



CALCULATION COVER SHEET

CALC. NO. TXUT-001-FSAR-2.4.2-CALC-037

REV. 1

PAGE NO. 1 of 83

Title:

Erosion Potential at Safety Related Structures Due to the Effects of Local Intense Precipitation - Comanche Peak Nuclear Power Plant Units 3 and 4.

Client: MNES

Project: Luminant COLA

Item	Cover Sheet Items	Yes	No
1	Does this calculation contain any open assumptions that require confirmation? (If YES, identify the assumptions)_____		X
2	Does this calculation serve as an "Alternate Calculation"? (If YES, identify the design verified calculation.) Design Verified Calculation No. _____		X
3	Does this calculation supersede an existing calculation? (If YES, identify the superseded calculation.) Superseded Calculation No. _____		X

Scope of Revision: The calculation was revised to include the supercritical velocities and hydraulic jump locations for the East Channel and the Off-site Channel in Section 2.0 of the calculation. The supercritical velocities and hydraulic jump within East Channel and Off-site Channel does not affect safety-related structures. A statement was added indicating adequate erosion control measure will be taken for areas where velocities exceed permissible velocities. Additionally, Tables 7-1 through 7-11 were provided as text instead of image in the calculation.

Revision Impact on Results: There are no changes to the supercritical velocities and hydraulic jumps adjacent to safety-related structures.

Study Calculation

Final Calculation

Safety-Related

Non-safety-Related

(Print Name and Sign)

Originator: Anubhav Gaur

Date: 10/24/2011

Design Verifier: Suraj Balan

Date: 10/24/2011

Approver: Pat Brunette

Date: 10/24/2011

Joseph Mancinelli

10/25/2011



CALCULATION
REVISION STATUS SHEET

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CALCULATION REVISION STATUS

<u>REVISION</u>	<u>DATE</u>	<u>DESCRIPTION</u>
0	10/12/2011	Initial Issue
1	10/25/2011	Revised to include results from the East Channel and Off-site Channel in Section 2.0

PAGE REVISION STATUS

<u>PAGE NO.</u>	<u>REVISION</u>	<u>PAGE NO.</u>	<u>REVISION</u>
All	1		

APPENDIX REVISION STATUS

<u>APPENDIX NO.</u>	<u>PAGE NO.</u>	<u>REVISION NO.</u>	<u>APPENDIX NO.</u>	<u>PAGE NO.</u>	<u>REVISION NO.</u>
A	All	0			



CALCULATION
DESIGN VERIFICATION
PLAN AND SUMMARY SHEET

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Calculation Design Verification Plan:

Calculation Design Verification Plan:

Apply CSP Number 3.01, Revision 6, Section 4.5.a, Design Review Method and to include at a minimum:

1. Review and determine if the analysis identifies areas with supercritical velocities and hydraulic jumps that can cause erosion at the site.
2. Review the design methodology and determine if it is appropriate, correctly applied and accurate.

(Print Name and Sign for Approval – mark "N/A" if not required)

Approver: Pat Brunette

Date: 10-24-2011

Joseph Mancinelli

10/25/2011

Calculation Design Verification Summary:

After reviewing the analysis of Erosion Potential at Safety Related Structures Due to the Effects of Local Intense Precipitation – Comanche Peak Nuclear Power Plant Units 3 and 4, Revision 1, I have come to the following conclusions:

1. The analysis identifies areas with supercritical velocities and hydraulic jumps that can cause erosion at the site.
2. The methodology, assumptions and inputs applied are reasonable and are in accordance with Enercon's CSP Number 3.01 Revision 6.
3. The summary of results and conclusions of the analysis has been independently verified.
4. The Originator has considered the recommendations given during the review process.


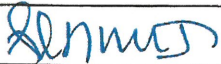
(Print Name and Sign)

Design Verifier: Suraj Balan

Date: 10/24/2011

Others: N/A

Date: N/A

		CALCULATION DESIGN VERIFICATION CHECKLIST			CALC. NO. TXUT-001- FSAR-2.4.2-CALC-037		
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Item	Cover Sheet Items	Yes	No	N/A			
1	Design Inputs – Were the design inputs correctly selected, referenced (latest revision), consistent with the design basis and incorporated in the calculation?	X					
2	Assumptions – Were the assumptions reasonable and adequately described, justified and/or verified, and documented?	X					
3	Quality Assurance – Were the appropriate QA classification and requirements assigned to the calculation?	X					
4	Codes, Standard and Regulatory Requirements – Were the applicable codes, standards and regulatory requirements, including issue and addenda, properly identified and their requirements satisfied?	X					
5	Construction and Operating Experience – Have applicable construction and operating experience been considered?			X			
6	Interfaces – Have the design interface requirements been satisfied, including interactions with other calculations?	X					
7	Methods – Was the calculation methodology appropriate and properly applied to satisfy the calculation objective?	X					
8	Design Outputs – Was the conclusion of the calculation clearly stated, did it correspond directly with the objectives and are the results reasonable compared to the inputs?	X					
9	Radiation Exposure – Has the calculation properly considered radiation exposure to the public and plant personnel?			X			
10	Acceptance Criteria – Are the acceptance criteria incorporated in the calculation sufficient to allow verification that the design requirements have been satisfactorily accomplished?	X					
11	Computer Software – Is a computer program or software used, and if so, are the requirements of CSP 3.02 met?	X					
COMMENTS: N/A							
<i>(Print Name and Sign)</i>							
Design Verifier: Suraj Balan				Date: 10/24/2011			
Others: N/A		Date: N/A					

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1.0 Purpose And Scope

The purpose of this calculation is to identify areas with supercritical velocities and hydraulic jump that can cause erosion, which can ultimately affect safety related structures at the Comanche Peak Nuclear Power Plant (CPNPP) Units 3 and 4. The velocities were calculated due to effects of local intense precipitation at the CPNPP Units 3 and 4, using calculated probable maximum precipitation (PMP) and site grading and drainage plans.

2.0 Summary Of Results And Conclusions

The analysis indicates that the supercritical flow exists at Unit 4 Ultimate Heat Sink (UHS), Unit 3 UHS, Center North, Unit 3 East, Unit 3 Southeast, Unit 3 East, and Offsite channels. The maximum supercritical velocities for these channels are listed below in Table 2-1.

The analysis indicates that the Froude Number exceeds one for Unit 4 UHS Branch Channel between cross sections 106.083 and 107, indicating there is supercritical flow. There are no indications of hydraulic jumps in the channels. The maximum velocity for Unit 4 UHS Branch Channel is 5.54 ft/sec at Cross Section 106.166. Cross Section data indicates that the Unit 4 UHS Branch Channel and overbank area between cross section 106 and 107 is crushed stone or gravel lined. The velocity within the Unit 4 UHS Branch Channel is below the permissible maximum velocity and there is no potential for erosion.

The analysis indicates that the Froude Number exceeds one for the Unit 3 UHS Upper Channel (Cross Sections 10 through 11.875) and Unit 3 UHS Branch Channel (Cross Section 108.422 through 109), indicating there is supercritical flow. The results also indicate there is a possibility of hydraulic jump between cross sections 108.411 and 108.422, and cross sections 9 and 10. Cross Section data indicates the channel between cross sections 10 through 12 is comprised of concrete and gravel and the area between cross sections 108 and 109 is gravel lined. Maximum velocity for the Unit 3 UHS Branch Channel is 5.13 ft/sec (Cross Section 108.466), which is less than the suggested maximum permissible velocity of 7-13 ft/sec for rubble lined section. Maximum velocity for Unit 3 UHS Upper Channel is 12.96 ft/sec (Cross Section 10), which is less than the maximum permissible velocity of for rubble and concrete. Therefore, the velocity within the Unit 3 UHS Upper and Branch Channel are below the permissible maximum velocity and there is no potential for erosion. The ratio of water surface elevation after and before hydraulic jump at both locations is close to one (1); indicating it's a very weak hydraulic jump. The cross-section at hydraulic jump locations is mostly gravel and may be subject to slight to moderate erosion.

The analysis indicates that the Froude Number exceeds one for Center North Channel between cross sections 12.9642 and 12.9821, indicating there is supercritical flow. There are no indications of hydraulic jumps in the channels. Cross Section data indicates the Center North Channel between cross sections 12 through 13 is concrete and gravel lined. Maximum velocity for Center North Channel is 4.64 ft/sec at Cross Section 12.9642. Therefore, the velocity within the Center North Channel is lower than the maximum permissible velocity of rubble lined and concrete lined channels thus eliminating any potential for erosion.

The analysis indicate that the Froude Number exceeds one for the Unit 3 East Channel (Cross Sections 2.84210 through 5), indicating there is supercritical flow. The results also indicate there is a possibility of hydraulic jump between cross sections 2.84210 and 2.86842, cross sections 4.02409 and 4.03614, cross sections 4.09638 and 4.10843, and cross sections 4.46988 and 4.48192. Maximum velocity for the Unit 3 East Channel is 6.90 ft/sec at Cross Section 2.86842. Channel cross section data indicates the Unit 3 East Channel is gravel and concrete lined between cross

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sections 2 and 5. Therefore, the velocity within the Unit 3 East Channel is below the permissible maximum velocity and there is no potential for erosion. The ratio of water surface elevation after and before hydraulic jump at each location is close to one (1); indicating it's a very weak hydraulic jump. The cross-section at hydraulic jump locations is mostly gravel and may be subject to slight to moderate erosion. Adequate erosion control measures will be taken to prevent erosion along the East Channel.

The analysis indicate that the Froude Number exceeds one for the Unit 3 Southeast Channel (Cross Sections 8.66666 through 9.92857), indicating there is supercritical flow as runoff travels down the steeper slopes of the Plant Loop Road near the entrance to the plant area. There is also an indication of hydraulic jump between cross section 8.5 and 8.66666. The Unit 3 Southeast Channel between Cross Sections 8 and 10 is gravel, rubble and concrete lined. Maximum velocity for Unit 3 Southeast Channel is 13.46 ft/sec at Cross Section 9. The velocity between cross sections 8.5 and 10 is over 9 ft/sec. The Unit 3 Southeast Channel between Cross Sections 8 and 10 is gravel, rubble and concrete lined. The velocities in portions of Unit 3 Southeast Channel, which are gravel and riprap lined, is more than the permissible velocity. However, the Manning's roughness coefficient used to achieve this velocity is considerably lower (50 percent) than the normal values. Therefore, the velocity in the Unit 3 Southeast Channel is not expected to be more than the permissible velocity. The ratio of water surface elevation after and before hydraulic jump is close to one (1); indicating it's a very weak hydraulic jump. The cross-section at hydraulic jump locations is mostly gravel and may be subject to slight to moderate erosion. Adequate erosion control measures will be taken to prevent erosion along the upstream end of Unit 3 Southeast Channel.

The East Channel and the Off-site Channel are not located adjacent to safety-related structures. The supercritical velocities at the East and Offsite Channels do not affect safety-related structures. Adequate erosion control measures will be taken to prevent erosion along the Off-site Channel.

Additionally, the results indicate that the maximum water surface elevation is at least 1 foot below the grade elevation of 822 ft for safety related structures and meets the Design Control Document (DCD) criteria (Reference 5). Table 2-1 provides a summary of the analysis results. Figure 2-1 identifies the locations with supercritical flows and hydraulic jumps at CPNPP Units 3 and 4.

Table 2-1. Summary of Results

Channel	Maximum Water Surface Elevation (ft)	Maximum Velocity (Cross Section) (ft/sec)	Hyd. Jump	Land Cover	Permissible Velocity (ft/sec)
Unit 4 UHS Channel	819.55	5.54 (c/s106.166)	-	Gravel	7-13
West Channel	820.34	-	-	-	-
Center South Channel	820.97	-	-	-	-
Unit 3 UHS Channel	819.52	5.13 (c/s108.466)	Yes	Gravel	7-13
		12.96 (c/s 10)	Yes	Gravel & Concrete	7-13
Unit 3 North Channel	820.12	-	-	-	-

Table 2-1. Summary of Results (Continued)

Channel	Maximum Water Surface Elevation (ft)	Maximum Velocity (Cross Section) (ft/sec)	Hyd. Jump	Land Cover	Permissible Velocity (ft/sec)
Center North Channel	820.16	4.64 (c/s 12.9642)	-	Gravel & Concrete	7-13
Unit 4 North Channel	820.10	-	-	Gravel & Concrete	7-13
Unit 3 East Channel	820.41	6.90 (c/s 2.86842)	Yes	Gravel & Concrete	7-13
Unit 3 Southeast Channel	819.71	13.46 (c/s 9)	Yes	Gravel & Concrete	7-13
East Channel	N/A	17.50 (c/s 3.21739)	Yes	Gravel & Concrete	7-13
Off-site Channel	N/A	13.91 (c/s 5.64705)	Yes	Gravel & Concrete	7-13

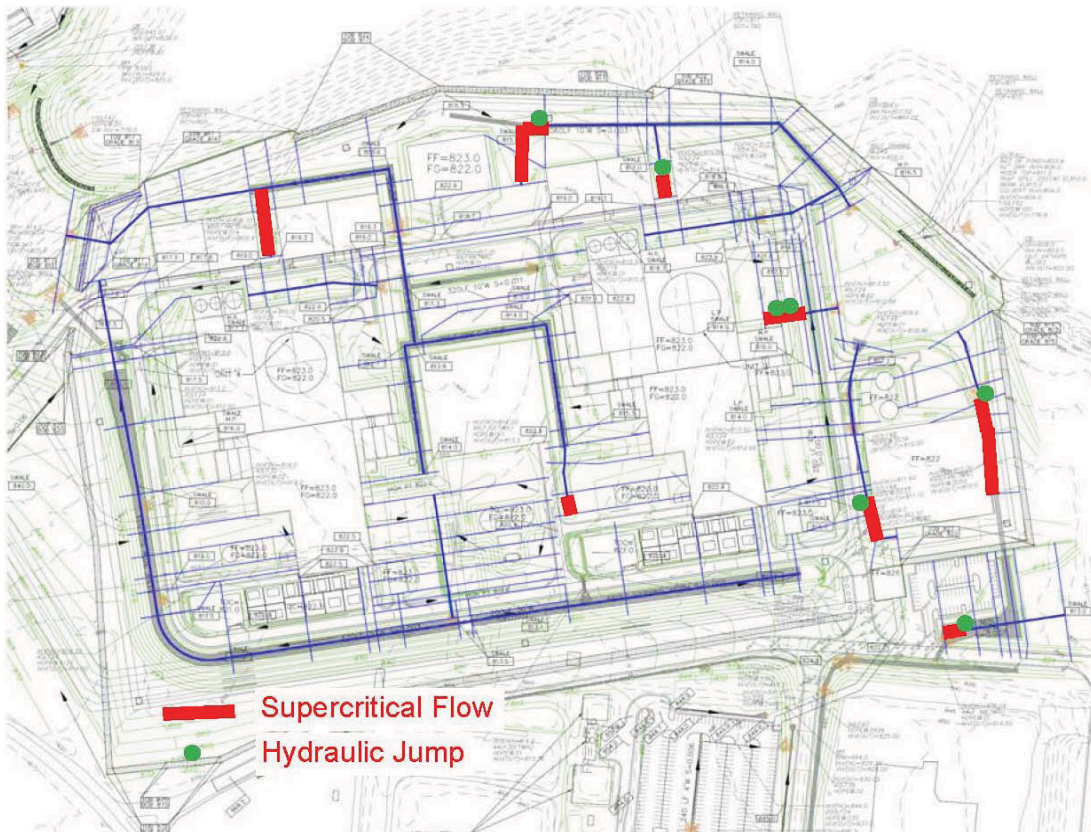


Figure 2-1. Supercritical Flow and Hydraulic Jump Locations at CPNPP Units 3 and 4

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3.0 References

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3. Analysis of the Effects of Local Intense Precipitation – Comanche Peak Nuclear Power Plant Units 3 and 4. Calculation Number TXUT-001-FSAR-2.4.2-CALC-036, Revision 0.
4. Mitsubishi Nuclear Energy Systems, Inc. (MNES) 2011. Dr. Masanori Onozuka (MNES). Transmittal Letter to: Joseph Mancinelli (ENERCON). Luminant COL Application Project. Site Drainage and Grading. LUM-EL-110008. 2011 Aug 26.
5. United States Advanced Pressurized Water Reactor (USAPWR). Design Control Document. Revision 1B.
6. Grading and Drainage Plan, Sheet 1 of 4. Luminant/Comanche Peak Units 3 & 4 MNES US APWR. Drawing Number CVL-12-11-102-001, Revision H.
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10. Post Development Drainage Area Map. Luminant/Comanche Peak Units 3 & 4 MNES US APWR. Drawing Number CVL-12-11-101-001, Revision H.
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13. Department of the Army, U.S. Army Corps of Engineers, "Drainage and Erosion Control Mobilization Construction", EM 1110-3-136, April 1984.
14. U.S. Army Corps of Engineers, Hydraulic Engineering Center- River Analysis System, Computer Software. Version 4.1.0, January 2010.,.
15. U.S. Army Corps of Engineers, Engineering & Design - Hydraulic Design of Flood Control Channels, EM 1110-2-1601, Washington D.C, July 1, 1991.

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4.0 Assumptions

The grading and drainage plan drawings (Reference 6 through 10) are designated non-safety related. The grading and drainage plan drawings have been transmitted (Reference 4) for use in the analysis of the effects of local intense precipitation and represent the best information available. Future uses of the results or analyses contained herein should consider the current state of the grading and drainage plan.

The U.S. Army Corps of Engineers, Hydrologic Engineering Center, Hydraulic Engineering Center-River Analysis System, Version 4.1.0, Computer Software (HEC-RAS, Reference 14) used in MITS004 – Analysis of the Effects of Local Intense Precipitation – Comanche Peak Nuclear Power Plant Units 3 and 4, Calculation Number TXUT-001-FSAR-2.4.2-CALC-036, Revision 0 (Reference 3); hereafter referred as Local Site Analysis is used in this calculation without any further evaluation along with the design inputs (except Manning’s roughness coefficient and boundary condition values) and assumptions including channel cross-sections, distances, elevations, roughness coefficient, rainfall data, tailwater conditions, drainage structures, inline structures, weir flow coefficient etc. used in Local Site analysis. The assumptions and design inputs used in HEC-RAS model are explained in detail in Local Site Analysis.

5.0 Design Inputs

Site grading is defined by the series of grading and drainage plan sheets (Reference 6 through 10). Safety-related Units 3 and 4 have a plant grade elevation of 822 ft (Reference 7 and 9). The site grading is used to develop spatial relationships, including elevations, for the HEC-RAS model.

Channel Cross Sections

The channel cross sections are referenced from the Local Site Analysis which utilizes the contours and features of the grading plan to create channel cross sections. The HEC-RAS schematic identifying the channel locations and cross sections is referenced from the Local Site Analysis and is shown in Figure 7-2. The cross sections, inline structures and obstructions are modeled in HEC-RAS and are explained in detail in Local Site Analysis.

Roughness Coefficient

Local Site Analysis assigns roughness coefficients to the channel cross sections based on the surface cover material. The roughness coefficients used in Local Site Analysis are shown in Table 5-1. The roughness coefficient for riprap is based on Strickler’s equation for riprap (Reference 15, Equation 3-2) and selected to be 0.034. As the size of the riprap approaches 1 ft, the roughness coefficient is equal to the K coefficient. A lower K coefficient results in a lower roughness coefficient, and yields higher velocities.

$$n = K[D_{90}(\text{min})]^{1/6}$$

Where:

n = roughness coefficient

K = 0.036, average

= 0.034 for velocity and stone size calculation

= 0.038 for capacity and freeboard calculation

D₉₀(min) = size of which 90 percent of sample is finer, ft

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To ensure a conservative approach, the selected roughness coefficients are decreased by a factor of 50 percent. The roughness coefficients used in the analysis are provided in Table 5-1.

Table 5-1. Manning's Roughness Coefficients

Material	Initial Estimate*	Decrease Factor	Final Estimate
Concrete	0.013	0.5	0.007
Crushed Stone/Gravel	0.026	0.5	0.013
Riprap	0.034	0.5	0.017

* The initial estimates of Manning's Roughness Coefficients are referenced from the Local Site Analysis

6.0 Methodology

As discussed in Local site Analysis:

- Runoff across the site is modeled using the open-channel flow hydraulic modeling software, HEC-RAS and steady flow option.
- The site grading plans and AutoCAD (Reference 1) are used to determine channel cross section distances and elevations.
- Site structures and buildings are modeled as obstructions and do not allow any storage in the cross section.
- Channel roughness coefficients are determined using the site grading plans and applicable standard tables (Reference 2 and 15).

It is to be noted; all the design inputs including channel cross sections, distances, elevations, roughness coefficient, rainfall data, tailwater conditions, drainage structures, inline structures, weir flow coefficient used in HEC-RAS model are same as the one used in Local Site Analysis.

To ensure a conservative approach, selected roughness coefficients are decreased by a factor of 50 percent. Lower roughness coefficient yield higher velocities and are therefore, more conservative.

HEC-RAS model used in Local Site Analysis was revised to reflect lower Manning's roughness coefficient values. The results were reviewed to identify the areas with a Froude Number greater than 1 (supercritical velocity) and areas containing a hydraulic jump. Supercritical flows are associated with higher velocities, which can cause erosion. When a channel slope becomes flat, the flow can become subcritical causing the formation of hydraulic jump, which further causes erosion to channel bed.

Where the Froude number is less than 1, the water flow has no opportunity to accelerate beyond the critical velocity. It is hindered by the bulk of water immediately downstream. The flow is considered sub-critical. With a Froude number greater than 1, the water flow exceeds the critical and transforms to supercritical flow. The sudden enforcement of sub-critical conditions on this flow as it re-encounters the inertia of the water downstream, results in a release of internal kinetic energy, some of which overcomes the cohesive forces holding the water molecules together foaming the water and tossing it about as can be seen in rapids.

Each location with supercritical flow and hydraulic jump will be assessed based on the location or whether it can impact safety related structures. The velocity at these locations will be compared to the permissible velocity as described in USACE Guidance (Reference 15).

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AutoCAD and HEC-RAS software have been verified and validated in accordance with ENERCON's Corporate Standard Procedure Number 3.02, Revision 5, Control of Computer Software. The verification and validation documents are maintained by Enercon as part of the Quality Assurance program.

7.0 Calculations

7.1 HEC-RAS Channels

The Local Site Analysis indicates that the site is divided into 11 different channels as listed below and shown in Figure 7-1.

1. Unit 4 UHS Channel
2. West Channel
3. Center South Channel
4. Unit 3 UHS Channel
5. Unit 3 North Channel
6. Center North Channel
7. Unit 4 North Channel
8. Unit 3 East Channel
9. Unit 3 Southeast Channel
10. East Channel
11. Off-site Channel

Runoff across the site enters one of the two on-site drainage ponds, labeled A and B, or an additional overflow area, labeled C, under local intense precipitation conditions. Runoff is carried to the pond areas by the channels as identified in Figure 7-1. Each channel is analyzed to identify if supercritical flows exist and if there is potential for hydraulic jump. As discussed earlier supercritical velocities are compared to the velocities for gravel and concrete depending on land cover at the location where supercritical flow occurs. USACE guidance (Reference 15) suggests maximum permissible velocity of 7-13 ft/sec for gravel, corresponding to roughness coefficient of 0.30-0.45. USACE guidance (Reference 15) suggests maximum permissible velocity of 20-30 ft/sec for concrete, corresponding to roughness coefficient of 0.016-0.020 ft/sec.

The roughness coefficients for gravel and riprap are 0.026 and 0.034 for gravel and riprap respectively as listed above in Table 5-1. These roughness coefficients are lower than 0.30 suggested by USACE guidance (Reference 15). Lower roughness coefficient shall give higher permissible velocities. Therefore, to be conservative the maximum permissible velocity of 7-13 ft/sec was used for both gravel and riprap.

Similarly, the roughness coefficient used for concrete is 0.013 as listed in Table 5-1. This roughness coefficient of 0.013 is lower than 0.016 suggested by USACE guidance (Reference 15). Therefore, to be conservative the maximum permissible velocity of 20-30 ft/sec was used for concrete.

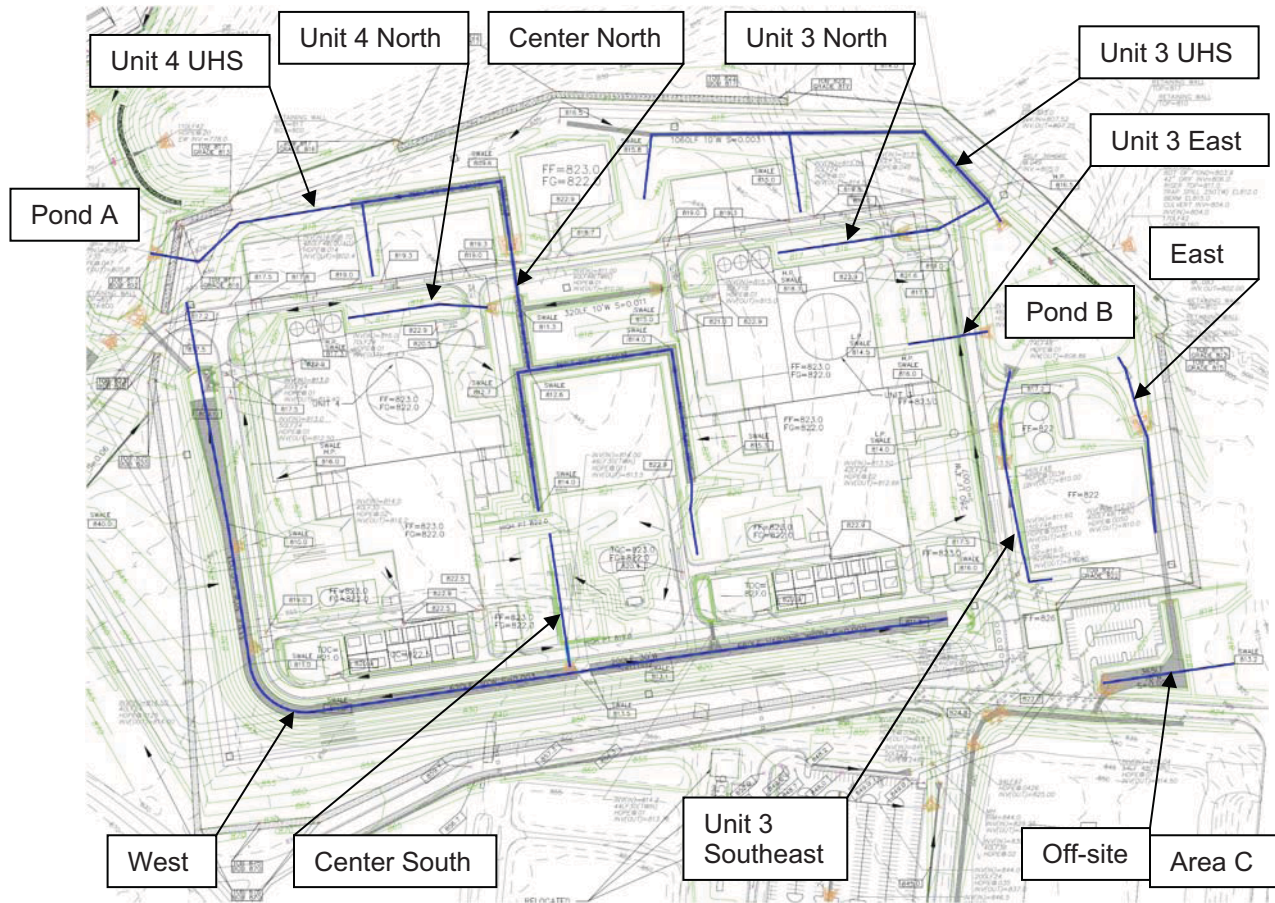


Figure 7-1. HEC-RAS Channels
Source: Local Site Analysis (Reference 3)

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7.2 HEC-RAS Model

HEC-RAS cross section inputs are discussed for each channel and provided using screenshot figures from the HEC-RAS software in Appendix A. The HEC-RAS model layout and inputs are explained in detail in Local Site Analysis. HEC-RAS is run using the steady flow option with a mixed flow regime. A mixed flow regime allows both subcritical and supercritical flow to occur in the model.

HEC-RAS detailed cross section results identify any software generated warnings. The warnings are not errors and are intended to provide information to the user that may or may not require action. As described in the HEC-RAS documentation (Reference 12), the hydraulic results at the warning locations are reviewed to ensure they are reasonable. If the hydraulic results are found to be reasonable, the message can be ignored.

There are several reoccurring warnings identifying that cross section end points had to be extended vertically for the computed water surface elevation, divided flow is computed for a cross section, or because of conveyance ratios, energy loss, or velocity head changes, there may be a need for additional cross sections. Cross section end point vertical extension is conservative and appropriate because the flow is confined to the described cross section and is prevented from spreading out beyond the established section, which would reduce the velocity and resulting water surface elevation. Divided flow is appropriate for the analysis, because high flows are overtopping internal cross section boundaries or high points and spreading out into adjacent areas. Where additional cross sections may be needed, cross section interpolation is used to generate enough cross sections in an effort to eliminate the warning or create a smooth flow profile. Other less frequent warnings, not characterized here, are addressed in the appropriate channel analysis discussions provided below.

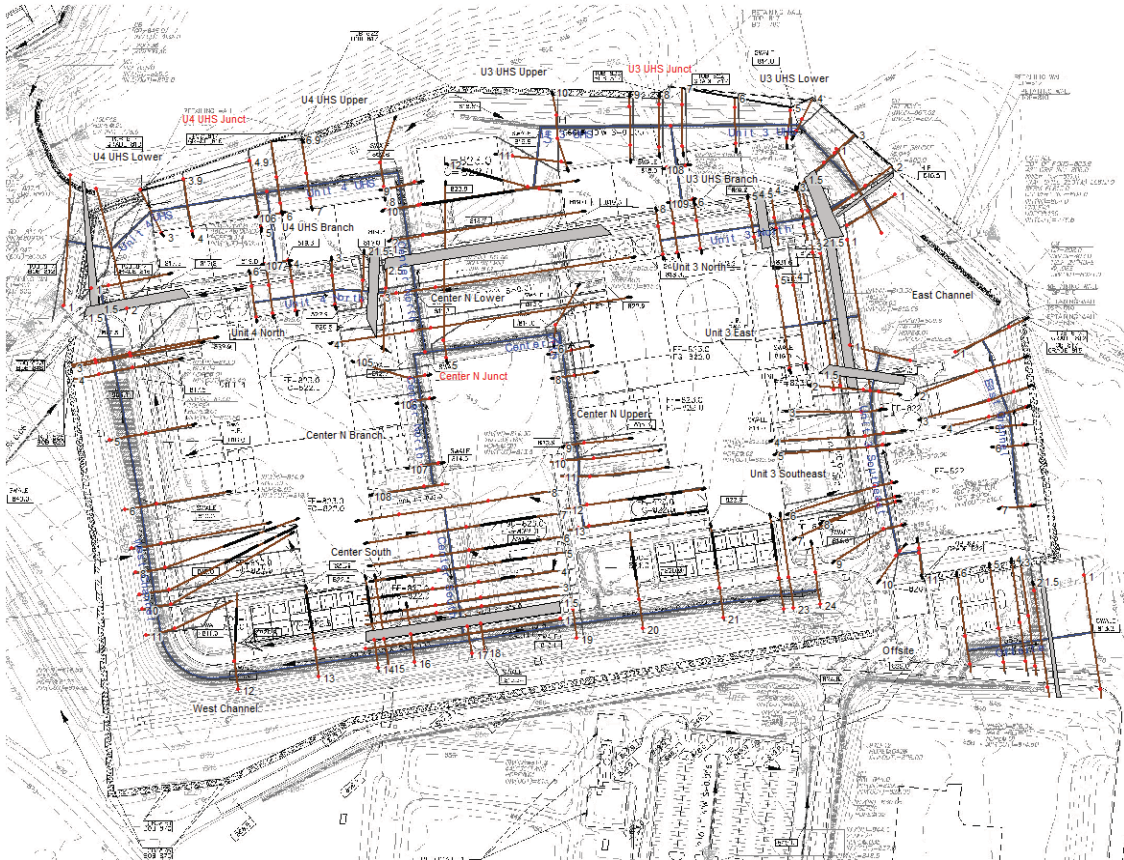


Figure 7-2. HEC-RAS Schematic
Source: Local Site Analysis (Reference 3)

7.3 Unit 4 UHS Channel

As discussed in Local site Analysis; the Unit 4 UHS Channel runs generally west along the north side of the Unit 4 UHS structures and empties into Drainage Pond A through a culvert structure, as shown in Figure 7-5. There is also a branch channel that flows north into the main channel between the sets of Unit 4 UHS structures. The Unit 4 UHS channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning's roughness coefficient was decreased to obtain conservative (higher) velocities. The Unit 4 UHS Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-3. The Unit 4 UHS Channel cross section data are shown in Appendix A.

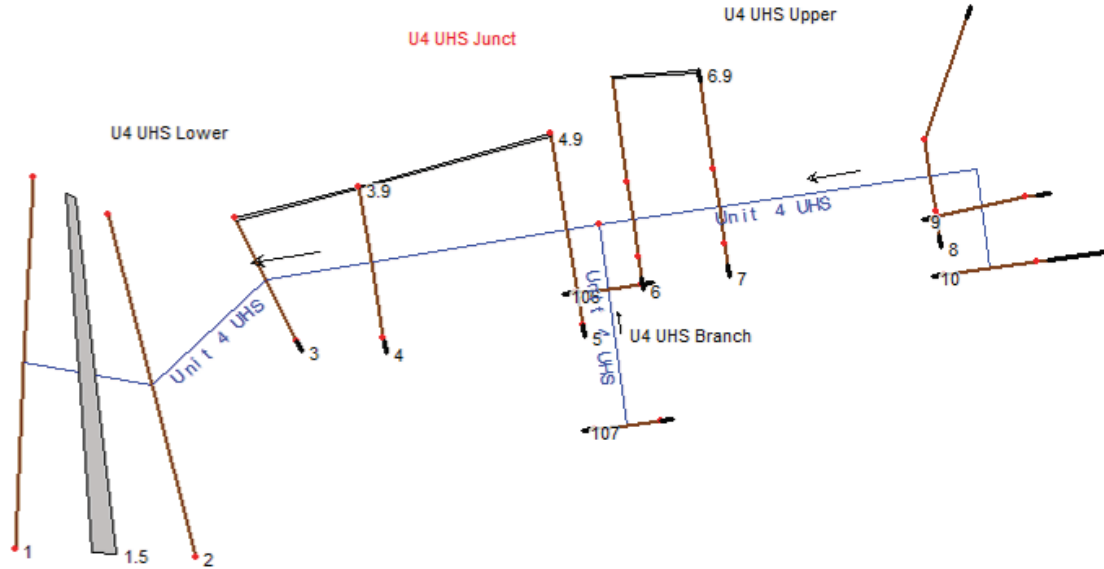


Figure 7-3. Unit 4 UHS Channel HEC-RAS Schematic

Source: Local Site Analysis (Reference 3)

Warnings indicate there may be a need for additional cross sections between Cross Sections 2 and 3, Cross Sections 4 and 5, Cross Sections 8 and 9 of the main channel and between Cross Sections 106 and 107 of the branch channel. HEC-RAS interpolation with 50 ft maximum spacing is used to generate three new cross sections between Cross Sections 4 and 5. Interpolation with 10 ft maximum spacing is used to generate seven new cross sections between Cross Sections 8 and 9, 13 new cross sections between Cross Sections 2 and 3, and 11 new cross sections between Cross Sections 106 and 107. The model is re-run and the warnings are eliminated. Table 7-1 provides the final results.



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Table 7-1. Unit 4 UHS Channel Final Results

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
U4 UHS	Upper	10	1607	809.83	818.92	814.44	819.13	0.00014	3.74	429.75	74.56	0.27
U4 UHS	Upper	9	1607	809.69	818.92		819.12	0.000124	3.66	441.45	75.73	0.26
U4 UHS	Upper	8.875*	1607	809.67	818.92		819.12	0.000123	3.64	445.04	78.22	0.26
U4 UHS	Upper	8.75*	1607	809.65	818.92		819.12	0.000121	3.62	448.17	80.71	0.26
U4 UHS	Upper	8.625*	1607	809.63	818.92		819.12	0.000117	3.61	452.75	100.94	0.26
U4 UHS	Upper	8.5*	1607	809.61	818.92		819.11	0.000106	3.53	489.09	144.49	0.25
U4 UHS	Upper	8.375*	1607	809.59	818.94		819.1	0.00009	3.34	546.66	157.59	0.23
U4 UHS	Upper	8.25*	1607	809.57	818.97		819.09	0.000072	3.05	619.89	170.7	0.21
U4 UHS	Upper	8.125*	1607	809.55	818.99		819.08	0.000054	2.71	708.24	183.8	0.18
U4 UHS	Upper	8	1607	809.53	819.01		819.07	0.00004	2.36	810.13	196.91	0.16
U4 UHS	Upper	7	1607	809.06	818.98		819.07	0.000043	2.49	737.85	158.98	0.16
U4 UHS	Upper	6.9	Lat Struct									
U4 UHS	Upper	6	1040.75	808.87	819.02		819.05	0.000015	1.46	823.24	177.73	0.09
U4 UHS	Branch	107	135	819	819.55	819.55	819.83	0.003077	4.23	31.94	58.25	1.01
U4 UHS	Branch	106.916*	135	818.92	819.39	819.47	819.77	0.005221	4.96	27.19	58.25	1.28
U4 UHS	Branch	106.833*	135	818.84	819.3	819.39	819.71	0.005809	5.13	26.31	58.25	1.35
U4 UHS	Branch	106.75*	135	818.76	819.21	819.32	819.64	0.006467	5.31	25.44	58.25	1.41
U4 UHS	Branch	106.666*	135	818.67	819.11	819.24	819.57	0.007022	5.45	24.79	58.25	1.47
U4 UHS	Branch	106.583*	135	818.59	819.05	819.17	819.5	0.006834	5.41	24.97	58.25	1.45
U4 UHS	Branch	106.5*	135	818.51	818.98	819.1	819.43	0.006798	5.42	24.92	57.82	1.45
U4 UHS	Branch	106.416*	135	818.43	818.91	819.03	819.37	0.00663	5.43	24.88	56.49	1.44
U4 UHS	Branch	106.333*	135	818.35	818.84	818.97	819.3	0.006447	5.43	24.86	55.18	1.43
U4 UHS	Branch	106.25*	135	818.27	818.78	818.9	819.24	0.006225	5.43	24.88	53.9	1.41
U4 UHS	Branch	106.166*	135	818.18	818.7	818.83	819.17	0.006426	5.54	24.35	52.31	1.43
U4 UHS	Branch	106.083*	135	818.1	818.63	818.76	819.11	0.006172	5.53	24.42	51.07	1.41
U4 UHS	Branch	106	135	818.02	818.91	818.7	819.06	0.001128	3.19	42.31	56.42	0.65
U4 UHS	Lower	5	1175.75	816	818.91		819.04	0.000175	2.8	419.72	165.33	0.31
U4 UHS	Lower	4.9	Lat Struct									
U4 UHS	Lower	4.75*	905.17	816	818.93		819.02	0.000144	2.43	372.59	157.13	0.28
U4 UHS	Lower	4.5*	630.92	816	818.95		819	0.000092	1.88	336.35	148.81	0.22
U4 UHS	Lower	4.25*	352.22	816	818.97		818.99	0.000035	1.14	309.97	140.45	0.13
U4 UHS	Lower	4	69.81	816	818.98		818.98	0.000002	0.24	291.68	131.95	0.03
U4 UHS	Lower	3.9	Lat Struct									
U4 UHS	Lower	3	59.62	816	818.98		818.98	0.000001	0.19	314.38	116.4	0.02
U4 UHS	Lower	2.92857*		815.86	818.98		818.98	0.000001	0.16	364.3	140.67	0.02

Table 7-1. Unit 4 UHS Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
U4 UHS	Lower	2.92857*	59.62	815.86	818.98		818.98	0.000001	0.16	364.3	140.67	0.02
U4 UHS	Lower	2.85714*	59.62	815.71	818.98		818.98	0	0.14	417.47	153.24	0.01
U4 UHS	Lower	2.78571*	59.62	815.57	818.98		818.98	0	0.13	471.82	165.82	0.01
U4 UHS	Lower	2.71428*	59.62	815.43	818.98		818.98	0	0.11	528.42	178.38	0.01
U4 UHS	Lower	2.64285*	59.62	815.29	818.98		818.98	0	0.1	586.71	190.96	0.01
U4 UHS	Lower	2.57142*	59.62	815.14	818.98		818.98	0	0.09	648.48	203.52	0.01
U4 UHS	Lower	2.5*	59.62	815	818.98		818.98	0	0.08	711.26	216.1	0.01
U4 UHS	Lower	2.42857*	59.62	814.86	818.98		818.98	0	0.08	775.91	228.67	0.01
U4 UHS	Lower	2.35714*	59.62	814.71	818.98		818.98	0	0.07	844.09	241.24	0.01
U4 UHS	Lower	2.28571*	59.62	814.57	818.98		818.98	0	0.07	913.16	253.81	0.01
U4 UHS	Lower	2.21428*	59.62	814.43	818.98		818.98	0	0.06	984.4	266.38	0.01
U4 UHS	Lower	2.14285*	59.62	814.29	818.98		818.98	0	0.06	1057.38	278.95	0.01
U4 UHS	Lower	2.07142*	59.62	814.14	818.98		818.98	0	0.05	1134.02	291.52	0
U4 UHS	Lower	2	2196.62	814	818.93	816.16	818.98	0.000042	1.84	1193.61	304.09	0.16
U4 UHS	Lower	1.5	Inl Struct									
U4 UHS	Lower	1	2196.62	800	816	801.26	816	0	0.47	4670.56	301.71	0.02

The results indicate that the Froude Number exceeds one for Unit 4 UHS Branch Channel between cross sections 106.083 and 107, indicating there is supercritical flow. There are no indications of hydraulic jumps in the channels. Table 7-1 indicates the maximum velocity for Unit 4 UHS Channel is 5.54 ft/sec at Unit 4 UHS Branch Channel Cross Section 106.166. Cross Section data indicates that the Unit 4 UHS Branch Channel and overbank area between cross section 106 and 107 is crushed stone or gravel lined. The velocity within the Unit 4 UHS Branch Channel is below the permissible maximum velocity and there is no potential for erosion.

Additionally, the maximum water surface elevation within Unit 4 UHS Channel is 819.55 ft (Cross Section 107) and does not exceed 1 ft below plant grade and meets DCD criteria. The 818.92 ft water surface elevation result at Cross Section 10 establishes a potential downstream boundary condition for the Center North Channel. The water surface elevation result for Cross Section 2 is 818.93 ft and establishes the downstream boundary condition for the West Channel. The Unit 4 UHS Channel flow profile is provided in Figure 7-4. The location of supercritical flows and hydraulic jumps within the Unit 4 UHS Channel are identified in Figure 7-5.

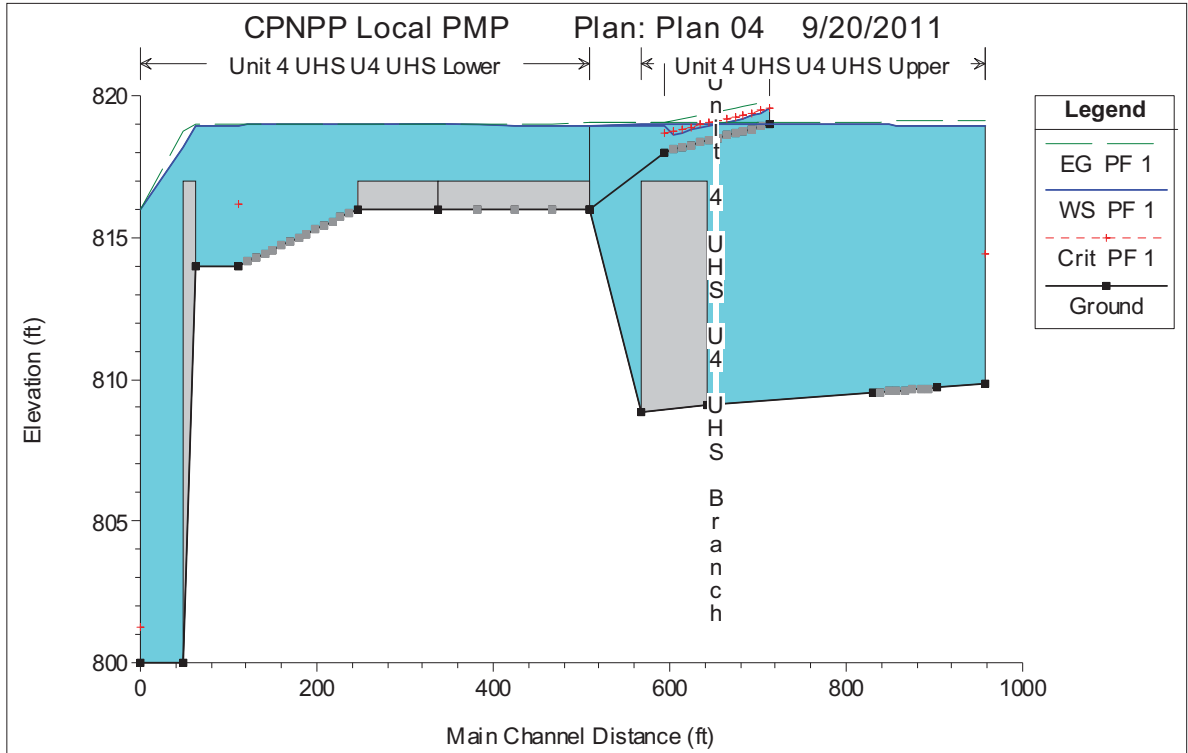


Figure 7-4. Unit 4 UHS Channel Flow Profile

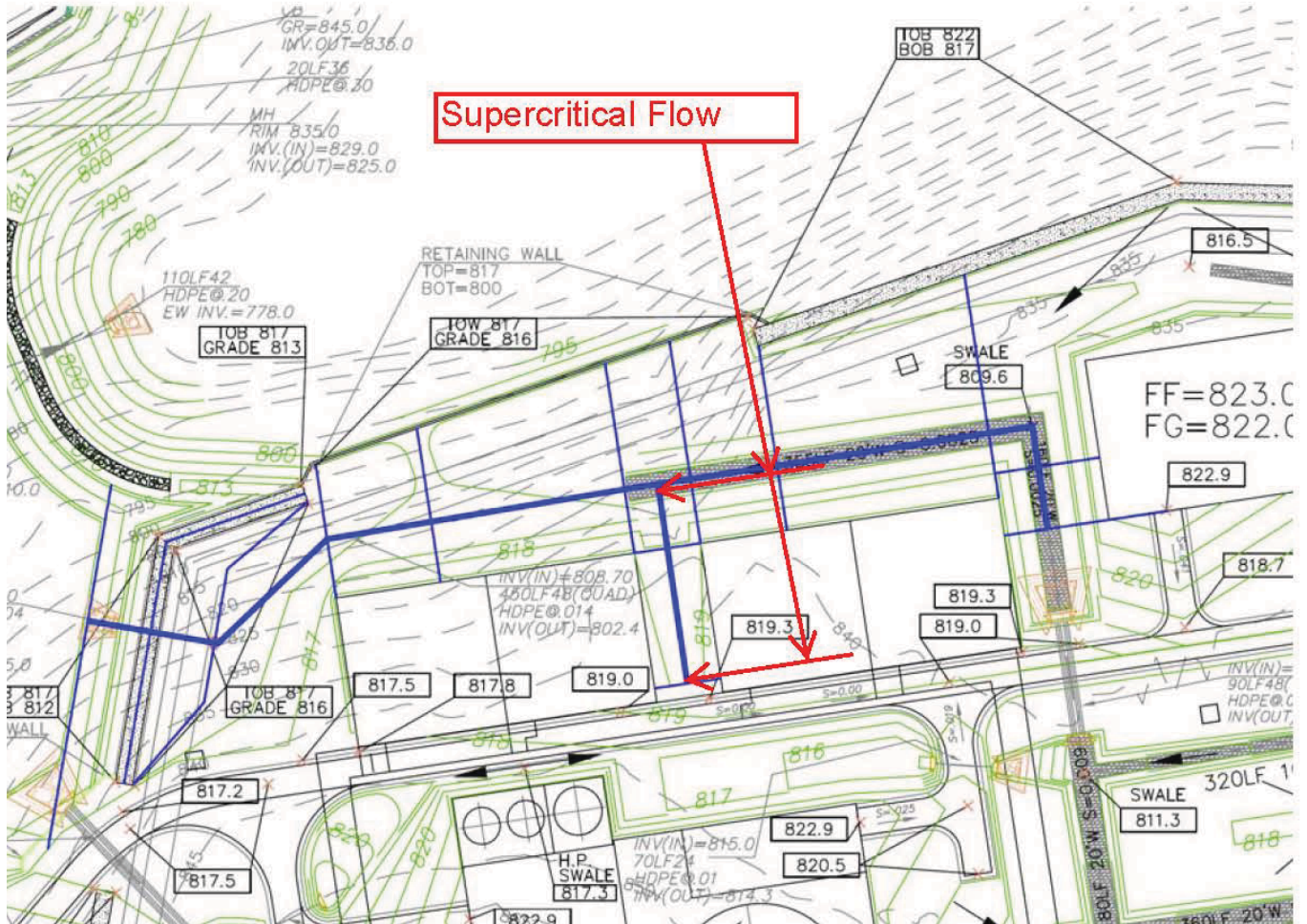


Figure 7-5. Unit 4 UHS Channel Cross Sections
Source: Local Site Analysis (Reference 3)

7.4 West Channel

As discussed in Local Site Analysis; the West Channel runs along the south and west side of Units 3 and 4 and empties into Drainage Pond A through a culvert structure, as shown in Figure 7-8. The West Channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning's roughness coefficient was decreased to obtain conservative (higher) velocities. The West Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-6. The West Channel cross section data are shown in Appendix A.

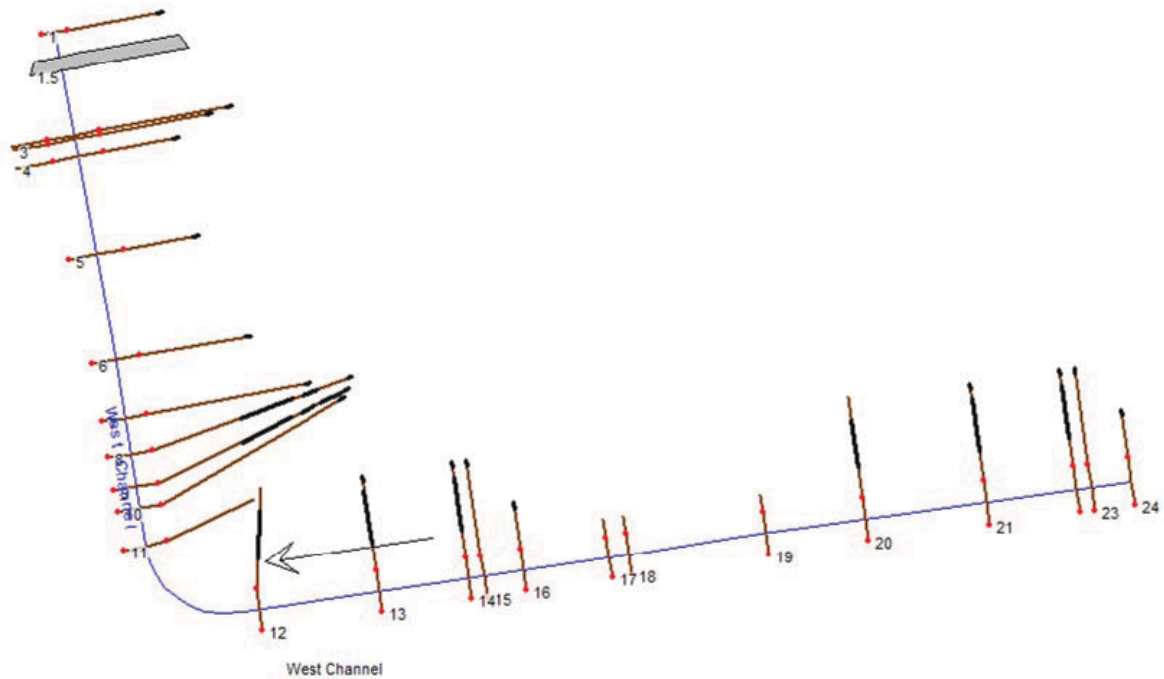


Figure 7-6. West Channel HEC-RAS Schematic
Source: Local Site Analysis (Reference 3)

The upstream Cross Section 24 is assigned a critical depth boundary condition. The downstream Cross Section 1 is assigned the water surface elevation from the Unit 4 UHS Channel Cross Section 2. The Unit 4 UHS Channel results indicate a water surface elevation of 818.93 ft (see Section 7.3) at Cross Section 2. The HEC-RAS model is run using the steady flow option with a mixed flow regime.

Warnings indicate there may be a need for additional cross sections between Cross Sections 2 and 3. HEC-RAS interpolation with 2 ft maximum spacing is used to generate three new cross sections between Cross Sections 2 and 3. The downstream boundary condition, established by the final results of the Unit 4 UHS Channel, remains unchanged. The model is re-run and the warnings are eliminated. Table 7-2 provides the final results.

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Table 7-2. West Channel Final Results

Reach	River Sta	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
West Channel	24	497	811.81	820.34	813.49	820.36	0.000006	1	523.95	114.46	0.07
West Channel	23	497	811.94	820.34		820.36	0.000006	0.99	540.73	139.2	0.07
West Channel	22	497	811.98	820.34		820.36	0.000006	1	518.85	109.99	0.07
West Channel	21	497	812.28	820.34		820.36	0.000007	1.08	483.41	108.25	0.07
West Channel	20	497	812.69	820.34		820.36	0.000009	1.15	459.05	133.84	0.08
West Channel	19	497	812.98	820.33		820.35	0.000012	1.25	408.21	91.1	0.09
West Channel	18	497	813.5	820.32		820.35	0.000014	1.3	393.01	90.45	0.1
West Channel	17	900	814	820.25		820.34	0.000052	2.51	369.27	90.3	0.19
West Channel	16	900	813.04	820.25		820.33	0.000039	2.3	412.05	105.82	0.17
West Channel	15	1267	812.84	820.17		820.32	0.000073	3.2	426.13	126.55	0.23
West Channel	14	1267	812.76	820.17		820.32	0.000072	3.2	415.27	102.71	0.23
West Channel	13	1267	812.31	820.17		820.31	0.000064	3.09	431.1	102.7	0.22
West Channel	12	1267	811.71	820.17		820.29	0.000053	2.9	471.72	148.17	0.2
West Channel	11	1402	811	820.18		820.27	0.000038	2.51	681.16	221.72	0.17
West Channel	10	1860	810.81	820.06		820.25	0.000081	3.67	575.53	213.29	0.24
West Channel	9	1860	810.7	820.04		820.25	0.000085	3.78	533.24	116.82	0.25
West Channel	8	1860	810.54	820.04		820.24	0.000081	3.69	543.82	116.98	0.24
West Channel	7	1860	810.36	820.05		820.23	0.000072	3.52	598.96	156.9	0.23
West Channel	6	1860	810.06	820.08		820.21	0.000052	2.99	725.44	176.53	0.19
West Channel	5	2023	809.53	820.1		820.19	0.000031	2.6	863.52	161.55	0.16
West Channel	4	2023	809	820.12		820.17	0.000026	1.97	1121.98	198.63	0.11
West Channel	3	2137	809	820.11		820.17	0.000027	2.04	1145.43	236.42	0.12
West Channel	2.75*	2137	809	820.11		820.17	0.000017	2.15	1261.04	277.78	0.12
West Channel	2.5*	2137	809	820.12		820.17	0.000015	1.96	1426.36	305.99	0.11
West Channel	2.25*	2137	809	820.13		820.16	0.000012	1.75	1617.63	323.75	0.1
West Channel	2	2137	809	820.14	812.48	820.16	0.000011	1.32	1828	339.74	0.07
West Channel	1.5	Inl Struct									
West Channel	1	2137	816	818.93	818.31	819.32	0.000638	5.7	430.87	192.77	0.59

The results indicate all Froude Numbers are less than one, indicating there is no supercritical flow in the West Channel. There are no indications of hydraulic jumps in the West Channel.

Additionally, the maximum water surface elevation for the West Channel is 820.34 ft (Cross Sections 20 through 24) and does not exceed 1 ft below plant grade and meets DCD criteria. The 820.25 ft water surface elevation result at Cross Section 17 establishes the downstream boundary condition for the Center South Channel. The West Channel flow profile is provided in Figure 7-7.

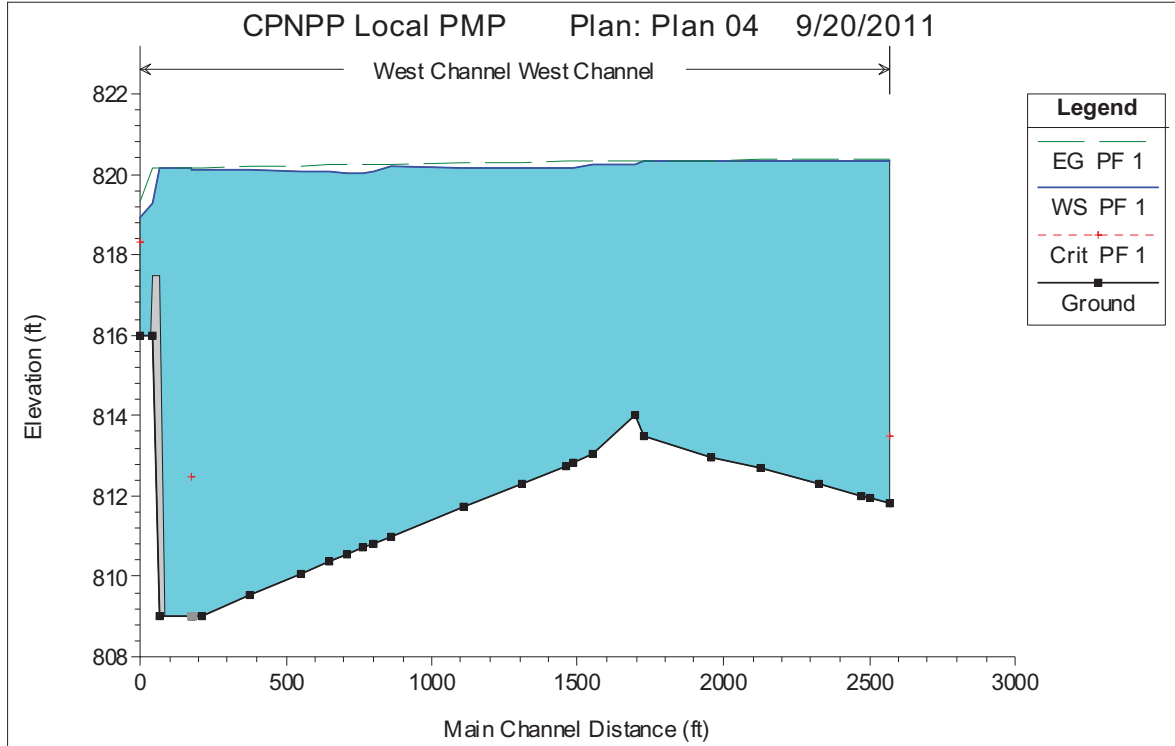


Figure 7-7. West Channel Flow Profile



Figure 7-8. West Channel Cross Sections
Source: Local Site Analysis (Reference 3)

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7.5 Center South Channel

As discussed in Local Site Analysis; Center South Channel captures runoff from between Units 3 and 4 and directs the flow south to a culvert emptying into the West Channel, as shown in Figure 7-11. The Center South Channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier, the Manning’s roughness coefficient was decreased to obtain conservative (higher) velocities. The Center South Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-9. The Center South Channel cross section data are shown in Appendix A.

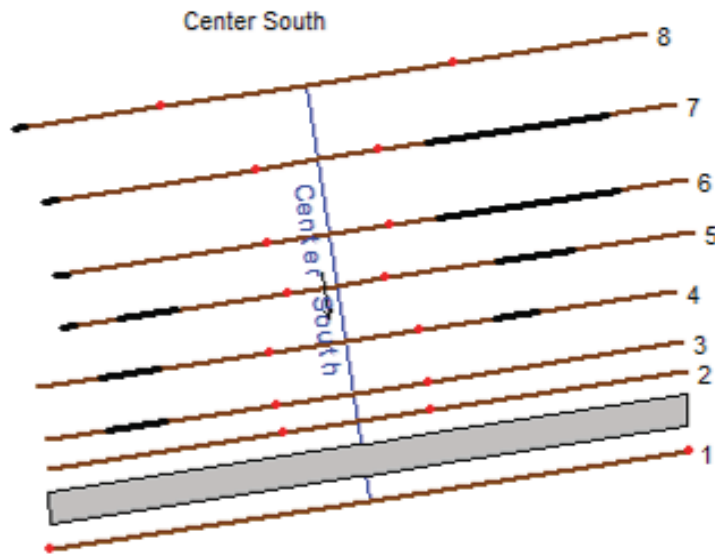


Figure 7-9. Center South Channel HEC-RAS Schematic
 Source: Local Site Analysis (Reference 3)

The upstream Cross Section 8 is assigned a critical depth boundary condition. The West Channel Cross Section 17 is immediately downstream from the high point and conservatively used as the downstream boundary condition, because it exhibits the highest water surface elevation of the applicable cross sections. The downstream boundary condition is assigned the West Channel preliminary water surface elevation of 820.25 ft (see Section 7.4). The HEC-RAS model is run using the steady flow option with a mixed flow regime.

Warnings indicate there may be a need for additional cross sections between Cross sections 4 and 5 and Cross sections 7 and 8. HEC-RAS interpolation with 10 ft maximum spacing is used to generate four new cross sections between Cross sections 4 and 5, and 5 ft maximum spacing is used to generate 11 new cross sections between Cross sections 7 and 8. The downstream boundary condition, established by the final results of the West Channel, remains unchanged. The model is re-run and the warnings are eliminated. Table 7-3 provides the final results.

Table 7-3. Center South Channel Final Results

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Center	South	8	324	820	820.96	820.38	820.98	0.000119	1.22	294.23	388.21	0.22
Center	South	7.91666*	324	819.71	820.96		820.98	0.000063	1.06	340.41	374.82	0.17
Center	South	7.83333*	324	819.42	820.97		820.98	0.000038	0.95	380.78	359.5	0.13
Center	South	7.75*	324	819.13	820.97		820.98	0.000025	0.86	414.06	338.02	0.11
Center	South	7.66666*	324	818.84	820.97		820.98	0.000018	0.8	442.13	310.19	0.1
Center	South	7.58333*	324	818.55	820.97		820.98	0.000014	0.75	466.98	273.71	0.09
Center	South	7.5*	324	818.26	820.97		820.98	0.000011	0.72	488.02	256.38	0.08
Center	South	7.41666*	324	817.97	820.97		820.98	0.000009	0.71	502.62	248.66	0.07
Center	South	7.33333*	324	817.68	820.97		820.98	0.000008	0.7	510.96	241.04	0.07
Center	South	7.25*	324	817.39	820.97		820.98	0.000008	0.71	512.22	233.85	0.07
Center	South	7.16666*	324	817.1	820.97		820.98	0.000007	0.72	506.71	226.8	0.07
Center	South	7.08333*	324	816.81	820.97		820.98	0.000008	0.75	495.24	219.99	0.07
Center	South	7	324	816.52	820.97		820.98	0.000008	0.79	476.23	213.17	0.07
Center	South	6	324	814.8	820.97		820.97	0.000005	0.68	560.45	248.54	0.06
Center	South	5	324	814.58	820.97		820.97	0.000003	0.63	662.58	302.02	0.05
Center	South	4.8*	324	814.53	820.97		820.97	0.000002	0.61	689.79	304.05	0.05
Center	South	4.6*	324	814.48	820.97		820.97	0.000002	0.57	724.63	306.62	0.04
Center	South	4.4*	324	814.44	820.97		820.97	0.000001	0.53	767.39	303.8	0.04
Center	South	4.2*	324	814.39	820.97		820.97	0.000001	0.49	822.74	303.55	0.04
Center	South	4	324	814.34	820.97		820.97	0.000001	0.42	886.75	302.59	0.03
Center	South	3	324	814.11	820.97		820.97	0.000001	0.34	1211.04	409.55	0.02
Center	South	2	821	814	820.97	815.87	820.97	0.000004	0.78	1374.84	490.41	0.06
Center	South	1.5	Inl Struct									
Center	South	1	821	812.84	820.86	813.87	820.86	0	0.23	3629.37	490.41	0.01

The results indicate all Froude Numbers are less than one, indicating there is no supercritical flow in the Center South Channel. There are no indications of hydraulic jumps in the channel.

Additionally, the maximum water surface elevation for Center South Channel is 820.97 ft (Cross Sections 2 through 7.83) and does not exceed 1 ft below plant grade and meets DCD criteria. The Center South Channel flow profile is provided in Figure 7-10.



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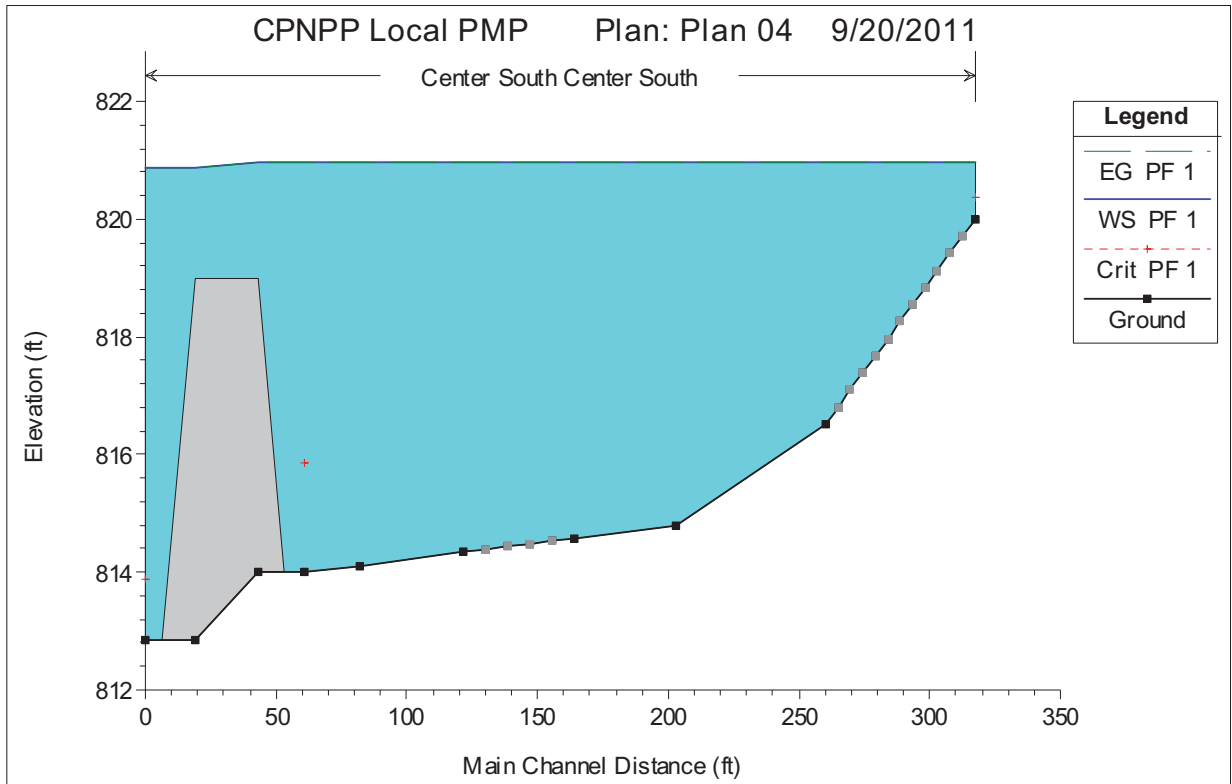


Figure 7-10. Center South Channel Flow Profile

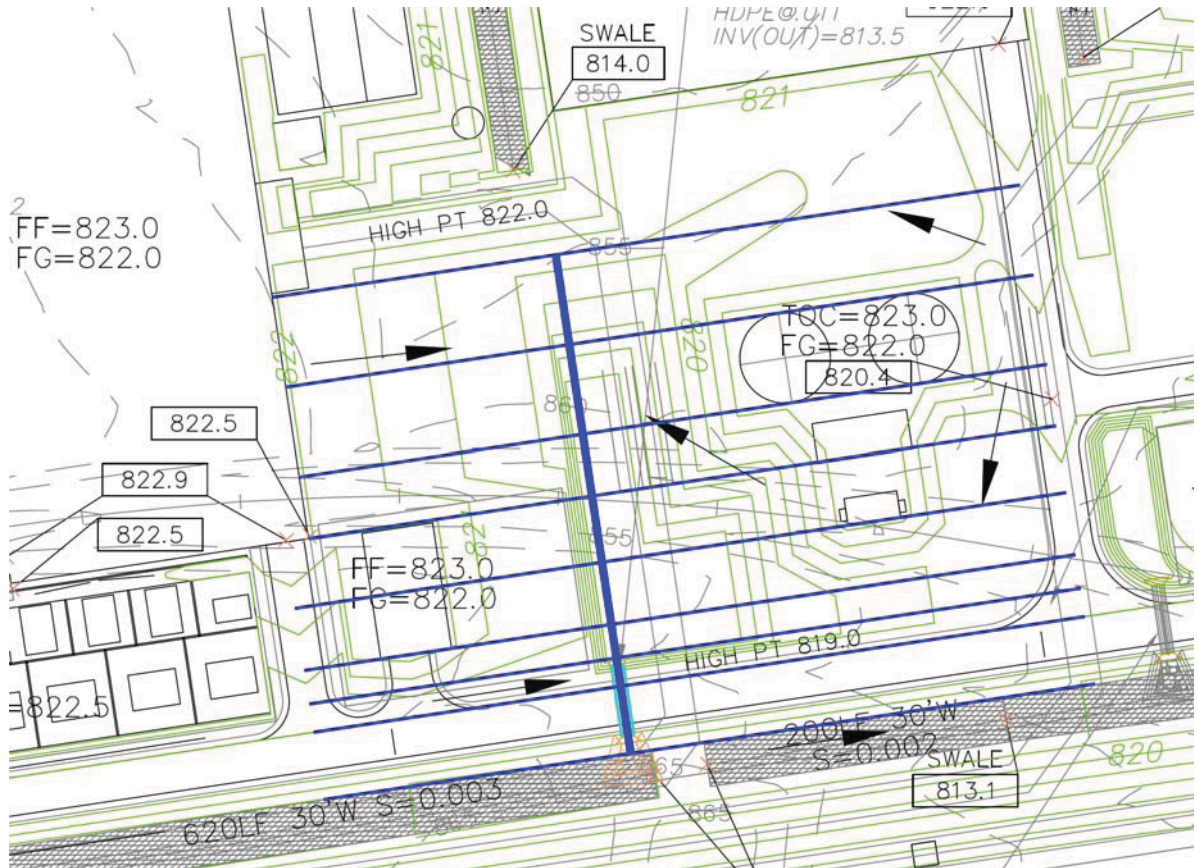


Figure 7-11. Center South Channel Cross Sections
Source: Local Site Analysis (Reference 3)

7.6 Unit 3 UHS Channel

As discussed in Local Site Analysis; Unit 3 UHS Channel runs generally east along the north side of the Unit 3 UHS structures and empties directly into Drainage Pond B through an inlet structure, as shown in Figure 7-14. There is also a branch of the channel that flows north into the main channel between the sets of Unit 3 UHS structures. The Unit 3 UHS Channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning’s roughness coefficient was decreased to obtain conservative (higher) velocities. The Unit 3 UHS Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-12. The Unit 3 UHS Channel cross section data are shown in Appendix A.

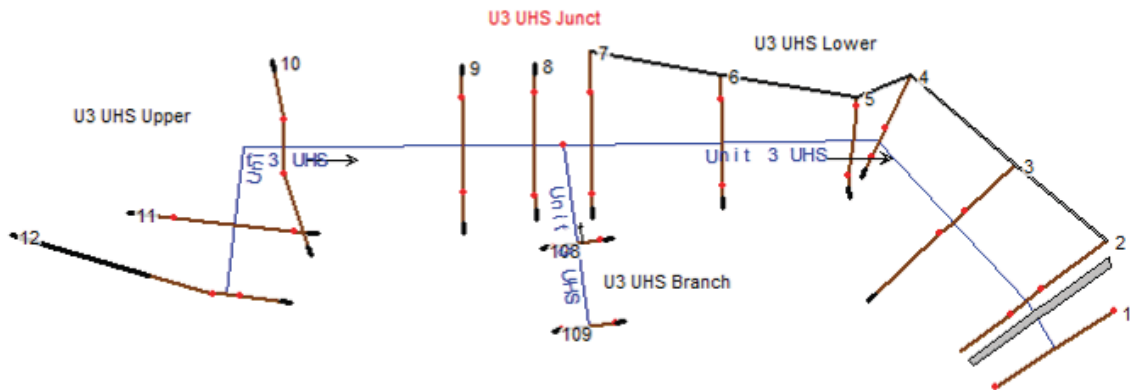


Figure 7-12. Unit 3 UHS Channel HEC-RAS Schematic
Source: Local Site Analysis (Reference 3)

The upstream Cross Sections 12 and 109 are assigned a critical depth boundary condition. The downstream Cross Section 1 is assigned the Drainage Pond B maximum water surface elevation of 815.1 ft (Local Site Analysis). The HEC-RAS model is run using the steady flow option with a mixed flow regime.

Warnings indicate there may be a need for additional cross sections between Cross Sections 3 and 4, Cross Sections 10 and 11 and Cross Sections 11 and 12 of the main channel, and Cross Sections 108 and 109 of the branch channel. HEC-RAS interpolation with 25 ft maximum spacing is used to generate four new cross sections between Cross Sections 10 and 11. HEC-RAS interpolation with 10 ft maximum spacing is used to generate seven new cross sections between Cross Sections 11 and 12, and 10 new cross sections between Cross Sections 3 and 4. Interpolation with 1 ft maximum spacing is used to generate 89 new cross sections between Cross Sections 108 and 109 of the branch channel. Cross section interpolation generally includes interpolation of obstructions. However, for the cross section added between Cross Sections 11 and 12, the appropriate obstructions are added as necessary. The model is re-run and the warnings are eliminated. Table 7-4 provides the final results.



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Table 7-4. Unit 3 UHS Channel Final Results

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
U3 UHS	Branch	109	125	819	819.52	819.52	819.78	0.003106	4.11	30.4	58.25	1
U3 UHS	Branch	108.988*	125	818.98	819.45	819.5	819.77	0.004326	4.58	27.34	58.25	1.18
U3 UHS	Branch	108.977*	125	818.96	819.47	819.48	819.75	0.003232	4.19	29.86	58.25	1.03
U3 UHS	Branch	108.966*	125	818.93	819.37	819.45	819.74	0.005233	4.85	25.84	58.25	1.28
U3 UHS	Branch	108.955*	125	818.91	819.43	819.43	819.7	0.003101	4.14	30.24	58.25	1.01
U3 UHS	Branch	108.944*	125	818.89	819.36	819.41	819.69	0.004342	4.59	27.34	58.25	1.18
U3 UHS	Branch	108.933*	125	818.87	819.38	819.39	819.66	0.003254	4.21	29.81	58.25	1.04
U3 UHS	Branch	108.922*	125	818.84	819.29	819.36	819.65	0.005221	4.85	25.85	58.25	1.28
U3 UHS	Branch	108.911*	125	818.82	819.34	819.34	819.61	0.003122	4.16	30.17	58.25	1.02
U3 UHS	Branch	108.9*	125	818.8	819.27	819.33	819.6	0.004331	4.59	27.33	58.25	1.18
U3 UHS	Branch	108.888*	125	818.78	819.3	819.31	819.57	0.003271	4.22	29.74	58.25	1.04
U3 UHS	Branch	108.877*	125	818.76	819.24	819.29	819.56	0.004336	4.6	27.31	58.25	1.18
U3 UHS	Branch	108.866*	125	818.73	819.18	819.26	819.55	0.005151	4.84	25.91	58.25	1.27
U3 UHS	Branch	108.855*	125	818.71	819.24	819.24	819.51	0.003149	4.18	30.04	58.25	1.02
U3 UHS	Branch	108.844*	125	818.69	819.17	819.22	819.5	0.004324	4.6	27.28	58.25	1.18
U3 UHS	Branch	108.833*	125	818.67	819.19	819.2	819.47	0.003283	4.24	29.63	58.25	1.04
U3 UHS	Branch	108.822*	125	818.64	819.1	819.18	819.46	0.004948	4.8	26.15	58.25	1.25
U3 UHS	Branch	108.811*	125	818.62	819.15	819.16	819.42	0.003252	4.23	29.67	58.25	1.04
U3 UHS	Branch	108.8*	125	818.6	819.09	819.14	819.41	0.004305	4.61	27.23	58.25	1.18
U3 UHS	Branch	108.788*	125	818.58	819.11	819.12	819.39	0.003288	4.25	29.53	58.25	1.04
U3 UHS	Branch	108.777*	125	818.56	819.06	819.1	819.37	0.004002	4.51	27.78	58.25	1.14
U3 UHS	Branch	108.766*	125	818.53	819	819.07	819.36	0.004864	4.79	26.12	58.25	1.24
U3 UHS	Branch	108.755*	125	818.51	819.04	819.06	819.32	0.003258	4.25	29.5	58.25	1.04
U3 UHS	Branch	108.744*	125	818.49	818.98	819.04	819.31	0.004287	4.62	27.08	56.4	1.17
U3 UHS	Branch	108.733*	125	818.47	819	819.02	819.29	0.003305	4.27	29.29	58.25	1.04
U3 UHS	Branch	108.722*	125	818.44	818.92	818.99	819.28	0.004936	4.83	25.86	55.84	1.25
U3 UHS	Branch	108.711*	125	818.42	818.96	818.97	819.24	0.003317	4.29	29.17	56.01	1.05
U3 UHS	Branch	108.7*	125	818.4	818.9	818.95	819.23	0.004327	4.66	26.85	55.57	1.18
U3 UHS	Branch	108.688*	125	818.38	818.92	818.93	819.21	0.003341	4.31	29.02	55.61	1.05
U3 UHS	Branch	108.677*	125	818.36	818.87	818.91	819.19	0.004047	4.57	27.33	55.24	1.15
U3 UHS	Branch	108.666*	125	818.33	818.8	818.89	819.19	0.005372	5	25.01	54.75	1.3
U3 UHS	Branch	108.655*	125	818.31	818.86	818.87	819.14	0.003127	4.24	29.49	55.05	1.02
U3 UHS	Branch	108.644*	125	818.29	818.79	818.85	819.13	0.004284	4.68	26.73	54.56	1.18
U3 UHS	Branch	108.633*	125	818.27	818.82	818.83	819.11	0.003322	4.33	28.86	54.62	1.05
U3 UHS	Branch	108.622*	125	818.24	818.73	818.8	819.1	0.00489	4.89	25.59	54.02	1.25



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Table 7-4. Unit 3 UHS Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
U3 UHS	Branch	108.611*	125	818.22	818.77	818.78	819.06	0.003312	4.34	28.8	54.19	1.05
U3 UHS	Branch	108.6*	125	818.2	818.72	818.77	819.05	0.004017	4.61	27.1	53.81	1.15
U3 UHS	Branch	108.588*	125	818.18	818.73	818.75	819.03	0.003298	4.35	28.75	53.8	1.05
U3 UHS	Branch	108.577*	125	818.16	818.68	818.73	819.01	0.004006	4.62	27.05	53.42	1.14
U3 UHS	Branch	108.566*	125	818.13	818.61	818.7	819.01	0.005361	5.06	24.69	52.93	1.31
U3 UHS	Branch	108.555*	125	818.11	818.67	818.68	818.96	0.003132	4.3	29.08	53.23	1.02
U3 UHS	Branch	108.544*	125	818.09	818.61	818.66	818.95	0.004261	4.73	26.41	52.74	1.18
U3 UHS	Branch	108.533*	125	818.07	818.63	818.64	818.93	0.003321	4.39	28.48	52.79	1.05
U3 UHS	Branch	108.522*	125	818.04	818.56	818.62	818.91	0.004273	4.75	26.31	52.31	1.18
U3 UHS	Branch	108.511*	125	818.02	818.58	818.6	818.88	0.003337	4.41	28.35	52.36	1.06
U3 UHS	Branch	108.5*	125	818	818.53	818.58	818.87	0.003979	4.66	26.81	52	1.14
U3 UHS	Branch	108.488*	125	817.98	818.54	818.56	818.85	0.003289	4.4	28.39	51.99	1.05
U3 UHS	Branch	108.477*	125	817.96	818.49	818.54	818.83	0.00399	4.68	26.71	51.6	1.15
U3 UHS	Branch	108.466*	125	817.93	818.42	818.51	818.83	0.005334	5.13	24.38	51.1	1.31
U3 UHS	Branch	108.455*	125	817.91	818.49	818.5	818.78	0.00314	4.36	28.66	51.42	1.03
U3 UHS	Branch	108.444*	125	817.89	818.42	818.48	818.78	0.004248	4.79	26.07	50.92	1.18
U3 UHS	Branch	108.433*	125	817.87	818.44	818.46	818.75	0.003333	4.46	28.05	50.96	1.06
U3 UHS	Branch	108.422*	125	817.84	818.37	818.43	818.73	0.004246	4.81	25.99	50.5	1.18
U3 UHS	Branch	108.411*	125	817.82	818.45	818.41	818.7	0.002447	4.06	30.76	50.88	0.92
U3 UHS	Branch	108.4*	125	817.8	818.46	818.4	818.69	0.002115	3.89	32.13	50.85	0.86
U3 UHS	Branch	108.388*	125	817.78	818.47		818.68	0.001853	3.74	33.43	50.82	0.81
U3 UHS	Branch	108.377*	125	817.76	818.47		818.67	0.001641	3.61	34.66	50.78	0.77
U3 UHS	Branch	108.366*	125	817.73	818.49		818.67	0.001353	3.4	36.74	50.81	0.71
U3 UHS	Branch	108.355*	125	817.71	818.49		818.66	0.001224	3.3	37.85	50.76	0.67
U3 UHS	Branch	108.344*	125	817.69	818.5		818.66	0.001113	3.21	38.93	50.71	0.65
U3 UHS	Branch	108.333*	125	817.67	818.5		818.65	0.001017	3.13	39.98	50.65	0.62
U3 UHS	Branch	108.322*	125	817.64	818.51		818.65	0.000884	3	41.7	50.64	0.58
U3 UHS	Branch	108.311*	125	817.62	818.51		818.64	0.000816	2.93	42.7	50.58	0.56
U3 UHS	Branch	108.3*	125	817.6	818.51		818.64	0.000756	2.86	43.66	50.51	0.54
U3 UHS	Branch	108.288*	125	817.58	818.52		818.64	0.000702	2.8	44.62	50.45	0.52
U3 UHS	Branch	108.277*	125	817.56	818.52		818.64	0.000653	2.74	45.58	50.39	0.51
U3 UHS	Branch	108.266*	125	817.53	818.52		818.63	0.000585	2.65	47.1	50.35	0.48
U3 UHS	Branch	108.255*	125	817.51	818.53		818.63	0.000548	2.6	48.02	50.28	0.47
U3 UHS	Branch	108.244*	125	817.49	818.53		818.63	0.000514	2.56	48.92	50.21	0.46
U3 UHS	Branch	108.233*	125	817.47	818.53		818.63	0.000483	2.51	49.82	50.15	0.44



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Table 7-4. Unit 3 UHS Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
U3 UHS	Branch	108.222*	125	817.44	818.53		818.63	0.000439	2.44	51.24	50.11	0.43
U3 UHS	Branch	108.211*	125	817.42	818.54		818.63	0.000415	2.4	52.11	50.04	0.41
U3 UHS	Branch	108.2*	125	817.4	818.54		818.62	0.000392	2.36	52.96	49.98	0.4
U3 UHS	Branch	108.188*	125	817.38	818.54		818.62	0.000372	2.32	53.8	49.9	0.39
U3 UHS	Branch	108.177*	125	817.36	818.54		818.62	0.000353	2.29	54.62	49.83	0.39
U3 UHS	Branch	108.166*	125	817.33	818.54		818.62	0.000325	2.23	55.97	49.78	0.37
U3 UHS	Branch	108.155*	125	817.31	818.54		818.62	0.000309	2.2	56.77	49.71	0.36
U3 UHS	Branch	108.144*	125	817.29	818.55		818.62	0.000295	2.17	57.55	49.63	0.36
U3 UHS	Branch	108.133*	125	817.27	818.55		818.62	0.000281	2.14	58.34	49.56	0.35
U3 UHS	Branch	108.122*	125	817.24	818.55		818.62	0.000261	2.1	59.63	49.51	0.34
U3 UHS	Branch	108.111*	125	817.22	818.55		818.62	0.00025	2.07	60.39	49.43	0.33
U3 UHS	Branch	108.1*	125	817.2	818.55		818.62	0.000239	2.04	61.15	49.36	0.32
U3 UHS	Branch	108.088*	125	817.18	818.55		818.61	0.00023	2.02	61.89	49.28	0.32
U3 UHS	Branch	108.077*	125	817.16	818.55		818.61	0.00022	2	62.64	49.21	0.31
U3 UHS	Branch	108.066*	125	817.13	818.55		818.61	0.000206	1.96	63.86	49.16	0.3
U3 UHS	Branch	108.055*	125	817.11	818.55		818.61	0.000198	1.94	64.59	49.09	0.3
U3 UHS	Branch	108.044*	125	817.09	818.56		818.61	0.000191	1.91	65.31	49.01	0.29
U3 UHS	Branch	108.033*	125	817.07	818.56		818.61	0.000184	1.89	66.01	48.93	0.29
U3 UHS	Branch	108.022*	125	817.04	818.56		818.61	0.000173	1.86	67.19	48.87	0.28
U3 UHS	Branch	108.011*	125	817.02	818.56		818.61	0.000167	1.84	67.88	48.8	0.28
U3 UHS	Branch	108	125	817	818.56		818.61	0.000161	1.82	68.57	48.72	0.27
U3 UHS	Upper	12	1652	817	819.47	819.47	820.35	0.001708	8.7	227.66	125.84	0.98
U3 UHS	Upper	11.875*	1652	816.93	819.15	819.4	820.29	0.002485	9.73	205.08	138	1.15
U3 UHS	Upper	11.75*	1652	816.85	818.86	819.29	820.24	0.003279	10.36	183.66	124.55	1.3
U3 UHS	Upper	11.625*	1652	816.78	818.64	819.17	820.19	0.004008	10.72	172.47	123.23	1.42
U3 UHS	Upper	11.5*	1652	816.71	818.44	818.93	820.14	0.004825	11	163.66	122.87	1.53
U3 UHS	Upper	11.375*	1652	816.64	818.26	818.81	820.08	0.005715	11.22	157.28	125.98	1.64
U3 UHS	Upper	11.25*	1652	816.57	818.11	818.7	820.01	0.006617	11.36	152.73	130.08	1.73
U3 UHS	Upper	11.125*	1652	816.49	817.96	818.55	819.94	0.007547	11.45	149.3	134.84	1.82
U3 UHS	Upper	11	1652	816.42	817.83	818.43	819.86	0.008557	11.51	146.61	140.18	1.91
U3 UHS	Upper	10.8*	1652	816.27	817.82	818.39	819.62	0.005702	10.95	156.82	135.41	1.7
U3 UHS	Upper	10.6*	1652	816.12	817.8	818.35	819.47	0.00409	10.67	165.39	133.21	1.56
U3 UHS	Upper	10.4*	1652	815.98	817.77	818.24	819.36	0.003033	10.64	177.84	154.35	1.48
U3 UHS	Upper	10.2*	1652	815.83	817.59	818.1	819.27	0.002909	11.43	179.54	164.83	1.6
U3 UHS	Upper	10	1652	815.68	817.23	817.78	819.16	0.00556	12.96	168.52	178.81	1.92



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Table 7-4. Unit 3 UHS Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
U3 UHS	Upper	9	1652	815.24	818.15	817.55	818.57	0.000518	5.52	329.11	148.28	0.61
U3 UHS	Upper	8	1652	815.02	818.1		818.53	0.000483	5.4	323.23	136.49	0.59
U3 UHS	Lower	7	1777	814.85	818.02		818.5	0.00056	5.83	333.13	149.65	0.64
U3 UHS	Lower	6.9	Lat Struct									
U3 UHS	Lower	6	1454.5	814.45	817.93		818.43	0.000508	5.86	268.11	117.36	0.64
U3 UHS	Lower	5	1168.16	814.06	817.87		818.36	0.000441	5.74	213.56	85.25	0.61
U3 UHS	Lower	4	1105.39	813.97	818.01		818.29	0.000379	4.54	261.5	97.88	0.43
U3 UHS	Lower	3.90909*	1079.45	813.93	818.02		818.28	0.000331	4.45	268.04	100.72	0.42
U3 UHS	Lower	3.81818*	1053.02	813.88	818.03		818.27	0.000296	4.26	275.08	103.82	0.4
U3 UHS	Lower	3.72727*	1026.09	813.84	818.04		818.26	0.000264	4.09	282.19	107.1	0.38
U3 UHS	Lower	3.63636*	998.7	813.8	818.05		818.25	0.000236	3.91	289.52	110.75	0.36
U3 UHS	Lower	3.54545*	970.86	813.75	818.06		818.24	0.000211	3.74	297.27	114.69	0.34
U3 UHS	Lower	3.45454*	942.62	813.71	818.07		818.24	0.000188	3.57	305.24	119.05	0.32
U3 UHS	Lower	3.36363*	913.99	813.66	818.08		818.23	0.000166	3.41	313.67	123.95	0.31
U3 UHS	Lower	3.27272*	884.99	813.62	818.09		818.22	0.000148	3.24	322.47	129.59	0.29
U3 UHS	Lower	3.18181*	855.66	813.58	818.1		818.22	0.000131	3.08	331.79	137.06	0.27
U3 UHS	Lower	3.09090*	826.02	813.53	818.11		818.21	0.000116	2.93	342.1	145.03	0.26
U3 UHS	Lower	3	796.08	813.49	818.12		818.21	0.000094	2.84	353.21	152.88	0.25
U3 UHS	Lower	2	627.32	813	818.13	815.83	818.19	0.00004	2.25	387.54	168.02	0.19
U3 UHS	Lower	1.5	Inl Struct									
U3 UHS	Lower	1	627.32	805	815.1	806.36	815.11	0.000003	0.62	1004.93	131.48	0.04

The results indicate that the Froude Number exceeds one for the Unit 3 UHS Upper Channel (Cross Sections 10 through 11.875) and Unit 3 UHS Branch Channel (Cross Section 108.422 through 109), indicating there is supercritical flow. The results also indicate there is a possibility of hydraulic jump between cross sections 108.411 and 108.422, and cross sections 9 and 10. Cross Section data indicates the channel between cross sections 10 through 12 is comprised of concrete and gravel and the area between cross sections 108 and 109 is gravel. Table 7-4 indicates the maximum velocity for the Unit 3 UHS Branch Channel is 5.13 ft/sec (Cross Section 108.466), which is less than the suggested maximum permissible velocity of 7-13 ft/sec for rubble lined section. Table 7-4 also indicates the maximum velocity for Unit 3 UHS Upper Channel is 12.96 ft/sec (Cross Section 10), which is less than the maximum permissible velocity of for rubble and concrete. Therefore, the velocity within the Unit 3 UHS Upper and Branch Channel are below the permissible maximum velocity and there is no potential for erosion. The ratio of water surface elevation after and before hydraulic jump at both locations is close to one (1); indicating it's a very weak hydraulic jump. The cross-section at hydraulic jump locations is mostly gravel and may cause slight to moderate erosion.

Additionally, the maximum water surface elevation within Unit 3 UHS Channel is 819.52 ft (Cross Section 109) and does not exceed 1 ft below plant grade and meets DCD criteria. The 819.47 ft

water surface elevation result for Cross Section 12 establishes a potential downstream boundary condition for the Center North Channel. The water surface elevation result for Cross Section 3 is 818.12 ft and establishes the downstream boundary condition for the Unit 3 North Channel. The Unit 3 UHS Channel flow profile is provided in Figure 7-13. The location of supercritical flows and hydraulic jumps within the Unit 3 UHS Channel are identified in Figure 7-14.

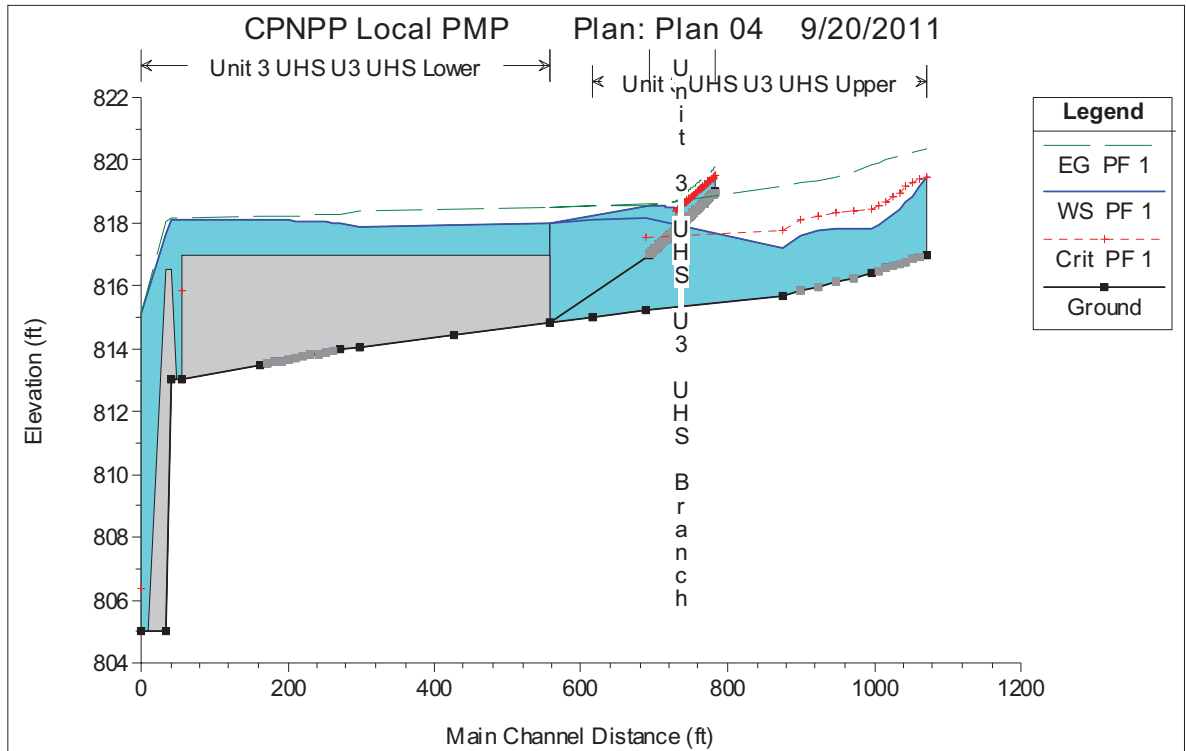


Figure 7-13. Unit 3 UHS Channel Flow Profile

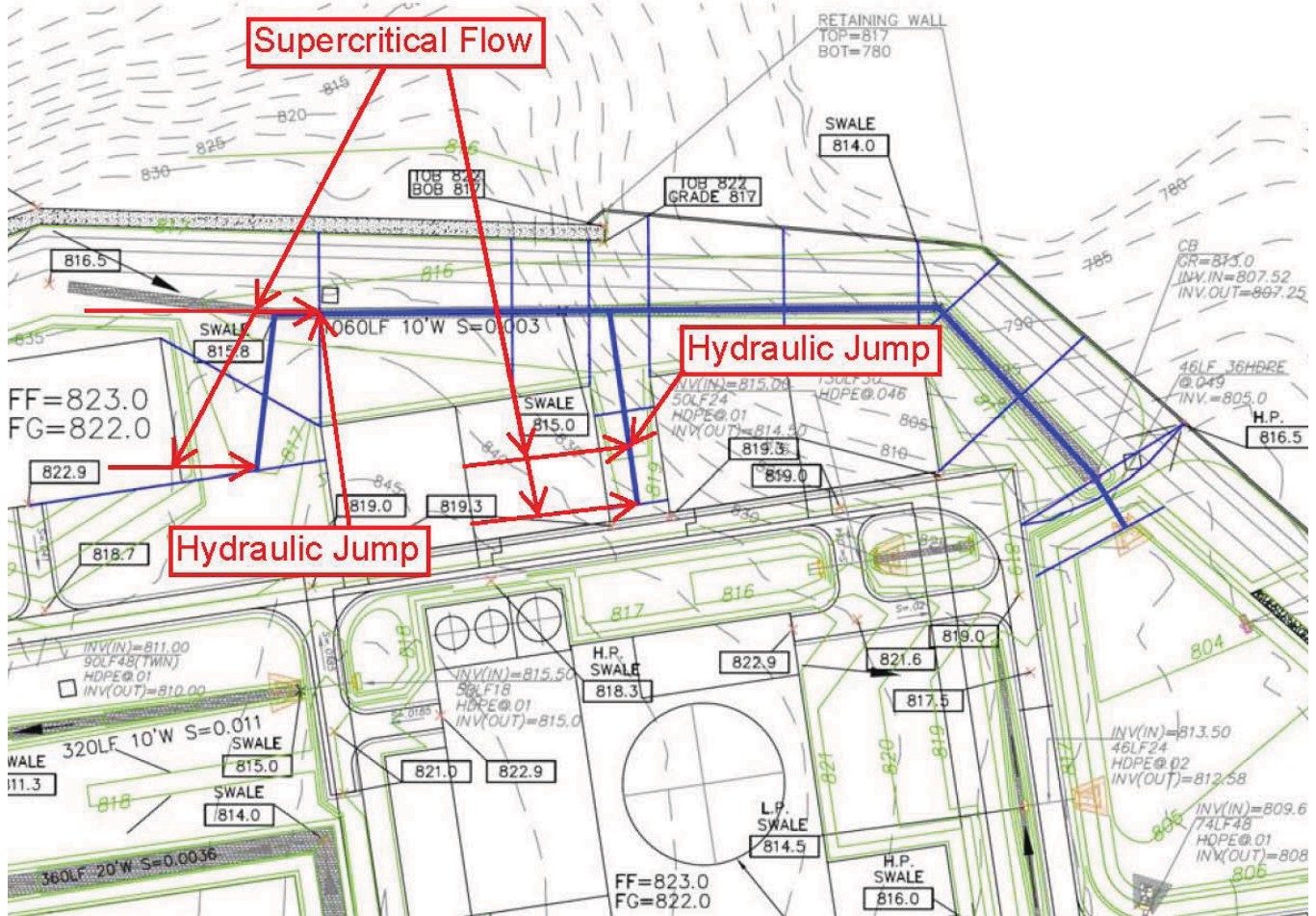


Figure 7-14. Unit 3 UHS Channel Cross Sections
Source: Local Site Analysis (Reference 3)

7.7 Unit 3 North Channel

As discussed in Local Site Analysis; the Unit 3 North Channel runs east and empties into Drainage Pond B through a culvert structure at the Plant Loop Road, as shown in Figure 7-17. The Unit 3 North Channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning's roughness coefficient was decreased to obtain conservative (higher) velocities. The Unit 3 North Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-15. The Unit 3 North Channel cross section data are shown in Appendix A.

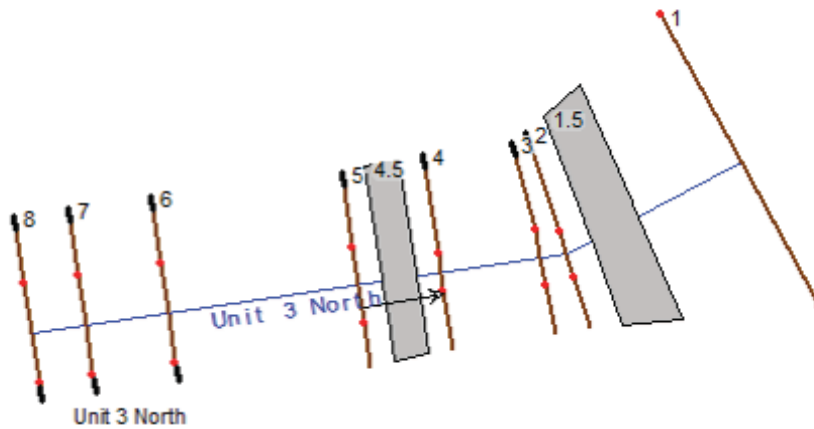


Figure 7-15. Unit 3 North Channel HEC-RAS Schematic
Source: Local Site Analysis (Reference 3)

The upstream Cross Section 8 is assigned a critical depth boundary condition. The downstream Cross Section 1 is assigned the higher water surface elevation from the Unit 3 UHS Channel (Cross Section 3). The result for the Unit 3 UHS Channel Cross Section 3 is 818.12 ft (see Section 7.6). The HEC-RAS model is run using the steady flow option with a mixed flow regime.

Warnings indicate there may be a need for additional cross sections between Cross Sections 3 and 4. HEC-RAS interpolation with 50 ft maximum spacing is used to generate one new cross section between Cross Sections 3 and 4. The downstream boundary condition, established by the final results of the Unit 3 UHS Channel, remains unchanged. The model is re-run and the warnings are eliminated. Table 7-5 provides the final results.

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Table 7-5. Unit 3 North Channel Final Results

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Unit 3	North	8	164	817	820.12	817.71	820.13	0.00001	0.71	233.36	104.15	0.07
Unit 3	North	7	164	816.64	820.12		820.13	0.000008	0.67	249.02	104.16	0.07
Unit 3	North	6	164	816.1	820.12		820.13	0.000006	0.63	268.81	104.16	0.06
Unit 3	North	5	164	815	820.12	816.52	820.13	0.000007	0.7	244.36	98.74	0.07
Unit 3	North	4.5	Inl Struct									
Unit 3	North	4	164	814.5	819.66		819.68	0.000023	1.11	177.2	105.54	0.1
Unit 3	North	3.5*	164	814.28	819.67		819.68	0.000015	0.93	207.89	112.19	0.08
Unit 3	North	3	164	814.05	819.67		819.68	0.000009	0.76	247.21	128.73	0.06
Unit 3	North	2	164	813.5	819.67	815.49	819.68	0.00001	0.79	239.4	134.84	0.07
Unit 3	North	1.5	Inl Struct									
Unit 3	North	1	164	813	818.12	813.64	818.12	0	0.15	1079.02	234.88	0.01

The results indicate all Froude Numbers are less than one, indicating there is no supercritical flow in the Unit 3 North Channel. There are no indications of hydraulic jumps in the channel.

Additionally, the maximum water surface elevation within Unit 3 UHS Channel is 820.12 ft (Cross Sections 5 through 8) and does not exceed 1 ft below plant grade and meets DCD criteria. The Unit 3 North Channel flow profile is provided in Figure 7-16.

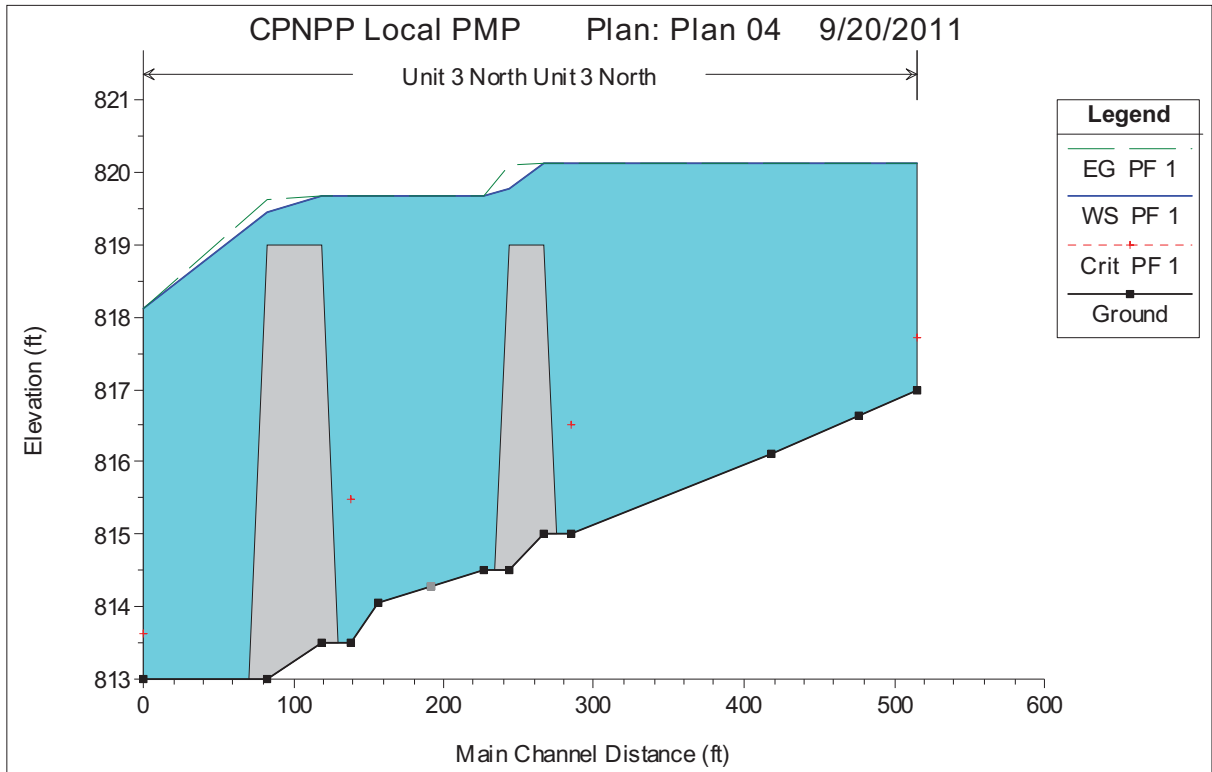


Figure 7-16. Unit 3 North Channel Flow Profile

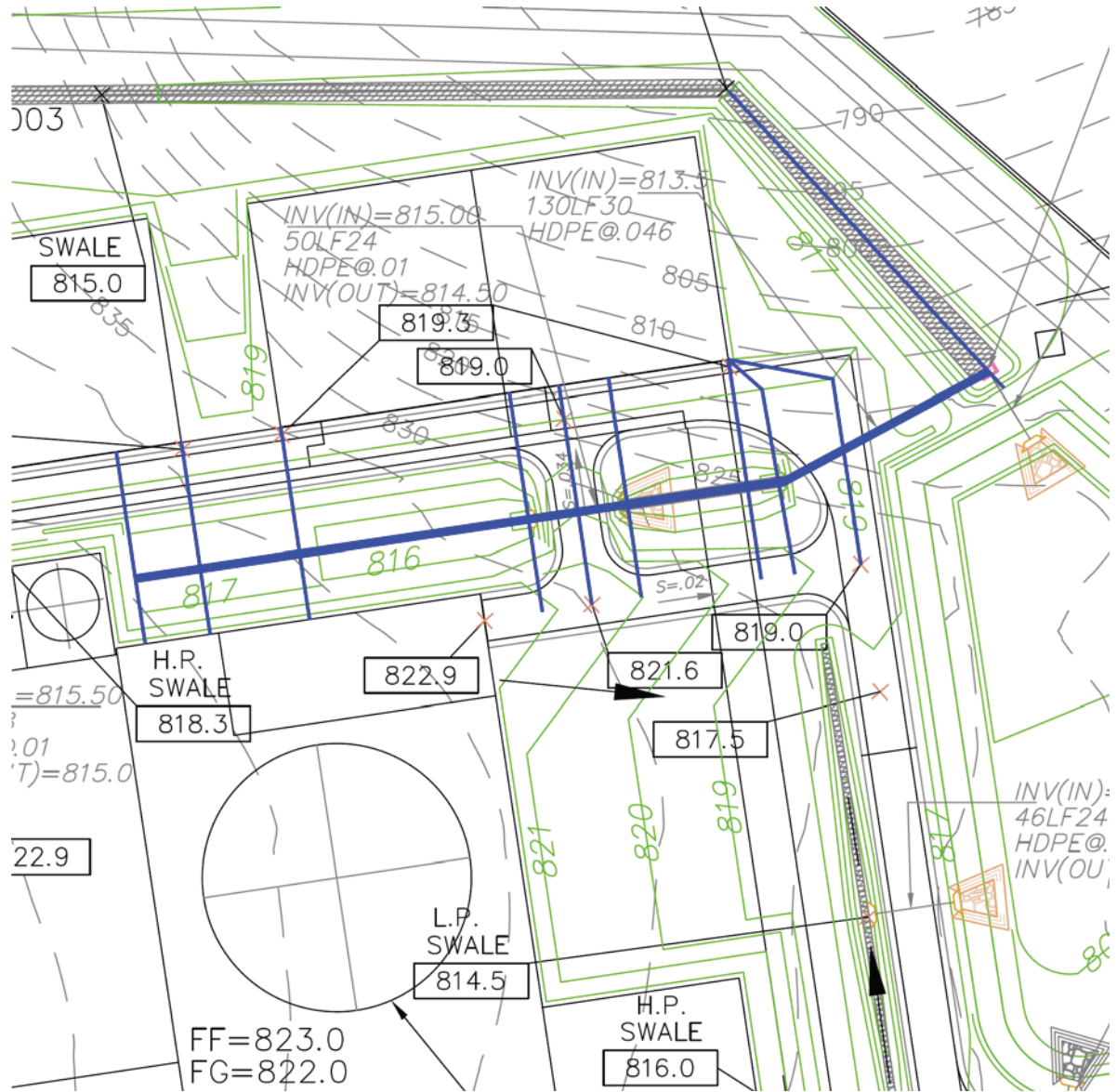


Figure 7-17. Unit 3 North Channel Cross Sections
Source: Local Site Analysis (Reference 3)

7.8 Center North Channel

As discussed in Local Site Analysis; Center North Channel runs generally north in two branches between Units 3 and 4 to a culvert structure at the Plant Loop Road, as shown in Figure 7-20. The Center North Channel, cross sections, in-line structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning's roughness coefficient was decreased to obtain conservative (higher) velocities. The Center North Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-18. The Center North Channel cross section data are shown in Appendix A.

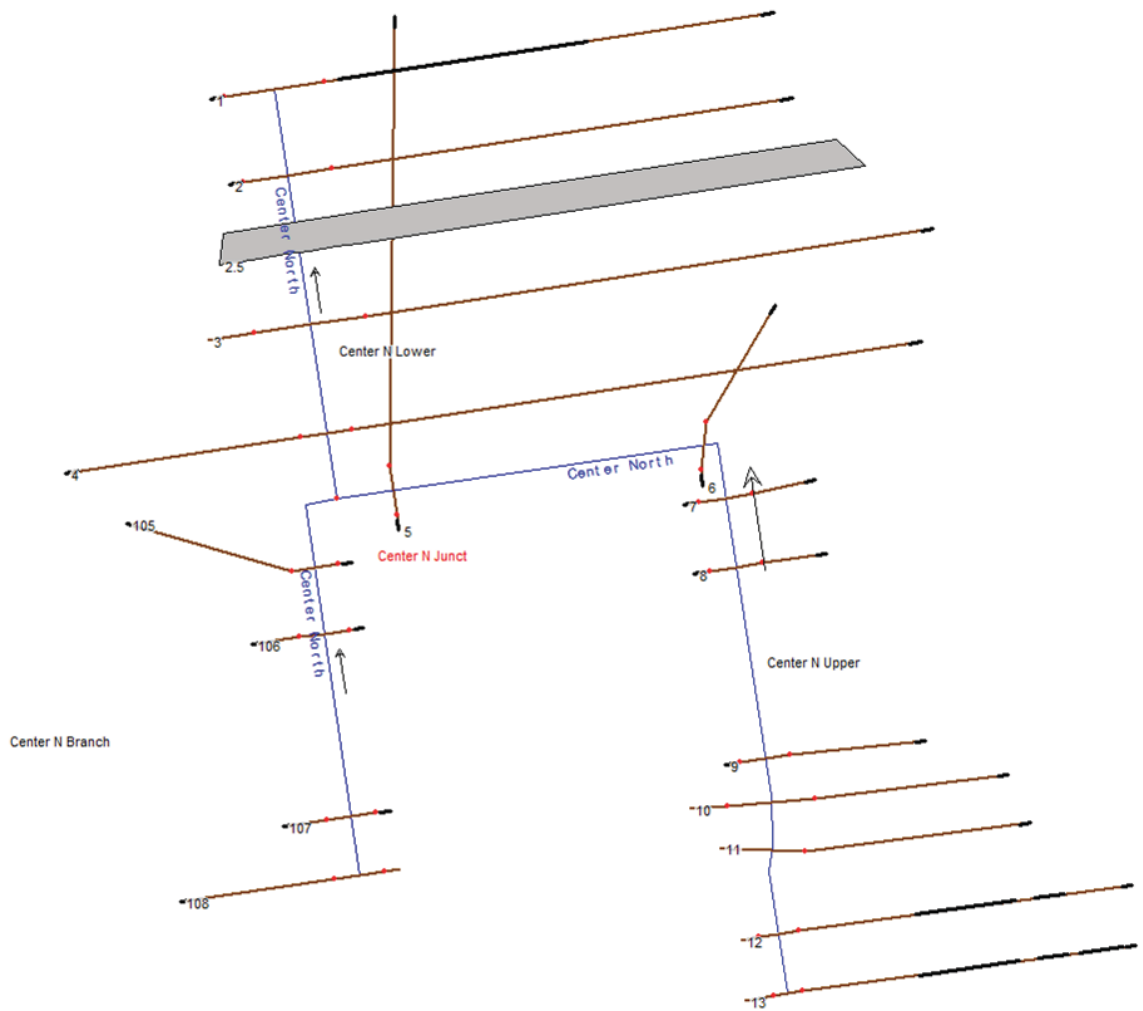


Figure 7-18. Center North Channel HEC-RAS Schematic
Source: Local Site Analysis (Reference 3)

The upstream Cross Sections 13 and 108 are assigned a critical depth boundary condition. The downstream Cross Section 1 is subject to the water surface elevations in the Unit 3 UHS Channel and the Unit 4 UHS Channel. As a conservative approach the higher of the water surface elevations is used. The upstream cross section of the Unit 3 UHS Channel provides the highest result of

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819.47 ft for the downstream boundary condition (see Section 7.6). The HEC-RAS model is run using the steady flow option with a mixed flow regime.

Warnings indicate there may be a need for additional cross sections between Cross Sections 3 and 4, 5 and 6, 9 and 10, 10 and 11, 11 and 12, and 12 and 13 of the main channel. In addition, warnings indicate there may be a need for additional cross sections between Cross Sections 105 and 106 and Cross Sections 107 and 108 of the branch channel.

HEC-RAS interpolation with 50 ft maximum spacing is used to generate one new cross section between Cross Sections 3 and 4, and five new cross sections between Cross Sections 5 and 6. Interpolation with 0.5 ft maximum spacing is used to generate 79 new cross sections between Cross Sections 9 and 10. Interpolation with 10 ft maximum spacing is used to generate four new cross sections between Cross Sections 10 and 11. Interpolation with 20 ft maximum spacing is used to generate three new cross sections between Cross Sections 11 and 12. Interpolation with 1 ft maximum spacing is used to generate 55 new cross sections between Cross Sections 12 and 13.

HEC-RAS interpolation with 50 ft maximum spacing is used to generate one new cross section between Cross Sections 105 and 106 of the branch channel. Interpolation with 10 ft maximum spacing is used to generate five new cross sections between Cross Sections 107 and 108 of the branch channel. The model is re-run and the warnings are eliminated. Table 7-6 provides the final results.



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Table 7-6. Center North Channel Final Results

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Center	N Upper	13	52	819.6	820.08	820.08	820.32	0.002853	3.87	13.69	33.9	0.96
Center	N Upper	12.9821*	52	819.5	820.01	820.06	820.31	0.004304	4.38	11.89	27.3	1.16
Center	N Upper	12.9642*	52	819.5	819.96	820.03	820.29	0.005193	4.64	11.2	26.6	1.26
Center	N Upper	12.9464*	52	819.5	820.04	820.01	820.25	0.002635	3.76	13.88	29.2	0.93
Center	N Upper	12.9285*	52	819.5	820.05	819.99	820.24	0.002192	3.55	14.72	30	0.85
Center	N Upper	12.9107*	52	819.5	820.05		820.23	0.001868	3.37	15.5	30.7	0.79
Center	N Upper	12.8928*	52	819.4	820.07		820.22	0.001471	3.13	16.74	31.8	0.71
Center	N Upper	12.875*	52	819.4	820.08		820.22	0.001299	3.01	17.44	32.3	0.67
Center	N Upper	12.8571*	52	819.4	820.08		820.21	0.001159	2.9	18.09	32.7	0.64
Center	N Upper	12.8392*	52	819.4	820.09		820.21	0.000977	2.75	19.12	33.3	0.59
Center	N Upper	12.8214*	52	819.3	820.09		820.2	0.000884	2.66	19.75	33.7	0.56
Center	N Upper	12.8035*	52	819.3	820.1		820.2	0.000803	2.58	20.38	34	0.54
Center	N Upper	12.7857*	52	819.3	820.1		820.2	0.000732	2.51	21	34.3	0.52
Center	N Upper	12.7678*	52	819.3	820.1		820.19	0.000642	2.4	21.91	34.8	0.49
Center	N Upper	12.75*	52	819.2	820.11		820.19	0.000593	2.34	22.49	35	0.47
Center	N Upper	12.7321*	52	819.2	820.11		820.19	0.000547	2.28	23.09	35.3	0.45
Center	N Upper	12.7142*	52	819.2	820.11		820.19	0.000488	2.2	23.95	35.6	0.43
Center	N Upper	12.6964*	52	819.2	820.12		820.19	0.000454	2.15	24.54	35.9	0.42
Center	N Upper	12.6785*	52	819.2	820.12		820.19	0.000423	2.1	25.11	36.1	0.4
Center	N Upper	12.6607*	52	819.1	820.12		820.18	0.000396	2.05	25.66	36.4	0.39
Center	N Upper	12.6428*	52	819.1	820.12		820.18	0.000359	1.99	26.49	36.6	0.37
Center	N Upper	12.625*	52	819.1	820.12		820.18	0.000337	1.95	27.04	36.8	0.36
Center	N Upper	12.6071*	52	819.1	820.12		820.18	0.000317	1.91	27.6	37.1	0.35
Center	N Upper	12.5892*	52	819	820.13		820.18	0.000291	1.86	28.4	37.3	0.34
Center	N Upper	12.5714*	52	819	820.13		820.18	0.000274	1.82	28.95	37.5	0.33
Center	N Upper	12.5535*	52	819	820.13		820.18	0.00026	1.79	29.46	37.7	0.32



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Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Center	N Upper	12.5357*	52	819	820.13		820.18	0.000247	1.76	30	37.9	0.31
Center	N Upper	12.5178*	52	818.9	820.13		820.18	0.000228	1.71	30.77	38.1	0.3
Center	N Upper	12.5*	52	818.9	820.13		820.18	0.000216	1.68	31.31	38.3	0.3
Center	N Upper	12.4821*	52	818.9	820.13		820.17	0.000206	1.66	31.83	38.4	0.29
Center	N Upper	12.4642*	52	818.9	820.13		820.17	0.000191	1.62	32.6	38.6	0.28
Center	N Upper	12.4464*	52	818.9	820.13		820.17	0.000183	1.59	33.09	38.8	0.27
Center	N Upper	12.4285*	52	818.8	820.13		820.17	0.000175	1.57	33.61	39	0.27
Center	N Upper	12.4107*	52	818.8	820.14		820.17	0.000167	1.54	34.14	39.1	0.26
Center	N Upper	12.3928*	52	818.8	820.14		820.17	0.000156	1.51	34.9	39.3	0.25
Center	N Upper	12.375*	52	818.8	820.14		820.17	0.00015	1.49	35.42	39.5	0.25
Center	N Upper	12.3571*	52	818.7	820.14		820.17	0.000143	1.46	35.98	39.7	0.24
Center	N Upper	12.3392*	52	818.7	820.14		820.17	0.000135	1.44	36.67	39.8	0.24
Center	N Upper	12.3214*	52	818.7	820.14		820.17	0.000129	1.42	37.19	40	0.23
Center	N Upper	12.3035*	52	818.7	820.14		820.17	0.000124	1.4	37.69	40.1	0.23
Center	N Upper	12.2857*	52	818.7	820.14		820.17	0.000119	1.38	38.21	40.3	0.22
Center	N Upper	12.2678*	52	818.6	820.14		820.17	0.000113	1.35	38.94	40.5	0.22
Center	N Upper	12.25*	52	818.6	820.14		820.17	0.000109	1.34	39.4	40.6	0.21
Center	N Upper	12.2321*	52	818.6	820.14		820.17	0.000105	1.32	39.9	40.7	0.21
Center	N Upper	12.2142*	52	818.6	820.14		820.17	0.000099	1.3	40.62	40.9	0.21
Center	N Upper	12.1964*	52	818.5	820.14		820.17	0.000096	1.28	41.12	41.1	0.2
Center	N Upper	12.1785*	52	818.5	820.14		820.17	0.000093	1.27	41.62	41.2	0.2
Center	N Upper	12.1607*	52	818.5	820.14		820.17	0.00009	1.25	42.11	41.4	0.2
Center	N Upper	12.1428*	52	818.5	820.14		820.17	0.000086	1.23	42.78	41.5	0.19
Center	N Upper	12.125*	52	818.4	820.14		820.17	0.000083	1.22	43.29	41.6	0.19
Center	N Upper	12.1071*	52	818.4	820.14		820.17	0.00008	1.2	43.78	41.8	0.19
Center	N Upper	12.0892*	52	818.4	820.14		820.17	0.000076	1.18	44.48	41.9	0.18
Center	N Upper	12.0714*	52	818.4	820.14		820.17	0.000074	1.17	44.98	42.1	0.18
Center	N Upper	12.0535*	52	818.4	820.14		820.17	0.000072	1.16	45.46	42.2	0.18



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Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Center	N Upper	12.0357*	52	818.3	820.14		820.17	0.00007	1.15	45.9	42.4	0.17
Center	N Upper	12.0178*	52	818.3	820.15		820.17	0.000067	1.13	46.59	42.5	0.17
Center	N Upper	12	52	818.3	820.15		820.16	0.000065	1.12	47.08	42.7	0.17
Center	N Upper	11.75*	52	818	820.15		820.16	0.000034	0.88	60.06	49.3	0.13
Center	N Upper	11.5*	52	817.6	820.15		820.16	0.000019	0.7	74.91	56.6	0.1
Center	N Upper	11.25*	52	817.3	820.15		820.16	0.000011	0.57	91.83	65.2	0.07
Center	N Upper	11	52	817	820.15		820.16	0.000007	0.48	111	79.9	0.06
Center	N Upper	10.8*	52	816.7	820.16		820.16	0.000004	0.38	145.2	106	0.04
Center	N Upper	10.6*	52	816.3	820.16		820.16	0.000002	0.3	184.9	125	0.03
Center	N Upper	10.4*	52	816	820.16		820.16	0.000001	0.25	229.4	140	0.03
Center	N Upper	10.2*	52	815.6	820.16		820.16	0.000001	0.21	277.8	151	0.02
Center	N Upper	10	442	815.3	820.12		820.15	0.000043	1.49	324.2	157	0.14
Center	N Upper	9.9875*	442	815.3	820.12		820.15	0.000032	1.52	322.1	156	0.14
Center	N Upper	9.975*	442	815.3	820.12		820.15	0.000032	1.53	320.1	155	0.14
Center	N Upper	9.9625*	442	815.3	820.12		820.15	0.000032	1.54	318.3	154	0.15
Center	N Upper	9.95*	442	815.3	820.12		820.15	0.000032	1.55	316.4	153	0.15
Center	N Upper	9.9375*	442	815.3	820.12		820.15	0.000033	1.56	314.2	152	0.15
Center	N Upper	9.925*	442	815.3	820.12		820.15	0.000033	1.57	312.5	151	0.15
Center	N Upper	9.9125*	442	815.3	820.12		820.15	0.000033	1.58	310.3	150	0.15
Center	N Upper	9.9*	442	815.3	820.12		820.15	0.000033	1.59	308.6	149	0.15
Center	N Upper	9.8875*	442	815.3	820.12		820.15	0.000033	1.6	306.8	148	0.15
Center	N Upper	9.875*	442	815.3	820.11		820.15	0.000033	1.61	304.8	147	0.15
Center	N Upper	9.8625*	442	815.3	820.11		820.15	0.000033	1.62	302.9	146	0.15
Center	N Upper	9.85*	442	815.3	820.11		820.15	0.000034	1.63	301.1	146	0.15
Center	N Upper	9.8375*	442	815.3	820.11		820.15	0.000034	1.64	298.9	144	0.15
Center	N Upper	9.825*	442	815.3	820.11		820.15	0.000034	1.65	297.4	143	0.16
Center	N Upper	9.8125*	442	815.3	820.11		820.15	0.000034	1.66	295.3	142	0.16
Center	N Upper	9.8*	442	815.3	820.11		820.15	0.000035	1.67	293.4	141	0.16



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Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Center	N Upper	9.7875*	442	815.3	820.11		820.15	0.000035	1.68	291.7	141	0.16
Center	N Upper	9.775*	442	815.3	820.11		820.15	0.000035	1.69	289.8	139	0.16
Center	N Upper	9.7625*	442	815.3	820.11		820.15	0.000035	1.7	288	139	0.16
Center	N Upper	9.75*	442	815.3	820.11		820.15	0.000035	1.71	286.2	138	0.16
Center	N Upper	9.7375*	442	815.2	820.11		820.15	0.000035	1.72	284.4	136	0.16
Center	N Upper	9.725*	442	815.2	820.11		820.15	0.000036	1.73	282.5	136	0.16
Center	N Upper	9.7125*	442	815.2	820.11		820.15	0.000036	1.75	280.7	135	0.16
Center	N Upper	9.7*	442	815.2	820.11		820.15	0.000036	1.76	278.7	134	0.17
Center	N Upper	9.6875*	442	815.2	820.11		820.15	0.000036	1.77	277.2	133	0.17
Center	N Upper	9.675*	442	815.2	820.1		820.15	0.000036	1.78	275.1	132	0.17
Center	N Upper	9.6625*	442	815.2	820.1		820.15	0.000037	1.79	273.3	131	0.17
Center	N Upper	9.65*	442	815.2	820.1		820.15	0.000037	1.8	271.5	130	0.17
Center	N Upper	9.6375*	442	815.2	820.1		820.15	0.000037	1.81	269.7	129	0.17
Center	N Upper	9.625*	442	815.2	820.1		820.15	0.000037	1.83	268	128	0.17
Center	N Upper	9.6125*	442	815.2	820.1		820.15	0.000038	1.84	266.3	127	0.17
Center	N Upper	9.6*	442	815.2	820.1		820.15	0.000038	1.85	264.2	126	0.18
Center	N Upper	9.5875*	442	815.2	820.1		820.15	0.000038	1.86	262.6	125	0.18
Center	N Upper	9.575*	442	815.2	820.1		820.15	0.000038	1.88	260.6	124	0.18
Center	N Upper	9.5625*	442	815.2	820.1		820.15	0.000039	1.89	259	123	0.18
Center	N Upper	9.55*	442	815.2	820.1		820.15	0.000039	1.9	257.2	123	0.18
Center	N Upper	9.5375*	442	815.2	820.1		820.15	0.000039	1.91	255.5	122	0.18
Center	N Upper	9.525*	442	815.2	820.1		820.15	0.000039	1.93	253.7	121	0.18
Center	N Upper	9.5125*	442	815.2	820.09		820.15	0.000039	1.94	251.9	120	0.18
Center	N Upper	9.5*	442	815.2	820.09		820.15	0.00004	1.96	250.1	119	0.18
Center	N Upper	9.4875*	442	815.2	820.09		820.15	0.00004	1.97	248.5	118	0.19
Center	N Upper	9.475*	442	815.2	820.09		820.15	0.00004	1.98	246.5	117	0.19
Center	N Upper	9.4625*	442	815.2	820.09		820.15	0.00004	2	244.8	116	0.19
Center	N Upper	9.45*	442	815.2	820.09		820.15	0.000041	2.01	243.3	115	0.19



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Center North Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Center	N Upper	9.4375*	442	815.2	820.09		820.15	0.000041	2.03	241.3	114	0.19
Center	N Upper	9.425*	442	815.2	820.09		820.15	0.000041	2.04	239.7	114	0.19
Center	N Upper	9.4125*	442	815.2	820.09		820.15	0.000042	2.06	238	113	0.19
Center	N Upper	9.4*	442	815.2	820.09		820.15	0.000042	2.07	236.3	112	0.2
Center	N Upper	9.3875*	442	815.2	820.08		820.15	0.000042	2.08	234.6	111	0.2
Center	N Upper	9.375*	442	815.2	820.08		820.15	0.000043	2.1	232.9	110	0.2
Center	N Upper	9.3625*	442	815.2	820.08		820.15	0.000043	2.12	231	109	0.2
Center	N Upper	9.35*	442	815.2	820.08		820.15	0.000043	2.13	229.5	108	0.2
Center	N Upper	9.3375*	442	815.2	820.08		820.15	0.000043	2.15	227.6	107	0.2
Center	N Upper	9.325*	442	815.2	820.08		820.15	0.000044	2.16	225.9	106	0.2
Center	N Upper	9.3125*	442	815.2	820.08		820.15	0.000044	2.18	224.2	106	0.21
Center	N Upper	9.3*	442	815.2	820.08		820.15	0.000044	2.19	222.7	105	0.21
Center	N Upper	9.2875*	442	815.2	820.07		820.15	0.000045	2.21	220.9	104	0.21
Center	N Upper	9.275*	442	815.2	820.07		820.15	0.000045	2.23	219.3	103	0.21
Center	N Upper	9.2625*	442	815.2	820.07		820.15	0.000046	2.25	217.4	102	0.21
Center	N Upper	9.25*	442	815.1	820.07		820.15	0.000046	2.26	215.9	101	0.21
Center	N Upper	9.2375*	442	815.1	820.07		820.15	0.000046	2.28	214.1	100	0.21
Center	N Upper	9.225*	442	815.1	820.07		820.15	0.000047	2.3	212.4	99.5	0.22
Center	N Upper	9.2125*	442	815.1	820.07		820.15	0.000047	2.31	211	98.8	0.22
Center	N Upper	9.2*	442	815.1	820.07		820.15	0.000047	2.33	209.1	97.7	0.22
Center	N Upper	9.1875*	442	815.1	820.06		820.15	0.000048	2.35	207.5	96.9	0.22
Center	N Upper	9.175*	442	815.1	820.06		820.15	0.000048	2.37	205.9	96.2	0.22
Center	N Upper	9.1625*	442	815.1	820.06		820.15	0.000048	2.39	204.3	95.1	0.22
Center	N Upper	9.15*	442	815.1	820.06		820.15	0.000049	2.41	202.6	94.4	0.23
Center	N Upper	9.1375*	442	815.1	820.06		820.15	0.000049	2.43	201	93.7	0.23
Center	N Upper	9.125*	442	815.1	820.06		820.15	0.00005	2.45	199.2	92.6	0.23
Center	N Upper	9.1125*	442	815.1	820.05		820.15	0.00005	2.47	197.7	91.9	0.23
Center	N Upper	9.1*	442	815.1	820.05		820.15	0.000051	2.49	196	90.9	0.23



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Center North Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Center	N Upper	9.0875*	442	815.1	820.05		820.15	0.000051	2.51	194.3	90.1	0.23
Center	N Upper	9.075*	442	815.1	820.05		820.15	0.000052	2.53	192.7	89.4	0.24
Center	N Upper	9.0625*	442	815.1	820.05		820.15	0.000052	2.55	191.1	88.4	0.24
Center	N Upper	9.05*	442	815.1	820.05		820.15	0.000053	2.57	189.6	87.7	0.24
Center	N Upper	9.0375*	442	815.1	820.04		820.15	0.000054	2.59	187.9	86.9	0.24
Center	N Upper	9.025*	442	815.1	820.04		820.15	0.000054	2.62	186.2	85.9	0.24
Center	N Upper	9.0125*	442	815.1	820.04		820.15	0.000055	2.64	184.7	85.2	0.25
Center	N Upper	9	442	815.1	820.04		820.14	0.000103	2.61	183.4	84.5	0.24
Center	N Upper	8	442	814.3	820.04		820.12	0.000071	2.26	195.2	50.2	0.2
Center	N Upper	7	442	814.1	820.04		820.12	0.000062	2.16	204.5	50.7	0.19
Center	N Upper	6	538	813.9	820.05		820.11	0.000047	2.12	289.5	88.8	0.17
Center	N Upper	5.83333*	538	813.7	820.04		820.11	0.000024	2.17	335.7	117	0.17
Center	N Upper	5.66666*	538	813.5	820.05		820.1	0.00002	2.04	395.2	164	0.16
Center	N Upper	5.5*	538	813.3	820.06		820.1	0.000016	1.87	496.5	260	0.15
Center	N Upper	5.33333*	538	813.1	820.07		820.09	0.000011	1.6	638	301	0.12
Center	N Upper	5.16666*	538	812.9	820.07		820.09	0.000008	1.34	805.5	341	0.1
Center	N Upper	5	538	812.7	820.08		820.09	0.000005	0.79	1000	382	0.06
Center	N Branch	108	257	814	820.09	815.43	820.1	0.000003	0.63	525.6	166	0.05
Center	N Branch	107.833*	257	814	820.09		820.1	0.000004	0.76	435.2	148	0.06
Center	N Branch	107.666*	257	813.9	820.09		820.1	0.000006	0.88	360.8	130	0.07
Center	N Branch	107.5*	257	813.9	820.08		820.1	0.000009	0.99	303.2	104	0.08
Center	N Branch	107.333*	257	813.9	820.08		820.1	0.000011	1.07	263.6	83.3	0.09
Center	N Branch	107.166*	257	813.8	820.08		820.09	0.000014	1.14	237.5	68.3	0.09
Center	N Branch	107	257	813.8	820.07		820.09	0.000017	1.18	221.2	57.3	0.1
Center	N Branch	106	257	813.1	820.07		820.09	0.000011	1.05	248.6	57.9	0.08
Center	N Branch	105.5*	257	813	820.08		820.09	0.000009	0.98	295.3	96.6	0.07
Center	N Branch	105	257	812.8	820.08		820.09	0.000005	0.78	442.7	177	0.06
Center	N Lower	4	1033	811.8	820.07		820.08	0.000013	1.46	1160	436	0.1

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Center North Channel Final Results (Continued)												
Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Center	N Lower	3.5*	1033	811.4	820.07		820.08	0.000011	1.27	1355	537	0.09
Center	N Lower	3	1168	811	820.07	814.73	820.08	0.000007	0.92	1687	563	0.06
Center	N Lower	2.5	Inl Struct									
Center	N Lower	2	1168	810	819.47		819.53	0.000037	2.09	755.3	367	0.15
Center	N Lower	1	1168	809.8	819.47	813.7	819.52	0.000036	1.98	699.3	203	0.14

The results indicate Froude Number exceeds one for Center North Upper Channel between cross sections 12.9642 and 12.9821, indicating there is supercritical flow. There are no indications of hydraulic jumps in the channels. Cross Section data indicates the Center North Upper Channel between cross sections 12 through 13 is concrete and gravel lined. Table 7-6 indicates the maximum velocity for the Center North Upper Channel is 4.64 ft/sec (Cross Section 12.9642). Therefore, the velocity within the Center North Upper Channel is lower than the maximum permissible velocity of rubble lined and concrete lined channels thus eliminating any potential for erosion.

Additionally, the maximum water surface elevation within Center North Channel is 820.16 ft (Cross Sections 10.2 through 10.8) and does not exceed 1 ft below plant grade and meets DCD criteria. The water surface elevation result for Cross Section 3 is 820.07 ft and establishes the downstream boundary condition for the Unit 4 North Channel. The Center North Channel flow profile is provided in Figure 7-19. The location of supercritical flows and hydraulic jumps within the Center North Channel are identified in Figure 7-20.

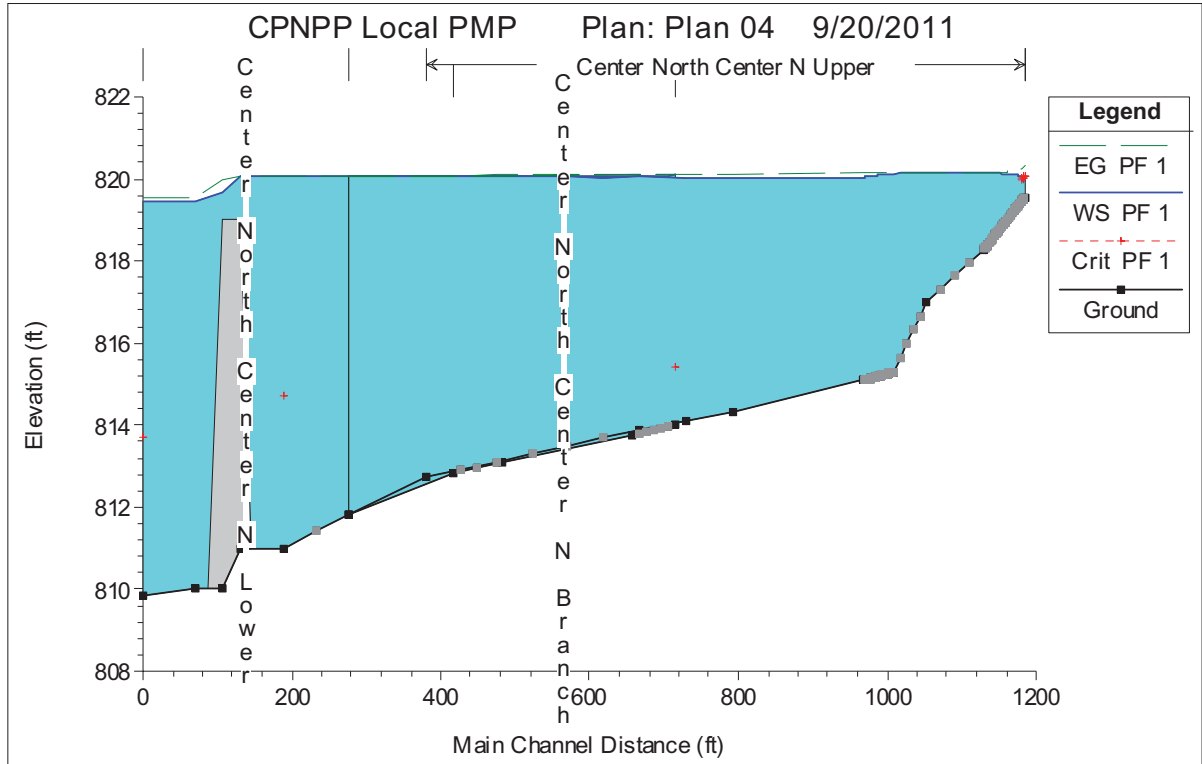


Figure 7-19. Center North Channel Flow Profile

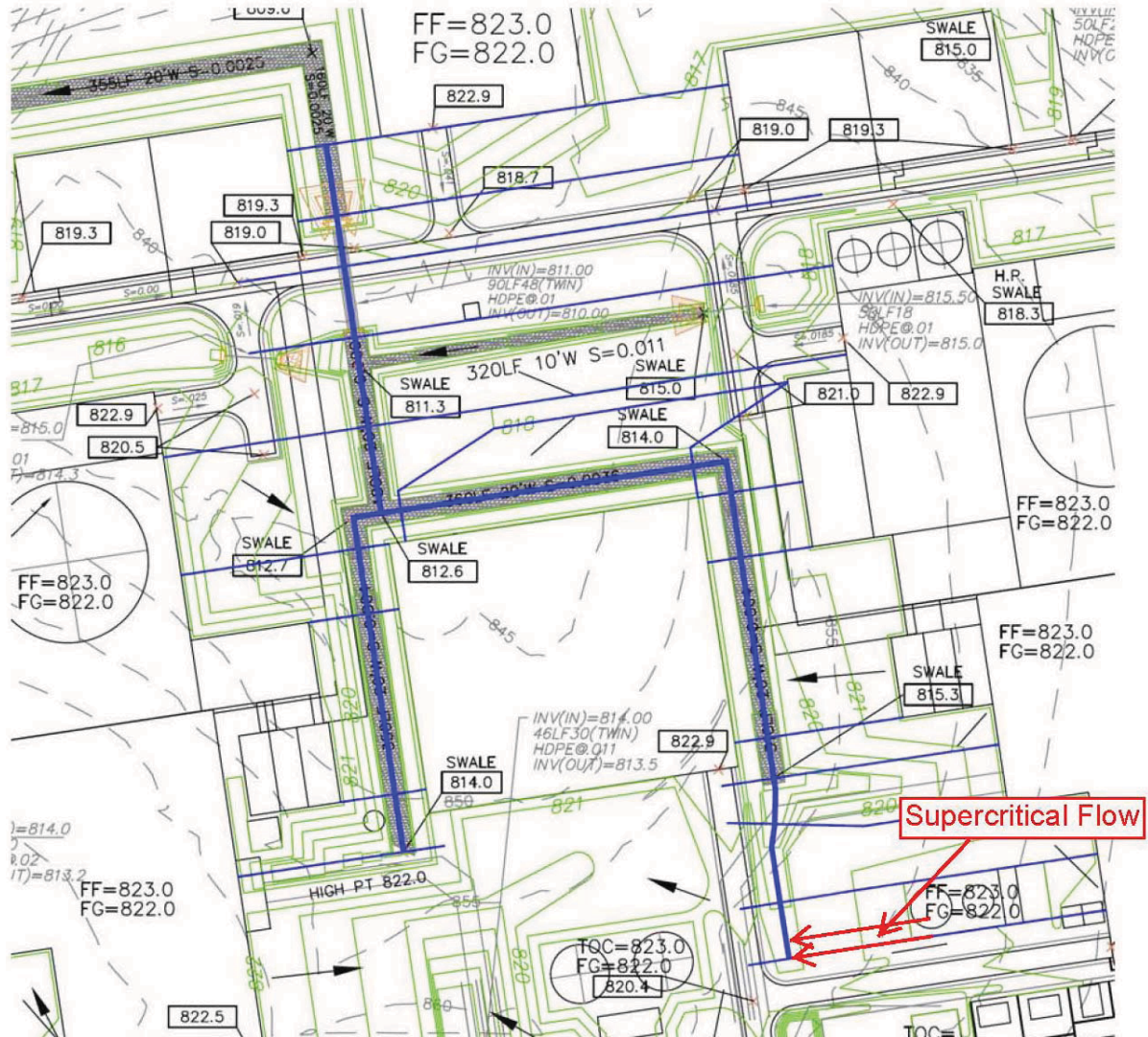


Figure 7-20. Center North Channel Cross Sections
Source: Local Site Analysis (Reference 3)

	<p style="text-align: center;">CALCULATION CONTROL SHEET</p>	<p>CALC. NO. TXUT-001- FSAR-2.4.2-CALC-037</p>
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7.9 Unit 4 North Channel

As discussed in Local Site Analysis; Unit 4 North Channel captures runoff in area just north of Unit 4 and directs flow east to a culvert structure at a road, as shown in Figure 7-23. The Unit 4 North Channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning’s roughness coefficient was decreased to obtain conservative (higher) velocities. The Unit 4 North Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-21. The Unit 4 North Channel cross section data are shown in Appendix A.

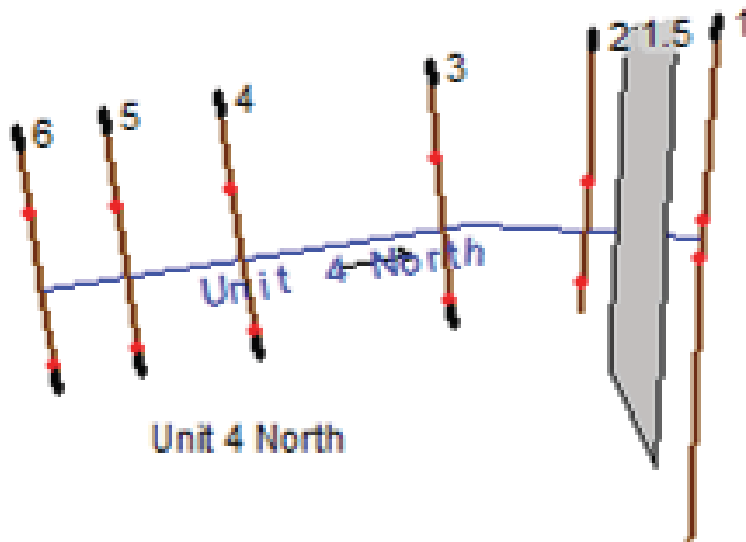


Figure 7-21. Unit 4 North Channel HEC-RAS Schematic
 Source: Local Site Analysis (Reference 3)

The upstream Cross Section 6 is assigned a critical depth boundary condition. The downstream Cross Section 1 is assigned the water surface elevation from the Center North Channel, Cross Section 3. The result for the Center North Channel Cross Section 3 is 820.07 ft (see Section 7.6). The HEC-RAS model is run using the steady flow option with a mixed flow regime.

There are no warnings for the Unit 4 North Channel results.. The final results for the Unit 4 North Channel are shown in Table 7-7.



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Table 7-7. Unit 4 North Channel Final Results

Reach	River Sta	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Unit 4 North	6	135	818	820.1	818.49	820.11	0.000011	0.61	194.64	104.24	0.08
Unit 4 North	5	135	816.95	820.1		820.11	0.000006	0.56	240.58	104.08	0.06
Unit 4 North	4	135	816.41	820.1		820.1	0.000005	0.54	255.35	104.09	0.05
Unit 4 North	3	135	815.52	820.1		820.1	0.000003	0.5	282.45	104.23	0.05
Unit 4 North	2	135	815	820.1	816.53	820.1	0.000005	0.58	241.67	110.11	0.06
Unit 4 North	1.5	Inl Struct									
Unit 4 North	1	135	814.3	820.07	816.13	820.07	0.000004	0.51	313.2	138.34	0.04

The results indicate all Froude Numbers are less than one, indicating there is no supercritical flow in the Unit 4 North Channel. There are no indications of hydraulic jumps in the Unit 4 North Channel.

Additionally, the maximum water surface elevation within Unit 4 North Channel is 820.10 ft (Cross Sections 2 through 6) and does not exceed 1 ft below plant grade and meets DCD criteria. The Unit 4 North Channel flow profile is provided in Figure 7-22.

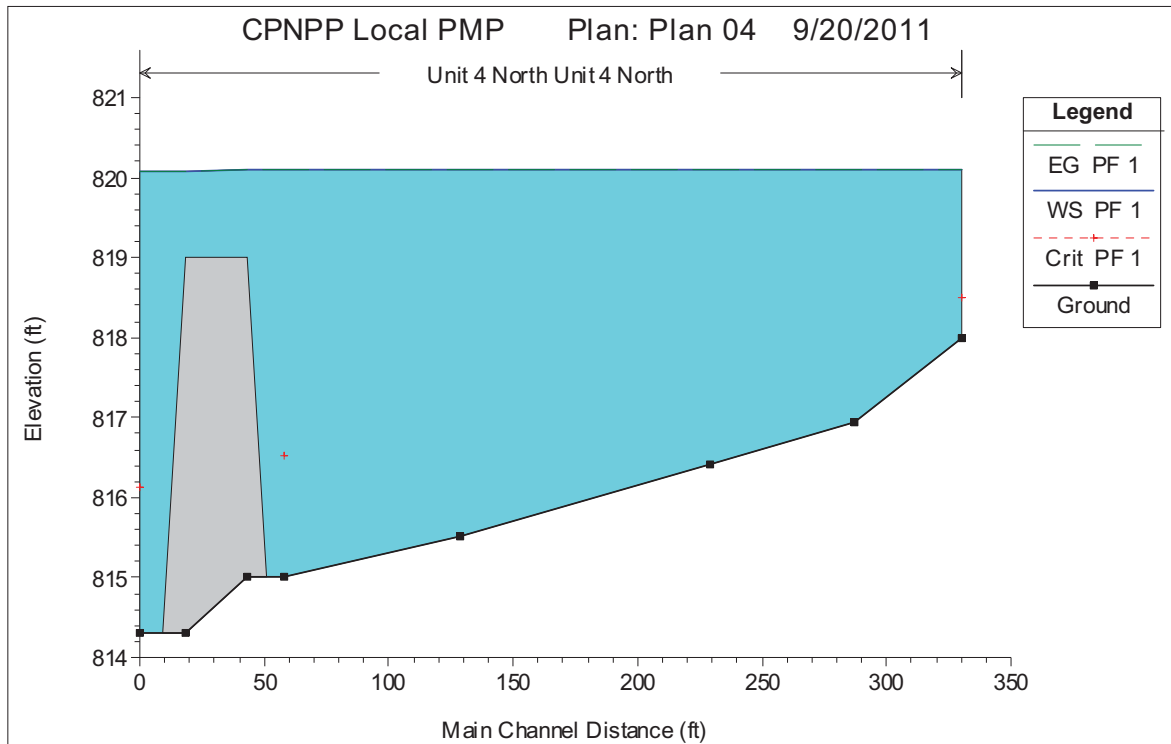


Figure 7-22. Unit 4 North Channel Flow Profile

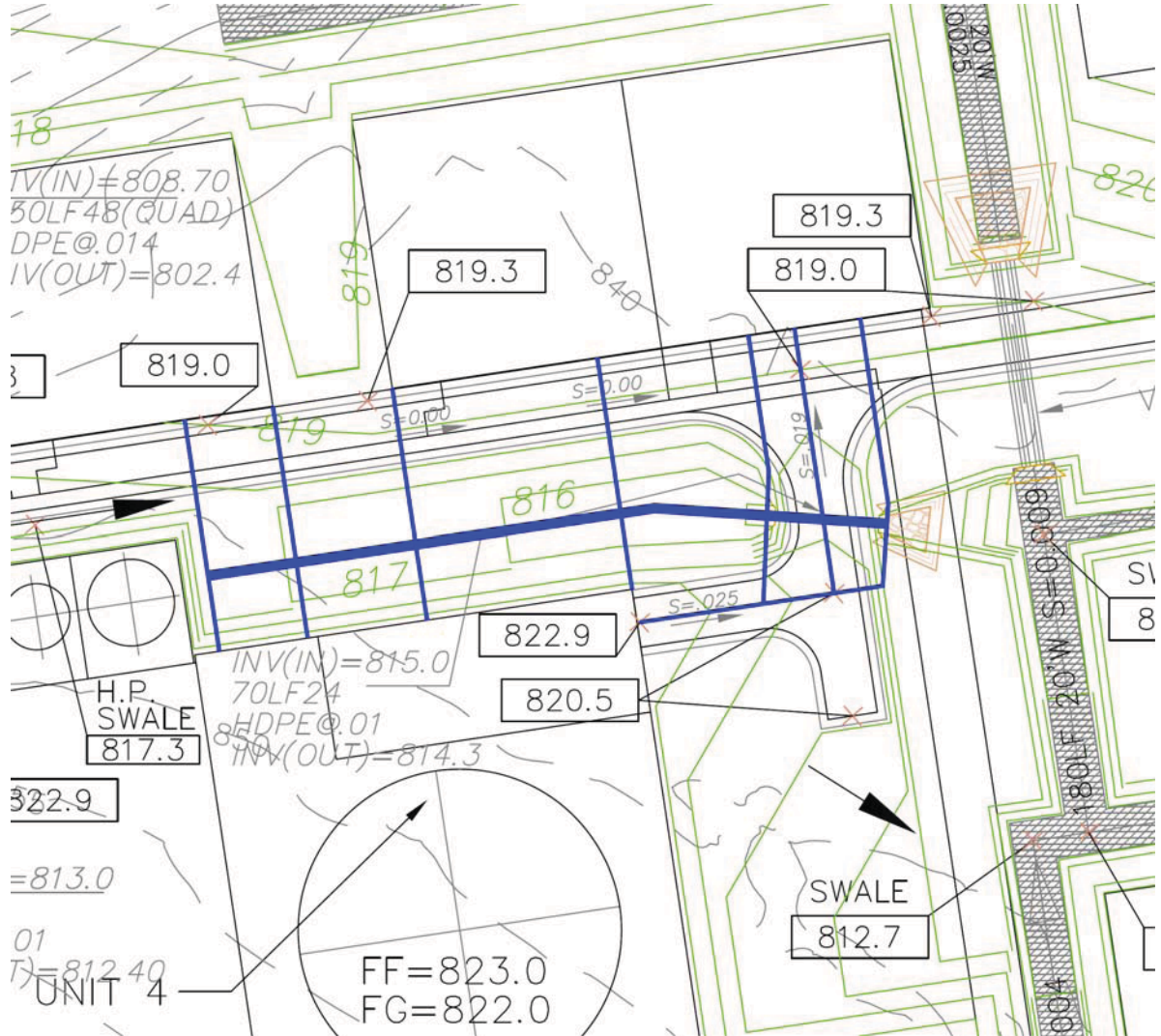


Figure 7-23. Unit 4 North Channel Cross Sections
Source: Local Site Analysis (Reference 3)

	<p style="text-align: center;">CALCULATION CONTROL SHEET</p>	<p>CALC. NO. TXUT-001-FSAR-2.4.2-CALC-037</p>
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7.10 Unit 3 East Channel

As discussed in Local Site Analysis; Unit 3 East Channel captures runoff and directs flow across the wide area adjacent to the east of Unit 3 to a culvert structure at the Plant Loop Road, as shown in Figure 7-26. The Unit 3 East Channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning’s roughness coefficient was decreased to obtain conservative (higher) velocities. The Unit 3 East Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-24. The Unit 3 East Channel cross section data are shown in Appendix A.

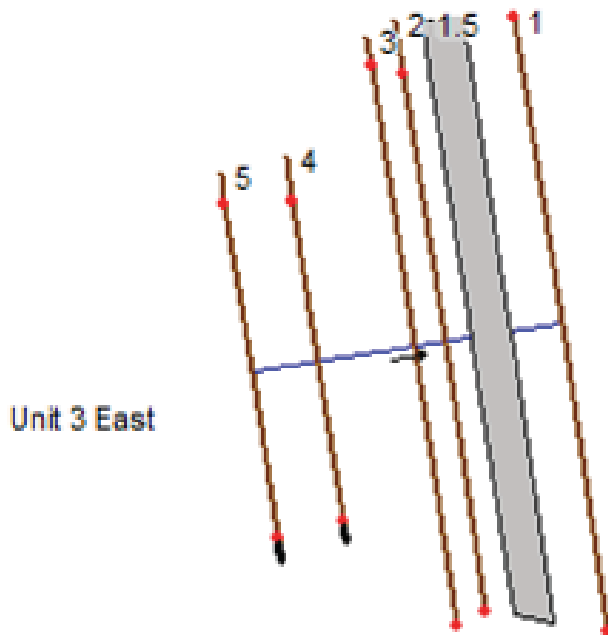


Figure 7-24. Unit 3 East Channel HEC-RAS Schematic
 Source: Local Site Analysis (Reference 3)

The upstream Cross Section 5 is assigned a critical depth boundary condition. The downstream Cross Section 1 is assigned the Drainage Pond B maximum water surface elevation of 815.1 ft (Local Site Analysis). The HEC-RAS model is run using the steady flow option with a mixed flow regime.

Warnings indicate there may be a need for additional cross sections between Cross Sections 2 and 3, Cross Sections 3 and 4, and Cross Sections 4 and 5. HEC-RAS interpolation with 0.5 ft maximum spacing is used to generate 37 new cross sections between Cross Sections 2 and 3 and 82 new cross sections between Cross Sections 4 and 5. Interpolation with 1 ft maximum spacing is used to generate 58 new cross sections between Cross Sections 3 and 4. The model is re-run and most warnings are eliminated as noted below. Table 7-8 provides the final results.



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Table 7-8. Unit 3 East Channel Final Results

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Unit 3	East	5	196	820	820.41	820.39	820.57	0.002842	3.22	60.83	160.04	0.92
Unit 3	East	4.98795*	196	819.99	820.38	820.38	820.56	0.003288	3.38	58.06	158.9	0.98
Unit 3	East	4.97590*	196	819.98	820.39	820.37	820.55	0.002865	3.23	60.63	159.69	0.92
Unit 3	East	4.96385*	196	819.97	820.37	820.36	820.54	0.003257	3.37	58.23	158.87	0.98
Unit 3	East	4.95180*	196	819.96	820.37	820.35	820.53	0.002838	3.22	60.82	159.74	0.92
Unit 3	East	4.93975*	196	819.95	820.35	820.34	820.52	0.003265	3.37	58.14	158.57	0.98
Unit 3	East	4.92771*	196	819.94	820.35	820.33	820.51	0.002845	3.23	60.72	159.43	0.92
Unit 3	East	4.91566*	196	819.93	820.33	820.32	820.5	0.003277	3.38	58.04	158.31	0.98
Unit 3	East	4.90361*	196	819.92	820.33	820.31	820.5	0.002845	3.23	60.71	159.34	0.92
Unit 3	East	4.89156*	196	819.91	820.31	820.3	820.48	0.003253	3.37	58.16	158.26	0.98
Unit 3	East	4.87951*	196	819.9	820.31	820.29	820.48	0.002838	3.23	60.72	159.13	0.92
Unit 3	East	4.86747*	196	819.89	820.29	820.28	820.46	0.003285	3.38	57.94	157.97	0.98
Unit 3	East	4.85542*	196	819.88	820.29	820.27	820.46	0.002865	3.24	60.49	158.76	0.92
Unit 3	East	4.84337*	196	819.87	820.27	820.26	820.44	0.003255	3.37	58.1	157.94	0.98
Unit 3	East	4.83132*	196	819.86	820.27	820.25	820.44	0.002837	3.23	60.68	158.81	0.92
Unit 3	East	4.81927*	196	819.85	820.25	820.24	820.43	0.003249	3.37	58.09	157.66	0.98
Unit 3	East	4.80722*	196	819.84	820.26	820.23	820.42	0.002836	3.23	60.64	158.52	0.92
Unit 3	East	4.79518*	196	819.83	820.23	820.22	820.41	0.003264	3.38	57.97	157.4	0.98
Unit 3	East	4.78313*	196	819.82	820.24	820.21	820.4	0.002836	3.23	60.63	158.43	0.92
Unit 3	East	4.77108*	196	819.81	820.21	820.2	820.39	0.003255	3.38	58.01	157.33	0.98
Unit 3	East	4.75903*	196	819.8	820.22	820.19	820.38	0.002839	3.24	60.57	158.19	0.92
Unit 3	East	4.74698*	196	819.79	820.19	820.18	820.37	0.003263	3.38	57.93	157.08	0.98
Unit 3	East	4.73494*	196	819.78	820.2	820.17	820.36	0.00284	3.24	60.55	158.11	0.92
Unit 3	East	4.72289*	196	819.77	820.17	820.16	820.35	0.003238	3.38	58.06	157.05	0.98
Unit 3	East	4.71084*	196	819.76	820.18	820.15	820.34	0.002826	3.23	60.61	157.91	0.92
Unit 3	East	4.69879*	196	819.75	820.15	820.14	820.33	0.003274	3.39	57.81	156.68	0.98
Unit 3	East	4.68674*	196	819.74	820.16	820.14	820.32	0.002853	3.25	60.38	157.55	0.92
Unit 3	East	4.67469*	196	819.73	820.13	820.13	820.31	0.003243	3.38	57.98	156.72	0.98
Unit 3	East	4.66265*	196	819.72	820.14	820.12	820.3	0.002832	3.24	60.51	157.52	0.92
Unit 3	East	4.65060*	196	819.71	820.11	820.11	820.29	0.003248	3.38	57.91	156.42	0.98
Unit 3	East	4.63855*	196	819.7	820.12	820.1	820.28	0.002835	3.24	60.46	157.28	0.92
Unit 3	East	4.62650*	196	819.69	820.09	820.09	820.27	0.003258	3.39	57.82	156.16	0.98
Unit 3	East	4.61445*	196	819.68	820.1	820.08	820.26	0.002835	3.24	60.44	157.2	0.92
Unit 3	East	4.60240*	196	819.67	820.07	820.07	820.25	0.003223	3.38	58.01	156.15	0.98
Unit 3	East	4.59036*	196	819.66	820.08	820.06	820.24	0.002816	3.24	60.54	157.01	0.92



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Table 7-8. Unit 3 East Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Unit 3	East	4.57831*	196	819.65	820.05	820.05	820.23	0.003284	3.4	57.62	155.73	0.99
Unit 3	East	4.56626*	196	819.64	820.06	820.04	820.22	0.002862	3.26	60.18	156.6	0.93
Unit 3	East	4.55421*	196	819.63	820.03	820.03	820.21	0.003188	3.37	58.16	155.91	0.97
Unit 3	East	4.54216*	196	819.62	820.04	820.02	820.2	0.002789	3.23	60.67	156.71	0.92
Unit 3	East	4.53012*	196	819.61	820.01	820.01	820.19	0.003417	3.45	56.85	155.13	1
Unit 3	East	4.51807*	196	819.6	819.96	820	820.19	0.004862	3.86	50.82	152.68	1.18
Unit 3	East	4.50602*	196	819.59	819.96	819.99	820.18	0.004323	3.72	52.73	153.32	1.12
Unit 3	East	4.49397*	196	819.59	819.96	819.99	820.17	0.004325	3.71	52.76	153.6	1.12
Unit 3	East	4.48192*	196	819.58	819.96	819.98	820.16	0.003873	3.59	54.62	154.22	1.06
Unit 3	East	4.46988*	196	819.57	819.99	819.97	820.15	0.002822	3.25	60.4	156.35	0.92
Unit 3	East	4.45783*	196	819.56	819.96	819.96	820.14	0.00327	3.4	57.6	155.1	0.98
Unit 3	East	4.44578*	196	819.55	819.97	819.95	820.13	0.002854	3.26	60.14	155.97	0.93
Unit 3	East	4.43373*	196	819.54	819.94	819.94	820.12	0.003234	3.39	57.8	155.16	0.98
Unit 3	East	4.42168*	196	819.53	819.95	819.93	820.11	0.00283	3.25	60.29	155.96	0.92
Unit 3	East	4.40963*	196	819.52	819.93	819.92	820.1	0.00323	3.39	57.78	154.88	0.98
Unit 3	East	4.39759*	196	819.51	819.93	819.91	820.1	0.002825	3.25	60.28	155.73	0.92
Unit 3	East	4.38554*	196	819.5	819.9	819.9	820.08	0.00325	3.4	57.63	154.59	0.98
Unit 3	East	4.37349*	196	819.49	819.91	819.89	820.08	0.00283	3.25	60.24	155.65	0.92
Unit 3	East	4.36144*	196	819.48	819.89	819.88	820.06	0.003217	3.39	57.81	154.59	0.98
Unit 3	East	4.34939*	196	819.47	819.89	819.87	820.06	0.002813	3.25	60.31	155.45	0.92
Unit 3	East	4.33735*	196	819.46	819.87	819.86	820.05	0.003259	3.41	57.52	154.2	0.98
Unit 3	East	4.32530*	196	819.45	819.87	819.85	820.04	0.002846	3.26	60.04	155.06	0.92
Unit 3	East	4.31325*	196	819.44	819.85	819.84	820.03	0.003222	3.4	57.73	154.26	0.98
Unit 3	East	4.30120*	196	819.43	819.85	819.83	820.02	0.00282	3.26	60.21	155.06	0.92
Unit 3	East	4.28915*	196	819.42	819.83	819.82	820.01	0.003226	3.4	57.66	153.95	0.98
Unit 3	East	4.27710*	196	819.41	819.83	819.81	820	0.002819	3.26	60.17	154.81	0.92
Unit 3	East	4.26506*	196	819.4	819.81	819.8	819.99	0.00324	3.41	57.55	153.68	0.98
Unit 3	East	4.25301*	196	819.39	819.81	819.79	819.98	0.002821	3.26	60.15	154.75	0.92
Unit 3	East	4.24096*	196	819.38	819.79	819.78	819.97	0.003215	3.4	57.68	153.67	0.98
Unit 3	East	4.22891*	196	819.37	819.79	819.77	819.96	0.002813	3.26	60.17	154.52	0.92
Unit 3	East	4.21686*	196	819.36	819.77	819.76	819.95	0.003239	3.41	57.5	153.31	0.98
Unit 3	East	4.20482*	196	819.35	819.77	819.75	819.94	0.002819	3.26	60.12	154.44	0.92
Unit 3	East	4.19277*	196	819.34	819.75	819.74	819.93	0.003222	3.4	57.59	153.34	0.98
Unit 3	East	4.18072*	196	819.33	819.75	819.73	819.92	0.00282	3.26	60.06	154.14	0.92
Unit 3	East	4.16867*	196	819.32	819.73	819.72	819.91	0.003197	3.4	57.69	153.09	0.98



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Table 7-8. Unit 3 East Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Unit 3	East	4.15662*	196	819.31	819.74	819.71	819.9	0.002799	3.26	60.17	153.94	0.92
Unit 3	East	4.14457*	196	819.3	819.7	819.7	819.89	0.003415	3.47	56.49	152.61	1.01
Unit 3	East	4.13253*	196	819.29	819.65	819.69	819.89	0.004875	3.89	50.42	150.03	1.18
Unit 3	East	4.12048*	196	819.28	819.66	819.68	819.87	0.004341	3.75	52.3	150.66	1.12
Unit 3	East	4.10843*	196	819.27	819.66	819.67	819.86	0.003897	3.62	54.1	151.27	1.07
Unit 3	East	4.09638*	196	819.26	819.67	819.66	819.85	0.00317	3.39	57.75	152.54	0.97
Unit 3	East	4.08433*	196	819.25	819.68	819.65	819.84	0.002768	3.25	60.33	153.66	0.91
Unit 3	East	4.07228*	196	819.24	819.64	819.64	819.83	0.003413	3.47	56.41	152	1.01
Unit 3	East	4.06024*	196	819.23	819.59	819.63	819.83	0.00489	3.9	50.29	149.4	1.18
Unit 3	East	4.04819*	196	819.22	819.6	819.62	819.82	0.00435	3.76	52.18	150.04	1.12
Unit 3	East	4.03614*	196	819.21	819.6	819.61	819.8	0.00391	3.63	53.96	150.63	1.07
Unit 3	East	4.02409*	196	819.2	819.61	819.6	819.79	0.003151	3.39	57.81	152.27	0.97
Unit 3	East	4.01204*	196	819.19	819.62	819.59	819.78	0.002765	3.25	60.25	153.06	0.91
Unit 3	East	4	196	819.18	819.58	819.58	819.77	0.003416	3.48	56.3	151.38	1.01
Unit 3	East	3.98305*	196	819.16	819.49	819.56	819.77	0.006435	4.22	46.39	150.03	1.34
Unit 3	East	3.96610*	196	819.14	819.44	819.53	819.76	0.008247	4.54	43.21	151.3	1.5
Unit 3	East	3.94915*	196	819.12	819.41	819.51	819.75	0.009689	4.74	41.39	153.3	1.61
Unit 3	East	3.93220*	196	819.1	819.37	819.48	819.74	0.010607	4.84	40.53	155.75	1.67
Unit 3	East	3.91525*	196	819.08	819.35	819.46	819.72	0.011335	4.9	39.98	158.14	1.72
Unit 3	East	3.89830*	196	819.06	819.32	819.43	819.7	0.012181	4.98	39.37	160.69	1.77
Unit 3	East	3.88135*	196	819.04	819.29	819.41	819.68	0.012925	5.03	38.94	163.36	1.82
Unit 3	East	3.86440*	196	819.02	819.26	819.38	819.67	0.013873	5.11	38.36	165.96	1.87
Unit 3	East	3.84745*	196	819	819.24	819.36	819.64	0.01426	5.12	38.29	168.66	1.89
Unit 3	East	3.83050*	196	818.98	819.21	819.33	819.62	0.014869	5.15	38.06	171.41	1.93
Unit 3	East	3.81355*	196	818.96	819.18	819.31	819.61	0.015978	5.23	37.48	174.06	1.99
Unit 3	East	3.79661*	196	818.94	819.16	819.29	819.59	0.016498	5.25	37.35	176.8	2.01
Unit 3	East	3.77966*	196	818.92	819.14	819.26	819.56	0.016715	5.23	37.45	179.69	2.02
Unit 3	East	3.76271*	196	818.9	819.11	819.24	819.54	0.0177	5.29	37.03	182.43	2.07
Unit 3	East	3.74576*	196	818.88	819.09	819.21	819.52	0.017926	5.28	37.12	185.27	2.08
Unit 3	East	3.72881*	196	818.86	819.06	819.19	819.49	0.017923	5.25	37.36	188.23	2.08
Unit 3	East	3.71186*	196	818.84	819.04	819.17	819.46	0.017954	5.22	37.57	191.22	2.07
Unit 3	East	3.69491*	196	818.82	819.02	819.14	819.44	0.018004	5.19	37.77	194.17	2.07
Unit 3	East	3.67796*	196	818.8	819	819.12	819.41	0.01811	5.17	37.93	197.03	2.08
Unit 3	East	3.66101*	196	818.78	818.98	819.1	819.39	0.018099	5.14	38.17	200.04	2.07
Unit 3	East	3.64406*	196	818.76	818.95	819.07	819.36	0.018277	5.12	38.28	202.98	2.08



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Table 7-8. Unit 3 East Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Unit 3	East	3.62711*	196	818.74	818.93	819.05	819.34	0.018798	5.14	38.17	205.82	2.1
Unit 3	East	3.61016*	196	818.72	818.91	819.03	819.32	0.019128	5.13	38.18	208.76	2.12
Unit 3	East	3.59322*	196	818.7	818.89	819	819.29	0.019296	5.12	38.3	211.73	2.12
Unit 3	East	3.57627*	196	818.68	818.86	818.98	819.27	0.019442	5.1	38.42	214.65	2.12
Unit 3	East	3.55932*	196	818.66	818.84	818.96	819.24	0.019514	5.08	38.59	217.64	2.13
Unit 3	East	3.54237*	196	818.64	818.82	818.94	819.22	0.019514	5.05	38.81	220.67	2.12
Unit 3	East	3.52542*	196	818.62	818.8	818.91	819.19	0.019508	5.02	39.02	223.59	2.12
Unit 3	East	3.50847*	196	818.6	818.78	818.89	819.16	0.019512	5	39.22	226.59	2.12
Unit 3	East	3.49152*	196	818.58	818.76	818.87	819.14	0.019504	4.97	39.44	229.64	2.11
Unit 3	East	3.47457*	196	818.56	818.73	818.84	819.11	0.019511	4.94	39.64	232.64	2.11
Unit 3	East	3.45762*	196	818.54	818.71	818.82	819.09	0.019508	4.92	39.84	235.57	2.11
Unit 3	East	3.44067*	196	818.52	818.69	818.8	819.06	0.019513	4.89	40.04	238.62	2.11
Unit 3	East	3.42372*	196	818.5	818.67	818.78	819.04	0.019529	4.87	40.23	241.64	2.1
Unit 3	East	3.40678*	196	818.48	818.65	818.75	819.01	0.019535	4.85	40.43	244.62	2.1
Unit 3	East	3.38983*	196	818.46	818.63	818.73	818.99	0.019527	4.82	40.63	247.64	2.1
Unit 3	East	3.37288*	196	818.44	818.61	818.71	818.96	0.019553	4.8	40.81	250.66	2.1
Unit 3	East	3.35593*	196	818.42	818.58	818.69	818.94	0.019542	4.78	41.01	253.66	2.09
Unit 3	East	3.33898*	196	818.4	818.56	818.67	818.91	0.019516	4.75	41.22	256.68	2.09
Unit 3	East	3.32203*	196	818.38	818.54	818.64	818.89	0.019522	4.73	41.42	259.75	2.09
Unit 3	East	3.30508*	196	818.36	818.52	818.62	818.87	0.01949	4.71	41.63	262.72	2.08
Unit 3	East	3.28813*	196	818.34	818.5	818.6	818.84	0.019492	4.69	41.82	265.73	2.08
Unit 3	East	3.27118*	196	818.32	818.48	818.58	818.82	0.019526	4.67	41.99	268.81	2.08
Unit 3	East	3.25423*	196	818.3	818.46	818.55	818.79	0.019521	4.65	42.18	271.83	2.08
Unit 3	East	3.23728*	196	818.28	818.44	818.53	818.77	0.019497	4.62	42.38	274.88	2.08
Unit 3	East	3.22033*	196	818.26	818.42	818.51	818.74	0.019509	4.61	42.56	277.89	2.07
Unit 3	East	3.20339*	196	818.24	818.39	818.49	818.72	0.019451	4.58	42.78	280.91	2.07
Unit 3	East	3.18644*	196	818.22	818.37	818.47	818.7	0.019476	4.56	42.95	283.96	2.07
Unit 3	East	3.16949*	196	818.2	818.35	818.45	818.67	0.01946	4.54	43.14	286.98	2.06
Unit 3	East	3.15254*	196	818.18	818.33	818.42	818.65	0.019451	4.52	43.33	290	2.06
Unit 3	East	3.13559*	196	818.16	818.31	818.4	818.63	0.019447	4.5	43.52	293.06	2.06
Unit 3	East	3.11864*	196	818.14	818.29	818.38	818.6	0.019427	4.48	43.71	296.1	2.06
Unit 3	East	3.10169*	196	818.12	818.27	818.36	818.58	0.019432	4.47	43.89	299.19	2.05
Unit 3	East	3.08474*	196	818.1	818.25	818.34	818.55	0.019454	4.45	44.05	302.22	2.05
Unit 3	East	3.06779*	196	818.08	818.23	818.32	818.53	0.019405	4.43	44.26	305.24	2.05
Unit 3	East	3.05084*	196	818.06	818.21	818.29	818.51	0.019426	4.41	44.42	308.93	2.05



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Table 7-8. Unit 3 East Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Unit 3	East	3.03389*	196	818.04	818.18	818.27	818.48	0.019389	4.39	44.61	311.31	2.04
Unit 3	East	3.01695*	196	818.02	818.16	818.25	818.46	0.019356	4.38	44.78	313.64	2.04
Unit 3	East	3	196	818	818.14	818.23	818.44	0.019363	4.36	44.91	316.02	2.04
Unit 3	East	2.97368*	196	817.88	818.01	818.11	818.41	0.032235	5.09	38.49	311.37	2.55
Unit 3	East	2.94736*	196	817.76	817.88	818	818.38	0.046154	5.69	34.47	305.73	2.98
Unit 3	East	2.92105*	196	817.64	817.75	817.88	818.34	0.058775	6.17	31.75	295.23	3.32
Unit 3	East	2.89473*	196	817.53	817.64	817.78	818.3	0.069391	6.53	29.99	286.68	3.56
Unit 3	East	2.86842*	196	817.41	817.51	817.66	818.25	0.080669	6.9	28.41	277.07	3.8
Unit 3	East	2.84210*	196	817.29	817.9	817.54	817.92	0.00022	1.11	175.85	312.02	0.26
Unit 3	East	2.81578*	196	817.17	817.9		817.92	0.000127	0.93	210.06	314.62	0.2
Unit 3	East	2.78947*	196	817.05	817.9		817.91	0.00008	0.81	242.9	317.08	0.16
Unit 3	East	2.76315*	196	816.93	817.91		817.91	0.000054	0.71	275.27	319.87	0.14
Unit 3	East	2.73684*	196	816.82	817.91		817.91	0.00004	0.64	304.71	322.97	0.12
Unit 3	East	2.71052*	196	816.7	817.91		817.91	0.00003	0.58	335.83	325.98	0.1
Unit 3	East	2.68421*	196	816.58	817.91		817.91	0.000023	0.53	366.66	329.61	0.09
Unit 3	East	2.65789*	196	816.46	817.91		817.91	0.000018	0.49	397.05	333.51	0.08
Unit 3	East	2.63157*	196	816.34	817.91		817.91	0.000014	0.46	427.19	334.38	0.07
Unit 3	East	2.60526*	196	816.22	817.91		817.91	0.000012	0.43	456.22	334.09	0.06
Unit 3	East	2.57894*	196	816.11	817.91		817.91	0.00001	0.41	483.22	333.8	0.06
Unit 3	East	2.55263*	196	815.99	817.91		817.91	0.000008	0.38	511.53	333.51	0.05
Unit 3	East	2.52631*	196	815.87	817.91		817.91	0.000007	0.36	538.92	333.19	0.05
Unit 3	East	2.5*	196	815.75	817.91		817.91	0.000006	0.35	565.69	332.87	0.05
Unit 3	East	2.47368*	196	815.63	817.91		817.91	0.000005	0.33	592.04	332.54	0.04
Unit 3	East	2.44736*	196	815.51	817.91		817.91	0.000005	0.32	617.52	332.45	0.04
Unit 3	East	2.42105*	196	815.39	817.91		817.91	0.000004	0.31	642.34	332.38	0.04
Unit 3	East	2.39473*	196	815.28	817.91		817.91	0.000004	0.29	665.27	332.3	0.04
Unit 3	East	2.36842*	196	815.16	817.91		817.91	0.000003	0.28	688.43	332.19	0.03
Unit 3	East	2.34210*	196	815.04	817.91		817.91	0.000003	0.28	712.27	332.11	0.03
Unit 3	East	2.31579*	196	814.92	817.91		817.91	0.000003	0.27	734.62	331.99	0.03
Unit 3	East	2.28947*	196	814.8	817.91		817.91	0.000003	0.26	756.1	331.9	0.03
Unit 3	East	2.26315*	196	814.68	817.91		817.91	0.000002	0.25	777.53	331.84	0.03
Unit 3	East	2.23684*	196	814.57	817.91		817.91	0.000002	0.25	796.84	331.7	0.03
Unit 3	East	2.21052*	196	814.45	817.91		817.91	0.000002	0.24	817.06	331.6	0.03
Unit 3	East	2.18421*	196	814.33	817.91		817.91	0.000002	0.23	836.35	331.5	0.03
Unit 3	East	2.15789*	196	814.21	817.91		817.91	0.000002	0.23	854.98	331.35	0.03

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Table 7-8. Unit 3 East Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Unit 3	East	2.13157*	196	814.09	817.91		817.91	0.000002	0.22	872.94	331.24	0.02
Unit 3	East	2.10526*	196	813.97	817.91		817.91	0.000002	0.22	890.67	331.08	0.02
Unit 3	East	2.07894*	196	813.86	817.91		817.91	0.000002	0.22	906.75	330.99	0.02
Unit 3	East	2.05263*	196	813.74	817.91		817.91	0.000001	0.21	923.28	330.88	0.02
Unit 3	East	2.02631*	196	813.62	817.91		817.91	0.000001	0.21	938.39	330.7	0.02
Unit 3	East	2	196	813.5	817.91	814.69	817.91	0.000001	0.21	953.67	330.6	0.02
Unit 3	East	1.5	Inl Struct									
Unit 3	East	1	196	810	815.1	810.23	815.1	0	0.11	1709.5	362.23	0.01

The results indicate that the Froude Number exceeds one for the Unit 3 East Channel (Cross Sections 2.84210 through 5), indicating there is supercritical flow. Therefore supercritical flow is present as runoff travels over the steep slope of the transverse channel. The results also indicate there is a possibility of hydraulic jump between cross sections 2.84210 and 2.86842, cross sections 4.02409 and 4.03614, cross sections 4.09638 and 4.10843, and cross sections 4.46988 and 4.48192. Table 7-8 indicates the maximum velocity for the Unit 3 East Channel is 6.90 ft/sec. at Cross Section 2.86842. Channel cross section data indicates the Unit 3 East Channel is gravel and concrete lined between cross sections 2 and 5. Therefore, the velocity within the Unit 3 East Channel is below the permissible maximum velocity and there is no potential for erosion. The ratio of water surface elevation after and before hydraulic jump at each location is close to one (1); indicating it's a very weak hydraulic jump. The cross-section at hydraulic jump locations is mostly gravel and may cause slight to moderate erosion.

Additionally, the maximum water surface elevation within Unit 3 East Channel is 820.41 ft (Cross Section 5) and does not exceed 1 ft below plant grade and meets DCD criteria. There is one remaining warning concerning critical depth used for Cross Section 3. This is appropriate because supercritical flow is present immediately downstream from Cross Section 3. The Unit 3 East Channel flow profile is provided in Figure 7-25. The location of supercritical flows and hydraulic jumps within the Unit 3 East Channel are identified in Figure 7-26.

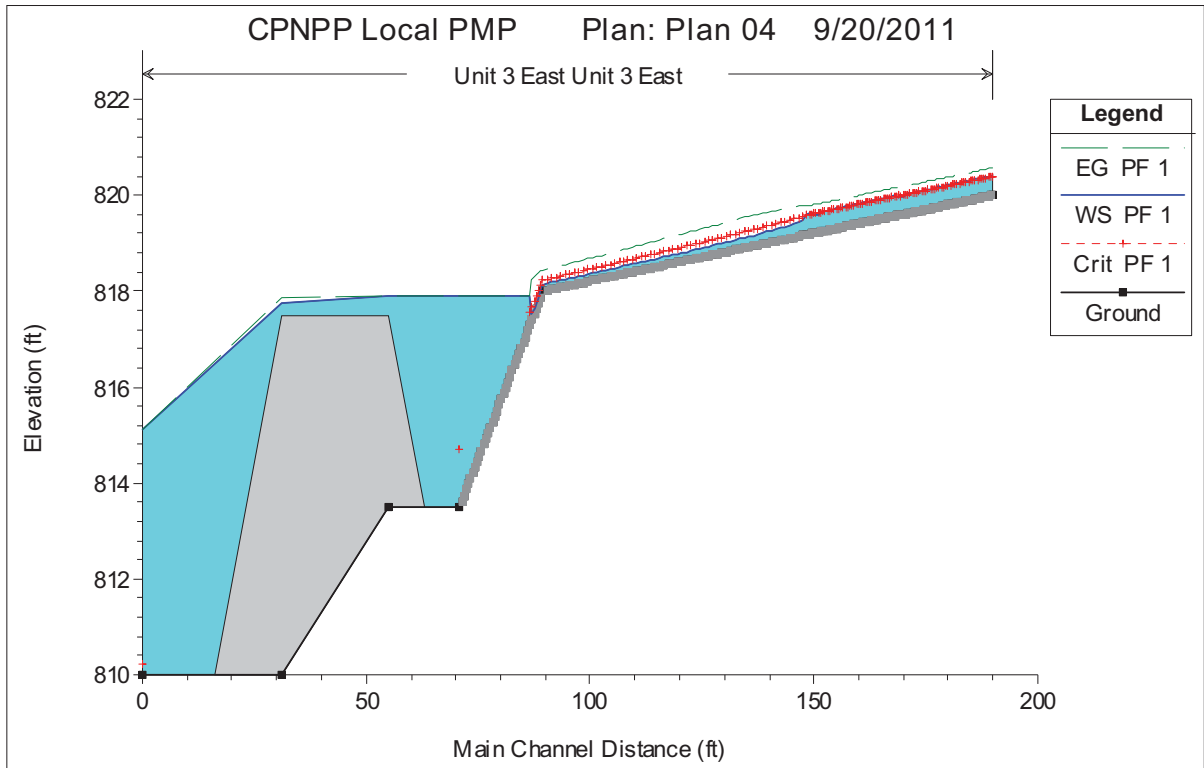


Figure 7-25. Unit 3 East Channel Flow Profile

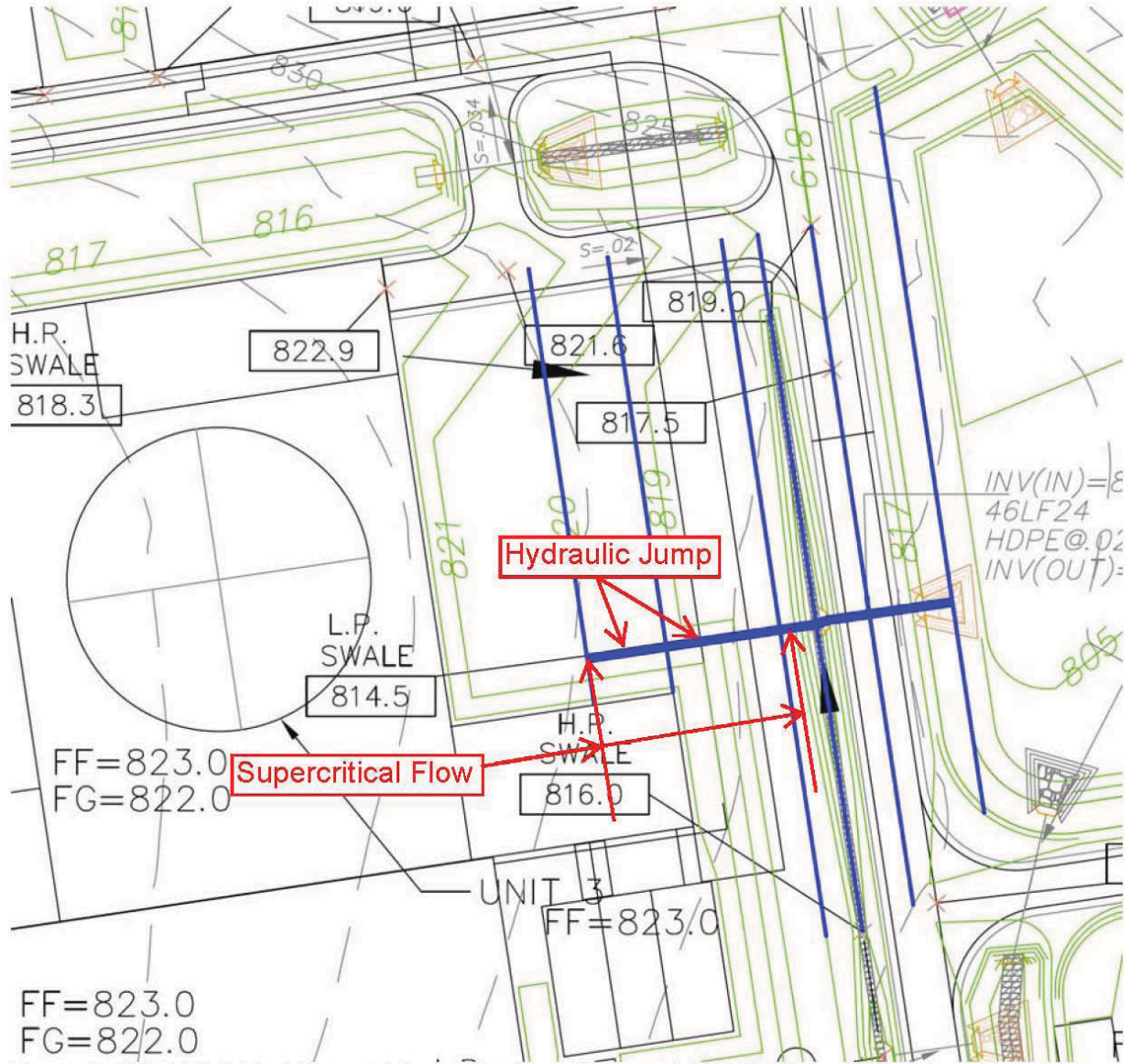


Figure 7-26. Unit 3 East Channel Cross Sections
Source: Local Site Analysis (Reference 3)

7.11 Unit 3 Southeast Channel

As discussed in Local Site Analysis; the Unit 3 Southeast Channel runs parallel to the Plant Loop Road adjacent to the southern portion of Unit 3 and directs flow north to a culvert structure that empties into Drainage Pond B, as shown in Figure 7-29. The Unit 3 Southeast Channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning’s roughness coefficient was decreased to obtain conservative (higher) velocities. The Unit 3 Southeast Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-27. The Unit 3 Southeast Channel cross section data are shown in Appendix A.

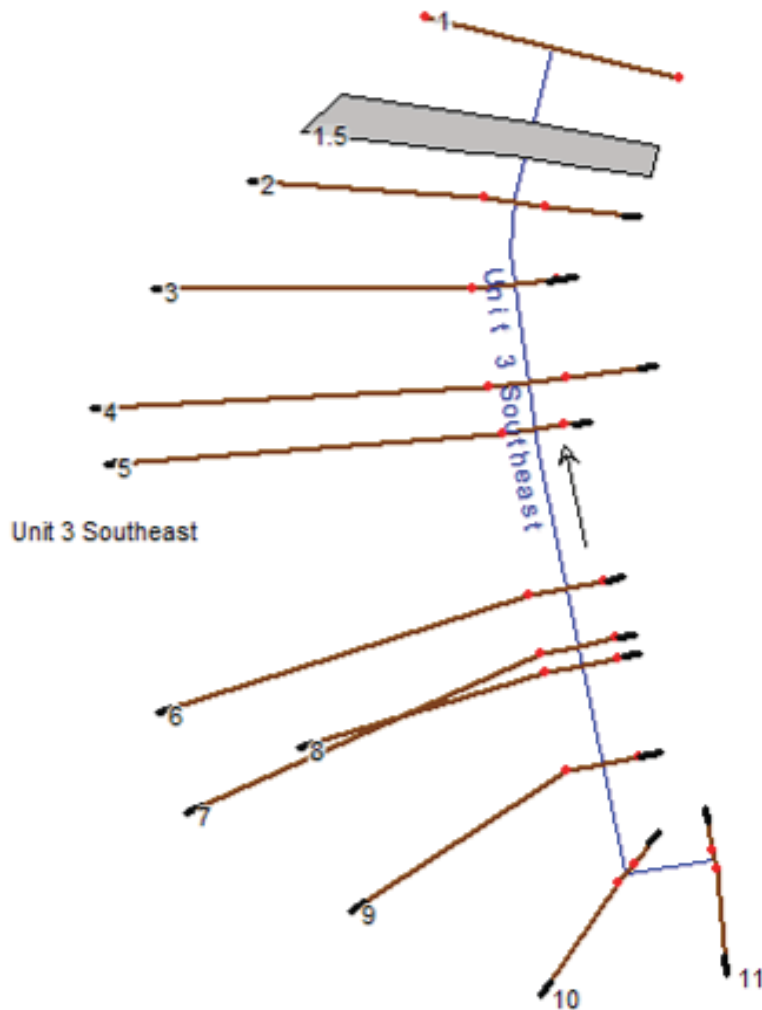


Figure 7-27. Unit 3 Southeast Channel HEC-RAS Schematic
Source: Local Site Analysis (Reference 3)



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The upstream Cross Section 11 is assigned a critical depth boundary condition. The downstream Cross Section 1 is assigned the Drainage Pond B maximum water surface elevation of 815.1 ft (Local Site Analysis). The HEC-RAS model is run using the steady flow option with a mixed flow regime.

Warnings indicate there may be a need for additional cross sections between Cross Sections 4 and 5, 8 and 9, 9 and 10, and 10 and 11. HEC-RAS interpolation with 10 ft maximum spacing is used to generate two new cross sections between Cross Sections 4 and 5, and five new cross sections between Cross Sections 8 and 9. Interpolation with 5 ft maximum spacing is used to generate 13 new cross sections between Cross Sections 9 and 10, and 10 new cross sections between Cross Sections 10 and 11. The model is re-run and most warnings are eliminated as noted below. Table 7-9 provides the final results.

Table 7-9. Unit 3 Southeast Channel Final Results

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Unit 3	Southeast	11	371	819.69	822.48	821.52	822.59	0.000227	3.31	144.06	80.48	0.36
Unit 3	Southeast	10.9090*	371	819.66	822.46		822.59	0.000275	3.63	135.59	82.35	0.39
Unit 3	Southeast	10.8181*	371	819.62	822.43		822.58	0.000328	3.96	126.19	79.81	0.43
Unit 3	Southeast	10.7272*	371	819.59	822.4		822.58	0.000381	4.25	117.76	76.23	0.46
Unit 3	Southeast	10.6363*	371	819.55	822.36		822.57	0.000443	4.56	109.71	72.61	0.5
Unit 3	Southeast	10.5454*	371	819.52	822.32		822.57	0.000516	4.89	102.01	68.92	0.54
Unit 3	Southeast	10.4545*	371	819.48	822.28		822.56	0.000593	5.2	95.09	64.97	0.58
Unit 3	Southeast	10.3636*	371	819.45	822.24		822.56	0.00066	5.45	89.47	60.48	0.61
Unit 3	Southeast	10.2727*	371	819.41	822.19		822.55	0.000734	5.71	84.64	57.5	0.64
Unit 3	Southeast	10.1818*	371	819.38	822.14		822.55	0.000829	6.01	79.76	54.94	0.68
Unit 3	Southeast	10.0909*	371	819.34	822.09	821.85	822.54	0.000924	6.29	75.58	52.68	0.71
Unit 3	Southeast	10	371	819.31	821.86	821.86	822.52	0.001461	7.43	62.87	47.76	0.88
Unit 3	Southeast	9.92857*	371	819.23	821.43	821.72	822.47	0.002789	9.05	49.93	45.92	1.18
Unit 3	Southeast	9.85714*	371	819.15	821.19	821.57	822.44	0.003633	9.67	45.82	47.15	1.33
Unit 3	Southeast	9.78571*	371	819.07	820.98	821.43	822.41	0.004549	10.14	42.41	47.9	1.46
Unit 3	Southeast	9.71428*	371	818.99	820.77	821.29	822.37	0.005619	10.54	39.44	47.13	1.6
Unit 3	Southeast	9.64285*	371	818.91	820.57	821.13	822.32	0.006989	10.95	36.81	45.32	1.75
Unit 3	Southeast	9.57142*	371	818.83	820.38	820.95	822.26	0.008529	11.32	35.04	44	1.9
Unit 3	Southeast	9.5*	371	818.75	820.2	820.78	822.21	0.009952	11.69	33.86	46.23	2.03
Unit 3	Southeast	9.42857*	371	818.67	820.02	820.6	822.15	0.011436	11.99	32.89	48.88	2.15
Unit 3	Southeast	9.35714*	371	818.59	819.86	820.43	822.09	0.013138	12.26	32.1	53.16	2.28
Unit 3	Southeast	9.28571*	371	818.51	819.71	820.25	822.02	0.015034	12.51	31.42	57.72	2.41
Unit 3	Southeast	9.21428*	371	818.43	819.56	820.07	821.93	0.017156	12.71	31.01	65.24	2.54
Unit 3	Southeast	9.14285*	371	818.35	819.41	819.89	821.84	0.019839	12.93	30.81	75.55	2.7
Unit 3	Southeast	9.07142*	371	818.27	819.26	819.72	821.73	0.023206	13.16	30.96	90.9	2.87



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Table 7-9. Unit 3 Southeast Channel Final Results (Continued)

Reach		River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Unit 3	Southeast	9	371	818.19	819.1	819.55	821.6	0.028402	13.46	30.98	94.81	3.12
Unit 3	Southeast	8.83333*	371	818.08	818.85	819.33	821.31	0.029858	12.17	29.53	88.42	3.1
Unit 3	Southeast	8.66666*	371	817.96	818.61	819.11	821.05	0.020777	9.12	31.34	84.33	2.52
Unit 3	Southeast	8.5*	371	817.84	819.67	818.88	819.78	0.000144	1.72	151.26	97.99	0.26
Unit 3	Southeast	8.33333*	371	817.73	819.69		819.77	0.000089	1.44	175.92	98.03	0.2
Unit 3	Southeast	8.16666*	371	817.61	819.7		819.76	0.000059	1.25	200.23	98.02	0.17
Unit 3	Southeast	8	371	817.5	819.71		819.76	0.000041	1.1	224.72	97.98	0.14
Unit 3	Southeast	7	371	817.5	819.71		819.76	0.00004	1.08	227.79	104.41	0.14
Unit 3	Southeast	6	371	817.5	819.73		819.75	0.000027	0.9	315.5	186.57	0.12
Unit 3	Southeast	5	371	817	819.73		819.75	0.000017	0.92	373.95	193.18	0.1
Unit 3	Southeast	4.66666*	371	814.64	819.73		819.74	0.000009	0.91	463.56	209.42	0.07
Unit 3	Southeast	4.33333*	371	812.29	819.74		819.74	0.000006	0.8	524.53	206.7	0.06
Unit 3	Southeast	4	737	809.93	819.71		819.74	0.00002	1.44	566.73	195.66	0.1
Unit 3	Southeast	3	737	809.75	819.71		819.74	0.000016	1.38	571.81	162.76	0.09
Unit 3	Southeast	2	737	809.6	819.71	814.25	819.74	0.000021	1.54	525.28	150.95	0.1
Unit 3	Southeast	1.5	Inl Struct									
Unit 3	Southeast	1	737	806	815.1	809.02	815.12	0.00001	1.08	679.63	132.46	0.08

The results indicate that the Froude Number exceeds one for the Unit 3 Southeast Channel (Cross Sections 8.66666 through 9.92857), indicating there is supercritical flow as runoff travels down the steeper slopes of the Plant Loop Road near the entrance to the plant area. There is also an indication of hydraulic jump between cross section 8.5 and 8.66666. The Unit 3 Southeast Channel between Cross Sections 8 and 10 is gravel, rubble and concrete lined. Table 7-9 indicates the maximum velocity for Unit 3 Southeast Channel is 13.46 ft/sec at Cross Section 9. The velocities in portions of Unit 3 Southeast Channel, which are gravel and riprap lined, is more than permissible velocity. However, the Manning's roughness coefficient used to achieve this velocity is considerably lower (50 percent) than the normal values. Therefore, the velocity in the Unit 3 Southeast Channel is not expected to be more than the permissible velocity. The ratio of water surface elevation after and before hydraulic jump location is close to one (1); indicating it's a very weak hydraulic jump. The cross-section at hydraulic jump locations is mostly gravel and may cause slight to moderate erosion.

Additionally, final results identify the overtopping water surface elevation at the downstream weir remains 819.71 ft (Cross Section 2). Backwater effects result in maximum water surface elevation of 819.73 ft at Cross Section 6 adjacent to the southern end of the Unit 3 nuclear island. All cross sections water surface elevations affecting safety related structures do not exceed 1 ft below plant grade and meets DCD criteria. There is one remaining warning concerning critical depth used for Cross Section 10. This is appropriate because supercritical flow is present immediately downstream from Cross Section 10. The Unit 3 Southeast Channel flow profile is provided in Figure 7-28. The location of supercritical flows and hydraulic jumps within the Unit 3 Southeast Channel are identified in Figure 7-29.

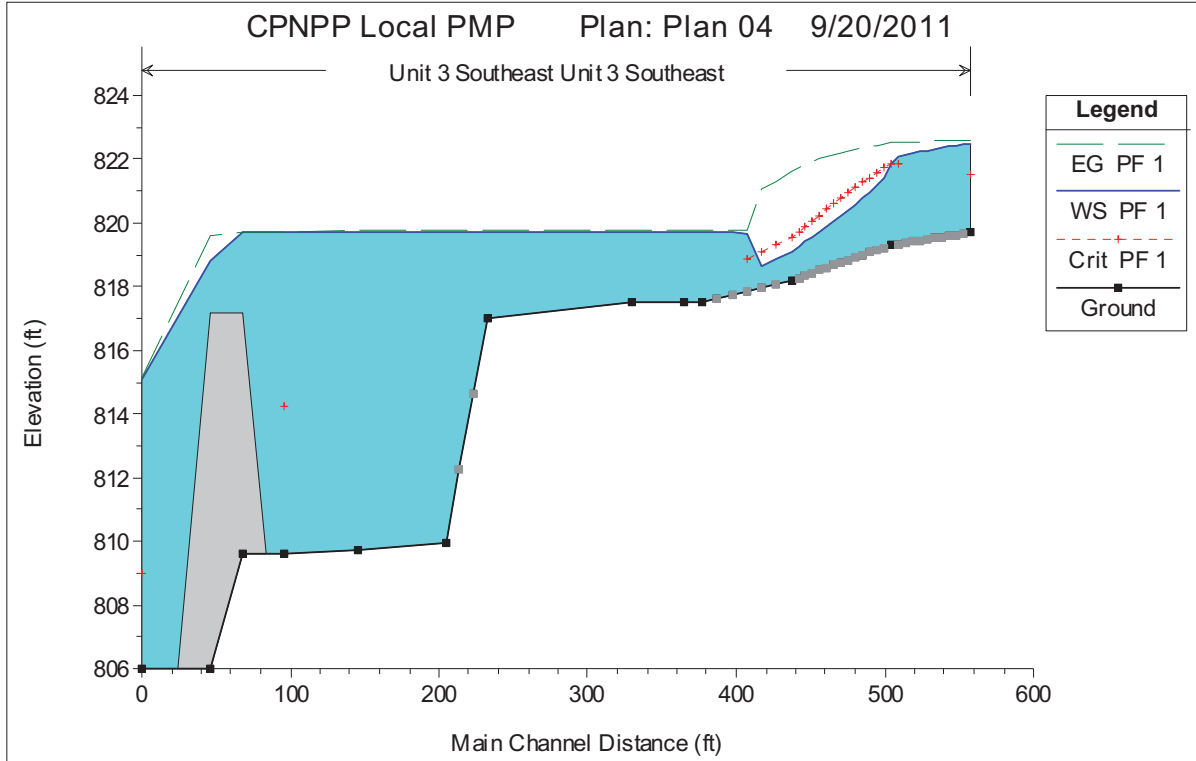


Figure 7-28. Unit 3 Southeast Channel Flow Profile

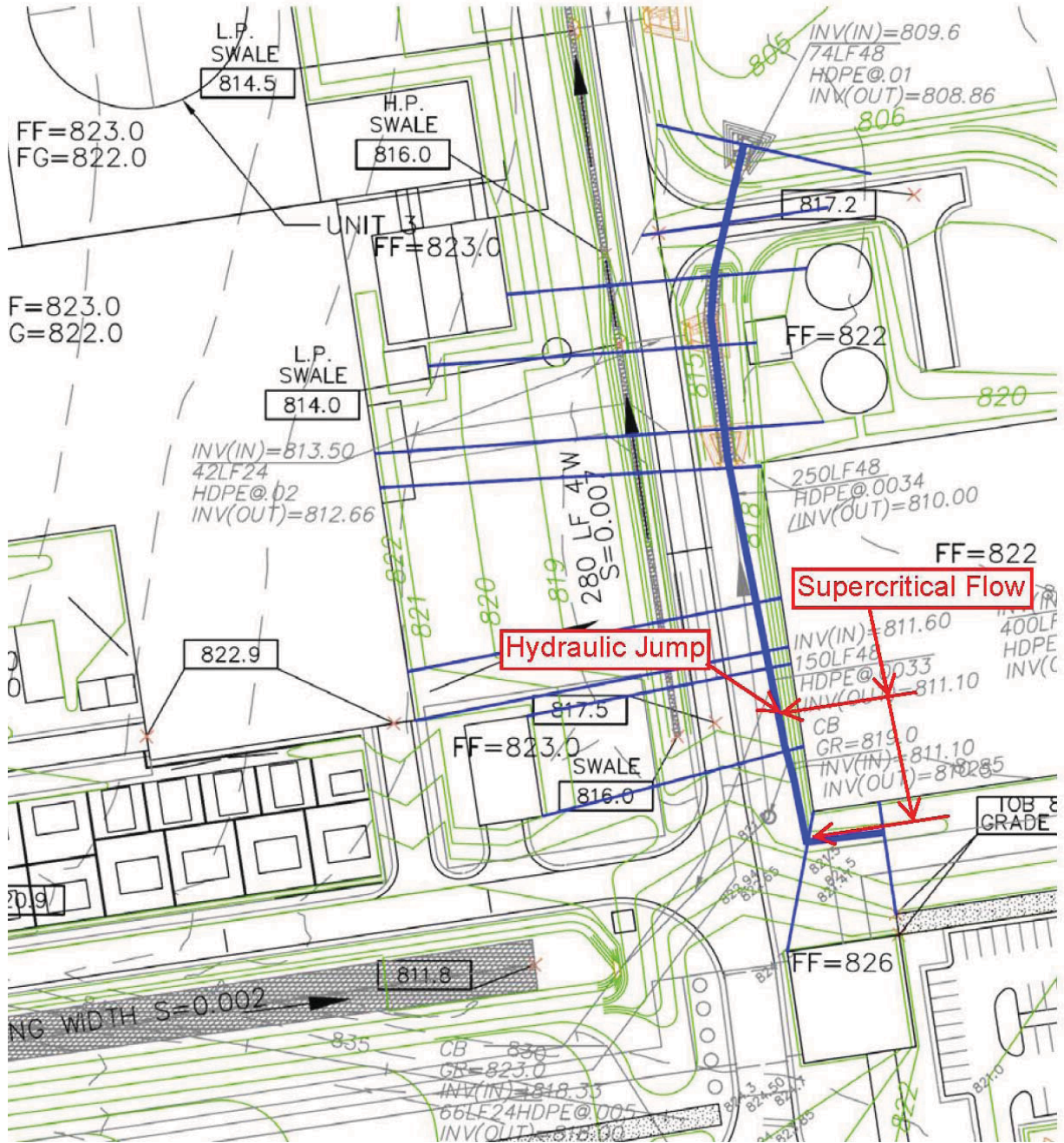


Figure 7-29. Unit 3 Southeast Channel Cross Sections
Source: Local Site Analysis (Reference 3)

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7.12 East Channel

As discussed in Local Site Analysis; the East Channel captures runoff in drainage area east of Unit 3 and beyond the immediate area of Units 3 and 4, ultimately discharging into Drainage Pond B, as shown in Figure 7-32. The East Channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning’s roughness coefficient was decreased to obtain conservative (higher) velocities. The East Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-30. The Unit 3 East Channel cross section data are shown in Appendix A.

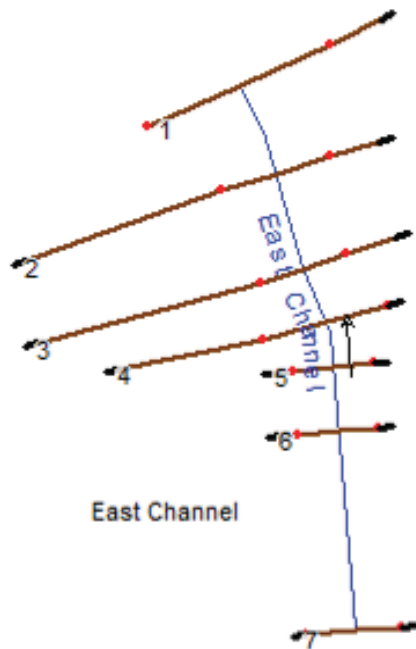


Figure 7-30. East Channel HEC-RAS Schematic
 Source: Local Site Analysis (Reference 3)

The upstream Cross Section 7 is assigned a critical depth boundary condition. The downstream Cross Section 1 is assigned the Drainage Pond B maximum water surface elevation of 815.1 ft (Local Site Analysis). The HEC-RAS model is run using the steady flow option with a mixed flow regime.

Warnings indicate there may be a need for additional cross sections between all cross sections. HEC-RAS interpolation with 1 ft maximum spacing is used to generate 72 new cross sections between Cross Sections 1 and 2, and 74 new cross sections between Cross Sections 2 and 3. Interpolation with 2 ft maximum spacing is used to generate 22 new cross sections between Cross Sections 3 and 4, 17 new cross sections between Cross Sections 4 and 5, and 75 new cross sections between Cross Sections 6 and 7. Interpolation with 10 ft maximum spacing is used to generate four new cross sections between Cross Sections 5 and 6. The model is re-run and most warnings are eliminated as noted below. Table 7-10 provides the final results.



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Table 7-10. East Channel Final Results

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
East Channel	7	213	821	821.72	821.72	822.05	0.00292	4.59	46.53	72.56	1.01
East Channel	6.98684*	213	820.97	821.62	821.69	822.04	0.004298	5.15	41.29	72.56	1.21
East Channel	6.97368*	213	820.95	821.64	821.67	822	0.003509	4.85	43.92	72.56	1.1
East Channel	6.96052*	213	820.92	821.56	821.64	821.99	0.004687	5.29	40.26	72.56	1.25
East Channel	6.94736*	213	820.89	821.51	821.61	821.98	0.005371	5.51	38.65	72.56	1.33
East Channel	6.93421*	213	820.87	821.58	821.59	821.92	0.00314	4.69	45.44	72.56	1.05
East Channel	6.92105*	213	820.84	821.49	821.57	821.91	0.004309	5.16	41.31	72.56	1.21
East Channel	6.90789*	213	820.82	821.51	821.55	821.87	0.003522	4.86	43.91	72.56	1.1
East Channel	6.89473*	213	820.79	821.43	821.52	821.86	0.004644	5.3	40.29	72.55	1.25
East Channel	6.88157*	213	820.76	821.38	821.49	821.85	0.005311	5.51	38.69	72.55	1.33
East Channel	6.86842*	213	820.74	821.45	821.47	821.79	0.0031	4.69	45.49	72.55	1.05
East Channel	6.85526*	213	820.71	821.36	821.44	821.78	0.004255	5.17	41.35	72.55	1.21
East Channel	6.84210*	213	820.68	821.32	821.41	821.76	0.004788	5.35	39.91	72.55	1.27
East Channel	6.82894*	213	820.66	821.36	821.39	821.72	0.003396	4.83	44.25	72.55	1.09
East Channel	6.81579*	213	820.63	821.3	821.36	821.69	0.004008	5.08	42.08	72.55	1.17
East Channel	6.80263*	213	820.61	821.3	821.34	821.67	0.003438	4.85	44.07	72.55	1.1
East Channel	6.78947*	213	820.58	821.22	821.31	821.66	0.004632	5.3	40.38	72.55	1.25
East Channel	6.77631*	213	820.55	821.17	821.28	821.65	0.005492	5.58	38.35	72.55	1.35
East Channel	6.76315*	213	820.53	821.25	821.26	821.59	0.003028	4.67	45.89	72.55	1.03
East Channel	6.75*	213	820.5	821.16	821.23	821.57	0.004312	5.2	41.23	72.55	1.21
East Channel	6.73684*	213	820.47	821.11	821.2	821.55	0.004786	5.37	39.93	72.55	1.27
East Channel	6.72368*	213	820.45	821.15	821.18	821.51	0.003435	4.86	44.13	72.55	1.09
East Channel	6.71052*	213	820.42	821.09	821.16	821.49	0.004043	5.11	41.99	72.55	1.18
East Channel	6.69736*	213	820.39	821.03	821.13	821.48	0.004888	5.44	39.51	72.54	1.29
East Channel	6.68421*	213	820.37	821.08	821.11	821.44	0.003302	4.83	44.47	72.54	1.08
East Channel	6.67105*	213	820.34	821.02	821.08	821.42	0.003954	5.11	42.08	72.54	1.17
East Channel	6.65789*	213	820.32	821.02	821.06	821.39	0.003555	4.95	43.44	72.54	1.12
East Channel	6.64473*	213	820.29	820.94	821.03	821.38	0.004633	5.37	40.05	72.54	1.26
East Channel	6.63157*	213	820.26	820.89	821.01	821.38	0.005489	5.66	38.01	72.54	1.36
East Channel	6.61842*	213	820.24	820.86	820.99	821.37	0.005794	5.76	37.35	72.54	1.39
East Channel	6.60526*	213	820.21	820.81	820.96	821.35	0.006348	5.93	36.27	72.14	1.45
East Channel	6.59210*	213	820.18	820.77	820.93	821.34	0.007006	6.1	35.23	71.73	1.51
East Channel	6.57894*	213	820.16	820.76	820.91	821.32	0.00674	6.04	35.61	71.56	1.48
East Channel	6.56579*	213	820.13	820.72	820.88	821.31	0.007316	6.2	34.68	71.2	1.54
East Channel	6.55263*	213	820.11	820.7	820.86	821.28	0.007056	6.13	35.04	71.08	1.52
East Channel	6.53947*	213	820.08	820.66	820.83	821.27	0.007589	6.28	34.21	70.7	1.57



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Table 7-10. East Channel Final Results (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
East Channel	6.52631*	213	820.05	820.63	820.81	821.24	0.007668	6.3	34.06	70.45	1.58
East Channel	6.51315*	213	820.03	820.62	820.79	821.22	0.007456	6.26	34.33	70.33	1.56
East Channel	6.5*	213	820	820.58	820.76	821.19	0.007616	6.3	34.06	70.03	1.57
East Channel	6.48684*	213	819.97	820.55	820.73	821.17	0.007632	6.33	33.92	69.8	1.58
East Channel	6.47368*	213	819.95	820.54	820.71	821.14	0.007419	6.28	34.19	69.69	1.56
East Channel	6.46052*	213	819.92	820.51	820.68	821.12	0.007562	6.33	33.94	69.41	1.57
East Channel	6.44736*	213	819.89	820.47	820.65	821.1	0.007903	6.42	33.45	69.15	1.61
East Channel	6.43421*	213	819.87	820.46	820.63	821.08	0.00769	6.37	33.71	69.05	1.59
East Channel	6.42105*	213	819.84	820.42	820.61	821.06	0.007915	6.43	33.37	68.76	1.61
East Channel	6.40789*	213	819.82	820.41	820.59	821.03	0.007711	6.39	33.61	68.66	1.59
East Channel	6.39473*	213	819.79	820.37	820.56	821.01	0.008002	6.45	33.29	68.44	1.61
East Channel	6.38157*	213	819.76	820.34	820.53	820.99	0.008211	6.51	32.99	68.17	1.63
East Channel	6.36842*	213	819.74	820.32	820.51	820.97	0.008032	6.47	33.19	68.07	1.61
East Channel	6.35526*	213	819.71	820.29	820.48	820.95	0.008256	6.53	32.88	67.86	1.63
East Channel	6.34210*	213	819.68	820.26	820.45	820.93	0.008462	6.59	32.59	67.6	1.65
East Channel	6.32894*	213	819.66	820.24	820.43	820.9	0.008307	6.56	32.76	67.5	1.64
East Channel	6.31579*	213	819.63	820.21	820.4	820.88	0.008529	6.61	32.47	67.3	1.66
East Channel	6.30263*	213	819.61	820.19	820.39	820.86	0.008391	6.59	32.6	67.14	1.65
East Channel	6.28947*	213	819.58	820.16	820.36	820.84	0.008543	6.65	32.31	66.94	1.67
East Channel	6.27631*	213	819.55	820.13	820.33	820.82	0.008757	6.71	32.04	66.75	1.69
East Channel	6.26315*	213	819.53	820.11	820.31	820.79	0.00864	6.68	32.14	66.59	1.68
East Channel	6.25*	213	819.5	820.08	820.28	820.77	0.008856	6.74	31.88	66.4	1.7
East Channel	6.23684*	213	819.47	820.04	820.25	820.75	0.009065	6.8	31.63	66.22	1.71
East Channel	6.22368*	213	819.45	820.02	820.23	820.73	0.008984	6.78	31.68	66.06	1.71
East Channel	6.21052*	213	819.42	819.99	820.2	820.71	0.009205	6.84	31.42	65.87	1.73
East Channel	6.19736*	213	819.39	819.96	820.17	820.69	0.009489	6.89	31.18	65.69	1.74
East Channel	6.18421*	213	819.37	819.94	820.16	820.67	0.009445	6.89	31.2	65.54	1.74
East Channel	6.17105*	213	819.34	819.91	820.13	820.65	0.009646	6.94	30.97	65.36	1.76
East Channel	6.15789*	213	819.32	819.89	820.11	820.63	0.009624	6.94	30.97	65.25	1.76
East Channel	6.14473*	213	819.29	819.86	820.08	820.61	0.009812	6.99	30.75	65.03	1.77
East Channel	6.13157*	213	819.26	819.83	820.05	820.59	0.009999	7.03	30.54	64.85	1.79
East Channel	6.11842*	213	819.24	819.81	820.03	820.57	0.010025	7.04	30.5	64.74	1.79
East Channel	6.10526*	213	819.21	819.78	820	820.54	0.009941	7.03	30.54	64.55	1.78
East Channel	6.09210*	213	819.18	819.75	819.97	820.52	0.010038	7.08	30.34	64.38	1.8
East Channel	6.07894*	213	819.16	819.73	819.96	820.5	0.010075	7.09	30.29	64.26	1.8



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Table 7-10. East Channel Final Results (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
East Channel	6.06579*	213	819.13	819.7	819.93	820.47	0.009992	7.08	30.33	64.07	1.8
East Channel	6.05263*	213	819.11	819.68	819.91	820.45	0.010034	7.1	30.27	63.96	1.8
East Channel	6.03947*	213	819.08	819.65	819.88	820.42	0.00995	7.09	30.32	63.81	1.79
East Channel	6.02631*	213	819.05	819.62	819.85	820.39	0.00986	7.07	30.36	63.62	1.79
East Channel	6.01315*	213	819.03	819.6	819.83	820.37	0.009891	7.09	30.31	63.51	1.79
East Channel	6	213	819	819.57	819.8	820.35	0.010159	7.13	30.12	63.34	1.81
East Channel	5.8*	213	818.9	819.45	819.69	820.25	0.010268	7.18	29.88	62.74	1.82
East Channel	5.6*	213	818.81	819.37	819.6	820.15	0.009922	7.12	30.1	62.33	1.79
East Channel	5.4*	213	818.71	819.33	819.54	820.05	0.008513	6.82	31.37	62.11	1.68
East Channel	5.2*	213	818.62	819.33	819.5	819.95	0.006493	6.29	34.02	62.14	1.48
East Channel	5	213	818.52	819.44	819.48	819.85	0.00345	5.17	41.47	62.67	1.11
East Channel	4.94444*	213	818.48	819.28	819.42	819.83	0.005698	5.94	36.05	64.44	1.38
East Channel	4.88888*	213	818.44	819.18	819.36	819.81	0.007337	6.33	33.81	66.43	1.55
East Channel	4.83333*	213	818.41	819.1	819.3	819.79	0.009224	6.7	31.93	68.43	1.71
East Channel	4.77777*	213	818.37	819.02	819.24	819.77	0.010699	6.93	30.88	70.41	1.82
East Channel	4.72222*	213	818.33	818.95	819.18	819.74	0.012094	7.13	30	72.42	1.93
East Channel	4.66666*	213	818.29	818.88	819.12	819.71	0.013647	7.29	29.34	74.42	2.03
East Channel	4.61111*	213	818.25	818.81	819.06	819.67	0.014992	7.44	28.74	76.41	2.12
East Channel	4.55555*	213	818.21	818.75	819	819.63	0.016288	7.53	28.41	78.44	2.18
East Channel	4.5*	213	818.18	818.7	818.95	819.59	0.017336	7.61	28.1	80.5	2.25
East Channel	4.44444*	213	818.14	818.63	818.89	819.55	0.018657	7.68	27.84	82.55	2.31
East Channel	4.38888*	213	818.1	818.58	818.83	819.51	0.019855	7.75	27.59	84.57	2.37
East Channel	4.33333*	213	818.06	818.52	818.77	819.46	0.021101	7.82	27.34	86.6	2.43
East Channel	4.27777*	213	818.02	818.46	818.72	819.43	0.022519	7.9	27.06	88.61	2.5
East Channel	4.22222*	213	817.98	818.4	818.66	819.38	0.023697	7.95	26.9	90.67	2.55
East Channel	4.16666*	213	817.95	818.36	818.61	819.32	0.023819	7.89	27.1	92.79	2.55
East Channel	4.11111*	213	817.91	818.3	818.55	819.28	0.025381	7.97	26.83	94.84	2.62
East Channel	4.05555*	213	817.87	818.25	818.5	819.23	0.025906	7.96	26.89	96.87	2.64
East Channel	4	213	817.83	818.19	818.44	819.18	0.02717	8	26.74	98.94	2.69
East Channel	3.95652*	213	817.49	817.99	818.26	819.11	0.032018	8.52	25.08	94.81	2.91
East Channel	3.91304*	213	817.15	817.76	818.07	819.04	0.028907	9.07	23.49	74.51	2.85
East Channel	3.86956*	213	816.81	817.5	817.87	818.96	0.02886	9.69	21.97	62.92	2.89
East Channel	3.82608*	213	816.47	817.23	817.63	818.89	0.028892	10.34	20.6	53.61	2.94
East Channel	3.78260*	213	816.13	816.95	817.4	818.82	0.029329	10.96	19.44	46.89	3
East Channel	3.73913*	213	815.79	816.66	817.16	818.74	0.030035	11.56	18.43	41.74	3.06



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Table 7-10. East Channel Final Results (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
East Channel	3.69565*	213	815.45	816.37	816.9	818.66	0.030759	12.14	17.55	37.58	3.13
East Channel	3.65217*	213	815.11	816.07	816.64	818.58	0.031718	12.71	16.76	34.28	3.2
East Channel	3.60869*	213	814.77	815.77	816.38	818.5	0.032743	13.26	16.06	31.54	3.27
East Channel	3.56521*	213	814.43	815.46	816.11	818.42	0.033757	13.8	15.44	29.2	3.34
East Channel	3.52173*	213	814.09	815.15	815.83	818.34	0.034785	14.32	14.87	27.18	3.41
East Channel	3.47826*	213	813.74	814.83	815.55	818.25	0.035813	14.85	14.35	25.38	3.48
East Channel	3.43478*	213	813.4	814.52	815.27	818.16	0.036641	15.32	13.91	23.86	3.54
East Channel	3.39130*	213	813.06	814.21	815	818.07	0.037358	15.77	13.5	22.49	3.59
East Channel	3.34782*	213	812.72	813.89	814.71	817.98	0.03825	16.23	13.12	21.28	3.64
East Channel	3.30434*	213	812.38	813.57	814.43	817.89	0.038993	16.67	12.78	20.2	3.69
East Channel	3.26087*	213	812.04	813.25	814.15	817.79	0.039674	17.09	12.47	19.21	3.74
East Channel	3.21739*	213	811.7	812.94	813.86	817.69	0.040396	17.5	12.17	18.31	3.78
East Channel	3.17391*	213	811.36	815.17	813.57	815.24	0.000147	2.17	98.14	50.1	0.27
East Channel	3.13043*	213	811.02	815.18		815.24	0.000106	1.95	109.34	51.07	0.23
East Channel	3.08695*	213	810.68	815.18		815.23	0.000078	1.77	120.34	51.83	0.2
East Channel	3.04347*	213	810.34	815.19		815.23	0.000059	1.62	131.23	52.19	0.18
East Channel	3	545	810	814.92		815.21	0.000404	4.27	127.77	50.14	0.47
East Channel	2.98666*	545	809.99	814.93		815.2	0.000388	4.2	129.77	50.59	0.46
East Channel	2.97333*	545	809.98	814.93		815.2	0.00037	4.12	132.13	51.09	0.45
East Channel	2.96*	545	809.97	814.94		815.19	0.000355	4.06	134.33	51.54	0.44
East Channel	2.94666*	545	809.96	814.94		815.19	0.000339	3.99	136.46	51.88	0.43
East Channel	2.93333*	545	809.96	814.95		815.19	0.000326	3.94	138.48	52.26	0.43
East Channel	2.92*	545	809.95	814.95		815.19	0.000311	3.87	140.79	52.6	0.42
East Channel	2.90666*	545	809.94	814.96		815.18	0.000298	3.81	143.01	52.97	0.41
East Channel	2.89333*	545	809.93	814.96		815.18	0.000286	3.75	145.28	53.34	0.4
East Channel	2.88*	545	809.92	814.97		815.18	0.000274	3.7	147.48	53.68	0.39
East Channel	2.86666*	545	809.91	814.97		815.18	0.000262	3.64	149.85	54.02	0.38
East Channel	2.85333*	545	809.9	814.97		815.17	0.000252	3.59	152	54.42	0.38
East Channel	2.84*	545	809.89	814.98		815.17	0.000242	3.53	154.35	54.76	0.37
East Channel	2.82666*	545	809.88	814.98		815.17	0.000232	3.48	156.7	55.12	0.36
East Channel	2.81333*	545	809.87	814.99		815.17	0.000223	3.43	158.94	55.47	0.36
East Channel	2.8*	545	809.87	814.99		815.17	0.000215	3.39	160.96	55.8	0.35
East Channel	2.78666*	545	809.86	814.99		815.16	0.000206	3.33	163.5	56.19	0.34
East Channel	2.77333*	545	809.85	814.99		815.16	0.000199	3.29	165.63	56.52	0.34
East Channel	2.76*	545	809.84	815		815.16	0.000191	3.24	168.1	56.87	0.33



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Table 7-10. East Channel Final Results (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
East Channel	2.74666*	545	809.83	815		815.16	0.000184	3.2	170.45	57.22	0.33
East Channel	2.73333*	545	809.82	815		815.16	0.000177	3.15	172.82	57.59	0.32
East Channel	2.72*	545	809.81	815.01		815.16	0.000171	3.11	175.16	57.92	0.32
East Channel	2.70666*	545	809.8	815.01		815.15	0.000164	3.07	177.7	58.28	0.31
East Channel	2.69333*	545	809.79	815.01		815.15	0.000159	3.03	179.92	58.63	0.3
East Channel	2.68*	545	809.79	815.01		815.15	0.000153	2.99	182.32	58.98	0.3
East Channel	2.66666*	545	809.78	815.02		815.15	0.000148	2.95	184.73	59.33	0.29
East Channel	2.65333*	545	809.77	815.02		815.15	0.000142	2.91	187.26	59.67	0.29
East Channel	2.64*	545	809.76	815.02		815.15	0.000138	2.88	189.53	60.01	0.29
East Channel	2.62666*	545	809.75	815.02		815.15	0.000133	2.84	192.15	60.36	0.28
East Channel	2.61333*	545	809.74	815.02		815.15	0.000128	2.8	194.65	60.72	0.28
East Channel	2.6*	545	809.73	815.03		815.14	0.000124	2.77	197.07	61.05	0.27
East Channel	2.58666*	545	809.72	815.03		815.14	0.000119	2.73	199.59	61.4	0.27
East Channel	2.57333*	545	809.71	815.03		815.14	0.000115	2.7	202.22	61.75	0.26
East Channel	2.56*	545	809.71	815.03		815.14	0.000112	2.67	204.47	62.12	0.26
East Channel	2.54666*	545	809.7	815.03		815.14	0.000108	2.63	207.14	62.45	0.25
East Channel	2.53333*	545	809.69	815.04		815.14	0.000105	2.6	209.63	62.79	0.25
East Channel	2.52*	545	809.68	815.04		815.14	0.000101	2.57	212.21	63.14	0.25
East Channel	2.50666*	545	809.67	815.04		815.14	0.000098	2.54	214.81	63.49	0.24
East Channel	2.49333*	545	809.66	815.04		815.14	0.000094	2.51	217.52	63.83	0.24
East Channel	2.48*	545	809.65	815.04		815.14	0.000092	2.48	219.97	64.17	0.24
East Channel	2.46666*	545	809.64	815.04		815.14	0.000089	2.45	222.71	64.51	0.23
East Channel	2.45333*	545	809.63	815.04		815.14	0.000086	2.42	225.28	64.85	0.23
East Channel	2.44*	545	809.62	815.05		815.13	0.000083	2.39	228.04	65.22	0.23
East Channel	2.42666*	545	809.62	815.05		815.13	0.000081	2.37	230.43	65.54	0.22
East Channel	2.41333*	545	809.61	815.05		815.13	0.000078	2.34	233.23	65.89	0.22
East Channel	2.4*	545	809.6	815.05		815.13	0.000076	2.31	235.97	66.24	0.22
East Channel	2.38666*	545	809.59	815.05		815.13	0.000073	2.28	238.66	66.58	0.21
East Channel	2.37333*	545	809.58	815.05		815.13	0.000071	2.26	241.33	66.93	0.21
East Channel	2.36*	545	809.57	815.05		815.13	0.000069	2.23	244.25	67.27	0.21
East Channel	2.34666*	545	809.56	815.05		815.13	0.000067	2.21	246.8	67.6	0.2
East Channel	2.33333*	545	809.55	815.06		815.13	0.000065	2.18	249.75	67.96	0.2
East Channel	2.32*	545	809.54	815.06		815.13	0.000063	2.16	252.52	68.3	0.2
East Channel	2.30666*	545	809.54	815.06		815.13	0.000061	2.14	255.03	68.62	0.2
East Channel	2.29333*	545	809.53	815.06		815.13	0.000059	2.11	257.91	68.99	0.19



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Table 7-10. East Channel Final Results (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
East Channel	2.28*	545	809.52	815.06		815.13	0.000058	2.09	260.81	69.31	0.19
East Channel	2.26666*	545	809.51	815.06		815.13	0.000056	2.07	263.5	69.66	0.19
East Channel	2.25333*	545	809.5	815.06		815.13	0.000054	2.04	266.57	70.02	0.18
East Channel	2.24*	545	809.49	815.06		815.13	0.000053	2.02	269.36	70.35	0.18
East Channel	2.22666*	545	809.48	815.06		815.13	0.000051	2	272.22	70.68	0.18
East Channel	2.21333*	545	809.47	815.06		815.12	0.00005	1.98	275.2	71.05	0.18
East Channel	2.2*	545	809.46	815.06		815.12	0.000048	1.96	278.21	71.38	0.17
East Channel	2.18666*	545	809.46	815.07		815.12	0.000047	1.94	280.69	71.71	0.17
East Channel	2.17333*	545	809.45	815.07		815.12	0.000046	1.92	283.83	72.07	0.17
East Channel	2.16*	545	809.44	815.07		815.12	0.000045	1.9	286.81	72.41	0.17
East Channel	2.14666*	545	809.43	815.07		815.12	0.000043	1.88	289.72	72.73	0.17
East Channel	2.13333*	545	809.42	815.07		815.12	0.000042	1.86	292.71	73.1	0.16
East Channel	2.12*	545	809.41	815.07		815.12	0.000041	1.84	295.84	73.43	0.16
East Channel	2.10666*	545	809.4	815.07		815.12	0.00004	1.82	298.8	73.75	0.16
East Channel	2.09333*	545	809.39	815.07		815.12	0.000039	1.81	301.92	74.13	0.16
East Channel	2.08*	545	809.38	815.07		815.12	0.000038	1.79	304.93	74.46	0.16
East Channel	2.06666*	545	809.37	815.07		815.12	0.000037	1.77	308.07	74.78	0.15
East Channel	2.05333*	545	809.37	815.07		815.12	0.000036	1.75	310.8	75.14	0.15
East Channel	2.04*	545	809.36	815.07		815.12	0.000035	1.74	314.08	75.48	0.15
East Channel	2.02666*	545	809.35	815.07		815.12	0.000034	1.72	317.12	75.81	0.15
East Channel	2.01333*	545	809.34	815.07		815.12	0.000033	1.7	320.28	76.17	0.15
East Channel	2	545	809.33	815.07		815.12	0.000032	1.69	323.38	76.5	0.14
East Channel	1.98630*	545	809.31	815.08		815.12	0.000031	1.66	328.62	77.43	0.14
East Channel	1.97260*	545	809.3	815.08		815.12	0.00003	1.63	333.4	78.33	0.14
East Channel	1.95890*	545	809.28	815.08		815.12	0.000029	1.61	338.68	79.26	0.14
East Channel	1.94520*	545	809.26	815.08		815.12	0.000028	1.58	343.95	80.19	0.13
East Channel	1.93150*	545	809.25	815.08		815.12	0.000027	1.56	348.93	81.12	0.13
East Channel	1.91780*	545	809.23	815.08		815.12	0.000026	1.54	354.27	82.01	0.13
East Channel	1.90411*	545	809.21	815.08		815.12	0.000025	1.52	359.66	82.95	0.13
East Channel	1.89041*	545	809.19	815.08		815.12	0.000024	1.49	365.08	83.88	0.13
East Channel	1.87671*	545	809.18	815.08		815.12	0.000023	1.47	370.27	84.81	0.12
East Channel	1.86301*	545	809.16	815.08		815.12	0.000023	1.45	375.72	85.72	0.12
East Channel	1.84931*	545	809.14	815.08		815.12	0.000022	1.43	381.22	86.65	0.12
East Channel	1.83561*	545	809.13	815.08		815.11	0.000021	1.41	386.33	87.58	0.12
East Channel	1.82191*	545	809.11	815.08		815.11	0.00002	1.39	392.11	88.51	0.12



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Table 7-10. East Channel Final Results (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
East Channel	1.80821*	545	809.09	815.09		815.11	0.00002	1.37	397.73	89.42	0.11
East Channel	1.79452*	545	809.08	815.09		815.11	0.000019	1.35	403.04	90.35	0.11
East Channel	1.78082*	545	809.06	815.09		815.11	0.000019	1.33	408.83	91.29	0.11
East Channel	1.76712*	545	809.04	815.09		815.11	0.000018	1.32	414.3	92.21	0.11
East Channel	1.75342*	545	809.02	815.09		815.11	0.000017	1.3	420.21	93.13	0.11
East Channel	1.73972*	545	809.01	815.09		815.11	0.000017	1.28	425.99	94.08	0.11
East Channel	1.72602*	545	808.99	815.09		815.11	0.000016	1.26	431.44	95	0.1
East Channel	1.71232*	545	808.97	815.09		815.11	0.000016	1.25	437.55	95.94	0.1
East Channel	1.69863*	545	808.96	815.09		815.11	0.000015	1.23	443.17	96.86	0.1
East Channel	1.68493*	545	808.94	815.09		815.11	0.000015	1.21	449.01	97.79	0.1
East Channel	1.67123*	545	808.92	815.09		815.11	0.000014	1.2	455.11	98.73	0.1
East Channel	1.65753*	545	808.91	815.09		815.11	0.000014	1.18	460.9	99.65	0.1
East Channel	1.64383*	545	808.89	815.09		815.11	0.000014	1.17	467.04	100.58	0.1
East Channel	1.63013*	545	808.87	815.09		815.11	0.000013	1.15	473.18	101.53	0.09
East Channel	1.61643*	545	808.85	815.09		815.11	0.000013	1.14	479.25	102.47	0.09
East Channel	1.60274*	545	808.84	815.09		815.11	0.000012	1.12	485.18	103.37	0.09
East Channel	1.58904*	545	808.82	815.09		815.11	0.000012	1.11	491.25	104.32	0.09
East Channel	1.57534*	545	808.8	815.09		815.11	0.000012	1.09	497.76	105.27	0.09
East Channel	1.56164*	545	808.79	815.09		815.11	0.000011	1.08	503.71	106.19	0.09
East Channel	1.54794*	545	808.77	815.09		815.11	0.000011	1.07	509.86	107.12	0.09
East Channel	1.53424*	545	808.75	815.09		815.11	0.000011	1.06	516.5	109.46	0.09
East Channel	1.52054*	545	808.74	815.09		815.11	0.00001	1.04	522.52	112.14	0.08
East Channel	1.50685*	545	808.72	815.09		815.11	0.00001	1.03	529.08	114.8	0.08
East Channel	1.49315*	545	808.7	815.09		815.11	0.00001	1.02	535.88	116.9	0.08
East Channel	1.47945*	545	808.68	815.09		815.11	0.000009	1.01	542.49	119.48	0.08
East Channel	1.46575*	545	808.67	815.09		815.11	0.000009	0.99	549.01	122	0.08
East Channel	1.45205*	545	808.65	815.09		815.11	0.000009	0.98	555.89	124.31	0.08
East Channel	1.43835*	545	808.63	815.1		815.11	0.000009	0.97	562.73	126.35	0.08
East Channel	1.42465*	545	808.62	815.1		815.11	0.000008	0.96	569.5	128.75	0.08
East Channel	1.41095*	545	808.6	815.1		815.11	0.000008	0.95	576.48	131.1	0.08
East Channel	1.39726*	545	808.58	815.1		815.11	0.000008	0.94	583.85	133.44	0.07
East Channel	1.38356*	545	808.57	815.1		815.11	0.000008	0.93	590.62	135.43	0.07
East Channel	1.36986*	545	808.55	815.1		815.11	0.000007	0.92	597.74	137.42	0.07
East Channel	1.35616*	545	808.53	815.1		815.11	0.000007	0.91	605.4	139.65	0.07
East Channel	1.34246*	545	808.51	815.1		815.11	0.000007	0.9	612.63	141.85	0.07



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Table 7-10. East Channel Final Results (Continued)

Reach	River Sta	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
		(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
East Channel	1.32876*	545	808.5	815.1		815.11	0.000007	0.89	619.7	143.79	0.07
East Channel	1.31506*	545	808.48	815.1		815.11	0.000007	0.88	627.54	145.93	0.07
East Channel	1.30137*	545	808.46	815.1		815.11	0.000006	0.87	635.02	148.05	0.07
East Channel	1.28767*	545	808.45	815.1		815.11	0.000006	0.86	642.08	149.63	0.07
East Channel	1.27397*	545	808.43	815.1		815.11	0.000006	0.85	649.89	151.69	0.07
East Channel	1.26027*	545	808.41	815.1		815.11	0.000006	0.84	657.81	153.73	0.06
East Channel	1.24657*	545	808.4	815.1		815.11	0.000006	0.83	665.48	155.74	0.06
East Channel	1.23287*	545	808.38	815.1		815.11	0.000006	0.82	673.14	157.61	0.06
East Channel	1.21917*	545	808.36	815.1		815.11	0.000006	0.81	681.21	159.59	0.06
East Channel	1.20548*	545	808.34	815.1		815.11	0.000005	0.8	689.27	161.15	0.06
East Channel	1.19178*	545	808.33	815.1		815.11	0.000005	0.79	697.14	163.07	0.06
East Channel	1.17808*	545	808.31	815.1		815.11	0.000005	0.78	705.03	164.91	0.06
East Channel	1.16438*	545	808.29	815.1		815.11	0.000005	0.78	713.13	166.79	0.06
East Channel	1.15068*	545	808.28	815.1		815.11	0.000005	0.77	721.39	168.67	0.06
East Channel	1.13698*	545	808.26	815.1		815.11	0.000005	0.76	729.63	170.5	0.06
East Channel	1.12328*	545	808.24	815.1		815.11	0.000005	0.75	737.54	171.88	0.06
East Channel	1.10959*	545	808.23	815.1		815.11	0.000004	0.74	745.99	173.71	0.06
East Channel	1.09589*	545	808.21	815.1		815.11	0.000004	0.74	754.11	175.49	0.06
East Channel	1.08219*	545	808.19	815.1		815.11	0.000004	0.73	763.02	177.22	0.05
East Channel	1.06849*	545	808.17	815.1		815.11	0.000004	0.72	771.58	178.47	0.05
East Channel	1.05479*	545	808.16	815.1		815.11	0.000004	0.71	779.49	179.38	0.05
East Channel	1.04109*	545	808.14	815.1		815.11	0.000004	0.71	788.32	180.3	0.05
East Channel	1.02739*	545	808.12	815.1		815.11	0.000004	0.7	797.41	181.22	0.05
East Channel	1.01369*	545	808.11	815.1		815.11	0.000004	0.69	805.24	182.12	0.05
East Channel	1	545	808.09	815.1	809.52	815.11	0.000004	0.69	814.13	183.04	0.05

The results indicate that the Froude number exceeds one at Cross Sections 3.21739 through 7, indicating there is supercritical flow in the East Channel. Additionally, there are indications of a hydraulic jump between Cross Sections 3.21739 and 3.17391. Cross Section data indicates the channel between cross sections 3 and 4 is comprised of gravel. Table 7-10 indicates the maximum velocity for the East Channel is 13.91 ft/sec, which is more than the suggested maximum permissible velocity of 7-13 ft/sec for rubble lined sections. Therefore, the velocity within the East Channel is more than the permissible maximum velocity and can cause erosion in the East Channel. However, there are no safety-related structures adjacent to the East Channel. The East Channel flow profile is provided in Figure 7-31. The location of supercritical flows and hydraulic jumps within the East Channel is identified in Figure 7-32.

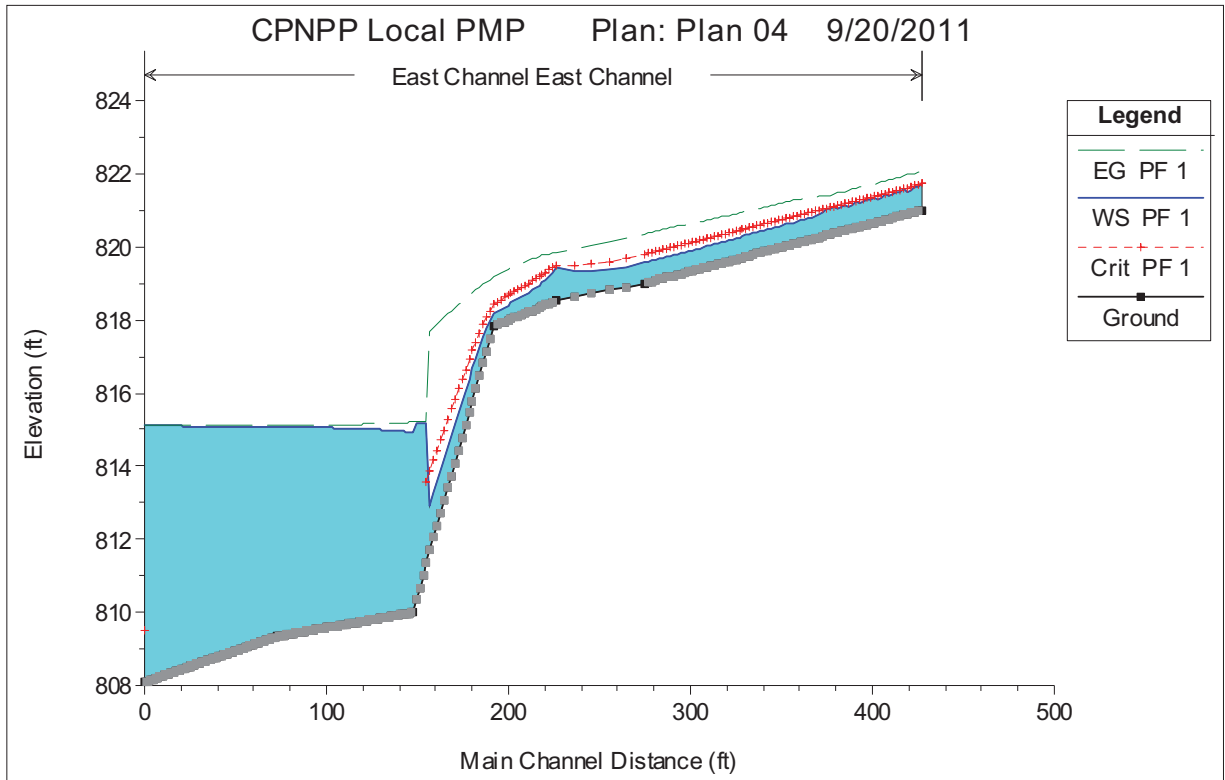


Figure 7-31. East Channel Flow Profile

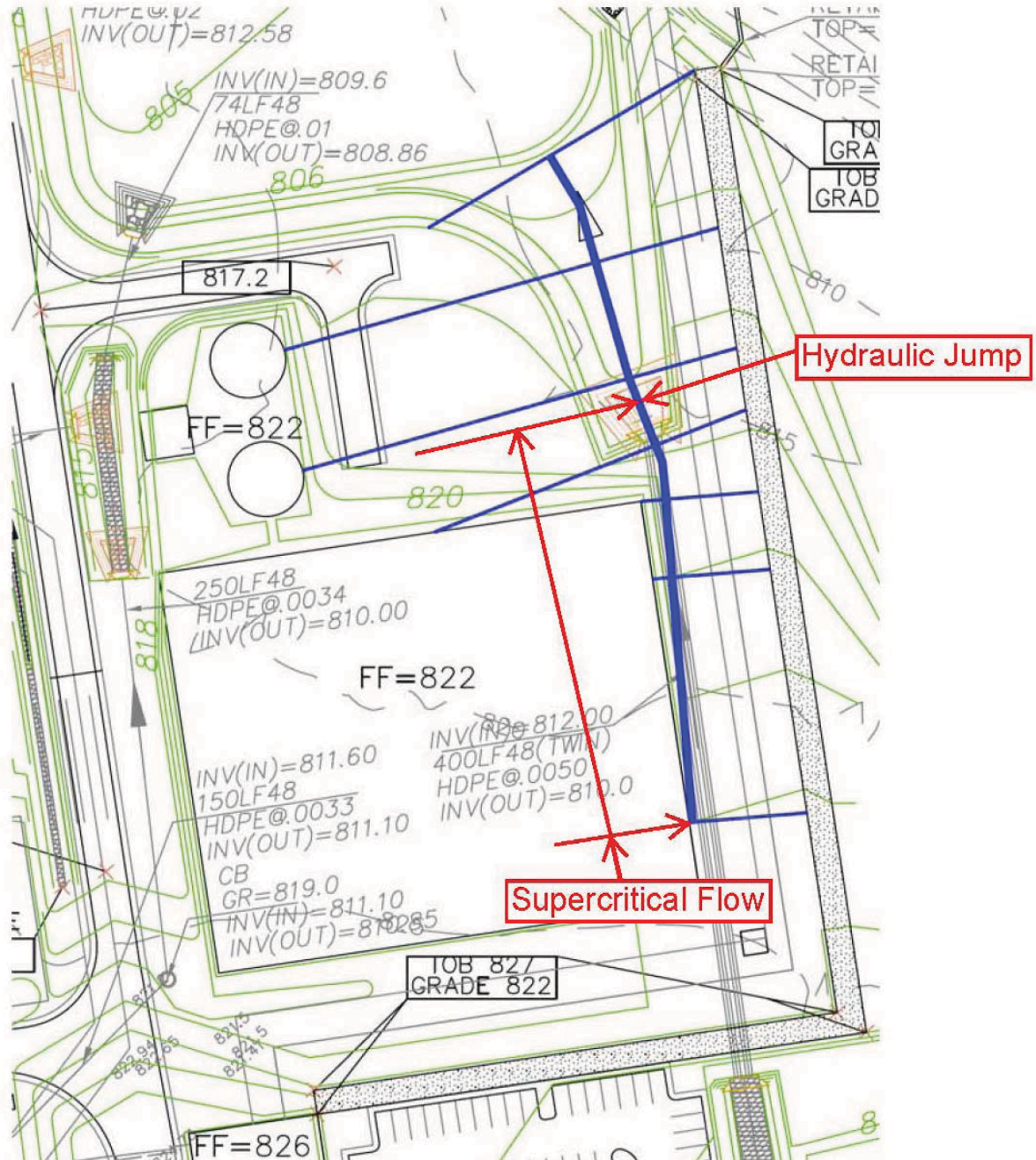


Figure 7-32. East Channel Cross Sections
 Source: Local Site Analysis (Reference 3)

	<p style="text-align: center;">CALCULATION CONTROL SHEET</p>	<p>CALC. NO. TXUT-001-FSAR-2.4.2-CALC-037</p>
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7.13 Off-site Channel

As discussed in Local Site Analysis; the Offsite Channel captures runoff in area generally south of the plant area and beyond the immediate area of Units 3 and 4. The Off-site Channel directs runoff to a culvert structure at the Vehicle Barrier System (VBS) and empties into the East Channel, as shown in Figure 7-35. An overflow embankment directs excess runoff to the Squaw Creek Reservoir (SCR). The Off-site Channel, cross sections, inline structures, obstructions, boundary conditions, weir coefficients etc. are described in detail in Local Site Analysis. As discussed earlier the Manning’s roughness coefficient was decreased to obtain conservative (higher) velocities. The Offsite Channel HEC-RAS schematic is referenced from the Local Site Analysis and is shown in Figure 7-33. The Offsite Channel cross section data are shown in Appendix A.

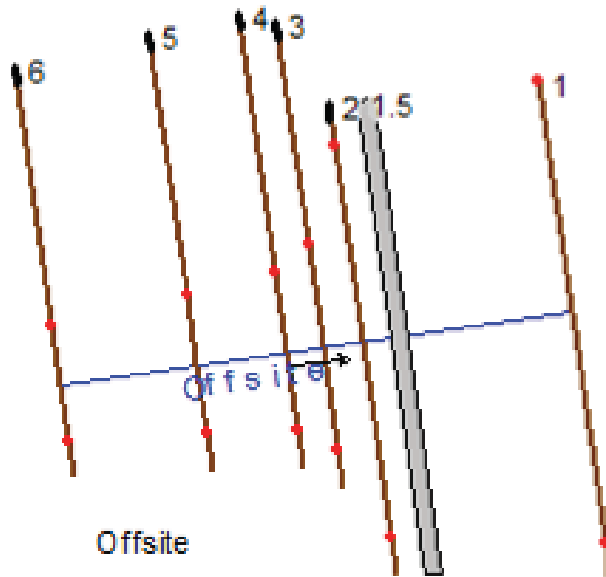


Figure 7-33. Off-site Channel HEC-RAS Schematic
 Source: Local Site Analysis (Reference 3)

The upstream Cross Section 6 is assigned a critical depth boundary condition. Excess runoff exceeding the overflow embankment of the Off-site Channel empties into the Squaw Creek Reservoir (SCR). However, the downstream cross section elevation is well above the Probable Maximum Flood (PMF) elevation of the SCR (Local Site Analysis, Section 5.0). Therefore, the downstream Cross Section 1 is assigned a normal depth slope of 0.2 ft/ft based on the steep slopes of the existing topography, as shown in Figure 7-35. The HEC-RAS model is run using the steady flow option with a mixed flow regime.

Warnings indicate there may be a need for additional cross sections between Cross Sections 2 and 3, 3 and 4, 4 and 5, and 5 and 6. HEC-RAS interpolation with 2 ft maximum spacing is used to generate 11 new cross sections between Cross Sections 2 and 3. Interpolation with 20 ft maximum spacing is used to generate one new cross section between Cross Sections 3 and 4. Interpolation with 50 ft maximum spacing is used to generate one new cross section between Cross Sections 4 and 5. Interpolation with 5 ft maximum spacing is used to generate 16 new cross sections between Cross Sections 5 and 6. The model is re-run and most warnings are eliminated as noted below. Table 7-11 provides the final results.



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Table 7-11. Off-site Channel Final Results

Reach	River Sta	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Offsite	6	2421	815	819.65	819.65	821.46	0.001043	10.78	224.49	62.31	1
Offsite	5.94117*	2421	814.94	819.21	819.57	821.42	0.001623	11.94	202.76	60.43	1.15
Offsite	5.88235*	2421	814.88	818.98	819.47	821.39	0.001826	12.46	194.36	59.84	1.22
Offsite	5.82352*	2421	814.82	818.76	819.38	821.37	0.00205	12.94	187.05	59.37	1.29
Offsite	5.76470*	2421	814.76	818.58	819.3	821.35	0.002258	13.34	181.46	59.09	1.34
Offsite	5.70588*	2421	814.71	818.44	819.22	821.32	0.002423	13.62	177.71	58.99	1.38
Offsite	5.64705*	2421	814.65	818.29	819.15	821.29	0.002582	13.91	174.05	58.9	1.43
Offsite	5.58823*	2421	814.59	820.13	819.05	821.14	0.000617	8.08	303.89	88.6	0.69
Offsite	5.52941*	2421	814.53	820.17		821.11	0.000569	7.82	315.24	93.37	0.66
Offsite	5.47058*	2421	814.47	820.21		821.09	0.000527	7.58	326.28	98.99	0.63
Offsite	5.41176*	2421	814.41	820.24		821.08	0.000489	7.35	337.73	105.41	0.61
Offsite	5.35294*	2421	814.35	820.28		821.06	0.000455	7.13	349.37	111.76	0.58
Offsite	5.29411*	2421	814.29	820.31		821.04	0.000426	6.93	360.77	117.82	0.56
Offsite	5.23529*	2421	814.24	820.33		821.03	0.000401	6.75	371.66	124.03	0.54
Offsite	5.17647*	2421	814.18	820.36		821.02	0.000378	6.57	383.17	129.97	0.52
Offsite	5.11764*	2421	814.12	820.38		821	0.000355	6.4	395.23	136.53	0.51
Offsite	5.05882*	2421	814.06	820.4		820.99	0.000335	6.23	407.22	143.94	0.49
Offsite	5	2421	814	820.42		820.98	0.000295	6.07	419.68	151.03	0.47
Offsite	4.5*	2421	813.78	820.52		820.93	0.000197	5.19	510.2	188.26	0.39
Offsite	4	2421	813.56	820.6		820.89	0.000128	4.46	603.87	208.55	0.33
Offsite	3.5*	2421	813.47	820.67		820.86	0.000084	3.65	760.52	235.24	0.27
Offsite	3	2421	813.39	820.7		820.84	0.000056	3.08	907.36	239.97	0.22
Offsite	2.91666*	2421	813.27	820.7		820.84	0.000051	3.08	900.34	240.33	0.23
Offsite	2.83333*	2421	813.16	820.71		820.84	0.000048	2.99	907.97	242.05	0.22
Offsite	2.75*	2421	813.04	820.71		820.83	0.000043	2.86	931.21	243.1	0.21
Offsite	2.66666*	2421	812.93	820.72		820.83	0.000037	2.7	968.34	244.12	0.2
Offsite	2.58333*	2421	812.81	820.73		820.83	0.00003	2.52	1019.81	244.01	0.19
Offsite	2.5*	2421	812.7	820.74		820.82	0.000024	2.33	1085.43	243	0.17
Offsite	2.41666*	2421	812.58	820.75		820.82	0.000019	2.14	1165.68	228.68	0.15
Offsite	2.33333*	2421	812.46	820.76		820.82	0.000015	1.96	1262.57	230.1	0.14
Offsite	2.25*	2421	812.35	820.76		820.81	0.000011	1.8	1371.92	232.82	0.12
Offsite	2.16666*	2421	812.23	820.77		820.81	0.000009	1.64	1494.74	236.48	0.11
Offsite	2.08333*	2421	812.12	820.77		820.81	0.000007	1.5	1628.85	240.75	0.1
Offsite	2	2421	812	820.78	814.34	820.81	0.000004	1.37	1775.73	245.55	0.09
Offsite	1.5	Inl Struct									
Offsite	1	2421	817	818.69	818.69	819.47	0.002123	7.1	340.79	219.88	1.01

The results indicate flow in the Off-site Channel does not exceed the Vehicle Barrier System (VBS) elevation of 827 ft and affect the East Channel. The Froude number exceeds one between cross sections 5.64705 and 6, indicating there is supercritical flow in the Off-site Channel. The results also indicate there is a possibility of hydraulic jump at cross section 5.58823 and 5.64705. Cross Section data indicates the channel between cross sections 5 and 6 is comprised of mostly gravel and riprap. Table 7-11 indicates the maximum velocity for the Off-site Channel is 13.91 ft/sec, which is more than the suggested maximum permissible velocity of 7-13 ft/sec for rubble lined sections. Therefore, the velocity within the Off-site Channel is more than the permissible maximum velocity and there may be potential for erosion in the Off-site Channel. However, there are no safety-related structures adjacent to the Off-site Channel.

There is one remaining warning concerning critical depth used for Cross Section 1. This is appropriate because the steep boundary condition would be expected to exhibit supercritical flow. The Off-site Channel flow profile is provided in Figure 7-34. The location of supercritical flows and hydraulic jumps within the Off-site Channel are identified in Figure 7-35.

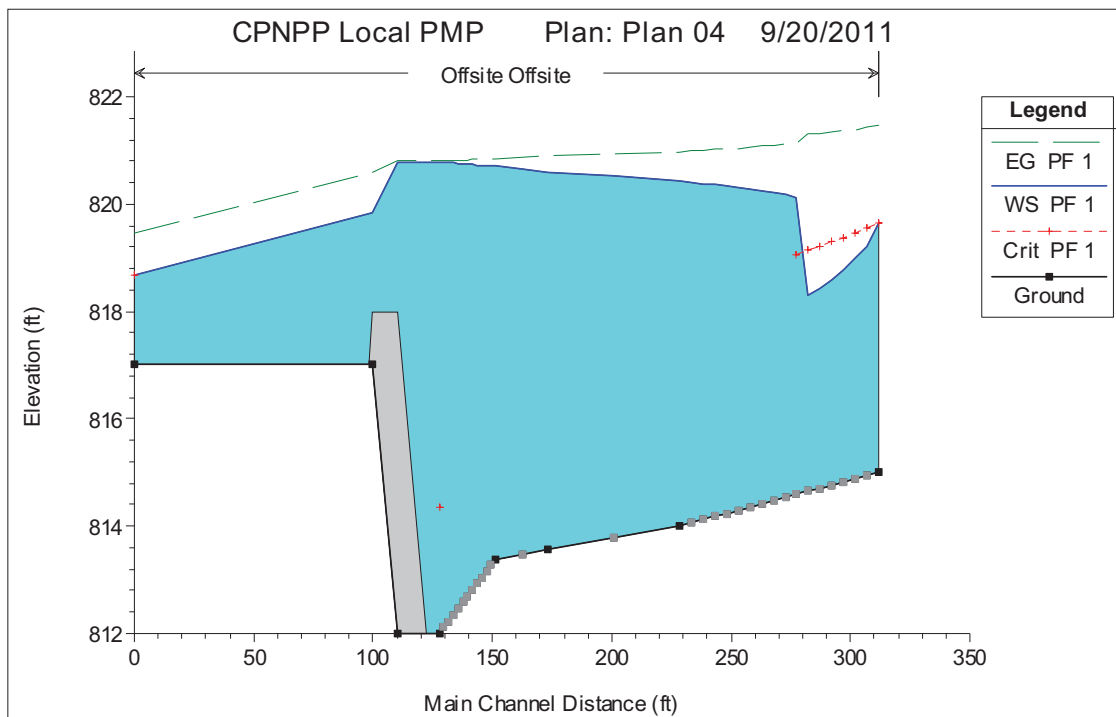


Figure 7-34. Off-site Channel Flow Profile

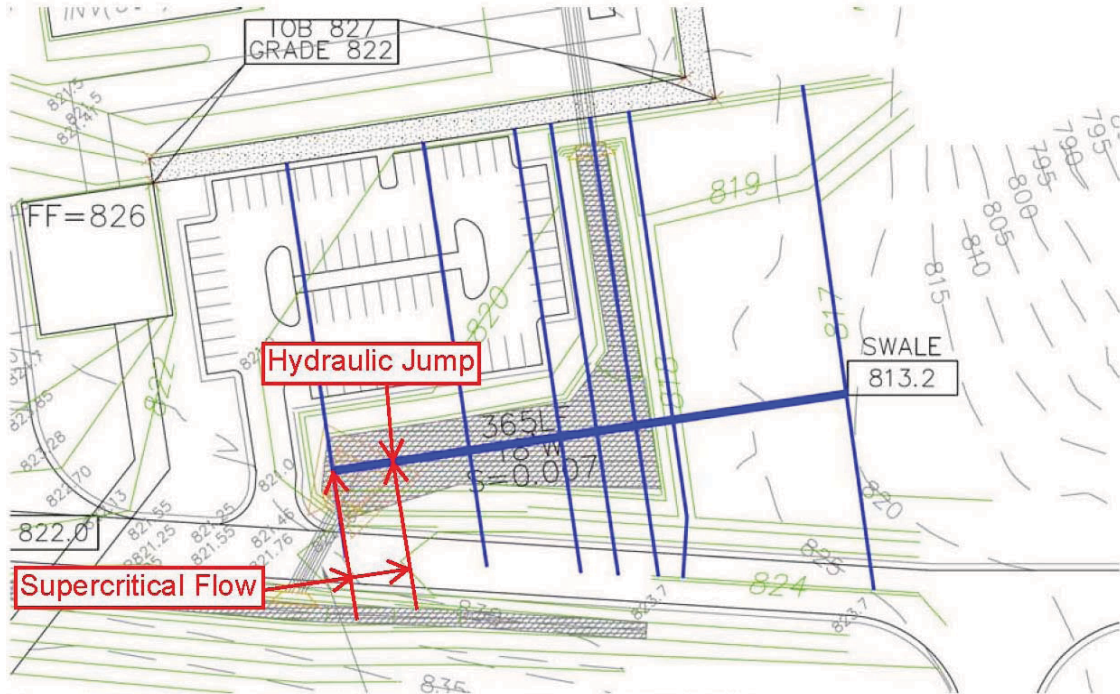


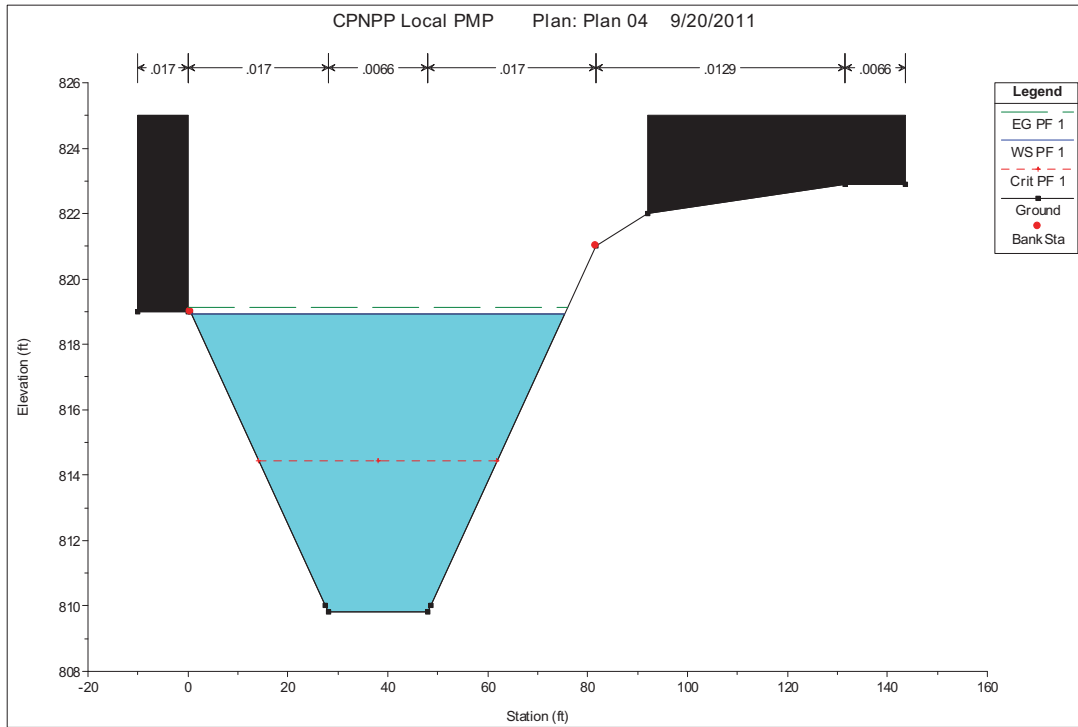
Figure 7-35. Off-site Channel Cross Sections
Source: Local Site Analysis (Reference 3)

8.0 Appendices

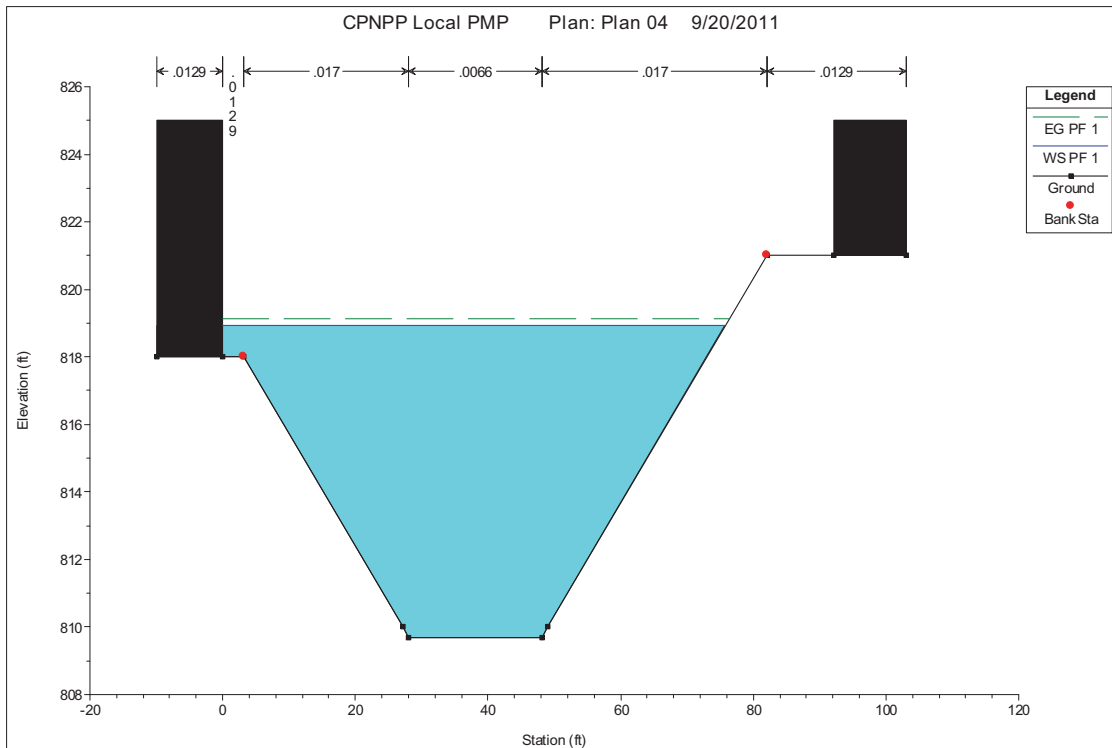
Appendix A – HEC-RAS Cross Section Plots

Appendix B – HEC-RAS Final Run Report

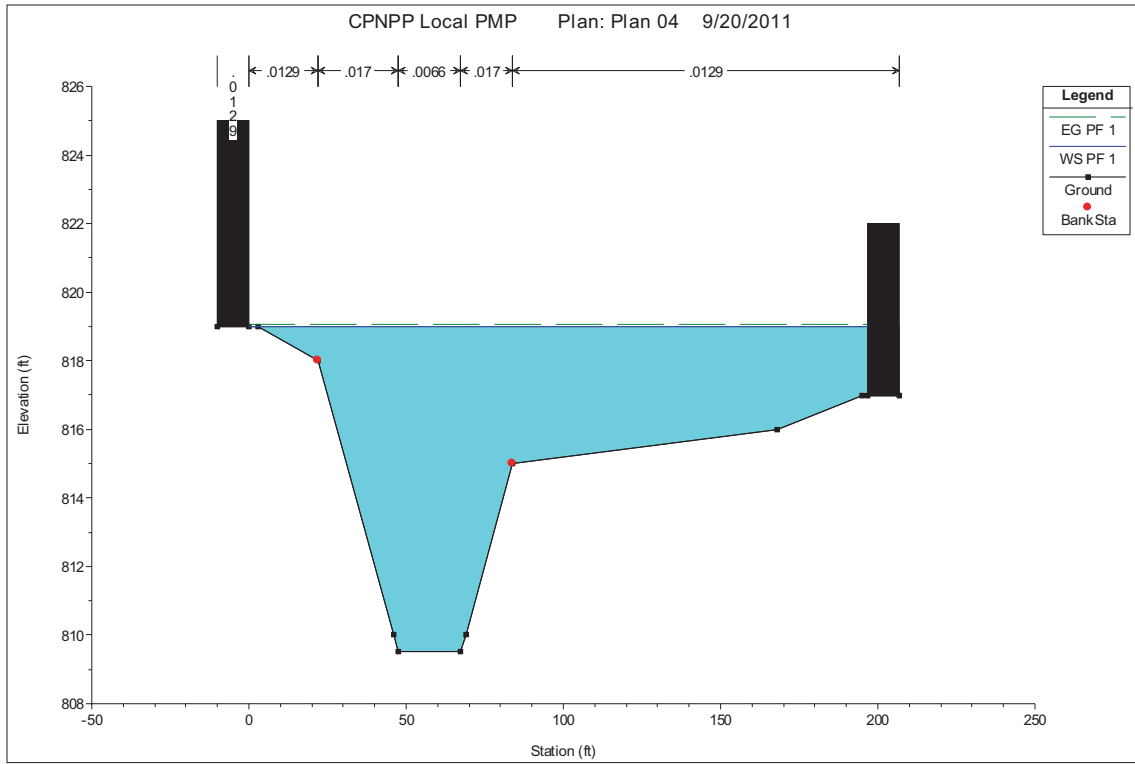
Unit 4 UHS Channel Cross Section Plots



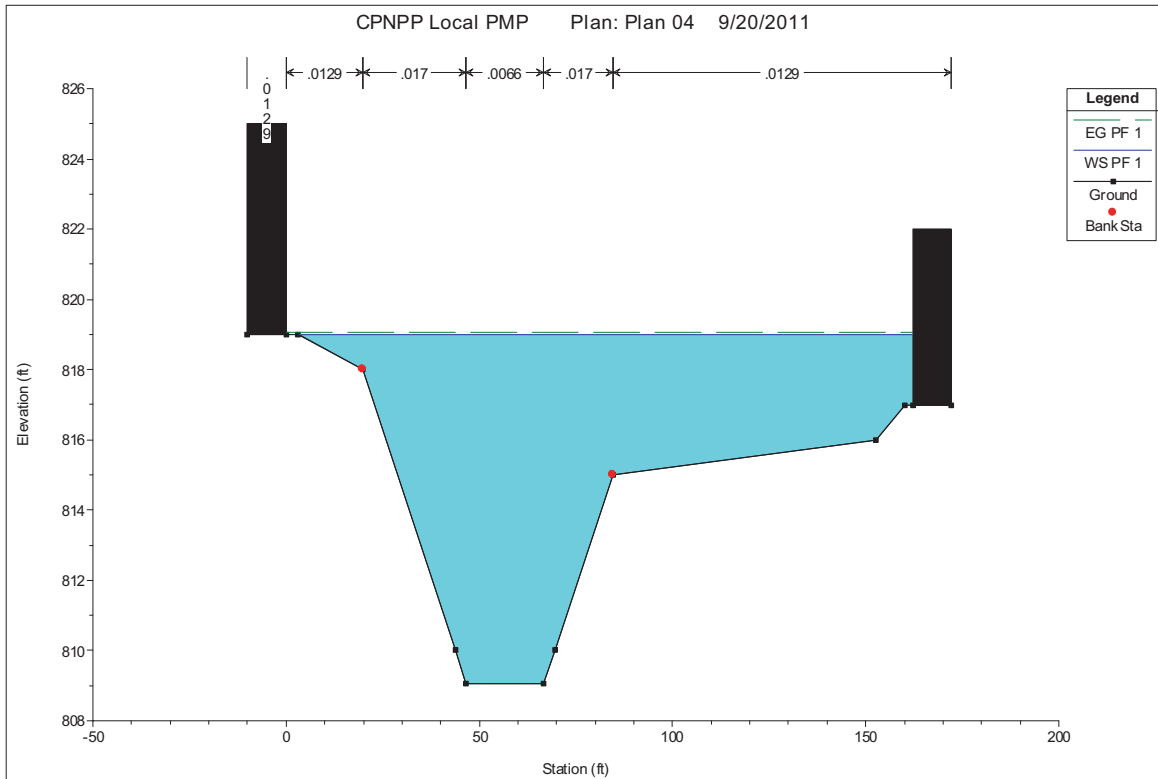
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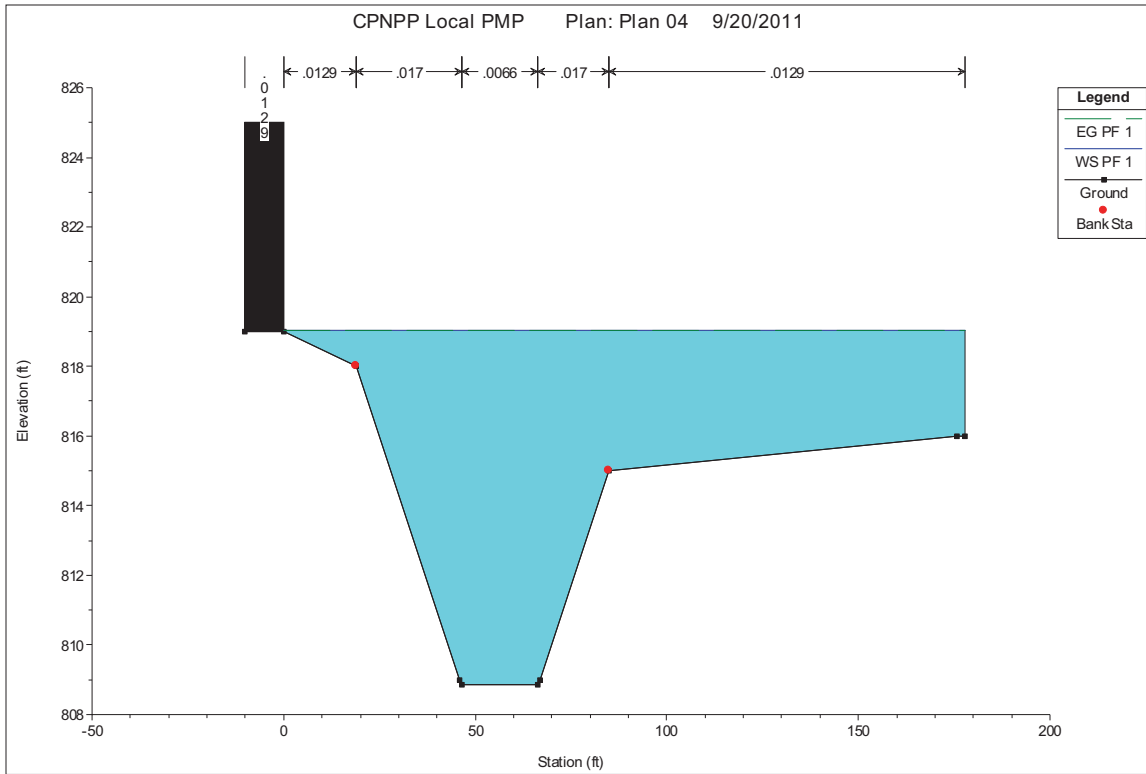
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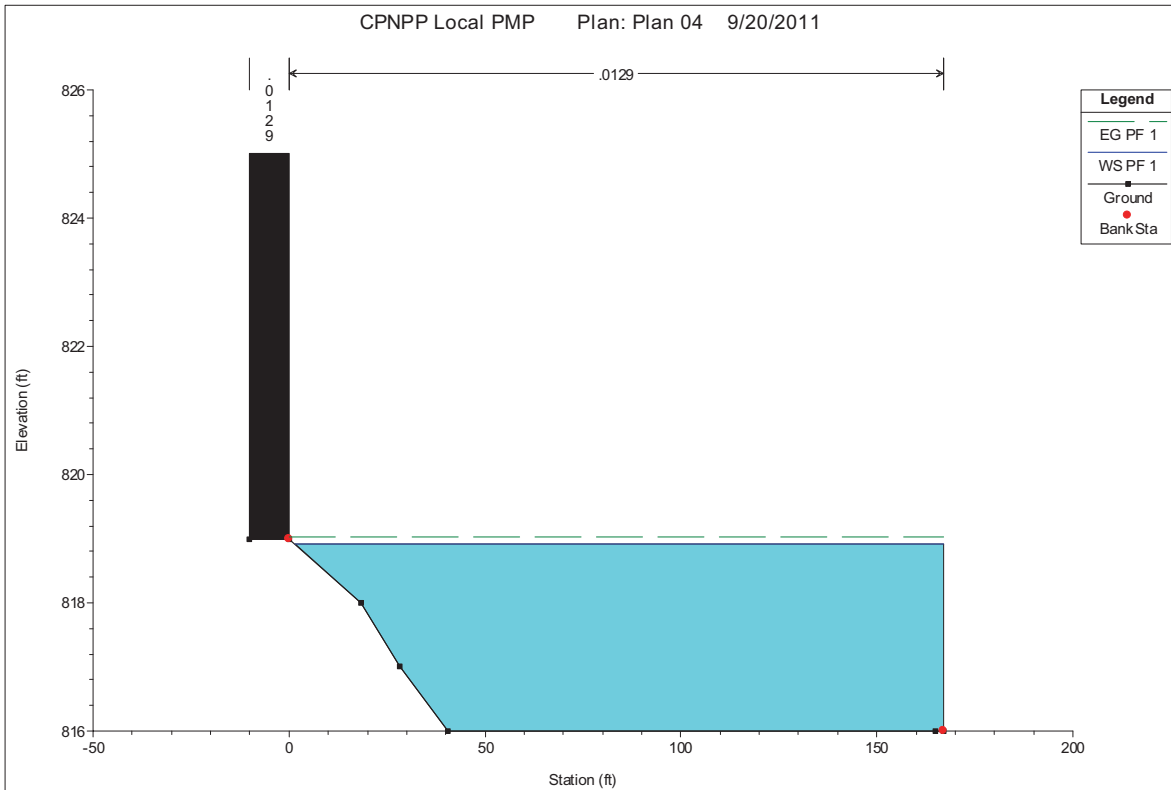
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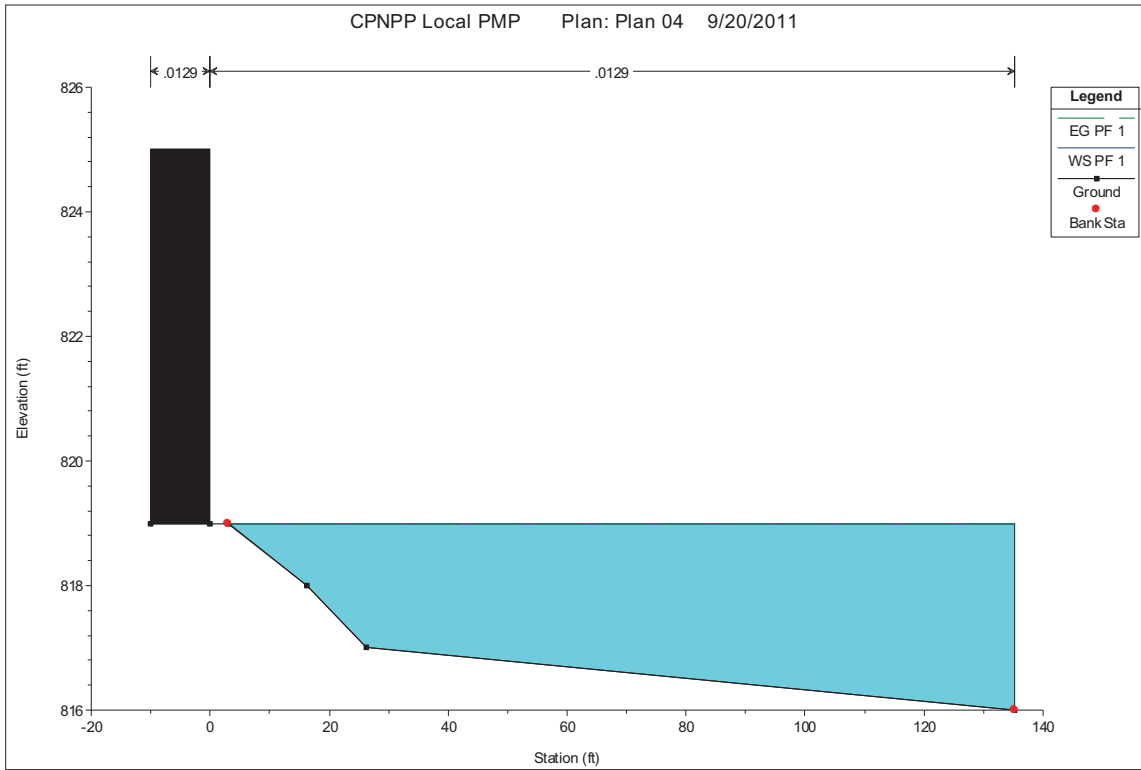
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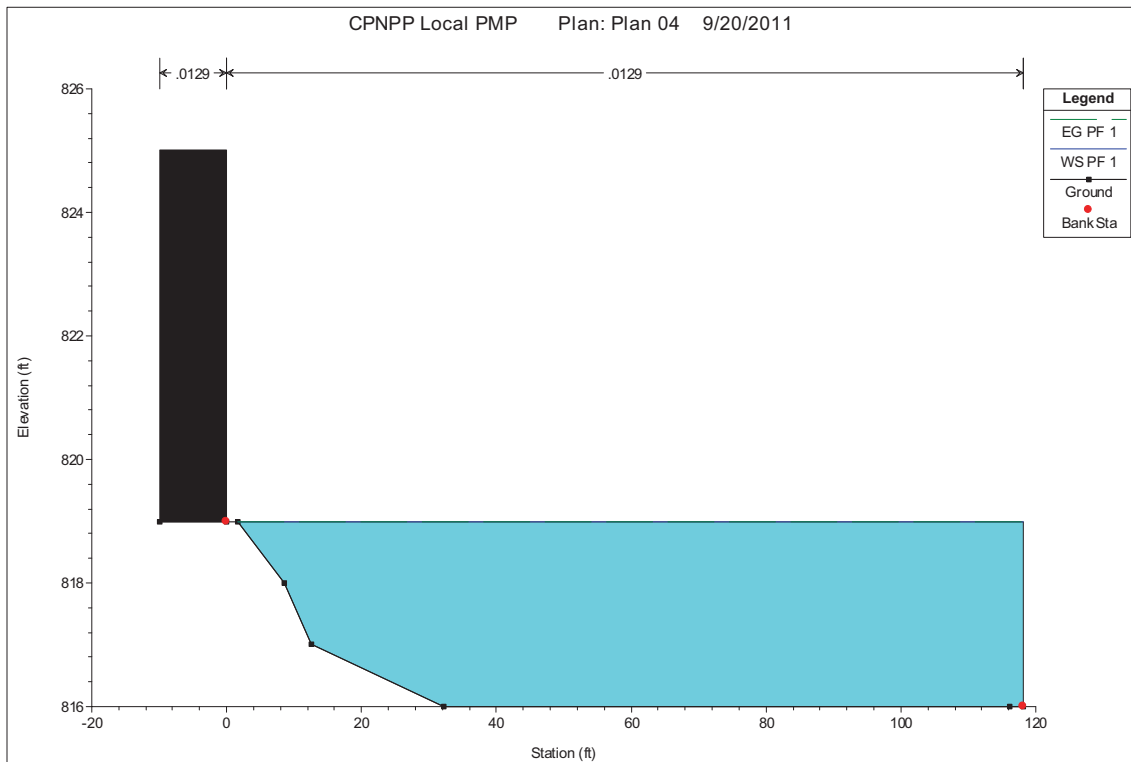
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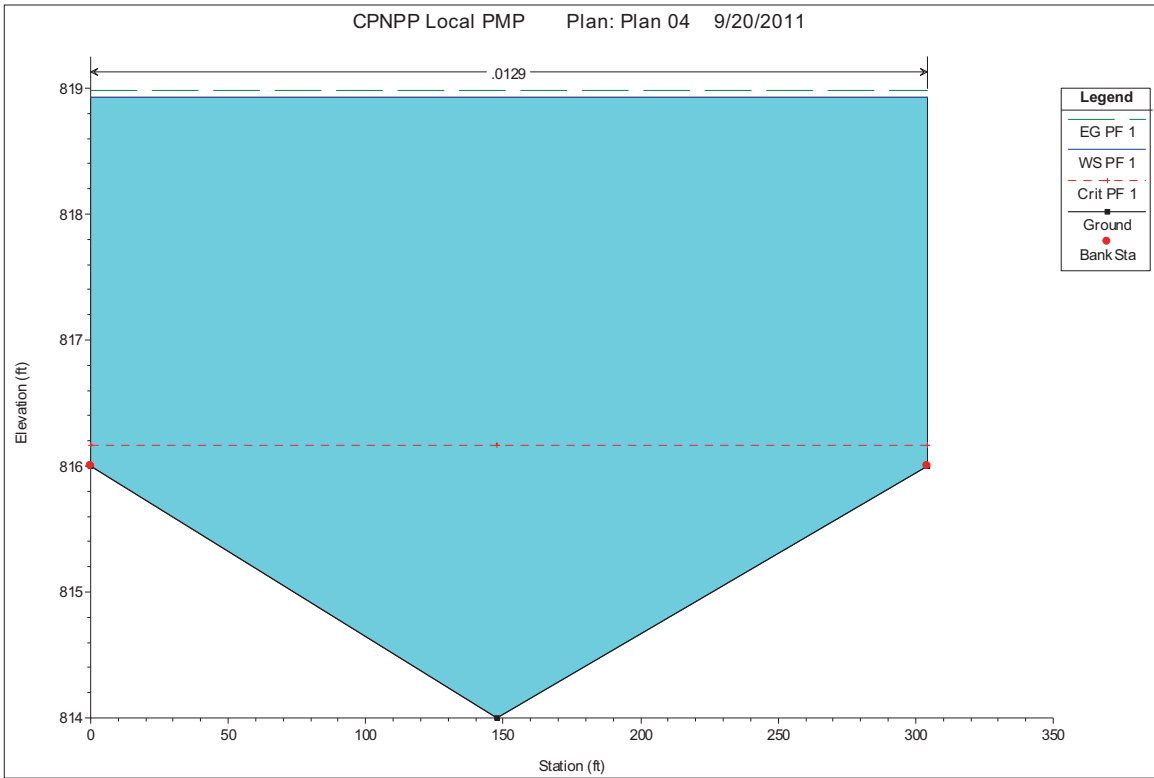
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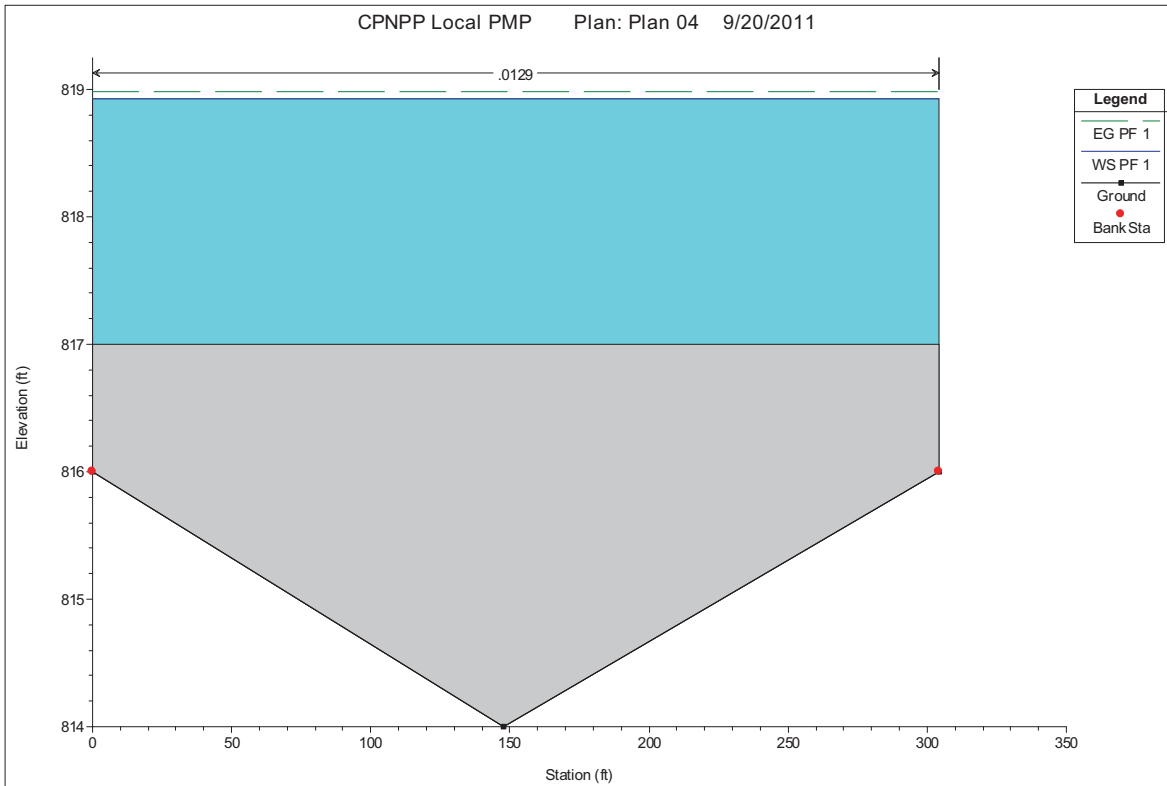
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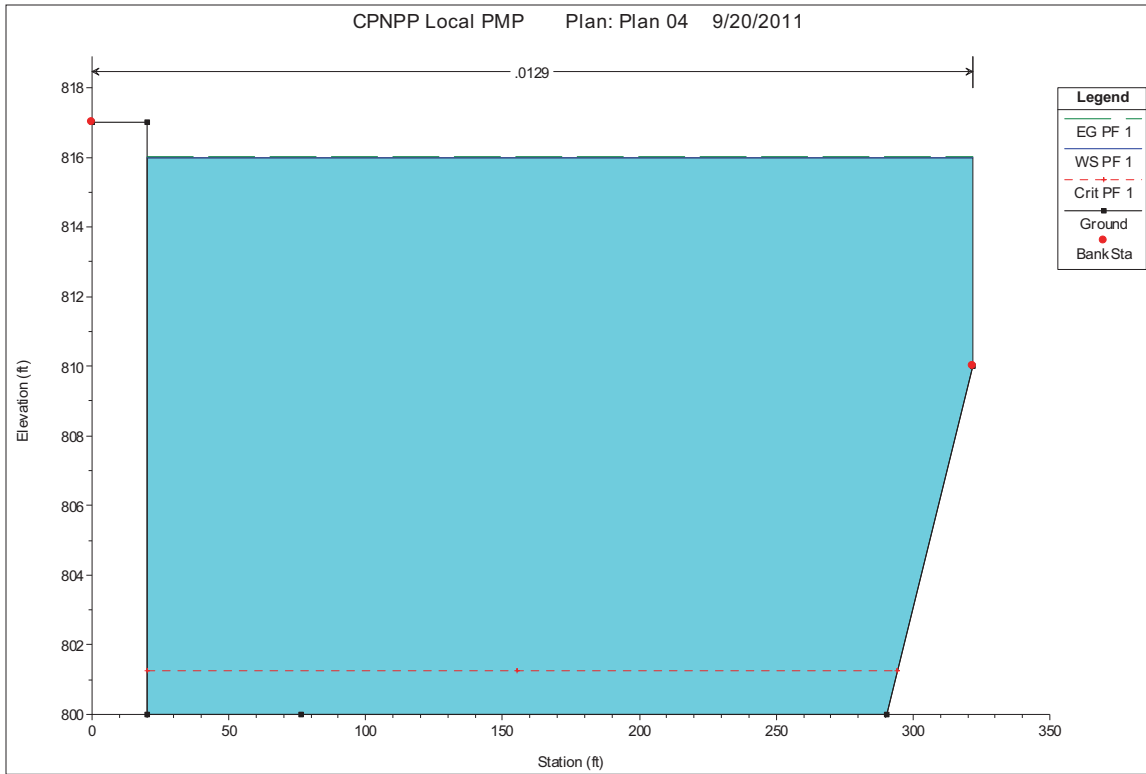
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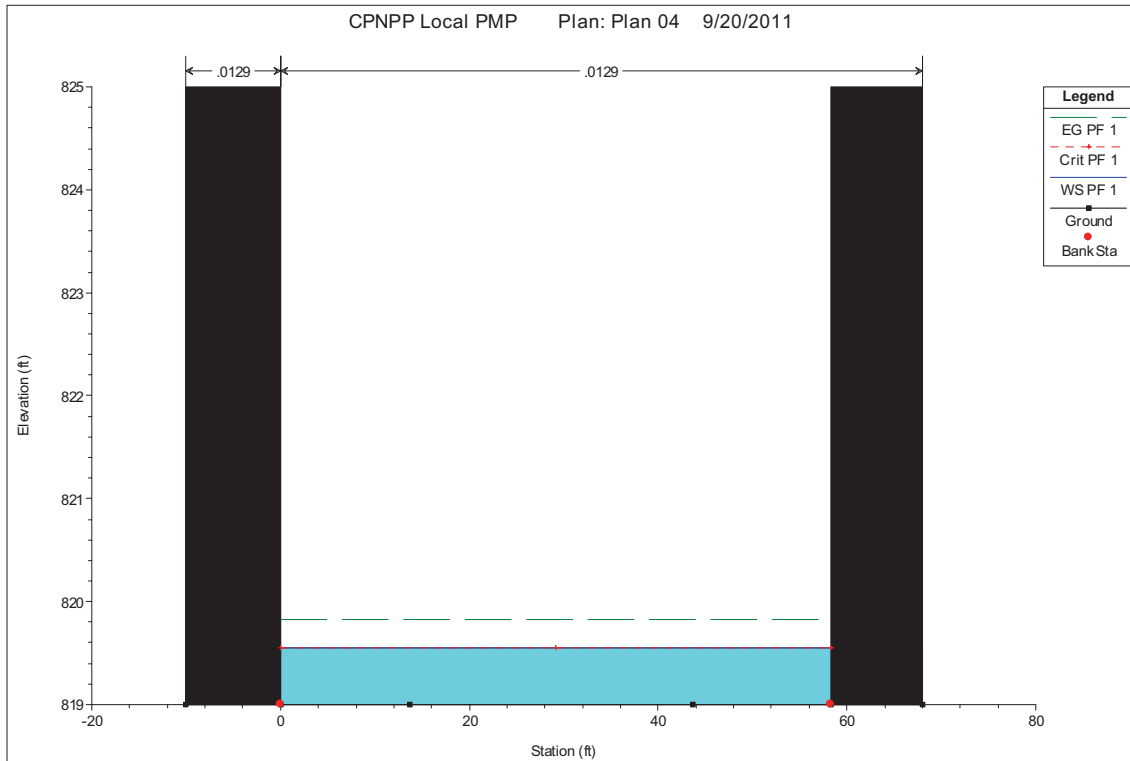
Unit 4 UHS Channel Cross Section 2



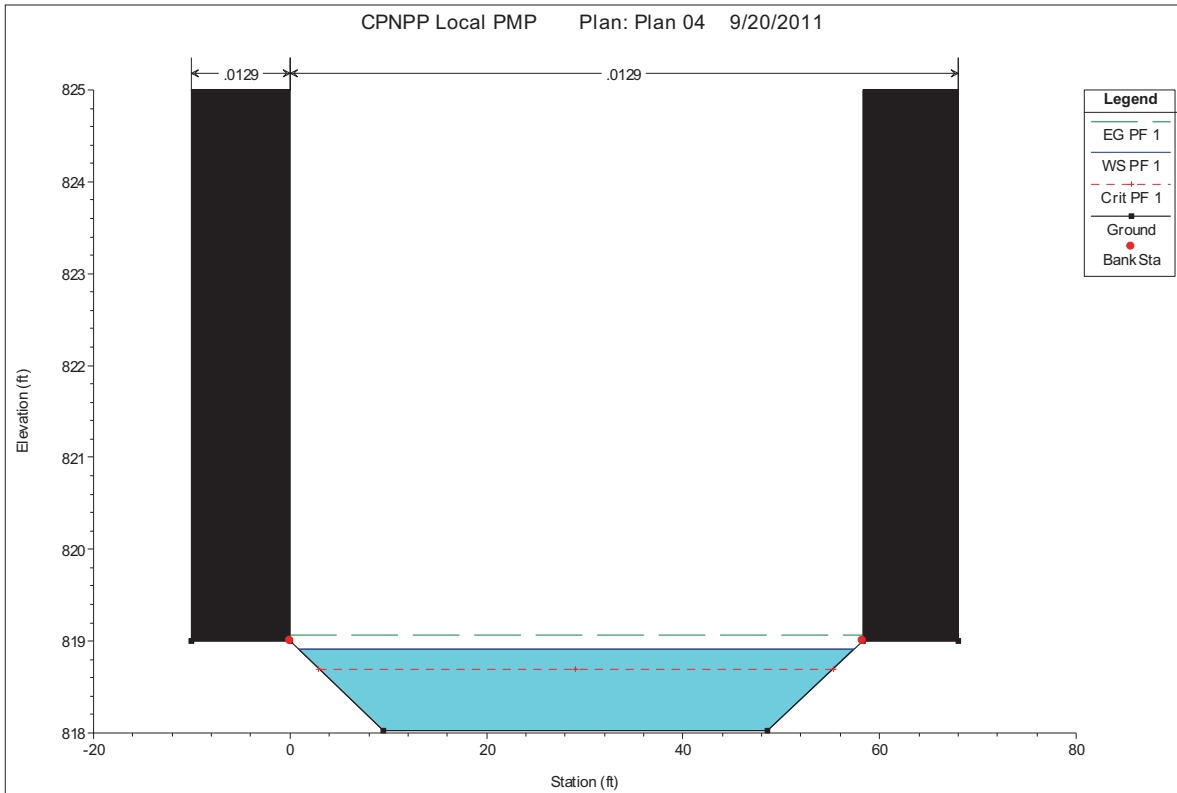
Unit 4 UHS Channel Inline Structure 1.5



Unit 4 UHS Channel Cross Section 1

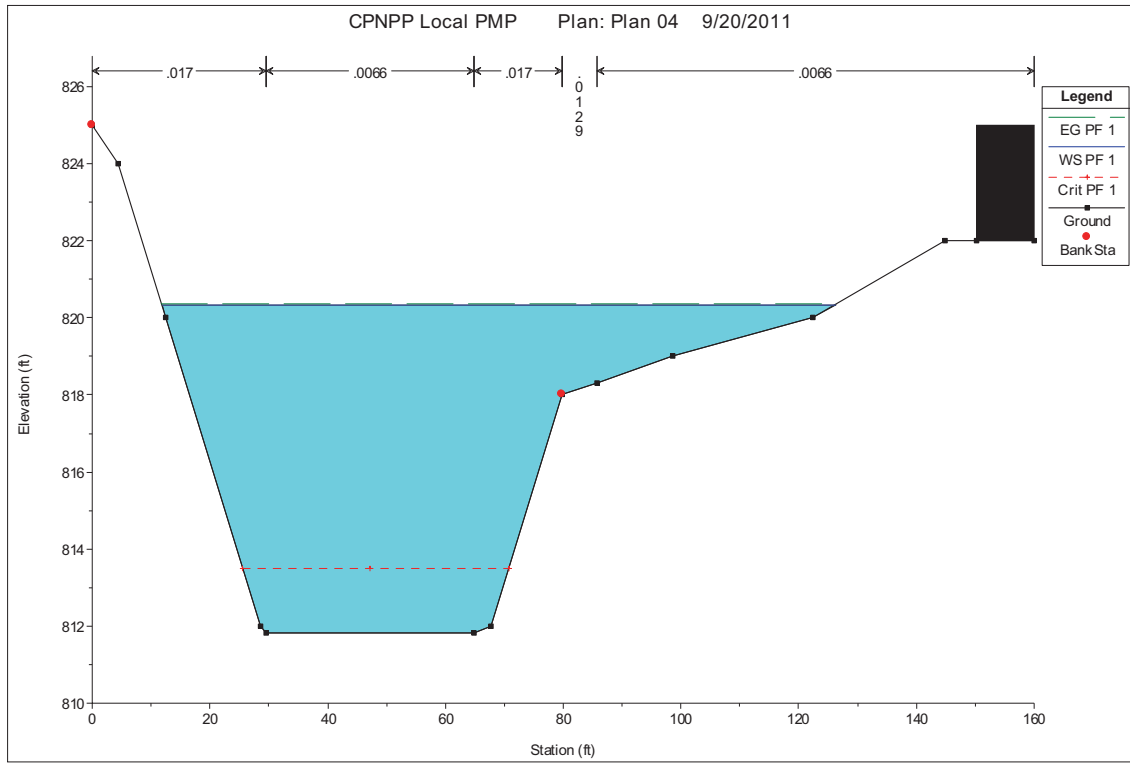


Unit 4 UHS Channel Cross Section 107

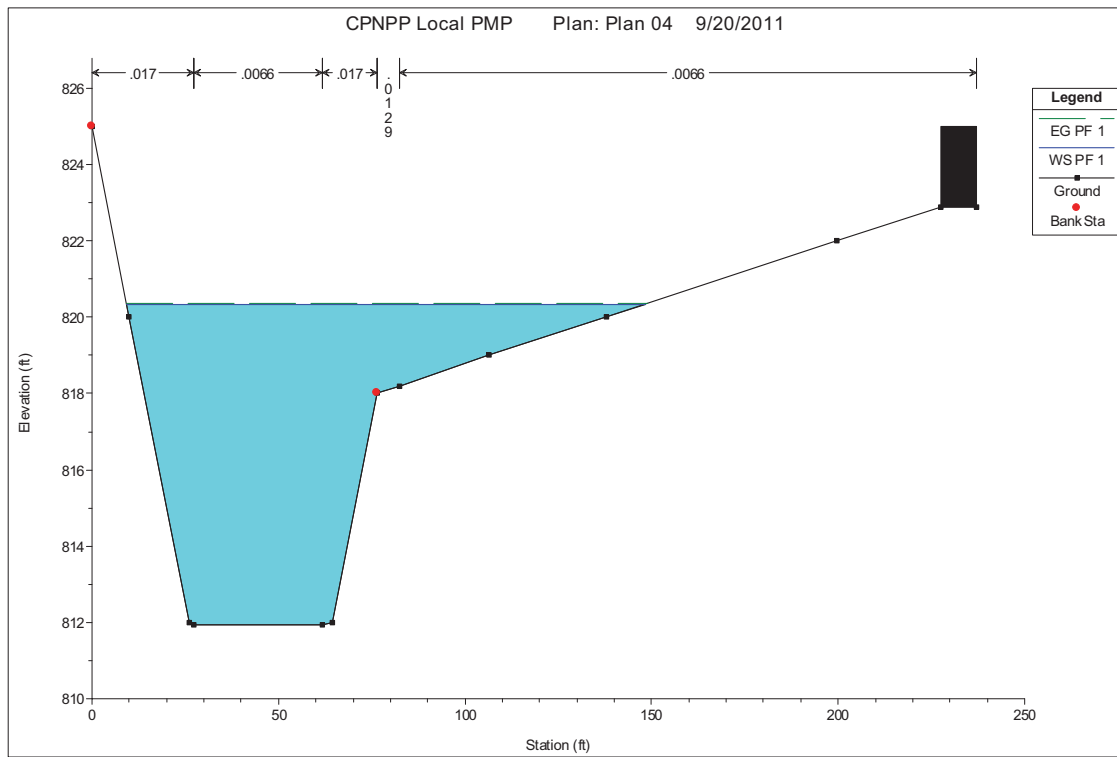


Unit 4 UHS Channel Cross Section 106

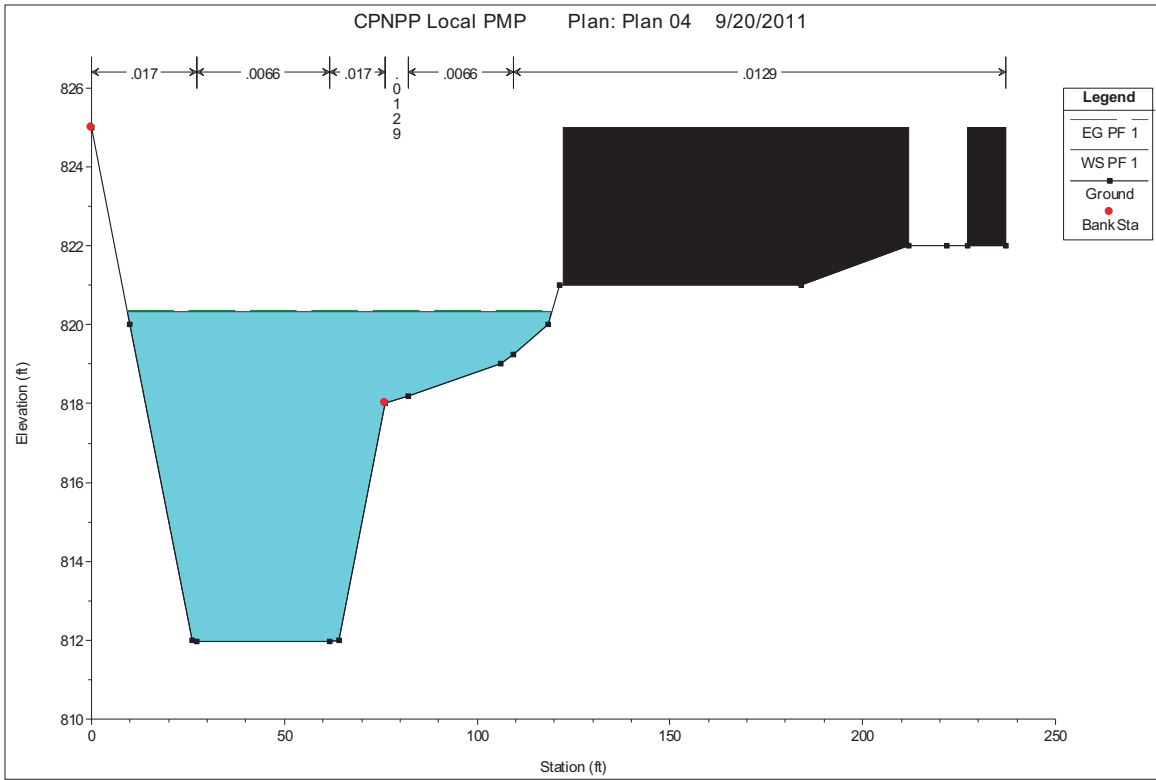
West Channel Cross Section Plots



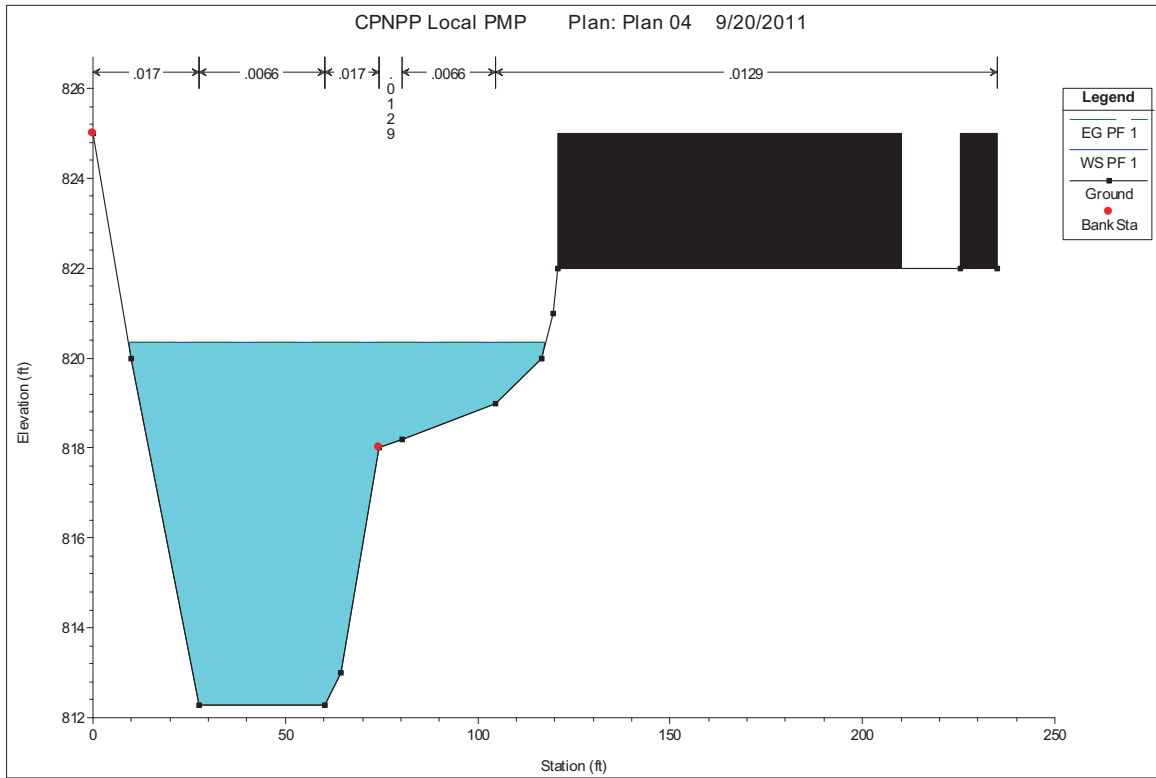
West Channel Cross Section 24



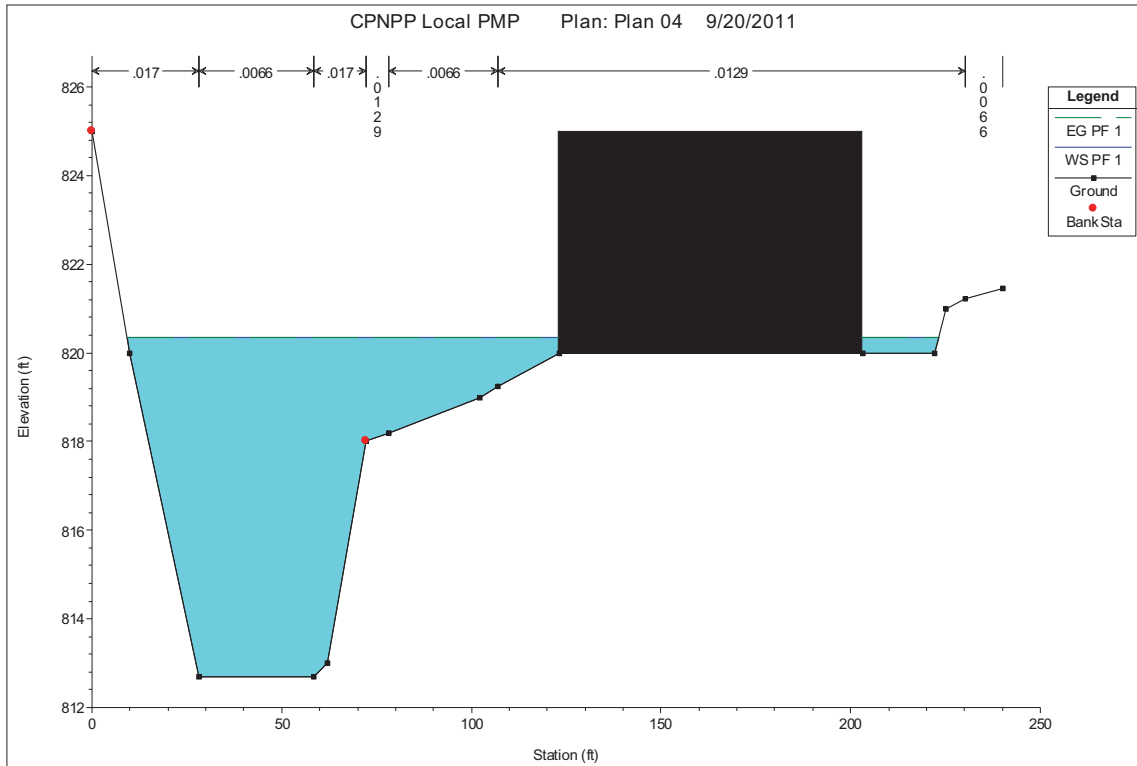
West Channel Cross Section 23



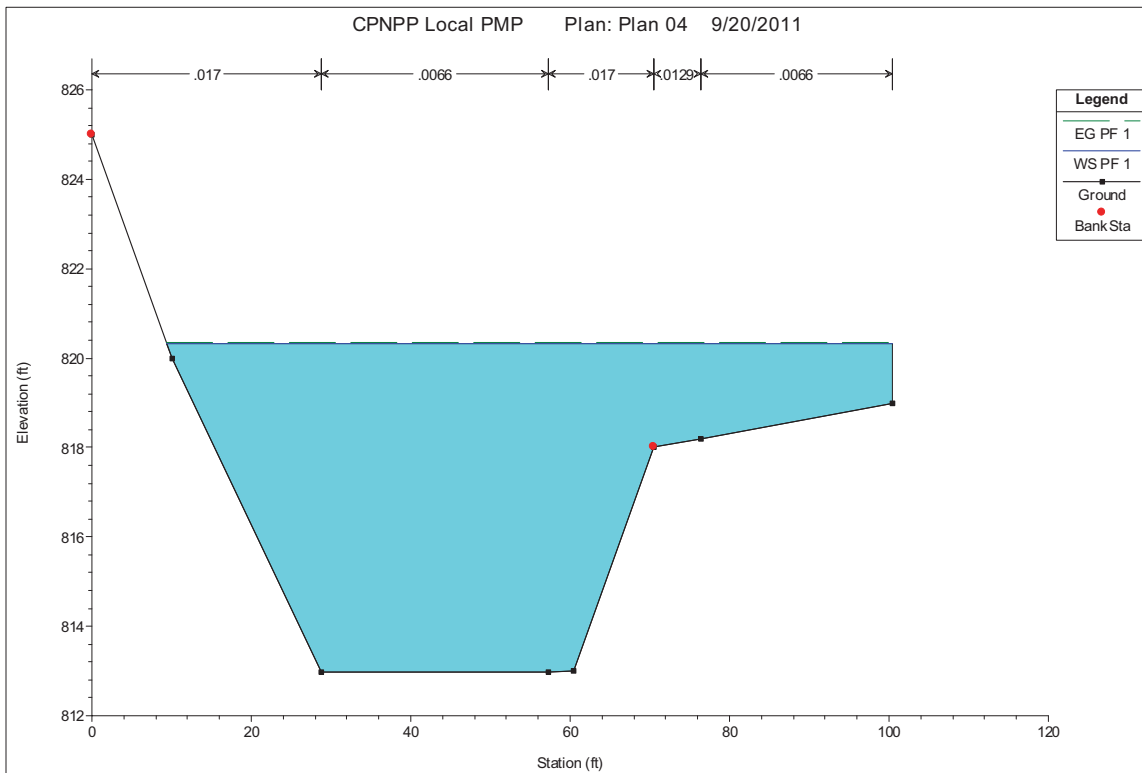
West Channel Cross Section 22



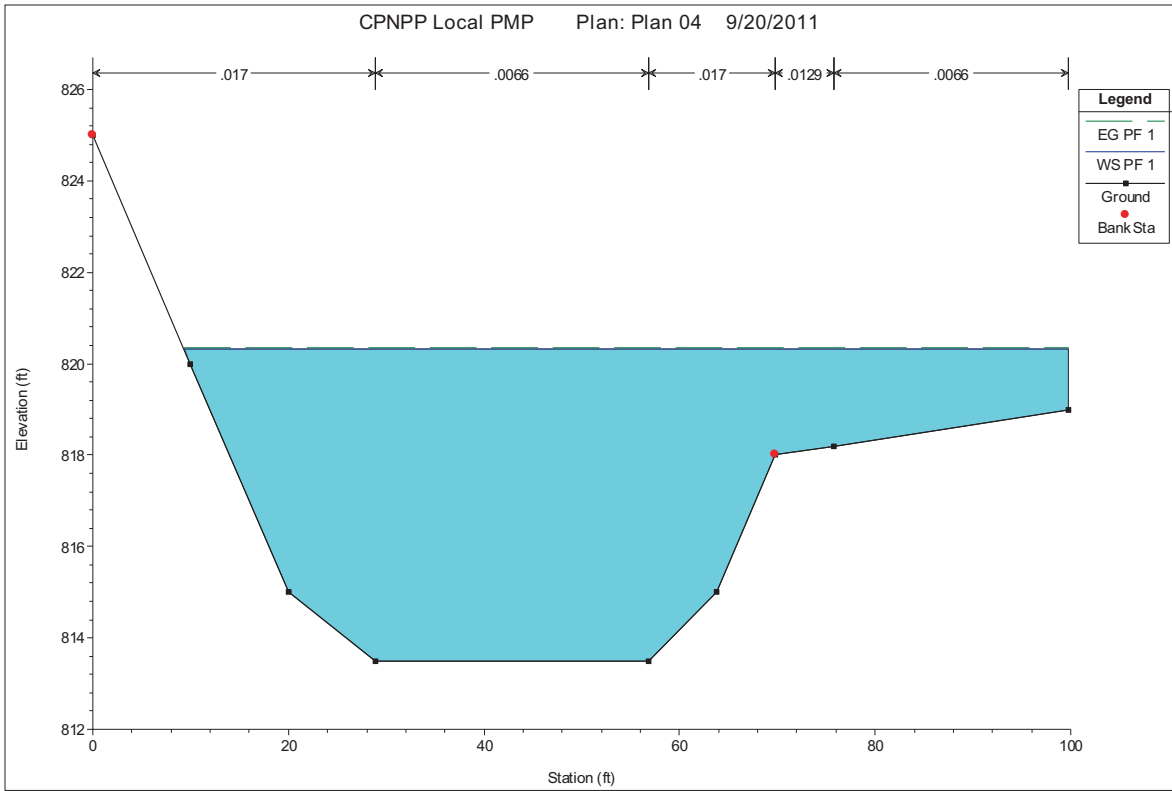
West Channel Cross Section 21



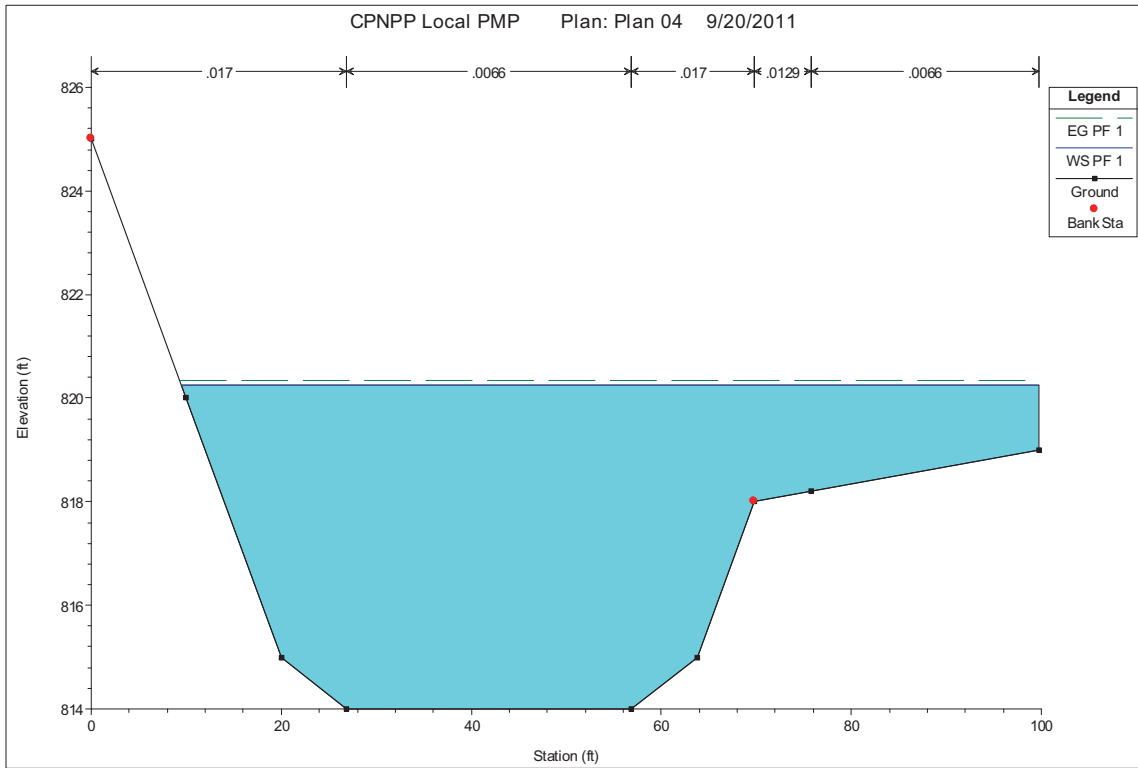
West Channel Cross Section 20



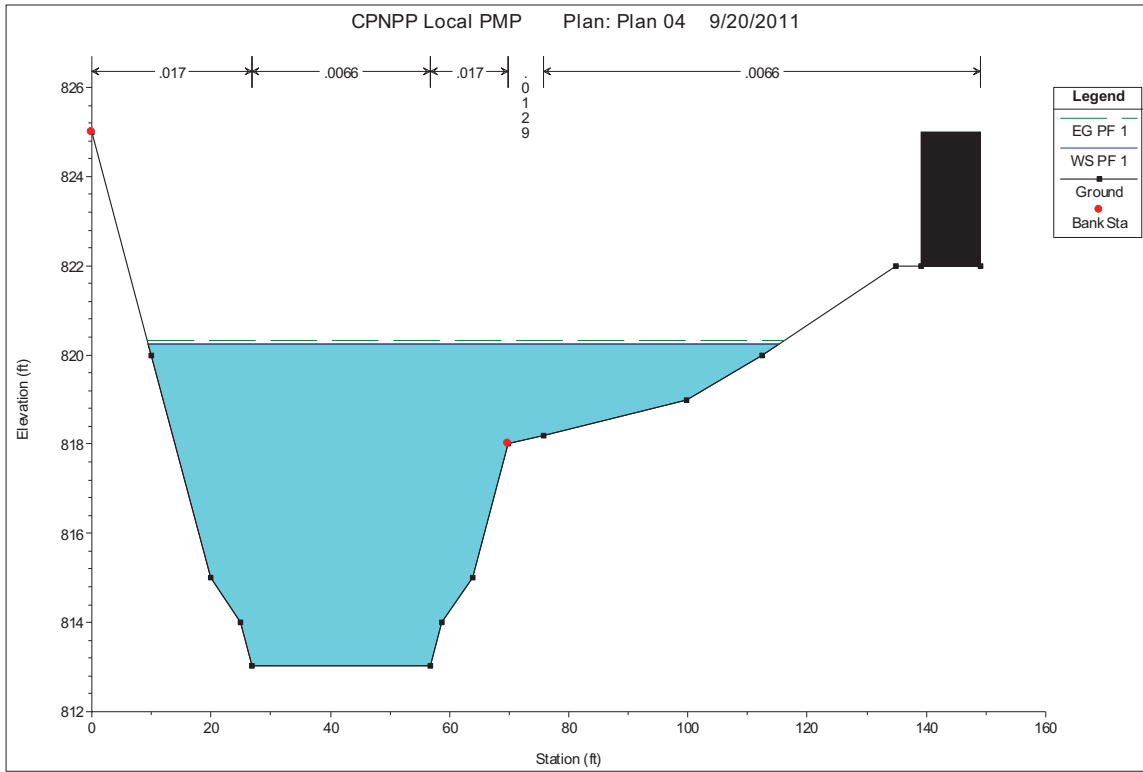
West Channel Cross Section 19



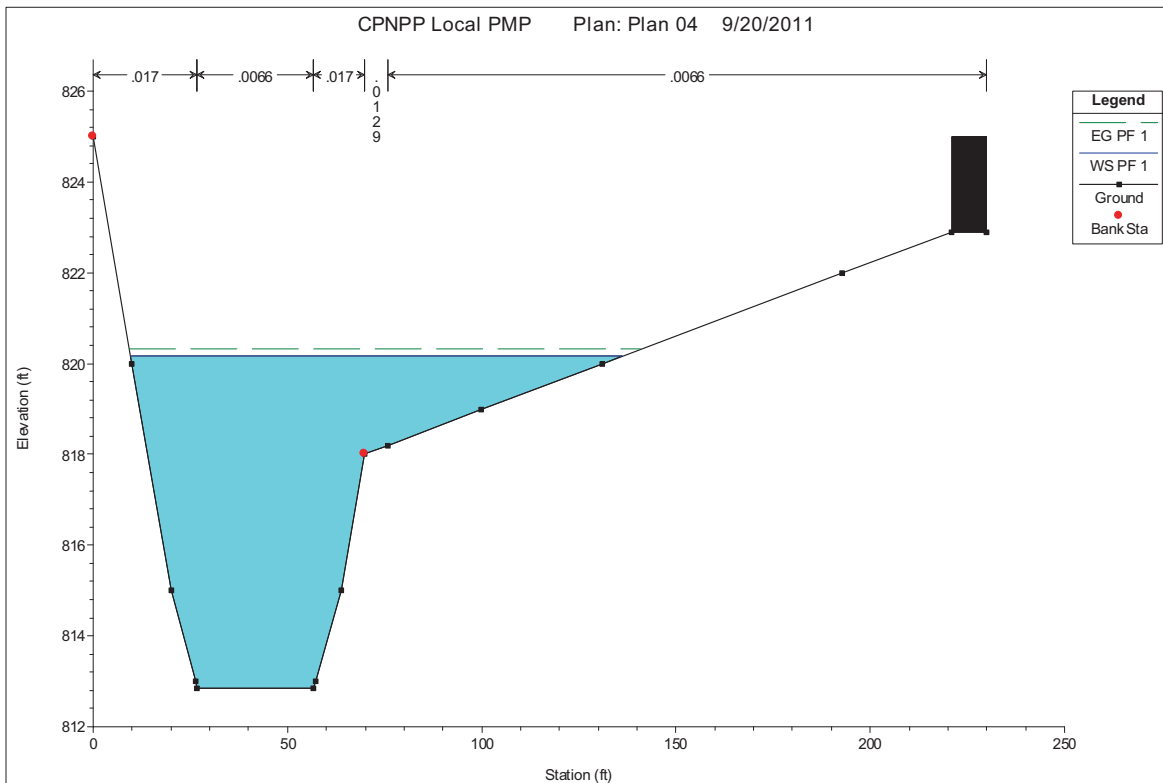
West Channel Cross Section 18



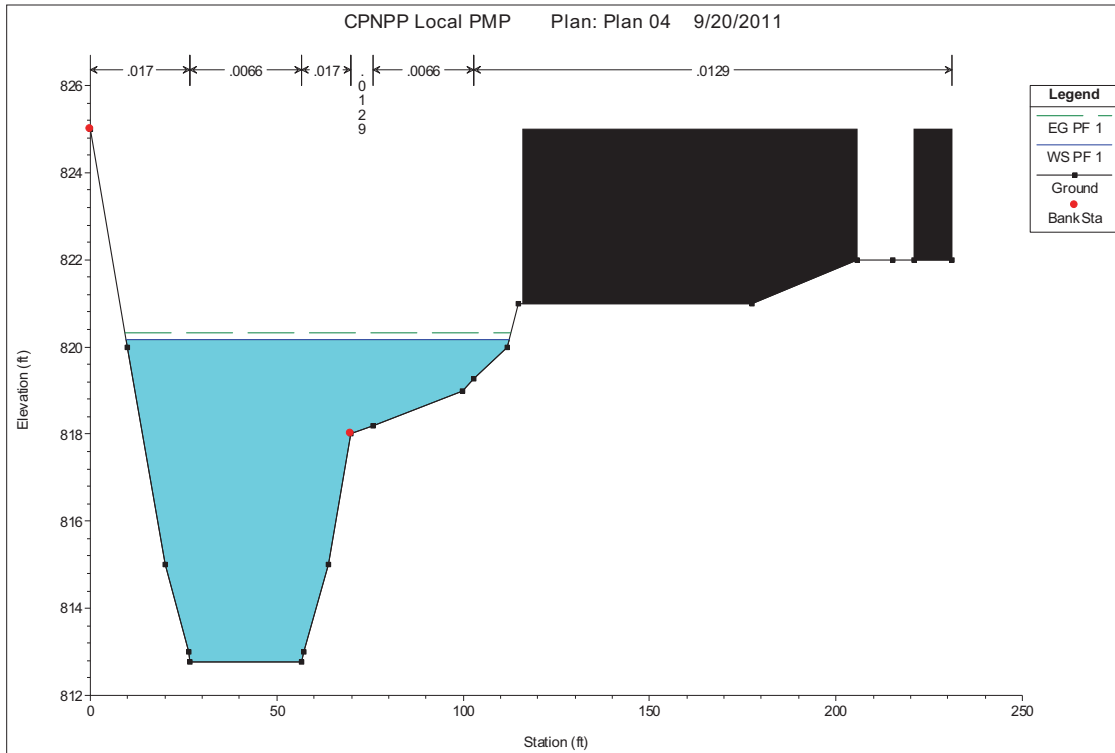
West Channel Cross Section 17



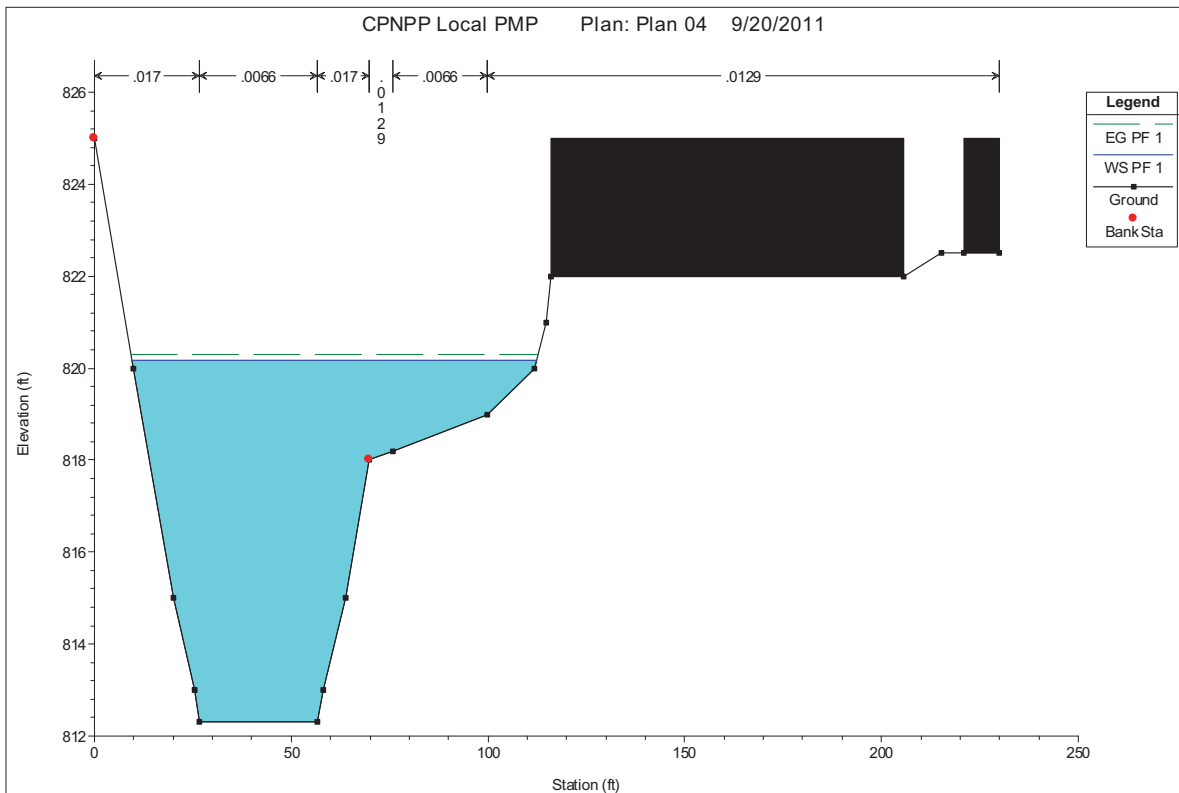
West Channel Cross Section 16



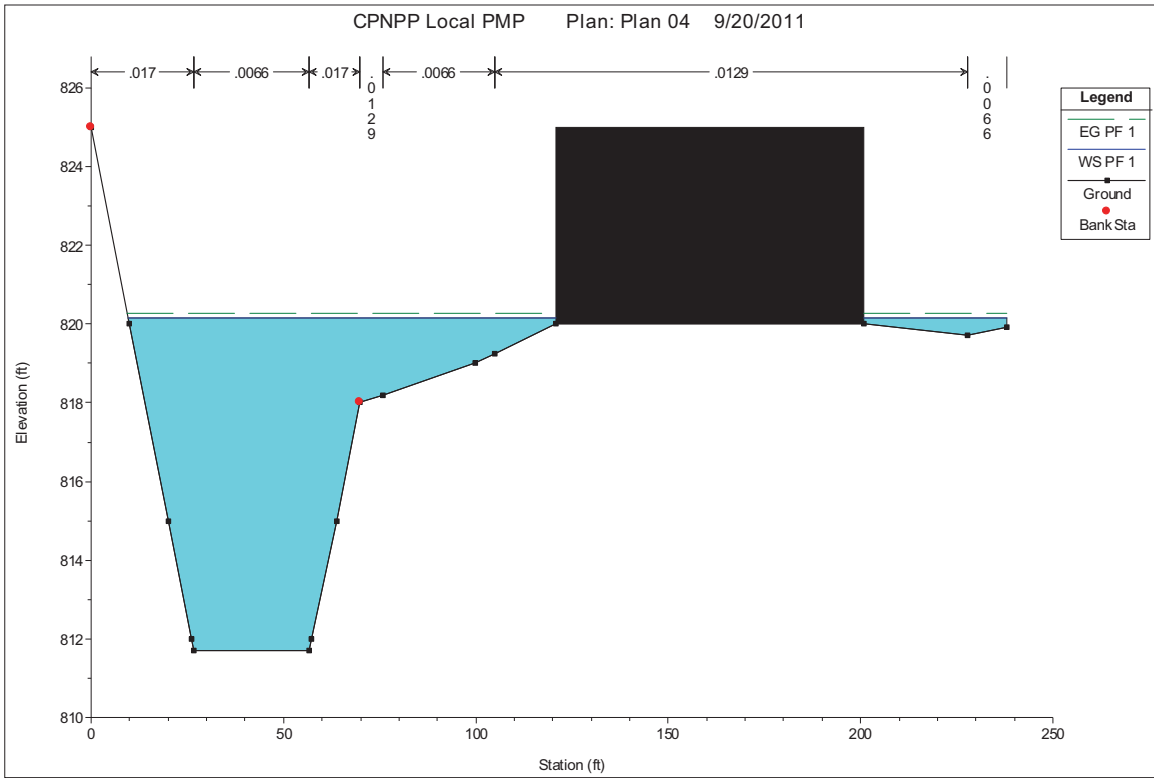
West Channel Cross Section 15



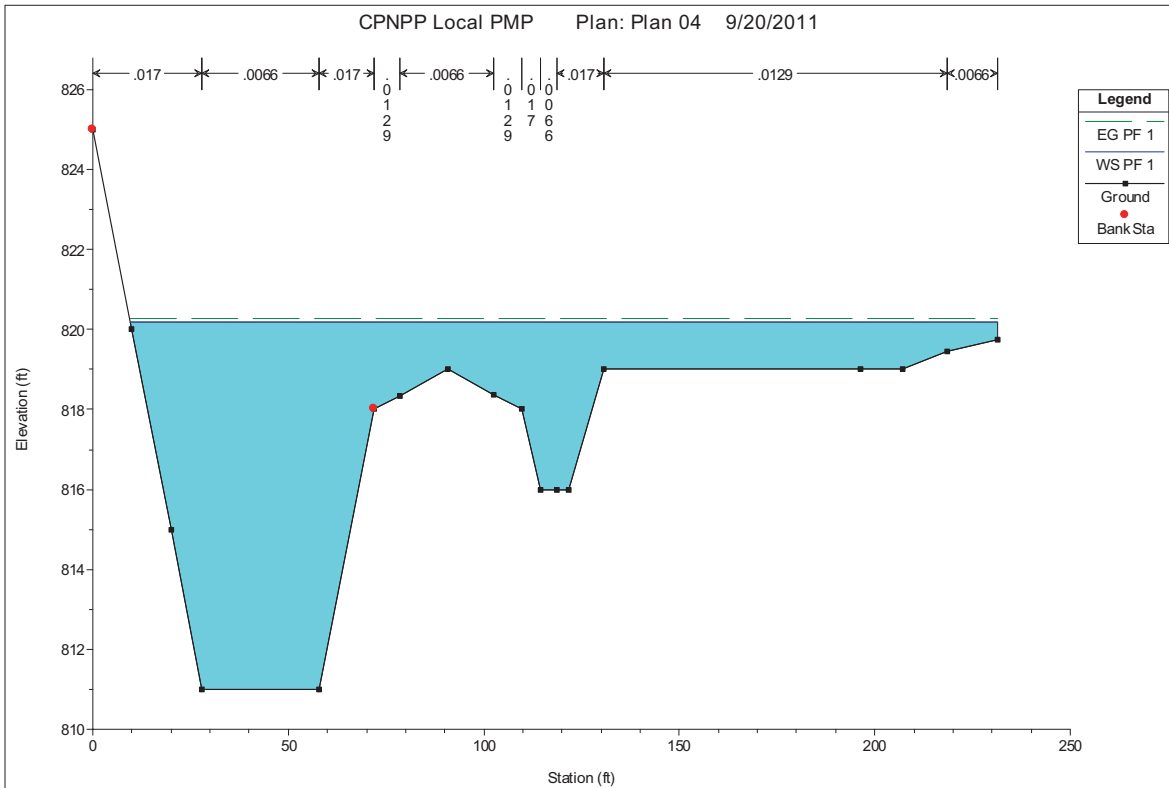
West Channel Cross Section 14



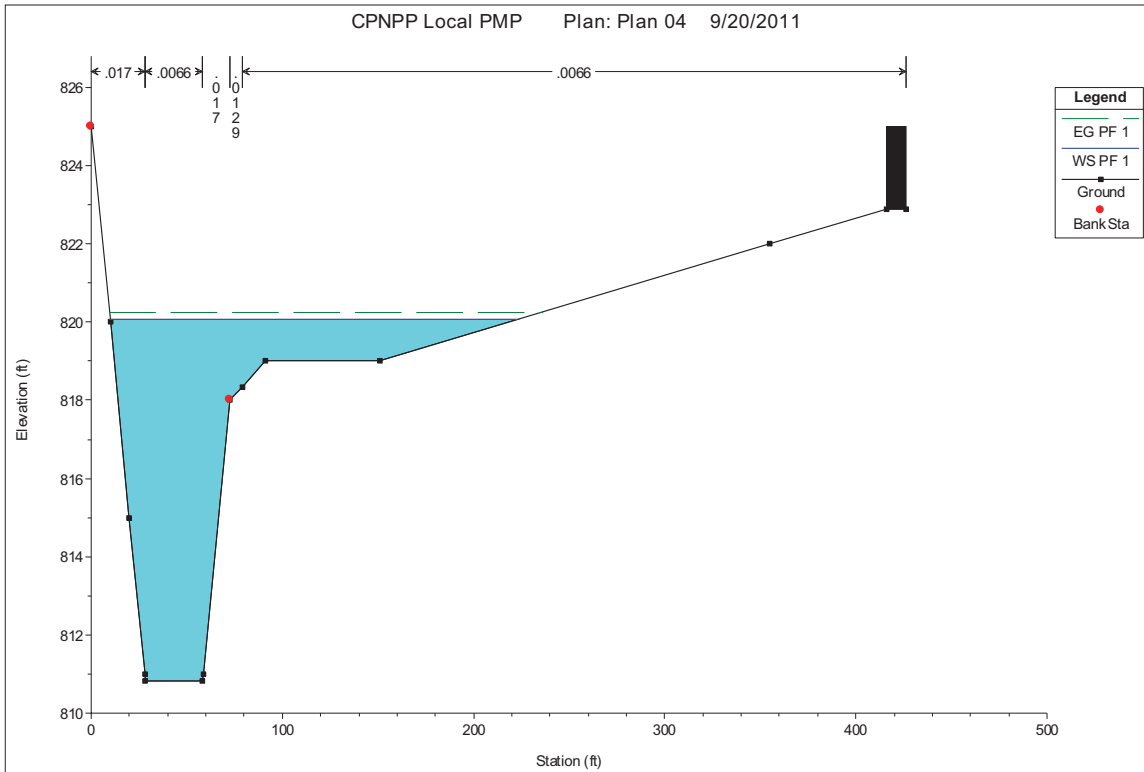
West Channel Cross Section 13



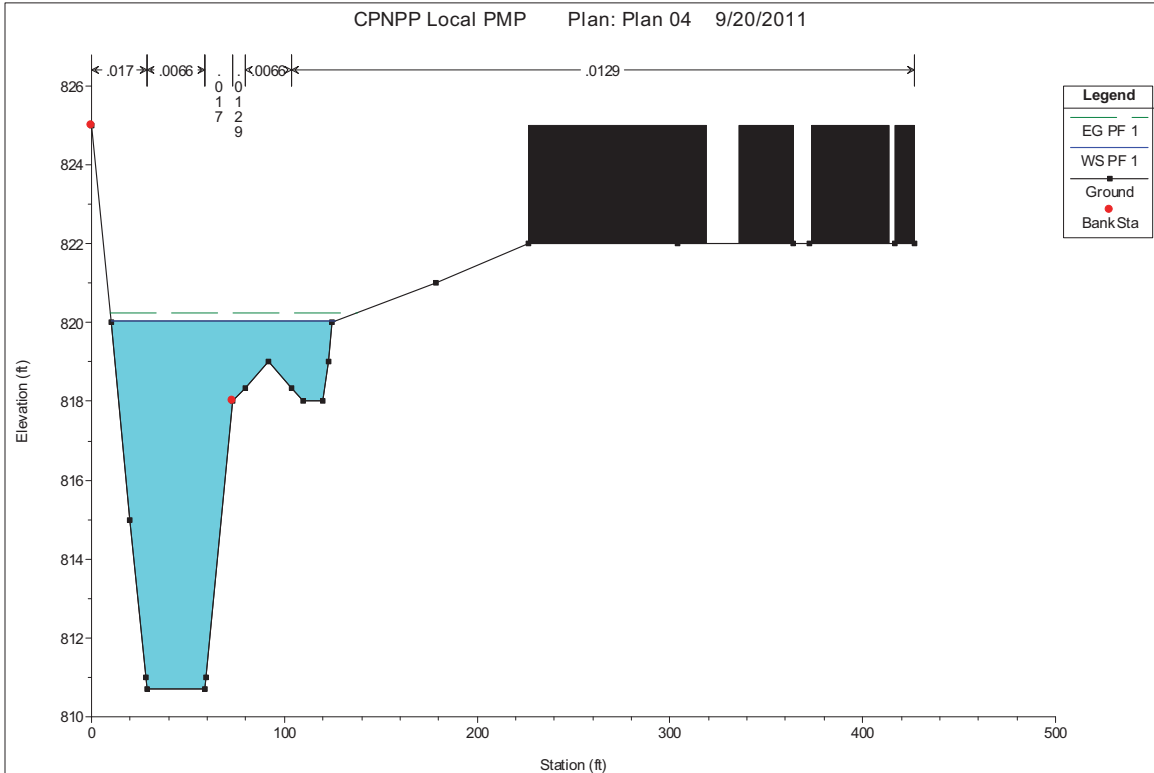
West Channel Cross Section 12



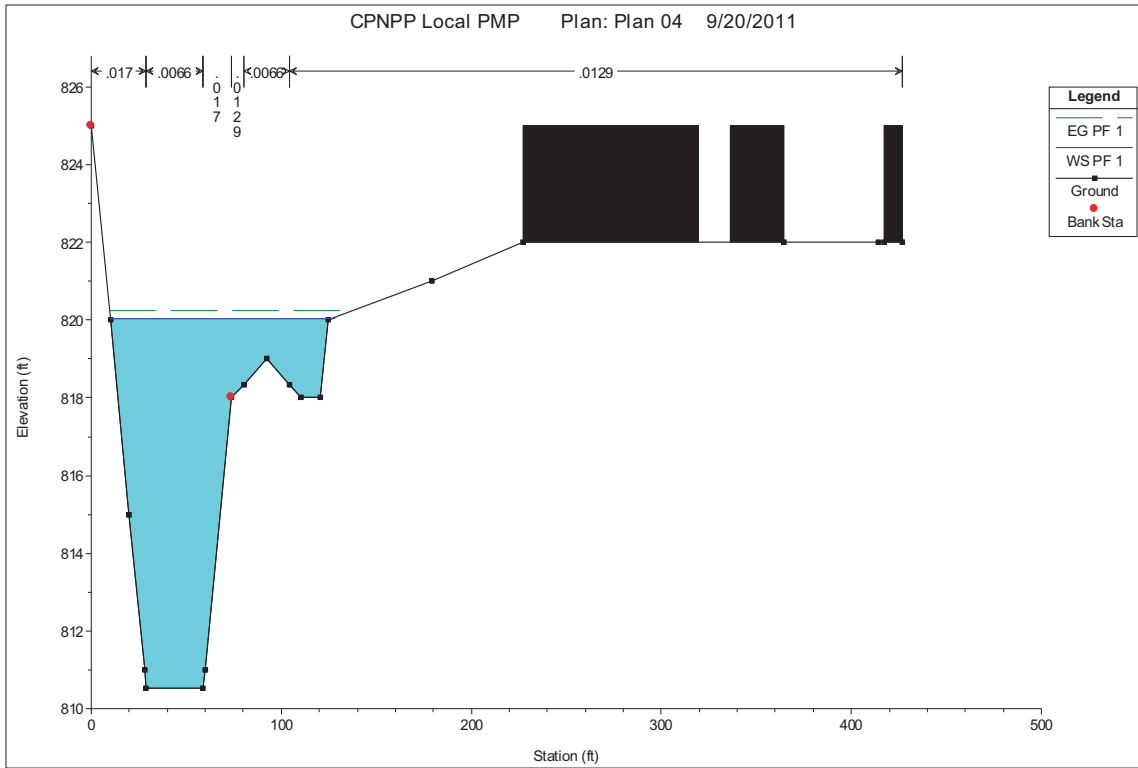
West Channel Cross Section 11



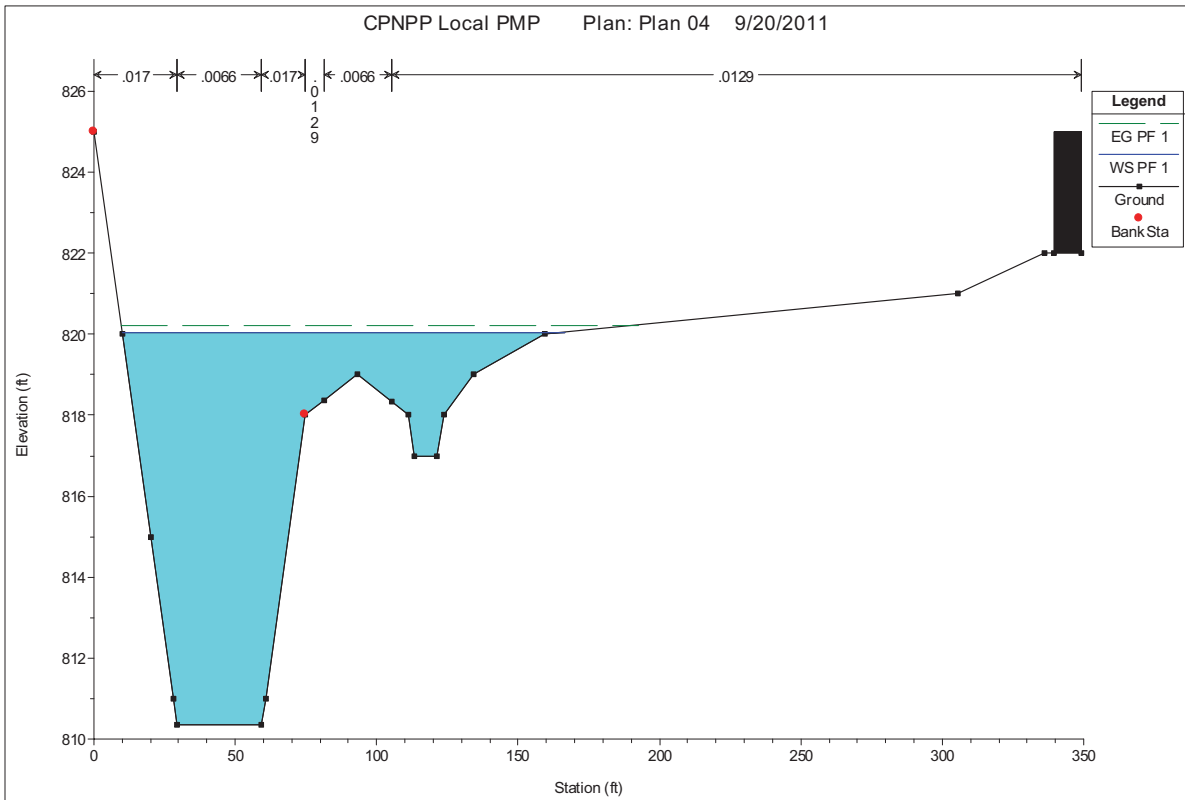
West Channel Cross Section 10



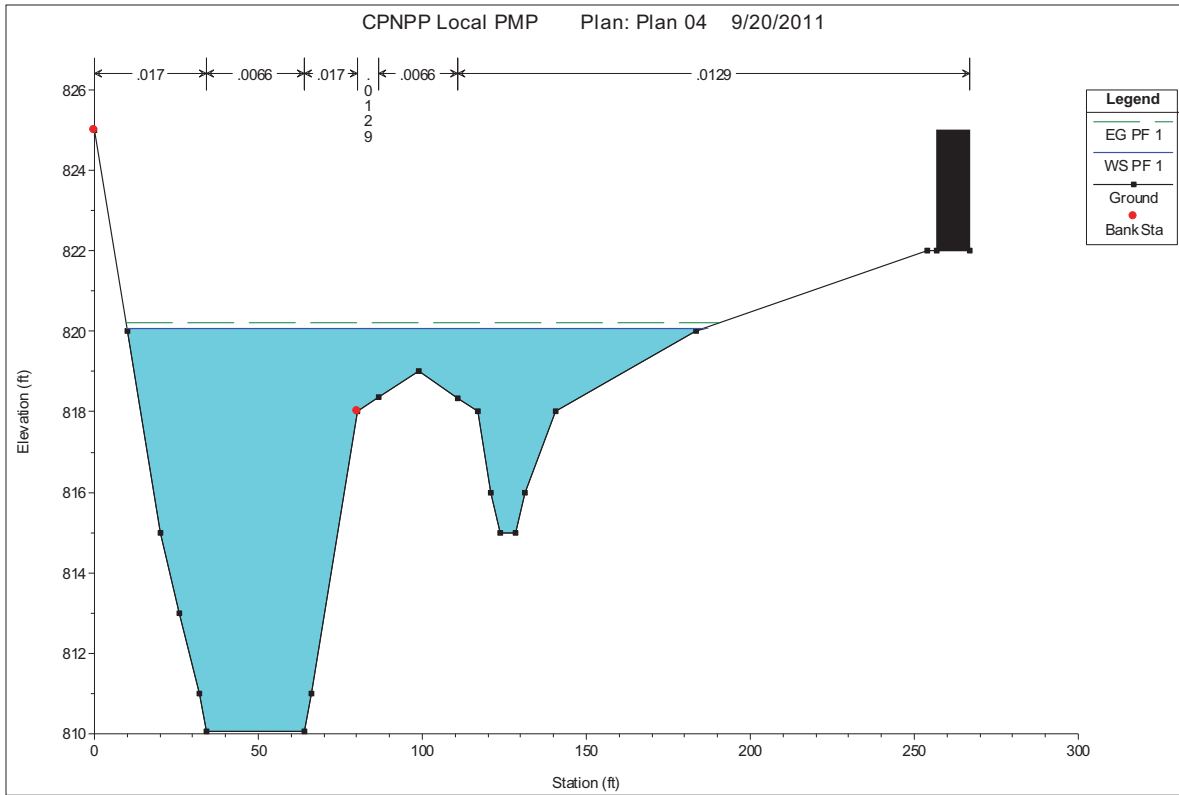
West Channel Cross Section 9



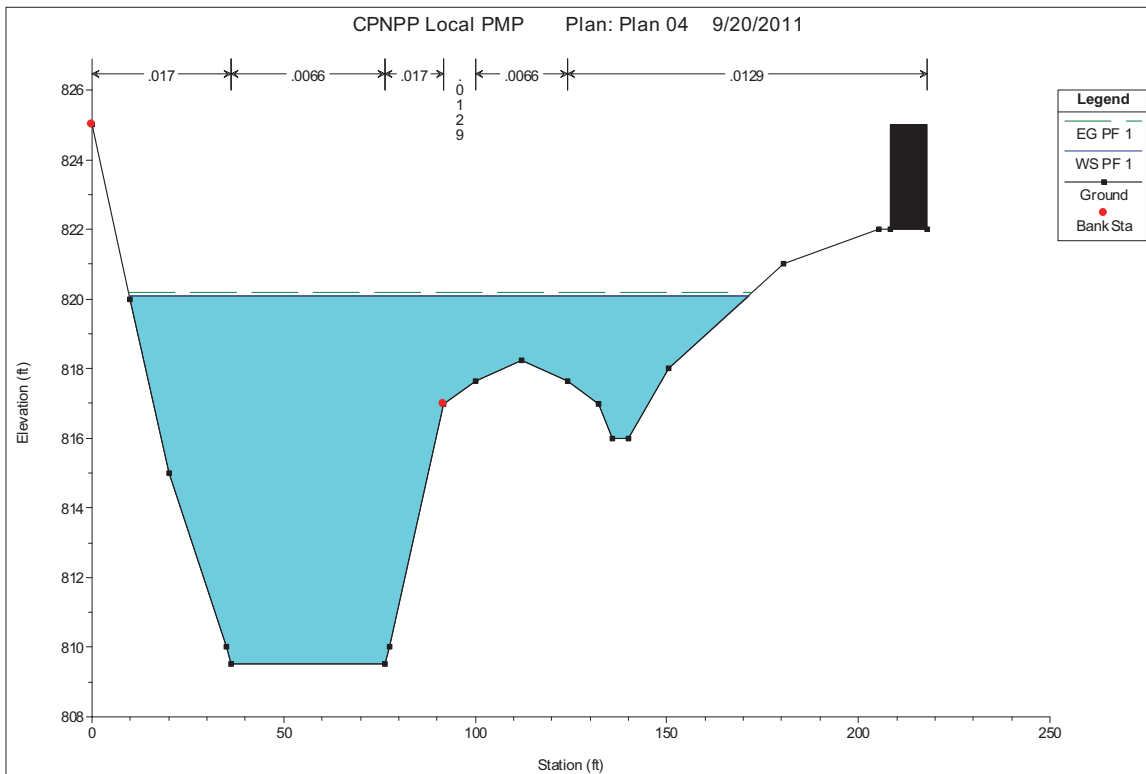
West Channel Cross Section 8



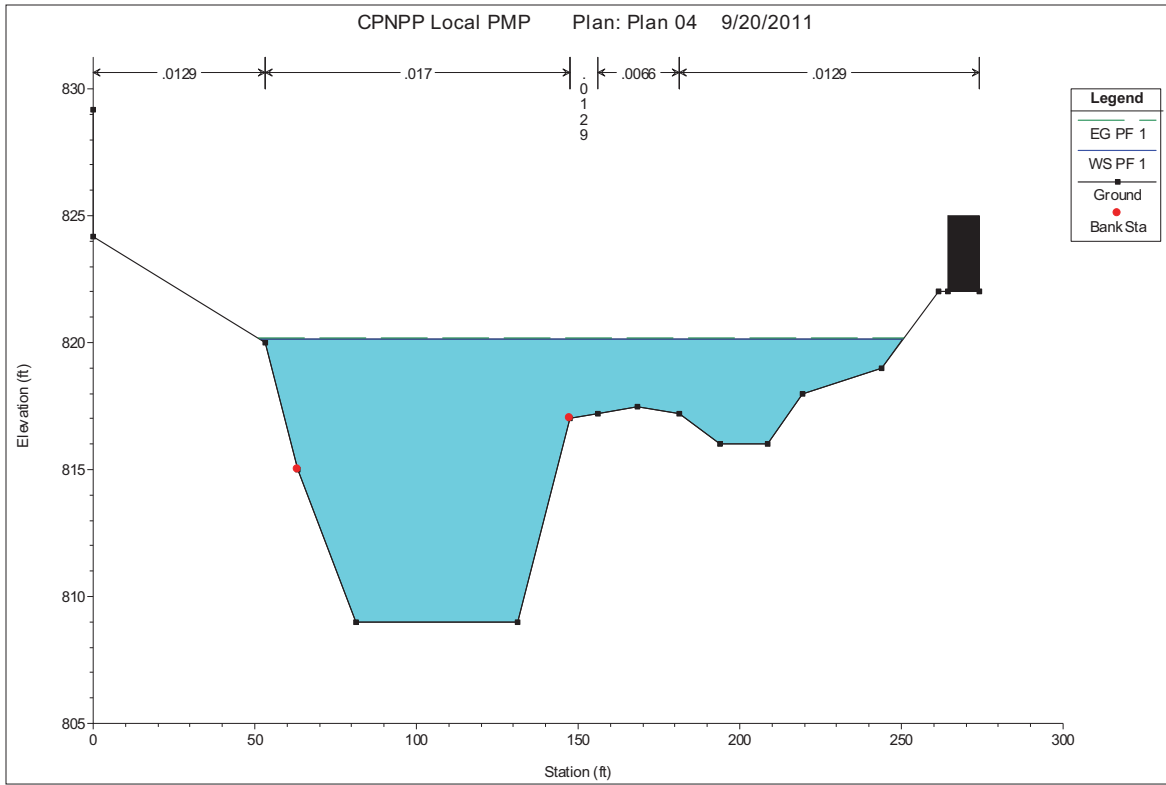
West Channel Cross Section 7



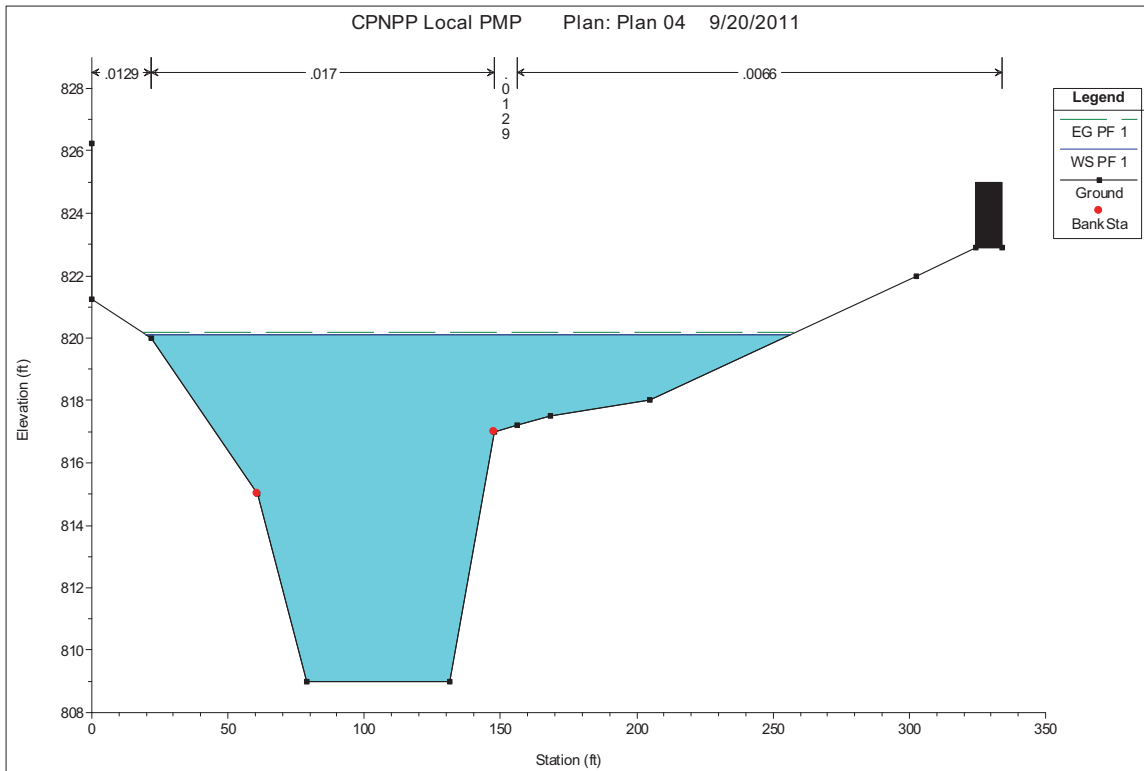
West Channel Cross Section 6



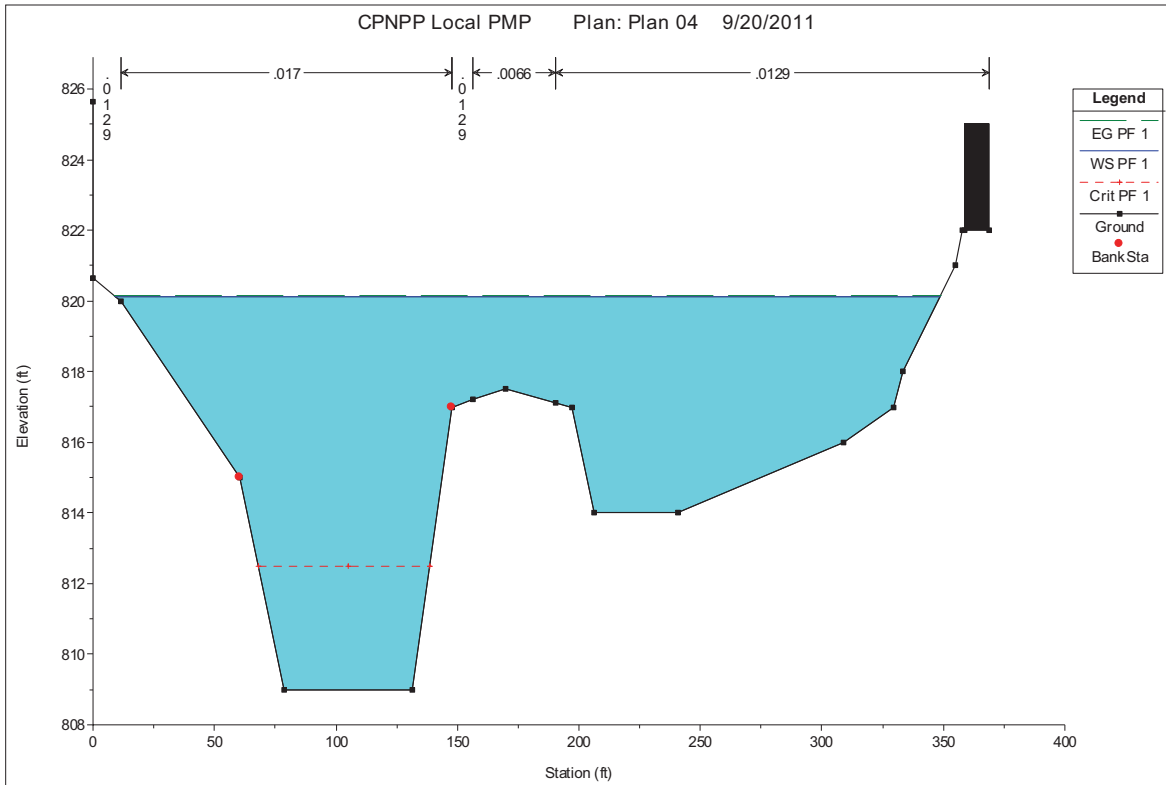
West Channel Cross Section 5



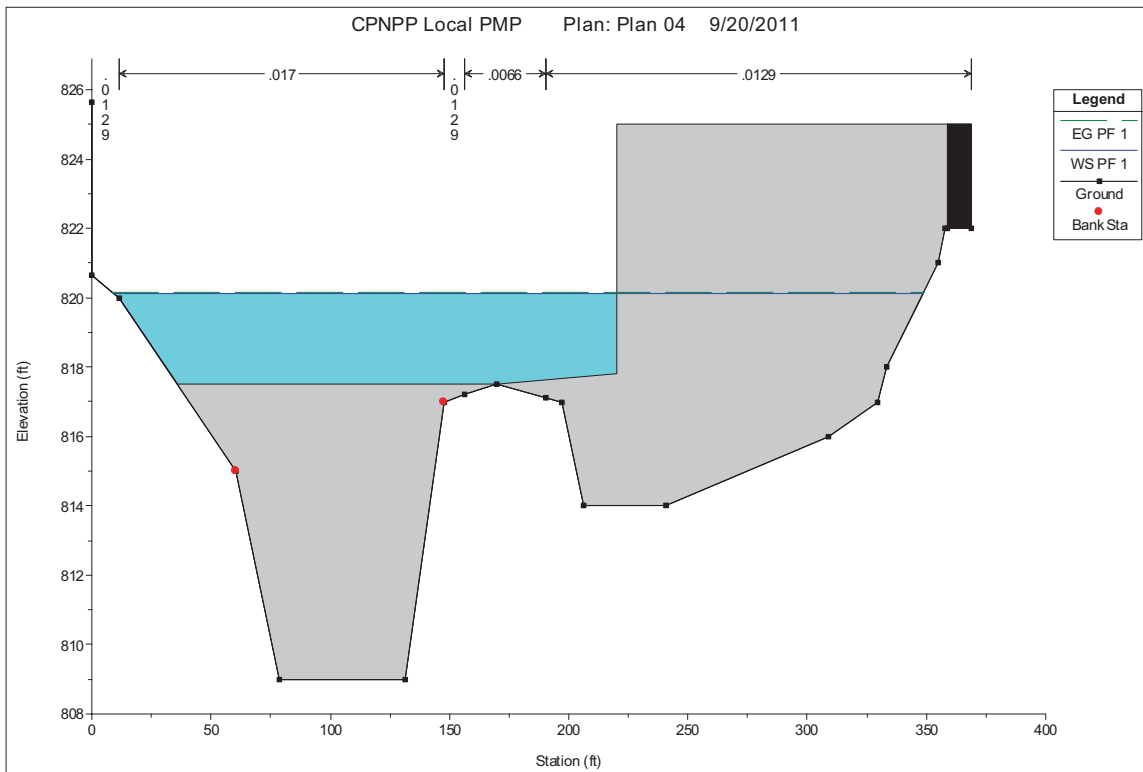
West Channel Cross Section 4



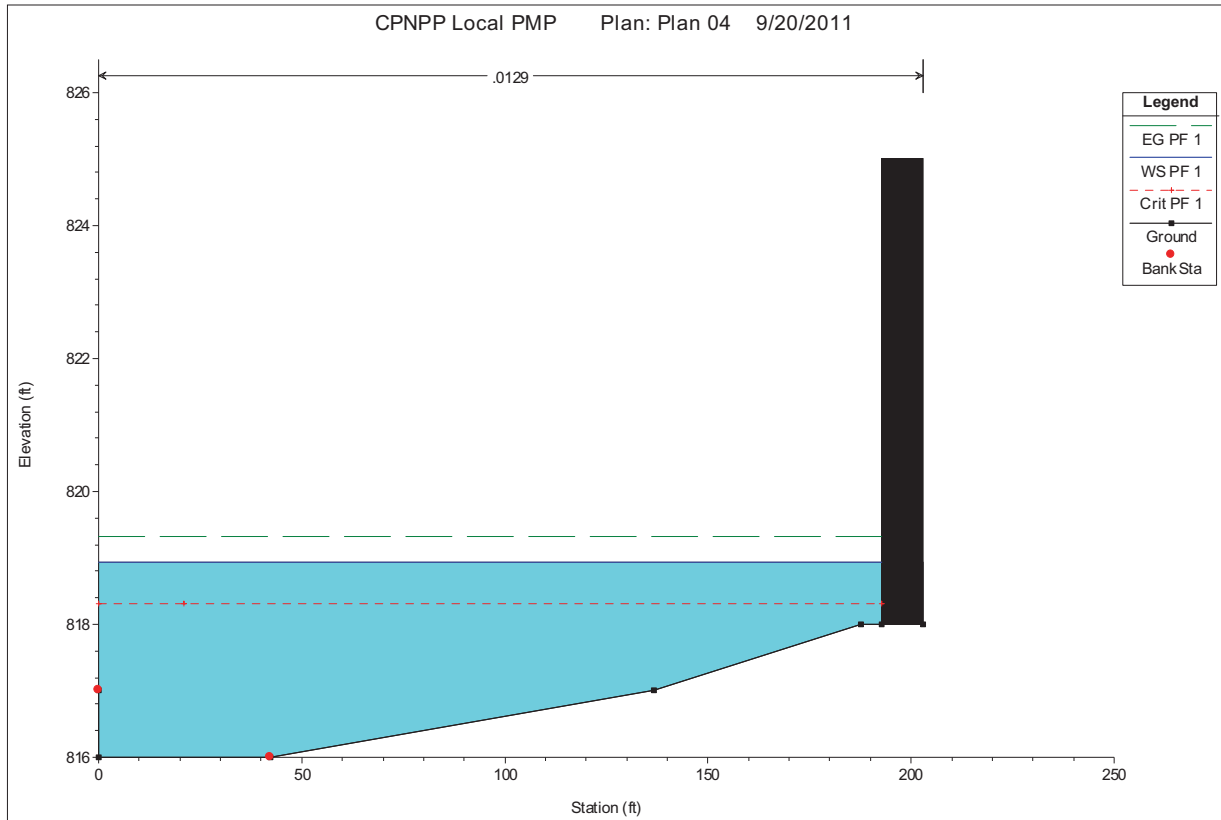
West Channel Cross Section 3



West Channel Cross Section 2

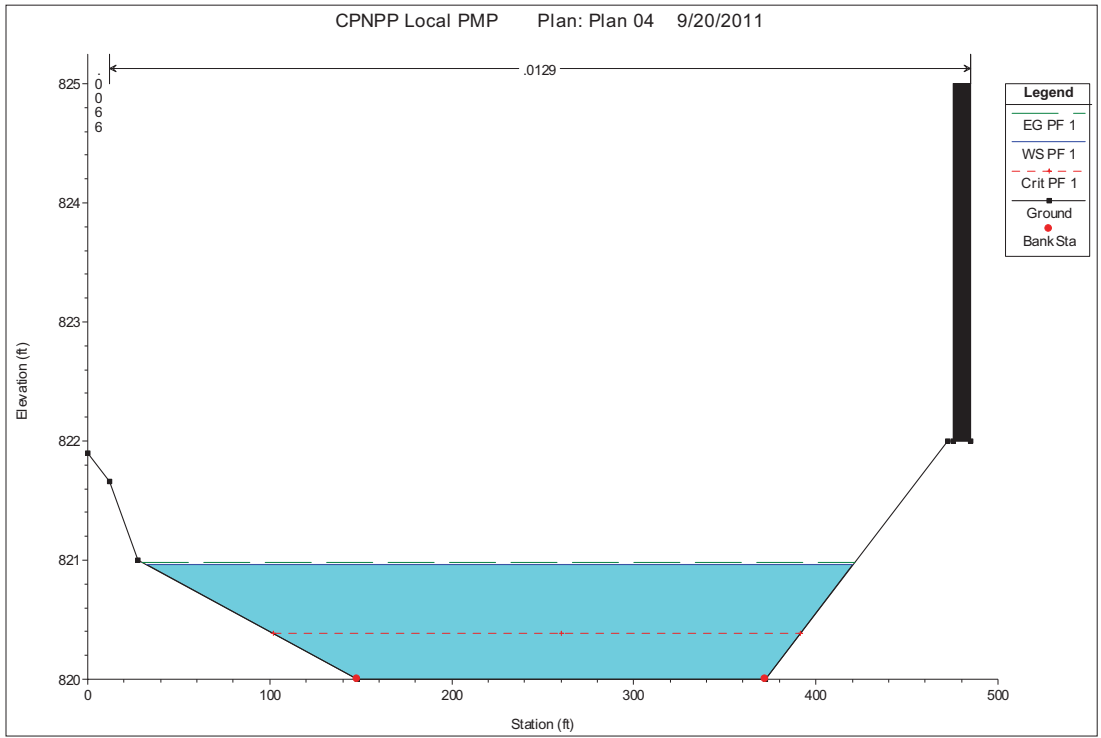


West Channel Inline Structure 1.5

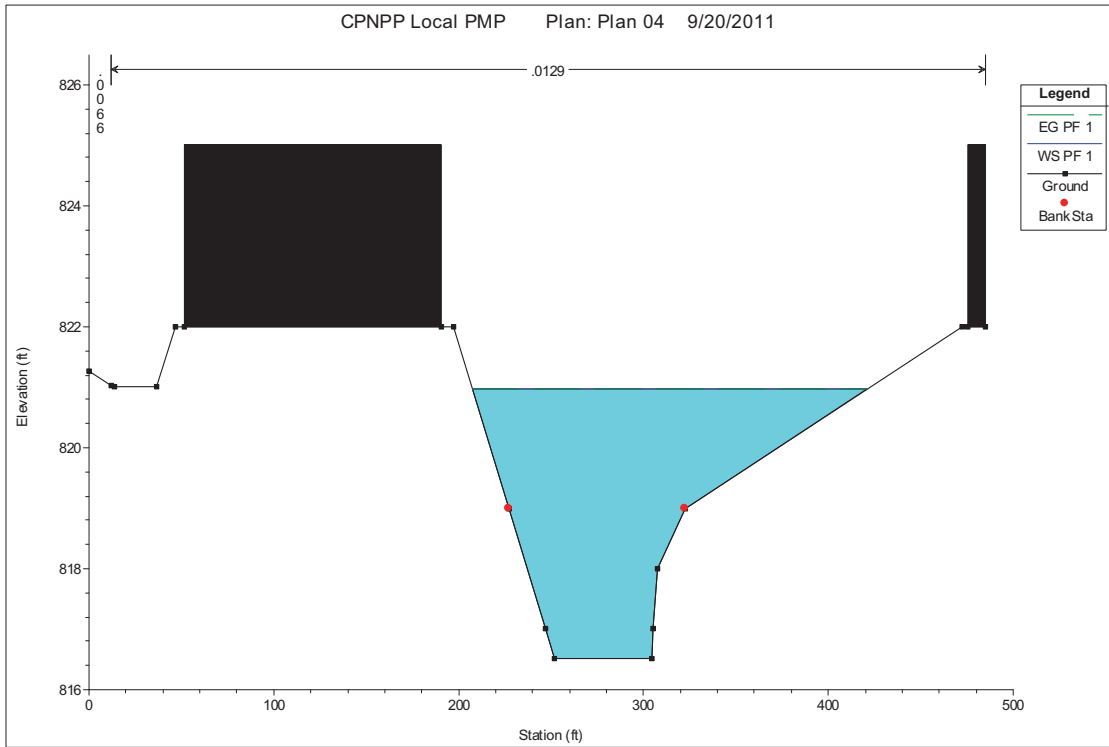


West Channel Cross Section 1

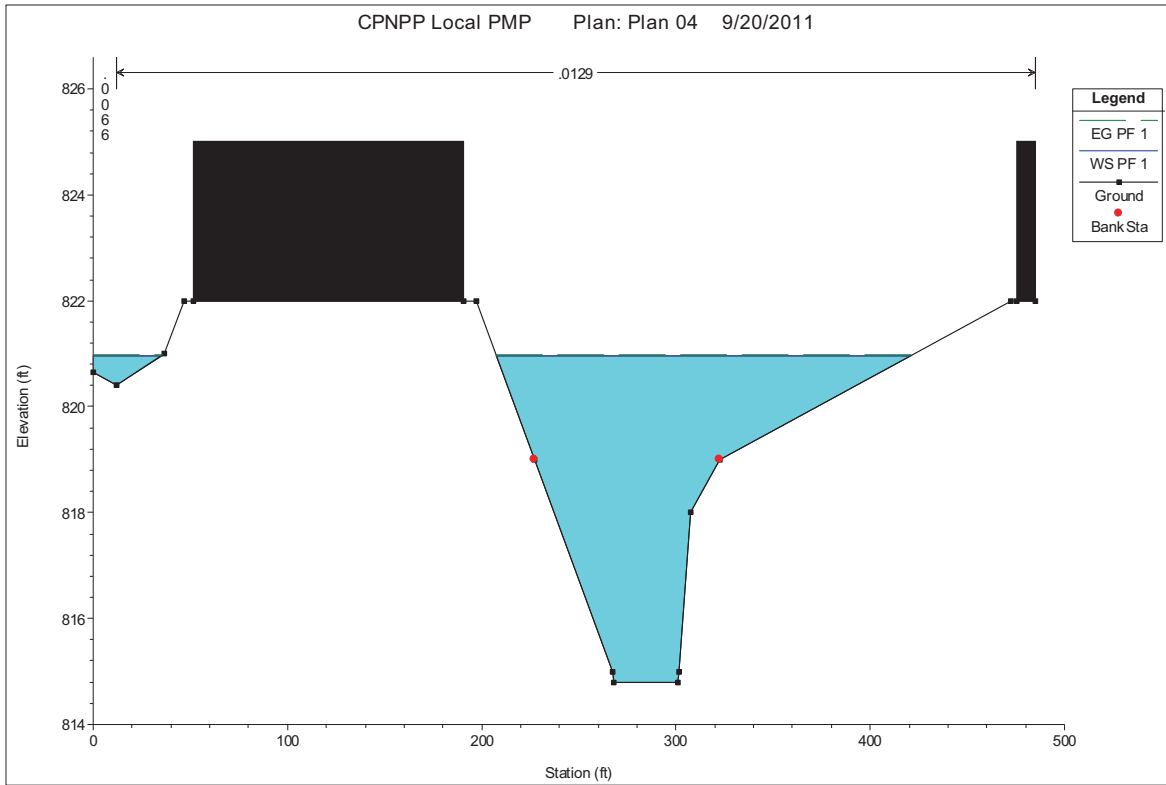
Center South Channel Cross Section Plots



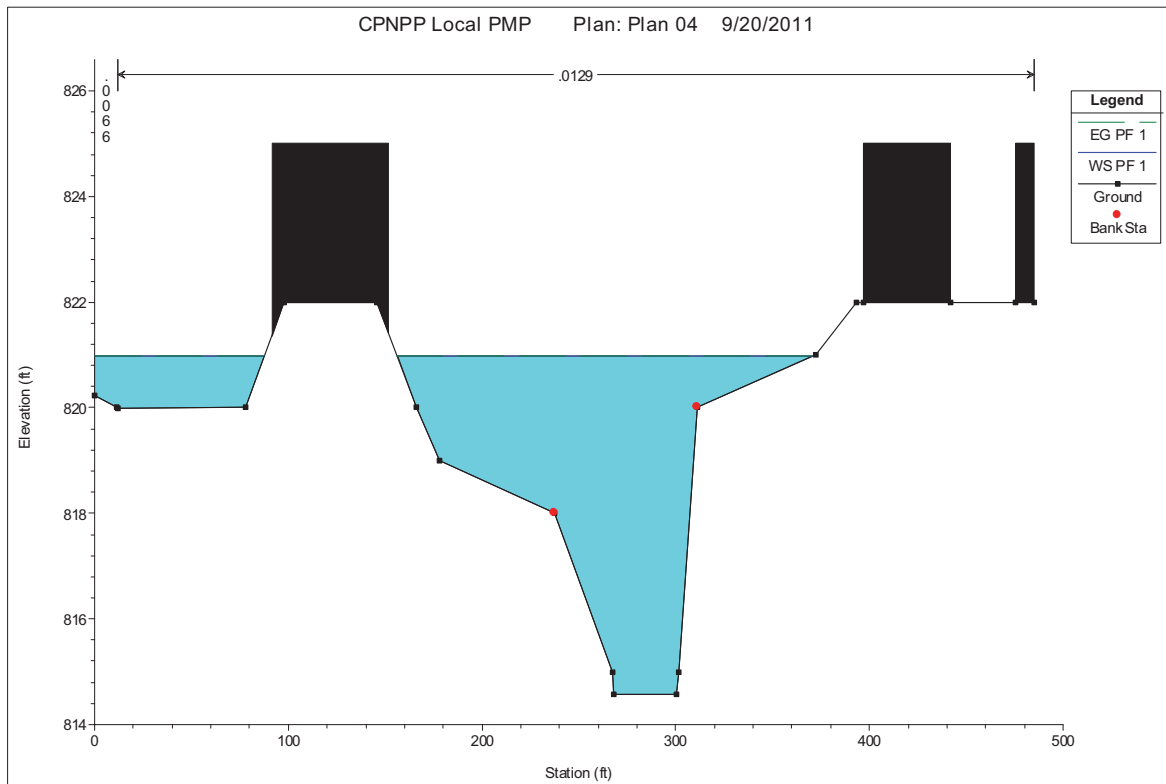
Center South Channel Cross Section 8



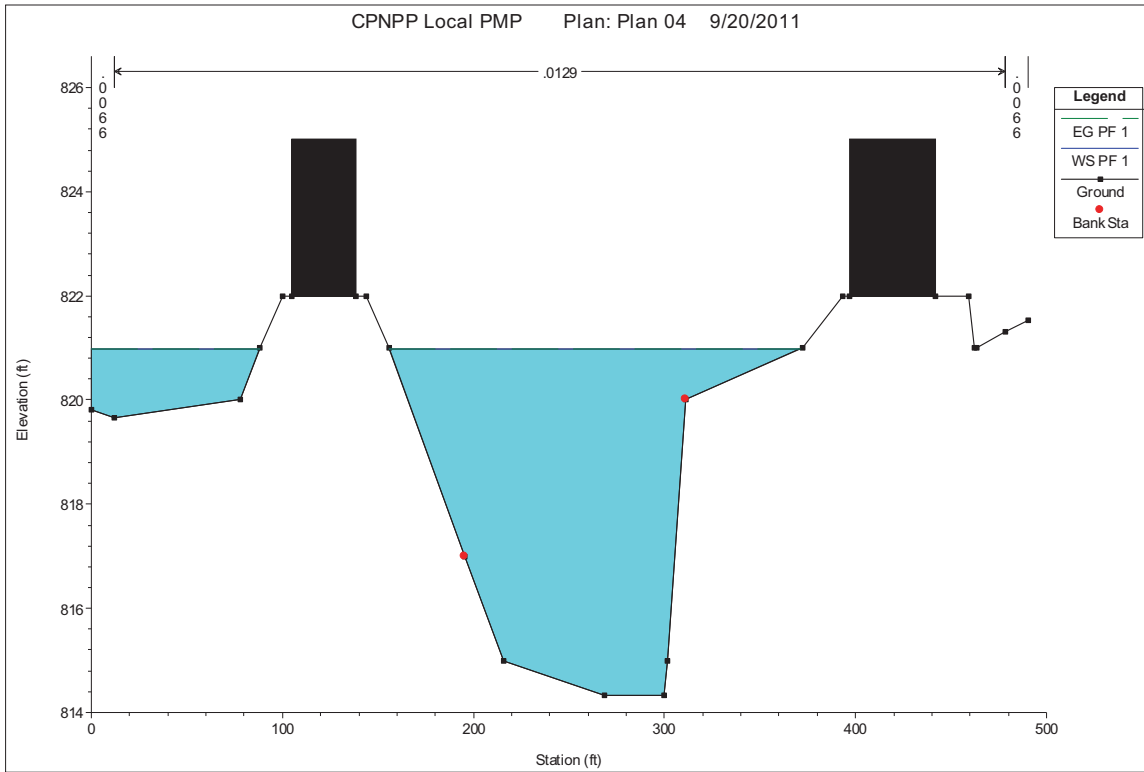
Center South Channel Cross Section 7



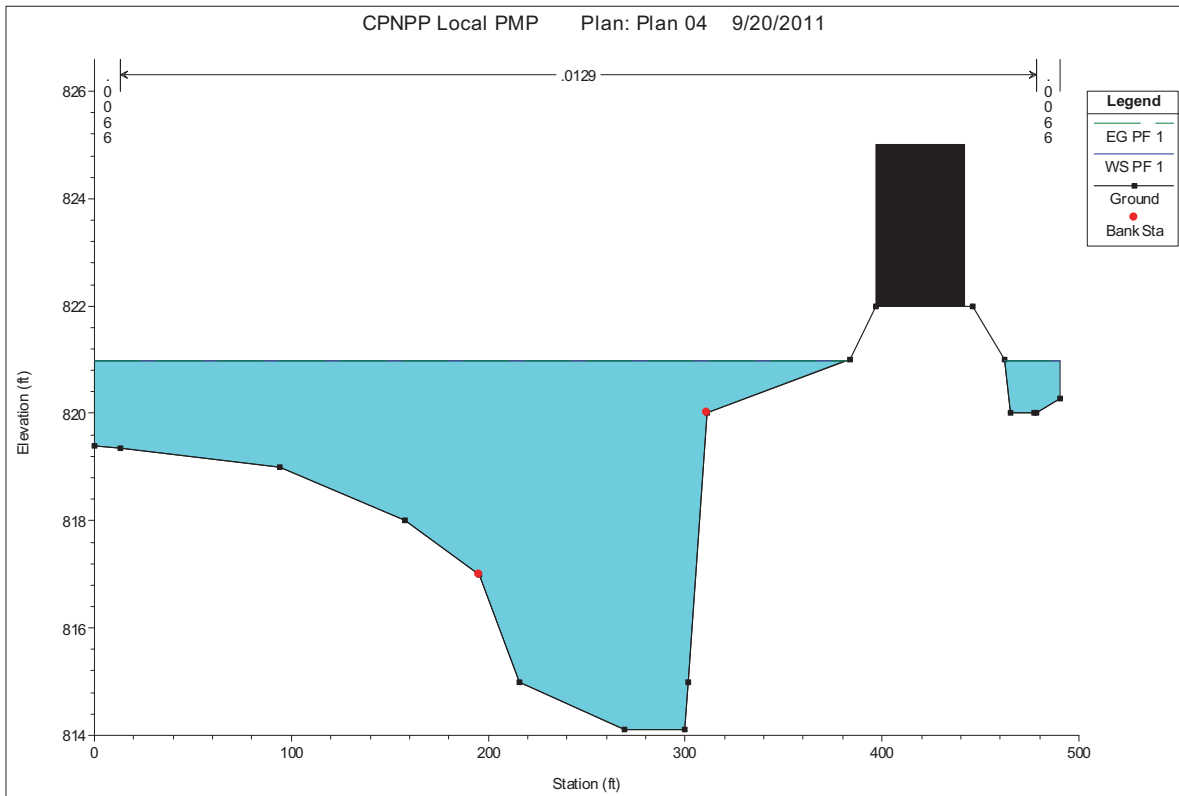
Center South Channel Cross Section 6



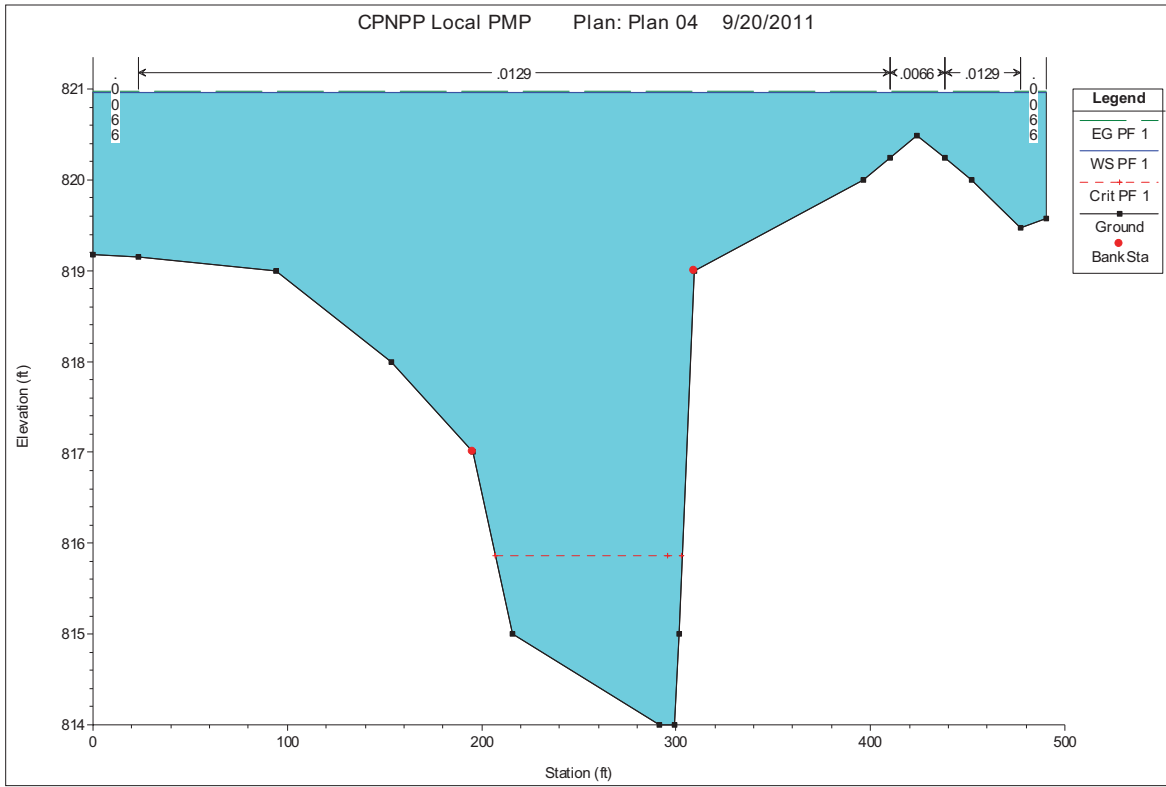
Center South Channel Cross Section 5



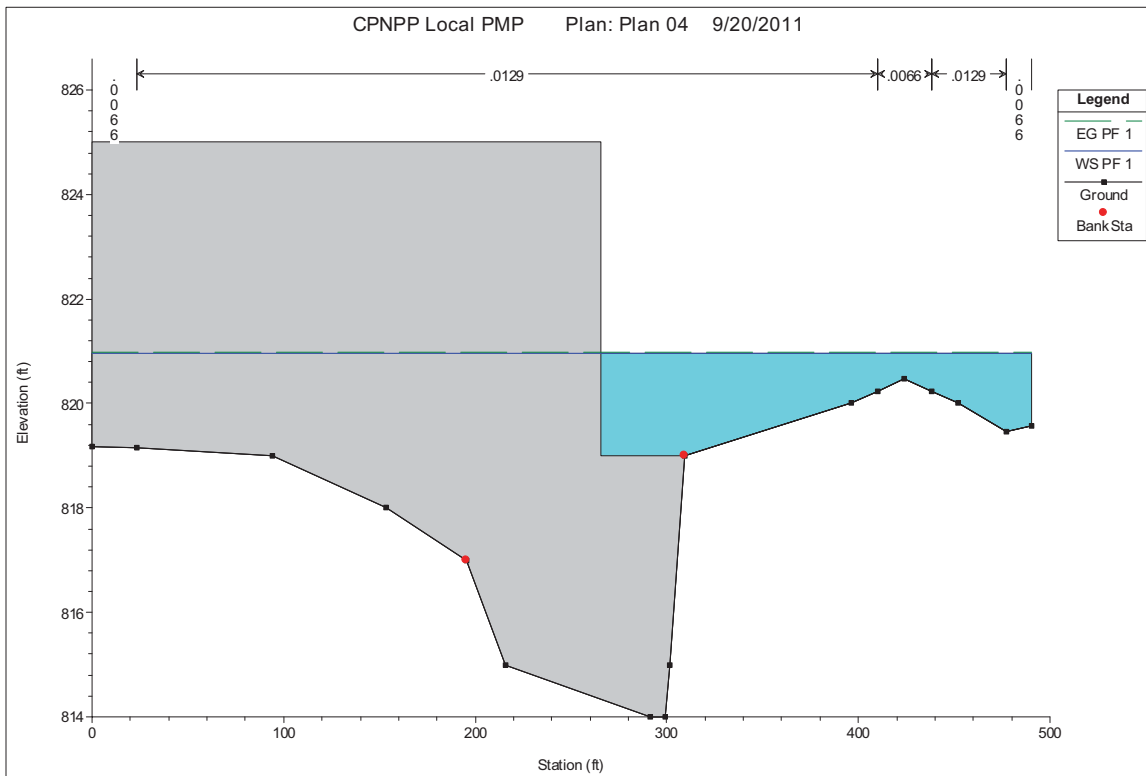
Center South Channel Cross Section 4



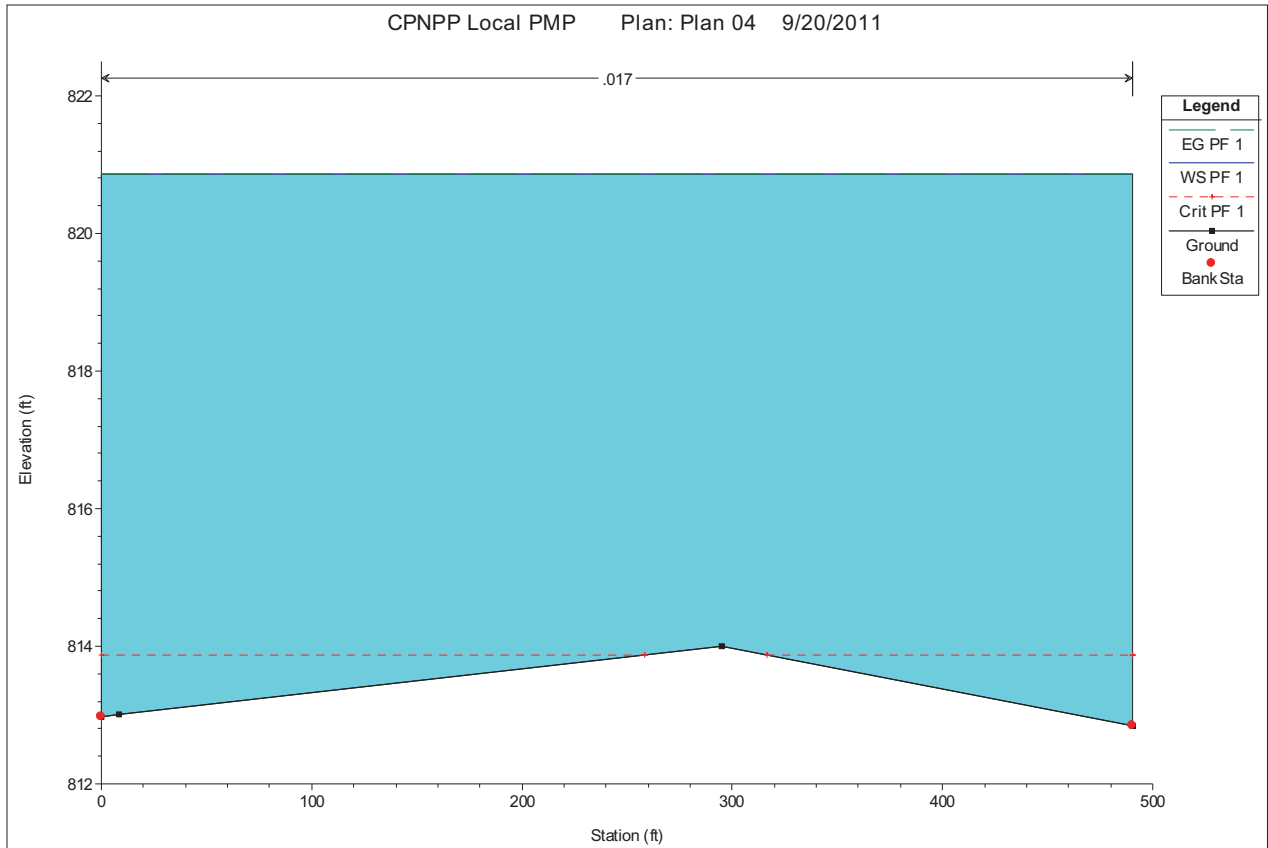
Center South Channel Cross Section 3



Center South Channel Cross Section 2

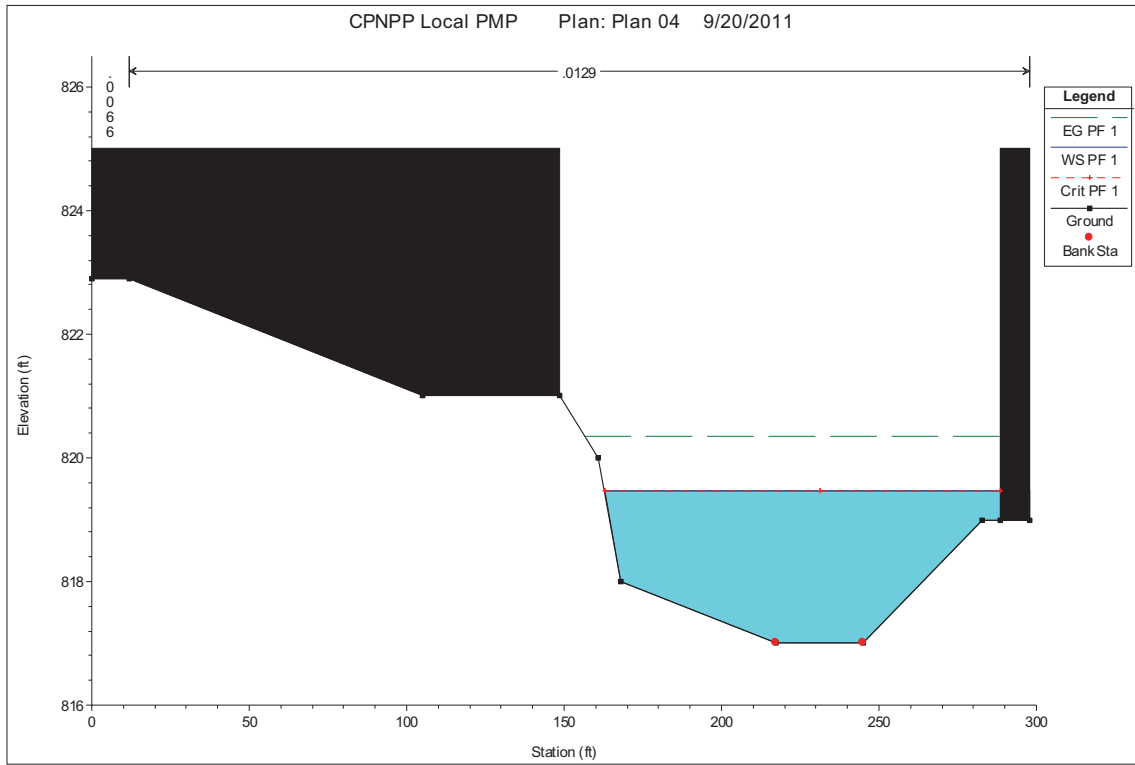


Center South Channel Inline Structure 1.5

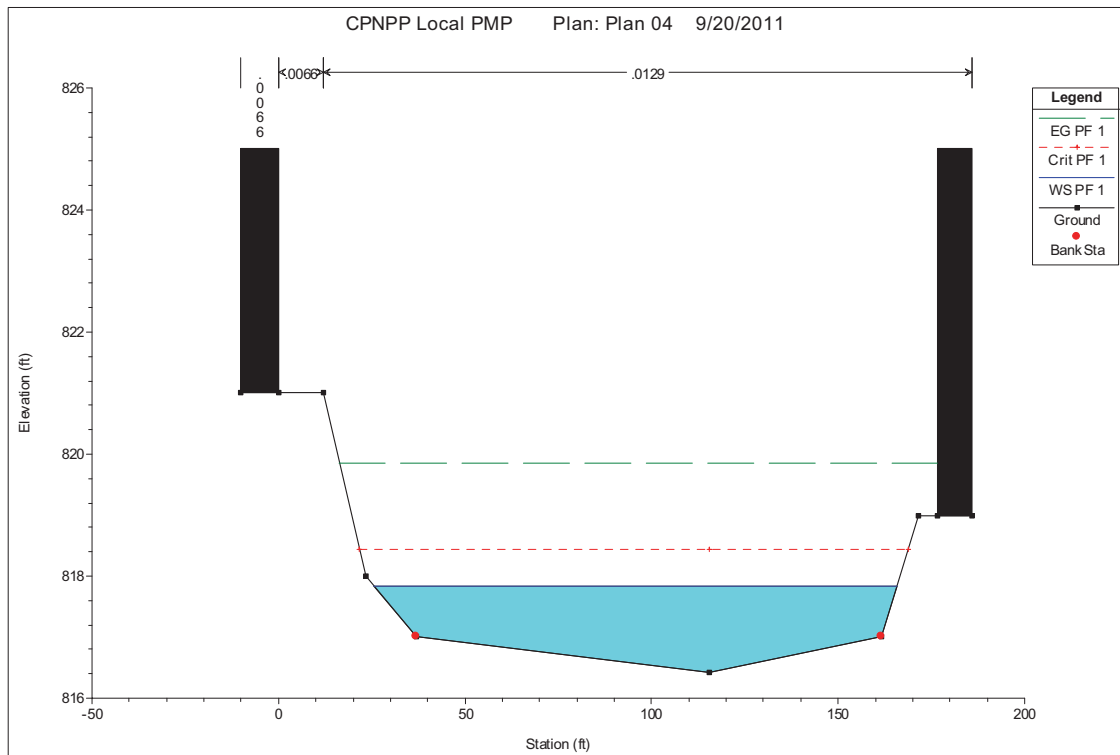


Center South Channel Cross Section 1

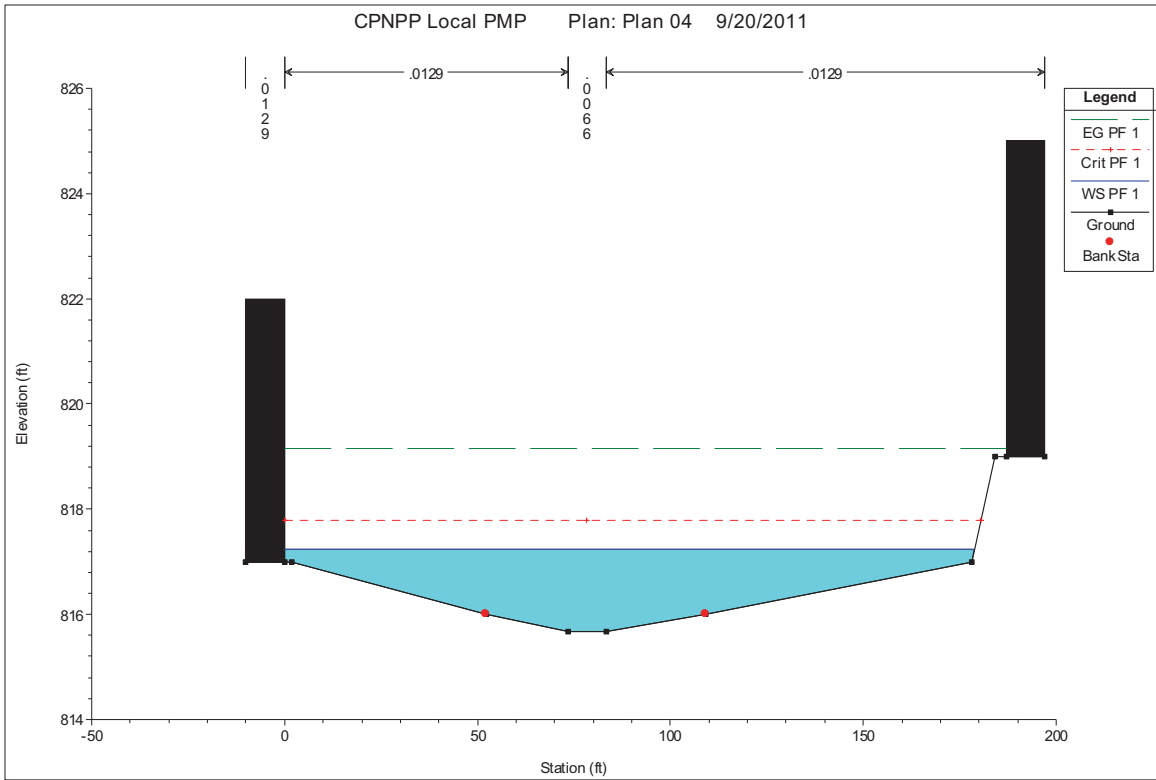
Unit 3 UHS Channel Cross Section Plots



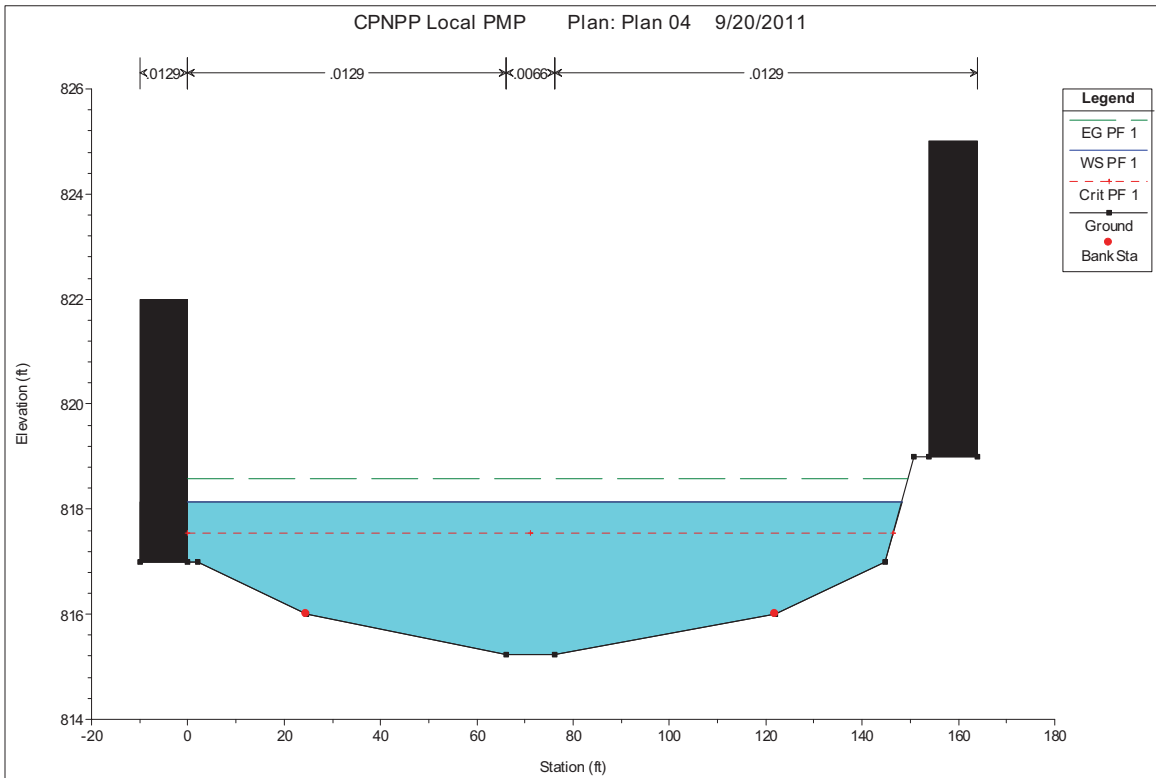
Unit 3 UHS Channel Cross Section 12



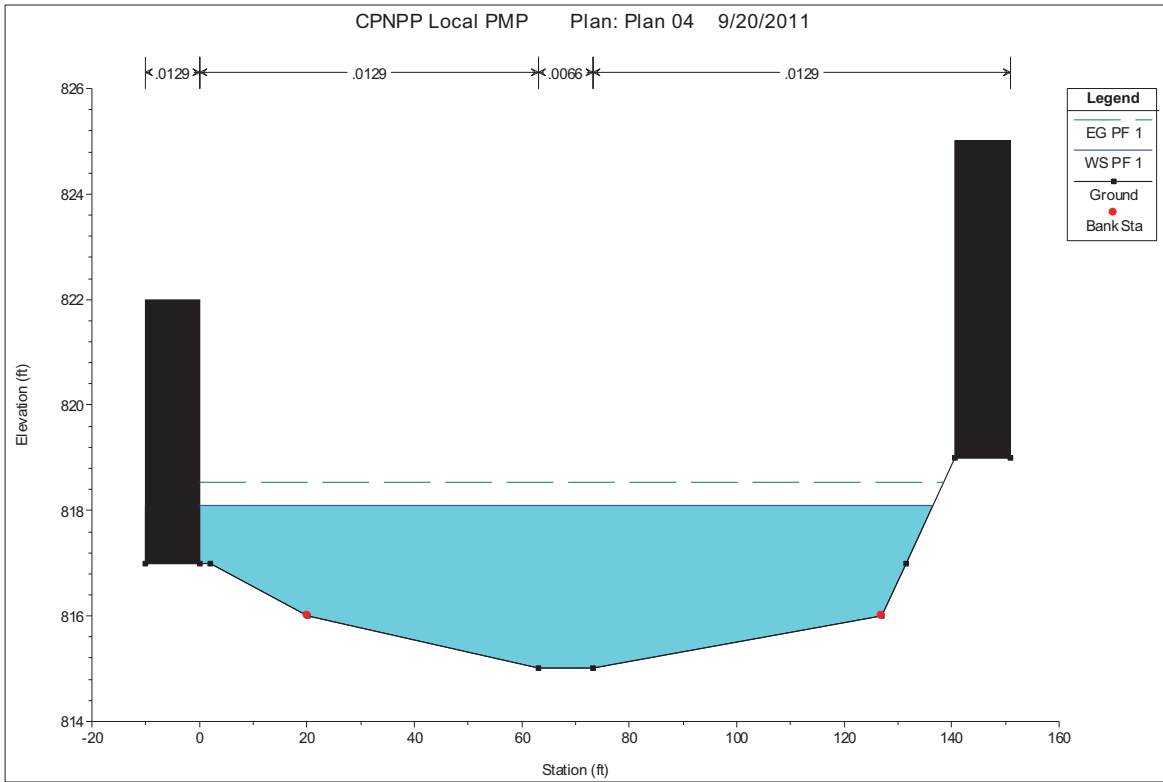
Unit 3 UHS Channel Cross Section 11



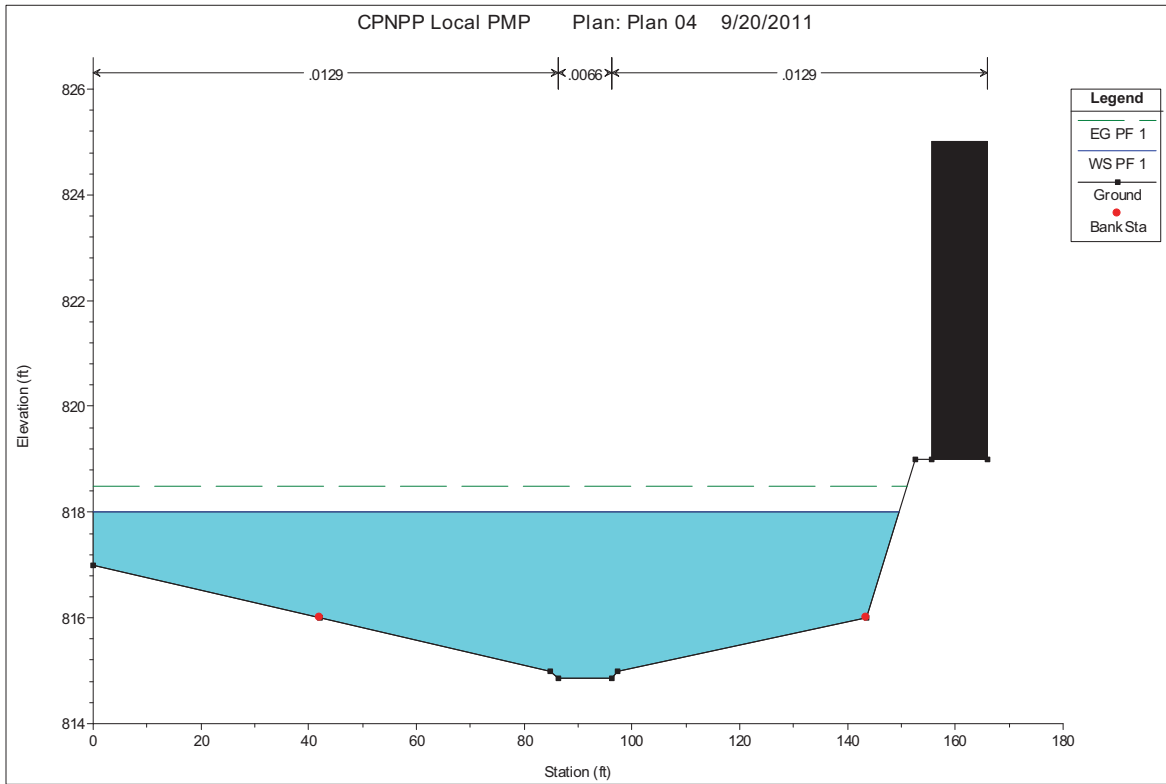
Unit 3 UHS Channel Cross Section 10



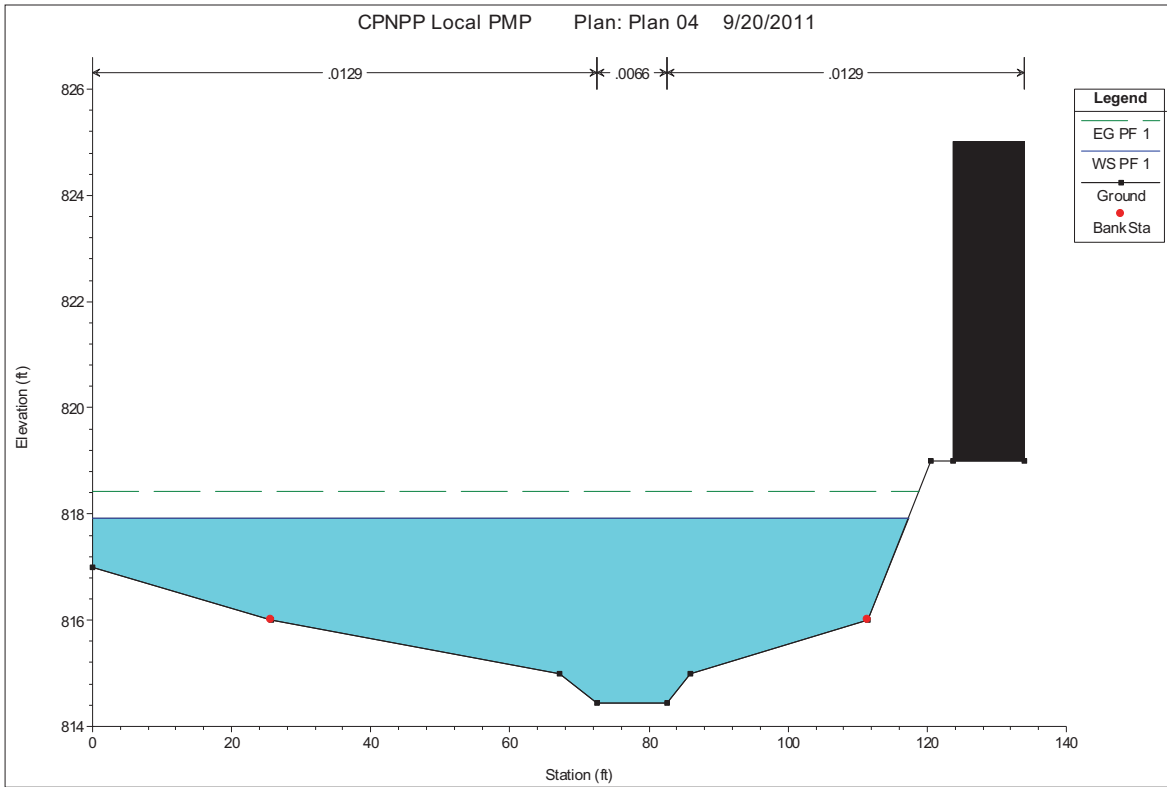
Unit 3 UHS Channel Cross Section 9



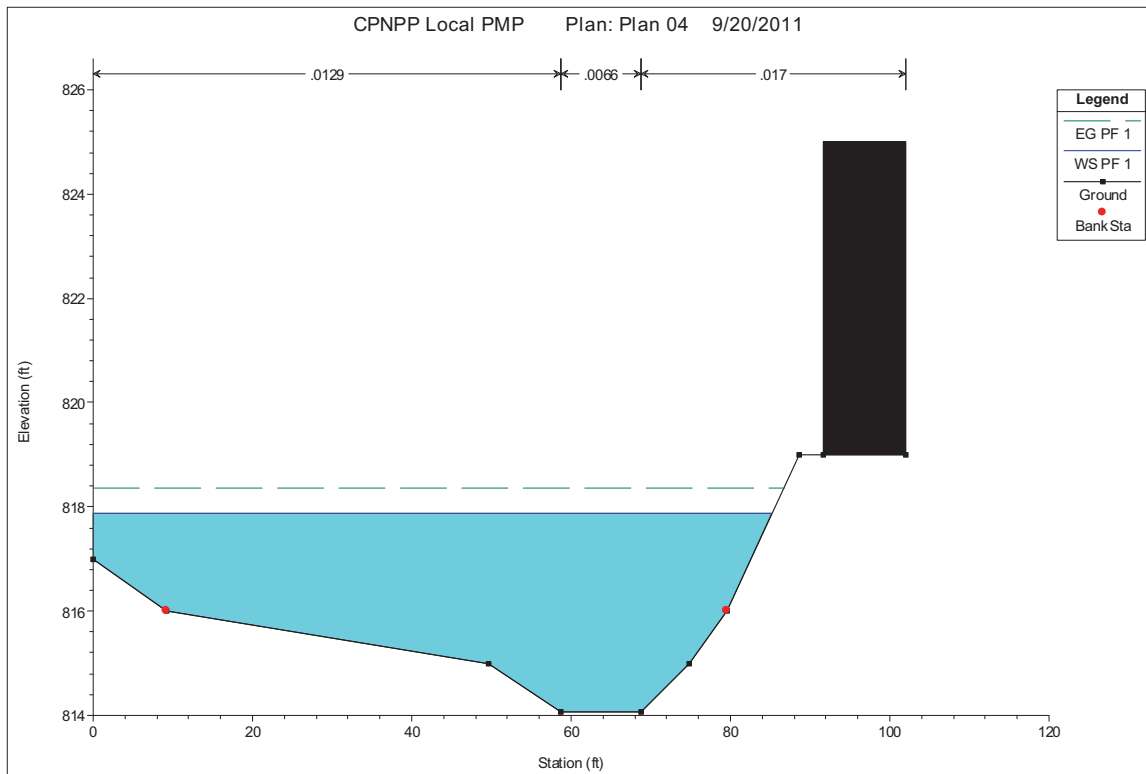
Unit 3 UHS Channel Cross Section 8



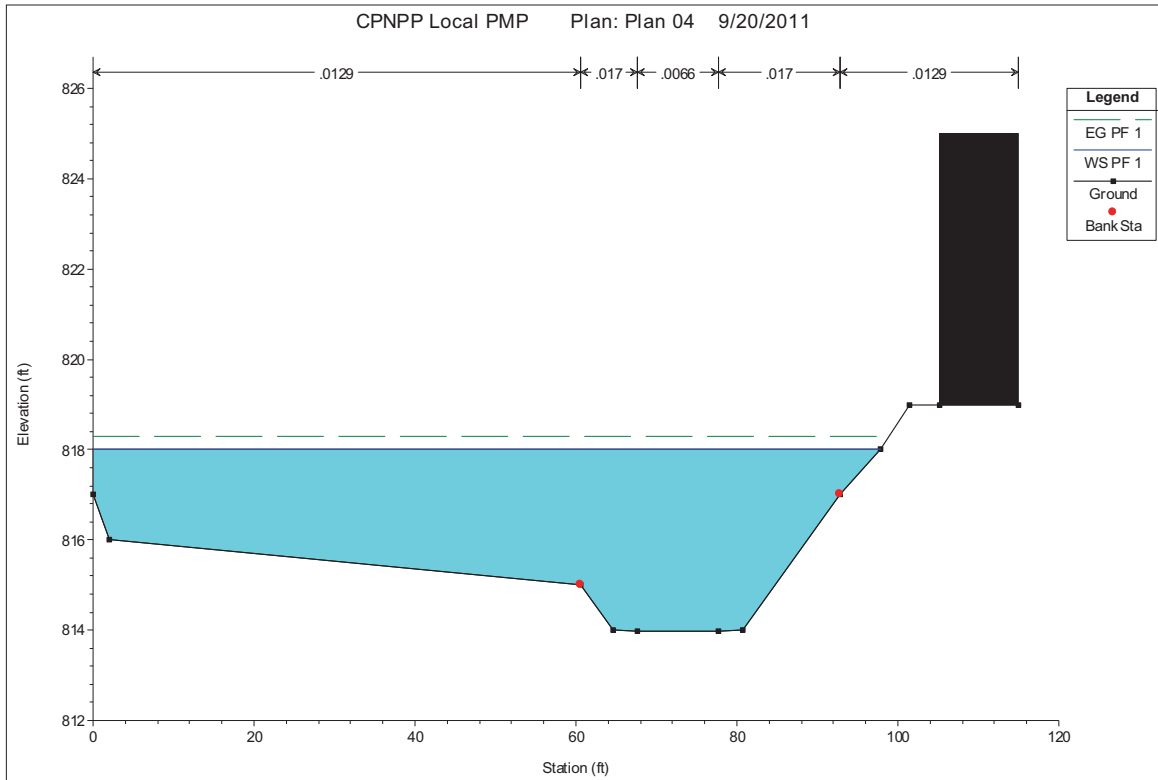
Unit 3 UHS Channel Cross Section 7



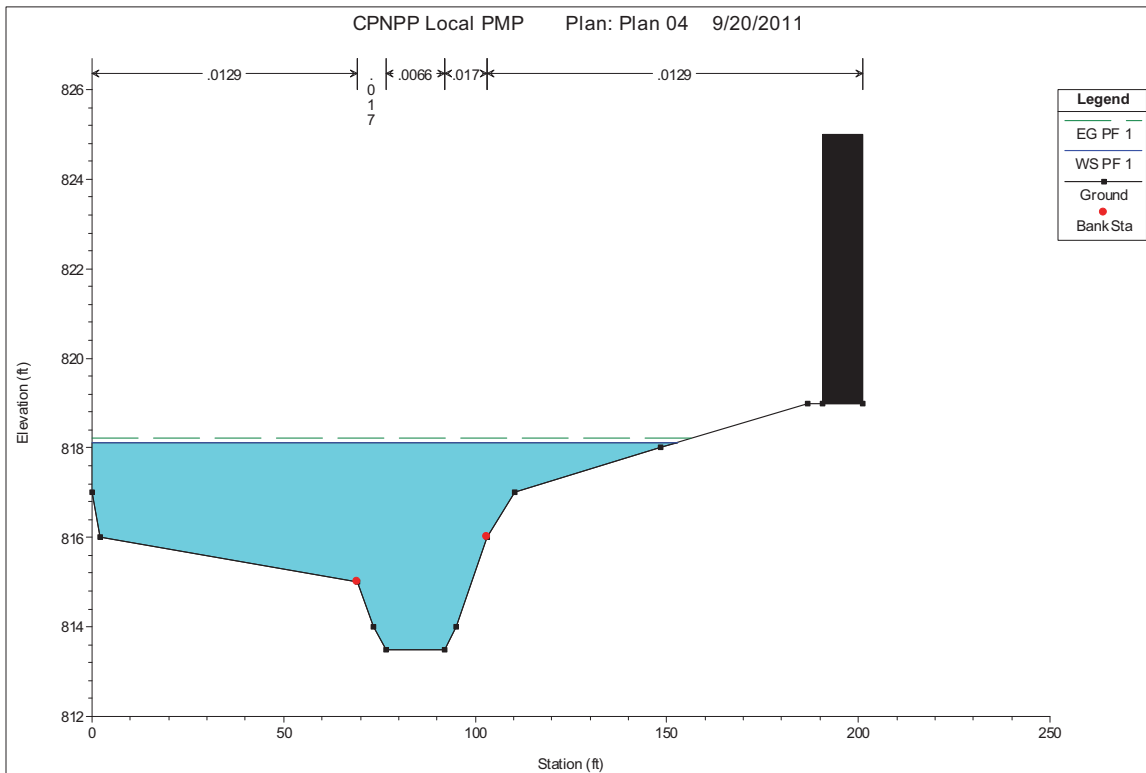
Unit 3 UHS Channel Cross Section 6



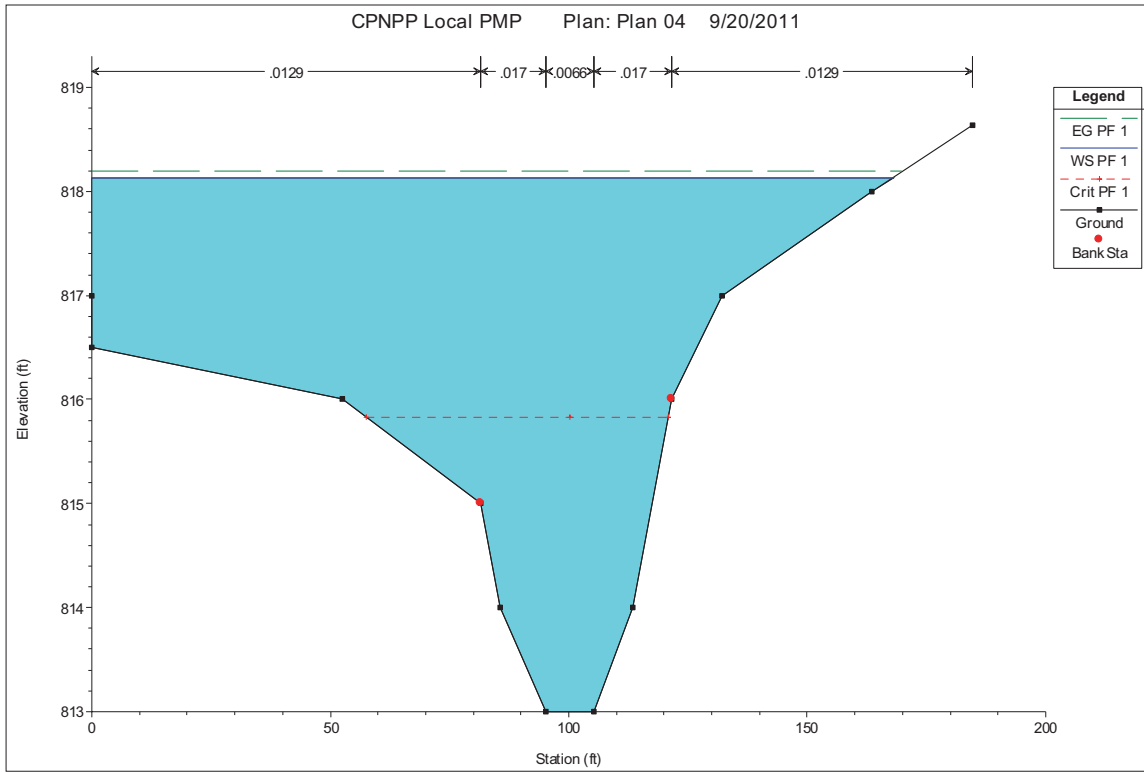
Unit 3 UHS Channel Cross Section 5



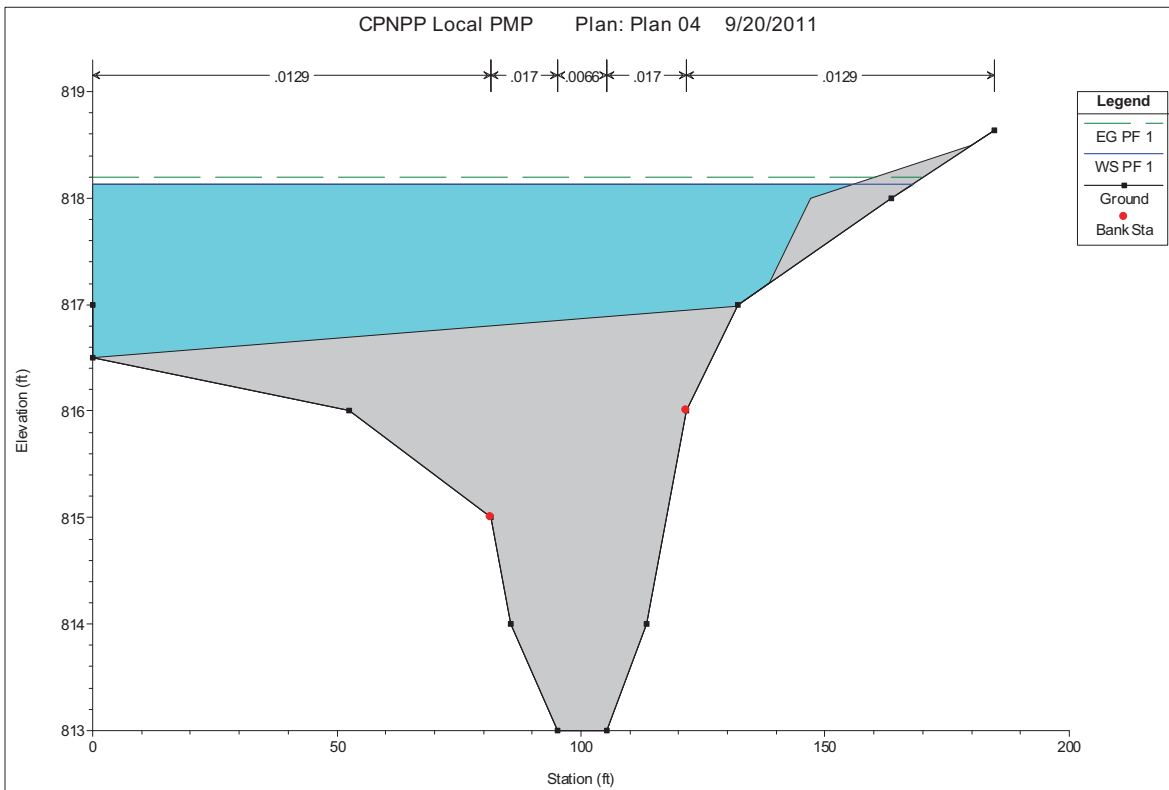
Unit 3 UHS Channel Cross Section 4



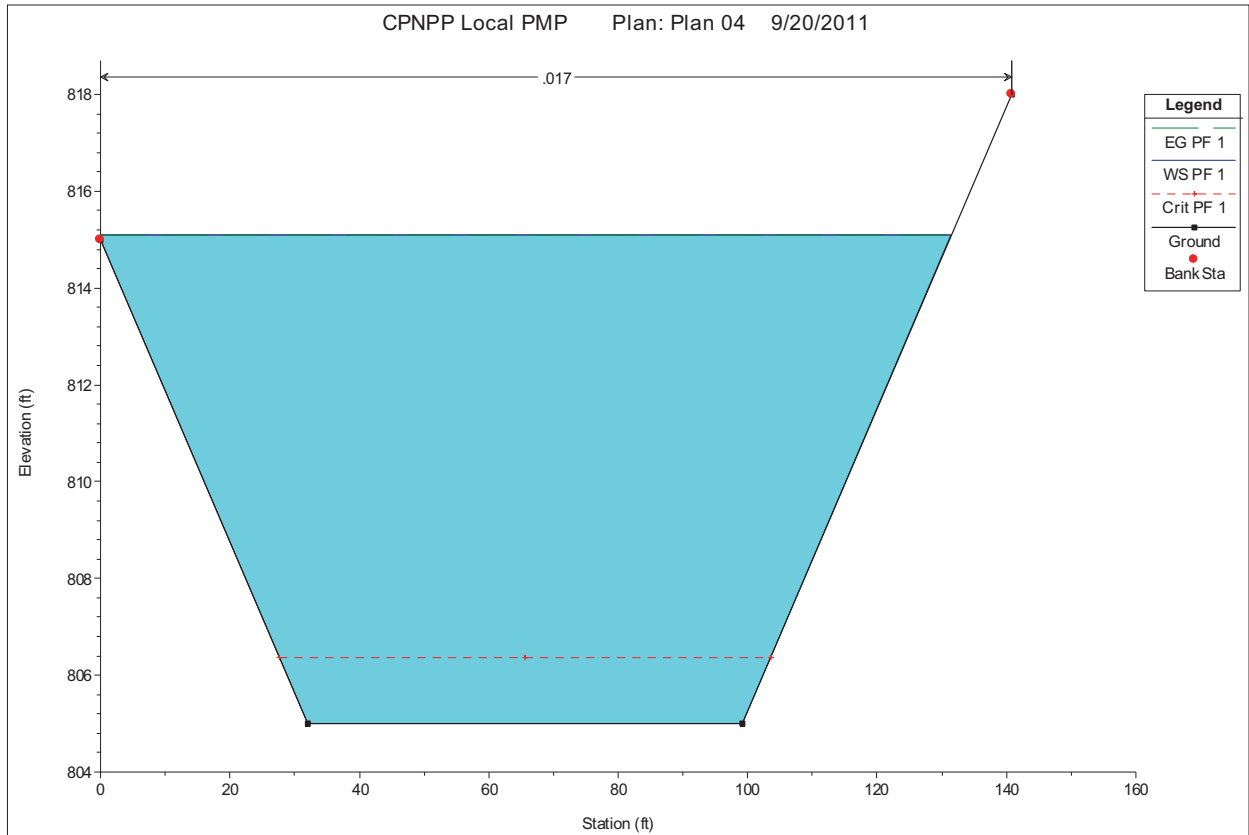
Unit 3 UHS Channel Cross Section 3



Unit 3 UHS Channel Cross Section 2

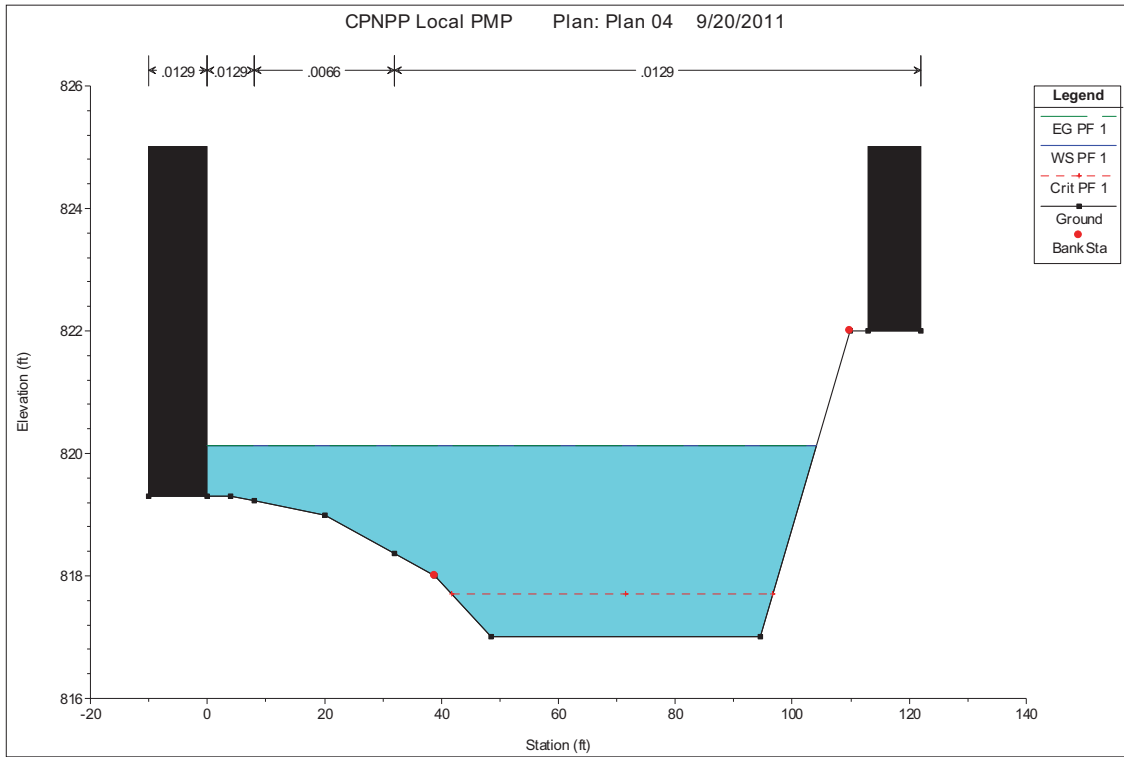


Unit 3 UHS Channel Lateral Structure 1.5

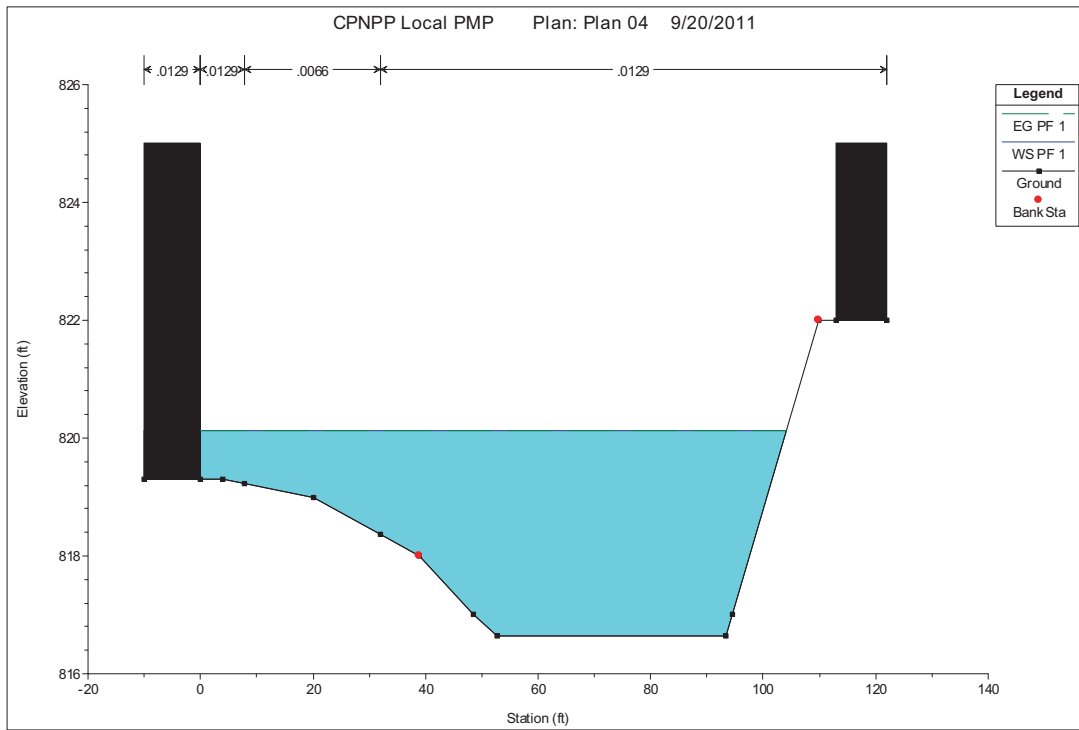


Unit 3 UHS Channel Cross Section 1

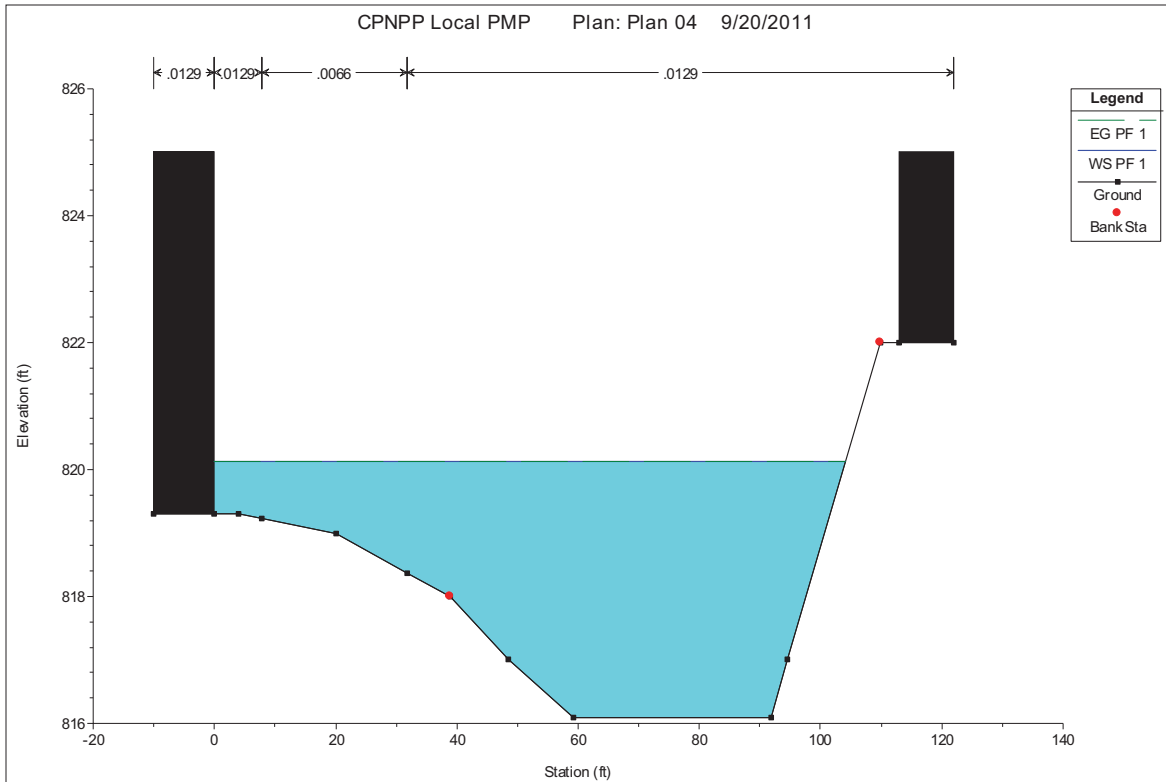
Unit 3 North Channel Cross Section Plots



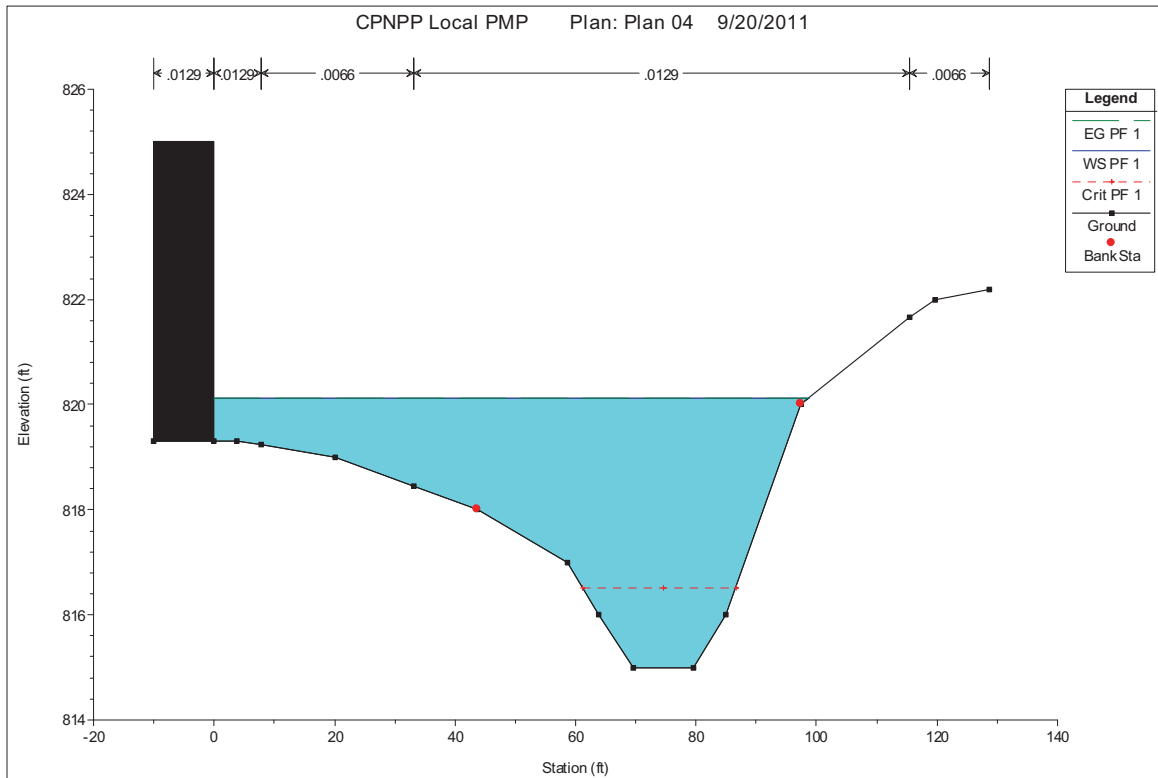
Unit 3 North Channel Cross Section 8



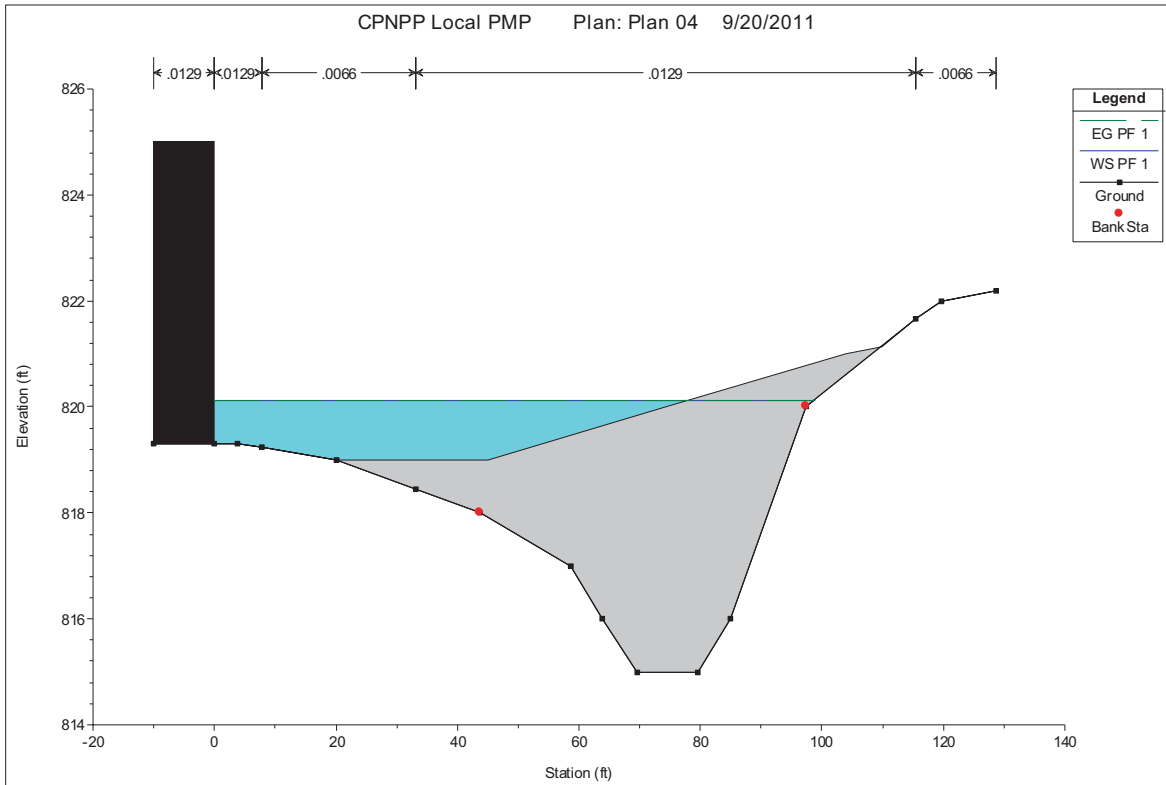
Unit 3 North Channel Cross Section 7



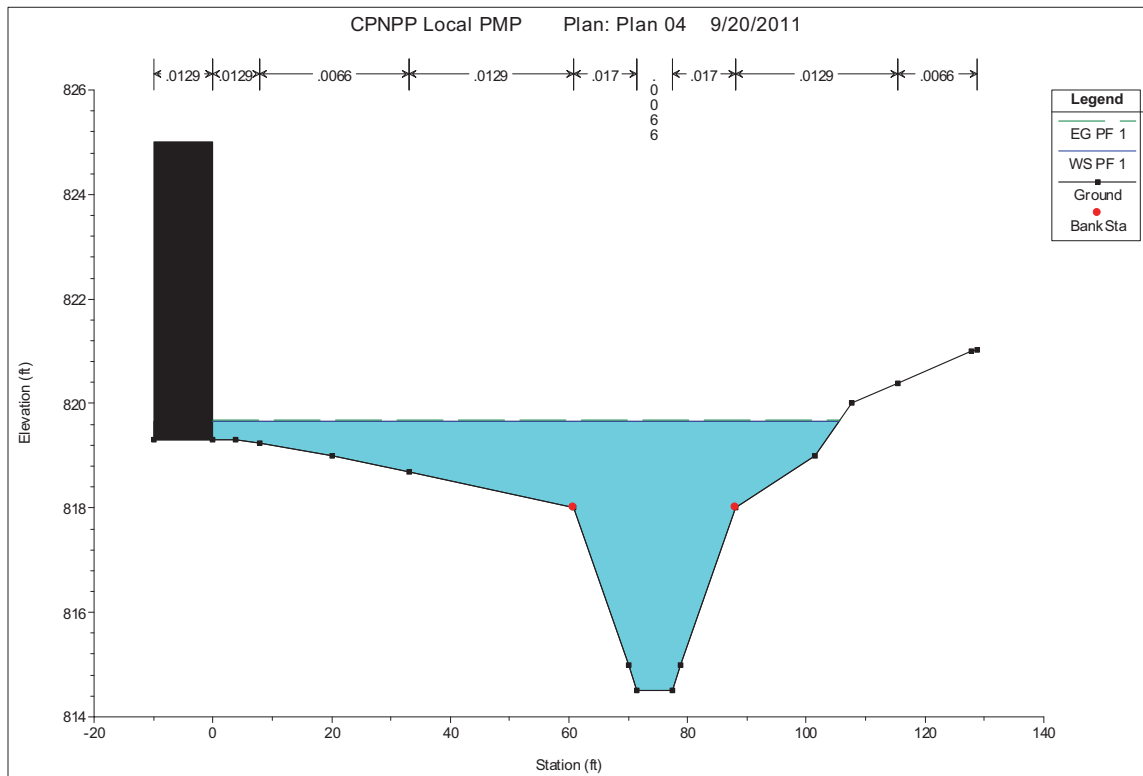
Unit 3 North Channel Cross Section 6



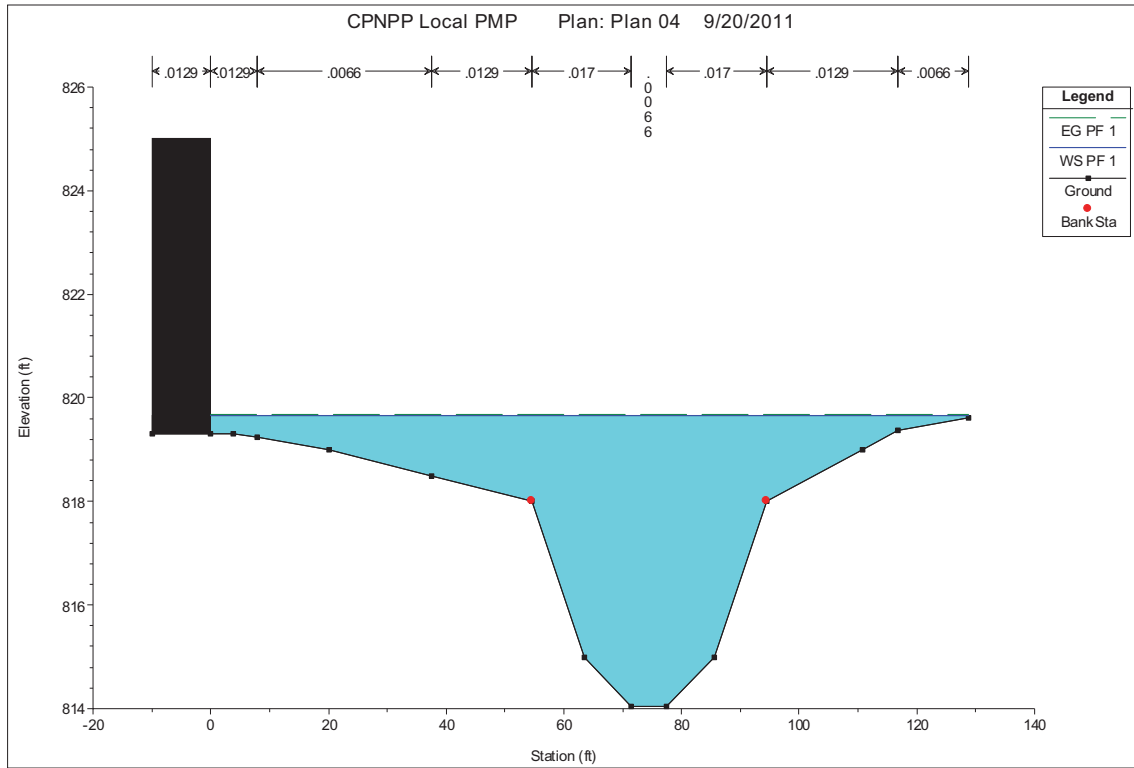
Unit 3 North Channel Cross Section 5



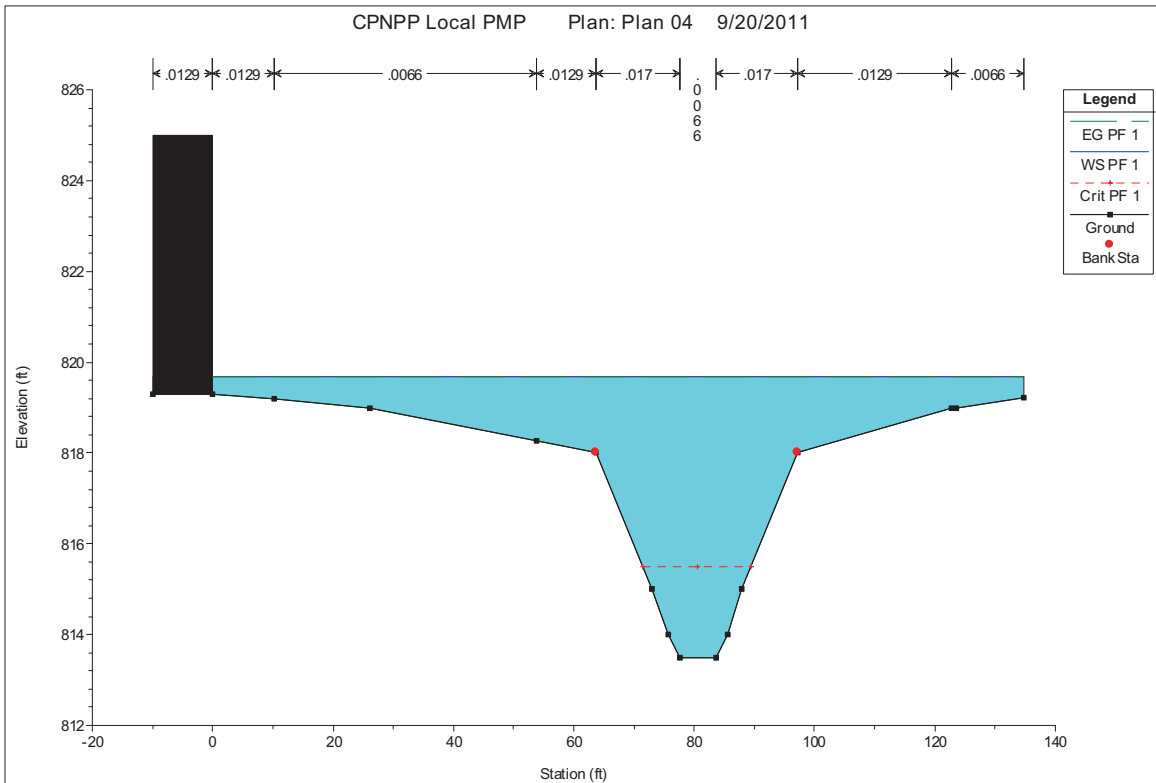
Unit 3 North Channel Inline Structure 4.5



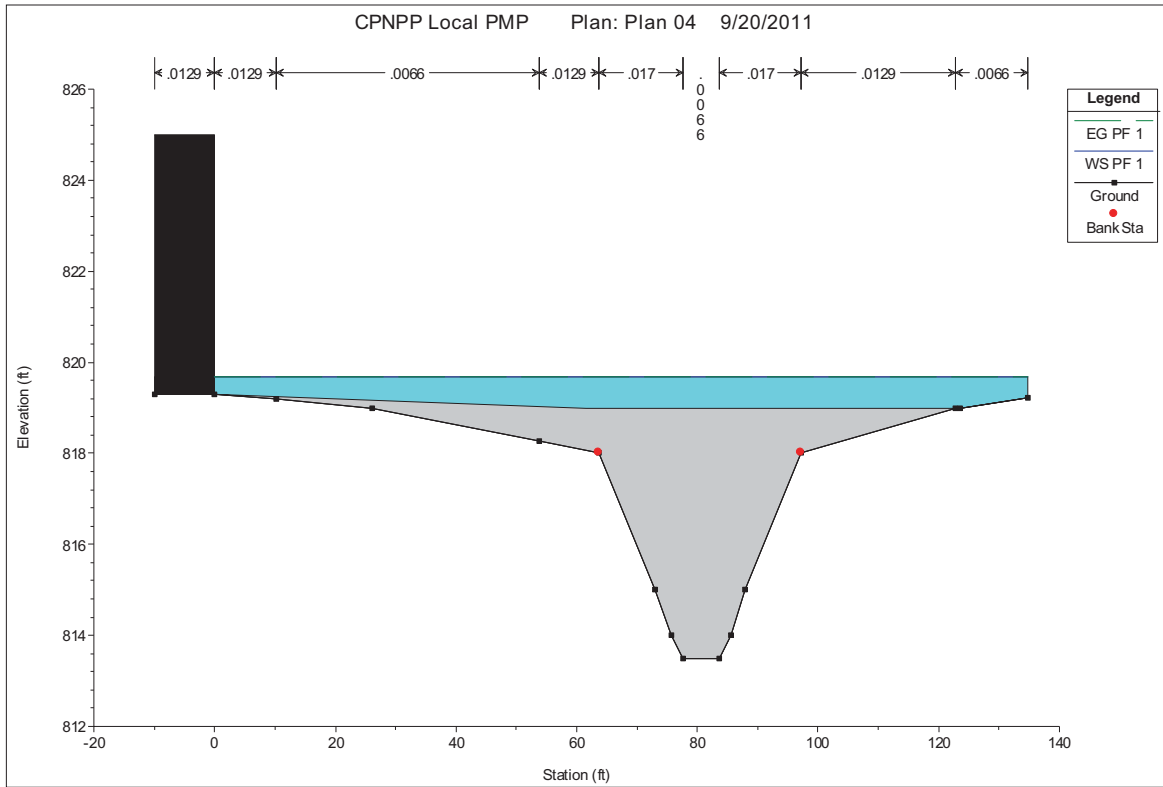
Unit 3 North Channel Cross Section 4



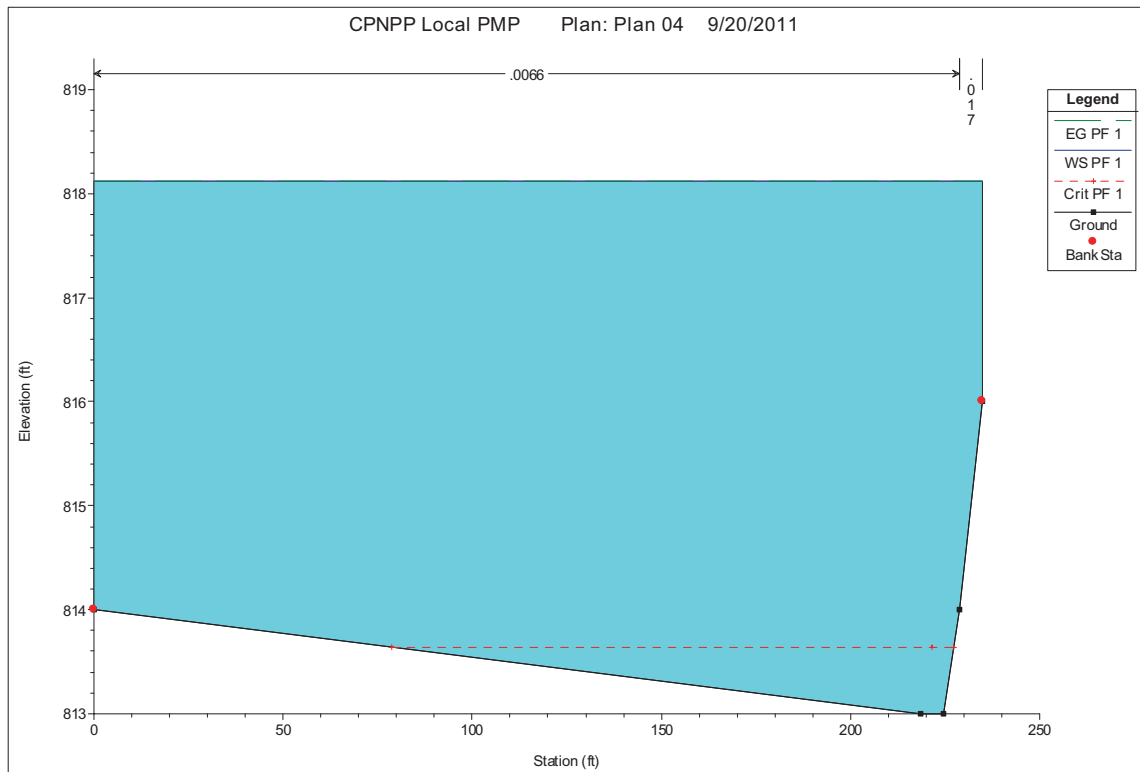
Unit 3 North Channel Cross Section 3



Unit 3 North Channel Cross Section 2

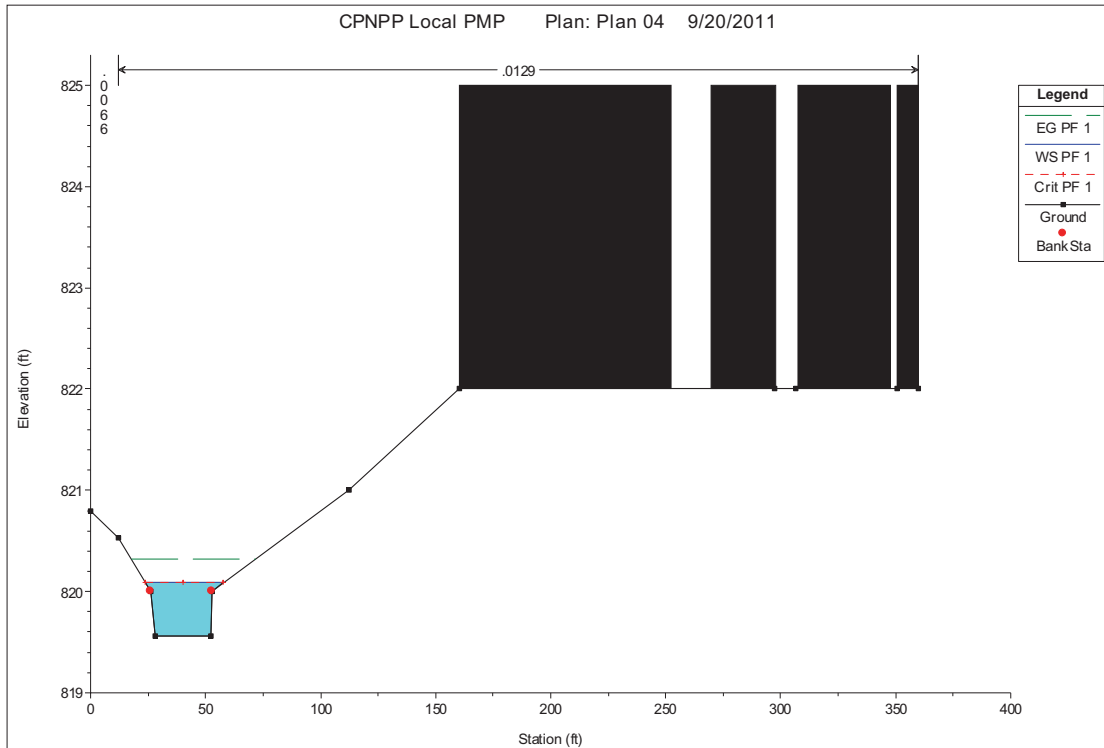


Unit 3 North Channel Inline Structure 1.5

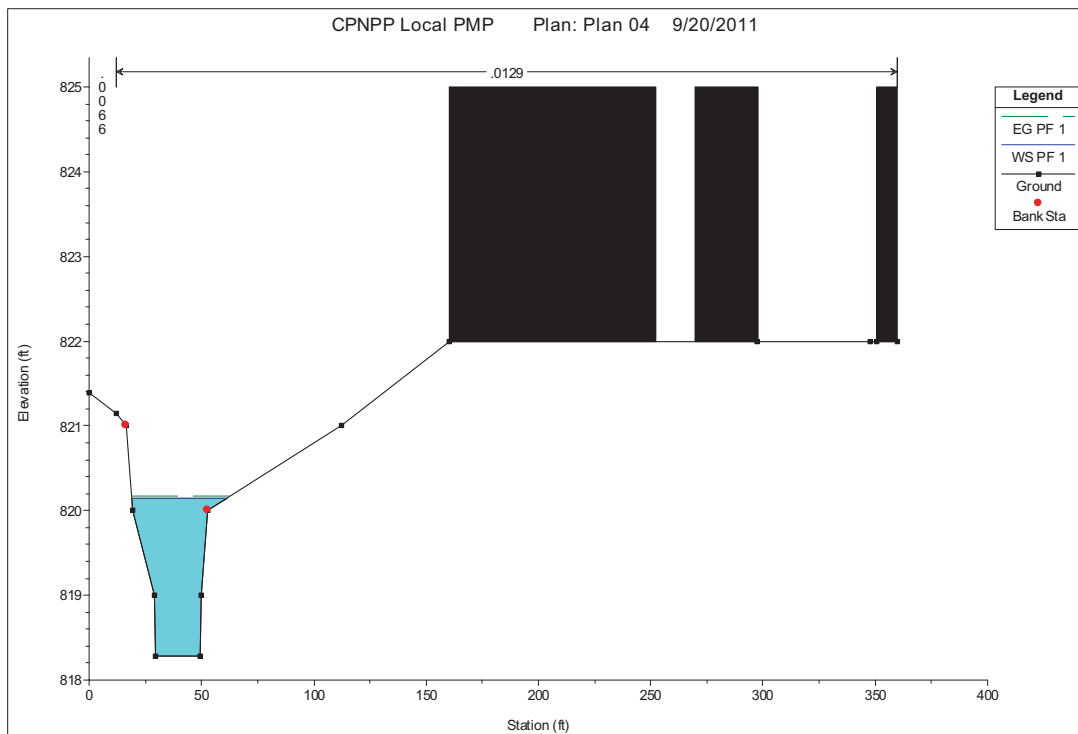


Unit 3 North Channel Cross Section 1

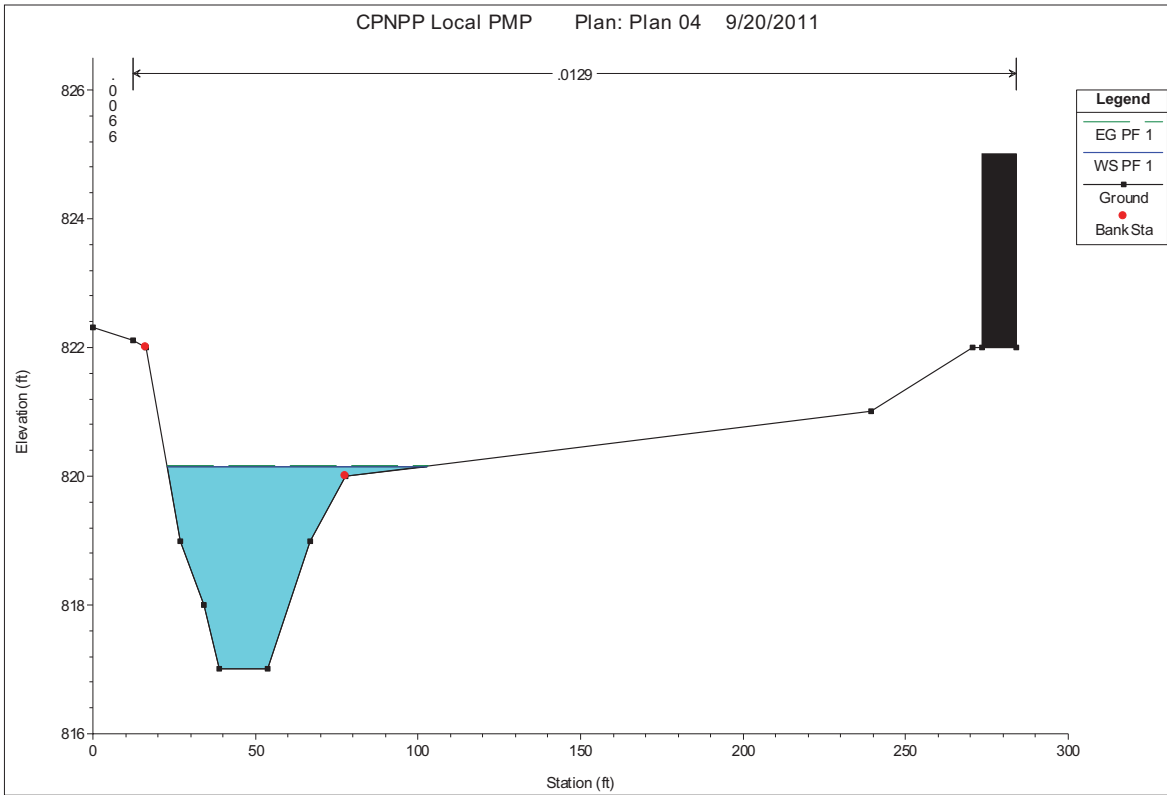
Center North Channel Cross Section Plots



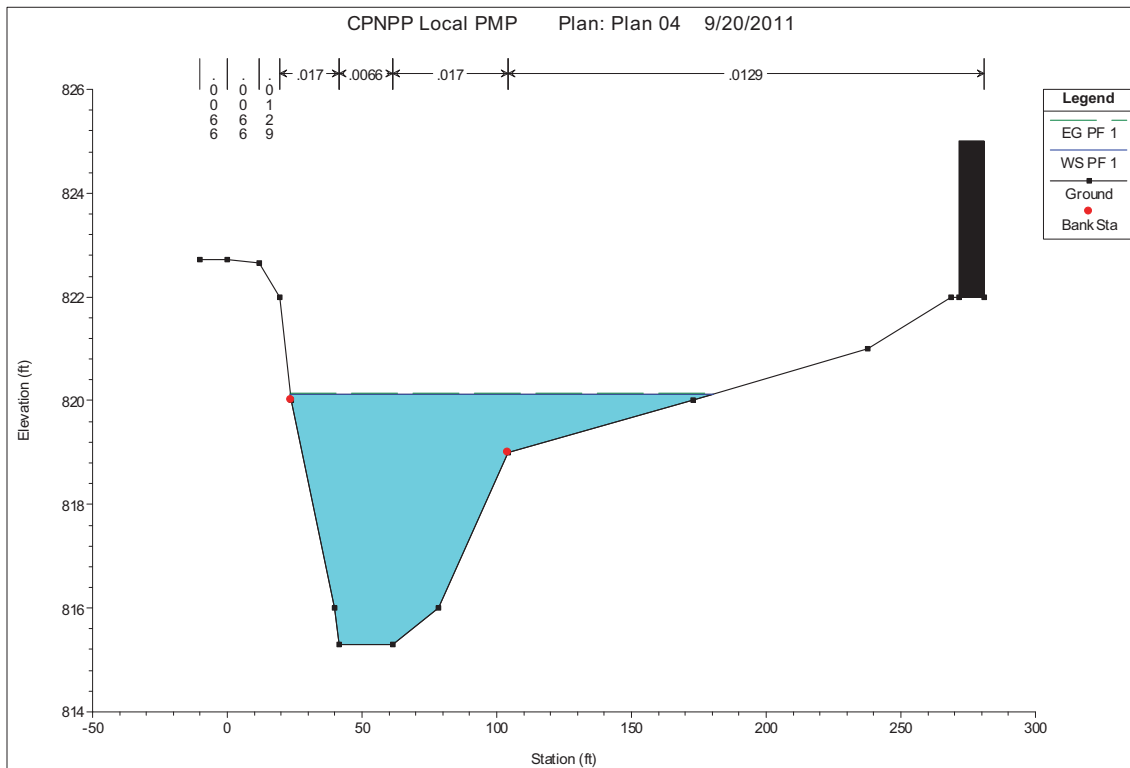
Center North Channel Cross Section 13



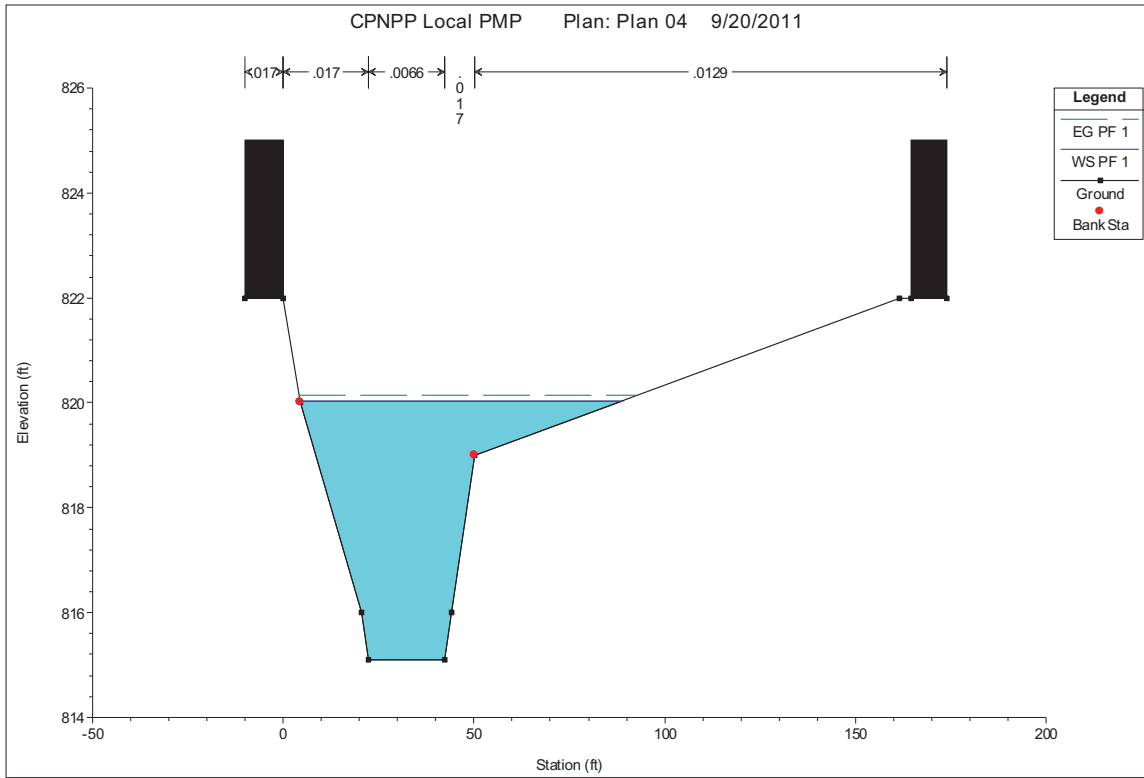
Center North Channel Cross Section 12



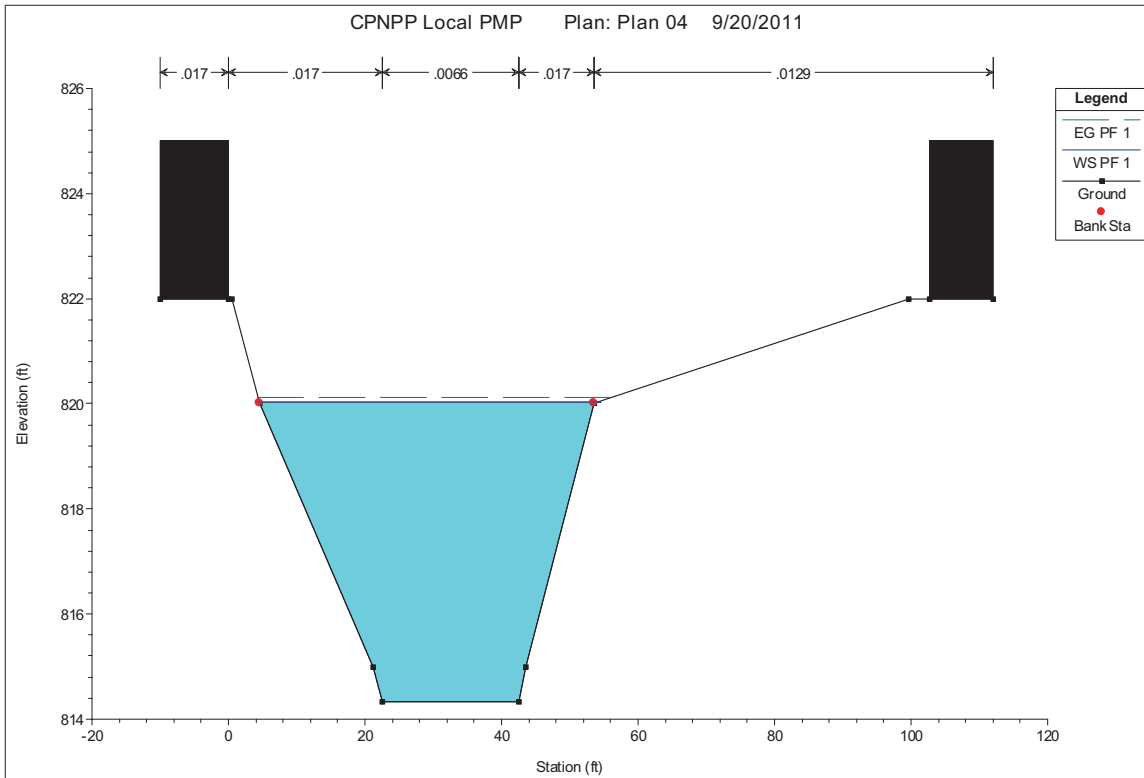
Center North Channel Cross Section 11



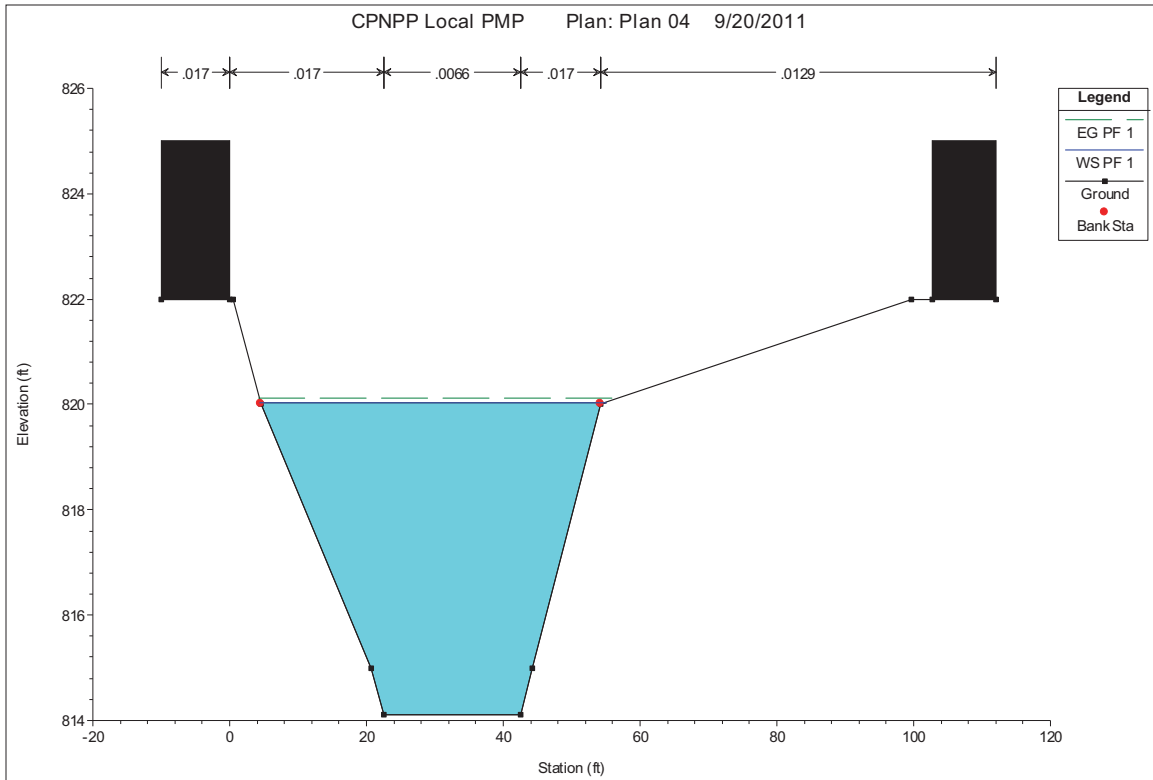
Center North Channel Cross Section 10



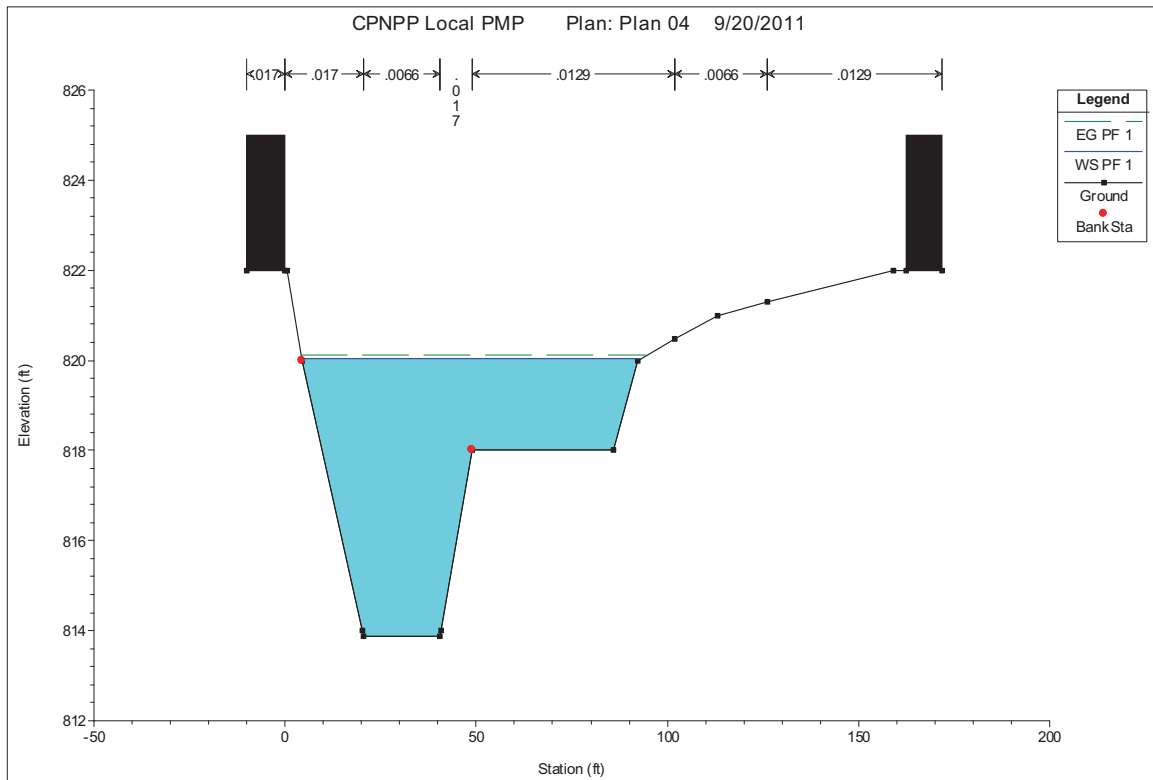
Center North Channel Cross Section 9



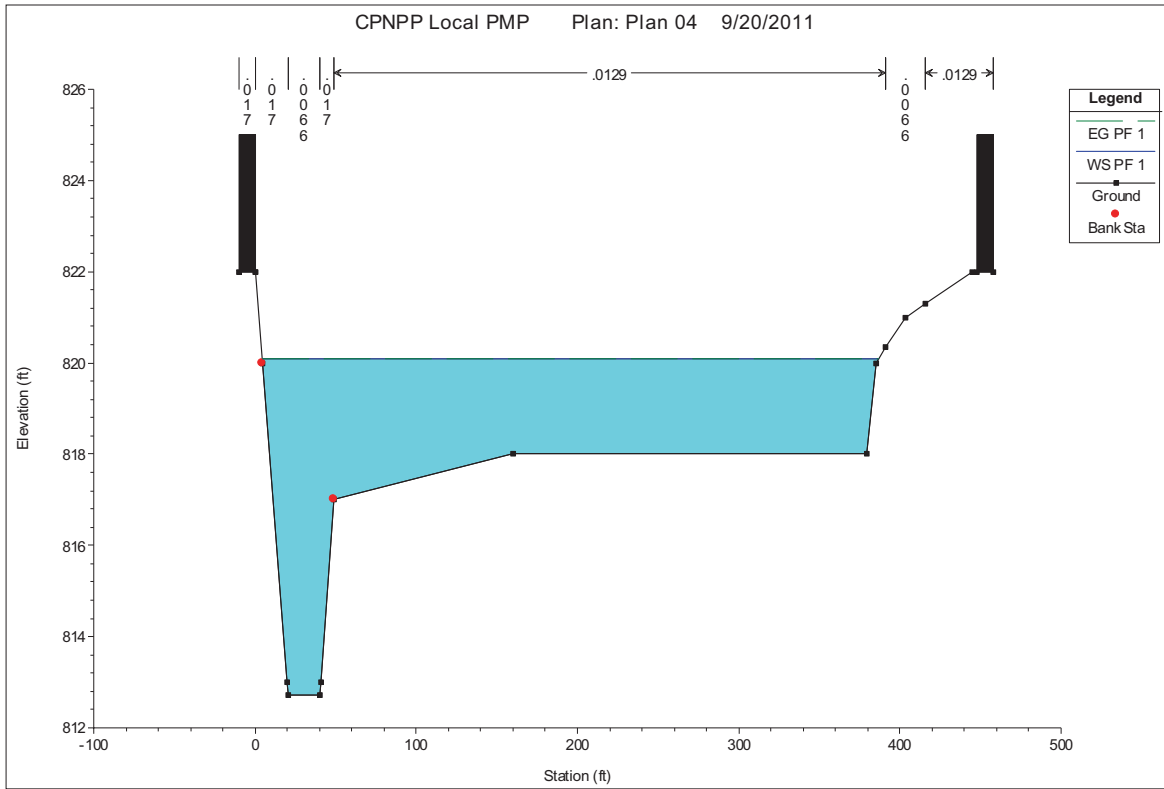
Center North Channel Cross Section 8



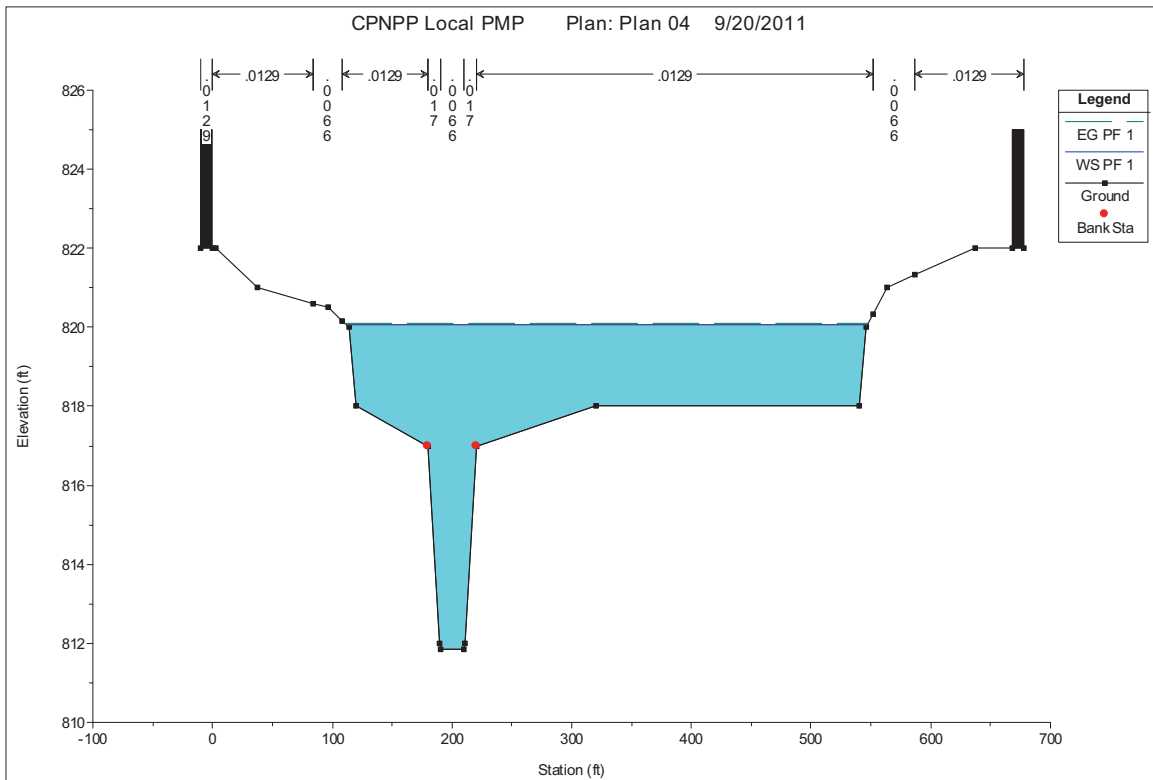
Center North Channel Cross Section 7



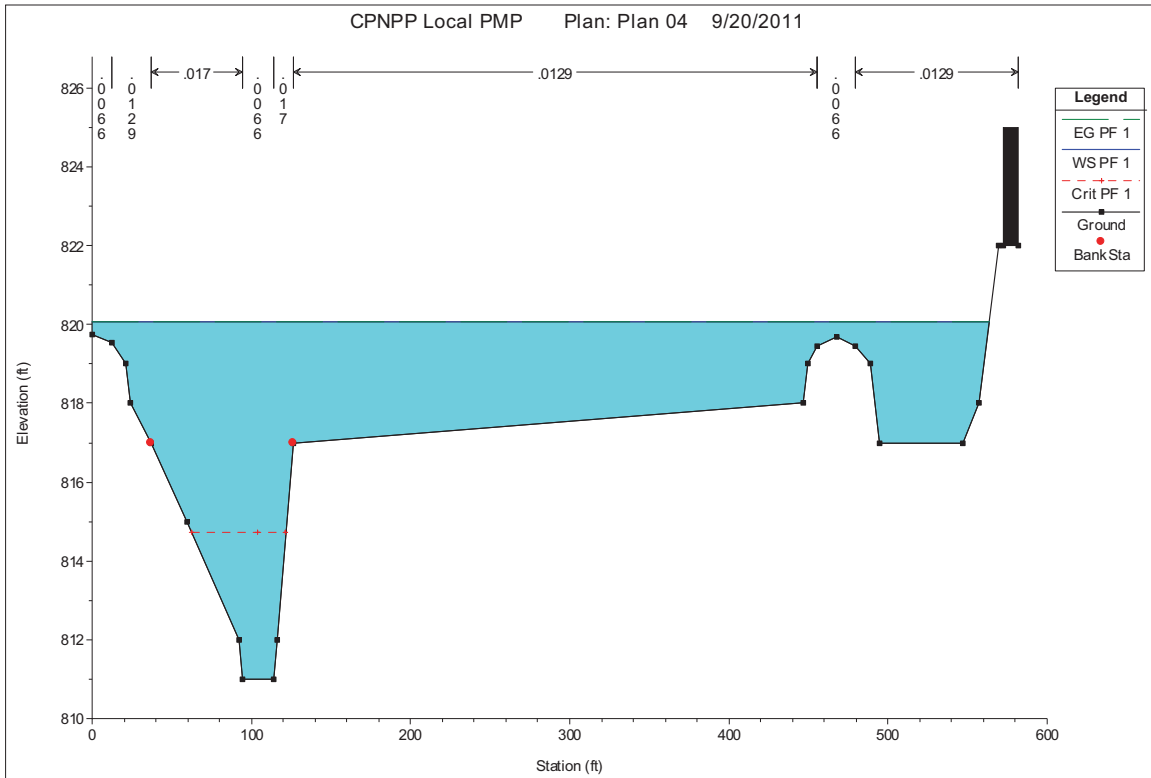
Center North Channel Cross Section 6



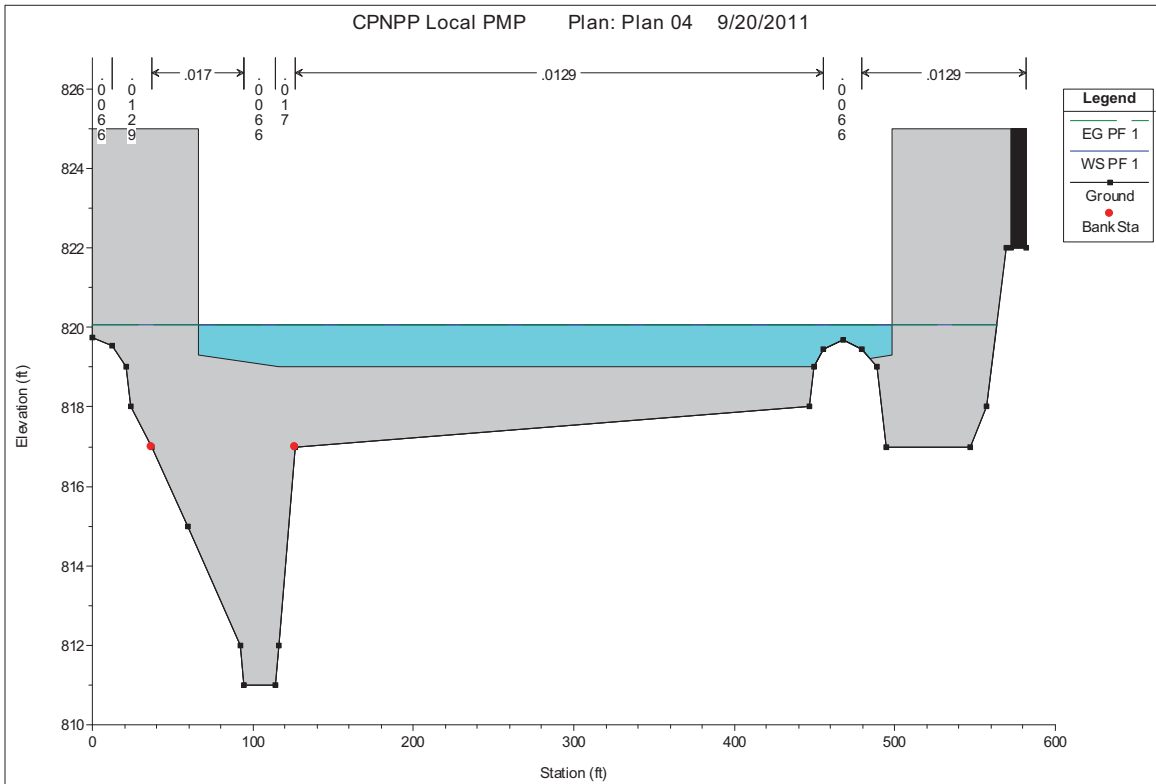
Center North Channel Cross Section 5



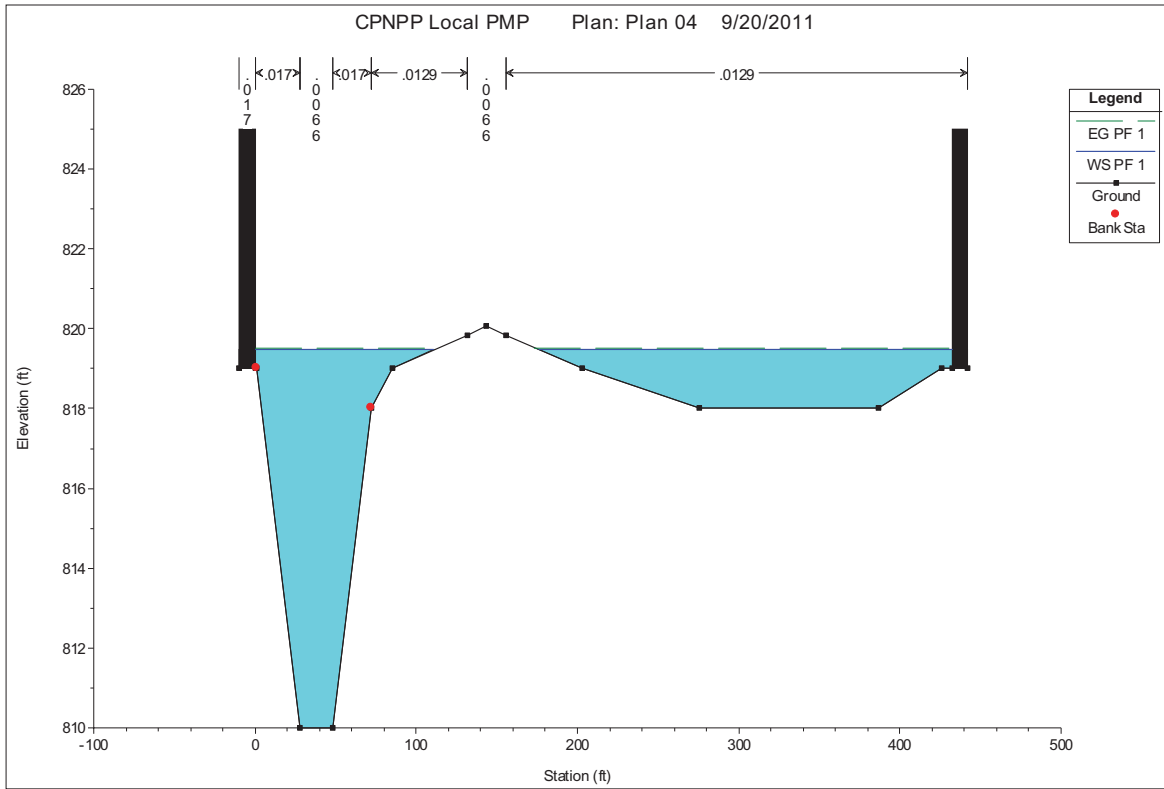
Center North Channel Cross Section 4



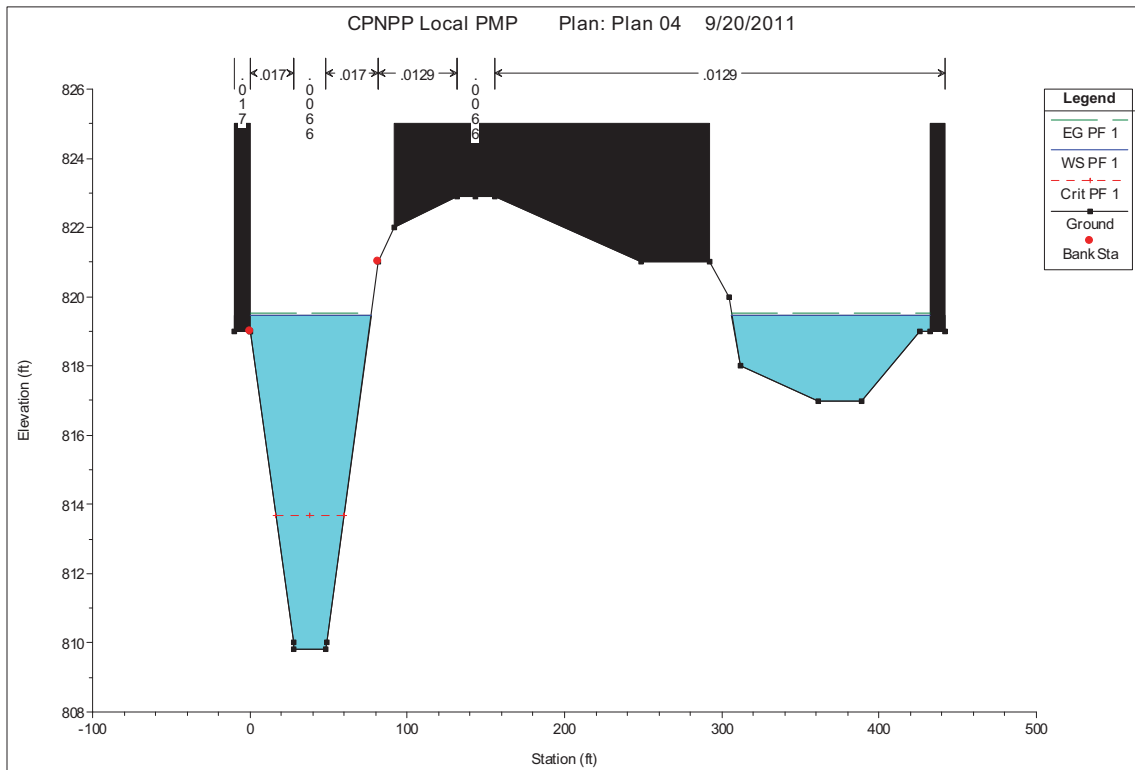
Center North Channel Cross Section 3



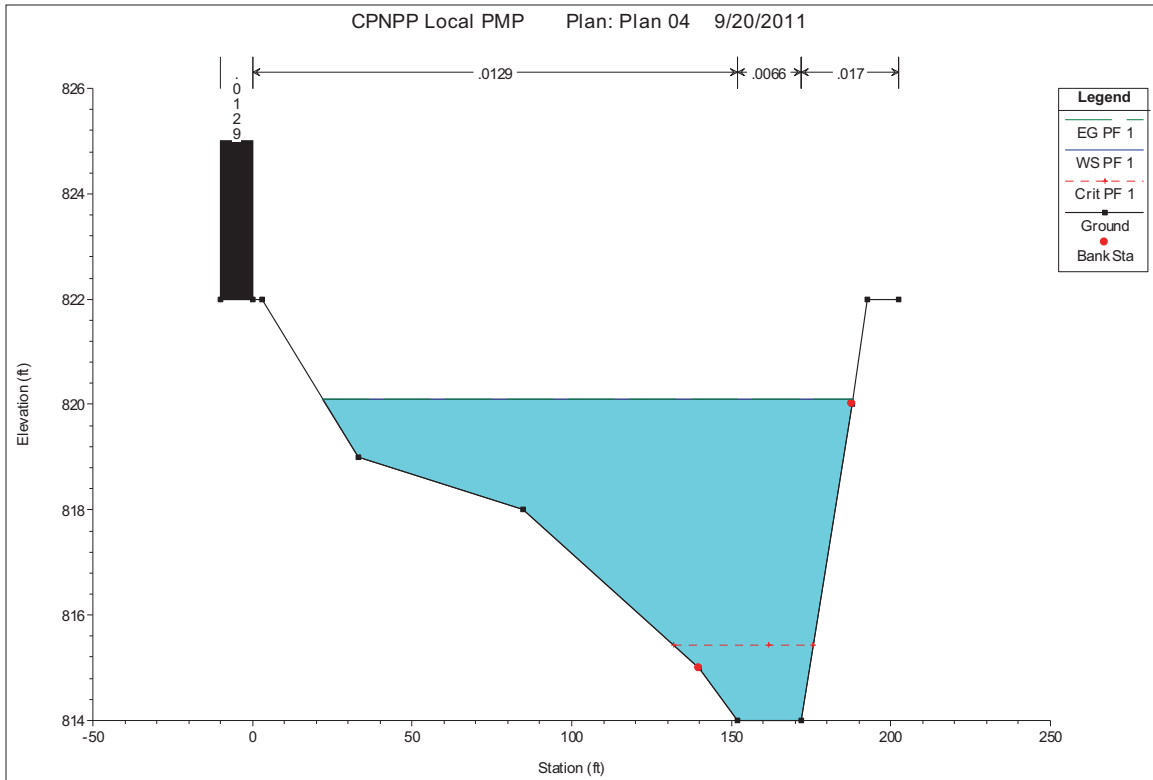
Center North Channel Inline Structure 2.5



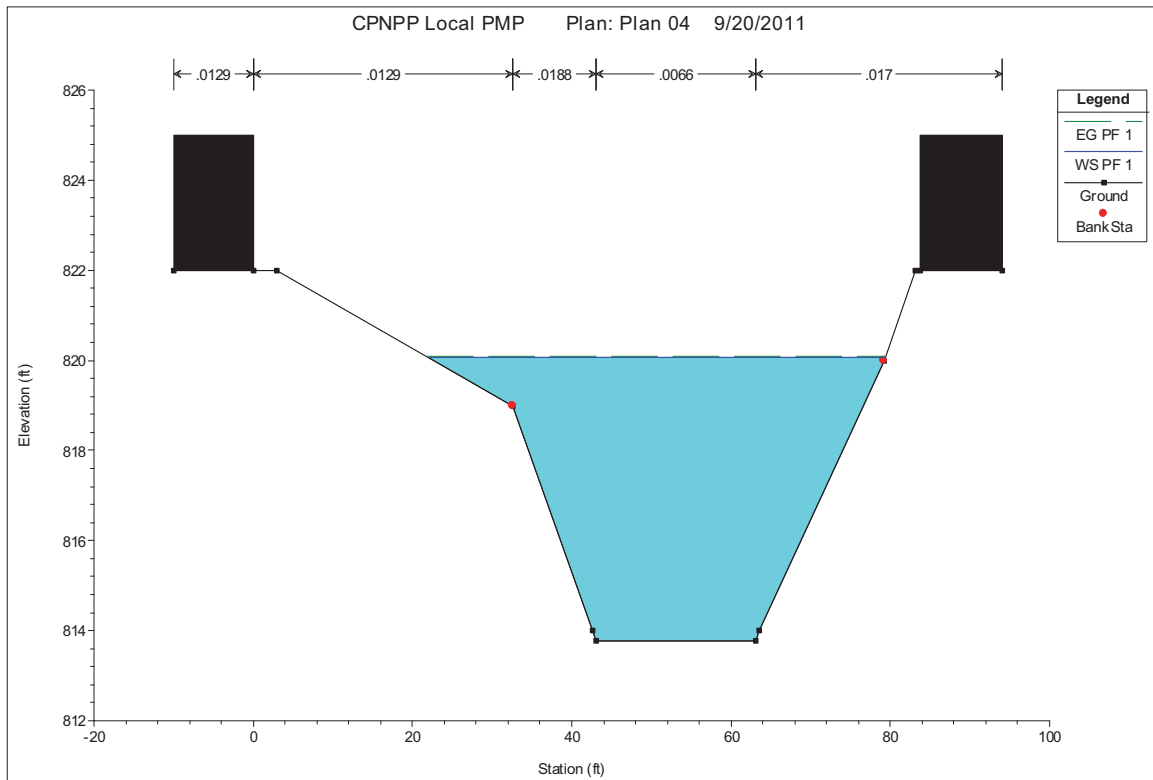
Center North Channel Cross Section 2



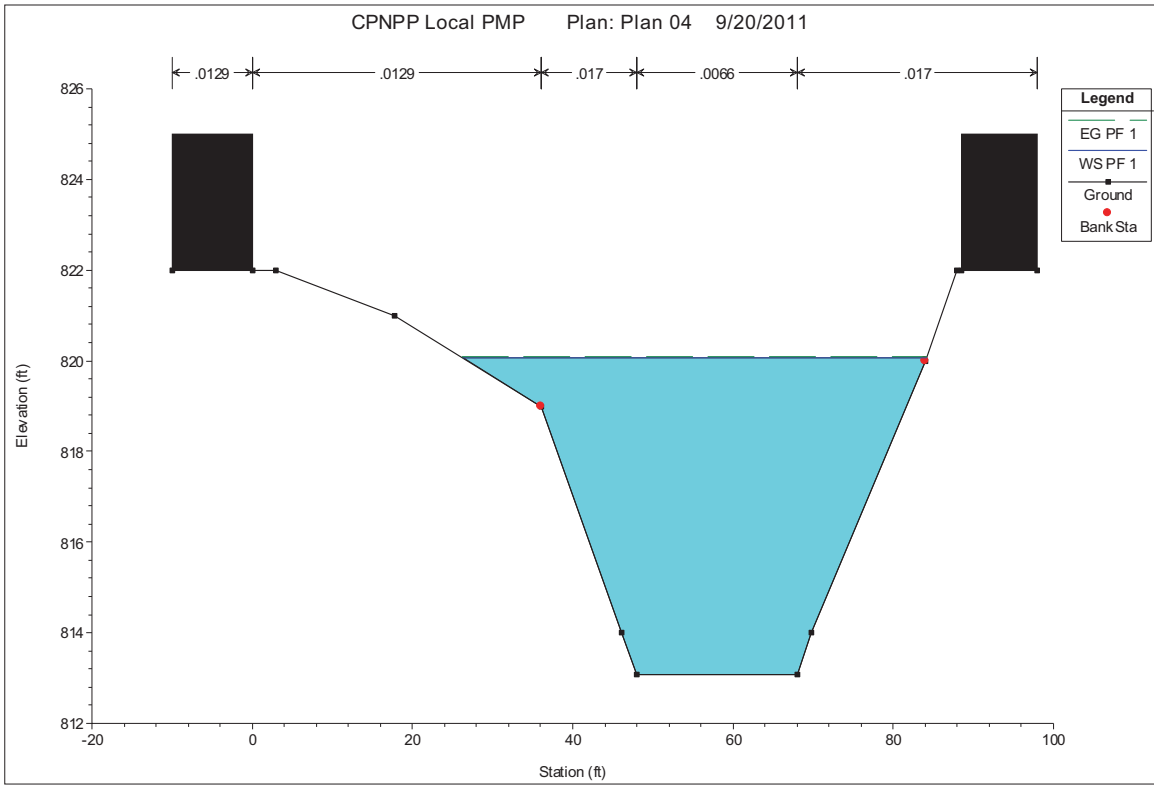
Center North Channel Cross Section 1



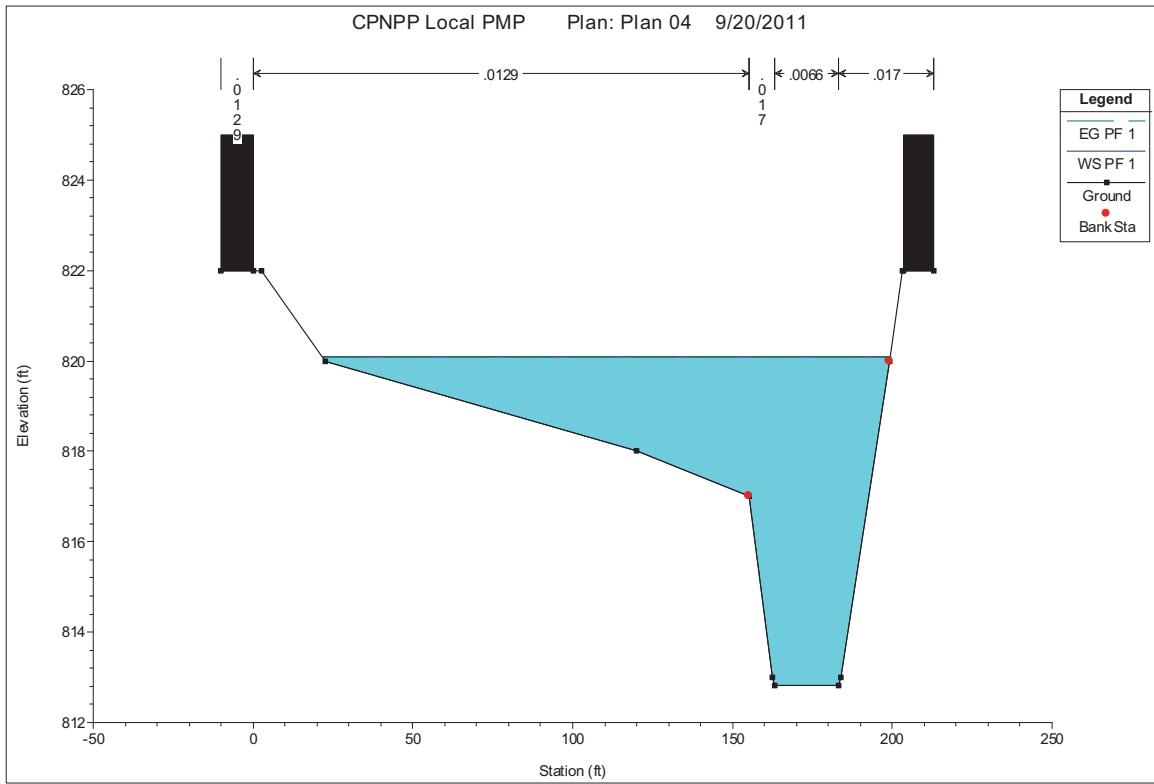
Center North Channel Cross Section 108



Center North Channel Cross Section 107

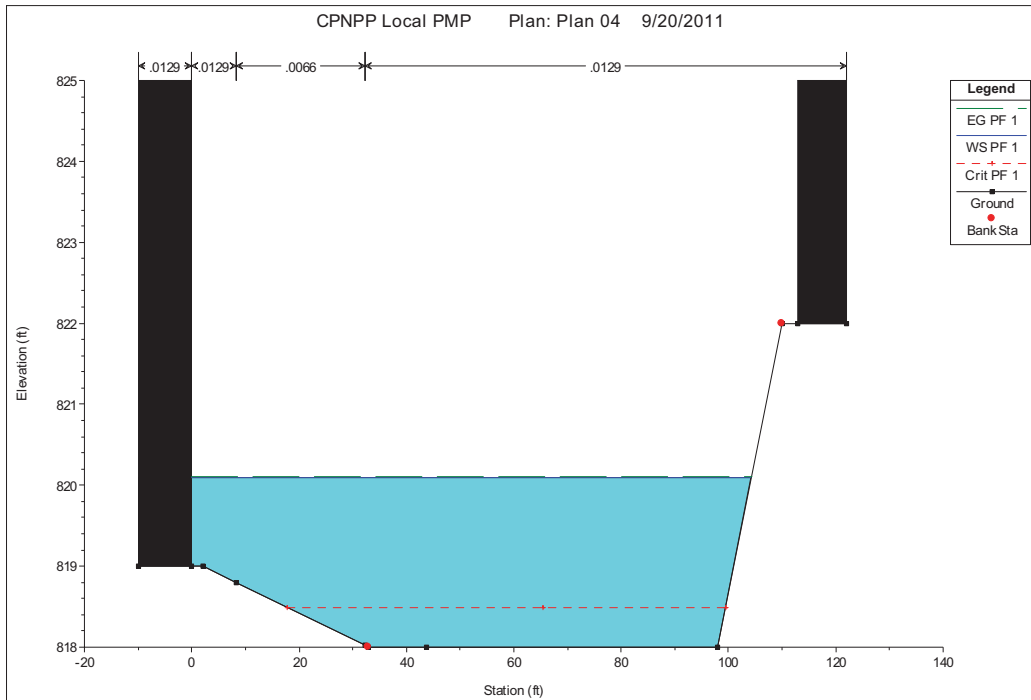


Center North Channel Cross Section 106

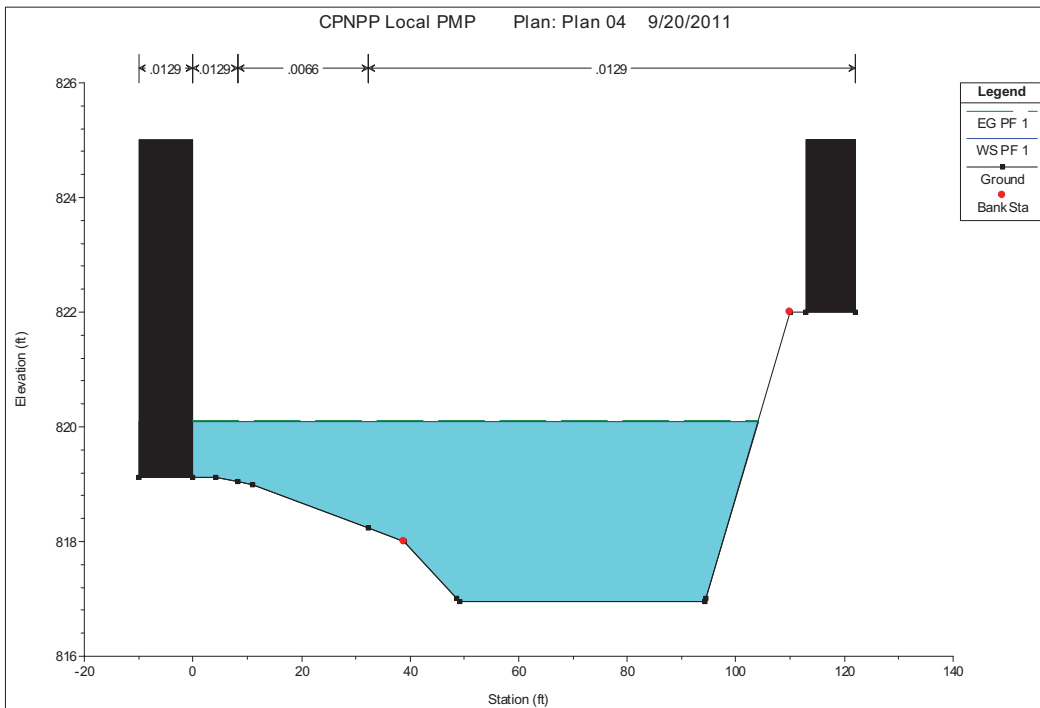


Center North Channel Cross Section 105

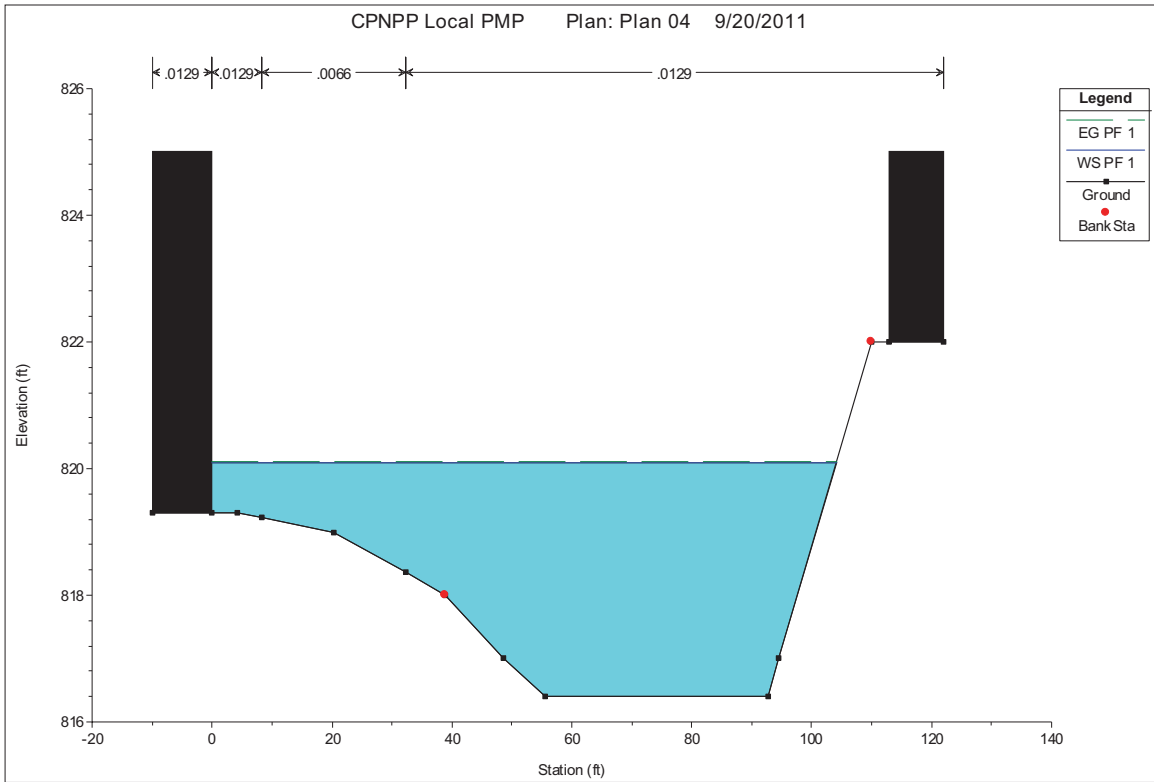
Unit 4 North Channel Cross Section Plots



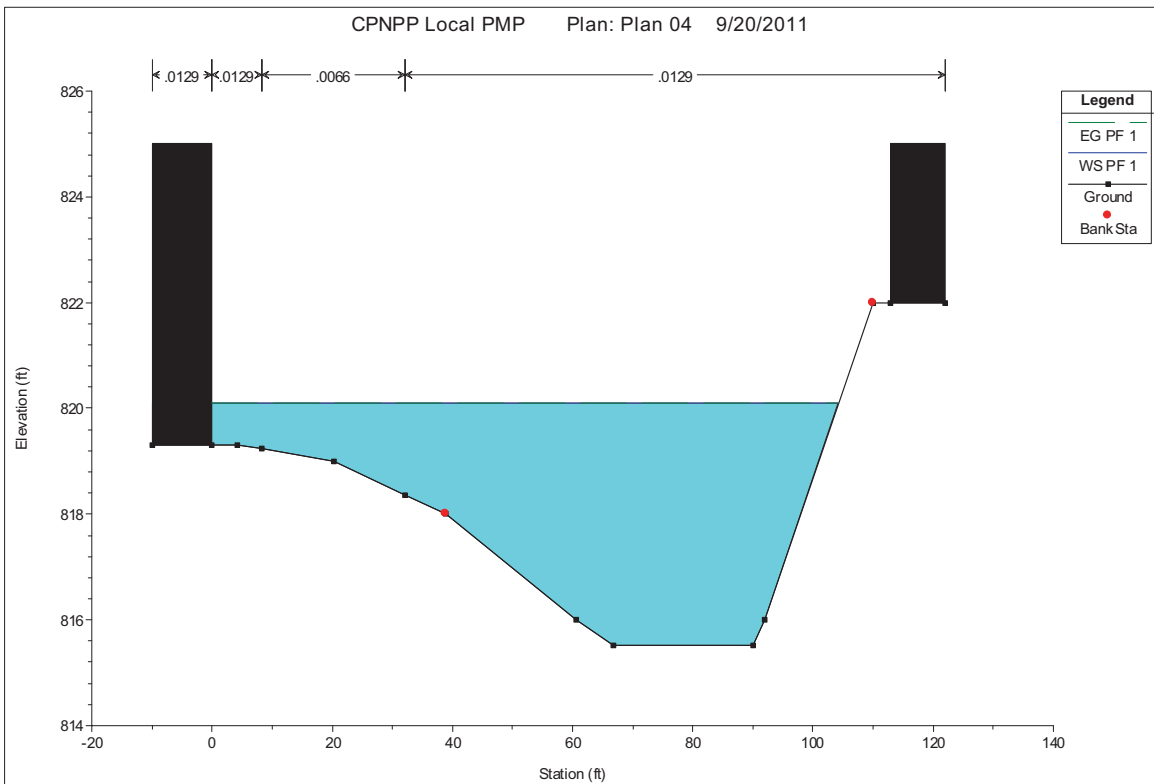
Unit 4 North Channel Cross Section 6



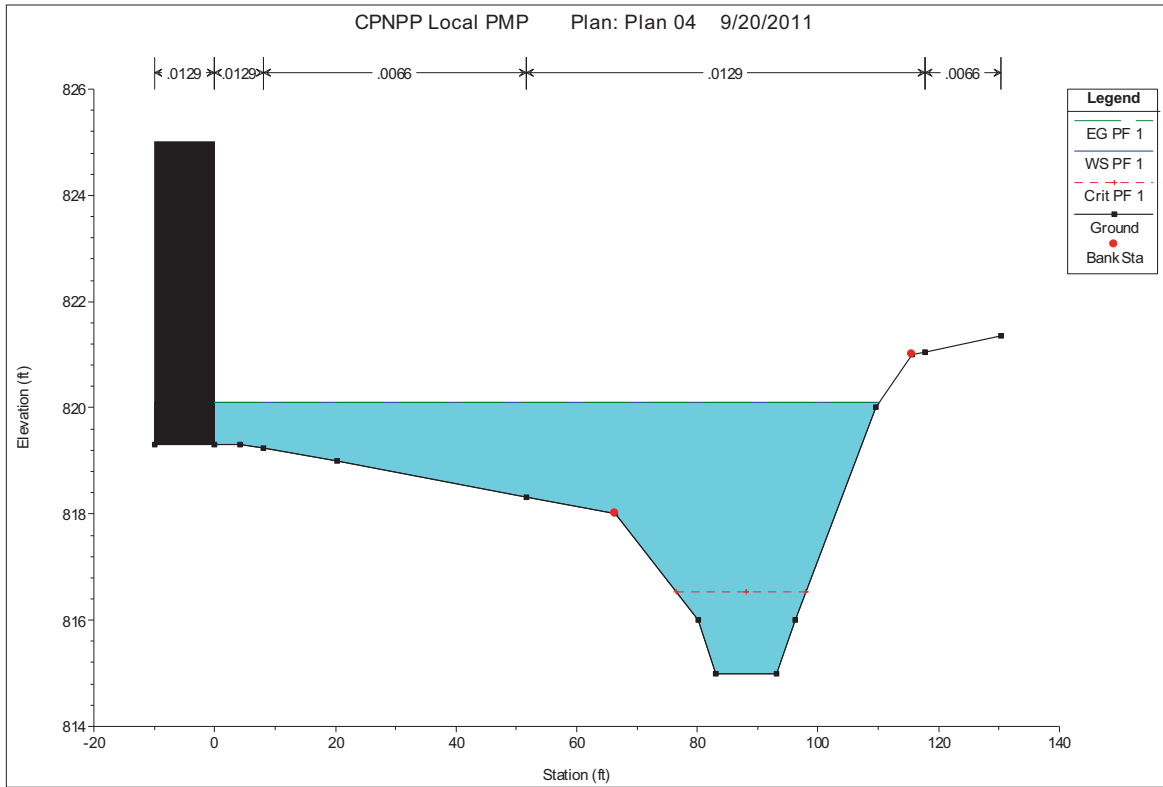
Unit 4 North Channel Cross Section 5



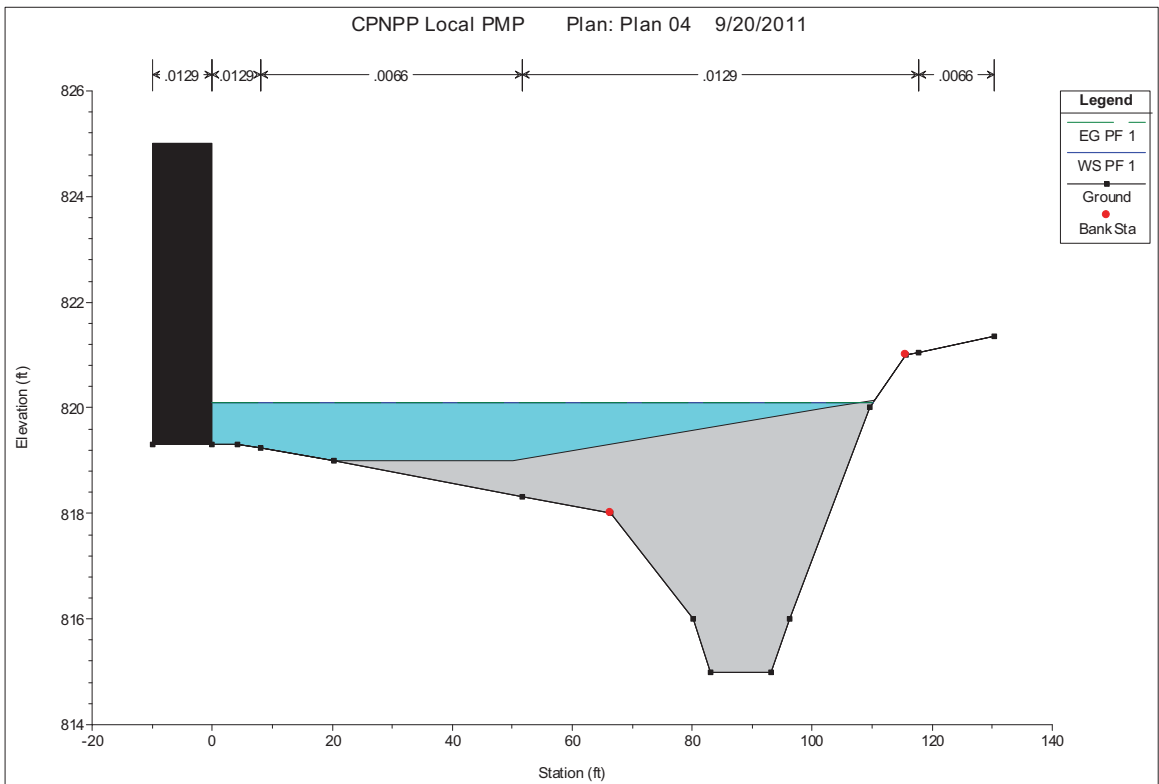
Unit 4 North Channel Cross Section 4



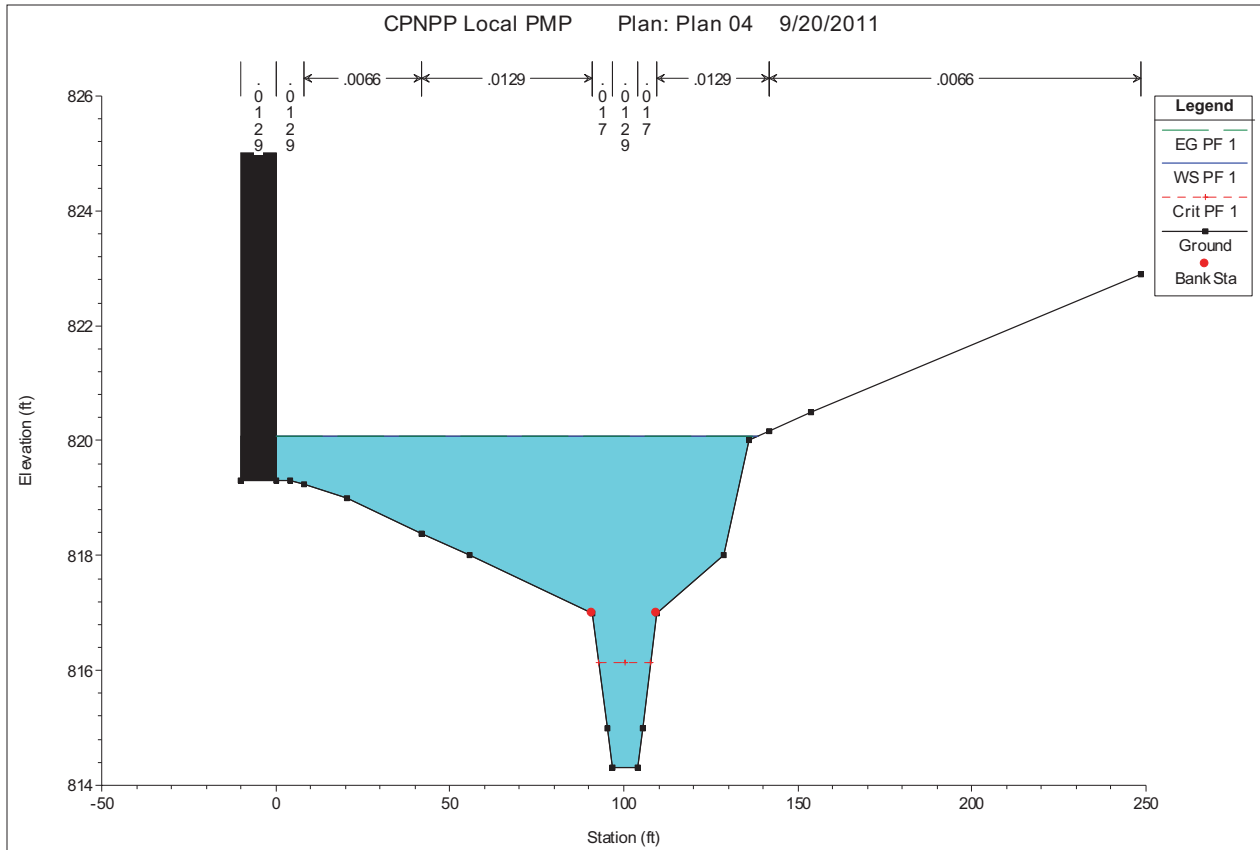
Unit 4 North Channel Cross Section 3



Unit 4 North Channel Cross Section 2

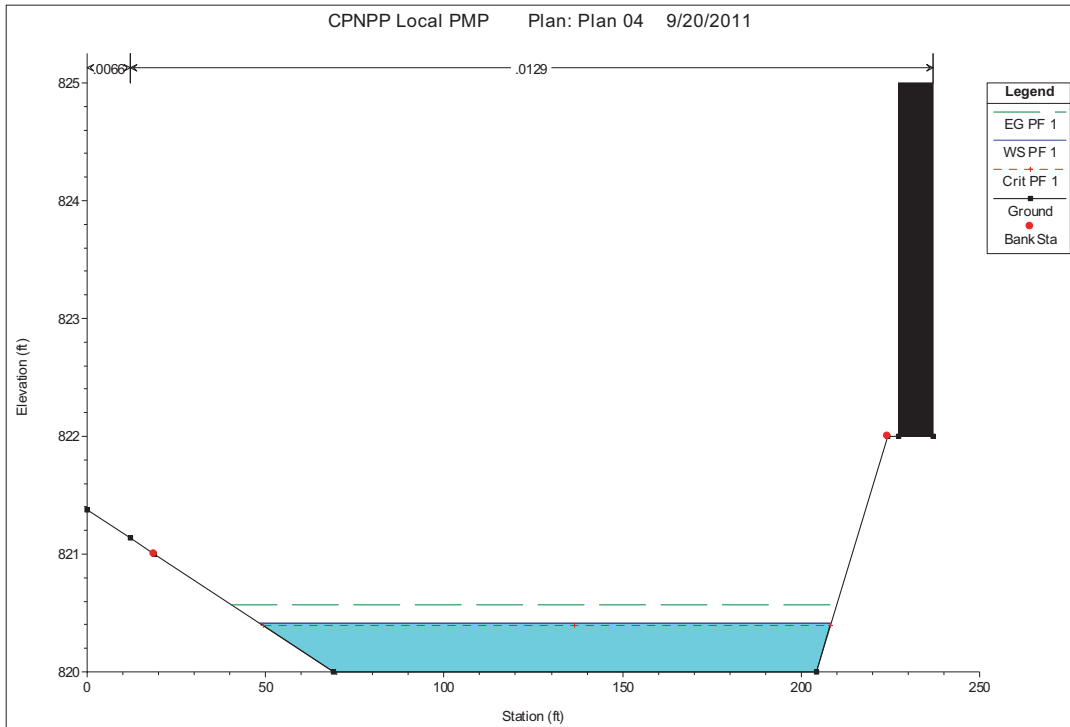


Unit 4 North Channel Inline Structure 1.5

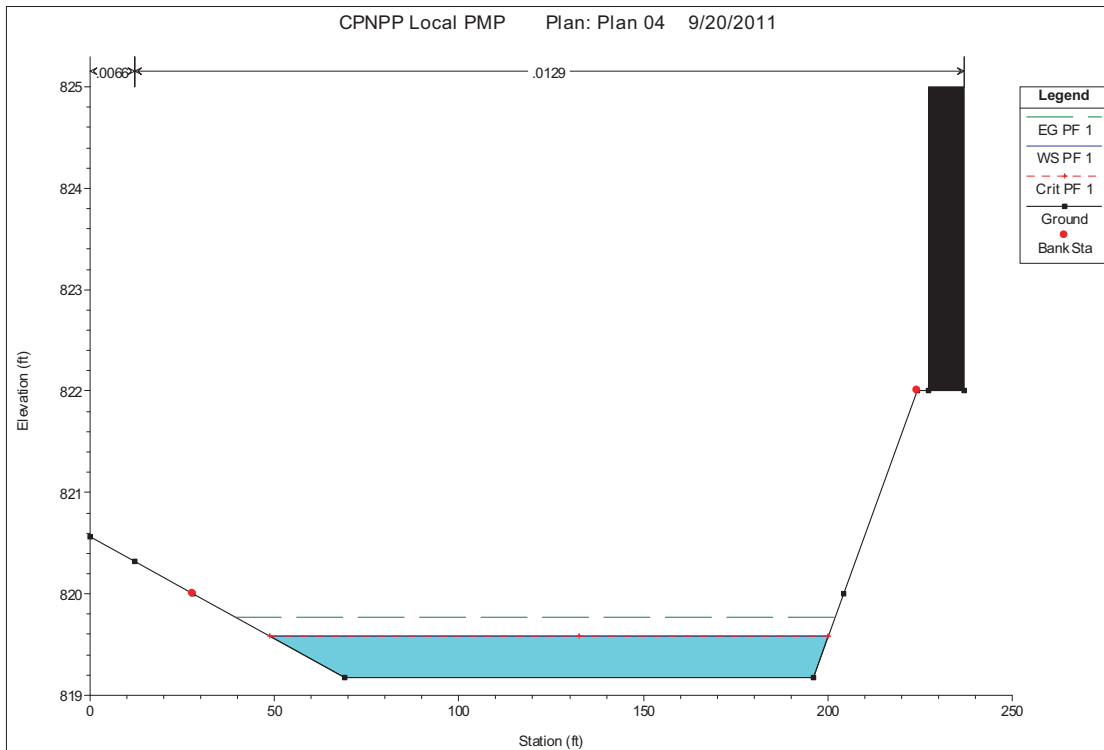


Unit 4 North Channel Cross Section 1

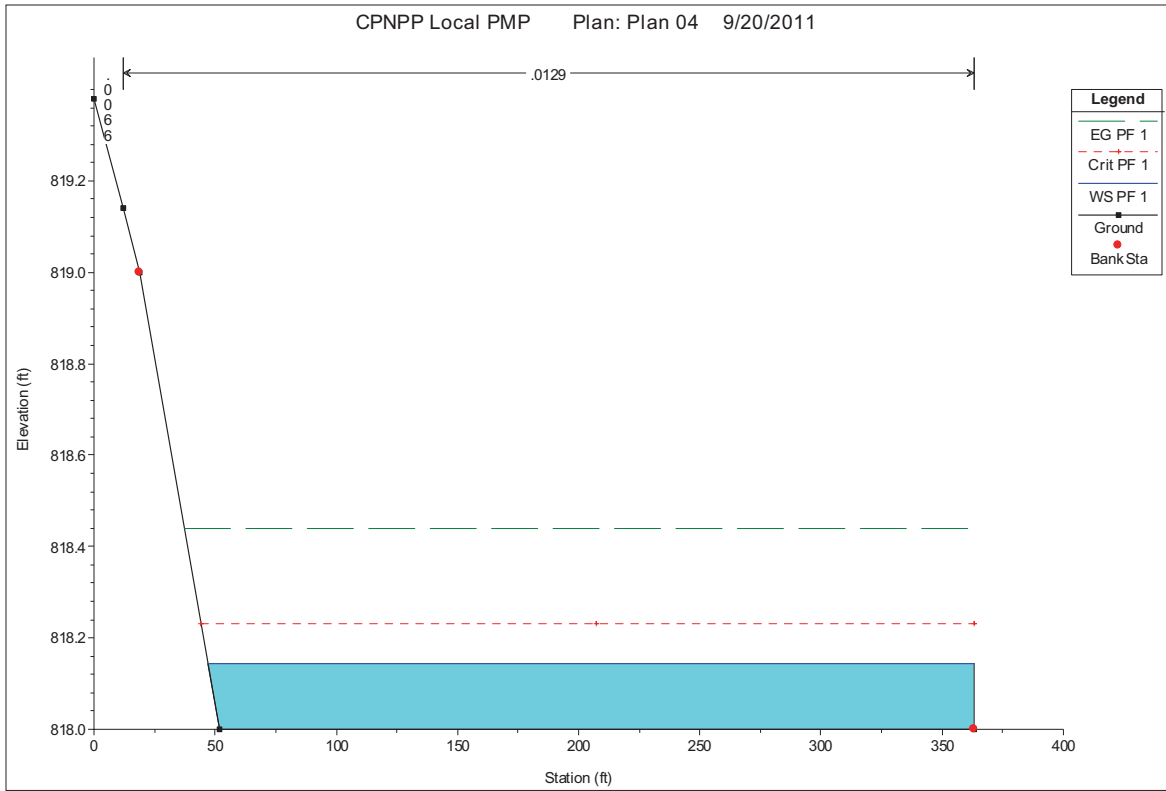
Unit 3 East Channel Cross Section Plots



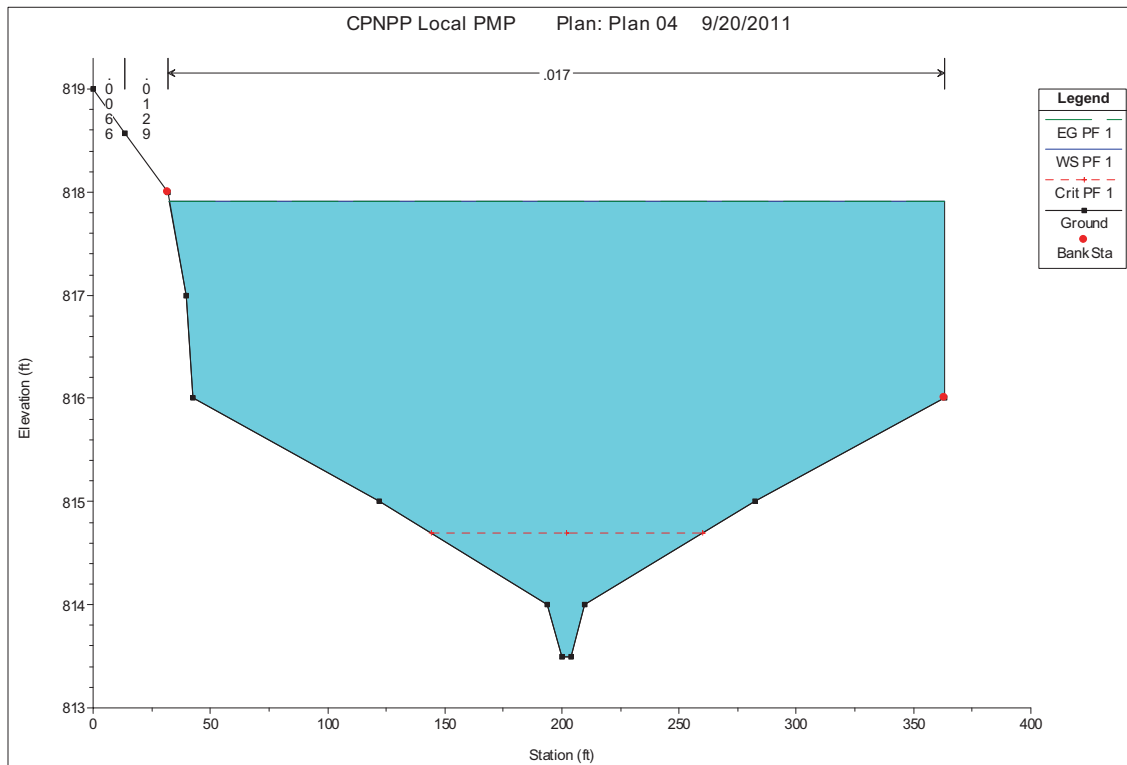
Unit 3 East Channel Cross Section 5



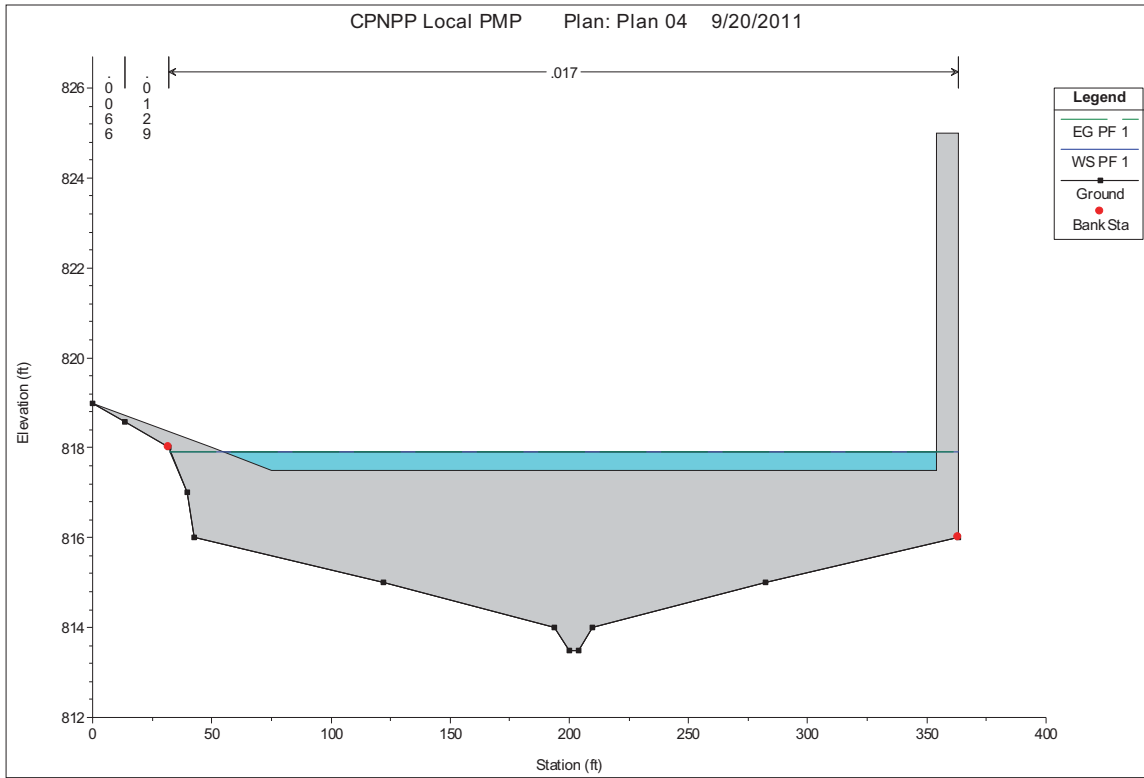
Unit 3 East Channel Cross Section 4



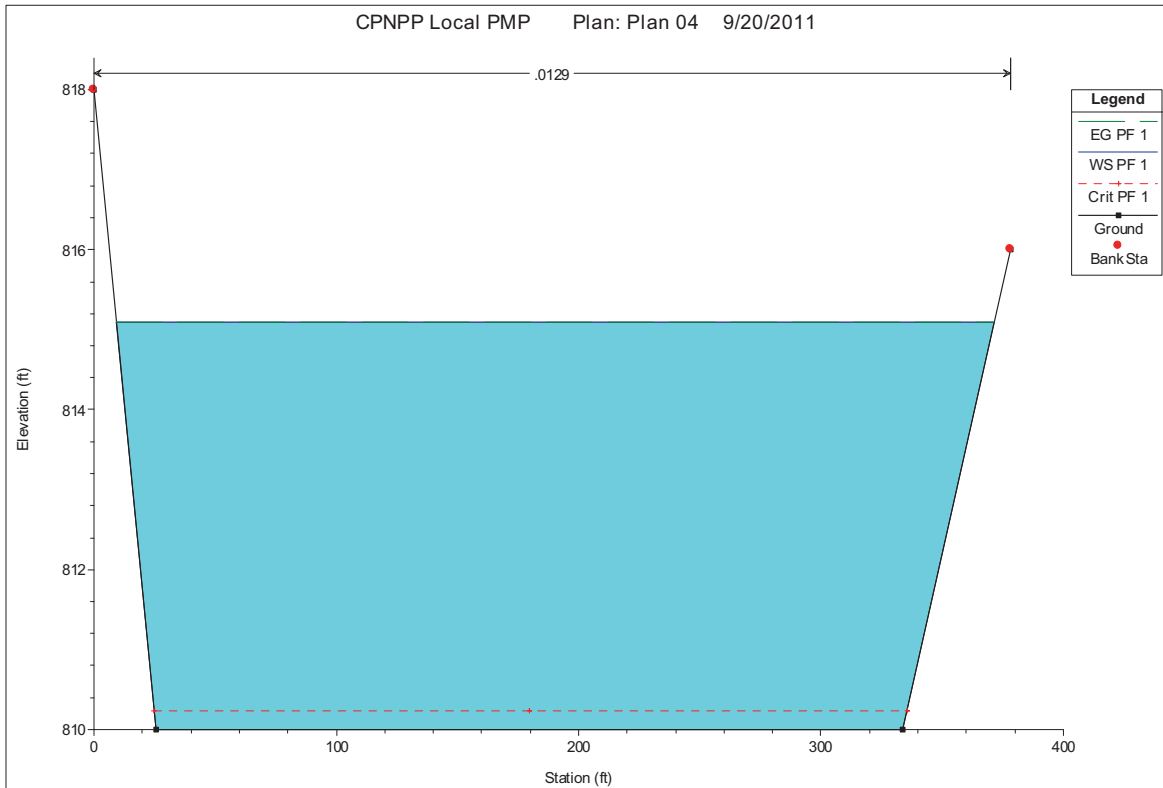
Unit 3 East Channel Cross Section 3



Unit 3 East Channel Cross Section 2

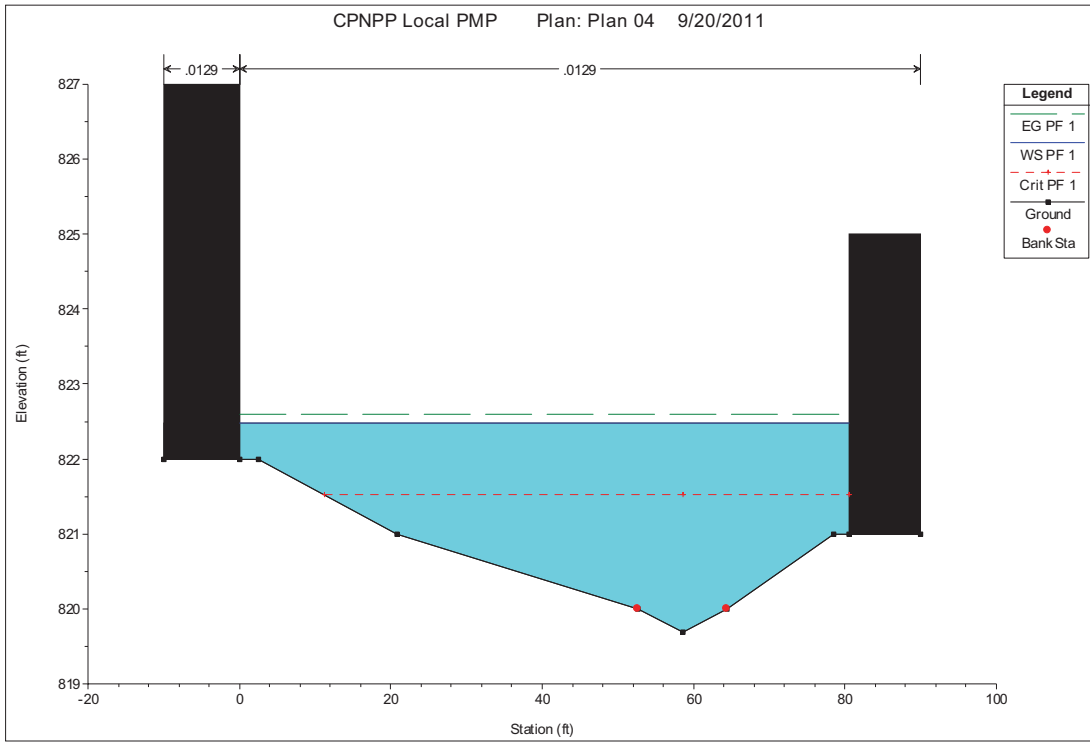


Unit 3 East Channel Inline Structure 1.5

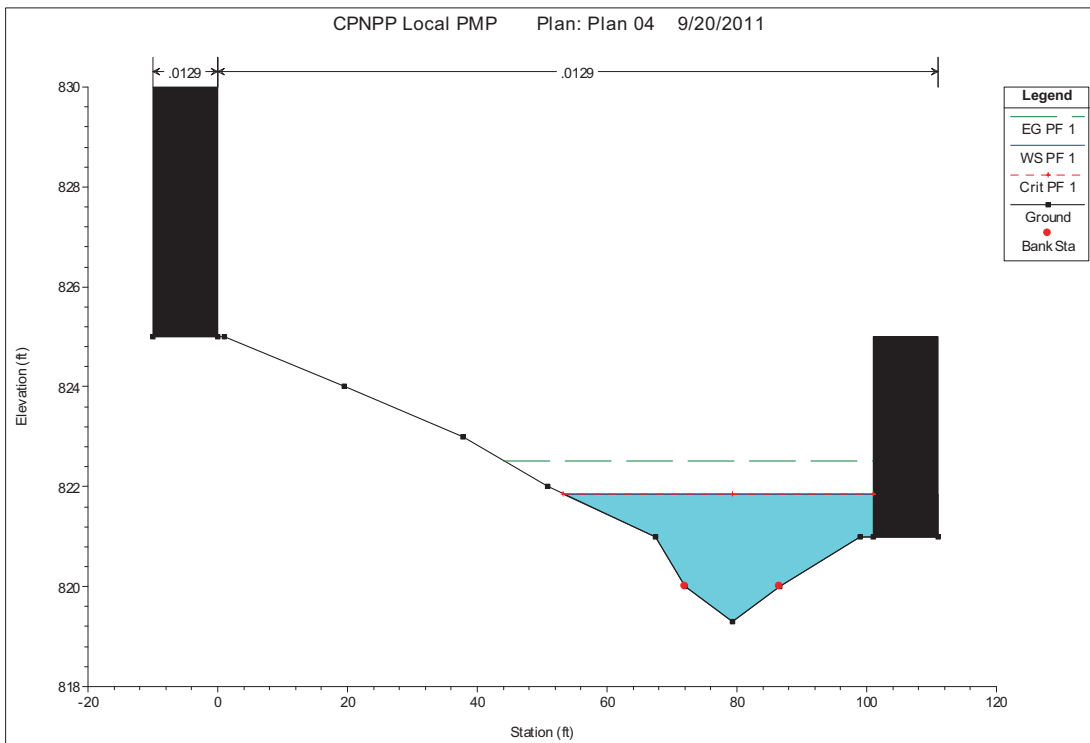


Unit 3 East Channel Cross Section 1

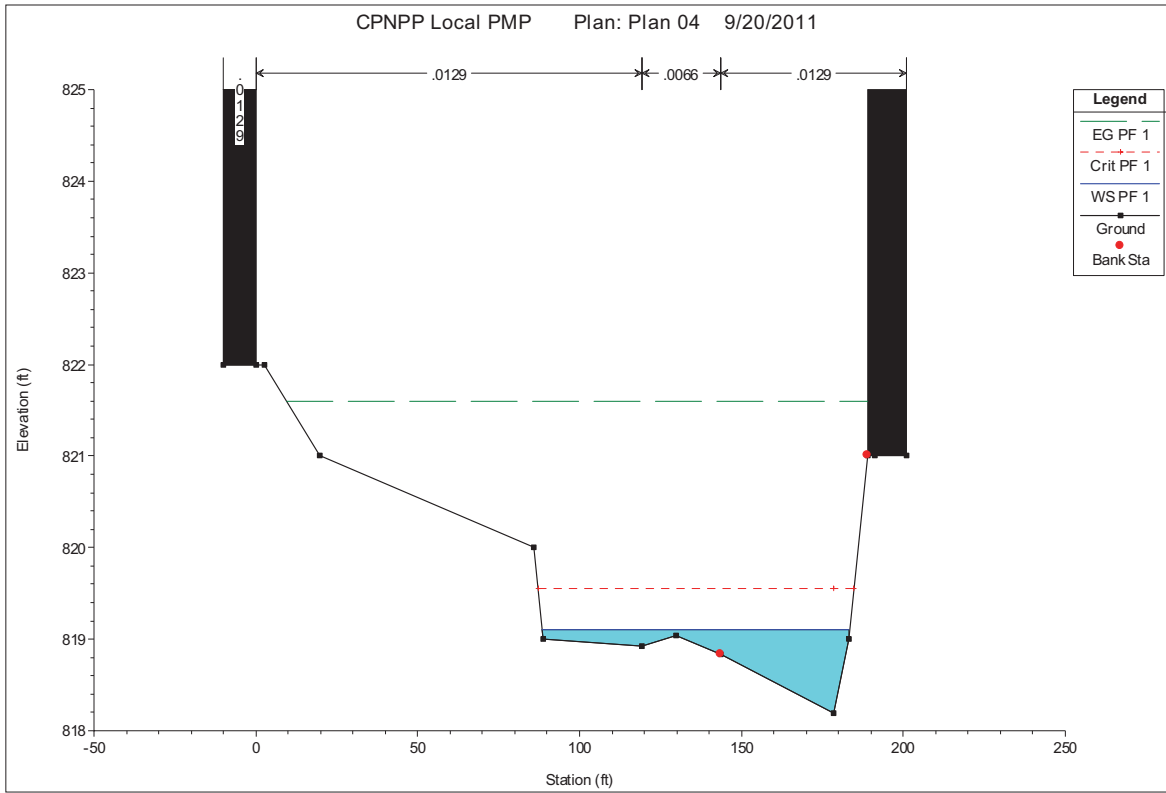
Unit 3 Southeast Channel Cross Section Plots



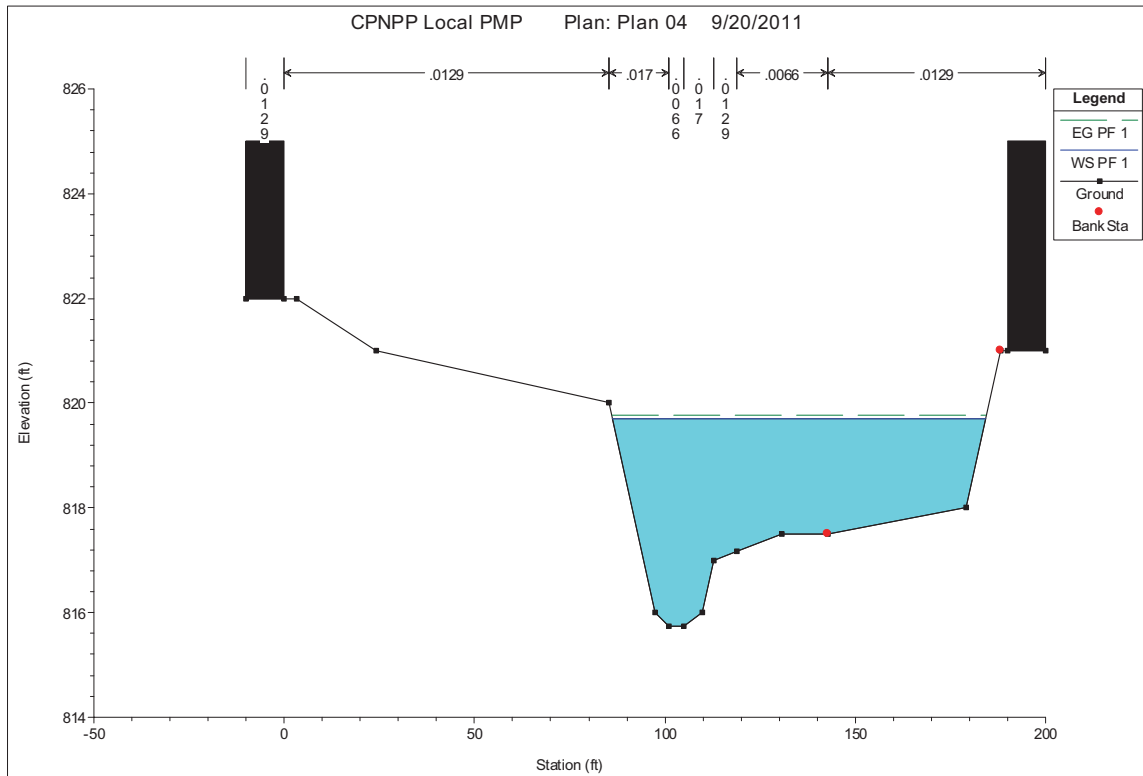
Unit 3 Southeast Channel Cross Section 11



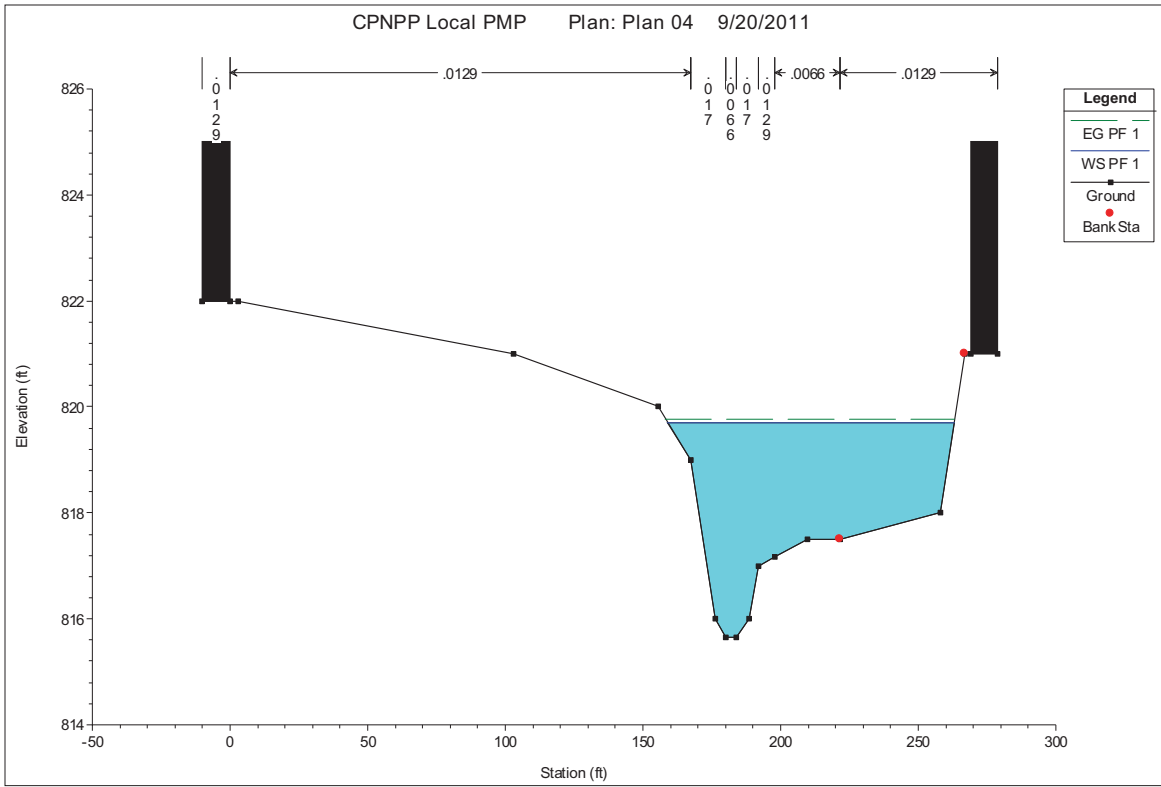
Unit 3 Southeast Channel Cross Section 10



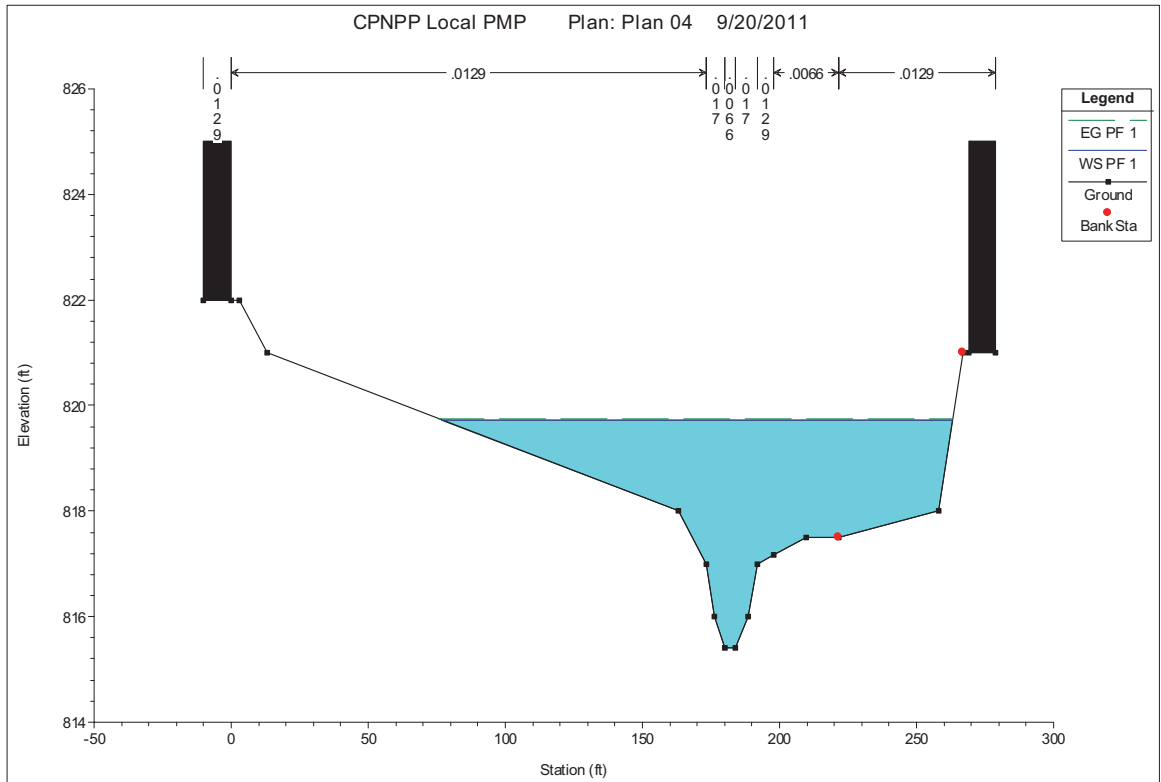
Unit 3 Southeast Channel Cross Section 9



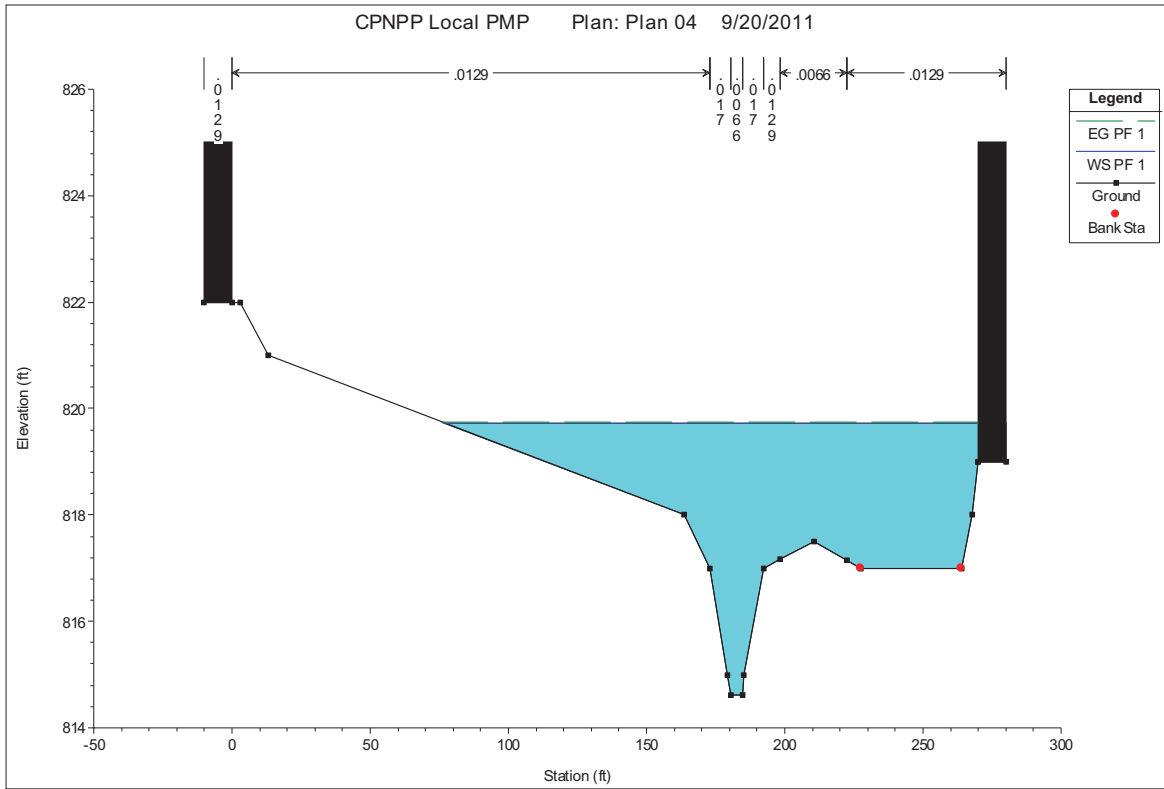
Unit 3 Southeast Channel Cross Section 8



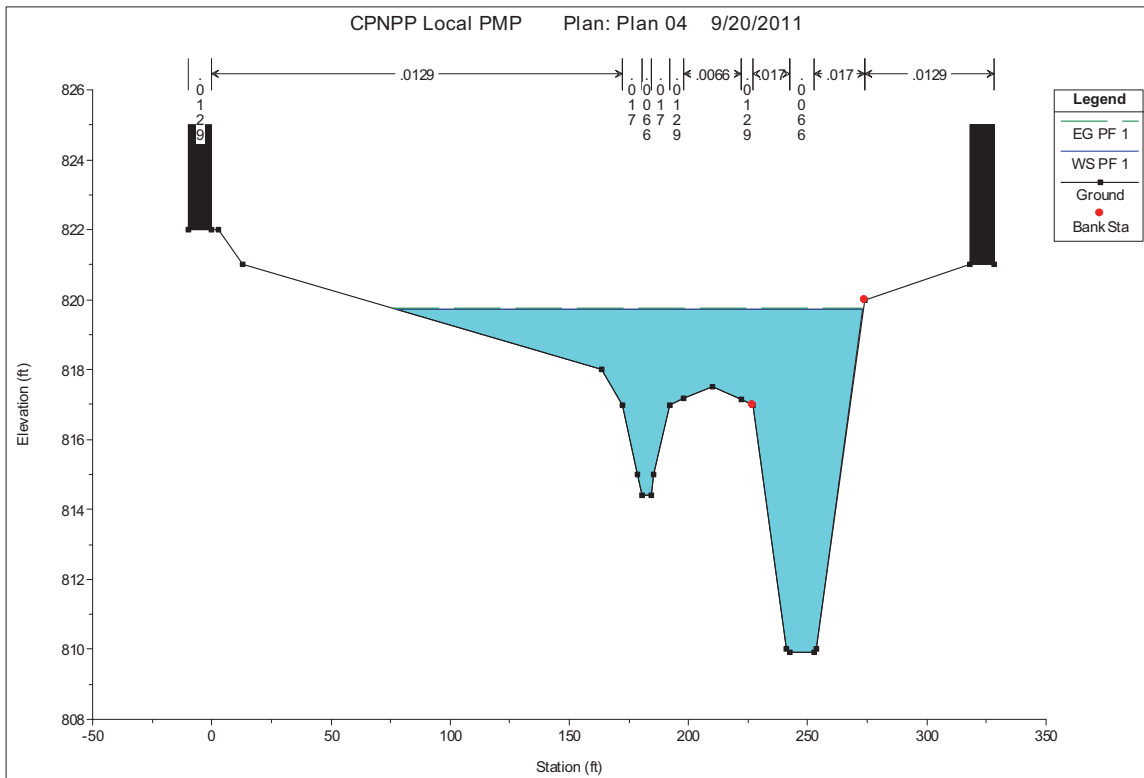
Unit 3 Southeast Channel Cross Section 7



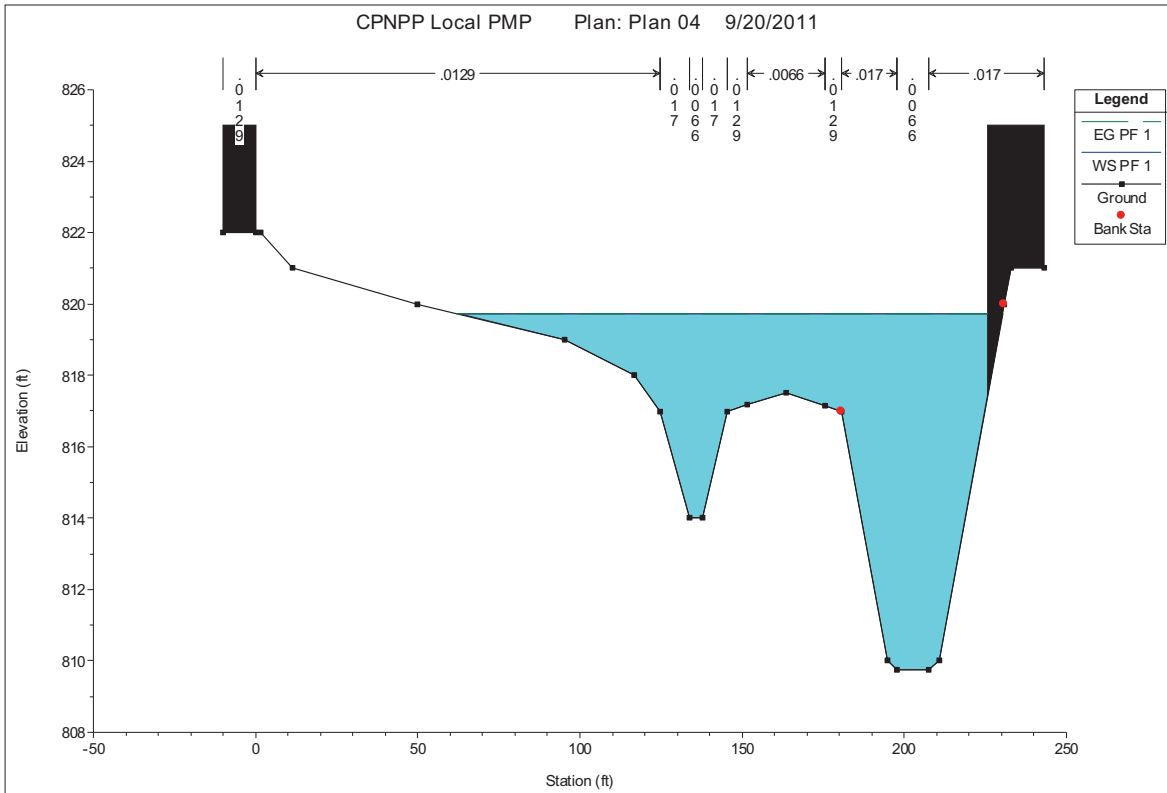
Unit 3 Southeast Channel Cross Section 6



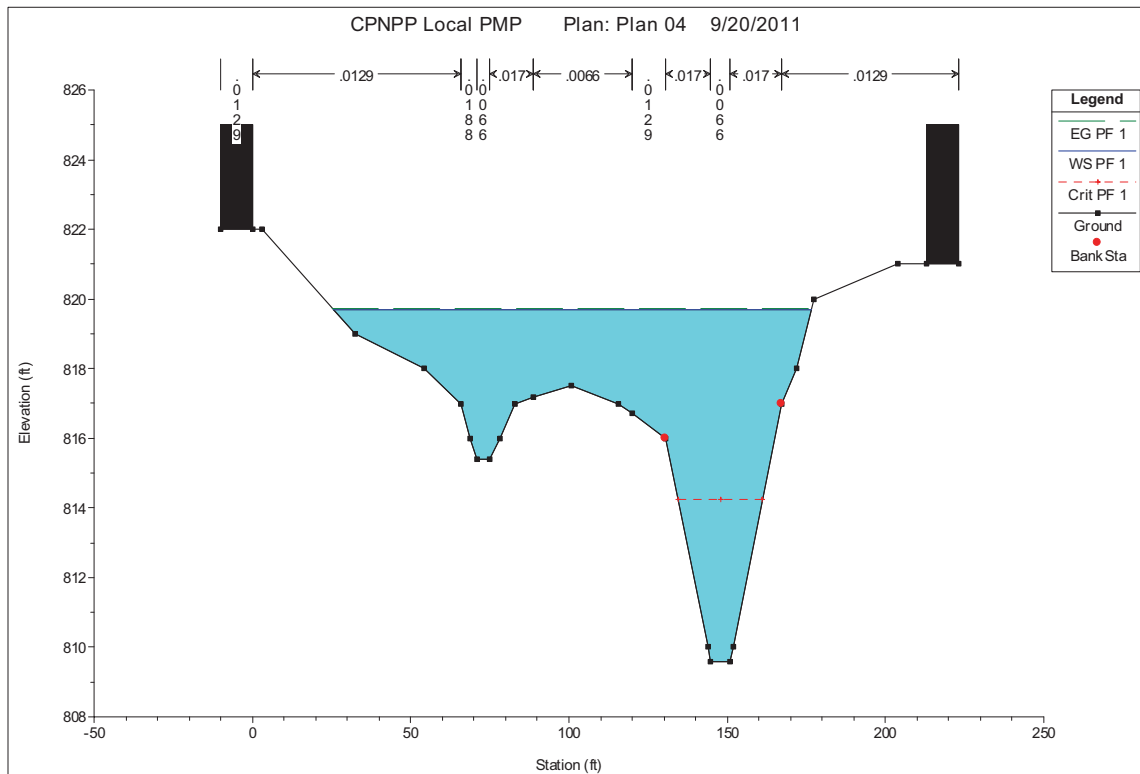
Unit 3 Southeast Channel Cross Section 5



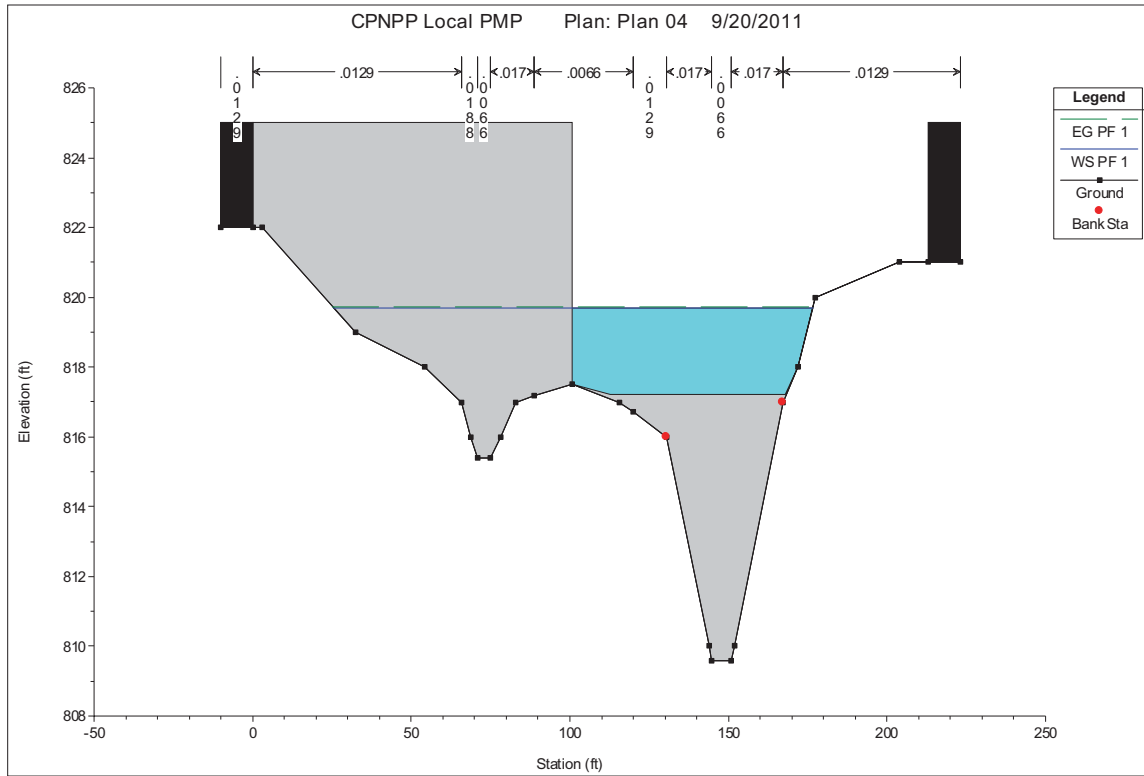
Unit 3 Southeast Channel Cross Section 4



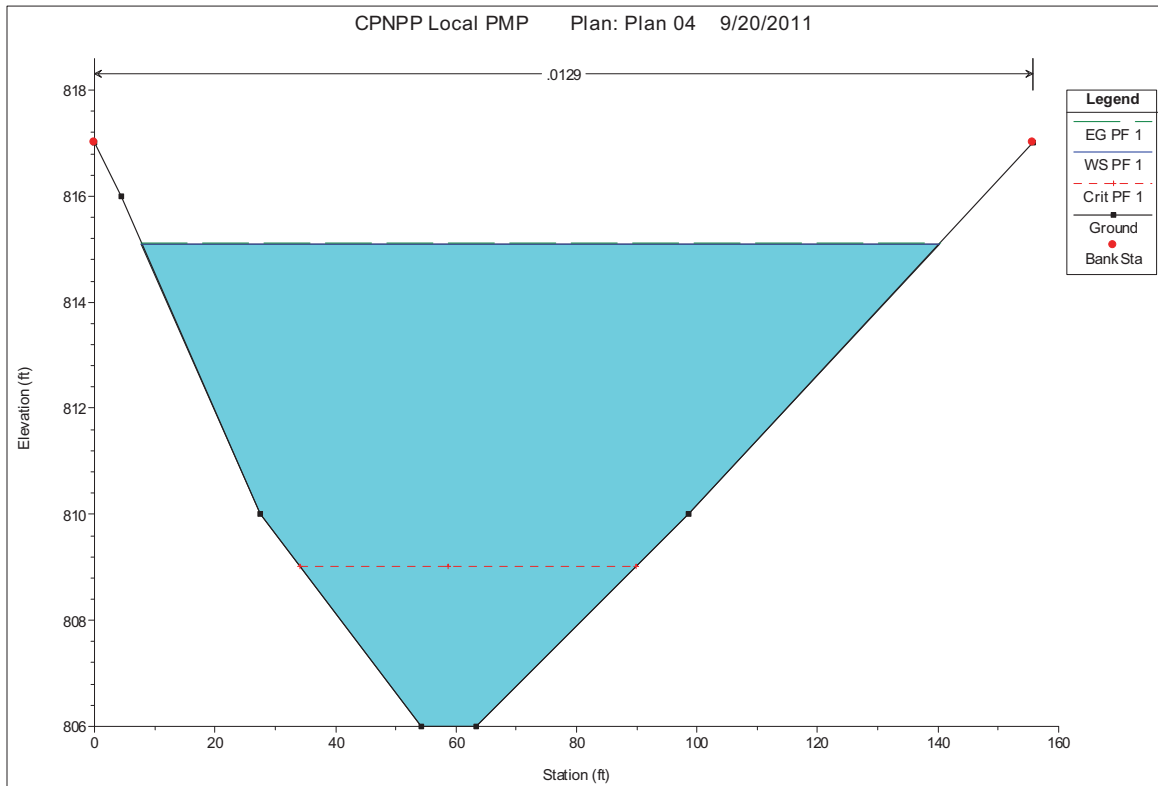
Unit 3 Southeast Channel Cross Section 3



Unit 3 Southeast Channel Cross Section 2

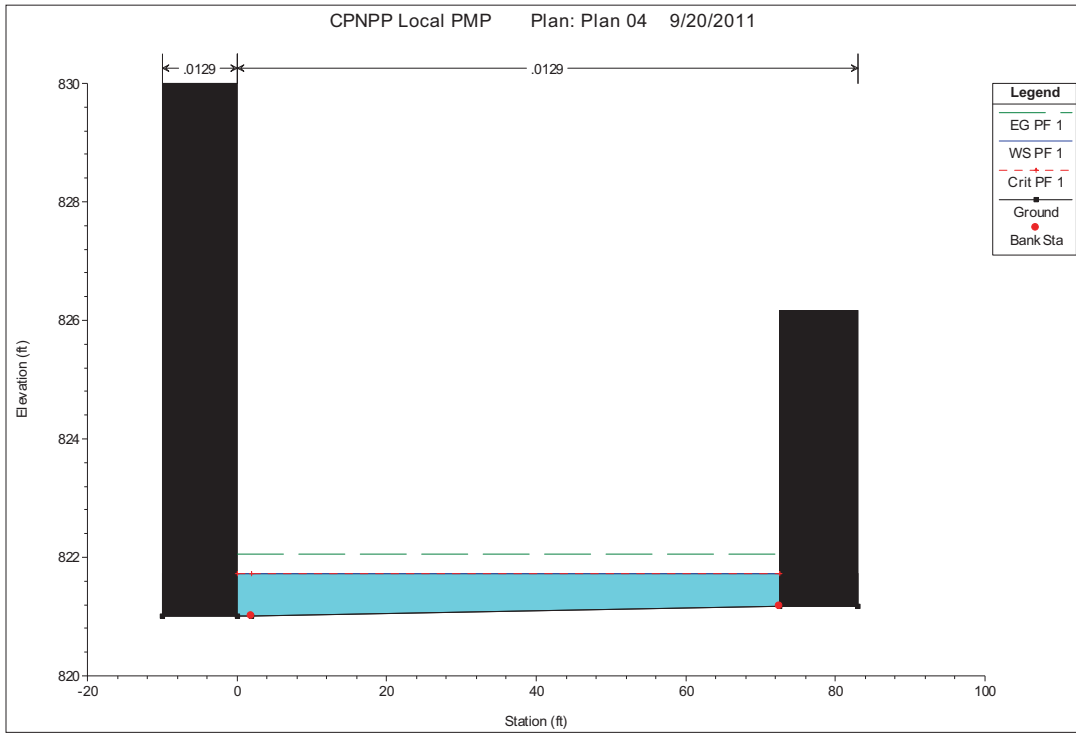


Unit 3 Southeast Channel Inline Structure 1.5

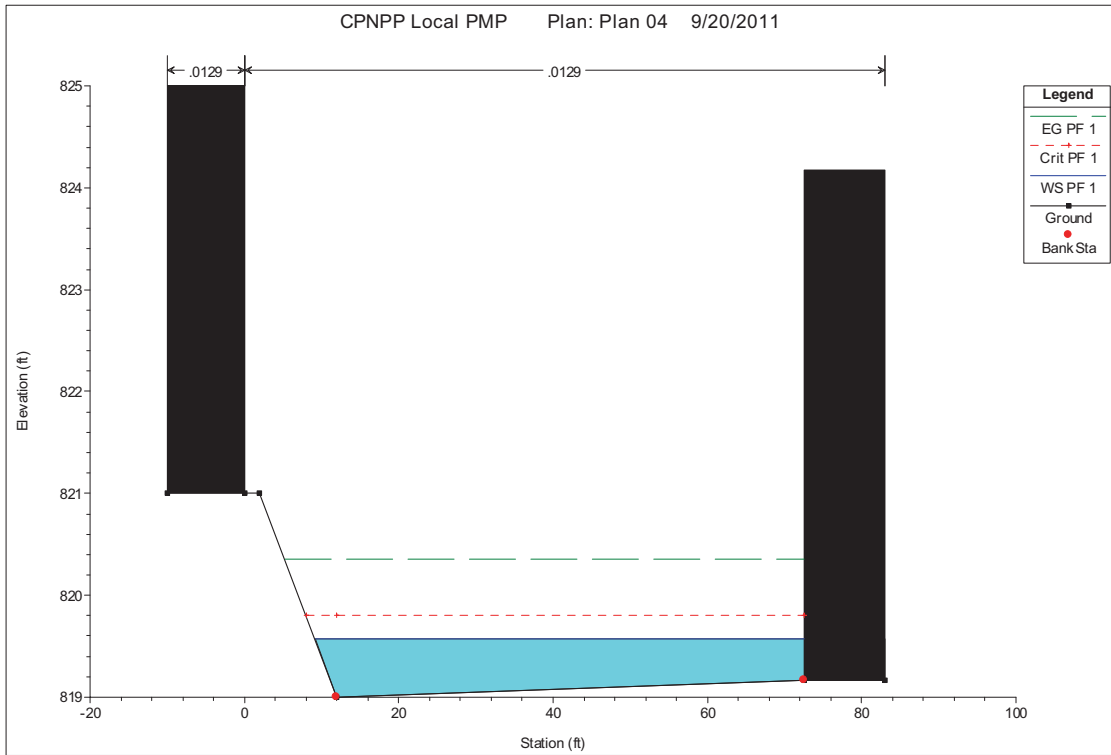


Unit 3 Southeast Channel Cross Section 1

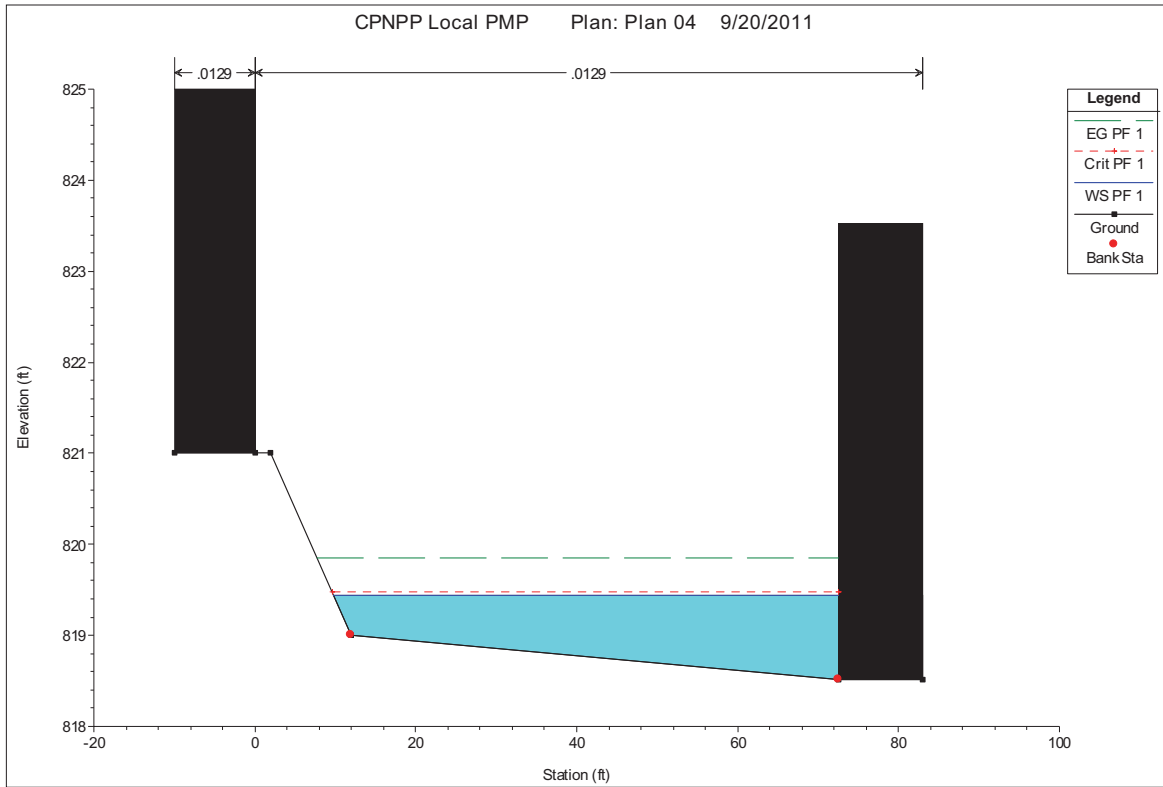
East Channel Cross Section Plots



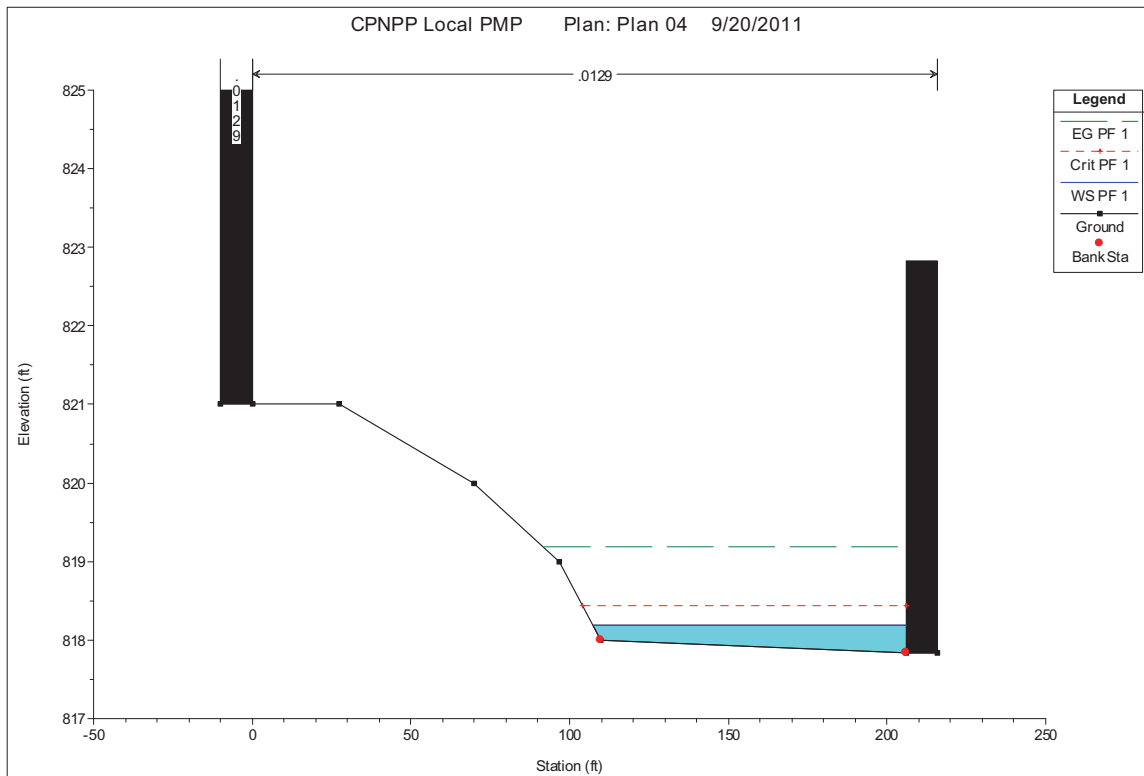
East Channel Cross Section 7



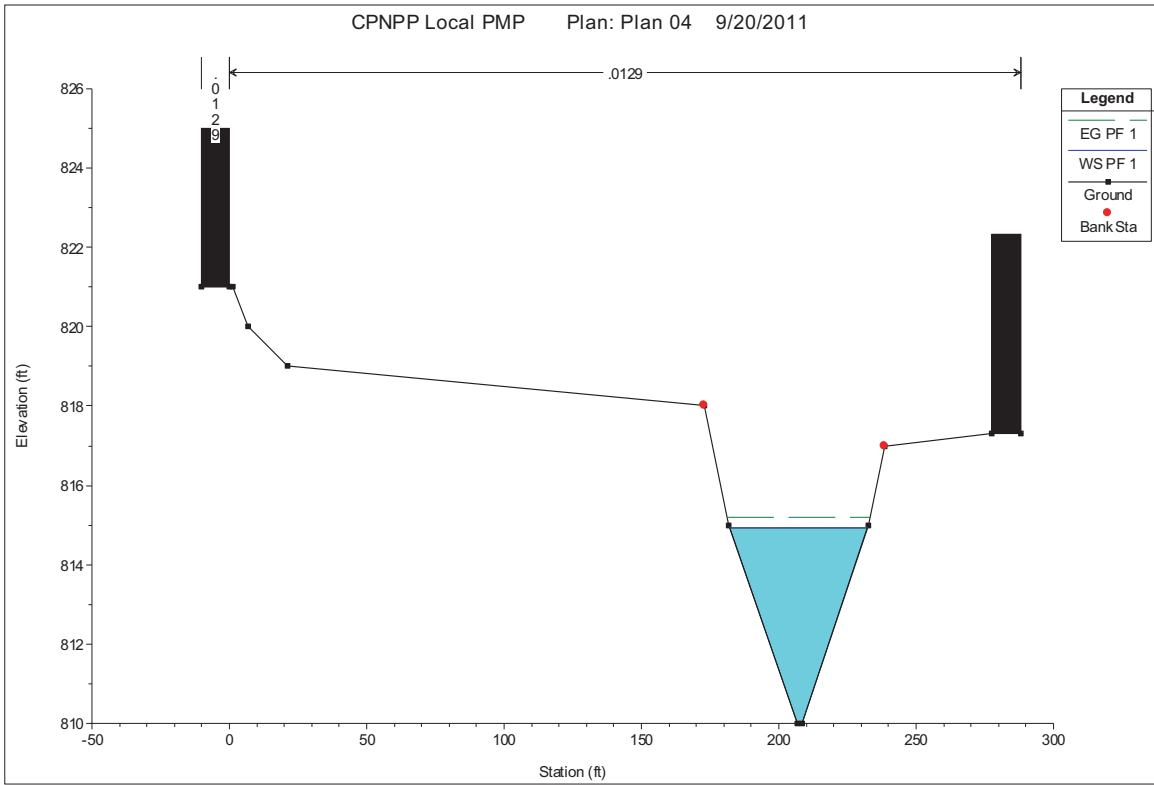
East Channel Cross Section 6



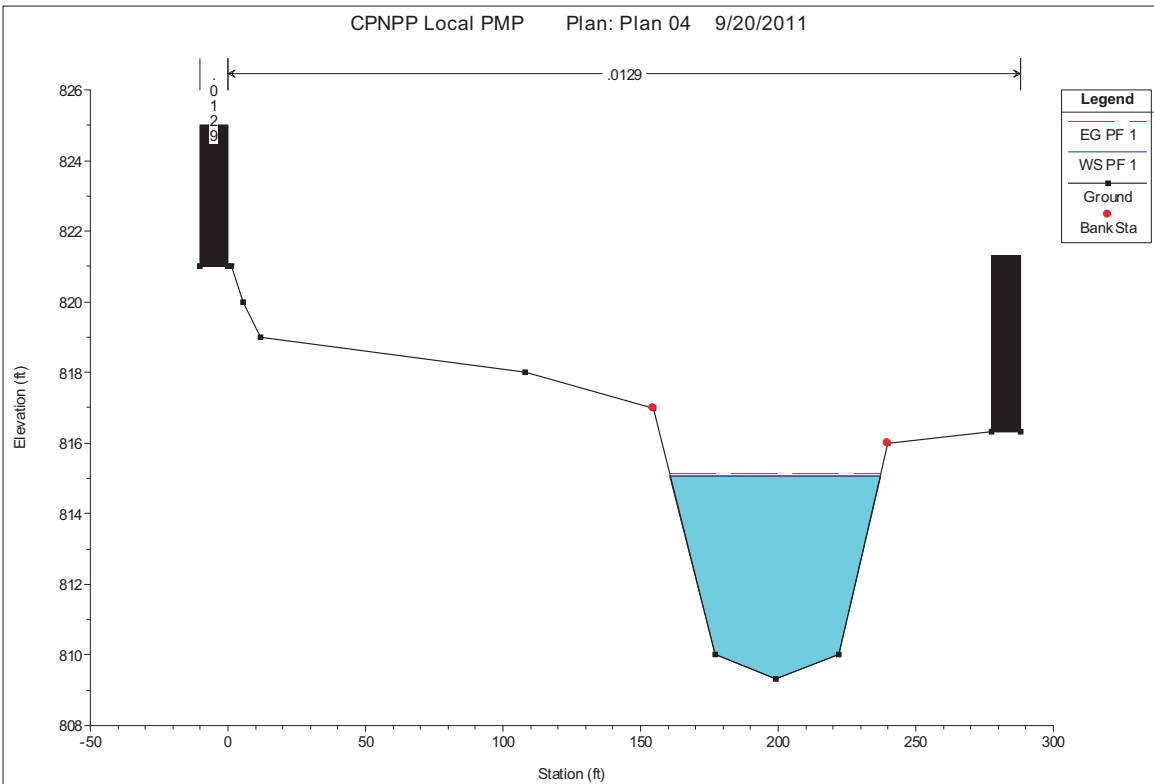
East Channel Cross Section 5



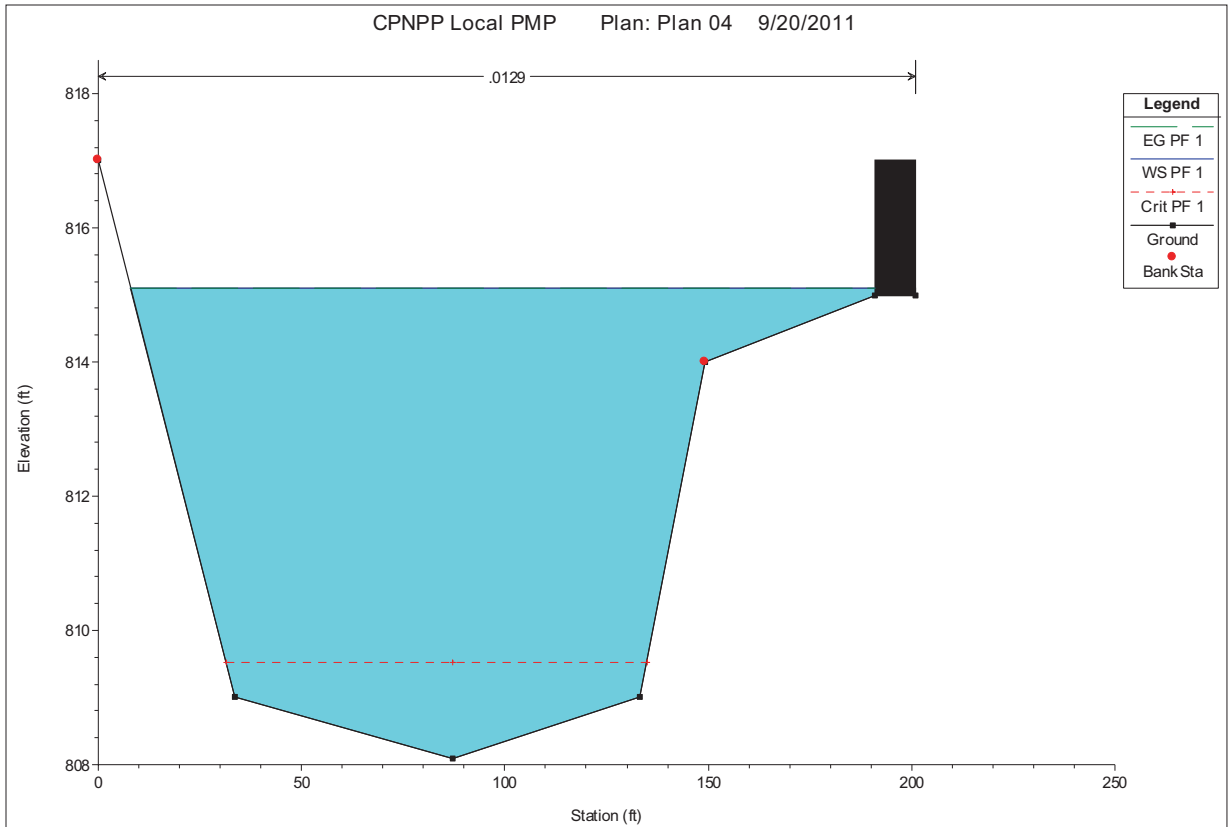
East Channel Cross Section 4



East Channel Cross Section 3

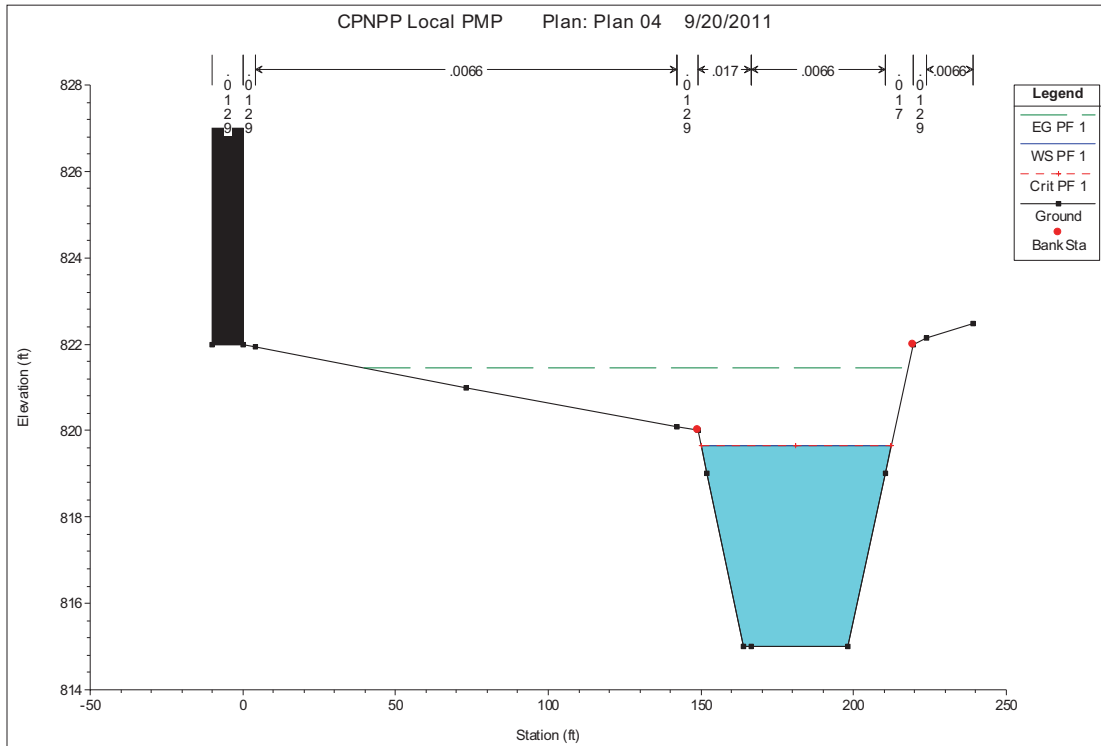


East Channel Cross Section 2

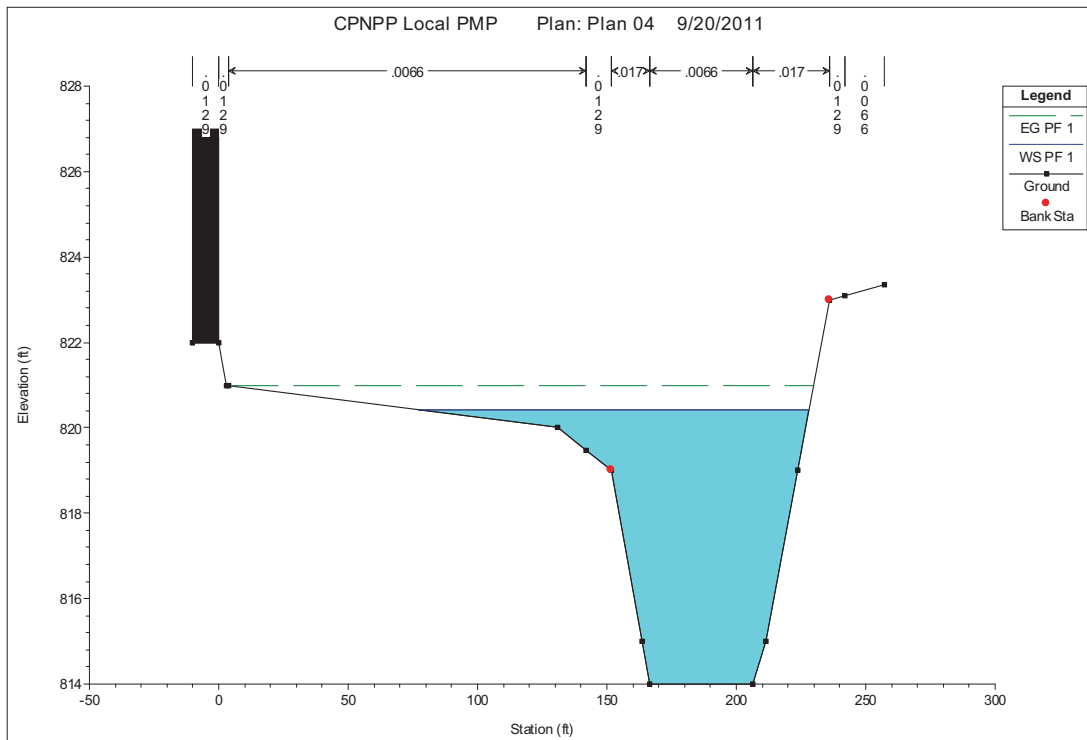


East Channel Cross Section 1

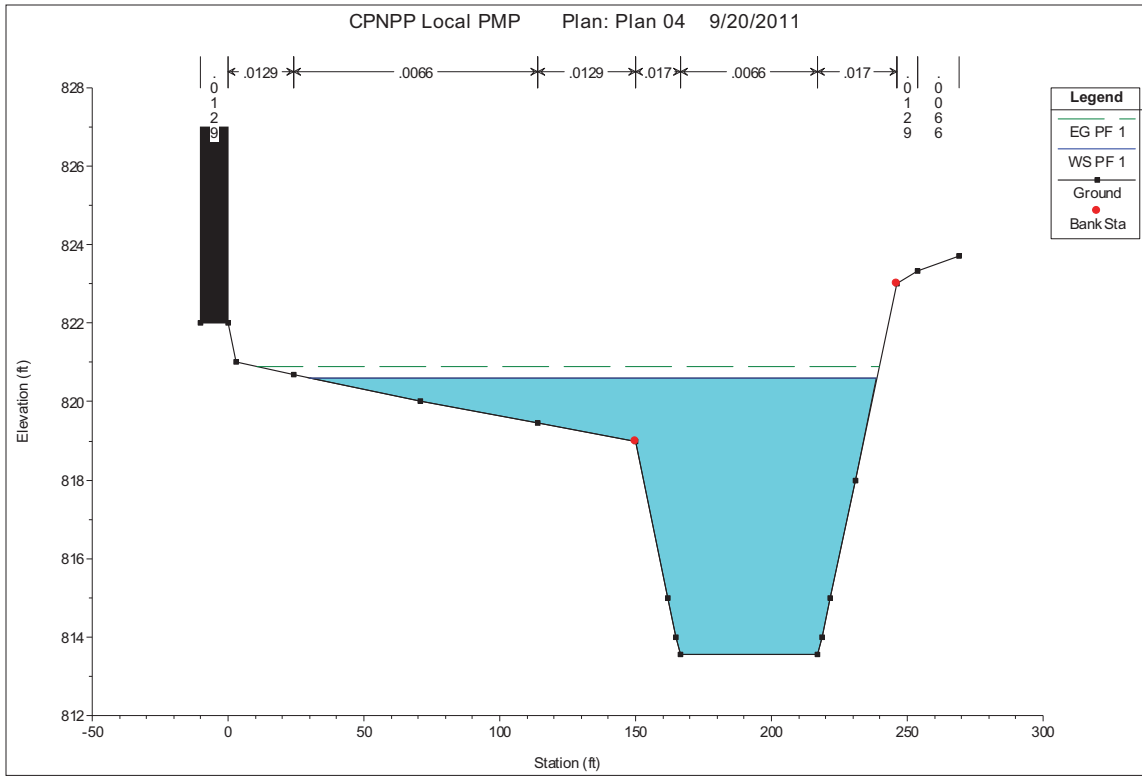
Offsite Channel Cross Section Plots



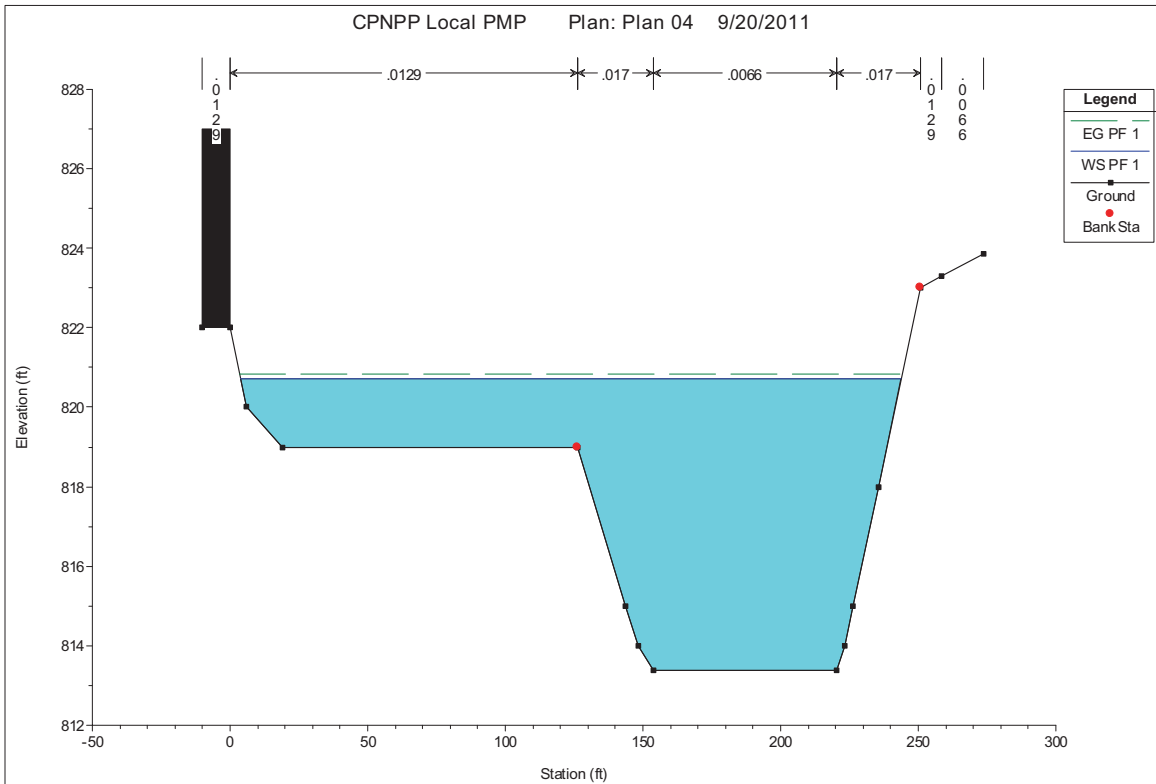
Offsite Channel Cross Section 6



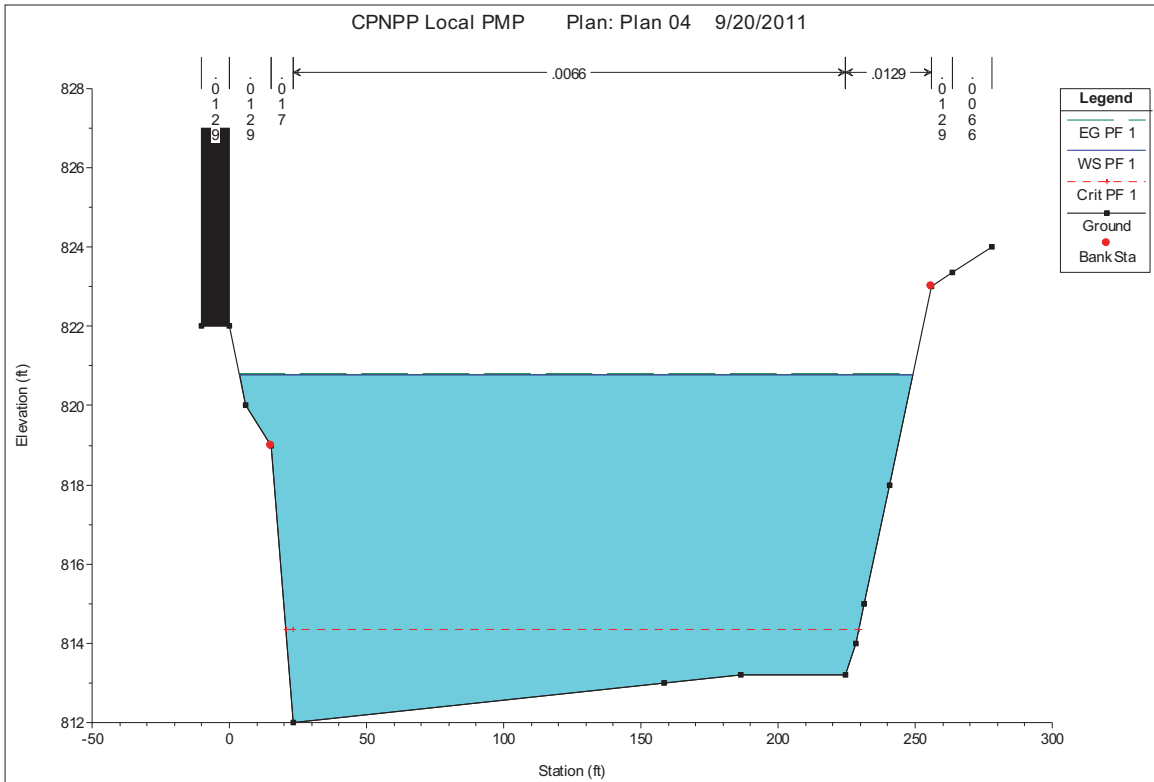
Offsite Channel Cross Section 5



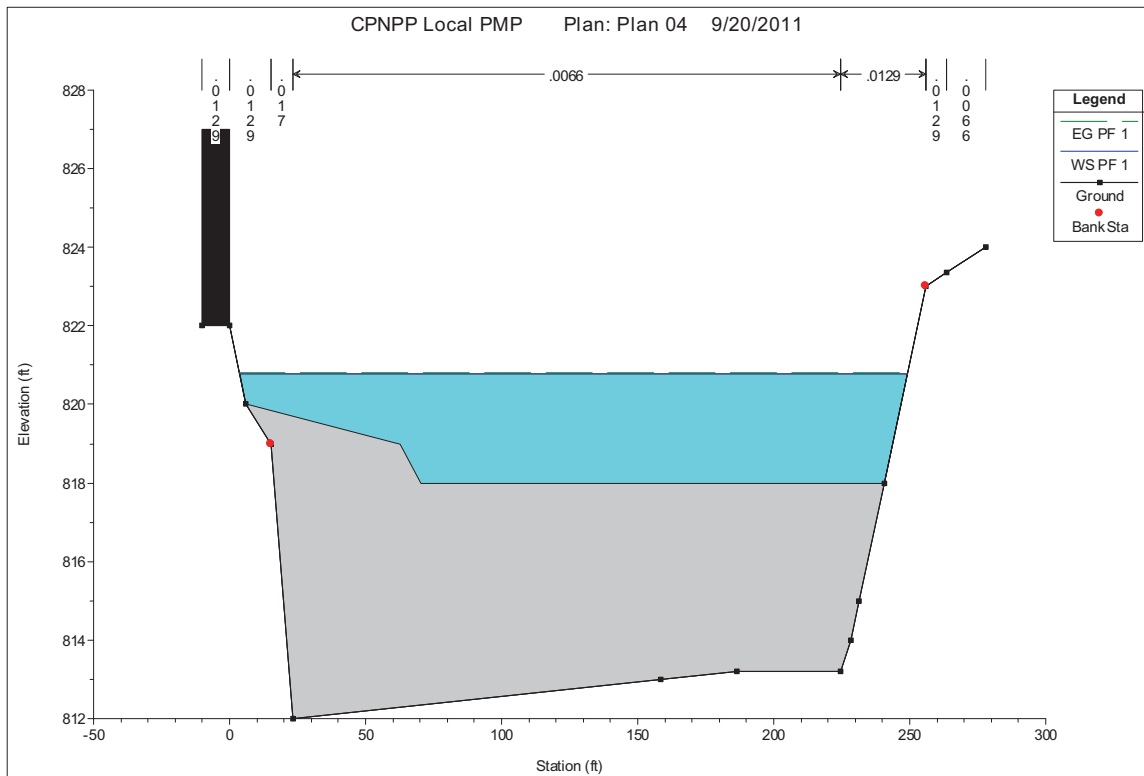
Offsite Channel Cross Section 4



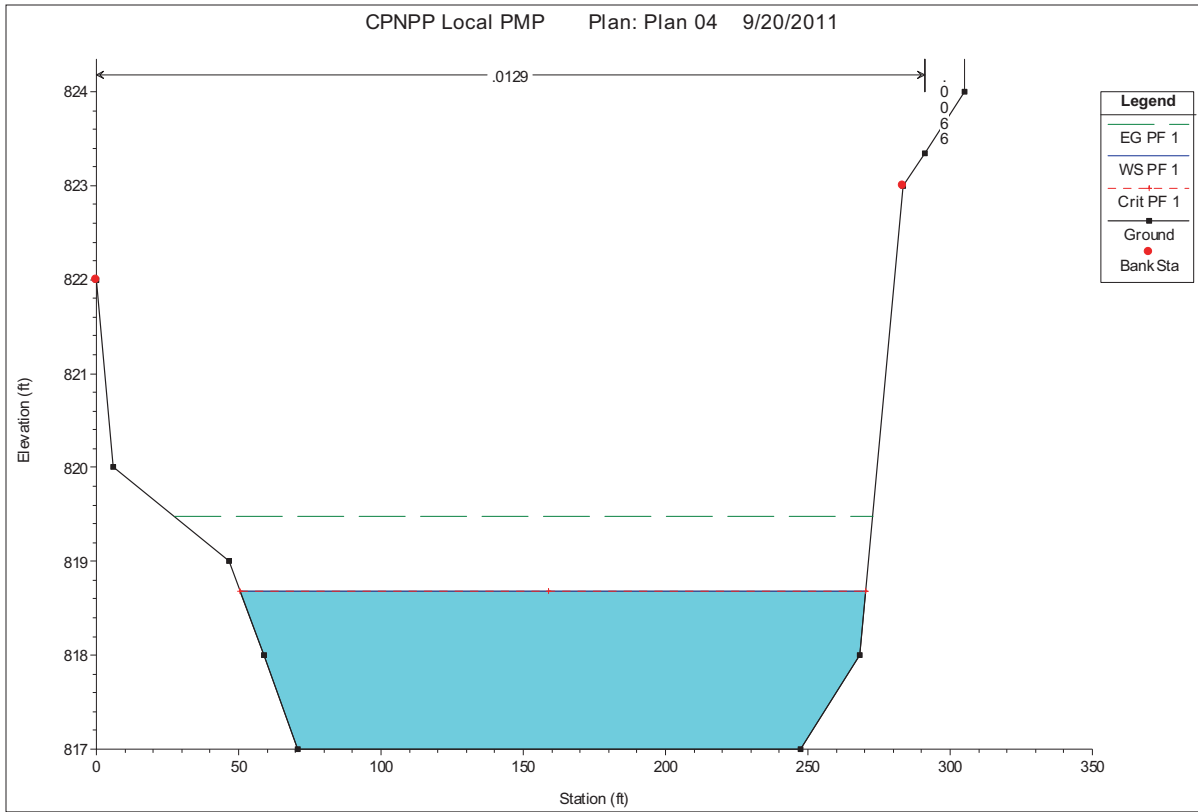
Offsite Channel Cross Section 3



Offsite Channel Cross Section 2



Offsite Channel Inline Structure 1.5



Offsite Channel Cross Section 1

CPNPPLocalPMP

HEC-RAS Version 4.1.0 Jan 2010
 U.S. Army Corps of Engineers
 Hydrologic Engineering Center
 609 Second Street
 Davis, California

```

X      X  XXXXXX      XXXX      XXXX      XX      XXXX
X      X  X          X      X      X      X      X
X      X  X          X          X      X      X      X
XXXXXXXX XXXX      X          XXX XXXX      XXXXXX      XXXX
X      X  X          X          X      X      X          X
X      X  X          X      X      X      X      X      X
X      X  XXXXXX      XXXX      X      X      X      X      XXXXX

```

PROJECT DATA

Project Title: CPNPP Local PMP
 Project File : CPNPPLocalPMP.prj
 Run Date and Time: 9/20/2011 2:15:23 PM

Project in English units

PLAN DATA

Plan Title: Plan 04
 Plan File : C:\Users\agaur\Desktop\HEC-RAS Prelim CPNPP\CPNPPLocalPMP.p04

Geometry Title: PMP_Erosion2
 Geometry File : C:\Users\agaur\Desktop\HEC-RAS Prelim
 CPNPP\CPNPPLocalPMP.g03

Flow Title : PMP
 Flow File : C:\Users\agaur\Desktop\HEC-RAS Prelim
 CPNPP\CPNPPLocalPMP.f01

Plan Summary Information:

Number of:	Cross Sections =	934	Multiple Openings =	0
	Culverts =	0	Inline Structures =	11
	Bridges =	0	Lateral Structures =	4

Computational Information

Water surface calculation tolerance	=	0.01
Critical depth calculation tolerance	=	0.01
Maximum number of iterations	=	20
Maximum difference tolerance	=	0.3
Flow tolerance factor	=	0.001

Computation Options

Critical depth computed only	where necessary
Conveyance Calculation Method:	At breaks in n values only
Friction Slope Method:	Average Conveyance
Computational Flow Regime:	Mixed Flow

FLOW DATA

CPNPPLocalPMP

Flow Title: PMP

Flow File : C:\Users\agaur\Desktop\HEC-RAS Prelim CPNPP\CPNPPLocalPMP.f01

Flow Data (cfs)

River	Reach	RS	PF 1
Center North	Center N Upper	13	52
Center North	Center N Upper	10	442
Center North	Center N Upper	6	538
Center North	Center N Branch	108	257
Center North	Center N Lower	4	1033
Center North	Center N Lower	3	1168
Center South	Center South	8	324
Center South	Center South	2	821
East Channel	East Channel	7	213
East Channel	East Channel	3	545
Offsite	Offsite	6	2421
Unit 3 East	Unit 3 East	5	196
Unit 3 North	Unit 3 North	8	164
Unit 3 Southeast	Unit 3 Southeast	11	371
Unit 3 Southeast	Unit 3 Southeast	4	737
Unit 3 UHS	U3 UHS Branch	109	125
Unit 3 UHS	U3 UHS Upper	12	1652
Unit 3 UHS	U3 UHS Lower	7	1777
Unit 3 UHS	U3 UHS Lower	2	1941
Unit 4 North	Unit 4 North	6	135
Unit 4 UHS	U4 UHS Upper	10	1607
Unit 4 UHS	U4 UHS Branch	107	135
Unit 4 UHS	U4 UHS Lower	5	1742
Unit 4 UHS	U4 UHS Lower	2	3879
West Channel	West Channel	24	497
West Channel	West Channel	17	900
West Channel	West Channel	15	1267
West Channel	West Channel	11	1402
West Channel	West Channel	10	1860
West Channel	West Channel	5	2023
West Channel	West Channel	3	2137

Boundary Conditions

River	Reach	Profile	Upstream
Downstream			
Center North	Center N Upper	PF 1	Critical
Center North	Center N Branch	PF 1	Critical
Center North	Center N Lower	PF 1	
Known WS = 819.47			
Center South	Center South	PF 1	Critical
Known WS = 820.86			
East Channel	East Channel	PF 1	Critical
Known WS = 815.1			
Offsite	Offsite	PF 1	Critical
Normal S = 0.2			
Unit 3 East	Unit 3 East	PF 1	Critical
Known WS = 815.1			
Unit 3 North	Unit 3 North	PF 1	Critical
Known WS = 818.12			

		CPNPPLocalPMP	
Unit 3 Southeast Known WS = 815.1	Unit 3 Southeast	PF 1	Critical
Unit 3 UHS	U3 UHS Branch	PF 1	Critical
Unit 3 UHS	U3 UHS Upper	PF 1	Critical
Unit 3 UHS Known WS = 815.1	U3 UHS Lower	PF 1	
Unit 4 North Known WS = 820.07	Unit 4 North	PF 1	Critical
Unit 4 UHS	U4 UHS Upper	PF 1	Critical
Unit 4 UHS	U4 UHS Branch	PF 1	Critical
Unit 4 UHS Known WS = 816	U4 UHS Lower	PF 1	
West Channel Known WS = 818.93	West Channel	PF 1	Critical

GEOMETRY DATA

Geometry Title: PMP_Erosion2
 Geometry File : C:\Users\agaur\Desktop\HEC-RAS Prelim CPNPP\CPNPPLocalPMP.g03

Reach Connection Table

River	Reach	Upstream Boundary	Downstream Boundary
Center North	Center N Upper		Center N Junct
Center North	Center N Branch		Center N Junct
Center North	Center N Lower	Center N Junct	
Center South	Center South		
East Channel	East Channel		
Offsite	Offsite		
Unit 3 East	Unit 3 East		
Unit 3 North	Unit 3 North		
Unit 3 Southeast	Unit 3 Southeast		
Unit 3 UHS	U3 UHS Branch		U3 UHS Junct
Unit 3 UHS	U3 UHS Upper		U3 UHS Junct
Unit 3 UHS	U3 UHS Lower	U3 UHS Junct	
Unit 4 North	Unit 4 North		
Unit 4 UHS	U4 UHS Upper		U4 UHS Junct
Unit 4 UHS	U4 UHS Branch		U4 UHS Junct
Unit 4 UHS	U4 UHS Lower	U4 UHS Junct	
West Channel	West Channel		

JUNCTION INFORMATION

Name: Center N Junct
 Description:
 Energy computation Method

Length across Junction River	Reach	Tributary River	Reach	Length	Angle
Center North	Center N Upper	to Center North	Center N Lower	104.11	
Center North	Center N Branch	to Center North	Center N Lower	142.47	

Name: U4 UHS Junct

CPNPPLocalPMP

Description:
Energy computation Method

Length across Junction		Tributary		Reach	Length	Angle
River	Reach	River	Reach			
Unit 4 UHS	U4 UHS Upper	to Unit 4 UHS	U4 UHS Lower	58.25		
Unit 4 UHS	U4 UHS Branch	to Unit 4 UHS	U4 UHS Lower	85.65		

Name: U3 UHS Junct
Description:
Energy computation Method

Length across Junction		Tributary		Reach	Length	Angle
River	Reach	River	Reach			
Unit 3 UHS	U3 UHS Upper	to Unit 3 UHS	U3 UHS Lower	57.69		
Unit 3 UHS	U3 UHS Branch	to Unit 3 UHS	U3 UHS Lower	136.09		

CROSS SECTION

RIVER: Center North
REACH: Center N Upper RS: 13

INPUT

Description:

Station Elevation Data num= 12

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.79	12	820.53	26.14	820	28.22	819.56	52.18	819.56		
52.78	820	112.32	821	160.49	822	297.45	822	306.35	822		
350.46	822	360	822								

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.0066	12	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

26.14	52.78	.98	.98	.98	.1	.3
-------	-------	-----	-----	-----	----	----

Blocked Obstructions num= 4

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
160.49	252.49	825	269.62	297.62	825	307.54	347.54	825
350.46	360	825						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.32	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.23	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	820.08	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)	820.08	Flow Area (sq ft)	0.10	13.38
0.21				
E.G. Slope (ft/ft)	0.002853	Area (sq ft)	0.10	13.38
0.21				
Q Total (cfs)	52.00	Flow (cfs)	0.07	51.77
0.16				
Top width (ft)	33.92	Top width (ft)	2.25	26.64
5.03				
Vel Total (ft/s)	3.80	Avg. vel. (ft/s)	0.75	3.87
0.75				
Max Chl Dpth (ft)	0.52	Hydr. Depth (ft)	0.04	0.50
0.04				

		CPNPPLocalPMP		
Conv. Total (cfs)	973.6	Conv. (cfs)	1.3	969.3
3.0				
Length wtd. (ft)	0.98	wetted Per. (ft)	2.25	26.83
5.03				
Min Ch El (ft)	819.56	Shear (lb/sq ft)	0.01	0.09
0.01				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.03
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.87
1.52				

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.
 Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.9821*

INPUT

Description:

Station Elevation Data		num= 18									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.8	11.92	820.54	19.2	820.27	25.96	820.02	26.47	819.9		
28.18	819.56	28.25	819.54	52.13	819.54	52.19	819.59	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values		num= 6									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.92	.0129	19.2	.0129	25.96	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	25.96	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.31	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.30	wt. n-Val.		0.013
0.000				
w.s. Elev (ft)	820.01	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)	820.06	Flow Area (sq ft)		11.88
0.00				
E.G. Slope (ft/ft)	0.004304	Area (sq ft)		11.88
0.00				
Q Total (cfs)	52.00	Flow (cfs)		52.00
0.00				
Top Width (ft)	27.30	Top width (ft)		26.77

CPNPPLocalPMP				
0.53				
Vel Total (ft/s)	4.37	Avg. Vel. (ft/s)		4.38
0.20				
Max Chl Dpth (ft)	0.47	Hydr. Depth (ft)		0.44
0.00				
Conv. Total (cfs)	792.7	Conv. (cfs)		792.7
0.0				
Length Wtd. (ft)	0.98	wetted Per. (ft)		26.97
0.53				
Min Ch El (ft)	819.54	Shear (lb/sq ft)		0.12
Alpha	1.00	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.03
4.03				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.87
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.9642*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.81 11.84 820.56 19.07 820.29 25.79 820.04 26.34 819.91									
28.2 819.55 28.27 819.51 52.08 819.51 52.14 819.58 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 11.84 .0128 19.07 .0129 25.79 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
25.79 52.78	.98 .98 .98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.29	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.		0.013
w.s. Elev (ft)	819.96	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)	820.03	Flow Area (sq ft)		11.20
E.G. slope (ft/ft)	0.005193	Area (sq ft)		11.20
Q Total (cfs)	52.00	Flow (cfs)		52.00
Top width (ft)	26.57	Top width (ft)		26.57
Vel Total (ft/s)	4.64	Avg. Vel. (ft/s)		4.64
Max Chl Dpth (ft)	0.45	Hydr. Depth (ft)		0.42

CPNPPLocalPMP

Conv. Total (cfs)	721.6	Conv. (cfs)	721.6
Length wtd. (ft)	0.98	wetted Per. (ft)	26.76
Min Ch El (ft)	819.51	Shear (lb/sq ft)	0.14
Alpha	1.00	Stream Power (lb/ft s)	360.00
0.00		Cum Volume (acre-ft)	0.19
Frctn Loss (ft)	0.00	Cum SA (acres)	0.00
4.03			
C & E Loss (ft)	0.00		
1.52			

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.9464*

INPUT

Description:

Station Elevation Data num= 18

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.82	11.76	820.57	18.93	820.3	25.61	820.05	26.21	819.91		
28.22	819.54	28.3	819.49	52.04	819.49	52.1	819.57	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.76	.0128	18.93	.0129	25.61	.0129	52.78	.0129
360	.0129								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
25.61	52.78	.98	.98	.98	.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.25	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.22	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.04	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)	820.01	Flow Area (sq ft)		13.84
0.04				
E.G. Slope (ft/ft)	0.002635	Area (sq ft)		13.84
0.04				
Q Total (cfs)	52.00	Flow (cfs)		51.99
0.01				
Top width (ft)	29.20	Top width (ft)		27.11
2.09				
Vel Total (ft/s)	3.75	Avg. vel. (ft/s)		3.76
0.40				
Max Chl Dpth (ft)	0.55	Hydr. Depth (ft)		0.51
0.02				
Conv. Total (cfs)	1013.0	Conv. (cfs)		1012.7
0.3				
Length wtd. (ft)	0.98	wetted Per. (ft)		27.33

		CPNPPLocalPMP			
2.09	Min Ch El (ft)	819.49	Shear (lb/sq ft)		0.08
0.00	Alpha	1.00	Stream Power (lb/ft s)	360.00	0.00
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03	C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.87
1.52					

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.9285*

INPUT

Description:

Station Elevation Data	num=	18								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
0 820.83 11.68 820.58 18.8 820.32 25.43 820.07 26.08 819.91										
28.24 819.53 28.32 819.47 51.99 819.47 52.06 819.55 52.78 820										
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822										
347.46 822 350.46 822 360 822										

Manning's n Values	num=	6								
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val										
0 .0066 11.68 .0127 18.8 .0129 25.43 .0129 52.78 .0129										
360 .0129										

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
25.43 52.78	.98 .98 .98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.20	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	820.05	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)	819.99	Flow Area (sq ft)		14.66
0.06				
E.G. slope (ft/ft)	0.002192	Area (sq ft)		14.66
0.06				
Q Total (cfs)	52.00	Flow (cfs)		51.97
0.03				
Top width (ft)	30.00	Top width (ft)		27.25
2.75				
Vel Total (ft/s)	3.53	Avg. vel. (ft/s)		3.55
0.44				
Max chl Dpth (ft)	0.58	Hydr. Depth (ft)		0.54
0.02				
Conv. Total (cfs)	1110.7	Conv. (cfs)		1110.1
0.6				
Length wtd. (ft)	0.98	wetted Per. (ft)		27.49
2.75				

	819.47	CPNPPLocalPMP Shear (lb/sq ft)		0.07
Min Ch El (ft)				
0.00				
Alpha	1.01	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.87
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.9107*

INPUT

Description:

Station Elevation Data		num=	18	
Sta	Elev	Sta	Elev	Sta
0	820.84	11.59	820.59	18.67
28.26	819.52	28.35	819.45	51.94
112.32	821	160.49	822	297.45
347.46	822	350.46	822	360

Manning's n Values		num=	6	
Sta	n Val	Sta	n Val	Sta
0	.0066	11.59	.0127	18.67
360	.0129			

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	25.26	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.23	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.05	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		15.41
0.09				
E.G. slope (ft/ft)	0.001868	Area (sq ft)		15.41
0.09				
Q Total (cfs)	52.00	Flow (cfs)		51.96
0.04				
Top width (ft)	30.66	Top width (ft)		27.39
3.27				
Vel Total (ft/s)	3.36	Avg. vel. (ft/s)		3.37
0.45				
Max Chl Dpth (ft)	0.60	Hydr. Depth (ft)		0.56
0.03				
Conv. Total (cfs)	1203.0	Conv. (cfs)		1202.1
0.9				
Length wtd. (ft)	0.98	wetted Per. (ft)		27.63
3.27				
Min Ch El (ft)	819.45	Shear (lb/sq ft)		0.07
0.00				
Alpha	1.01	Stream Power (lb/ft s)	360.00	0.00
0.00				

Frctn Loss (ft)	0.00	CPNPPLocalPMP		
4.03		Cum Volume (acre-ft)	0.19	4.02
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.8928*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.85 11.51 820.61 18.54 820.35 25.08 820.11 25.81 819.91									
28.28 819.51 28.38 819.42 51.89 819.42 51.97 819.53 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 11.51 .0126 18.54 .0129 25.08 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
25.08 52.78	.98 .98 .98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.22	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.15	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	820.07	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		16.59
0.15				
E.G. Slope (ft/ft)	0.001471	Area (sq ft)		16.59
0.15				
Q Total (cfs)	52.00	Flow (cfs)		51.93
0.07				
Top width (ft)	31.76	Top width (ft)		27.56
4.21				
Vel Total (ft/s)	3.11	Avg. vel. (ft/s)		3.13
0.48				
Max Chl Dpth (ft)	0.65	Hydr. Depth (ft)		0.60
0.04				
Conv. Total (cfs)	1355.7	Conv. (cfs)		1353.9
1.8				
Length wtd. (ft)	0.98	wetted Per. (ft)		27.83
4.21				
Min Ch El (ft)	819.42	Shear (lb/sq ft)		0.05
0.00				
Alpha	1.01	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CPNPPLocalPMP

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.875*

INPUT

Description:

Station	Elevation	Data	num=	18	Station	Elevation	Station	Elevation	Station	Elevation
0	820.86	11.43	820.62	18.41	820.37	24.9	820.12	25.68	819.91	
28.3	819.5	28.4	819.4	51.85	819.4	51.92	819.52	52.78	820	
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822	
347.46	822	350.46	822	360	822					

Manning's n	Values	num=	6	Station	n Val	Station	n Val	Station	n Val
0	.0066	11.43	.0126	18.41	.0129	24.9	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	24.9	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.22	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.14	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.08	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		17.27
0.17				
E.G. slope (ft/ft)	0.001299	Area (sq ft)		17.27
0.17				
Q Total (cfs)	52.00	Flow (cfs)		51.92
0.08				
Top width (ft)	32.28	Top width (ft)		27.72
4.56				
Vel Total (ft/s)	2.98	Avg. vel. (ft/s)		3.01
0.47				
Max Chl Dpth (ft)	0.68	Hydr. Depth (ft)		0.62
0.04				
Conv. Total (cfs)	1443.0	Conv. (cfs)		1440.8
2.3				
Length wtd. (ft)	0.98	wetted Per. (ft)		28.01
4.56				
Min Ch El (ft)	819.40	Shear (lb/sq ft)		0.05
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

CPNPPLocalPMP

RIVER: Center North
 REACH: Center N Upper RS: 12.8571*

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.88	11.35	820.63	18.28	820.38	24.72	820.14	25.55	819.92		
28.32	819.49	28.43	819.38	51.8	819.38	51.88	819.51	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values		num= 6		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.35	.0126	18.28	.0129	24.72	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	24.72	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	820.21	Element	Left OB	Channel
Right OB					
vel Head (ft)	0.13		wt. n-val.		0.013
0.013					
w.s. Elev (ft)	820.08		Reach Len. (ft)	0.98	0.98
0.98					
Crit w.s. (ft)			Flow Area (sq ft)		17.90
0.20					
E.G. slope (ft/ft)	0.001159		Area (sq ft)		17.90
0.20					
Q Total (cfs)	52.00		Flow (cfs)		51.91
0.09					
Top width (ft)	32.68		Top width (ft)		27.84
4.84					
vel Total (ft/s)	2.87		Avg. vel. (ft/s)		2.90
0.46					
Max Chl Dpth (ft)	0.70		Hydr. Depth (ft)		0.64
0.04					
Conv. Total (cfs)	1527.3		Conv. (cfs)		1524.7
2.7					
Length wtd. (ft)	0.98		wetted Per. (ft)		28.14
4.84					
Min Ch El (ft)	819.38		Shear (lb/sq ft)		0.05
0.00					
Alpha	1.02		Stream Power (lb/ft s)	360.00	0.00
0.00					
Frctn Loss (ft)	0.00		Cum volume (acre-ft)	0.19	4.02
4.03					
C & E Loss (ft)	0.00		Cum SA (acres)	0.00	0.86
1.52					

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.8392*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 18	
Sta	Elev	Sta	Elev
0	820.89	11.27	820.64
28.34	819.48	28.46	819.35
112.32	821	160.49	822
347.46	822	350.46	822

Manning's n Values

num= 6	
Sta	n Val
0	.0066
11.27	.0125
18.15	.0129
24.55	.0129
52.78	.0129
360	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	24.55	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.21	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.12	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.09	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		18.88
0.24				
E.G. Slope (ft/ft)	0.000977	Area (sq ft)		18.88
0.24				
Q Total (cfs)	52.00	Flow (cfs)		51.89
0.11				
Top width (ft)	33.32	Top width (ft)		27.98
5.34				
Vel Total (ft/s)	2.72	Avg. Vel. (ft/s)		2.75
0.45				
Max Chl Dpth (ft)	0.74	Hydr. Depth (ft)		0.67
0.04				
Conv. Total (cfs)	1663.9	Conv. (cfs)		1660.4
3.5				
Length wtd. (ft)	0.98	wetted Per. (ft)		28.30
5.34				
Min Ch El (ft)	819.35	Shear (lb/sq ft)		0.04
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.8214*

INPUT

Description:

Station Elevation Data		num= 18	
------------------------	--	---------	--

Sta	Elev	Sta	Elev	CPNPPLocalPMP	Sta	Elev	Sta	Elev	Sta	Elev
0	820.9	11.19	820.66	18.02	820.42	24.37	820.18	25.29	819.92	
28.36	819.47	28.48	819.33	51.7	819.33	51.79	819.49	52.78	820	
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822	
347.46	822	350.46	822	360	822					

Manning's n Values		num=		6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.19	.0125	18.02	.0129	24.37	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	24.37	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.20	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.11	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.09	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		19.49
0.26				
E.G. Slope (ft/ft)	0.000884	Area (sq ft)		19.49
0.26				
Q Total (cfs)	52.00	Flow (cfs)		51.88
0.12				
Top width (ft)	33.66	Top width (ft)		28.10
5.56				
Vel Total (ft/s)	2.63	Avg. vel. (ft/s)		2.66
0.44				
Max chl Dpth (ft)	0.76	Hydr. Depth (ft)		0.69
0.05				
Conv. Total (cfs)	1749.0	Conv. (cfs)		1745.2
3.9				
Length wtd. (ft)	0.98	wetted Per. (ft)		28.44
5.56				
Min Ch El (ft)	819.33	Shear (lb/sq ft)		0.04
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.8035*

INPUT

Description:

Station	Elevation	Data	num=	18	Sta	Elev	Sta	Elev	Sta	Elev
0	820.91	11.11	820.67	17.89	820.43	24.19	820.2	25.16	819.92	
28.38	819.46	28.51	819.31	51.65	819.31	51.75	819.48	52.78	820	
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822	

347.46	822	350.46	822	CPNPPLocalPMP 360 822
Manning's n Values		num= 6		
Sta	n Val	Sta	n Val	Sta n Val Sta n Val
0	.0066	11.11	.0124	17.89 .0129 24.19 .0129 52.78 .0129
360	.0129			
Bank Sta:	Left	Right	Lengths:	Left Channel Right Coeff Contr. Expan.
	24.19	52.78		.98 .98 .98 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.20	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.10	Reach Len. (ft)	0.98	0.98
0.98				
Crit W.S. (ft)		Flow Area (sq ft)		20.10
0.28				
E.G. slope (ft/ft)	0.000803	Area (sq ft)		20.10
0.28				
Q Total (cfs)	52.00	Flow (cfs)		51.88
0.12				
Top width (ft)	33.99	Top width (ft)		28.23
5.76				
Vel Total (ft/s)	2.55	Avg. vel. (ft/s)		2.58
0.43				
Max Chl Dpth (ft)	0.79	Hydr. Depth (ft)		0.71
0.05				
Conv. Total (cfs)	1835.2	Conv. (cfs)		1830.9
4.3				
Length wtd. (ft)	0.98	wetted Per. (ft)		28.58
5.76				
Min Ch El (ft)	819.31	Shear (lb/sq ft)		0.04
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.7857*

INPUT

Description:

Station	Elevation	Data	num=	18
Sta	Elev	Sta	Elev	Sta Elev Sta Elev Sta Elev
0	820.92	11.03	820.68	17.76 820.45 24.02 820.21 25.02 819.92
28.4	819.45	28.53	819.29	51.61 819.29 51.71 819.47 52.78 820
112.32	821	160.49	822	297.45 822 297.54 822 306.35 822
347.46	822	350.46	822	360 822

Manning's n Values	num=	6
Sta n Val	Sta n Val	Sta n Val

	0	.0066	11.03	.0124	CPNPPLocalPMP 17.76	.0129	24.02	.0129	52.78	.0129
	360	.0129								
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	24.02	52.78		.98	.98		.1	.3		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.20	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.10	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		20.71
0.30				
E.G. slope (ft/ft)	0.000732	Area (sq ft)		20.71
0.30				
Q Total (cfs)	52.00	Flow (cfs)		51.87
0.13				
Top width (ft)	34.33	Top width (ft)		28.38
5.95				
Vel Total (ft/s)	2.48	Avg. Vel. (ft/s)		2.51
0.42				
Max Chl Dpth (ft)	0.81	Hydr. Depth (ft)		0.73
0.05				
Conv. Total (cfs)	1921.4	Conv. (cfs)		1916.8
4.6				
Length wtd. (ft)	0.98	wetted Per. (ft)		28.74
5.95				
Min Ch El (ft)	819.29	Shear (lb/sq ft)		0.03
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.7678*

INPUT

Description:

Station	Elevation	Data	num=	18						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	820.93	10.94	820.7	17.63	820.46	23.84	820.23	24.89	819.92	
28.42	819.44	28.56	819.26	51.56	819.26	51.66	819.46	52.78	820	
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822	
347.46	822	350.46	822	360	822					

Manning's n	Values	num=	6						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.94	.0123	17.63	.0129	23.84	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.

23.84 52.78 CPNPPLocalPMP
.98 .98 .98 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.10	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		21.59
0.33				
E.G. slope (ft/ft)	0.000642	Area (sq ft)		21.59
0.33				
Q Total (cfs)	52.00	Flow (cfs)		51.87
0.13				
Top width (ft)	34.75	Top width (ft)		28.52
6.24				
Vel Total (ft/s)	2.37	Avg. vel. (ft/s)		2.40
0.41				
Max Chl Dpth (ft)	0.84	Hydr. Depth (ft)		0.76
0.05				
Conv. Total (cfs)	2051.6	Conv. (cfs)		2046.4
5.3				
Length wtd. (ft)	0.98	wetted Per. (ft)		28.91
6.24				
Min ch El (ft)	819.26	Shear (lb/sq ft)		0.03
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
REACH: Center N Upper RS: 12.75*

INPUT

Description:

Station	Elevation	Data	num=	18					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.94	10.86	820.71	17.5	820.48	23.66	820.25	24.76	819.93
28.44	819.43	28.59	819.24	51.51	819.24	51.62	819.45	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				

Manning's n Values	num=	6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val		
0	.0066	10.86	.0123	17.5	.0129	23.66	.0129	52.78	.0129
360	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
23.66 52.78 .98 .98 .98 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.98	0.98
0.98				
Crit W.S. (ft)		Flow Area (sq ft)		22.15
0.34				
E.G. Slope (ft/ft)	0.000593	Area (sq ft)		22.15
0.34				
Q Total (cfs)	52.00	Flow (cfs)		51.86
0.14				
Top width (ft)	35.02	Top width (ft)		28.63
6.39				
Vel Total (ft/s)	2.31	Avg. vel. (ft/s)		2.34
0.40				
Max Chl Dpth (ft)	0.87	Hydr. Depth (ft)		0.77
0.05				
Conv. Total (cfs)	2136.0	Conv. (cfs)		2130.4
5.6				
Length wtd. (ft)	0.98	wetted Per. (ft)		29.03
6.39				
Min Ch El (ft)	819.24	Shear (lb/sq ft)		0.03
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.7321*

INPUT

Description:

Station	Elevation	Data	num=	18					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.95	10.78	820.72	17.36	820.49	23.49	820.27	24.63	819.93
28.46	819.42	28.61	819.22	51.46	819.22	51.57	819.44	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				

Manning's n Values	num=	6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.78	.0123	17.36	.0129	23.49	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.49	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.		0.013

CPNPPLocalPMP				
0.013				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		22.73
0.36				
E.G. Slope (ft/ft)	0.000547	Area (sq ft)		22.73
0.36				
Q Total (cfs)	52.00	Flow (cfs)		51.86
0.14				
Top width (ft)	35.29	Top width (ft)		28.75
6.54				
Vel Total (ft/s)	2.25	Avg. Vel. (ft/s)		2.28
0.39				
Max Chl Dpth (ft)	0.89	Hydr. Depth (ft)		0.79
0.05				
Conv. Total (cfs)	2222.9	Conv. (cfs)		2216.9
6.0				
Length wtd. (ft)	0.98	wetted Per. (ft)		29.17
6.54				
Min Ch El (ft)	819.22	Shear (lb/sq ft)		0.03
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.7142*

INPUT

Description:

Station Elevation Data num= 18									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.96	10.7	820.73	17.23	820.51	23.31	820.29	24.5	819.93
28.48	819.41	28.64	819.19	51.41	819.19	51.53	819.43	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				

Manning's n Values num= 6									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.7	.0122	17.23	.0129	23.31	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.31	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		23.57

CPNPPLocalPMP

0.38				
E.G. Slope (ft/ft)	0.000488	Area (sq ft)		23.57
0.38				
Q Total (cfs)	52.00	Flow (cfs)		51.86
0.14				
Top width (ft)	35.63	Top width (ft)		28.89
6.75				
Vel Total (ft/s)	2.17	Avg. Vel. (ft/s)		2.20
0.38				
Max Chl Dpth (ft)	0.92	Hydr. Depth (ft)		0.82
0.06				
Conv. Total (cfs)	2353.0	Conv. (cfs)		2346.5
6.5				
Length Wtd. (ft)	0.98	wetted Per. (ft)		29.33
6.75				
Min Ch El (ft)	819.19	Shear (lb/sq ft)		0.02
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.6964*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.97 10.62 820.75	17.1	820.53	23.13	820.3	24.37	819.93			
28.5 819.4 28.67 819.17	51.37	819.17	51.49	819.42	52.78	820			
112.32 821 160.49 822	297.45	822	297.54	822	306.35	822			
347.46 822 350.46 822	360	822							

Manning's n Values	num=	6							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 10.62 .0122	17.1	.0129	23.13	.0129	52.78	.0129			
360 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
23.13 52.78	.98 .98 .98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		24.14
0.40				
E.G. Slope (ft/ft)	0.000454	Area (sq ft)		24.14
0.40				
Q Total (cfs)	52.00	Flow (cfs)		51.85

CPNPPLocalPMP

0.15				
Top width (ft)	35.90	Top width (ft)		29.03
6.87				
Vel Total (ft/s)	2.12	Avg. vel. (ft/s)		2.15
0.37				
Max Chl Dpth (ft)	0.95	Hydr. Depth (ft)		0.83
0.06				
Conv. Total (cfs)	2440.1	Conv. (cfs)		2433.2
6.8				
Length wtd. (ft)	0.98	wetted Per. (ft)		29.49
6.87				
Min Ch El (ft)	819.17	Shear (lb/sq ft)		0.02
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.6785*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.98 10.54 820.76 16.97 820.54 22.95 820.32 24.23 819.93									
28.52 819.39 28.69 819.15 51.32 819.15 51.44 819.41 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 10.54 .0121 16.97 .0129 22.95 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
22.95 52.78	.98 .98 .98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.12	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		24.70
0.41				
E.G. Slope (ft/ft)	0.000423	Area (sq ft)		24.70
0.41				
Q Total (cfs)	52.00	Flow (cfs)		51.85
0.15				
Top width (ft)	36.14	Top width (ft)		29.16
6.98				
Vel Total (ft/s)	2.07	Avg. vel. (ft/s)		2.10

CPNPPLocalPMP

0.36					
Max Chl Dpth (ft)	0.97	Hydr. Depth (ft)		0.85	
0.06					
Conv. Total (cfs)	2527.0	Conv. (cfs)		2519.9	
7.1					
Length wtd. (ft)	0.98	wetted Per. (ft)		29.64	
6.98					
Min Ch El (ft)	819.15	Shear (lb/sq ft)		0.02	
0.00					
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00	
0.00					
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02	
4.03					
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86	
1.52					

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.6607*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.99 10.46 820.77 16.84 820.56 22.78 820.34 24.1 819.94									
28.54 819.38 28.72 819.13 51.27 819.13 51.4 819.39 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 10.46 .0121 16.84 .0129 22.78 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
22.78 52.78	.98 .98 .98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		25.24
0.42				
E.G. Slope (ft/ft)	0.000396	Area (sq ft)		25.24
0.42				
Q Total (cfs)	52.00	Flow (cfs)		51.85
0.15				
Top width (ft)	36.35	Top width (ft)		29.27
7.08				
Vel Total (ft/s)	2.03	Avg. vel. (ft/s)		2.05
0.35				
Max Chl Dpth (ft)	0.99	Hydr. Depth (ft)		0.86
0.06				
Conv. Total (cfs)	2613.0	Conv. (cfs)		2605.6

CPNPPLocalPMP

7.4				
Length Wtd. (ft)	0.98	wetted Per. (ft)		29.75
7.08				
Min Ch El (ft)	819.13	Shear (lb/sq ft)		0.02
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.6428*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 821 10.38 820.78	16.71	820.57	22.6	820.36	23.97	819.94			
28.56 819.37 28.74	819.1	51.22	819.1	51.36	819.38	52.78	820		
112.32 821 160.49	822	297.45	822	297.54	822	306.35	822		
347.46 822 350.46	822	360	822						

Manning's n Values	num=	6							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 10.38	.012	16.71	.0129	22.6	.0129	52.78	.0129		
360 .0129									

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
22.6	52.78	.98	.98	.98	.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.18	Element	Left OB	Channel
Right OB				
vel Head (ft)	0.06	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		26.05
0.44				
E.G. slope (ft/ft)	0.000359	Area (sq ft)		26.05
0.44				
Q Total (cfs)	52.00	Flow (cfs)		51.85
0.15				
Top width (ft)	36.62	Top width (ft)		29.40
7.22				
vel Total (ft/s)	1.96	Avg. vel. (ft/s)		1.99
0.34				
Max Chl Dpth (ft)	1.02	Hydr. Depth (ft)		0.89
0.06				
Conv. Total (cfs)	2744.0	Conv. (cfs)		2736.2
7.8				
Length Wtd. (ft)	0.98	wetted Per. (ft)		29.91
7.22				
Min Ch El (ft)	819.10	Shear (lb/sq ft)		0.02

CPNPPLocalPMP				
0.00	Alpha	1.03	Stream Power (lb/ft s)	360.00 0.00
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19 4.02
4.03	C & E Loss (ft)	0.00	Cum SA (acres)	0.00 0.86
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.625*

INPUT

Description:

Station Elevation Data num= 18											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.02	10.29	820.8	16.58	820.59	22.42	820.38	23.84	819.94		
28.58	819.36	28.77	819.08	51.17	819.08	51.31	819.37	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values num= 6											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.29	.012	16.58	.0129	22.42	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	22.42	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.12	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		26.59
0.45				
E.G. Slope (ft/ft)	0.000337	Area (sq ft)		26.59
0.45				
Q Total (cfs)	52.00	Flow (cfs)		51.85
0.15				
Top width (ft)	36.83	Top width (ft)		29.53
7.30				
Vel Total (ft/s)	1.92	Avg. vel. (ft/s)		1.95
0.33				
Max Chl Dpth (ft)	1.04	Hydr. Depth (ft)		0.90
0.06				
Conv. Total (cfs)	2831.0	Conv. (cfs)		2822.9
8.0				
Length wtd. (ft)	0.98	wetted Per. (ft)		30.05
7.31				
Min Ch El (ft)	819.08	Shear (lb/sq ft)		0.02
0.00				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02

CPNPPLocalPMP

4.03
 C & E Loss (ft) 0.00 Cum SA (acres) 0.00 0.85
 1.52

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.6071*

INPUT

Description:

Station Elevation Data		num= 18	
Sta	Elev	Sta	Elev
0	821.03	10.21	820.81
28.6	819.35	28.8	819.06
112.32	821	160.49	822
347.46	822	350.46	822

Manning's n Values		num= 6	
Sta	n Val	Sta	n Val
0	.0066	10.21	.012
360	.0129		

Bank Sta: Left 22.25 Right 52.78 Lengths: Left Channel .98 Right .98 Coeff Contr. .1 Expan. .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.12	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		27.14
0.46				
E.G. slope (ft/ft)	0.000317	Area (sq ft)		27.14
0.46				
Q Total (cfs)	52.00	Flow (cfs)		51.85
0.15				
Top Width (ft)	37.05	Top width (ft)		29.67
7.38				
Vel Total (ft/s)	1.88	Avg. vel. (ft/s)		1.91
0.32				
Max Chl Dpth (ft)	1.06	Hydr. Depth (ft)		0.91
0.06				
Conv. Total (cfs)	2919.2	Conv. (cfs)		2910.9
8.3				
Length wtd. (ft)	0.98	wetted Per. (ft)		30.20
7.39				
Min Ch El (ft)	819.06	Shear (lb/sq ft)		0.02
0.00				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CPNPPLocalPMP

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.5892*

INPUT

Description:

Station Elevation Data		num= 18	
Sta	Elev	Sta	Elev
0	821.04	10.13	820.82
28.62	819.34	28.82	819.03
112.32	821	160.49	822
347.46	822	350.46	822

Manning's n Values		num= 6	
Sta	n Val	Sta	n Val
0	.0066	10.13	.0119
360	.0129	16.32	.0129
		22.07	.0129
		52.78	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	22.07	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.18			
Right OB				
vel Head (ft)	0.05	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.13	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		27.92
0.47				
E.G. slope (ft/ft)	0.000291	Area (sq ft)		27.92
0.47				
Q Total (cfs)	52.00	Flow (cfs)		51.85
0.15				
Top width (ft)	37.30	Top width (ft)		29.80
7.50				
vel Total (ft/s)	1.83	Avg. vel. (ft/s)		1.86
0.31				
Max Chl Dpth (ft)	1.10	Hydr. Depth (ft)		0.94
0.06				
Conv. Total (cfs)	3049.9	Conv. (cfs)		3041.3
8.6				
Length wtd. (ft)	0.98	wetted Per. (ft)		30.37
7.50				
Min Ch El (ft)	819.03	Shear (lb/sq ft)		0.02
0.00				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.02
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

CPNPPLocalPMP

RIVER: Center North
 REACH: Center N Upper RS: 12.5714*

INPUT

Description:

Station Elevation Data				num= 18		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.05	10.05	820.83	16.19	820.64	21.89	820.43	23.44	819.94		
28.64	819.33	28.85	819.01	51.03	819.01	51.18	819.34	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values				num= 6		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.05	.0119	16.19	.0129	21.89	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21.89	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	820.13	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		28.47
0.48				
E.G. Slope (ft/ft)	0.000274	Area (sq ft)		28.47
0.48				
Q Total (cfs)	52.00	Flow (cfs)		51.85
0.15				
Top width (ft)	37.50	Top width (ft)		29.93
7.57				
Vel Total (ft/s)	1.80	Avg. vel. (ft/s)		1.82
0.30				
Max Chl Dpth (ft)	1.12	Hydr. Depth (ft)		0.95
0.06				
Conv. Total (cfs)	3139.4	Conv. (cfs)		3130.6
8.8				
Length wtd. (ft)	0.98	wetted Per. (ft)		30.51
7.57				
Min Ch El (ft)	819.01	Shear (lb/sq ft)		0.02
0.00				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.01
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.5535*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.06	9.97	820.85	16.06	820.65	21.72	820.45	23.31	819.95		
28.66	819.32	28.88	818.99	50.98	818.99	51.14	819.33	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values

num= 6		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.97	.0118	16.06	.0129	21.72	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	21.72	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)		Element	Left OB	Channel
Right OB	820.18				
Vel Head (ft)	0.05		wt. n-val.		0.013
0.013					
W.S. Elev (ft)	820.13		Reach Len. (ft)	0.98	0.98
0.98					
Crit w.s. (ft)			Flow Area (sq ft)		28.97
0.49					
E.G. Slope (ft/ft)	0.000260		Area (sq ft)		28.97
0.49					
Q Total (cfs)	52.00		Flow (cfs)		51.85
0.15					
Top width (ft)	37.66		Top width (ft)		30.04
7.62					
Vel Total (ft/s)	1.77		Avg. vel. (ft/s)		1.79
0.30					
Max Chl Dpth (ft)	1.14		Hydr. Depth (ft)		0.96
0.06					
Conv. Total (cfs)	3224.3		Conv. (cfs)		3215.3
9.0					
Length wtd. (ft)	0.98		wetted Per. (ft)		30.62
7.63					
Min Ch El (ft)	818.99		Shear (lb/sq ft)		0.02
0.00					
Alpha	1.03		Stream Power (lb/ft s)	360.00	0.00
0.00					
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)	0.19	4.01
4.03					
C & E Loss (ft)	0.00		Cum SA (acres)	0.00	0.85
1.52					

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.5357*

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPP		Local		PMP			
0	821.07	9.89	820.86	15.93	820.67	21.54	820.46	23.18	819.95
28.68	819.31	28.9	818.97	50.94	818.97	51.09	819.32	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				

Manning's n Values		num=		6					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.89	.0118	15.93	.0129	21.54	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	21.54	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.13	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		29.50
0.50				
E.G. slope (ft/ft)	0.000247	Area (sq ft)		29.50
0.50				
Q Total (cfs)	52.00	Flow (cfs)		51.86
0.14				
Top width (ft)	37.86	Top width (ft)		30.18
7.68				
Vel Total (ft/s)	1.73	Avg. vel. (ft/s)		1.76
0.29				
Max Chl Dpth (ft)	1.16	Hydr. Depth (ft)		0.98
0.06				
Conv. Total (cfs)	3311.7	Conv. (cfs)		3302.6
9.2				
Length wtd. (ft)	0.98	wetted Per. (ft)		30.79
7.68				
Min Ch El (ft)	818.97	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.01
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.5178*

INPUT

Description:

Station Elevation Data		num=		18					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.08	9.81	820.87	15.79	820.69	21.36	820.48	23.05	819.95
28.7	819.3	28.93	818.94	50.89	818.94	51.05	819.31	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				

CPNPPLocalPMP

Manning's n Values		num= 6		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.81	.0117	15.79	.0129	21.36	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	21.36	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.13	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		30.27
0.51				
E.G. Slope (ft/ft)	0.000228	Area (sq ft)		30.27
0.51				
Q Total (cfs)	52.00	Flow (cfs)		51.86
0.14				
Top width (ft)	38.07	Top width (ft)		30.31
7.77				
Vel Total (ft/s)	1.69	Avg. Vel. (ft/s)		1.71
0.28				
Max Chl Dpth (ft)	1.19	Hydr. Depth (ft)		1.00
0.07				
Conv. Total (cfs)	3444.5	Conv. (cfs)		3435.1
9.5				
Length wtd. (ft)	0.98	wetted Per. (ft)		30.94
7.77				
Min Ch El (ft)	818.94	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.01
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.5*

INPUT

Description:

Station Elevation Data		num= 18		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.09	9.73	820.89	15.66	820.7	21.18	820.5	22.92	819.95		
28.72	819.29	28.95	818.92	50.84	818.92	51.01	819.3	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values		num= 6		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.73	.0117	15.66	.0129	21.18	.0129	52.78	.0129		

CPNPPLocalPMP

360 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21.18 52.78 .98 .98 .98 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.13	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		30.79
0.51				
E.G. slope (ft/ft)	0.000216	Area (sq ft)		30.79
0.51				
Q Total (cfs)	52.00	Flow (cfs)		51.86
0.14				
Top width (ft)	38.25	Top width (ft)		30.43
7.82				
Vel Total (ft/s)	1.66	Avg. vel. (ft/s)		1.68
0.28				
Max Chl Dpth (ft)	1.21	Hydr. Depth (ft)		1.01
0.07				
Conv. Total (cfs)	3534.7	Conv. (cfs)		3525.1
9.6				
Length wtd. (ft)	0.98	wetted Per. (ft)		31.08
7.82				
Min Ch El (ft)	818.92	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.01
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.4821*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.1 9.64 820.9 15.53 820.72 21.01 820.52 22.79 819.95									
28.74 819.28 28.98 818.9 50.79 818.9 50.96 819.29 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 9.64 .0117 15.53 .0129 21.01 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21.01 52.78 .98 .98 .98 .1 .3

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.13	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		31.31
0.52				
E.G. slope (ft/ft)	0.000206	Area (sq ft)		31.31
0.52				
Q Total (cfs)	52.00	Flow (cfs)		51.86
0.14				
Top width (ft)	38.42	Top width (ft)		30.56
7.86				
Vel Total (ft/s)	1.63	Avg. vel. (ft/s)		1.66
0.27				
Max Chl Dpth (ft)	1.23	Hydr. Depth (ft)		1.02
0.07				
Conv. Total (cfs)	3623.4	Conv. (cfs)		3613.7
9.8				
Length wtd. (ft)	0.98	wetted Per. (ft)		31.22
7.87				
Min Ch El (ft)	818.90	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.01
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.4642*

INPUT

Description:

Station Elevation Data	num=	18
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 821.11 9.56 820.91 15.4 820.73 20.83 820.54 22.65 819.95		
28.76 819.27 29.01 818.87 50.74 818.87 50.92 819.28 52.78 820		
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822		
347.46 822 350.46 822 360 822		

Manning's n Values	num=	6
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 9.56 .0116 15.4 .0129 20.83 .0129 52.78 .0129		
360 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
20.83 52.78	.98 .98 .98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.13	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		32.07
0.53				
E.G. Slope (ft/ft)	0.000191	Area (sq ft)		32.07
0.53				
Q Total (cfs)	52.00	Flow (cfs)		51.86
0.14				
Top width (ft)	38.63	Top width (ft)		30.70
7.94				
Vel Total (ft/s)	1.59	Avg. Vel. (ft/s)		1.62
0.26				
Max Chl Dpth (ft)	1.26	Hydr. Depth (ft)		1.04
0.07				
Conv. Total (cfs)	3758.4	Conv. (cfs)		3748.4
10.0				
Length wtd. (ft)	0.98	wetted Per. (ft)		31.39
7.94				
Min Ch El (ft)	818.87	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.03	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.01
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.4464*

INPUT

Description:

Station Elevation Data				num=	18						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.12	9.48	820.92	15.27	820.75	20.65	820.55	22.52	819.96		
28.78	819.26	29.03	818.85	50.7	818.85	50.87	819.27	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values				num=	6						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.48	.0116	15.27	.0129	20.65	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	20.65	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

		Element		
E.G. Elev (ft)	820.17		Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.		0.013
0.013				

		CPNPPLocalPMP	
W.S. Elev (ft)	820.13	Reach Len. (ft)	0.98
0.98			0.98
Crit w.s. (ft)		Flow Area (sq ft)	32.56
0.53			
E.G. slope (ft/ft)	0.000183	Area (sq ft)	32.56
0.53			
Q Total (cfs)	52.00	Flow (cfs)	51.86
0.14			
Top width (ft)	38.79	Top width (ft)	30.81
7.98			
Vel Total (ft/s)	1.57	Avg. Vel. (ft/s)	1.59
0.26			
Max Chl Dpth (ft)	1.28	Hydr. Depth (ft)	1.06
0.07			
Conv. Total (cfs)	3841.8	Conv. (cfs)	3831.6
10.2			
Length wtd. (ft)	0.98	wetted Per. (ft)	31.53
7.98			
Min Ch El (ft)	818.85	Shear (lb/sq ft)	0.01
0.00			
Alpha	1.02	Stream Power (lb/ft s)	360.00
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19
4.03			4.01
C & E Loss (ft)	0.00	Cum SA (acres)	0.00
1.52			0.85

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.4285*

INPUT

Description:

Station Elevation Data		num= 18	
Sta	Elev	Sta	Elev
0	821.13	9.4	820.94
28.8	819.25	29.06	818.83
112.32	821	160.49	822
347.46	822	350.46	822

Manning's n Values		num= 6	
Sta	n Val	Sta	n Val
0	.0066	9.4	.0115
360	.0129	15.14	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	20.48	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.13	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		33.07
0.54				

		CPNPPLocalPMP		
E.G. Slope (ft/ft)	0.000175	Area (sq ft)		33.07
0.54				
Q Total (cfs)	52.00	Flow (cfs)		51.86
0.14				
Top width (ft)	38.95	Top width (ft)		30.94
8.02				
Vel Total (ft/s)	1.55	Avg. vel. (ft/s)		1.57
0.25				
Max Chl Dpth (ft)	1.30	Hydr. Depth (ft)		1.07
0.07				
Conv. Total (cfs)	3932.8	Conv. (cfs)		3922.5
10.3				
Length wtd. (ft)	0.98	wetted Per. (ft)		31.66
8.02				
Min Ch El (ft)	818.83	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.01
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.4107*

INPUT

Description:

Station Elevation Data		num=	18							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	821.14	9.32	820.95	15.01	820.78	20.3	820.59	22.26	819.96	
28.82	819.24	29.09	818.81	50.6	818.81	50.79	819.25	52.78	820	
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822	
347.46	822	350.46	822	360	822					

Manning's n Values		num=	6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
0	.0066	9.32	.0115	15.01	.0129	20.3	.0129	52.78	.0129	
360	.0129									

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	20.3	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		33.59
0.55				
E.G. Slope (ft/ft)	0.000167	Area (sq ft)		33.59
0.55				
Q Total (cfs)	52.00	Flow (cfs)		51.87
0.13				

		CPNPPLocalPMP		
Top width (ft)	39.12	Top width (ft)		31.07
8.06				
Vel Total (ft/s)	1.52	Avg. vel. (ft/s)		1.54
0.25				
Max Chl Dpth (ft)	1.33	Hydr. Depth (ft)		1.08
0.07				
Conv. Total (cfs)	4024.2	Conv. (cfs)		4013.8
10.4				
Length wtd. (ft)	0.98	wetted Per. (ft)		31.80
8.06				
Min Ch El (ft)	818.81	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.01
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.3928*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.15 9.24 820.96 14.88 820.8 20.12 820.61 22.13 819.96									
28.84 819.23 29.11 818.78 50.55 818.78 50.74 819.23 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 9.24 .0114 14.88 .0129 20.12 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
20.12 52.78	.98 .98 .98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		34.34
0.55				
E.G. Slope (ft/ft)	0.000156	Area (sq ft)		34.34
0.55				
Q Total (cfs)	52.00	Flow (cfs)		51.87
0.13				
Top width (ft)	39.31	Top width (ft)		31.20
8.11				
Vel Total (ft/s)	1.49	Avg. vel. (ft/s)		1.51
0.24				

Max Chl Dpth (ft) 0.07	1.36	CPNPPLocalPMP Hydr. Depth (ft)		1.10
Conv. Total (cfs) 10.6	4161.0	Conv. (cfs)		4150.3
Length Wtd. (ft) 8.12	0.98	wetted Per. (ft)		31.96
Min Ch El (ft) 0.00	818.78	Shear (lb/sq ft)		0.01
Alpha 0.00	1.02	Stream Power (lb/ft s)	360.00	0.00
Frctn Loss (ft) 4.03	0.00	Cum Volume (acre-ft)	0.19	4.01
C & E Loss (ft) 1.52	0.00	Cum SA (acres)	0.00	0.85

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.375*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.16 9.16 820.97 14.75 820.81 19.95 820.62 22 819.96									
28.86 819.22 29.14 818.76 50.51 818.76 50.7 819.22 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 9.16 .0114 14.75 .0129 19.95 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
19.95 52.78	.98 .98 .98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		34.86
0.56				
E.G. slope (ft/ft)	0.000150	Area (sq ft)		34.86
0.56				
Q Total (cfs)	52.00	Flow (cfs)		51.87
0.13				
Top width (ft)	39.48	Top width (ft)		31.33
8.15				
Vel Total (ft/s)	1.47	Avg. vel. (ft/s)		1.49
0.24				
Max Chl Dpth (ft)	1.38	Hydr. Depth (ft)		1.11
0.07				
Conv. Total (cfs)	4252.3	Conv. (cfs)		4241.6
10.7				

		CPNPPLocalPMP		
Length wtd. (ft)	0.98	Wetted Per. (ft)		32.10
8.15				
Min Ch El (ft)	818.76	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.01
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.85
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.3571*

INPUT

Description:

Station Elevation Data		num= 18									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.18	9.08	820.99	14.62	820.83	19.77	820.64	21.86	819.96		
28.88	819.2	29.16	818.74	50.46	818.74	50.66	819.21	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values		num= 6									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.08	.0114	14.62	.0129	19.77	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	19.77	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.17			
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		35.42
0.56				
E.G. Slope (ft/ft)	0.000143	Area (sq ft)		35.42
0.56				
Q Total (cfs)	52.00	Flow (cfs)		51.87
0.13				
Top Width (ft)	39.65	Top Width (ft)		31.47
8.18				
Vel Total (ft/s)	1.45	Avg. vel. (ft/s)		1.46
0.23				
Max Chl Dpth (ft)	1.40	Hydr. Depth (ft)		1.13
0.07				
Conv. Total (cfs)	4353.4	Conv. (cfs)		4342.5
10.9				
Length wtd. (ft)	0.98	wetted Per. (ft)		32.25
8.18				
Min Ch El (ft)	818.74	Shear (lb/sq ft)		0.01
0.00				

	Alpha	CPNPPLocalPMP	Stream Power (lb/ft s)	360.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.01	
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84	

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.3392*

INPUT

Description:

Station	Elevation	Data	num=	18	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.19	8.99	821	14.49	820.85	19.59	820.66	21.73	819.97			
28.9	819.19	29.19	818.71	50.41	818.71	50.61	819.2	52.78	820			
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822			
347.46	822	350.46	822	360	822							

Station	n Val	Sta	num=	6	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.99	.0113	14.49	.0129	19.59	.0129	52.78	.0129	
360	.0129									

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	19.59	52.78		.98	.98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB Vel Head (ft)	0.03	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		36.10
0.57				
E.G. slope (ft/ft)	0.000135	Area (sq ft)		36.10
0.57				
Q Total (cfs)	52.00	Flow (cfs)		51.87
0.13				
Top width (ft)	39.80	Top width (ft)		31.57
8.23				
Vel Total (ft/s)	1.42	Avg. vel. (ft/s)		1.44
0.23				
Max Chl Dpth (ft)	1.43	Hydr. Depth (ft)		1.14
0.07				
Conv. Total (cfs)	4482.2	Conv. (cfs)		4471.2
11.0				
Length wtd. (ft)	0.98	wetted Per. (ft)		32.38
8.23				
Min Ch El (ft)	818.71	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.00
4.03				

C & E Loss (ft)	0.00	CPNPPLocalPMP Cum SA (acres)	0.00	0.84
1.52				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.3214*

INPUT

Description:

Station	Elevation	Data	num=	18							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.2	8.91	821.01	14.36	820.86	19.42	820.68	21.6	819.97		
28.92	819.18	29.22	818.69	50.36	818.69	50.57	819.19	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n	Values	num=	6						
Sta	n val	Sta	n val	Sta	n val	Sta	n val	Sta	n val
0	.0066	8.91	.0113	14.36	.0129	19.42	.0129	52.78	.0129
360	.0129								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
19.42	52.78	.98	.98	.98	.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
vel Head (ft)	0.03	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		36.61
0.57				
E.G. slope (ft/ft)	0.000129	Area (sq ft)		36.61
0.57				
Q Total (cfs)	52.00	Flow (cfs)		51.87
0.13				
Top width (ft)	39.96	Top width (ft)		31.70
8.26				
vel Total (ft/s)	1.40	Avg. vel. (ft/s)		1.42
0.22				
Max Chl Dpth (ft)	1.45	Hydr. Depth (ft)		1.16
0.07				
Conv. Total (cfs)	4575.5	Conv. (cfs)		4564.4
11.2				
Length wtd. (ft)	0.98	wetted Per. (ft)		32.52
8.26				
Min Ch El (ft)	818.69	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.00
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84
1.51				

CPNPPLocalPMP

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.3035*

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.21	8.83	821.03	14.22	820.88	19.24	820.7	21.47	819.97		
28.94	819.17	29.24	818.67	50.31	818.67	50.52	819.18	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values		num= 6		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.83	.0112	14.22	.0129	19.24	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	19.24	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.17	Element		
Right OB				
Vel Head (ft)	0.03	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		37.12
0.58				
E.G. Slope (ft/ft)	0.000124	Area (sq ft)		37.12
0.58				
Q Total (cfs)	52.00	Flow (cfs)		51.87
0.13				
Top Width (ft)	40.12	Top Width (ft)		31.83
8.29				
Vel Total (ft/s)	1.38	Avg. Vel. (ft/s)		1.40
0.22				
Max Chl Dpth (ft)	1.47	Hydr. Depth (ft)		1.17
0.07				
Conv. Total (cfs)	4666.7	Conv. (cfs)		4655.5
11.3				
Length wtd. (ft)	0.98	wetted Per. (ft)		32.67
8.29				
Min Ch El (ft)	818.67	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.00
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84
1.51				

CROSS SECTION

CPNPPLocalPMP

RIVER: Center North
 REACH: Center N Upper RS: 12.2857*

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.22	8.75	821.04	14.09	820.89	19.06	820.71	21.34	819.97		
28.96	819.16	29.27	818.65	50.27	818.65	50.48	819.17	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values		num= 6		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.75	.0112	14.09	.0129	19.06	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	19.06	52.78		.98	.98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	820.17	Element	Left OB	Channel
	Vel Head (ft)	0.03	wt. n-val.		0.013
0.013	W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98	Crit w.s. (ft)		Flow Area (sq ft)		37.62
0.58	E.G. slope (ft/ft)	0.000119	Area (sq ft)		37.62
0.58	Q Total (cfs)	52.00	Flow (cfs)		51.88
0.12	Top width (ft)	40.28	Top width (ft)		31.96
8.32	Vel Total (ft/s)	1.36	Avg. vel. (ft/s)		1.38
0.21	Max Chl Dpth (ft)	1.49	Hydr. Depth (ft)		1.18
0.07	Conv. Total (cfs)	4758.8	Conv. (cfs)		4747.5
11.4	Length wtd. (ft)	0.98	wetted Per. (ft)		32.82
8.32	Min Ch El (ft)	818.65	Shear (lb/sq ft)		0.01
0.00	Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.00
4.03	C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84
1.51					

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.2678*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 18		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.23	8.67	821.05	13.96	820.91	18.88	820.73	21.21	819.97		
28.98	819.15	29.3	818.62	50.22	818.62	50.44	819.16	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.67	.0112	13.96	.0129	18.88	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	18.88	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.17			
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		38.35
0.59				
E.G. slope (ft/ft)	0.000113	Area (sq ft)		38.35
0.59				
Q Total (cfs)	52.00	Flow (cfs)		51.88
0.12				
Top width (ft)	40.45	Top width (ft)		32.09
8.36				
Vel Total (ft/s)	1.34	Avg. vel. (ft/s)		1.35
0.21				
Max Chl Dpth (ft)	1.52	Hydr. Depth (ft)		1.19
0.07				
Conv. Total (cfs)	4896.9	Conv. (cfs)		4885.4
11.5				
Length wtd. (ft)	0.98	wetted Per. (ft)		32.97
8.36				
Min Ch El (ft)	818.62	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.00
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.25*

INPUT

Description:

Station Elevation Data		num= 18		Sta	Elev	Sta	Elev	Sta	Elev
0	821.24	8.59	821.06	13.83	820.93	18.71	820.75	21.07	819.98

		CPNP		Local		PMP			
29	819.14	29.32	818.6	50.17	818.6	50.39	819.15	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				
Manning's n Values		num=		6					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.59	.0111	13.83	.0129	18.71	.0129	52.78	.0129
360	.0129								
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	18.71	52.78		.98	.98		.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.17	Element		
Right OB				
Vel Head (ft)	0.03	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		38.81
0.59				
E.G. Slope (ft/ft)	0.000109	Area (sq ft)		38.81
0.59				
Q Total (cfs)	52.00	Flow (cfs)		51.88
0.12				
Top width (ft)	40.58	Top width (ft)		32.20
8.38				
Vel Total (ft/s)	1.32	Avg. Vel. (ft/s)		1.34
0.20				
Max Chl Dpth (ft)	1.54	Hydr. Depth (ft)		1.21
0.07				
Conv. Total (cfs)	4981.8	Conv. (cfs)		4970.3
11.6				
Length wtd. (ft)	0.98	wetted Per. (ft)		33.10
8.38				
Min Ch El (ft)	818.60	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.00
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.2321*

INPUT

Description:

Station Elevation Data		num=		18					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.25	8.51	821.08	13.7	820.94	18.53	820.77	20.94	819.98
29.02	819.13	29.35	818.58	50.12	818.58	50.35	819.14	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				

Manning's n Values		num=		CPNPPLocalPMP		num=		num=	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.51	.0111	13.7	.0129	18.53	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	18.53	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		39.31
0.59				
E.G. Slope (ft/ft)	0.000105	Area (sq ft)		39.31
0.59				
Q Total (cfs)	52.00	Flow (cfs)		51.88
0.12				
Top width (ft)	40.74	Top width (ft)		32.33
8.41				
Vel Total (ft/s)	1.30	Avg. vel. (ft/s)		1.32
0.20				
Max Chl Dpth (ft)	1.56	Hydr. Depth (ft)		1.22
0.07				
Conv. Total (cfs)	5075.4	Conv. (cfs)		5063.7
11.7				
Length wtd. (ft)	0.98	wetted Per. (ft)		33.24
8.41				
Min Ch El (ft)	818.58	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.00
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.2142*

INPUT

Description:

Station Elevation Data		num=		num=		num=		num=	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.26	8.43	821.09	13.57	820.96	18.35	820.79	20.81	819.98
29.04	819.12	29.38	818.55	50.07	818.55	50.31	819.13	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				

Manning's n Values		num=		num=		num=		num=	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.43	.011	13.57	.0129	18.35	.0129	52.78	.0129
360	.0129								

CPNPPLocalPMP

Bank Sta: Left 18.35 Right 52.78 Lengths: Left .98 Channel .98 Right .98 Coeff Contr. .1 Expan. .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit W.S. (ft)		Flow Area (sq ft)		40.02
0.60				
E.G. slope (ft/ft)	0.000099	Area (sq ft)		40.02
0.60				
Q Total (cfs)	52.00	Flow (cfs)		51.88
0.12				
Top width (ft)	40.90	Top width (ft)		32.46
8.44				
Vel Total (ft/s)	1.28	Avg. vel. (ft/s)		1.30
0.20				
Max Chl Dpth (ft)	1.59	Hydr. Depth (ft)		1.23
0.07				
Conv. Total (cfs)	5213.9	Conv. (cfs)		5202.1
11.8				
Length wtd. (ft)	0.98	wetted Per. (ft)		33.39
8.44				
Min Ch El (ft)	818.55	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	4.00
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.1964*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.27 8.34 821.1 13.44 820.97 18.18 820.8 20.68 819.98									
29.06 819.11 29.4 818.53 50.03 818.53 50.26 819.12 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.34 .011 13.44 .0129 18.18 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left 18.18 Right 52.78 Lengths: Left .98 Channel .98 Right .98 Coeff Contr. .1 Expan. .3

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		40.52
0.60				
E.G. Slope (ft/ft)	0.000096	Area (sq ft)		40.52
0.60				
Q Total (cfs)	52.00	Flow (cfs)		51.88
0.12				
Top width (ft)	41.05	Top width (ft)		32.59
8.46				
Vel Total (ft/s)	1.26	Avg. Vel. (ft/s)		1.28
0.19				
Max Chl Dpth (ft)	1.61	Hydr. Depth (ft)		1.24
0.07				
Conv. Total (cfs)	5305.2	Conv. (cfs)		5293.3
11.9				
Length wtd. (ft)	0.98	wetted Per. (ft)		33.55
8.46				
Min Ch El (ft)	818.53	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.00
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.1785*

INPUT

Description:

Station Elevation Data num= 18

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.28	8.26	821.11	13.31	820.99	18	820.82	20.55	819.98
29.08	819.1	29.43	818.51	49.98	818.51	50.22	819.11	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.26	.0109	13.31	.0129	18	.0129	52.78	.0129
360	.0129								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
18	52.78	.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
----------------	--------	---------	---------	---------

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		41.02
0.60				
E.G. slope (ft/ft)	0.000093	Area (sq ft)		41.02
0.60				
Q Total (cfs)	52.00	Flow (cfs)		51.88
0.12				
Top width (ft)	41.20	Top width (ft)		32.72
8.48				
Vel Total (ft/s)	1.25	Avg. Vel. (ft/s)		1.27
0.19				
Max Chl Dpth (ft)	1.63	Hydr. Depth (ft)		1.25
0.07				
Conv. Total (cfs)	5399.0	Conv. (cfs)		5387.0
11.9				
Length wtd. (ft)	0.98	wetted Per. (ft)		33.69
8.48				
Min Ch El (ft)	818.51	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.00
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.1607*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.29 8.18 821.13 13.18 821.01 17.82 820.84 20.42 819.98									
29.1 819.09 29.45 818.49 49.93 818.49 50.17 819.1 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.18 .0109 13.18 .0129 17.82 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
17.82 52.78	.98 .98 .98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98

		CPNPPLocalPMP	
0.98			
Crit w.s. (ft)		Flow Area (sq ft)	41.51
0.61			
E.G. Slope (ft/ft)	0.000090	Area (sq ft)	41.51
0.61			
Q Total (cfs)	52.00	Flow (cfs)	51.89
0.11			
Top width (ft)	41.35	Top width (ft)	32.85
8.50			
Vel Total (ft/s)	1.23	Avg. Vel. (ft/s)	1.25
0.19			
Max Chl Dpth (ft)	1.65	Hydr. Depth (ft)	1.26
0.07			
Conv. Total (cfs)	5490.8	Conv. (cfs)	5478.8
12.0			
Length wtd. (ft)	0.98	wetted Per. (ft)	33.83
8.50			
Min Ch El (ft)	818.49	Shear (lb/sq ft)	0.01
0.00			
Alpha	1.02	Stream Power (lb/ft s)	360.00
0.00			
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19
4.03			
C & E Loss (ft)	0.00	Cum SA (acres)	0.00
1.51			

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.1428*

INPUT

Description:

Station Elevation Data		num= 18	
Sta	Elev	Sta	Elev
0	821.3	8.1	821.14
29.12	819.08	29.48	818.46
112.32	821	160.49	822
347.46	822	350.46	822

Manning's n Values		num= 6	
Sta	n Val	Sta	n Val
0	.0066	8.1	.0109
360	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	17.65	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		42.17
0.61				
E.G. slope (ft/ft)	0.000086	Area (sq ft)		42.17

		CPNPPLocalPMP			
0.61					
Q Total (cfs)	52.00	Flow (cfs)		51.89	
0.11					
Top Width (ft)	41.49	Top width (ft)		32.96	
8.53					
Vel Total (ft/s)	1.22	Avg. Vel. (ft/s)		1.23	
0.18					
Max Chl Dpth (ft)	1.68	Hydr. Depth (ft)		1.28	
0.07					
Conv. Total (cfs)	5622.7	Conv. (cfs)		5610.5	
12.1					
Length wtd. (ft)	0.98	wetted Per. (ft)		33.97	
8.53					
Min Ch El (ft)	818.46	Shear (lb/sq ft)		0.01	
0.00					
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00	
0.00					
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	4.00	
4.03					
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.84	
1.51					

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.125*

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.32	8.02	821.15	12.92	821.04	17.47	820.88	20.15	819.99		
29.14	819.07	29.51	818.44	49.84	818.44	50.09	819.07	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values		num= 6		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.02	.0108	12.92	.0129	17.47	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	17.47	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		42.68
0.61				
E.G. Slope (ft/ft)	0.000083	Area (sq ft)		42.68
0.61				
Q Total (cfs)	52.00	Flow (cfs)		51.89
0.11				
Top Width (ft)	41.64	Top width (ft)		33.09

CPNPPLocalPMP			
8.54			
Vel Total (ft/s)	1.20	Avg. Vel. (ft/s)	1.22
0.18			
Max Chl Dpth (ft)	1.70	Hydr. Depth (ft)	1.29
0.07			
Conv. Total (cfs)	5721.0	Conv. (cfs)	5708.8
12.2			
Length Wtd. (ft)	0.98	wetted Per. (ft)	34.11
8.54			
Min Ch El (ft)	818.44	Shear (lb/sq ft)	0.01
0.00			
Alpha	1.02	Stream Power (lb/ft s)	360.00
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19
4.03			
C & E Loss (ft)	0.00	Cum SA (acres)	0.00
1.51			

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.1071*

INPUT

Description:

Station Elevation Data		num= 18	
Sta	Elev	Sta	Elev
0	821.33	7.94	821.16
29.16	819.06	29.53	818.42
112.32	821	160.49	822
347.46	822	350.46	822

Manning's n Values		num= 6	
Sta	n Val	Sta	n Val
0	.0066	7.94	.0108
360	.0129	12.79	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	17.29	52.78		.98	.98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		43.17
0.62				
E.G. slope (ft/ft)	0.000080	Area (sq ft)		43.17
0.62				
Q Total (cfs)	52.00	Flow (cfs)		51.89
0.11				
Top width (ft)	41.78	Top width (ft)		33.23
8.56				
Vel Total (ft/s)	1.19	Avg. Vel. (ft/s)		1.20
0.18				
Max Chl Dpth (ft)	1.72	Hydr. Depth (ft)		1.30

CPNPPLocalPMP				
0.07				
Conv. Total (cfs)	5812.5	Conv. (cfs)		5800.2
12.2				
Length wtd. (ft)	0.98	wetted Per. (ft)		34.26
8.56				
Min Ch El (ft)	818.42	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.99
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.83
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.0892*

INPUT

Description:

Station Elevation Data num= 18											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.34	7.86	821.18	12.65	821.07	17.11	820.91	19.89	819.99		
29.18	819.05	29.56	818.39	49.74	818.39	50	819.05	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values num= 6											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	7.86	.0107	12.65	.0129	17.11	.0129	52.78	.0129		
360	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	17.11	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		43.87
0.62				
E.G. Slope (ft/ft)	0.000076	Area (sq ft)		43.87
0.62				
Q Total (cfs)	52.00	Flow (cfs)		51.89
0.11				
Top width (ft)	41.94	Top width (ft)		33.36
8.58				
Vel Total (ft/s)	1.17	Avg. vel. (ft/s)		1.18
0.17				
Max Chl Dpth (ft)	1.75	Hydr. Depth (ft)		1.32
0.07				
Conv. Total (cfs)	5952.1	Conv. (cfs)		5939.8
12.3				
Length wtd. (ft)	0.98	wetted Per. (ft)		34.42

CPNPPLocalPMP

8.58				
Min Ch El (ft)	818.39	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.99
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.83
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.0714*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.35 7.78 821.19 12.52 821.09 16.94 820.93 19.76 819.99									
29.2 819.04 29.58 818.37 49.69 818.37 49.96 819.04 52.78 820									
112.32 821 160.49 822 297.45 822 297.54 822 306.35 822									
347.46 822 350.46 822 360 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 7.78 .0107 12.52 .0129 16.94 .0129 52.78 .0129									
360 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
16.94 52.78	.98 .98 .98	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		44.36
0.62				
E.G. Slope (ft/ft)	0.000074	Area (sq ft)		44.36
0.62				
Q Total (cfs)	52.00	Flow (cfs)		51.89
0.11				
Top Width (ft)	42.08	Top width (ft)		33.48
8.60				
Vel Total (ft/s)	1.16	Avg. vel. (ft/s)		1.17
0.17				
Max Chl Dpth (ft)	1.77	Hydr. Depth (ft)		1.32
0.07				
Conv. Total (cfs)	6047.1	Conv. (cfs)		6034.7
12.4				
Length wtd. (ft)	0.98	wetted Per. (ft)		34.56
8.60				
Min Ch El (ft)	818.37	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00

CPNPPLocalPMP				
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.99
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.83
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.0535*

INPUT

Description:

Station Elevation Data num= 18									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.36	7.69	821.2	12.39	821.1	16.76	820.95	19.63	819.99
29.22	819.03	29.61	818.35	49.64	818.35	49.91	819.03	52.78	820
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822
347.46	822	350.46	822	360	822				

Manning's n Values num= 6									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	7.69	.0106	12.39	.0129	16.76	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	16.76	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		44.84
0.62				
E.G. slope (ft/ft)	0.000072	Area (sq ft)		44.84
0.62				
Q Total (cfs)	52.00	Flow (cfs)		51.89
0.11				
Top width (ft)	42.23	Top width (ft)		33.61
8.62				
Vel Total (ft/s)	1.14	Avg. vel. (ft/s)		1.16
0.17				
Max Chl Dpth (ft)	1.79	Hydr. Depth (ft)		1.33
0.07				
Conv. Total (cfs)	6139.7	Conv. (cfs)		6127.2
12.5				
Length wtd. (ft)	0.98	wetted Per. (ft)		34.70
8.62				
Min Ch El (ft)	818.35	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.99
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.83

CPNPPLocalPMP

1.51

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.0357*

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.37	7.61	821.22	12.26	821.12	16.58	820.96	19.49	820		
29.24	819.02	29.64	818.33	49.6	818.33	49.87	819.02	52.78	820		
112.32	821	160.49	822	297.45	822	297.54	822	306.35	822		
347.46	822	350.46	822	360	822						

Manning's n Values		num= 6		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	7.61	.0106	12.26	.0129	16.58	.0129	52.78	.0129
360	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	16.58	52.78		.98	.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		45.28
0.63				
E.G. Slope (ft/ft)	0.000070	Area (sq ft)		45.28
0.63				
Q Total (cfs)	52.00	Flow (cfs)		51.90
0.10				
Top width (ft)	42.36	Top width (ft)		33.73
8.63				
Vel Total (ft/s)	1.13	Avg. vel. (ft/s)		1.15
0.17				
Max Chl Dpth (ft)	1.81	Hydr. Depth (ft)		1.34
0.07				
Conv. Total (cfs)	6225.0	Conv. (cfs)		6212.5
12.5				
Length wtd. (ft)	0.98	wetted Per. (ft)		34.83
8.63				
Min Ch El (ft)	818.33	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.99
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.83
1.51				

CPNPPLocalPMP

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 12.0178*

INPUT

Description:

Station Elevation Data		num= 18	
Sta	Elev	Sta	Elev
0	821.38	7.53	821.23
29.26	819.01	29.66	818.3
112.32	821	160.49	822
347.46	822	350.46	822

Manning's n Values		num= 6	
Sta	n Val	Sta	n Val
0	.0066	7.53	.0106
360	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	16.41	52.78		.98	.98		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.17	Element		
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.15	Reach Len. (ft)	0.98	0.98
0.98				
Crit w.s. (ft)		Flow Area (sq ft)		45.97
0.63				
E.G. Slope (ft/ft)	0.000067	Area (sq ft)		45.97
0.63				
Q Total (cfs)	52.00	Flow (cfs)		51.90
0.10				
Top width (ft)	42.51	Top width (ft)		33.86
8.65				
Vel Total (ft/s)	1.12	Avg. vel. (ft/s)		1.13
0.16				
Max Chl Dpth (ft)	1.85	Hydr. Depth (ft)		1.36
0.07				
Conv. Total (cfs)	6362.9	Conv. (cfs)		6350.3
12.6				
Length wtd. (ft)	0.98	wetted Per. (ft)		35.00
8.65				
Min Ch El (ft)	818.30	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.99
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.83
1.51				

CROSS SECTION

RIVER: Center North

CPNPPLocalPMP

REACH: Center N Upper RS: 12

INPUT

Description:

Station Elevation Data num= 15

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.39	12	821.15	16.23	821	19.23	820	29.28	819
29.69	818.28	49.5	818.28	49.78	819	52.78	820	112.32	821
160.49	822	297.54	822	347.46	822	350.46	822	360	822

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.0066	12	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

16.23	52.78	19.19	19.19	19.19	.1	.3
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Blocked Obstructions num= 3

Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
160.49	252.49	825	269.62	297.62	825	350.46	360	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.15	Reach Len. (ft)	19.19	19.19
19.19				
Crit w.s. (ft)		Flow Area (sq ft)		46.45
0.63				
E.G. Slope (ft/ft)	0.000065	Area (sq ft)		46.45
0.63				
Q Total (cfs)	52.00	Flow (cfs)		51.90
0.10				
Top width (ft)	42.65	Top width (ft)		33.99
8.66				
Vel Total (ft/s)	1.10	Avg. vel. (ft/s)		1.12
0.16				
Max Chl Dpth (ft)	1.87	Hydr. Depth (ft)		1.37
0.07				
Conv. Total (cfs)	6457.8	Conv. (cfs)		6445.1
12.7				
Length wtd. (ft)	19.19	wetted Per. (ft)		35.13
8.66				
Min Ch El (ft)	818.28	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.02	Stream Power (lb/ft s)	360.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.99
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.83
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 11.75*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 22		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.62	12.02	821.39	12.11	821.39	16.26	821.25	19.77	820.14
23.5	819.51	28.78	818.92	31.52	818.54	32	817.96	50.6	817.96
51.32	818.58	55.14	819.37	58.97	820	113.63	820.81	157.85	821.61
280.19	821.75	283.66	821.77	322.64	822	326.74	822	329.49	822
332.24	822	341	822						

Manning's n Values

num= 6		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12.02	.0129	12.11	.0129	16.26	.0129	58.97	.0129
341	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	16.26	58.97		19.19	19.19		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.15	Reach Len. (ft)	19.19	19.19
19.19				
Crit w.s. (ft)		Flow Area (sq ft)		59.30
0.76				
E.G. Slope (ft/ft)	0.000034	Area (sq ft)		59.30
0.76				
Q Total (cfs)	52.00	Flow (cfs)		51.91
0.09				
Top width (ft)	49.34	Top width (ft)		39.23
10.11				
Vel Total (ft/s)	0.87	Avg. vel. (ft/s)		0.88
0.12				
Max Chl Dpth (ft)	2.19	Hydr. Depth (ft)		1.51
0.07				
Conv. Total (cfs)	8900.0	conv. (cfs)		8884.5
15.5				
Length wtd. (ft)	19.19	wetted Per. (ft)		39.98
10.11				
Min Ch El (ft)	817.96	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	341.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.96
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.81
1.51				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 11.5*

INPUT

Description:

Station Elevation Data		num= 22		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPPLocalPMP							
0	821.85	12.05	821.63	12.13	821.63	16.3	821.5	20.31	820.27
24.58	819.34	30.62	818.62	33.76	818.07	34.31	817.64	51.71	817.64
52.86	818.16	59	819.25	65.17	820	114.94	820.62	155.21	821.22
266.63	821.5	269.78	821.54	305.28	822	309.01	822	311.52	822
314.02	822	322	822						

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12.05	.0129	12.13	.0129	16.3	.0129	65.17	.0129
322	.0129								

Bank Sta: Left 16.3 Right 65.17 Lengths: Left Channel 19.19 Right 19.19 Coeff Contr. .1 Expan. .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.15	Reach Len. (ft)	19.19	19.19
19.19				
Crit w.s. (ft)		Flow Area (sq ft)		73.98
0.93				
E.G. Slope (ft/ft)	0.000019	Area (sq ft)		73.98
0.93				
Q Total (cfs)	52.00	Flow (cfs)		51.92
0.08				
Top width (ft)	56.55	Top width (ft)		44.32
12.23				
Vel Total (ft/s)	0.69	Avg. vel. (ft/s)		0.70
0.09				
Max Chl Dpth (ft)	2.51	Hydr. Depth (ft)		1.67
0.08				
Conv. Total (cfs)	11907.0	Conv. (cfs)		11887.7
19.3				
Length wtd. (ft)	19.19	wetted Per. (ft)		44.90
12.23				
Min Ch El (ft)	817.64	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	322.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.93
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.80
1.50				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 11.25*

INPUT

Description:

Station	Elevation	Data	num=	22	Station	Elevation	Station	Elevation	Station	Elevation
0	822.09	12.07	821.87	12.16	821.87	16.33	821.75	20.85	820.41	
25.66	819.17	32.47	818.31	35.99	817.61	36.61	817.32	52.81	817.32	
54.4	817.74	62.87	819.12	71.36	820	116.26	820.44	152.58	820.84	

253.06	821.25	255.91	821.31	CPNPPLocalPMP	287.92	822	291.29	822	293.55	822	
295.81	822	303	822								
Manning's n Values		num=		6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12.07	.0129	12.16	.0129	16.33	.0129	71.36	.0129		
303	.0129										
Bank Sta:	Left	Right	Lengths:		Left Channel	Right	Coeff Contr.		Expan.		
	16.33	71.36			19.19	19.19	.1		.3		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	820.15	Reach Len. (ft)	19.19	19.19
19.19				
Crit w.s. (ft)		Flow Area (sq ft)		90.62
1.21				
E.G. slope (ft/ft)	0.000011	Area (sq ft)		90.62
1.21				
Q Total (cfs)	52.00	Flow (cfs)		51.92
0.08				
Top width (ft)	65.22	Top width (ft)		49.52
15.70				
Vel Total (ft/s)	0.57	Avg. vel. (ft/s)		0.57
0.07				
Max Chl Dpth (ft)	2.83	Hydr. Depth (ft)		1.83
0.08				
Conv. Total (cfs)	15533.3	Conv. (cfs)		15508.1
25.2				
Length wtd. (ft)	19.19	wetted Per. (ft)		50.04
15.70				
Min Ch El (ft)	817.32	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	303.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.90
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.77
1.50				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 11

INPUT

Description:

Station	Elevation	Data	num=	13							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	822.32	12.18	822.11	16.36	822	26.74	819	34.31	818		
38.92	817	53.92	817	66.73	819	77.56	820	239.49	821		
270.56	822	273.56	822	284	822						

Manning's n Values		num=		3							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val

0 .0066 12.18 .0129 CPNPPLocalPMP
 284 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 16.36 77.56 8.89 8.89 8.89 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 273.56 284 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	820.15	Reach Len. (ft)	8.89	8.89
8.89				
Crit w.s. (ft)		Flow Area (sq ft)		109.09
1.94				
E.G. Slope (ft/ft)	0.000007	Area (sq ft)		109.09
1.94				
Q Total (cfs)	52.00	Flow (cfs)		51.89
0.11				
Top width (ft)	79.89	Top width (ft)		54.82
25.07				
Vel Total (ft/s)	0.47	Avg. vel. (ft/s)		0.48
0.05				
Max Chl Dpth (ft)	3.15	Hydr. Depth (ft)		1.99
0.08				
Conv. Total (cfs)	19793.3	Conv. (cfs)		19752.7
40.6				
Length wtd. (ft)	8.89	wetted Per. (ft)		55.35
25.07				
Min Ch El (ft)	817.00	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	284.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.85
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.75
1.49				

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 10.8*

INPUT

Description:

Station Elevation Data	num=	22							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-2 822.4 3.9 822.33	10.98 822.24	12.74 822.17	15.44 822.04						
17.8 821.6 27.75 818.8	35.01 817.71	37.68 817.12	39.42 816.66						
55.42 816.66 66.33 817.97	70.3 818.54	82.88 819.8	160.75 820.4						
234.16 820.97 240.17 821.03	269.36 821.97	270.35 822	272.76 822						
273.26 822 283.4 822									

Manning's n Values	num=	9							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-2 .0066 3.9 .0086	10.98 .0123	12.74 .0132	15.44 .0137						

17.8 .0116 32.23 .0116 CPNPPLocalPMP
 48.39 .0137 283.4 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 17.8 82.88 8.89 8.89 8.89 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 273.172 283.4 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.013
0.014				
W.S. Elev (ft)	820.16	Reach Len. (ft)	8.89	8.89
8.89				
Crit w.s. (ft)		Flow Area (sq ft)		136.94
8.21				
E.G. Slope (ft/ft)	0.000004	Area (sq ft)		136.94
8.21				
Q Total (cfs)	52.00	Flow (cfs)		51.47
0.53				
Top width (ft)	106.11	Top width (ft)		59.95
46.16				
Vel Total (ft/s)	0.36	Avg. vel. (ft/s)		0.38
0.06				
Max Chl Dpth (ft)	3.50	Hydr. Depth (ft)		2.28
0.18				
Conv. Total (cfs)	27626.7	Conv. (cfs)		27345.0
281.6				
Length wtd. (ft)	8.89	wetted Per. (ft)		60.52
46.16				
Min Ch El (ft)	816.66	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.09	Stream Power (lb/ft s)	283.40	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.83
4.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.74
1.48				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 10.6*

INPUT

Description:

Station	Elevation	Data	num=	22						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-4	822.48	2.92	822.43	11.23	822.35	13.31	822.23	16.47	822.03	
19.24	821.2	28.76	818.6	35.7	817.42	38.26	816.84	39.93	816.32	
56.93	816.32	69.35	817.48	73.87	818.09	88.2	819.6	163.77	820.3	
235.01	820.98	240.84	821.07	269.18	821.98	270.13	822	272.48	822	
272.96	822	282.8	822							

Manning's n Values num= 9

Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val	Sta	n Val
-4	.0066	2.92	.0081	11.23	.0124	13.31	.0135	16.47	.0145	
19.24	.0104	34.54	.0104	51.65	.0145	282.8	.0129			

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 19.24 88.2 8.89 8.89 8.89 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
272.784	282.8	825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.16			
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.013
0.015				
W.S. Elev (ft)	820.16	Reach Len. (ft)	8.89	8.89
8.89				
Crit w.s. (ft)		Flow Area (sq ft)		168.22
16.70				
E.G. slope (ft/ft)	0.000002	Area (sq ft)		168.22
16.70				
Q Total (cfs)	52.00	Flow (cfs)		50.98
1.02				
Top width (ft)	125.19	Top width (ft)		65.14
60.05				
Vel Total (ft/s)	0.28	Avg. vel. (ft/s)		0.30
0.06				
Max Chl Dpth (ft)	3.84	Hydr. Depth (ft)		2.58
0.28				
Conv. Total (cfs)	37333.3	Conv. (cfs)		36604.0
729.3				
Length wtd. (ft)	8.89	wetted Per. (ft)		65.76
60.06				
Min Ch El (ft)	816.32	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.14	Stream Power (lb/ft s)	282.80	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.80
4.02				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.73
1.47				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 10.4*

INPUT

Description:

Station	Elevation	Data	num=	22	Sta	Elev	Sta	Elev	Sta	Elev
-6	822.56	1.95	822.53	11.49	822.45	13.87	822.28	17.51	822.02	
20.69	820.8	29.77	818.4	36.4	817.12	38.84	816.56	40.43	815.98	
58.43	815.98	72.37	816.99	77.44	817.63	93.51	819.4	166.79	820.2	
235.86	820.98	241.52	821.1	268.99	821.99	269.92	822	272.19	822	
272.66	822	282.2	822							

CPNPPLocalPMP

Manning's n Values		num= 9		Sta n Val		Sta n Val		Sta n Val		
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-6	.0066	1.95	.0076	11.49	.0126	13.87	.0139	17.51	.0154	
20.69	.0091	36.84	.0091	54.91	.0154	282.2	.0129			
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	20.69	93.51		8.89	8.89		.1	.3		
Blocked Obstructions		num= 1								
Sta L	Sta R	Elev								
272.396	282.2	825								

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.		0.013
0.015				
W.S. Elev (ft)	820.16	Reach Len. (ft)	8.89	8.89
8.89				
Crit w.s. (ft)		Flow Area (sq ft)		203.17
26.22				
E.G. Slope (ft/ft)	0.000001	Area (sq ft)		203.17
26.22				
Q Total (cfs)	52.00	Flow (cfs)		50.60
1.40				
Top width (ft)	139.69	Top width (ft)		70.39
69.30				
Vel Total (ft/s)	0.23	Avg. Vel. (ft/s)		0.25
0.05				
Max Chl Dpth (ft)	4.18	Hydr. Depth (ft)		2.89
0.38				
Conv. Total (cfs)	49073.0	Conv. (cfs)		47749.9
1323.1				
Length wtd. (ft)	8.89	wetted Per. (ft)		71.08
69.31				
Min Ch El (ft)	815.98	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.18	Stream Power (lb/ft s)	282.20	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.76
4.02				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.71
1.46				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 10.2*

INPUT

Description:

Station Elevation Data		num= 22		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-8	822.64	.97	822.62	11.74	822.55	14.43	822.34	18.54	822.01
22.13	820.4	30.78	818.2	37.09	816.83	39.42	816.28	40.94	815.64
59.94	815.64	75.39	816.49	81.01	817.18	98.83	819.2	169.81	820.1

236.72	820.99	242.19	821.14	CPNPPLocalPMP	268.81	821.99	269.7	822	271.91	822
272.36	822	281.6	822							
Manning's n Values				num=	9					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-8	.0066	.97	.0071	11.74	.0127	14.43	.0142	18.54	.0162	
22.13	.0079	39.14	.0079	58.18	.0162	281.6	.0129			
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	22.13	98.83		8.89	8.89	8.89	.1	.3		
Blocked Obstructions				num=	1					
Sta L	Sta R	Elev								
272.008	281.6	825								

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.013
0.016				
W.S. Elev (ft)	820.16	Reach Len. (ft)	8.89	8.89
8.89				
Crit w.s. (ft)		Flow Area (sq ft)		241.72
36.09				
E.G. Slope (ft/ft)	0.000001	Area (sq ft)		241.72
36.09				
Q Total (cfs)	52.00	Flow (cfs)		50.33
1.67				
Top width (ft)	150.99	Top width (ft)		75.74
75.25				
Vel Total (ft/s)	0.19	Avg. vel. (ft/s)		0.21
0.05				
Max Chl Dpth (ft)	4.52	Hydr. Depth (ft)		3.19
0.48				
Conv. Total (cfs)	63017.6	Conv. (cfs)		60989.5
2028.2				
Length wtd. (ft)	8.89	wetted Per. (ft)		76.51
75.25				
Min Ch El (ft)	815.64	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.20	Stream Power (lb/ft s)	281.60	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.71
4.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.70
1.44				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 10

INPUT

Description:

Station	Elevation	Data	num=	15					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.72	0	822.72	12	822.66	19.57	822	23.57	820

40	816	41.44	815.3	61.44	815.3	78.41	816	104.15	819
172.83	820	237.57	821	268.62	822	271.62	822	281	822
Manning's n Values num= 8									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0066	0	.0066	12	.0129	19.57	.017	41.44	.0066
61.44	.017	104.15	.0129	281	.0129				
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.									
	23.57	104.15		.5	.5	.5		.1	.3
Blocked Obstructions num= 1									
Sta L	Sta R	Elev							
271.62	281	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.	0.017	0.015
0.013				
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	281.04
43.12				
E.G. Slope (ft/ft)	0.000043	Area (sq ft)	0.01	281.04
43.12				
Q Total (cfs)	442.00	Flow (cfs)	0.00	419.90
22.10				
Top width (ft)	157.33	Top width (ft)	0.24	80.58
76.51				
Vel Total (ft/s)	1.36	Avg. vel. (ft/s)	0.08	1.49
0.51				
Max Chl Dpth (ft)	4.82	Hydr. Depth (ft)	0.06	3.49
0.56				
Conv. Total (cfs)	67761.6	Conv. (cfs)	0.2	64373.1
3388.4				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.27	81.41
76.52				
Min Ch El (ft)	815.30	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.15	Stream Power (lb/ft s)	281.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.66
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.68
1.43				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.9875*

INPUT

Description:

Station	Elevation	Data	num=	20					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.71	-.07	822.71	11.84	822.65	12.99	822.55	19.36	821.98

		CPNPPLocalPMP							
23.33	820	39.42	816.08	39.76	816	41.2	815.3	61.2	815.3
70.96	815.71	78	816.01	103.48	819	171.9	820	236.4	821.01
261.95	821.83	266.21	821.96	267.33	822	270.32	822	279.66	822

Manning's n Values num= 11

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0067	-.07	.0067	11.84	.013	12.99	.0136	19.36	.0169
23.33	.0066	41.1	.0066	54.71	.0136	61	.0169	89.79	.0143
279.66	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

23.33	103.48	.5	.5	.5		.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
270.2816	279.66	825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.03	wt. n-val.	0.017	0.013
0.014				
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	279.29
42.82				
E.G. slope (ft/ft)	0.000032	Area (sq ft)	0.01	279.29
42.82				
Q Total (cfs)	442.00	Flow (cfs)	0.00	424.89
17.11				
Top width (ft)	156.42	Top width (ft)	0.24	80.15
76.03				
Vel Total (ft/s)	1.37	Avg. vel. (ft/s)	0.07	1.52
0.40				
Max Chl Dpth (ft)	4.82	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	78375.1	Conv. (cfs)	0.2	75340.8
3034.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.27	80.98
76.04				
Min Ch El (ft)	815.30	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.18	Stream Power (lb/ft s)	279.66	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.66
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.68
1.42				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.975*

INPUT
 Description:
 Station Elevation Data num= 20

Sta	Elev	Sta	Elev	CPNPPLocalPMP		Sta	Elev	Sta	Elev
-10	822.7	-.14	822.7	11.69	822.64	12.82	822.55	19.15	821.97
23.09	820	39.19	816.08	39.52	816	40.96	815.29	60.96	815.29
70.62	815.71	77.59	816.02	102.8	819	170.97	820.01	235.22	821.01
260.67	821.83	264.93	821.96	266.04	822	269.02	822	278.33	822

Manning's n Values		num=	11
Sta	n Val	Sta	n Val
-10	.0069	-.14	.0069
23.09	.0066	40.77	.0066
278.33	.0129	54.3	.0135
		60.55	.0168
		89.19	.0143

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	23.09	102.8		.5	.5		.1	.3

Blocked Obstructions			num=	1
Sta L	Sta R	Elev		
268.9432	278.33	825		

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.15	Element		
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.017	0.013
0.014				
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	277.87
42.22				
E.G. Slope (ft/ft)	0.000032	Area (sq ft)	0.01	277.87
42.22				
Q Total (cfs)	442.00	Flow (cfs)	0.00	425.13
16.87				
Top width (ft)	155.11	Top width (ft)	0.24	79.71
75.16				
Vel Total (ft/s)	1.38	Avg. Vel. (ft/s)	0.07	1.53
0.40				
Max Chl Dpth (ft)	4.83	Hydr. Depth (ft)	0.06	3.49
0.56				
Conv. Total (cfs)	78253.5	Conv. (cfs)	0.2	75266.7
2986.7				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.27	80.55
75.17				
Min Ch El (ft)	815.29	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.18	Stream Power (lb/ft s)	278.33	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.66
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.68
1.42				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.9625*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.69	-.21	822.69	11.53	822.64	12.66	822.54	18.94	821.95		
22.85	820	38.95	816.08	39.29	815.99	40.73	815.29	60.73	815.29		
70.28	815.72	77.18	816.02	102.13	819	170.03	820.01	234.05	821.02		
259.4	821.83	263.64	821.97	264.75	822	267.71	822	276.99	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.007	-.21	.007	11.53	.0131	12.66	.0137	18.94	.0168		
22.85	.0066	40.43	.0066	53.89	.0134	60.11	.0167	88.59	.0143		
276.99	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	22.85	102.13		.5	.5		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
267.6049	276.99	825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.017	0.012
0.014				
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	276.31
42.01				
E.G. Slope (ft/ft)	0.000032	Area (sq ft)	0.01	276.31
42.01				
Q Total (cfs)	442.00	Flow (cfs)	0.00	425.18
16.82				
Top width (ft)	154.28	Top width (ft)	0.24	79.28
74.76				
Vel Total (ft/s)	1.39	Avg. vel. (ft/s)	0.07	1.54
0.40				
Max Chl Dpth (ft)	4.83	Hydr. Depth (ft)	0.06	3.49
0.56				
Conv. Total (cfs)	78102.0	Conv. (cfs)	0.2	75129.2
2972.7				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.27	80.12
74.77				
Min Ch El (ft)	815.29	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.18	Stream Power (lb/ft s)	276.99	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.65
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.68
1.42				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.95*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.68	-.28	822.68	11.38	822.63	12.49	822.53	18.73	821.94		
22.62	820	38.71	816.08	39.05	815.99	40.49	815.29	60.49	815.29		
69.94	815.72	76.76	816.03	101.45	819	169.1	820.01	232.87	821.03		
258.13	821.83	262.35	821.97	263.46	822	266.41	822	275.65	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0071	-.28	.0071	11.38	.0131	12.49	.0137	18.73	.0167		
22.62	.0066	40.1	.0066	53.48	.0134	59.67	.0166	87.99	.0144		
275.65	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	22.62	101.45		.5	.5		.1	.3

Blocked Obstructions		num= 1		Sta L		Sta R		Elev	
Sta L	Sta R	Elev							
266.2665	275.65	825							

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.017	0.012
0.014				
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	41.81	Flow Area (sq ft)	0.01	274.61
41.81				
E.G. slope (ft/ft)	0.000032	Area (sq ft)	0.01	274.61
41.81				
Q Total (cfs)	442.00	Flow (cfs)	0.00	425.29
16.71				
Top width (ft)	153.45	Top width (ft)	0.24	78.83
74.38				
Vel Total (ft/s)	1.40	Avg. vel. (ft/s)	0.07	1.55
0.40				
Max Chl Dpth (ft)	4.83	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	77714.0	Conv. (cfs)	0.2	74775.2
2938.6				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.26	79.67
74.39				
Min Ch El (ft)	815.29	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	275.65	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.65
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.68
1.42				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

CPNPPLocalPMP

RIVER: Center North
 REACH: Center N Upper RS: 9.9375*

INPUT

Description:

Station	Elevation	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.67	-.36	822.67	11.22	822.62	12.33	822.52	18.52	821.92			
22.38	820	38.47	816.08	38.81	815.99	40.25	815.29	60.25	815.29			
69.6	815.72	76.35	816.04	100.78	819	168.17	820.02	231.7	821.03			
256.86	821.84	261.07	821.97	262.16	822	265.11	822	274.31	822			

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0072	-.36	.0072	11.22	.0132	12.33	.0137	18.52	.0166
22.38	.0066	39.76	.0066	53.08	.0133	59.22	.0165	87.39	.0144
274.31	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 22.38 100.78 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 264.9281 274.31 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.017	0.012
0.014				
w.s. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	272.98
41.21				
E.G. Slope (ft/ft)	0.000033	Area (sq ft)	0.01	272.98
41.21				
Q Total (cfs)	442.00	Flow (cfs)	0.00	425.51
16.49				
Top width (ft)	152.14	Top width (ft)	0.24	78.40
73.50				
Vel Total (ft/s)	1.41	Avg. vel. (ft/s)	0.07	1.56
0.40				
Max Chl Dpth (ft)	4.83	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	77492.2	Conv. (cfs)	0.2	74600.3
2891.7				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.26	79.24
73.51				
Min Ch El (ft)	815.29	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	274.31	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.65
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.68
1.42				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

CPNPPLocalPMP

RIVER: Center North
 REACH: Center N Upper RS: 9.925*

INPUT

Description:

Station Elevation Data		num= 20		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.67	-.43	822.67	11.06	822.61	12.17	822.52	18.31	821.91		
22.14	820	38.23	816.08	38.57	815.99	40.01	815.28	60.01	815.28		
69.26	815.73	75.94	816.05	100.1	819	167.24	820.02	230.52	821.04		
255.59	821.84	259.78	821.97	260.87	822	263.81	822	272.98	822		

Manning's n Values		num= 11		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0074	-.43	.0074	11.06	.0132	12.17	.0138	18.31	.0165		
22.14	.0066	39.43	.0066	52.67	.0132	58.78	.0164	86.79	.0144		
272.98	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 22.14 100.1 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 263.5898 272.98 825

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	820.15	Element	Left OB	Channel
0.014	Vel Head (ft)	0.04	wt. n-val.	0.017	0.012
0.50	w.s. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
41.03	Crit w.s. (ft)		Flow Area (sq ft)	0.01	271.50
41.03	E.G. slope (ft/ft)	0.000033	Area (sq ft)	0.01	271.50
16.45	Q Total (cfs)	442.00	Flow (cfs)	0.00	425.55
73.14	Top width (ft)	151.34	Top width (ft)	0.23	77.96
0.40	Vel Total (ft/s)	1.41	Avg. vel. (ft/s)	0.07	1.57
0.56	Max Chl Dpth (ft)	4.84	Hydr. Depth (ft)	0.06	3.48
2879.3	Conv. Total (cfs)	77380.0	Conv. (cfs)	0.2	74500.5
73.15	Length wtd. (ft)	0.50	wetted Per. (ft)	0.26	78.81
0.00	Min Ch El (ft)	815.28	Shear (lb/sq ft)	0.00	0.01
0.00	Alpha	1.19	Stream Power (lb/ft s)	272.98	0.00
4.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.64
1.42	C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.68

Note: Manning's n values were composited to a single value in the main channel.
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CPNPPLocalPMP

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.9125*

INPUT

Description:

Station	Elevation	Data	num=	20	Station	Elevation	Station	Elevation	Station	Elevation
-10	822.66	- .5	822.66	10.91	822.6	12	822.51	18.1	821.89	
21.9	820	37.99	816.08	38.33	815.98	39.77	815.28	59.77	815.28	
68.92	815.73	75.53	816.06	99.43	819	166.31	820.03	229.35	821.05	
254.32	821.84	258.49	821.97	259.58	822	262.5	822	271.64	822	

Manning's n	Values	num=	11	Station	n Val	Station	n Val	Station	n Val
-10	.0075	- .5	.0075	10.91	.0133	12	.0138	18.1	.0164
21.9	.0066	39.09	.0066	52.26	.0131	58.34	.0163	86.19	.0145
271.64	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	21.9	99.43		.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			262.2514	271.64	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.016	0.012
0.015				
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	269.88
40.43				
E.G. slope (ft/ft)	0.000033	Area (sq ft)	0.01	269.88
40.43				
Q Total (cfs)	442.00	Flow (cfs)	0.00	425.85
16.15				
Top width (ft)	149.97	Top width (ft)	0.23	77.53
72.20				
Vel Total (ft/s)	1.42	Avg. vel. (ft/s)	0.07	1.58
0.40				
Max Chl Dpth (ft)	4.84	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	77029.5	Conv. (cfs)	0.2	74214.5
2814.8				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.26	78.38
72.21				
Min Ch El (ft)	815.28	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	271.64	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.64
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.68
1.42				

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.9*

INPUT

Description:

Station	Elevation	Data	num=	20	Station	Elevation	Station	Elevation	Station	Elevation
-10	822.65	-.57	822.65	10.75	822.59	11.84	822.5	17.89	821.88	
21.66	820	37.76	816.07	38.09	815.98	39.53	815.28	59.53	815.28	
68.59	815.74	75.12	816.06	98.75	819	165.37	820.03	228.17	821.05	
253.05	821.84	257.21	821.97	258.29	822	261.2	822	270.3	822	

Station	n Val	Station	n Val	Station	n Val	Station	n Val	Station	n Val
-10	.0076	-.57	.0076	10.75	.0133	11.84	.0139	17.89	.0164
21.66	.0066	38.76	.0066	51.85	.013	57.89	.0161	85.59	.0145
270.3	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21.66 98.75 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 260.913 270.3 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.016	0.012
0.015				
w.s. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	268.38
40.24				
E.G. Slope (ft/ft)	0.000033	Area (sq ft)	0.01	268.38
40.24				
Q Total (cfs)	442.00	Flow (cfs)	0.00	425.95
16.05				
Top width (ft)	149.21	Top width (ft)	0.23	77.09
71.89				
Vel Total (ft/s)	1.43	Avg. vel. (ft/s)	0.07	1.59
0.40				
Max Chl Dpth (ft)	4.84	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	77144.9	Conv. (cfs)	0.2	74344.1
2800.6				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.26	77.94
71.90				
Min Ch El (ft)	815.28	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	270.30	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.64
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.68
1.42				

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.8875*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.64	-.64	822.64	10.59	822.59	11.67	822.5	17.68	821.86		
21.42	820	37.52	816.07	37.86	815.98	39.3	815.28	59.3	815.28		
68.25	815.74	74.71	816.07	98.08	819	164.44	820.03	227	821.06		
251.78	821.85	255.92	821.97	257	822	259.9	822	268.96	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0078	-.64	.0078	10.59	.0134	11.67	.0139	17.68	.0163		
21.42	.0066	38.42	.0066	51.44	.0129	57.45	.016	84.99	.0145		
268.96	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21.42 98.08 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 259.5746 268.96 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.04	wt. n-Val.	0.016	0.012
0.015				
w.s. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	266.75
40.04				
E.G. Slope (ft/ft)	0.000033	Area (sq ft)	0.01	266.75
40.04				
Q Total (cfs)	442.00	Flow (cfs)	0.00	425.99
16.01				
Top width (ft)	148.42	Top width (ft)	0.23	76.66
71.53				
Vel Total (ft/s)	1.44	Avg. vel. (ft/s)	0.07	1.60
0.40				
Max Chl Dpth (ft)	4.84	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	76951.6	Conv. (cfs)	0.2	74164.4
2787.0				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.26	77.51
71.54				
Min ch El (ft)	815.28	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	268.96	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.63
4.00				

C & E Loss (ft) 0.00 CPNPPLocalPMP Cum SA (acres) 0.00 0.67
 1.42

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.875*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.63	-.71	822.63	10.44	822.58	11.51	822.49	17.47	821.85		
21.19	820	37.28	816.07	37.62	815.98	39.06	815.27	59.06	815.27		
67.91	815.74	74.29	816.08	97.4	819	163.51	820.04	225.82	821.06		
250.51	821.85	254.63	821.97	255.71	822	258.6	822	267.62	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0079	-.71	.0079	10.44	.0134	11.51	.014	17.47	.0162		
21.19	.0066	38.09	.0066	51.03	.0128	57.01	.0159	84.39	.0146		
267.62	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21.19 97.4 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 258.2362 267.62 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB Vel Head (ft)	0.04	wt. n-val.	0.016	0.012
0.015				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	265.32
39.48				
E.G. slope (ft/ft)	0.000033	Area (sq ft)	0.01	265.32
39.48				
Q Total (cfs)	442.00	Flow (cfs)	0.00	426.29
15.70				
Top width (ft)	147.11	Top width (ft)	0.23	76.21
70.67				
Vel Total (ft/s)	1.45	Avg. vel. (ft/s)	0.07	1.61
0.40				
Max Chl Dpth (ft)	4.84	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	76695.3	Conv. (cfs)	0.2	73970.1
2725.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.26	77.07
70.67				
Min Ch El (ft)	815.27	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	267.62	0.00
0.00				

		CPNPPLocalPMP		
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.63
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.67
1.42				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.8625*

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.62	-.78	822.62	10.28	822.57	11.34	822.48	17.26	821.83		
20.95	820	37.04	816.07	37.38	815.98	38.82	815.27	58.82	815.27		
67.57	815.75	73.88	816.09	96.73	819	162.58	820.04	224.65	821.07		
249.24	821.85	253.35	821.97	254.42	822	257.29	822	266.29	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.008	-.78	.008	10.28	.0135	11.34	.014	17.26	.0161		
20.95	.0066	37.75	.0066	50.62	.0127	56.56	.0158	83.79	.0146		
266.29	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	20.95	96.73		.5	.5	.5		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
256.8979	266.29	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.016	0.012
0.015				
w.s. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	263.64
39.28				
E.G. Slope (ft/ft)	0.000033	Area (sq ft)	0.01	263.64
39.28				
Q Total (cfs)	442.00	Flow (cfs)	0.00	426.32
15.67				
Top width (ft)	146.32	Top width (ft)	0.23	75.78
70.31				
Vel Total (ft/s)	1.46	Avg. vel. (ft/s)	0.07	1.62
0.40				
Max Chl Dpth (ft)	4.84	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	76465.9	Conv. (cfs)	0.2	73754.1
2711.7				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.26	76.64
70.32				
Min Ch El (ft)	815.27	Shear (lb/sq ft)	0.00	0.01
0.00				

	Alpha	CPNPPLocalPMP	Stream Power (lb/ft s)	266.29	0.00
0.00	1.19				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.63	
4.00					
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.67	
1.42					

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.85*

INPUT

Description:

Station	Elevation	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.61	-.85	822.61	10.13	822.56	11.18	822.48	17.05	821.82			
20.71	820	36.8	816.07	37.14	815.97	38.58	815.27	58.58	815.27			
67.23	815.75	73.47	816.1	96.06	819	161.65	820.04	223.47	821.08			
247.97	821.85	252.06	821.97	253.13	822	255.99	822	264.95	822			

Manning's n	Values	num=	11	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0082	-.85	.0082	10.13	.0135	11.18	.014	17.05	.016		
20.71	.0066	37.42	.0066	50.21	.0126	56.12	.0157	83.19	.0146		
264.95	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	20.71	96.06		.5	.5	.5		.1	.3
Blocked Obstructions	num=	1							
Sta L	Sta R	Elev							
255.5595	264.95	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.	0.016	0.012
0.015				
w.s. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	262.04
39.09				
E.G. slope (ft/ft)	0.000034	Area (sq ft)	0.01	262.04
39.09				
Q Total (cfs)	442.00	Flow (cfs)	0.00	426.36
15.64				
Top width (ft)	145.54	Top width (ft)	0.23	75.35
69.96				
Vel Total (ft/s)	1.47	Avg. vel. (ft/s)	0.07	1.63
0.40				
Max Chl Dpth (ft)	4.84	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	76279.4	Conv. (cfs)	0.2	73581.0
2698.3				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.25	76.21
69.97				

		CPNPPLocalPMP		
Min Ch El (ft)	815.27	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	264.95	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.62
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.67
1.42				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.8375*

INPUT

Description:

Station Elevation Data num= 20

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.6	-.92	822.6	9.97	822.55	11.01	822.47	16.84	821.8
20.47	820	36.57	816.07	36.9	815.97	38.34	815.27	58.34	815.27
66.89	815.75	73.06	816.11	95.38	819	160.71	820.05	222.3	821.08
246.7	821.85	250.77	821.97	251.84	822	254.69	822	263.61	822

Manning's n Values num= 11

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0083	-.92	.0083	9.97	.0136	11.01	.0141	16.84	.016
20.47	.0066	37.08	.0066	49.8	.0126	55.68	.0156	82.59	.0147
263.61	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 20.47 95.38 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 254.2211 263.61 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.016	0.012
0.015				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	260.38
38.52				
E.G. slope (ft/ft)	0.000034	Area (sq ft)	0.01	260.38
38.52				
Q Total (cfs)	442.00	Flow (cfs)	0.00	426.63
15.37				
Top width (ft)	144.22	Top width (ft)	0.23	74.91
69.09				
Vel Total (ft/s)	1.48	Avg. vel. (ft/s)	0.07	1.64
0.40				
Max Chl Dpth (ft)	4.84	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	75860.1	Conv. (cfs)	0.2	73222.5
2637.4				

		CPNPPLocalPMP		
Length wtd. (ft)	0.50	Wetted Per. (ft)	0.25	75.77
69.09		Shear (lb/sq ft)	0.00	0.01
Min Ch El (ft)	815.27	Stream Power (lb/ft s)	263.61	0.00
0.00		Cum Volume (acre-ft)	0.19	3.62
Alpha	1.19	Cum SA (acres)	0.00	0.67
0.00				
Frctn Loss (ft)	0.00			
4.00				
C & E Loss (ft)	0.00			
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.825*

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.59	-.99	822.59	9.81	822.54	10.85	822.46	16.63	821.78		
20.23	820	36.33	816.07	36.67	815.97	38.11	815.26	58.11	815.26		
66.55	815.76	72.65	816.11	94.71	819	159.78	820.05	221.12	821.09		
245.42	821.86	249.49	821.97	250.54	822	253.39	822	262.27	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0084	-.99	.0084	9.81	.0136	10.85	.0141	16.63	.0159		
20.23	.0066	36.75	.0066	49.39	.0125	55.23	.0155	81.99	.0147		
262.27	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 20.23 94.71 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 252.8828 262.27 825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.016	0.012
0.015				
w.s. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	259.10
38.33				
E.G. Slope (ft/ft)	0.000034	Area (sq ft)	0.01	259.10
38.33				
Q Total (cfs)	442.00	Flow (cfs)	0.00	426.70
15.30				
Top width (ft)	143.45	Top width (ft)	0.23	74.48
68.75				
Vel Total (ft/s)	1.49	Avg. vel. (ft/s)	0.07	1.65
0.40				
Max Chl Dpth (ft)	4.85	Hydr. Depth (ft)	0.06	3.48
0.56				

		CPNPPLocalPMP		
Conv. Total (cfs)	75812.7	Conv. (cfs)	0.2	73188.0
2624.6				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.25	75.35
68.75				
Min Ch El (ft)	815.26	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	262.27	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.62
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.67
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.8125*

INPUT

Description:

Station	Elevation	Data	num=	20							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.58	-1.07	822.58	9.66	822.54	10.69	822.45	16.42	821.77		
19.99	820	36.09	816.07	36.43	815.97	37.87	815.26	57.87	815.26		
66.21	815.76	72.24	816.12	94.03	819	158.85	820.06	219.95	821.1		
244.15	821.86	248.2	821.97	249.25	822	252.08	822	260.94	822		

Station	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0086	-1.07	.0086	9.66	.0137	10.69	.0142	16.42	.0158		
19.99	.0066	36.41	.0066	48.98	.0124	54.79	.0154	81.39	.0147		
260.94	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	19.99	94.03		.5	.5	.5		.1	.3
Blocked Obstructions			num=	1					
	Sta L	Sta R	Elev						
	251.5444	260.94	825						

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.04	wt. n-Val.	0.016	0.012
0.015				
w.s. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	257.47
37.78				
E.G. slope (ft/ft)	0.000034	Area (sq ft)	0.01	257.47
37.78				
Q Total (cfs)	442.00	Flow (cfs)	0.00	426.88
15.11				
Top width (ft)	142.12	Top width (ft)	0.23	74.04
67.86				
Vel Total (ft/s)	1.50	Avg. vel. (ft/s)	0.07	1.66
0.40				

		CPNPPLocalPMP		
Max Chl Dpth (ft)	4.85	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	75588.7	Conv. (cfs)	0.2	73003.8
2584.8				
Length Wtd. (ft)	0.50	wetted Per. (ft)	0.25	74.91
67.87				
Min Ch El (ft)	815.26	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	260.94	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.62
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.67
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.8*

INPUT

Description:

Station Elevation Data		num= 20	
Sta	Elev	Sta	Elev
-10	822.58	-1.14	822.58
19.76	820	35.85	816.07
65.87	815.77	71.83	816.13
242.88	821.86	246.91	821.97

Manning's n Values		num= 11	
Sta	n Val	Sta	n Val
-10	.0087	-1.14	.0087
19.76	.0066	36.08	.0066
259.6	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	19.76	93.36		.5	.5		.1	.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
250.206	259.6	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.016	0.012
0.015				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	255.78
37.59				
E.G. slope (ft/ft)	0.000035	Area (sq ft)	0.01	255.78
37.59				
Q Total (cfs)	442.00	Flow (cfs)	0.00	427.00
15.00				
Top width (ft)	141.37	Top width (ft)	0.23	73.60
67.55				

		CPNPPLocalPMP		
Vel Total (ft/s) 0.40	1.51	Avg. Vel. (ft/s)	0.08	1.67
Max Chl Dpth (ft) 0.56	4.85	Hydr. Depth (ft)	0.06	3.48
Conv. Total (cfs) 2553.2	75219.0	Conv. (cfs)	0.2	72665.6
Length wtd. (ft) 67.56	0.50	wetted Per. (ft)	0.25	74.47
Min Ch El (ft) 0.00	815.26	Shear (lb/sq ft)	0.00	0.01
Alpha 0.00	1.19	Stream Power (lb/ft s)	259.60	0.00
Frctn Loss (ft) 4.00	0.00	Cum Volume (acre-ft)	0.19	3.61
C & E Loss (ft) 1.41	0.00	Cum SA (acres)	0.00	0.67

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.7875*

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.57	-1.21	822.57	9.34	822.52	10.36	822.44	16	821.74		
19.52	820	35.61	816.06	35.95	815.96	37.39	815.26	57.39	815.26		
65.54	815.77	71.41	816.14	92.68	819	156.99	820.06	217.6	821.11		
241.61	821.86	245.62	821.97	246.67	822	249.48	822	258.26	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0088	-1.21	.0088	9.34	.0138	10.36	.0143	16	.0156		
19.52	.0066	35.74	.0066	48.17	.0122	53.9	.0152	80.19	.0148		
258.26	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 19.52 92.68 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 248.8676 258.26 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.016	0.012
0.015				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	254.24
37.40				
E.G. Slope (ft/ft)	0.000035	Area (sq ft)	0.01	254.24
37.40				
Q Total (cfs)	442.00	Flow (cfs)	0.00	427.04
14.96				

		CPNPPLocalPMP		
Top width (ft)	140.61	Top width (ft)	0.22	73.16
67.22				
Vel Total (ft/s)	1.52	Avg. Vel. (ft/s)	0.08	1.68
0.40				
Max Chl Dpth (ft)	4.85	Hydr. Depth (ft)	0.06	3.48
0.56				
Conv. Total (cfs)	75061.2	Conv. (cfs)	0.2	72520.9
2540.2				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.25	74.03
67.23				
Min Ch El (ft)	815.26	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	258.26	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.61
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.67
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.775*

INPUT

Description:

Station Elevation Data		num=	20							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822.56	-1.28	822.56	9.19	822.51	10.19	822.43	15.79	821.72	
19.28	820	35.38	816.06	35.71	815.96	37.15	815.25	57.15	815.25	
65.2	815.77	71	816.15	92.01	819	156.05	820.07	216.43	821.12	
240.34	821.87	244.34	821.97	245.38	822	248.18	822	256.92	822	

Manning's n Values		num=	11							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0089	-1.28	.0089	9.19	.0138	10.19	.0143	15.79	.0156	
19.28	.0066	35.41	.0066	47.76	.0121	53.46	.0151	79.59	.0148	
256.92	.0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 19.28 92.01 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 247.5293 256.92 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.	0.016	0.012
0.015				
w.s. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	252.88
36.86				
E.G. slope (ft/ft)	0.000035	Area (sq ft)	0.01	252.88
36.86				

		CPNPPLocalPMP		
Q Total (cfs)	442.00	Flow (cfs)	0.00	427.25
14.75				
Top width (ft)	139.29	Top width (ft)	0.22	72.73
66.34				
Vel Total (ft/s)	1.53	Avg. Vel. (ft/s)	0.08	1.69
0.40				
Max Chl Dpth (ft)	4.86	Hydr. Depth (ft)	0.05	3.48
0.56				
Conv. Total (cfs)	74949.6	Conv. (cfs)	0.2	72448.0
2501.5				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.25	73.61
66.34				
Min ch El (ft)	815.25	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	256.92	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.61
4.00				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.67
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.7625*

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.55	-1.35	822.55	9.03	822.5	10.03	822.43	15.58	821.71		
19.04	820	35.14	816.06	35.48	815.96	36.92	815.25	56.92	815.25		
64.86	815.78	70.59	816.15	91.33	819	155.12	820.07	215.25	821.12		
239.07	821.87	243.05	821.97	244.09	822	246.88	822	255.59	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0091	-1.35	.0091	9.03	.0139	10.03	.0143	15.58	.0155		
19.04	.0066	35.07	.0066	47.35	.012	53.02	.015	78.99	.0149		
255.59	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	19.04	91.33		.5	.5		.1	.3
Blocked Obstructions			num=	1				
	Sta L	Sta R	Elev					
	246.1909	255.59	825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.	0.016	0.012
0.015				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	251.33
36.68				

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.000035	Area (sq ft)	0.01 251.33
36.68			
Q Total (cfs)	442.00	Flow (cfs)	0.00 427.37
14.63			
Top width (ft)	138.55	Top width (ft)	0.22 72.29
66.04			
Vel Total (ft/s)	1.53	Avg. vel. (ft/s)	0.08 1.70
0.40			
Max Chl Dpth (ft)	4.86	Hydr. Depth (ft)	0.05 3.48
0.56			
Conv. Total (cfs)	74642.7	Conv. (cfs)	0.2 72171.6
2471.0			
Length wtd. (ft)	0.50	wetted Per. (ft)	0.25 73.17
66.05			
Min Ch El (ft)	815.25	Shear (lb/sq ft)	0.00 0.01
0.00			
Alpha	1.19	Stream Power (lb/ft s)	255.59 0.00
0.00			
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19 3.60
4.00			
C & E Loss (ft)	0.00	Cum SA (acres)	0.00 0.67
1.41			

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.75*

INPUT

Description:

Station Elevation Data		num= 20	
Sta	Elev	Sta	Elev
-10	822.54	-1.42	822.54
18.8	820	34.9	816.06
64.52	815.78	70.18	816.16
237.8	821.87	241.76	821.97

Manning's n Values		num= 11	
Sta	n Val	Sta	n Val
-10	.0092	-1.42	.0092
18.8	.0066	34.74	.0066
254.25	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	18.8	90.66		.5	.5	.5		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
244.8525	254.25	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.015	0.012
0.015				
w.s. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				

		CPNPPLocalPMP		
Crit w.s. (ft)		Flow Area (sq ft)	0.01	249.74
36.49				
E.G. slope (ft/ft)	0.000035	Area (sq ft)	0.01	249.74
36.49				
Q Total (cfs)	442.00	Flow (cfs)	0.00	427.41
14.59				
Top width (ft)	137.79	Top width (ft)	0.22	71.86
65.71				
Vel Total (ft/s)	1.54	Avg. vel. (ft/s)	0.08	1.71
0.40				
Max Chl Dpth (ft)	4.86	Hydr. Depth (ft)	0.05	3.48
0.56				
Conv. Total (cfs)	74444.8	Conv. (cfs)	0.2	71986.9
2457.7				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.25	72.74
65.72				
Min Ch El (ft)	815.25	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	254.25	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.60
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.7375*

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.53	-1.49	822.53	8.72	822.49	9.7	822.41	15.16	821.68		
18.56	820	34.66	816.06	35	815.95	36.44	815.24	56.44	815.24		
64.18	815.78	69.77	816.17	89.99	819	153.26	820.08	212.9	821.14		
236.53	821.87	240.48	821.97	241.51	822	244.27	822	252.91	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0093	-1.49	.0093	8.72	.014	9.7	.0144	15.16	.0153		
18.56	.0066	34.4	.0066	46.53	.0118	52.13	.0148	77.79	.015		
252.91	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 18.56 89.99 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 243.5141 252.91 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.	0.015	0.012
0.015				

		CPNPPLocalPMP	
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50
0.50			0.50
Crit w.s. (ft)		Flow Area (sq ft)	0.01
35.96			248.42
E.G. slope (ft/ft)	0.000035	Area (sq ft)	0.01
35.96			248.42
Q Total (cfs)	442.00	Flow (cfs)	0.00
14.32			427.68
Top width (ft)	136.49	Top width (ft)	0.22
64.85			71.43
Vel Total (ft/s)	1.55	Avg. Vel. (ft/s)	0.08
0.40			1.72
Max Chl Dpth (ft)	4.87	Hydr. Depth (ft)	0.05
0.55			3.48
Conv. Total (cfs)	74211.9	Conv. (cfs)	0.2
2404.3			71807.4
Length wtd. (ft)	0.50	wetted Per. (ft)	0.24
64.86			72.32
Min Ch El (ft)	815.24	Shear (lb/sq ft)	0.00
0.00			0.01
Alpha	1.19	Stream Power (lb/ft s)	252.91
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19
3.99			3.60
C & E Loss (ft)	0.00	Cum SA (acres)	0.00
1.41			0.66

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.725*

INPUT

Description:

Station Elevation Data		num= 20	
Sta	Elev	Sta	Elev
-10	822.52	-1.56	822.52
18.33	820	34.42	816.06
63.84	815.79	69.36	816.18
235.26	821.87	239.19	821.97

Manning's n Values		num= 11	
Sta	n Val	Sta	n Val
-10	.0095	-1.56	.0095
18.33	.0066	34.07	.0066
251.57	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 18.33 89.31 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 242.1758 251.57 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft) 820.15 Element Left OB Channel
 Right OB

		CPNPPLocalPMP		
Vel Head (ft)	0.05	wt. n-Val.	0.015	0.012
0.015				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	246.73
35.78				
E.G. Slope (ft/ft)	0.000036	Area (sq ft)	0.01	246.73
35.78				
Q Total (cfs)	442.00	Flow (cfs)	0.00	427.70
14.30				
Top width (ft)	135.75	Top width (ft)	0.22	70.98
64.55				
Vel Total (ft/s)	1.56	Avg. vel. (ft/s)	0.08	1.73
0.40				
Max Chl Dpth (ft)	4.87	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	73923.9	Conv. (cfs)	0.2	71532.8
2390.9				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.24	71.87
64.56				
Min Ch El (ft)	815.24	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	251.57	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.59
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.7125*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
-10	822.51	-1.63	822.51	8.41	822.47	9.37	822.4	14.74	821.65		
18.09	820	34.18	816.06	34.52	815.95	35.96	815.24	55.96	815.24		
63.5	815.79	68.95	816.19	88.64	819	151.39	820.08	210.55	821.15		
233.99	821.88	237.9	821.97	238.92	822	241.67	822	250.24	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
-10	.0096	-1.63	.0096	8.41	.0141	9.37	.0145	14.74	.0152		
18.09	.0066	33.73	.0066	45.71	.0117	51.24	.0145	76.59	.015		
250.24	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 18.09 88.64 .5 .5 .5 .1 .3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
240.8374	250.24	825	

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.	0.015	0.012
0.015				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	245.15
35.58				
E.G. slope (ft/ft)	0.000036	Area (sq ft)	0.01	245.15
35.58				
Q Total (cfs)	442.00	Flow (cfs)	0.00	427.79
14.20				
Top width (ft)	134.99	Top width (ft)	0.22	70.55
64.22				
Vel Total (ft/s)	1.57	Avg. Vel. (ft/s)	0.08	1.75
0.40				
Max Chl Dpth (ft)	4.87	Hydr. Depth (ft)	0.05	3.47
0.55				
Conv. Total (cfs)	73968.4	Conv. (cfs)	0.1	71591.1
2377.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.24	71.44
64.23				
Min Ch El (ft)	815.24	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	250.24	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.59
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.7*

INPUT

Description:

Station	Elevation	Data	num=	20							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.5	-1.7	822.5	8.25	822.46	9.21	822.39	14.53	821.63		
17.85	820	33.95	816.06	34.28	815.95	35.72	815.24	55.72	815.24		
63.16	815.79	68.53	816.19	87.96	819	150.46	820.09	209.38	821.15		
232.72	821.88	236.62	821.97	237.63	822	240.36	822	248.9	822		

Station	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0097	-1.7	.0097	8.25	.0141	9.21	.0146	14.53	.0151
17.85	.0066	33.4	.0066	45.3	.0116	50.8	.0144	75.99	.0151
248.9	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 17.85 87.96 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 239.499 248.9 825

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.015	0.012
0.015				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	243.64
35.07				
E.G. slope (ft/ft)	0.000036	Area (sq ft)	0.01	243.64
35.07				
Q Total (cfs)	442.00	Flow (cfs)	0.00	428.04
13.95				
Top width (ft)	133.71	Top width (ft)	0.22	70.11
63.39				
Vel Total (ft/s)	1.59	Avg. vel. (ft/s)	0.08	1.76
0.40				
Max Chl Dpth (ft)	4.87	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	73648.6	Conv. (cfs)	0.1	71323.2
2325.2				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.24	71.01
63.40				
Min Ch El (ft)	815.24	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	248.90	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.59
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.6875*

INPUT

Description:

Station Elevation Data		num=	20						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.49	-1.78	822.49	8.09	822.45	9.04	822.38	14.32	821.61
17.61	820	33.71	816.06	34.05	815.95	35.49	815.23	55.49	815.23
62.83	815.8	68.12	816.2	87.29	819	149.53	820.09	208.2	821.16
231.45	821.88	235.33	821.98	236.34	822	239.06	822	247.56	822

Manning's n Values		num=	11						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0099	-1.78	.0099	8.09	.0142	9.04	.0146	14.32	.015
17.61	.0066	33.06	.0066	44.89	.0115	50.36	.0143	75.39	.0151
247.56	.0129								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
17.61	87.29	.5	.5	.5		.1	.3
Blocked Obstructions		num=	1				
Sta L	Sta R	Elev					
238.1606	247.56	825					

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.015	0.011
0.015				
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	242.25
34.88				
E.G. slope (ft/ft)	0.000036	Area (sq ft)	0.01	242.25
34.88				
Q Total (cfs)	442.00	Flow (cfs)	0.00	428.10
13.90				
Top width (ft)	132.98	Top width (ft)	0.22	69.68
63.08				
Vel Total (ft/s)	1.59	Avg. vel. (ft/s)	0.08	1.77
0.40				
Max Chl Dpth (ft)	4.88	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	73537.5	Conv. (cfs)	0.1	71225.1
2312.3				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.24	70.58
63.09				
Min Ch El (ft)	815.23	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	247.56	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.59
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.675*

INPUT

Description:

Station	Elevation	Data	num=	20						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822.49	-1.85	822.49	7.94	822.45	8.88	822.38	14.11	821.6	
17.37	820	33.47	816.06	33.81	815.94	35.25	815.23	55.25	815.23	
62.49	815.8	67.71	816.21	86.61	819	148.6	820.1	207.03	821.17	
230.17	821.88	234.04	821.98	235.05	822	237.76	822	246.23	822	

Manning's n Values	num=	11							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.01	-1.85	.01	7.94	.0142	8.88	.0147	14.11	.0149
17.37	.0066	32.73	.0066	44.48	.0114	49.91	.0142	74.79	.0151
246.23	.0129								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
17.37	86.61	.5	.5	.5	.1	.3	
Blocked Obstructions		num=	1				

CPNPPLocalPMP

Sta L Sta R Elev
236.8223 246.23 825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.05	wt. n-Val.	0.015	0.011
0.015				
w.s. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	240.67
34.38				
E.G. Slope (ft/ft)	0.000036	Area (sq ft)	0.01	240.67
34.38				
Q Total (cfs)	442.00	Flow (cfs)	0.00	428.27
13.73				
Top width (ft)	131.70	Top width (ft)	0.21	69.24
62.24				
Vel Total (ft/s)	1.61	Avg. Vel. (ft/s)	0.08	1.78
0.40				
Max Chl Dpth (ft)	4.87	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	73314.4	Conv. (cfs)	0.1	71036.8
2277.5				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.24	70.14
62.25				
Min Ch El (ft)	815.23	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	246.23	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.58
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.41				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
REACH: Center N Upper RS: 9.6625*

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.48	-1.92	822.48	7.78	822.44	8.71	822.37	13.9	821.58		
17.13	820	33.23	816.05	33.57	815.94	35.01	815.23	55.01	815.23		
62.15	815.81	67.3	816.22	85.94	819	147.67	820.1	205.85	821.17		
228.9	821.88	232.76	821.98	233.76	822	236.46	822	244.89	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0101	-1.92	.0101	7.78	.0143	8.71	.0147	13.9	.0148		
17.13	.0066	32.39	.0066	44.07	.0113	49.47	.0141	74.19	.0152		
244.89	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
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Blocked Obstructions num= 1
 Sta L Sta R Elev
 235.4839 244.89 825

CPNPPLocalPMP
 .5 .5 .5 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.015	0.011
0.015				
W.S. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	34.19	Flow Area (sq ft)	0.01	239.13
34.19				
E.G. slope (ft/ft)	0.000037	Area (sq ft)	0.01	239.13
34.19				
Q Total (cfs)	442.00	Flow (cfs)	0.00	428.38
13.62				
Top width (ft)	130.96	Top width (ft)	0.21	68.81
61.94				
Vel Total (ft/s)	1.62	Avg. vel. (ft/s)	0.08	1.79
0.40				
Max Chl Dpth (ft)	4.87	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	72986.2	Conv. (cfs)	0.1	70737.0
2249.0				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.24	69.72
61.95				
Min Ch El (ft)	815.23	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	244.89	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.58
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.65*

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.47	-1.99	822.47	7.63	822.43	8.55	822.36	13.69	821.57		
16.9	820	32.99	816.05	33.33	815.94	34.77	815.23	54.77	815.23		
61.81	815.81	66.89	816.23	85.26	819	146.73	820.1	204.68	821.18		
227.63	821.89	231.47	821.98	232.47	822	235.15	822	243.55	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0102	-1.99	.0102	7.63	.0143	8.55	.0147	13.69	.0148		
16.9	.0066	32.06	.0066	43.67	.0112	49.03	.014	73.59	.0152		
243.55	.0129										

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 16.9 85.26 .5 .5 .5 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 234.1455 243.55 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.015	0.011
0.015				
W.S. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	237.52
34.00				
E.G. slope (ft/ft)	0.000037	Area (sq ft)	0.01	237.52
34.00				
Q Total (cfs)	442.00	Flow (cfs)	0.00	428.42
13.58				
Top width (ft)	130.21	Top width (ft)	0.21	68.36
61.64				
Vel Total (ft/s)	1.63	Avg. vel. (ft/s)	0.08	1.80
0.40				
Max Chl Dpth (ft)	4.87	Hydr. Depth (ft)	0.05	3.47
0.55				
Conv. Total (cfs)	72778.0	Conv. (cfs)	0.1	70542.2
2235.6				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.23	69.27
61.65				
Min Ch El (ft)	815.23	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	243.55	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.58
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.6375*

INPUT

Description:

Station	Elevation	Data	num=	20							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.46	-2.06	822.46	7.47	822.42	8.38	822.36	13.48	821.55		
16.66	820	32.76	816.05	33.09	815.94	34.53	815.22	54.53	815.22		
61.47	815.81	66.48	816.24	84.59	819	145.8	820.11	203.5	821.19		
226.36	821.89	230.18	821.98	231.18	822	233.85	822	242.21	822		

Manning's n Values	num=	11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0104	-2.06	.0104	7.47	.0144	8.38	.0148	13.48	.0147		

16.66	.0066	31.72	.0066	CPNPPLocalPMP	43.26	.0111	48.58	.0139	72.99	.0152
242.21	.0129									
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expans.		
	16.66	84.59		.5	.5		.1	.3		
Blocked Obstructions			num=	1						
Sta L	Sta R	Elev								
232.8071	242.21	825								

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.	0.015	0.011
0.015				
w.s. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	236.18
33.51				
E.G. Slope (ft/ft)	0.000037	Area (sq ft)	0.01	236.18
33.51				
Q Total (cfs)	442.00	Flow (cfs)	0.00	428.60
13.39				
Top width (ft)	128.93	Top width (ft)	0.21	67.93
60.79				
Vel Total (ft/s)	1.64	Avg. Vel. (ft/s)	0.08	1.81
0.40				
Max Chl Dpth (ft)	4.88	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	72660.9	Conv. (cfs)	0.1	70458.8
2202.0				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.23	68.85
60.80				
Min Ch El (ft)	815.22	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	242.21	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.58
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.625*

INPUT

Description:

Station Elevation Data	num=	20							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 822.45 -2.13 822.45	7.31 822.41	8.22 822.35	13.27 821.54						
16.42 820 32.52 816.05	32.86 815.94	34.3 815.22	54.3 815.22						
61.13 815.82 66.06 816.24	83.92 819	144.87 820.11	202.33 821.19						
225.09 821.89 228.89 821.98	229.89 822	232.55 822	240.88 822						

Manning's n Values num= 11

Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0105	-2.13	.0105	7.31	.0144	8.22	.0148	13.27	.0146	
16.42	.0066	31.39	.0066	42.85	.011	48.14	.0138	72.39	.0153	
240.88	.0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 16.42 83.92 .5 .5 .5 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 231.4688 240.88 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.015	0.011
0.015				
W.S. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	234.67
33.32				
E.G. slope (ft/ft)	0.000037	Area (sq ft)	0.01	234.67
33.32				
Q Total (cfs)	442.00	Flow (cfs)	0.00	428.71
13.29				
Top width (ft)	128.20	Top width (ft)	0.21	67.50
60.49				
Vel Total (ft/s)	1.65	Avg. vel. (ft/s)	0.08	1.83
0.40				
Max Chl Dpth (ft)	4.88	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	72337.4	conv. (cfs)	0.1	70162.8
2174.4				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.23	68.42
60.50				
Min Ch El (ft)	815.22	shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	240.88	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.57
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.6125*

INPUT

Description:

Station	Elevation	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.44	-2.2	822.44	7.16	822.4	8.06	822.34	13.06	821.52	
16.18	820	32.28	816.05	32.62	815.93	34.06	815.22	54.06	815.22	
60.79	815.82	65.65	816.25	83.24	819	143.94	820.11	201.15	821.2	
223.82	821.89	227.61	821.98	228.6	822	231.25	822	239.54	822	

CPNPPLocalPMP

Manning's n Values		num=		11					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0106	-2.2	.0106	7.16	.0145	8.06	.0149	13.06	.0145
16.18	.0066	31.05	.0066	42.44	.011	47.7	.0137	71.79	.0153
239.54	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	16.18	83.24		.5	.5		.1	.3

Blocked Obstructions			num=	1
Sta L	Sta R	Elev		
230.1304	239.54	825		

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)		Element	Left OB	Channel
Right OB		820.15			
Vel Head (ft)	0.015	0.05	wt. n-val.	0.015	0.011
W.S. Elev (ft)	0.50	820.10	Reach Len. (ft)	0.50	0.50
Crit w.s. (ft)	33.14		Flow Area (sq ft)	0.01	233.10
E.G. slope (ft/ft)	33.14	0.000038	Area (sq ft)	0.01	233.10
Q Total (cfs)	13.25	442.00	Flow (cfs)	0.00	428.75
Top width (ft)	60.21	127.47	Top width (ft)	0.21	67.06
Vel Total (ft/s)	0.40	1.66	Avg. vel. (ft/s)	0.08	1.84
Max Chl Dpth (ft)	0.55	4.88	Hydr. Depth (ft)	0.05	3.48
Conv. Total (cfs)	2161.7	72090.0	Conv. (cfs)	0.1	69928.2
Length wtd. (ft)	60.22	0.50	wetted Per. (ft)	0.23	67.98
Min Ch El (ft)	0.00	815.22	Shear (lb/sq ft)	0.00	0.01
Alpha	0.00	1.19	Stream Power (lb/ft s)	239.54	0.00
Frctn Loss (ft)	3.99	0.00	Cum volume (acre-ft)	0.19	3.57
C & E Loss (ft)	1.40	0.00	Cum SA (acres)	0.00	0.66

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.6*

INPUT

Description:

Station Elevation Data		num=		20					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.43	-2.27	822.43	7	822.4	7.89	822.34	12.85	821.51
15.94	820	32.04	816.05	32.38	815.93	33.82	815.22	53.82	815.22

		CPNPPLocalPMP							
60.45	815.82	65.24	816.26	82.57	819	143.01	820.12	199.98	821.21
222.55	821.9	226.32	821.98	227.31	822	229.95	822	238.2	822
Manning's n Values		num=		11					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0108	-2.27	.0108	7	.0145	7.89	.0149	12.85	.0144
15.94	.0066	30.72	.0066	42.03	.0109	47.25	.0136	71.19	.0153
238.2	.0129								
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	15.94	82.57		.5	.5		.1	.3	
Blocked Obstructions		num=		1					
Sta L	Sta R	Elev							
228.792	238.2	825							

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.15	Element		
Right OB				
Vel Head (ft)	0.05	wt. n-Val.	0.014	0.011
0.015				
w.s. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	231.55
32.65				
E.G. Slope (ft/ft)	0.000038	Area (sq ft)	0.01	231.55
32.65				
Q Total (cfs)	442.00	Flow (cfs)	0.00	428.91
13.09				
Top width (ft)	126.20	Top width (ft)	0.20	66.63
59.37				
Vel Total (ft/s)	1.67	Avg. vel. (ft/s)	0.08	1.85
0.40				
Max Chl Dpth (ft)	4.88	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	71859.6	Conv. (cfs)	0.1	69730.7
2128.8				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.23	67.56
59.38				
Min Ch El (ft)	815.22	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	238.20	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.57
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.66
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.5875*

INPUT

Description:

Station	Elevation	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev

				CPNPPLocalPMP					
-10	822.42	-2.34	822.42	6.84	822.39	7.73	822.33	12.64	821.49
15.7	820	31.8	816.05	32.14	815.93	33.58	815.21	53.58	815.21
60.11	815.83	64.83	816.27	81.89	819	142.07	820.12	198.81	821.21
221.28	821.9	225.03	821.98	226.01	822	228.64	822	236.86	822

Manning's n Values num= 11

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0109	-2.34	.0109	6.84	.0146	7.73	.015	12.64	.0144
15.7	.0066	30.38	.0066	41.62	.0108	46.81	.0135	70.59	.0154
236.86	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

15.7	81.89	.5	.5	.5	.1	.3
Blocked Obstructions num= 1						
Sta L	Sta R	Elev				
227.4536	236.86	825				

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.15	Element		
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.014	0.011
0.015				
W.S. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	230.16
32.47				
E.G. Slope (ft/ft)	0.000038	Area (sq ft)	0.01	230.16
32.47				
Q Total (cfs)	442.00	Flow (cfs)	0.00	429.02
12.98				
Top width (ft)	125.47	Top width (ft)	0.20	66.19
59.07				
Vel Total (ft/s)	1.68	Avg. vel. (ft/s)	0.08	1.86
0.40				
Max Chl Dpth (ft)	4.89	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	71605.7	conv. (cfs)	0.1	69503.4
2102.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.23	67.12
59.08				
Min Ch El (ft)	815.21	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	236.86	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.56
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.575*

INPUT
 Description:

Station Elevation Data				num=		CPNPPLocalPMP					
Sta	Elev	Sta	Elev	20		Sta	Elev	Sta	Elev	Sta	Elev
-10	822.41	-2.41	822.41	6.69	822.38	7.56	822.32	12.43	821.48		
15.47	820	31.56	816.05	31.9	815.93	33.34	815.21	53.34	815.21		
59.78	815.83	64.42	816.28	81.22	819	141.14	820.13	197.63	821.22		
220.01	821.9	223.75	821.98	224.72	822	227.34	822	235.52	822		

Manning's n Values				num=		11					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.011	-2.41	.011	6.69	.0146	7.56	.015	12.43	.0143		
15.47	.0066	30.05	.0066	41.21	.0107	46.37	.0134	69.99	.0154		
235.52	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	15.47	81.22		.5	.5	.5		.1	.3

Blocked Obstructions			num=		1						
Sta L	Sta R	Elev									
226.1152	235.52	825									

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.15	Element		
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.014	0.011
0.015				
W.S. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	228.60
31.99				
E.G. slope (ft/ft)	0.000038	Area (sq ft)	0.01	228.60
31.99				
Q Total (cfs)	442.00	Flow (cfs)	0.00	429.18
12.82				
Top width (ft)	124.20	Top width (ft)	0.20	65.75
58.25				
Vel Total (ft/s)	1.70	Avg. vel. (ft/s)	0.08	1.88
0.40				
Max Chl Dpth (ft)	4.89	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	71371.4	Conv. (cfs)	0.1	69301.4
2069.9				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.22	66.69
58.26				
Min Ch El (ft)	815.21	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	235.52	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.56
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.5625*

CPNPPLocalPMP

INPUT

Description:

Station	Elevation	Data	num=	20	Station	Elevation	Station	Elevation	Station	Elevation
-10	822.4	-2.49	822.4	6.53	822.37	7.4	822.31	12.22	821.46	
15.23	820	31.33	816.05	31.66	815.92	33.11	815.21	53.11	815.21	
59.44	815.83	64.01	816.28	80.54	819	140.21	820.13	196.46	821.23	
218.74	821.9	222.46	821.98	223.43	822	226.04	822	234.19	822	

Manning's n	Values	num=	11	Station	n Val	Station	n Val	Station	n Val
-10	.0112	-2.49	.0112	6.53	.0147	7.4	.015	12.22	.0142
15.23	.0066	29.71	.0066	40.8	.0106	45.92	.0133	69.39	.0154
234.19	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	15.23	80.54		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1
Sta L	Sta R	Elev
224.7769	234.19	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.014	0.011
0.015				
w.s. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	227.13
31.81				
E.G. Slope (ft/ft)	0.000039	Area (sq ft)	0.01	227.13
31.81				
Q Total (cfs)	442.00	Flow (cfs)	0.00	429.23
12.77				
Top width (ft)	123.48	Top width (ft)	0.20	65.31
57.97				
Vel Total (ft/s)	1.71	Avg. vel. (ft/s)	0.08	1.89
0.40				
Max Chl Dpth (ft)	4.89	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	71211.0	Conv. (cfs)	0.1	69153.3
2057.6				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.22	66.25
57.98				
Min Ch El (ft)	815.21	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	234.19	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.56
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North

CPNPPLocalPMP

REACH: Center N Upper RS: 9.55*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.4	-2.56	822.4	6.38	822.36	7.23	822.31	12.01	821.45		
14.99	820	31.09	816.05	31.43	815.92	32.87	815.21	52.87	815.21		
59.1	815.84	63.6	816.29	79.87	819	139.28	820.13	195.28	821.23		
217.47	821.9	221.17	821.98	222.14	822	224.74	822	232.85	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0113	-2.56	.0113	6.38	.0147	7.23	.0151	12.01	.0141		
14.99	.0066	29.38	.0066	40.39	.0105	45.48	.0132	68.79	.0155		
232.85	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	14.99	79.87		.5	.5	.1	.3
Blocked Obstructions	num= 1						
Sta L	Sta R	Elev					
223.4385	232.85	825					

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.05		wt. n-val.	0.014	0.011
0.015					
W.S. Elev (ft)	820.10		Reach Len. (ft)	0.50	0.50
0.50					
Crit w.s. (ft)			Flow Area (sq ft)	0.01	225.53
31.62					
E.G. slope (ft/ft)	0.000039		Area (sq ft)	0.01	225.53
31.62					
Q Total (cfs)	442.00		Flow (cfs)	0.00	429.33
12.67					
Top width (ft)	122.74		Top width (ft)	0.20	64.88
57.66					
Vel Total (ft/s)	1.72		Avg. vel. (ft/s)	0.08	1.90
0.40					
Max Chl Dpth (ft)	4.89		Hydr. Depth (ft)	0.05	3.48
0.55					
Conv. Total (cfs)	70830.6		Conv. (cfs)	0.1	68799.6
2030.9					
Length wtd. (ft)	0.50		wetted Per. (ft)	0.22	65.83
57.67					
Min Ch El (ft)	815.21		Shear (lb/sq ft)	0.00	0.01
0.00					
Alpha	1.19		Stream Power (lb/ft s)	232.85	0.00
0.00					
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)	0.19	3.56
3.99					
C & E Loss (ft)	0.00		Cum SA (acres)	0.00	0.65
1.40					

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

CPNPPLocalPMP

RIVER: Center North
 REACH: Center N Upper RS: 9.5375*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.39	-2.63	822.39	6.22	822.35	7.07	822.3	11.8	821.43		
14.75	820	30.85	816.04	31.19	815.92	32.63	815.2	52.63	815.2		
58.76	815.84	63.18	816.3	79.19	819	138.35	820.14	194.11	821.24		
216.2	821.91	219.89	821.98	220.85	822	223.43	822	231.51	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0114	-2.63	.0114	6.22	.0148	7.07	.0151	11.8	.014		
14.75	.0066	29.04	.0066	39.98	.0104	45.04	.0131	68.19	.0155		
231.51	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	14.75	79.19		.5	.5	.5		.1	.3

Blocked Obstructions		num= 1		Sta L Sta R Elev	
	222.1001	231.51			825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.014	0.011
0.016				
W.S. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	224.29
31.17				
E.G. slope (ft/ft)	0.000039	Area (sq ft)	0.01	224.29
31.17				
Q Total (cfs)	442.00	Flow (cfs)	0.00	429.50
12.50				
Top width (ft)	121.52	Top width (ft)	0.20	64.44
56.88				
Vel Total (ft/s)	1.73	Avg. vel. (ft/s)	0.08	1.91
0.40				
Max Chl Dpth (ft)	4.90	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	70760.5	Conv. (cfs)	0.1	68759.4
2001.0				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.22	65.39
56.89				
Min Ch El (ft)	815.20	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	231.51	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.55
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CPNPPLocalPMP

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.525*

INPUT

Description:

Station Elevation Data		num= 20		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.38	-2.7	822.38	6.06	822.35	6.9	822.29	11.59	821.41		
14.51	820	30.61	816.04	30.95	815.92	32.39	815.2	52.39	815.2		
58.42	815.85	62.77	816.31	78.52	819	137.41	820.14	192.93	821.25		
214.92	821.91	218.6	821.98	219.56	822	222.13	822	230.18	822		

Manning's n Values		num= 11		Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0115	-2.7	.0115	6.06	.0148	6.9	.0152	11.59	.014		
14.51	.0066	28.71	.0066	39.57	.0103	44.59	.0129	67.59	.0155		
230.18	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 14.51 78.52 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 220.7617 230.18 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.014	0.011
0.016				
w.s. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	222.70
30.98				
E.G. slope (ft/ft)	0.000039	Area (sq ft)	0.01	222.70
30.98				
Q Total (cfs)	442.00	Flow (cfs)	0.00	429.59
12.41				
Top width (ft)	120.78	Top width (ft)	0.20	64.01
56.57				
Vel Total (ft/s)	1.74	Avg. vel. (ft/s)	0.08	1.93
0.40				
Max Chl Dpth (ft)	4.90	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	70761.0	Conv. (cfs)	0.1	68773.4
1987.4				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.22	64.97
56.58				
Min Ch El (ft)	815.20	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	230.18	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.55
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.40				

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.5125*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.37	-2.77	822.37	5.91	822.34	6.74	822.29	11.38	821.4		
14.27	820	30.37	816.04	30.71	815.92	32.15	815.2	52.15	815.2		
58.08	815.85	62.36	816.32	77.84	819	136.48	820.14	191.76	821.25		
213.65	821.91	217.31	821.98	218.27	822	220.83	822	228.84	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0117	-2.77	.0117	5.91	.0149	6.74	.0152	11.38	.0139		
14.27	.0066	28.37	.0066	39.16	.0102	44.15	.0128	66.99	.0156		
228.84	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	14.27	77.84		.5	.5		.1	.3
Blocked Obstructions			num=	1				
	Sta L	Sta R	Elev					
	219.4234	228.84	825					

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.06		wt. n-val.	0.014	0.011
0.016					
W.S. Elev (ft)	820.09		Reach Len. (ft)	0.50	0.50
0.50					
Crit w.s. (ft)			Flow Area (sq ft)	0.01	221.14
30.79					
E.G. slope (ft/ft)	0.000039		Area (sq ft)	0.01	221.14
30.79					
Q Total (cfs)	442.00		Flow (cfs)	0.00	429.68
12.32					
Top width (ft)	120.05		Top width (ft)	0.19	63.57
56.28					
Vel Total (ft/s)	1.75		Avg. vel. (ft/s)	0.08	1.94
0.40					
Max Chl Dpth (ft)	4.89		Hydr. Depth (ft)	0.05	3.48
0.55					
Conv. Total (cfs)	70405.1		Conv. (cfs)	0.1	68443.3
1961.6					
Length wtd. (ft)	0.50		wetted Per. (ft)	0.22	64.53
56.29					
Min Ch El (ft)	815.20		Shear (lb/sq ft)	0.00	0.01
0.00					
Alpha	1.19		Stream Power (lb/ft s)	228.84	0.00
0.00					
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)	0.19	3.55
3.99					
C & E Loss (ft)	0.00		Cum SA (acres)	0.00	0.65
1.40					

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.5*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.36	-2.84	822.36	5.75	822.33	6.58	822.28	11.17	821.38		
14.03	820	30.14	816.04	30.47	815.91	31.91	815.2	51.92	815.2		
57.74	815.85	61.95	816.32	77.17	819	135.55	820.15	190.58	821.26		
212.38	821.91	216.03	821.98	216.98	822	219.53	822	227.5	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0118	-2.84	.0118	5.75	.015	6.58	.0153	11.17	.0138		
14.03	.0066	28.04	.0066	38.76	.0102	43.71	.0127	66.39	.0156		
227.5	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	14.03	77.17		.5	.5		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
218.085	227.5	825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.014	0.011
0.016				
W.S. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	219.71
30.34				
E.G. slope (ft/ft)	0.000040	Area (sq ft)	0.01	219.71
30.34				
Q Total (cfs)	442.00	Flow (cfs)	0.00	429.83
12.17				
Top width (ft)	118.83	Top width (ft)	0.19	63.14
55.50				
Vel Total (ft/s)	1.77	Avg. vel. (ft/s)	0.08	1.96
0.40				
Max Chl Dpth (ft)	4.89	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	70176.4	Conv. (cfs)	0.1	68244.7
1931.6				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.21	64.11
55.51				
Min Ch El (ft)	815.20	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	227.50	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.55
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65

CPNPPLocalPMP

1.40

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.4875*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.35	-2.91	822.35	5.6	822.32	6.41	822.27	10.96	821.37		
13.8	820	29.9	816.04	30.24	815.91	31.68	815.19	51.68	815.19		
57.4	815.86	61.54	816.33	76.5	819	134.62	820.15	189.41	821.26		
211.11	821.92	214.74	821.98	215.69	822	218.22	822	226.16	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0119	-2.91	.0119	5.6	.015	6.41	.0153	10.96	.0137		
13.8	.0066	27.7	.0066	38.35	.0101	43.26	.0126	65.79	.0156		
226.16	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	13.8	76.5		.5	.5		.1	.3

Blocked Obstructions		num= 1
Sta L	Sta R	Elev
216.7466	226.16	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.014	0.011
0.016				
w.s. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	218.34
30.15				
E.G. Slope (ft/ft)	0.000040	Area (sq ft)	0.01	218.34
30.15				
Q Total (cfs)	442.00	Flow (cfs)	0.00	429.89
12.11				
Top width (ft)	118.10	Top width (ft)	0.19	62.70
55.21				
Vel Total (ft/s)	1.78	Avg. vel. (ft/s)	0.08	1.97
0.40				
Max Chl Dpth (ft)	4.90	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	70044.7	Conv. (cfs)	0.1	68125.6
1919.0				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.21	63.68
55.22				
Min Ch El (ft)	815.19	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	226.16	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.54

CPNPPLocalPMP				
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.475*

INPUT

Description:

Station Elevation Data num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.34	-2.98	822.34	5.44	822.31	6.25	822.27	10.75	821.35
13.56	820	29.66	816.04	30	815.91	31.44	815.19	51.44	815.19
57.07	815.86	61.13	816.34	75.82	819	133.69	820.16	188.23	821.27
209.84	821.92	213.45	821.98	214.39	822	216.92	822	224.82	822

Manning's n Values num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0121	-2.98	.0121	5.44	.0151	6.25	.0153	10.75	.0136
13.56	.0066	27.37	.0066	37.94	.01	42.82	.0125	65.19	.0157
224.82	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	13.56	75.82		.5	.5	.5		.1	.3
Blocked Obstructions num= 1									
Sta L	Sta R	Elev							
215.4082	224.82	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.014	0.011
0.016				
w.s. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	216.80
29.71				
E.G. Slope (ft/ft)	0.000040	Area (sq ft)	0.01	216.80
29.71				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.09
11.91				
Top Width (ft)	116.90	Top width (ft)	0.19	62.26
54.45				
Vel Total (ft/s)	1.79	Avg. vel. (ft/s)	0.08	1.98
0.40				
Max Chl Dpth (ft)	4.90	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	69671.5	Conv. (cfs)	0.1	67793.8
1877.5				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.21	63.24
54.46				
Min Ch El (ft)	815.19	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	224.82	0.00

CPNPPLocalPMP				
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.54
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.4625*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.33	-3.05	822.33	5.28	822.31	6.08	822.26	10.54	821.34		
13.32	820	29.42	816.04	29.76	815.91	31.2	815.19	51.2	815.19		
56.73	815.86	60.72	816.35	75.15	819	132.75	820.16	187.06	821.28		
208.57	821.92	212.17	821.98	213.1	822	215.62	822	223.49	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0122	-3.05	.0122	5.28	.0151	6.08	.0154	10.54	.0136		
13.32	.0066	27.03	.0066	37.53	.0099	42.38	.0124	64.59	.0157		
223.49	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 13.32 75.15 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 214.0699 223.49 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.014	0.011
0.016				
W.S. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	215.28
29.52				
E.G. slope (ft/ft)	0.000040	Area (sq ft)	0.01	215.28
29.52				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.14
11.86				
Top width (ft)	116.16	Top width (ft)	0.19	61.83
54.14				
Vel Total (ft/s)	1.81	Avg. vel. (ft/s)	0.08	2.00
0.40				
Max Chl Dpth (ft)	4.90	Hydr. Depth (ft)	0.05	3.48
0.55				
Conv. Total (cfs)	69454.4	Conv. (cfs)	0.1	67590.0
1864.3				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.21	62.82
54.16				
Min Ch El (ft)	815.19	Shear (lb/sq ft)	0.00	0.01

CPNPPLocalPMP					
0.00	Alpha	1.19	Stream Power (lb/ft s)	223.49	0.00
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.54
3.99	C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.39					

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.45*

INPUT

Description:

Station Elevation Data num= 20											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.32	-3.12	822.32	5.13	822.3	5.92	822.25	10.33	821.32		
13.08	820	29.18	816.04	29.52	815.9	30.96	815.18	50.96	815.18		
56.39	815.87	60.3	816.36	74.47	819	131.82	820.16	185.88	821.28		
207.3	821.92	210.88	821.98	211.81	822	214.32	822	222.15	822		

Manning's n Values num= 11											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0123	-3.12	.0123	5.13	.0152	5.92	.0154	10.33	.0135		
13.08	.0066	26.7	.0066	37.12	.0098	41.93	.0123	63.99	.0157		
222.15	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	13.08	74.47		.5	.5	.5		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
212.7315	222.15	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.014	0.011
0.016				
w.S. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.S. (ft)		Flow Area (sq ft)	0.01	213.93
29.34				
E.G. Slope (ft/ft)	0.000041	Area (sq ft)	0.01	213.93
29.34				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.19
11.81				
Top width (ft)	115.44	Top width (ft)	0.19	61.39
53.86				
Vel Total (ft/s)	1.82	Avg. vel. (ft/s)	0.08	2.01
0.40				
Max Chl Dpth (ft)	4.91	Hydr. Depth (ft)	0.04	3.48
0.54				
Conv. Total (cfs)	69329.3	Conv. (cfs)	0.1	67477.2
1852.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.21	62.39

CPNPPLocalPMP				
53.88				
Min Ch El (ft)	815.18	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	222.15	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.54
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.4375*

INPUT

Description:

Station Elevation Data num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.32	-3.2	822.32	4.97	822.29	5.75	822.24	10.12	821.31
12.84	820	28.95	816.04	29.28	815.9	30.72	815.18	50.72	815.18
56.05	815.87	59.89	816.37	73.8	819	130.89	820.17	184.71	821.29
206.03	821.92	209.59	821.98	210.52	822	213.01	822	220.81	822

Manning's n Values num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0125	-3.2	.0125	4.97	.0152	5.75	.0155	10.12	.0134
12.84	.0066	26.36	.0066	36.71	.0097	41.49	.0122	63.39	.0158
220.81	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 12.84 73.8 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 211.3931 220.81 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-Val.	0.013	0.011
0.016				
W.S. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	212.39
28.90				
E.G. slope (ft/ft)	0.000041	Area (sq ft)	0.01	212.39
28.90				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.39
11.61				
Top width (ft)	114.25	Top width (ft)	0.18	60.96
53.11				
Vel Total (ft/s)	1.83	Avg. vel. (ft/s)	0.08	2.03
0.40				
Max Chl Dpth (ft)	4.91	Hydr. Depth (ft)	0.04	3.48
0.54				
Conv. Total (cfs)	68938.4	Conv. (cfs)	0.1	67126.9

CPNPPLocalPMP				
1811.4				
Length Wtd. (ft)	0.50	wetted Per. (ft)	0.20	61.96
53.12				
Min Ch El (ft)	815.18	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	220.81	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.53
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.425*

INPUT

Description:

Station Elevation Data num= 20											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.31	-3.27	822.31	4.81	822.28	5.59	822.24	9.91	821.29		
12.6	820	28.71	816.03	29.05	815.9	30.49	815.18	50.49	815.18		
55.71	815.88	59.48	816.37	73.12	819	129.96	820.17	183.53	821.3		
204.76	821.93	208.3	821.98	209.23	822	211.71	822	219.48	822		

Manning's n Values num= 11											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0126	-3.27	.0126	4.81	.0153	5.59	.0155	9.91	.0133		
12.6	.0066	26.03	.0066	36.3	.0096	41.05	.0121	62.79	.0158		
219.48	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	12.6	73.12		.5	.5	.5		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
210.0547	219.48	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.013	0.011
0.016				
W.S. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	210.98
28.72				
E.G. slope (ft/ft)	0.000041	Area (sq ft)	0.01	210.98
28.72				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.44
11.56				
Top width (ft)	113.53	Top width (ft)	0.18	60.52
52.83				
Vel Total (ft/s)	1.84	Avg. Vel. (ft/s)	0.08	2.04
0.40				
Max Chl Dpth (ft)	4.91	Hydr. Depth (ft)	0.04	3.49

CPNPPLocalPMP

0.54				
Conv. Total (cfs)	68783.3	Conv. (cfs)	0.1	66984.0
1799.2				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.20	61.53
52.84				
Min Ch El (ft)	815.18	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	219.48	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.53
3.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.65
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.4125*

INPUT

Description:

Station Elevation Data	num=	20							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 822.3 -3.34 822.3 4.66 822.27 5.43 822.23 9.7 821.28									
12.37 820 28.47 816.03 28.81 815.9 30.25 815.18 50.25 815.18									
55.37 815.88 59.07 816.38 72.45 819 129.03 820.17 182.36 821.3									
203.49 821.93 207.02 821.99 207.94 822 210.41 822 218.14 822									

Manning's n Values	num=	11							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0127 -3.34 .0127 4.66 .0153 5.43 .0156 9.7 .0132									
12.37 .0066 25.69 .0066 35.89 .0095 40.6 .012 62.19 .0159									
218.14 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 12.37 72.45 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 208.7164 218.14 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.013	0.011
0.016				
w.S. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.S. (ft)		Flow Area (sq ft)	0.01	209.45
28.53				
E.G. Slope (ft/ft)	0.000042	Area (sq ft)	0.01	209.45
28.53				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.53
11.47				
Top width (ft)	112.79	Top width (ft)	0.18	60.08
52.53				
Vel Total (ft/s)	1.86	Avg. vel. (ft/s)	0.08	2.06

CPNPPLocalPMP				
0.40				
Max Chl Dpth (ft)	4.91	Hydr. Depth (ft)	0.04	3.49
0.54				
Conv. Total (cfs)	68406.8	Conv. (cfs)	0.1	66631.8
1774.9				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.20	61.09
52.54				
Min Ch El (ft)	815.18	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	218.14	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.53
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.4*

INPUT

Description:

Station Elevation Data num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.29	-3.41	822.29	4.5	822.26	5.26	822.22	9.49	821.26
12.13	820	28.23	816.03	28.57	815.9	30.01	815.17	50.01	815.17
55.03	815.88	58.66	816.39	71.77	819	128.1	820.18	181.19	821.31
202.22	821.93	205.73	821.99	206.65	822	209.11	822	216.8	822

Manning's n Values num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0128	-3.41	.0128	4.5	.0154	5.26	.0156	9.49	.0132
12.13	.0066	25.36	.0066	35.48	.0094	40.16	.0119	61.59	.0159
216.8	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 12.13 71.77 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 207.378 216.8 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-Val.	0.013	0.011
0.016				
w.s. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	208.16
28.12				
E.G. slope (ft/ft)	0.000042	Area (sq ft)	0.01	208.16
28.12				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.69
11.31				
Top Width (ft)	111.63	Top width (ft)	0.18	59.64

CPNPPLocalPMP				
51.81				
Vel Total (ft/s)	1.87	Avg. Vel. (ft/s)	0.08	2.07
0.40				
Max Chl Dpth (ft)	4.92	Hydr. Depth (ft)	0.04	3.49
0.54				
Conv. Total (cfs)	68293.5	Conv. (cfs)	0.1	66545.5
1747.9				
Length Wtd. (ft)	0.50	wetted Per. (ft)	0.20	60.66
51.82				
Min Ch El (ft)	815.17	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	216.80	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.53
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.3875*

INPUT

Description:

Station Elevation Data num= 20											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.28	-3.48	822.28	4.35	822.26	5.1	822.22	9.28	821.25		
11.89	820	27.99	816.03	28.33	815.89	29.77	815.17	49.77	815.17		
54.69	815.89	58.25	816.4	71.1	819	127.16	820.18	180.01	821.32		
200.95	821.93	204.44	821.99	205.36	822	207.81	822	215.46	822		

Manning's n Values num= 11											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.013	-3.48	.013	4.35	.0154	5.1	.0157	9.28	.0131		
11.89	.0066	25.02	.0066	35.07	.0094	39.72	.0118	60.99	.0159		
215.46	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	11.89	71.1		.5	.5	.5		.1	.3

Blocked Obstructions num= 1			
Sta L	Sta R	Elev	
206.0396	215.46	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.	0.013	0.011
0.016				
W.S. Elev (ft)	820.08	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	206.63
27.92				
E.G. slope (ft/ft)	0.000042	Area (sq ft)	0.01	206.63
27.92				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.72

CPNPPLocalPMP				
11.28				
Top width (ft)	110.90	Top width (ft)	0.18	59.21
51.51				
Vel Total (ft/s)	1.88	Avg. vel. (ft/s)	0.08	2.08
0.40				
Max Chl Dpth (ft)	4.91	Hydr. Depth (ft)	0.04	3.49
0.54				
Conv. Total (cfs)	68004.9	Conv. (cfs)	0.1	66270.1
1734.8				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.19	60.24
51.52				
Min Ch El (ft)	815.17	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	215.46	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.52
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.375*

INPUT

Description:

Station Elevation Data num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.27	-3.55	822.27	4.19	822.25	4.93	822.21	9.07	821.23
11.65	820	27.75	816.03	28.09	815.89	29.53	815.17	49.53	815.17
54.35	815.89	57.83	816.41	70.43	819	126.23	820.18	178.84	821.32
199.67	821.93	203.16	821.99	204.07	822	206.5	822	214.12	822

Manning's n Values num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0131	-3.55	.0131	4.19	.0155	4.93	.0157	9.07	.013
11.65	.0066	24.69	.0066	34.66	.0093	39.27	.0117	60.39	.016
214.12	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	11.65	70.43		.5	.5	.5		.1	.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
204.7012	214.12	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.	0.013	0.011
0.016				
w.s. Elev (ft)	820.08	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	205.11
27.74				
E.G. slope (ft/ft)	0.000043	Area (sq ft)	0.01	205.11

CPNPPLocalPMP				
27.74				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.82
11.18				
Top width (ft)	110.17	Top width (ft)	0.17	58.78
51.22				
Vel Total (ft/s)	1.90	Avg. Vel. (ft/s)	0.08	2.10
0.40				
Max Chl Dpth (ft)	4.91	Hydr. Depth (ft)	0.04	3.49
0.54				
Conv. Total (cfs)	67624.0	Conv. (cfs)	0.1	65912.8
1711.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.19	59.82
51.23				
Min Ch El (ft)	815.17	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	214.12	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.52
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.3625*

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.26	-3.62	822.26	4.03	822.24	4.77	822.2	8.86	821.21		
11.41	820	27.52	816.03	27.85	815.89	29.3	815.17	49.3	815.17		
54.02	815.89	57.42	816.41	69.75	819	125.3	820.19	177.66	821.33		
198.4	821.94	201.87	821.99	202.77	822	205.2	822	212.79	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0132	-3.62	.0132	4.03	.0155	4.77	.0157	8.86	.0129		
11.41	.0066	24.35	.0066	34.26	.0092	38.83	.0116	59.79	.016		
212.79	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 11.41 69.75 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 203.3629 212.79 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-Val.	0.013	0.010
0.016				
W.S. Elev (ft)	820.08	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	203.66

CPNPPLocalPMP				
27.32				
E.G. Slope (ft/ft)	0.000043	Area (sq ft)	0.01	203.66
27.32				
Q Total (cfs)	442.00	Flow (cfs)	0.00	430.96
11.04				
Top width (ft)	109.02	Top width (ft)	0.17	58.34
50.50				
Vel Total (ft/s)	1.91	Avg. Vel. (ft/s)	0.08	2.12
0.40				
Max Chl Dpth (ft)	4.91	Hydr. Depth (ft)	0.04	3.49
0.54				
Conv. Total (cfs)	67418.1	Conv. (cfs)	0.1	65733.8
1684.2				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.19	59.38
50.52				
Min Ch El (ft)	815.17	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	212.79	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.52
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.35*

INPUT

Description:

Station Elevation Data num= 20											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.25	-3.69	822.25	3.88	822.23	4.6	822.2	8.65	821.2		
11.17	820	27.28	816.03	27.62	815.89	29.06	815.16	49.06	815.16		
53.68	815.9	57.01	816.42	69.08	819	124.37	820.19	176.49	821.34		
197.13	821.94	200.58	821.99	201.48	822	203.9	822	211.45	822		

Manning's n Values num= 11											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0134	-3.69	.0134	3.88	.0156	4.6	.0158	8.65	.0128		
11.17	.0066	24.02	.0066	33.85	.0091	38.39	.0115	59.19	.016		
211.45	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 11.17 69.08 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 202.0245 211.45 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.	0.013	0.010
0.016				
W.S. Elev (ft)	820.08	Reach Len. (ft)	0.50	0.50

CPNPPLocalPMP				
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	202.36
27.14				
E.G. Slope (ft/ft)	0.000043	Area (sq ft)	0.01	202.36
27.14				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.02
10.98				
Top width (ft)	108.30	Top width (ft)	0.17	57.91
50.22				
Vel Total (ft/s)	1.93	Avg. vel. (ft/s)	0.08	2.13
0.40				
Max Chl Dpth (ft)	4.92	Hydr. Depth (ft)	0.04	3.49
0.54				
Conv. Total (cfs)	67290.3	Conv. (cfs)	0.1	65618.1
1672.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.19	58.97
50.23				
Min Ch El (ft)	815.16	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	211.45	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.52
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.3375*

INPUT

Description:

Station Elevation Data num= 20											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.24	-3.76	822.24	3.72	822.22	4.44	822.19	8.44	821.18		
10.94	820	27.04	816.03	27.38	815.89	28.82	815.16	48.82	815.16		
53.34	815.9	56.6	816.43	68.4	819	123.44	820.2	175.31	821.34		
195.86	821.94	199.3	821.99	200.19	822	202.6	822	210.11	822		

Manning's n Values num= 11											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0135	-3.76	.0135	3.72	.0156	4.44	.0158	8.44	.0128		
10.94	.0066	23.68	.0066	33.44	.009	37.94	.0113	58.59	.0161		
210.11	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	10.94	68.4		.5	.5	.5		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
200.6861	210.11	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.	0.013	0.010

CPNPPLocalPMP				
0.016				
W.S. Elev (ft)	820.08	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	200.82
26.73				
E.G. slope (ft/ft)	0.000043	Area (sq ft)	0.01	200.82
26.73				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.23
10.77				
Top width (ft)	107.15	Top width (ft)	0.17	57.46
49.52				
Vel Total (ft/s)	1.94	Avg. Vel. (ft/s)	0.08	2.15
0.40				
Max Chl Dpth (ft)	4.92	Hydr. Depth (ft)	0.04	3.49
0.54				
Conv. Total (cfs)	67123.2	Conv. (cfs)	0.1	65487.9
1635.2				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.19	58.52
49.53				
Min Ch El (ft)	815.16	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	210.11	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.52
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.325*

INPUT

Description:

Station Elevation Data num= 20											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.23	-3.83	822.23	3.56	822.21	4.27	822.18	8.23	821.17		
10.7	820	26.8	816.03	27.14	815.88	28.58	815.16	48.58	815.16		
53	815.9	56.19	816.44	67.73	819	122.5	820.2	174.14	821.35		
194.59	821.94	198.01	821.99	198.9	822	201.29	822	208.77	822		

Manning's n Values num= 11											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0136	-3.83	.0136	3.56	.0157	4.27	.0159	8.23	.0127		
10.7	.0066	23.34	.0066	33.03	.0089	37.5	.0112	57.99	.0161		
208.77	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 10.7 67.73 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 199.3477 208.77 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft) 820.15 Element Left OB Channel
 Page 121

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.07	wt. n-val.	0.013	0.010
0.016				
W.S. Elev (ft)	820.08	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	199.34
26.54				
E.G. slope (ft/ft)	0.000044	Area (sq ft)	0.01	199.34
26.54				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.28
10.72				
Top width (ft)	106.42	Top width (ft)	0.17	57.03
49.22				
Vel Total (ft/s)	1.96	Avg. Vel. (ft/s)	0.08	2.16
0.40				
Max Chl Dpth (ft)	4.92	Hydr. Depth (ft)	0.04	3.50
0.54				
Conv. Total (cfs)	66896.3	Conv. (cfs)	0.1	65273.7
1622.5				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.18	58.10
49.23				
Min Ch El (ft)	815.16	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	208.77	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.51
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.3125*

INPUT

Description:

Station		Elevation Data		num=	20		Sta		Elev	
Sta	Elev	Sta	Elev		Sta	Elev	Sta	Elev	Sta	Elev
-10	822.22	-3.91	822.22		3.41	822.21	4.11	822.17	8.02	821.15
10.46	820	26.56	816.03		26.9	815.88	28.34	815.16	48.34	815.16
52.66	815.91	55.78	816.45		67.05	819	121.57	820.2	172.96	821.35
193.32	821.95	196.72	821.99		197.61	822	199.99	822	207.44	822

Manning's n Values		num=	11		Sta		n Val		Sta		n Val	
Sta	n Val		Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0138		-3.91	.0138	3.41	.0157	4.11	.0159	8.02	.0126		
10.46	.0066		23.01	.0066	32.62	.0088	37.06	.0111	57.39	.0161		
207.44	.0129											

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	10.46	67.05		.5	.5	.5		.1	.3
Blocked Obstructions			num=	1					
	Sta L	Sta R	Elev						
	198.0094	207.44	825						

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.	0.013	0.010
0.016				
W.S. Elev (ft)	820.08	Reach Len. (ft)	0.50	0.50
0.50				
Crit W.S. (ft)		Flow Area (sq ft)	0.01	197.80
26.36				
E.G. Slope (ft/ft)	0.000044	Area (sq ft)	0.01	197.80
26.36				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.32
10.68				
Top width (ft)	105.69	Top width (ft)	0.16	56.59
48.94				
Vel Total (ft/s)	1.97	Avg. vel. (ft/s)	0.08	2.18
0.41				
Max Chl Dpth (ft)	4.92	Hydr. Depth (ft)	0.04	3.50
0.54				
Conv. Total (cfs)	66642.9	Conv. (cfs)	0.1	65032.6
1610.2				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.18	57.67
48.95				
Min Ch El (ft)	815.16	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	207.44	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.51
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.3*

INPUT

Description:

Station Elevation Data		num=	20						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.22	-3.98	822.22	3.25	822.2	3.95	822.17	7.81	821.14
10.22	820	26.33	816.02	26.66	815.88	28.1	815.15	48.1	815.15
52.32	815.91	55.37	816.45	66.38	819	120.64	820.21	171.79	821.36
192.05	821.95	195.44	821.99	196.32	822	198.69	822	206.1	822

Manning's n Values		num=	11						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0139	-3.98	.0139	3.25	.0158	3.95	.016	7.81	.0125
10.22	.0066	22.67	.0066	32.21	.0087	36.61	.011	56.79	.0162
206.1	.0129								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
10.22	66.38	.5	.5	.5		.1	.3

Blocked Obstructions			num=	1
Sta L	Sta R	Elev		
196.671	206.1	825		

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-Val.	0.013	0.010
0.016				
W.S. Elev (ft)	820.08	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	196.69
25.97				
E.G. Slope (ft/ft)	0.000044	Area (sq ft)	0.01	196.69
25.97				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.52
10.48				
Top Width (ft)	104.58	Top width (ft)	0.16	56.16
48.26				
Vel Total (ft/s)	1.99	Avg. Vel. (ft/s)	0.08	2.19
0.40				
Max Chl Dpth (ft)	4.93	Hydr. Depth (ft)	0.04	3.50
0.54				
Conv. Total (cfs)	66445.0	Conv. (cfs)	0.1	64869.5
1575.4				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.18	57.25
48.27				
Min Ch El (ft)	815.15	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	206.10	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.51
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.2875*

INPUT

Description:

Station Elevation Data	num=	20								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-10 822.21 -4.05 822.21 3.1 822.19 3.78 822.16 7.6 821.12										
9.98 820 26.09 816.02 26.43 815.88 27.87 815.15 47.87 815.15										
51.98 815.92 54.95 816.46 65.7 819 119.71 820.21 170.61 821.37										
190.78 821.95 194.15 821.99 195.03 822 197.39 822 204.76 822										

Manning's n Values	num=	11							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .014 -4.05 .014 3.1 .0158 3.78 .016 7.6 .0124									
9.98 .0066 22.34 .0066 31.8 .0086 36.17 .0109 56.19 .0162									
204.76 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
9.98 65.7	.5 .5 .5	.1	.3
Blocked Obstructions	num=	1	
Sta L Sta R Elev			

CPNPPLocalPMP

195.3326 204.76 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-Val.	0.012	0.010
0.016				
W.S. Elev (ft)	820.07	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	195.14
25.79				
E.G. slope (ft/ft)	0.000045	Area (sq ft)	0.01	195.14
25.79				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.56
10.44				
Top width (ft)	103.86	Top width (ft)	0.16	55.72
47.98				
Vel Total (ft/s)	2.00	Avg. vel. (ft/s)	0.08	2.21
0.40				
Max Chl Dpth (ft)	4.92	Hydr. Depth (ft)	0.04	3.50
0.54				
Conv. Total (cfs)	66177.5	Conv. (cfs)	0.1	64614.3
1563.2				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.18	56.82
47.99				
Min Ch El (ft)	815.15	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	204.76	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.51
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.275*

INPUT

Description:

Station Elevation Data		num=	20						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.2	-4.12	822.2	2.94	822.18	3.62	822.15	7.39	821.11
9.74	820	25.85	816.02	26.19	815.87	27.63	815.15	47.63	815.15
51.64	815.92	54.54	816.47	65.03	819	118.78	820.21	169.44	821.37
189.51	821.95	192.86	821.99	193.74	822	196.08	822	203.43	822

Manning's n Values		num=	11						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0141	-4.12	.0141	2.94	.0159	3.62	.016	7.39	.0124
9.74	.0066	22	.0066	31.39	.0086	35.73	.0108	55.59	.0162
203.43	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	9.74	65.03		.5	.5		.1	.3

Blocked Obstructions num= CPNPPLocalPMP
 1
 Sta L Sta R Elev
 193.9942 203.43 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.	0.012	0.010
0.016				
w.s. Elev (ft)	820.07	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	193.67
25.60				
E.G. slope (ft/ft)	0.000045	Area (sq ft)	0.01	193.67
25.60				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.60
10.40				
Top width (ft)	103.14	Top width (ft)	0.16	55.29
47.69				
vel Total (ft/s)	2.02	Avg. vel. (ft/s)	0.08	2.23
0.41				
Max Chl Dpth (ft)	4.92	Hydr. Depth (ft)	0.04	3.50
0.54				
Conv. Total (cfs)	65898.0	Conv. (cfs)	0.1	64347.2
1550.7				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.17	56.40
47.70				
Min Ch El (ft)	815.15	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	203.43	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.50
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.39				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.2625*

INPUT

Description:

Station Elevation Data	num=	20							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 822.19 -4.19 822.19 2.78 822.17 3.45 822.15 7.18 821.09									
9.51 820 25.61 816.02 25.95 815.87 27.39 815.15 47.39 815.15									
51.31 815.92 54.13 816.48 64.35 819 117.84 820.22 168.26 821.38									
188.24 821.95 191.57 821.99 192.45 822 194.78 822 202.09 822									

Manning's n Values	num=	11							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0143 -4.19 .0143 2.78 .0159 3.45 .0161 7.18 .0123									
9.51 .0066 21.67 .0066 30.98 .0085 35.28 .0107 54.99 .0163									
202.09 .0129									

Bank Sta:	Left	Right	Lengths:	CPNPPLocalPMP	Left	Channel	Right	Coeff	Contr.	Expan.
	9.51	64.35			.5	.5	.5		.1	.3
Blocked Obstructions	num=			1						
Sta L	Sta R	Elev								
192.6559	202.09	825								

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-Val.	0.012	0.010
0.016				
W.S. Elev (ft)	820.07	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	192.16
25.20				
E.G. slope (ft/ft)	0.000046	Area (sq ft)	0.01	192.16
25.20				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.77
10.23				
Top width (ft)	102.01	Top width (ft)	0.15	54.84
47.01				
Vel Total (ft/s)	2.03	Avg. Vel. (ft/s)	0.08	2.25
0.41				
Max Chl Dpth (ft)	4.92	Hydr. Depth (ft)	0.04	3.50
0.54				
Conv. Total (cfs)	65488.7	Conv. (cfs)	0.1	63972.7
1515.9				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.17	55.96
47.02				
Min Ch El (ft)	815.15	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	202.09	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.50
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.25*

INPUT

Description:

Station	Elevation	Data	num=	20						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822.18	-4.26	822.18	2.63	822.16	3.29	822.14	6.97	821.08	
9.27	820	25.37	816.02	25.71	815.87	27.15	815.14	47.15	815.14	
50.97	815.93	53.72	816.49	63.68	819	116.91	820.22	167.09	821.39	
186.97	821.96	190.29	821.99	191.15	822	193.48	822	200.75	822	

Manning's n Values	num=	11							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0144	-4.26	.0144	2.63	.016	3.29	.0161	6.97	.0122
9.27	.0066	21.33	.0066	30.57	.0084	34.84	.0106	54.39	.0163

CPNPPLocalPMP

200.75 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 9.27 63.68 .5 .5 .5 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 191.3175 200.75 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.08	wt. n-val.	0.012	0.010
0.016				
W.S. Elev (ft)	820.07	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	190.89
25.03				
E.G. Slope (ft/ft)	0.000046	Area (sq ft)	0.01	190.89
25.03				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.83
10.17				
Top width (ft)	101.29	Top width (ft)	0.15	54.41
46.73				
Vel Total (ft/s)	2.05	Avg. vel. (ft/s)	0.08	2.26
0.41				
Max Chl Dpth (ft)	4.93	Hydr. Depth (ft)	0.04	3.51
0.54				
Conv. Total (cfs)	65354.2	Conv. (cfs)	0.1	63850.0
1504.2				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.17	55.55
46.74				
Min Ch El (ft)	815.14	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	200.75	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.50
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.2375*

INPUT

Description:

Station	Elevation	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.17	-4.33	822.17	2.47	822.16	3.12	822.13	6.76	821.06	
9.03	820	25.13	816.02	25.47	815.87	26.91	815.14	46.91	815.14	
50.63	815.93	53.31	816.5	63.01	819	115.98	820.23	165.91	821.39	
185.7	821.96	189	821.99	189.86	822	192.18	822	199.41	822	

Manning's n Values	num=	11	Sta	n Val	Sta	n Val	Sta	n Val
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	

				CPNPP	Local	PMP				
-10	.0145	-4.33	.0145	2.47	.016	3.12	.0162	6.76	.0121	
9.03	.0066	21	.0066	30.16	.0083	34.4	.0105	53.79	.0163	
199.41	.0129									

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	9.03	63.01		.5	.5	.5		.1	.3
Blocked Obstructions	num=			1					
Sta L	Sta R	Elev							
189.9791	199.41	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.	0.012	0.010
0.016				
w.s. Elev (ft)	820.07	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	189.43
24.64				
E.G. slope (ft/ft)	0.000046	Area (sq ft)	0.01	189.43
24.64				
Q Total (cfs)	442.00	Flow (cfs)	0.00	431.95
10.05				
Top width (ft)	100.19	Top width (ft)	0.15	53.98
46.06				
Vel Total (ft/s)	2.06	Avg. vel. (ft/s)	0.08	2.28
0.41				
Max Chl Dpth (ft)	4.93	Hydr. Depth (ft)	0.03	3.51
0.53				
Conv. Total (cfs)	65093.9	Conv. (cfs)	0.1	63614.4
1479.5				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.16	55.13
46.08				
Min Ch El (ft)	815.14	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	199.41	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.50
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.64
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.225*

INPUT

Description:

Station	Elevation	Data	num=	20					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.16	-4.4	822.16	2.31	822.15	2.96	822.13	6.55	821.05
8.79	820	24.9	816.02	25.24	815.87	26.68	815.14	46.68	815.14
50.29	815.93	52.9	816.5	62.33	819	115.05	820.23	164.74	821.4
184.42	821.96	187.71	821.99	188.57	822	190.88	822	198.07	822

Manning's n Values				CPNPPLocalPMP					
Sta	n Val	Sta	num=	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0147	-4.4	.0147	2.31	.0161	2.96	.0162	6.55	.012
8.79	.0066	20.66	.0066	29.75	.0082	33.95	.0104	53.19	.0164
198.07	.0129								

Bank Sta: Left 8.79 Right 62.33 Lengths: Left Channel .5 Right .5 Coeff Contr. .1 Expan. .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 188.6407 198.07 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.08	wt. n-val.	0.012	0.010
0.016				
w.s. Elev (ft)	820.07	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	187.98
24.46				
E.G. Slope (ft/ft)	0.000047	Area (sq ft)	0.00	187.98
24.46				
Q Total (cfs)	442.00	Flow (cfs)	0.00	432.04
9.96				
Top width (ft)	99.47	Top width (ft)	0.15	53.54
45.79				
Vel Total (ft/s)	2.08	Avg. Vel. (ft/s)	0.08	2.30
0.41				
Max Chl Dpth (ft)	4.93	Hydr. Depth (ft)	0.03	3.51
0.53				
Conv. Total (cfs)	64713.9	Conv. (cfs)	0.1	63255.5
1458.4				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.16	54.70
45.80				
Min Ch El (ft)	815.14	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	198.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.50
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.2125*

INPUT

Description:

Station	Elevation	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.15	-4.47	822.15	2.16	822.14	2.79	822.12	6.34	821.03	
8.55	820	24.66	816.02	25	815.86	26.44	815.13	46.44	815.13	
49.95	815.94	52.48	816.51	61.66	819	114.12	820.23	163.56	821.41	

Manning's n Values		num= 11		CPNPPLocalPMP		822		822	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0148	-4.47	.0148	2.16	.0161	2.79	.0163	6.34	.012
8.55	.0066	20.33	.0066	29.35	.0081	33.51	.0103	52.59	.0164
196.74	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	8.55	61.66		.5	.5		.1	.3

Blocked Obstructions	num=
	1

Sta L	Sta R	Elev
187.3024	196.74	825

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	820.15	Element	Left OB	Channel
	Vel Head (ft)	0.08	wt. n-val.	0.012	0.010
	0.016				
	W.S. Elev (ft)	820.07	Reach Len. (ft)	0.50	0.50
	0.50				
	Crit w.s. (ft)		Flow Area (sq ft)	0.00	186.71
	24.28				
	E.G. Slope (ft/ft)	0.000047	Area (sq ft)	0.00	186.71
	24.28				
	Q Total (cfs)	442.00	Flow (cfs)	0.00	432.10
	9.90				
	Top width (ft)	98.76	Top width (ft)	0.14	53.11
	45.51				
	Vel Total (ft/s)	2.09	Avg. vel. (ft/s)	0.08	2.31
	0.41				
	Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.03	3.52
	0.53				
	Conv. Total (cfs)	64569.7	Conv. (cfs)	0.1	63123.1
	1446.6				
	Length wtd. (ft)	0.50	wetted Per. (ft)	0.16	54.29
	45.52				
	Min Ch El (ft)	815.13	Shear (lb/sq ft)	0.00	0.01
	0.00				
	Alpha	1.19	Stream Power (lb/ft s)	196.74	0.00
	0.00				
	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.49
	3.98				
	C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
	1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.2*

INPUT

Description:

Station	Elevation	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.14	-4.54	822.14		2	822.13	2.63	822.11	6.13	821.01

		CPNP		Local		PMP			
8.31	820	24.42	816.02	24.76	815.86	26.2	815.13	46.2	815.13
49.61	815.94	52.07	816.52	60.98	819	113.18	820.24	162.39	821.41
181.88	821.97	185.14	821.99	185.99	822	188.27	822	195.4	822
Manning's n Values		num=		11					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0149	-4.54	.0149	2	.0162	2.63	.0163	6.13	.0119
8.31	.0066	19.99	.0066	28.94	.008	33.07	.0102	51.99	.0164
195.4	.0129								
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	8.31	60.98		.5	.5		.1	.3	
Blocked Obstructions		num=		1					
Sta L	Sta R	Elev							
185.964	195.4	825							

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.08		wt. n-val.	0.012	0.010
0.016					
W.S. Elev (ft)	820.07		Reach Len. (ft)	0.50	0.50
0.50					
Crit W.S. (ft)			Flow Area (sq ft)	0.00	185.23
23.89					
E.G. slope (ft/ft)	0.000047		Area (sq ft)	0.00	185.23
23.89					
Q Total (cfs)	442.00		Flow (cfs)	0.00	432.22
9.78					
Top width (ft)	97.66		Top width (ft)	0.14	52.67
44.85					
Vel Total (ft/s)	2.11		Avg. vel. (ft/s)	0.08	2.33
0.41					
Max Chl Dpth (ft)	4.94		Hydr. Depth (ft)	0.03	3.52
0.53					
Conv. Total (cfs)	64300.9		Conv. (cfs)	0.1	62878.7
1422.1					
Length wtd. (ft)	0.50		wetted Per. (ft)	0.16	53.87
44.86					
Min Ch El (ft)	815.13		Shear (lb/sq ft)	0.00	0.01
0.00					
Alpha	1.19		Stream Power (lb/ft s)	195.40	0.00
0.00					
Frctn Loss (ft)	0.00		Cum volume (acre-ft)	0.19	3.49
3.98					
C & E Loss (ft)	0.00		Cum SA (acres)	0.00	0.63
1.38					

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.1875*

INPUT
 Description:
 Station Elevation Data num= 20

Sta	Elev	Sta	Elev	CPNPPLocalPMP	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.14	-4.62	822.14	1.85	822.12	2.47	822.1	5.92	821	821
8.08	820	24.18	816.02	24.52	815.86	25.96	815.13	45.96	815.13	815.13
49.27	815.94	51.66	816.53	60.31	819	112.25	820.24	161.22	821.42	821.42
180.61	821.97	183.85	821.99	184.7	822	186.97	822	194.06	822	822

Manning's n Values		num=		11					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0151	-4.62	.0151	1.85	.0162	2.47	.0163	5.92	.0118
8.08	.0066	19.66	.0066	28.53	.0079	32.62	.0101	51.39	.0165
194.06	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	8.08	60.31		.5	.5	.5		.1	.3

Blocked Obstructions			num=	1
Sta L	Sta R	Elev		
184.6256	194.06	825		

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.15	Element		
Right OB				
Vel Head (ft)	0.08	wt. n-val.	0.012	0.010
0.017				
W.S. Elev (ft)	820.06	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	183.75
23.70				
E.G. Slope (ft/ft)	0.000048	Area (sq ft)	0.00	183.75
23.70				
Q Total (cfs)	442.00	Flow (cfs)	0.00	432.31
9.69				
Top width (ft)	96.93	Top width (ft)	0.14	52.23
44.56				
Vel Total (ft/s)	2.13	Avg. Vel. (ft/s)	0.08	2.35
0.41				
Max Chl Dpth (ft)	4.93	Hydr. Depth (ft)	0.03	3.52
0.53				
Conv. Total (cfs)	63882.6	Conv. (cfs)	0.1	62481.5
1401.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.15	53.44
44.57				
Min Ch El (ft)	815.13	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	194.06	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.49
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.175*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.13	-4.69	822.13	1.69	822.12	2.3	822.1	5.71	820.98		
7.84	820	23.94	816.01	24.28	815.86	25.72	815.13	45.72	815.13		
48.93	815.95	51.25	816.54	59.63	819	111.32	820.24	160.04	821.43		
179.34	821.97	182.57	821.99	183.41	822	185.67	822	192.73	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0152	-4.69	.0152	1.69	.0163	2.3	.0164	5.71	.0117		
7.84	.0066	19.32	.0066	28.12	.0078	32.18	.01	50.79	.0165		
192.73	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	7.84	59.63		.5	.5		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
183.2872	192.73	825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.09	wt. n-val.	0.012	0.010
0.017				
W.S. Elev (ft)	820.06	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	182.33
23.52				
E.G. slope (ft/ft)	0.000048	Area (sq ft)	0.00	182.33
23.52				
Q Total (cfs)	442.00	Flow (cfs)	0.00	432.35
9.64				
Top width (ft)	96.21	Top width (ft)	0.14	51.79
44.28				
Vel Total (ft/s)	2.15	Avg. vel. (ft/s)	0.08	2.37
0.41				
Max Chl Dpth (ft)	4.93	Hydr. Depth (ft)	0.03	3.52
0.53				
Conv. Total (cfs)	63656.1	Conv. (cfs)	0.0	62267.0
1389.0				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.15	53.01
44.30				
Min Ch El (ft)	815.13	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	192.73	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.49
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper

RS: 9.1625*

CPNPPLocalPMP

INPUT

Description:

Station	Elevation	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.12	-4.76	822.12	1.53	822.11	2.14	822.09	5.5	820.97	
7.6	820	23.71	816.01	24.04	815.86	25.49	815.12	45.49	815.12	
48.59	815.95	50.84	816.54	58.96	819	110.39	820.25	158.87	821.43	
178.07	821.97	181.28	821.99	182.12	822	184.36	822	191.39	822	

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0153	-4.76	.0153	1.53	.0163	2.14	.0164	5.5	.0116
7.6	.0066	18.99	.0066	27.71	.0078	31.74	.0099	50.19	.0165
191.39	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	7.6	58.96		.5	.5		.1	.3

Blocked Obstructions

Sta L	Sta R	Elev	num=	1
181.9489	191.39	825		

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	820.15	Element	Left OB	Channel
0.017	Vel Head (ft)	0.09	wt. n-val.	0.012	0.010
0.50	W.S. Elev (ft)	820.06	Reach Len. (ft)	0.50	0.50
23.16	Crit w.s. (ft)		Flow Area (sq ft)	0.00	181.15
23.16	E.G. slope (ft/ft)	0.000048	Area (sq ft)	0.00	181.15
9.51	Q Total (cfs)	442.00	Flow (cfs)	0.00	432.49
43.65	Top width (ft)	95.14	Top width (ft)	0.13	51.36
0.41	Vel Total (ft/s)	2.16	Avg. vel. (ft/s)	0.08	2.39
0.53	Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.03	3.53
1366.3	Conv. Total (cfs)	63483.3	Conv. (cfs)	0.0	62116.9
43.67	Length wtd. (ft)	0.50	wetted Per. (ft)	0.15	52.61
0.00	Min Ch El (ft)	815.12	Shear (lb/sq ft)	0.00	0.01
0.00	Alpha	1.19	Stream Power (lb/ft s)	191.39	0.00
3.98	Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.48
1.38	C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

CPNPPLocalPMP

RIVER: Center North
 REACH: Center N Upper RS: 9.15*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.11	-4.83	822.11	1.38	822.1	1.97	822.08	5.29	820.95		
7.36	820	23.47	816.01	23.81	815.85	25.25	815.12	45.25	815.12		
48.26	815.96	50.43	816.55	58.28	819	109.46	820.25	157.69	821.44		
176.8	821.97	179.99	821.99	180.83	822	183.06	822	190.05	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0154	-4.83	.0154	1.38	.0164	1.97	.0165	5.29	.0116		
7.36	.0066	18.65	.0066	27.3	.0077	31.29	.0097	49.59	.0166		
190.05	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 7.36 58.28 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 180.6105 190.05 825

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	820.15	Element	Left OB	Channel
	Vel Head (ft)	0.09	wt. n-val.	0.012	0.010
	0.017				
	w.s. Elev (ft)	820.06	Reach Len. (ft)	0.50	0.50
	0.50				
	Crit w.s. (ft)		Flow Area (sq ft)	0.00	179.66
	22.97				
	E.G. Slope (ft/ft)	0.000049	Area (sq ft)	0.00	179.66
	22.97				
	Q Total (cfs)	442.00	Flow (cfs)	0.00	432.60
	9.40				
	Top Width (ft)	94.42	Top width (ft)	0.13	50.92
	43.37				
	Vel Total (ft/s)	2.18	Avg. vel. (ft/s)	0.08	2.41
	0.41				
	Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.03	3.53
	0.53				
	Conv. Total (cfs)	63274.1	Conv. (cfs)	0.0	61928.3
	1345.7				
	Length wtd. (ft)	0.50	wetted Per. (ft)	0.14	52.18
	43.38				
	Min Ch El (ft)	815.12	Shear (lb/sq ft)	0.00	0.01
	0.00				
	Alpha	1.19	Stream Power (lb/ft s)	190.05	0.00
	0.00				
	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.48
	3.98				
	C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
	1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

CPNPPLocalPMP

RIVER: Center North
 REACH: Center N Upper RS: 9.1375*

INPUT

Description:

Station Elevation Data		num= 20		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.1	-4.9	822.1	1.22	822.09	1.81	822.08	5.08	820.94		
7.12	820	23.23	816.01	23.57	815.85	25.01	815.12	45.01	815.12		
47.92	815.96	50.02	816.56	57.61	819	108.52	820.25	156.52	821.45		
175.53	821.98	178.71	822	179.53	822	181.76	822	188.71	822		

Manning's n Values		num= 11		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0156	-4.9	.0156	1.22	.0164	1.81	.0165	5.08	.0115		
7.12	.0066	18.32	.0066	26.89	.0076	30.85	.0096	48.99	.0166		
188.71	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 7.12 57.61 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 179.2721 188.71 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.09	wt. n-val.	0.012	0.010
0.017				
W.S. Elev (ft)	820.06	Reach Len. (ft)	0.50	0.50
0.50				
Crit W.S. (ft)		Flow Area (sq ft)	0.00	178.22
22.78				
E.G. slope (ft/ft)	0.000049	Area (sq ft)	0.00	178.22
22.78				
Q Total (cfs)	442.00	Flow (cfs)	0.00	432.65
9.35				
Top width (ft)	93.69	Top width (ft)	0.13	50.49
43.07				
Vel Total (ft/s)	2.20	Avg. vel. (ft/s)	0.08	2.43
0.41				
Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.03	3.53
0.53				
Conv. Total (cfs)	62997.2	Conv. (cfs)	0.0	61664.1
1333.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.14	51.77
43.09				
Min Ch El (ft)	815.12	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	188.71	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.48
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
1.38				

Note: Manning's n values were composited to a single value in the main channel.
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CPNPPLocalPMP

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.125*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.09	-4.97	822.09	1.06	822.08	1.64	822.07	4.87	820.92		
6.88	820	22.99	816.01	23.33	815.85	24.77	815.12	44.77	815.12		
47.58	815.96	49.6	816.57	56.93	819	107.59	820.26	155.34	821.45		
174.26	821.98	177.42	822	178.24	822	180.46	822	187.38	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0157	-4.97	.0157	1.06	.0165	1.64	.0166	4.87	.0114		
6.88	.0066	17.98	.0066	26.48	.0075	30.41	.0095	48.39	.0167		
187.38	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 6.88 56.93 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 177.9337 187.38 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
vel Head (ft)	0.09	wt. n-val.	0.011	0.010
0.017				
W.S. Elev (ft)	820.06	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	176.73
22.41				
E.G. slope (ft/ft)	0.000050	Area (sq ft)	0.00	176.73
22.41				
Q Total (cfs)	442.00	Flow (cfs)	0.00	432.80
9.20				
Top width (ft)	92.62	Top width (ft)	0.12	50.05
42.45				
vel Total (ft/s)	2.22	Avg. vel. (ft/s)	0.08	2.45
0.41				
Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.03	3.53
0.53				
Conv. Total (cfs)	62545.8	Conv. (cfs)	0.0	61243.5
1302.3				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.13	51.35
42.46				
Min Ch El (ft)	815.12	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	187.38	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.48
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
1.38				

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.1125*

INPUT

Description:

Station	Elev	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.08	-5.04	822.08	.91	822.07	1.48	822.06	4.66	820.91	
6.65	820	22.75	816.01	23.09	815.85	24.53	815.11	44.53	815.11	
47.24	815.97	49.19	816.58	56.26	819	106.66	820.26	154.17	821.46	
172.99	821.98	176.13	822	176.95	822	179.15	822	186.04	822	

Station	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0158	-5.04	.0158	.91	.0165	1.48	.0166	4.66	.0113
6.65	.0066	17.65	.0066	26.07	.0074	29.96	.0094	47.79	.0167
186.04	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	6.65	56.26		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1
Sta L	Sta R	Elev
176.5954	186.04	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-val.	0.011	0.010
0.017				
w.s. Elev (ft)	820.05	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	175.48
22.23				
E.G. Slope (ft/ft)	0.000050	Area (sq ft)	0.00	175.48
22.23				
Q Total (cfs)	442.00	Flow (cfs)	0.00	432.85
9.15				
Top width (ft)	91.90	Top width (ft)	0.12	49.61
42.17				
Vel Total (ft/s)	2.24	Avg. vel. (ft/s)	0.08	2.47
0.41				
Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.03	3.54
0.53				
Conv. Total (cfs)	62365.8	Conv. (cfs)	0.0	61075.1
1290.6				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.13	50.94
42.19				
Min Ch El (ft)	815.11	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	186.04	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.19	3.48
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
1.38				

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.1*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.07	-5.11	822.07	.75	822.07	1.32	822.06	4.45	820.89		
6.41	820	22.52	816.01	22.85	815.84	24.3	815.11	44.29	815.11		
46.9	815.97	48.78	816.58	55.59	819	105.73	820.27	152.99	821.46		
171.72	821.98	174.85	822	175.66	822	177.85	822	184.7	822		

Manning's n Values		num= 11		Sta n val		Sta n val		Sta n val		Sta n val	
Sta	n val	Sta	n val	Sta	n val	Sta	n val	Sta	n val	Sta	n val
-10	.016	-5.11	.016	.75	.0166	1.32	.0167	4.45	.0112		
6.41	.0066	17.31	.0066	25.66	.0073	29.52	.0093	47.19	.0167		
184.7	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 6.41 55.59 .5 .5 .5 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
175.257	184.7	825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.09	wt. n-val.	0.011	0.010
0.017				
w.s. Elev (ft)	820.05	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	174.08
21.87				
E.G. slope (ft/ft)	0.000051	Area (sq ft)	0.00	174.08
21.87				
Q Total (cfs)	442.00	Flow (cfs)	0.00	432.97
9.03				
Top width (ft)	90.85	Top width (ft)	0.12	49.18
41.55				
Vel Total (ft/s)	2.26	Avg. vel. (ft/s)	0.08	2.49
0.41				
Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.03	3.54
0.53				
Conv. Total (cfs)	62075.8	Conv. (cfs)	0.0	60807.6
1268.1				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.13	50.53
41.57				
Min Ch El (ft)	815.11	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	184.70	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.47
3.98				

C & E Loss (ft) 1.38
 0.00 CPNPPLocalPMP Cum SA (acres) 0.00 0.63

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.0875*

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.06	-5.18	822.06	.6	822.06	1.15	822.05	4.24	820.88		
6.17	820	22.28	816.01	22.62	815.84	24.06	815.11	44.06	815.11		
46.56	815.97	48.37	816.59	54.91	819	104.8	820.27	151.82	821.47		
170.45	821.98	173.56	822	174.37	822	176.55	822	183.36	822		

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0161	-5.18	.0161	.6	.0166	1.15	.0167	4.24	.0112		
6.17	.0066	16.98	.0066	25.25	.0072	29.08	.0092	46.59	.0168		
183.36	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 6.17 54.91 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 173.9186 183.36 825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB Vel Head (ft)	0.10	wt. n-val.	0.011	0.010
0.017				
W.S. Elev (ft)	820.05	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	21.68	Flow Area (sq ft)	0.00	172.62
21.68				
E.G. slope (ft/ft)	0.000051	Area (sq ft)	0.00	172.62
21.68				
Q Total (cfs)	442.00	Flow (cfs)	0.00	433.04
8.95				
Top width (ft)	90.13	Top width (ft)	0.11	48.74
41.28				
Vel Total (ft/s)	2.27	Avg. vel. (ft/s)	0.08	2.51
0.41				
Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.03	3.54
0.53				
Conv. Total (cfs)	61622.0	Conv. (cfs)	0.0	60373.5
1248.5				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.12	50.12
41.29				
Min Ch El (ft)	815.11	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	183.36	0.00
0.00				

		CPNPPLocalPMP		
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.47
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.075*

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.05	-5.25	822.05	.44	822.05	.99	822.04	4.03	820.86		
5.93	820	22.04	816.01	22.38	815.84	23.82	815.11	43.82	815.11		
46.22	815.98	47.96	816.6	54.24	819	103.86	820.27	150.64	821.48		
169.17	821.99	172.27	822	173.08	822	175.25	822	182.02	822		

Manning's n Values		num= 11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0162	-5.25	.0162	.44	.0167	.99	.0167	4.03	.0111		
5.93	.0066	16.64	.0066	24.84	.0071	28.63	.0091	45.99	.0168		
182.02	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	5.93	54.24		.5	.5	.5		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
172.5802	182.02	825	

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.10	wt. n-val.	0.011	0.010
0.017				
W.S. Elev (ft)	820.05	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	171.17
21.49				
E.G. Slope (ft/ft)	0.000052	Area (sq ft)	0.00	171.17
21.49				
Q Total (cfs)	442.00	Flow (cfs)	0.00	433.09
8.91				
Top width (ft)	89.40	Top width (ft)	0.11	48.31
40.98				
Vel Total (ft/s)	2.29	Avg. vel. (ft/s)	0.08	2.53
0.41				
Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.02	3.54
0.52				
Conv. Total (cfs)	61298.2	Conv. (cfs)	0.0	60062.2
1235.9				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.12	49.71
40.99				
Min Ch El (ft)	815.11	Shear (lb/sq ft)	0.00	0.01
0.00				

	Alpha	CPNPPLocalPMP	Stream Power (lb/ft s)	182.02	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.47	
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63	

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.0625*

INPUT

Description:

Station	Elev	Data	num=	20	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.04	-5.33	822.04	.28	822.04	.82	822.03	3.82	820.84	
5.69	820	21.8	816.01	22.14	815.84	23.58	815.1	43.58	815.1	
45.88	815.98	47.55	816.61	53.56	819	102.93	820.28	149.47	821.48	
167.9	821.99	170.98	822	171.79	822	173.94	822	180.69	822	

Station	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0164	-5.33	.0164	.28	.0167	.82	.0168	3.82	.011
5.69	.0066	16.31	.0066	24.44	.007	28.19	.009	45.39	.0168
180.69	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	5.69	53.56		.5	.5	.5		.1	.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
171.2419	180.69	825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.10	wt. n-val.	0.011	0.010
0.017				
w.s. Elev (ft)	820.05	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	169.95
21.15				
E.G. slope (ft/ft)	0.000052	Area (sq ft)	0.00	169.95
21.15				
Q Total (cfs)	442.00	Flow (cfs)	0.00	433.21
8.79				
Top width (ft)	88.37	Top width (ft)	0.11	47.87
40.39				
Vel Total (ft/s)	2.31	Avg. vel. (ft/s)	0.08	2.55
0.42				
Max Chl Dpth (ft)	4.95	Hydr. Depth (ft)	0.02	3.55
0.52				
Conv. Total (cfs)	61101.2	Conv. (cfs)	0.0	59886.1
1215.0				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.12	49.31
40.41				

		CPNPPLocalPMP		
Min Ch El (ft)	815.10	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	180.69	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.47
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.05*

INPUT

Description:

Station Elevation Data num= 20

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.04	-5.4	822.04	.13	822.03	.66	822.03	3.61	820.83
5.45	820	21.56	816	21.9	815.84	23.34	815.1	43.34	815.1
45.55	815.99	47.14	816.62	52.89	819	102	820.28	148.29	821.49
166.63	821.99	169.7	822	170.5	822	172.64	822	179.35	822

Manning's n Values num= 11

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0165	-5.4	.0165	.13	.0168	.66	.0168	3.61	.0109
5.45	.0066	15.97	.0066	24.03	.007	27.75	.0089	44.79	.0169
179.35	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 5.45 52.89 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 169.9035 179.35 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-val.	0.011	0.010
0.017				
W.S. Elev (ft)	820.05	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	168.60
20.96				
E.G. slope (ft/ft)	0.000053	Area (sq ft)	0.00	168.60
20.96				
Q Total (cfs)	442.00	Flow (cfs)	0.00	433.28
8.72				
Top width (ft)	87.65	Top width (ft)	0.10	47.44
40.11				
Vel Total (ft/s)	2.33	Avg. vel. (ft/s)	0.07	2.57
0.42				
Max Chl Dpth (ft)	4.95	Hydr. Depth (ft)	0.02	3.55
0.52				
Conv. Total (cfs)	60620.7	Conv. (cfs)	0.0	59424.9
1195.8				

		CPNPPLocalPMP		
Length wtd. (ft)	0.50	Wetted Per. (ft)	0.11	48.91
40.12		Shear (lb/sq ft)	0.00	0.01
Min Ch El (ft)	815.10	Stream Power (lb/ft s)	179.35	0.00
0.00		Cum Volume (acre-ft)	0.19	3.47
Alpha	1.19	Cum SA (acres)	0.00	0.63
0.00				
Frctn Loss (ft)	0.00			
3.98				
C & E Loss (ft)	0.00			
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.0375*

INPUT

Description:

Station Elevation Data			num=	20							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.03	-5.47	822.03	-.03	822.02	.49	822.02	3.4	820.81		
5.22	820	21.32	816	21.66	815.83	23.1	815.1	43.1	815.1		
45.21	815.99	46.72	816.63	52.21	819	101.07	820.28	147.12	821.5		
165.36	821.99	168.41	822	169.21	822	171.34	822	178.01	822		

Manning's n Values			num=	11							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0166	-5.47	.0166	-.03	.0168	.49	.0169	3.4	.0108		
5.22	.0066	15.64	.0066	23.62	.0069	27.3	.0088	44.19	.0169		
178.01	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 5.22 52.21 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 168.5651 178.01 825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.10	wt. n-val.	0.011	0.010
0.017				
w.s. Elev (ft)	820.04	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	167.13
20.78				
E.G. Slope (ft/ft)	0.000054	Area (sq ft)	0.00	167.13
20.78				
Q Total (cfs)	442.00	Flow (cfs)	0.00	433.32
8.68				
Top width (ft)	86.91	Top width (ft)	0.10	46.99
39.83				
Vel Total (ft/s)	2.35	Avg. vel. (ft/s)	0.07	2.59
0.42				
Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.02	3.56
0.52				

	CPNPPLocalPMP		
Conv. Total (cfs) 1183.7	60264.1	Conv. (cfs)	0.0 59080.4
Length wtd. (ft) 39.84	0.50	wetted Per. (ft)	0.11 48.49
Min Ch El (ft) 0.00	815.10	Shear (lb/sq ft)	0.00 0.01
Alpha 0.00	1.19	Stream Power (lb/ft s)	178.01 0.00
Frctn Loss (ft) 3.98	0.00	Cum Volume (acre-ft)	0.19 3.46
C & E Loss (ft) 1.38	0.00	Cum SA (acres)	0.00 0.63

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
REACH: Center N Upper RS: 9.025*

INPUT

Description:

Station	Elevation	Data	num=	20							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.02	-5.54	822.02	-.19	822.02	.33	822.01	3.19	820.8		
4.98	820	21.09	816	21.42	815.83	22.87	815.1	42.87	815.1		
44.87	815.99	46.31	816.63	51.54	819	100.14	820.29	145.94	821.5		
164.09	822	167.12	822	167.92	822	170.04	822	176.68	822		

Manning's n Values	num=	11									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0167	-5.54	.0167	-.19	.0169	.33	.0169	3.19	.0108		
4.98	.0066	15.3	.0066	23.21	.0068	26.86	.0087	43.59	.0169		
176.68	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.		
	4.98	51.54		.5	.5	.5		.1	.3		
Blocked Obstructions			num=	1							
	Sta L	Sta R	Elev								
	167.2267	176.68	825								

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB				
Vel Head (ft)	0.10	wt. n-Val.	0.011	0.010
0.017				
w.s. Elev (ft)	820.04	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	165.73
20.43				
E.G. slope (ft/ft)	0.000054	Area (sq ft)	0.00	165.73
20.43				
Q Total (cfs)	442.00	Flow (cfs)	0.00	433.42
8.58				
Top width (ft)	85.89	Top width (ft)	0.09	46.56
39.24				
Vel Total (ft/s)	2.37	Avg. vel. (ft/s)	0.07	2.62
0.42				

		CPNPPLocalPMP		
Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)	0.02	3.56
0.52				
Conv. Total (cfs)	59901.7	Conv. (cfs)	0.0	58739.3
1162.4				
Length Wtd. (ft)	0.50	wetted Per. (ft)	0.10	48.10
39.25				
Min Ch El (ft)	815.10	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	176.68	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.46
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.63
1.38				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9.0125*

INPUT

Description:

Station Elevation Data	num=	20							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 822.01 -5.61 822.01 -.34 822.01 .16 822.01 2.98 820.78									
4.74 820 20.85 816 21.19 815.83 22.63 815.09 42.63 815.09									
44.53 816 45.9 816.64 50.86 819 99.2 820.29 144.77 821.51									
162.82 822 165.84 822 166.62 822 168.74 822 175.34 822									

Manning's n Values	num=	11							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0169 -5.61 .0169 -.34 .0169 .16 .017 2.98 .0107									
4.74 .0066 14.97 .0066 22.8 .0067 26.42 .0086 42.99 .017									
175.34 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
4.74 50.86	.5 .5 .5	.1	.3
Blocked Obstructions	num=	1	
Sta L Sta R Elev			
165.8884 175.34 825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.11	wt. n-val.	0.000	0.010
0.017				
W.S. Elev (ft)	820.04	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	164.49
20.25				
E.G. slope (ft/ft)	0.000055	Area (sq ft)	0.00	164.49
20.25				
Q Total (cfs)	442.00	Flow (cfs)	0.00	433.50
8.50				
Top width (ft)	85.17	Top width (ft)	0.09	46.12
38.96				

		CPNPPLocalPMP		
Vel Total (ft/s)	2.39	Avg. Vel. (ft/s)	0.07	2.64
0.42				
Max Chl Dpth (ft)	4.95	Hydr. Depth (ft)	0.02	3.57
0.52				
Conv. Total (cfs)	59484.6	Conv. (cfs)	0.0	58340.6
1144.0				
Length wtd. (ft)	0.50	wetted Per. (ft)	0.10	47.71
38.97				
Min Ch El (ft)	815.09	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.19	Stream Power (lb/ft s)	175.34	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	3.46
3.98				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.62
1.37				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 9

INPUT

Description:

Station Elevation Data		num= 11									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	4.5	820	20.61	816	22.39	815.09		
42.39	815.09	44.19	816	50.19	819	161.55	822	164.55	822		
174	822										

Manning's n Values		num= 6									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.017	0	.017	22.39	.0066	42.39	.017	50.19	.0129		
174	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	4.5	50.19		176.29	176.29		.1	.3
Blocked Obstructions			num=	2				
Sta L	Sta R	Elev	Sta L	Sta R	Elev			
-10	0	825	164.55	174	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-val.	0.017	0.013
0.013				
W.S. Elev (ft)	820.04	Reach Len. (ft)	176.29	176.29
176.29				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	163.27
20.14				
E.G. slope (ft/ft)	0.000103	Area (sq ft)	0.00	163.27
20.14				
Q Total (cfs)	442.00	Flow (cfs)	0.00	426.80
15.20				
Top width (ft)	84.45	Top width (ft)	0.09	45.69
38.67				

		CPNPPLocalPMP		
Vel Total (ft/s) 0.75	2.41	Avg. Vel. (ft/s)	0.06	2.61
Max Chl Dpth (ft) 0.52	4.95	Hydr. Depth (ft)	0.02	3.57
Conv. Total (cfs) 1501.4	43656.1	Conv. (cfs)	0.0	42154.7
Length wtd. (ft) 38.68	176.29	wetted Per. (ft)	0.10	47.32
Min Ch El (ft) 0.00	815.09	Shear (lb/sq ft)	0.00	0.02
Alpha 0.00	1.14	Stream Power (lb/ft s)	174.00	0.00
Frctn Loss (ft) 3.98	0.01	Cum Volume (acre-ft)	0.19	3.46
C & E Loss (ft) 1.37	0.01	Cum SA (acres)	0.00	0.62

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 8

INPUT

Description:

Station Elevation Data		num= 12	
Sta	Elev	Sta	Elev
-10	822	0	822
22.46	814.34	42.46	814.34
102.72	822	112	822

Manning's n Values		num= 6	
Sta	n Val	Sta	n Val
-10	.017	0	.017
22.46	.0066	42.46	.017
102.72	.0129	53.64	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	4.5	53.64		63.59	63.59		.1	.3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	102.72	112	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.	0.000	0.013
0.013				
W.S. Elev (ft)	820.04	Reach Len. (ft)	63.59	63.59
63.59				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	195.15
0.02				
E.G. slope (ft/ft)	0.000071	Area (sq ft)	0.00	195.15
0.02				
Q Total (cfs)	442.00	Flow (cfs)	0.00	442.00
0.00				
Top width (ft)	50.22	Top width (ft)	0.09	49.14
0.99				

		CPNPPLocalPMP		
Vel Total (ft/s)	2.26	Avg. Vel. (ft/s)	0.05	2.26
0.08				
Max Chl Dpth (ft)	5.70	Hydr. Depth (ft)	0.02	3.97
0.02				
Conv. Total (cfs)	52422.7	Conv. (cfs)	0.0	52422.5
0.2				
Length wtd. (ft)	63.59	wetted Per. (ft)	0.10	51.39
0.99				
Min Ch El (ft)	814.34	Shear (lb/sq ft)	0.00	0.02
0.00				
Alpha	1.00	Stream Power (lb/ft s)	112.00	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)	0.19	2.73
3.93				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.43
1.29				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 7

INPUT

Description:

Station Elevation Data		num= 12	
Sta	Elev	Sta	Elev
-10	822	0	822
22.49	814.11	42.49	814.11
102.72	822	112	822

Manning's n Values		num= 6	
Sta	n Val	Sta	n Val
-10	.017	0	.017
22.49	.0066	42.49	.017
112	.0129	54.16	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	4.5	54.16		63.02	63.02		.1	.3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Elev
-10	0	825	825
102.72	112	825	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.	0.000	0.014
0.013				
W.S. Elev (ft)	820.04	Reach Len. (ft)	63.02	63.02
63.02				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	204.46
0.02				
E.G. slope (ft/ft)	0.000062	Area (sq ft)	0.00	204.46
0.02				
Q Total (cfs)	442.00	Flow (cfs)	0.00	442.00
0.00				
Top width (ft)	50.74	Top width (ft)	0.09	49.66
1.00				

		CPNPPLocalPMP		
Vel Total (ft/s)	2.16	Avg. Vel. (ft/s)	0.05	2.16
0.07				
Max Chl Dpth (ft)	5.93	Hydr. Depth (ft)	0.02	4.12
0.02				
Conv. Total (cfs)	55999.7	Conv. (cfs)	0.0	55999.5
0.2				
Length wtd. (ft)	63.02	wetted Per. (ft)	0.10	52.02
1.00				
Min Ch El (ft)	814.11	Shear (lb/sq ft)	0.00	0.02
0.00				
Alpha	1.00	Stream Power (lb/ft s)	112.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	2.44
3.93				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.36
1.29				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 6

INPUT

Description:

Station Elevation Data		num= 17	
Sta	Elev	Sta	Elev
-10	822	0	822
20.5	813.88	40.5	813.88
92.17	820	101.9	820.47
162.42	822	172	822

Manning's n Values		num= 8	
Sta	n Val	Sta	n Val
-10	.017	0	.017
101.9	.0066	126.28	.0129
		172	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	4.5	48.85		47.67	47.67	47.67		.1	.3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Sta L
-10	0	825	162.42
			172
			825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-Val.	0.017	0.013
0.013				
w.s. Elev (ft)	820.05	Reach Len. (ft)	47.67	47.67
47.67				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	207.19
82.35				
E.G. slope (ft/ft)	0.000047	Area (sq ft)	0.00	207.19
82.35				
Q Total (cfs)	538.00	Flow (cfs)	0.00	439.73
98.27				
Top width (ft)	88.77	Top width (ft)	0.10	44.35

CPNPPLocalPMP

44.32					
Vel Total (ft/s)	1.86	Avg. Vel. (ft/s)	0.05	2.12	
1.19					
Max Chl Dpth (ft)	6.17	Hydr. Depth (ft)	0.02	4.67	
1.86					
Conv. Total (cfs)	78127.8	Conv. (cfs)	0.0	63857.5	
14270.3					
Length Wtd. (ft)	47.67	wetted Per. (ft)	0.11	46.45	
44.63					
Min Ch El (ft)	813.88	Shear (lb/sq ft)	0.00	0.01	
0.01					
Alpha	1.14	Stream Power (lb/ft s)	172.00	0.00	
0.00					
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	2.14	
3.88					
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.29	
1.26					

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 5.83333*

INPUT

Description:

Station Elevation Data num= 27

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	.5	822	4.5	820	19.96	813.95
20.33	813.8	20.5	813.69	40.5	813.69	40.85	813.82	41.03	813.91
48.91	817.83	95.21	818	100.09	818	108.98	819.67	122.47	820.06
137.87	820.5	156.27	820.74	186.74	821.14	189.25	821.5	191.81	821.59
196.82	821.77	201.78	821.88	201.89	821.88	206.38	821.92	214.24	822
215.49	822	219.67	822						

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.017	0	.017	4.5	.0066	20.39	.0066	20.52	.0066
40.26	.0169	40.55	.017	219.67	.0129				

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 4.5 48.91 47.67 47.67 47.67 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	210.0167	219.67	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-Val.	0.000	0.009
0.017				
w.s. Elev (ft)	820.04	Reach Len. (ft)	47.67	47.67
47.67				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	214.06
121.68				
E.G. slope (ft/ft)	0.000024	Area (sq ft)	0.00	214.06
121.68				

		CPNPPLocalPMP	
Q Total (cfs)	538.00	Flow (cfs)	0.00
72.72			465.28
Top width (ft)	117.49	Top width (ft)	0.09
72.99			44.41
Vel Total (ft/s)	1.60	Avg. Vel. (ft/s)	0.03
0.60			2.17
Max Chl Dpth (ft)	6.35	Hydr. Depth (ft)	0.02
1.67			4.82
Conv. Total (cfs)	110462.4	Conv. (cfs)	0.0
14931.1			95531.2
Length wtd. (ft)	47.67	wetted Per. (ft)	0.10
73.15			46.58
Min Ch El (ft)	813.69	Shear (lb/sq ft)	0.00
0.00			0.01
Alpha	1.61	Stream Power (lb/ft s)	219.67
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19
3.76			1.91
C & E Loss (ft)	0.00	Cum SA (acres)	0.00
1.20			0.24

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 5.66666*

INPUT

Description:

Station Elevation Data num= 27

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	.5	822	4.5	820	19.96	813.76
20.33	813.6	20.5	813.5	40.5	813.5	40.86	813.64	41.03	813.73
48.97	817.67	108.17	818	114.42	818	125.78	819.33	143.04	819.65
162.74	820	186.26	820.19	225.22	820.51	228.44	821.2	231.71	821.34
238.12	821.62	244.46	821.76	244.6	821.76	250.35	821.85	260.39	822
261.99	822	267.33	822						

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.017	0	.017	4.5	.0066	20.41	.0066	20.54	.0066
40.31	.0169	40.6	.017	267.33	.0129				

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

4.5	48.97	47.67	47.67	47.67	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	257.6133	267.33	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.	0.017	0.009
0.017				
w.s. Elev (ft)	820.05	Reach Len. (ft)	47.67	47.67
47.67				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	221.39

CPNPPLocalPMP				
173.83	E.G. Slope (ft/ft)	0.000020	Area (sq ft)	0.00 221.39
173.83	Q Total (cfs)	538.00	Flow (cfs)	0.00 451.01
86.99	Top width (ft)	164.43	Top width (ft)	0.10 44.47
119.86	Vel Total (ft/s)	1.36	Avg. Vel. (ft/s)	0.03 2.04
0.50	Max Chl Dpth (ft)	6.55	Hydr. Depth (ft)	0.02 4.98
1.45	Conv. Total (cfs)	120335.4	Conv. (cfs)	0.0 100877.3
19458.1	Length wtd. (ft)	47.67	wetted Per. (ft)	0.11 46.71
119.94	Min ch El (ft)	813.50	Shear (lb/sq ft)	0.00 0.01
0.00	Alpha	1.90	Stream Power (lb/ft s)	267.33 0.00
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19 1.68
3.60	C & E Loss (ft)	0.00	Cum SA (acres)	0.00 0.20
1.09				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 5.5*

INPUT

Description:

Station Elevation Data num= 27											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	.5	822	4.5	820	19.96	813.57		
20.33	813.41	20.5	813.3	40.5	813.3	40.86	813.45	41.04	813.54		
49.03	817.5	121.14	818	128.75	818	142.59	819	163.6	819.23		
187.6	819.5	216.26	819.65	263.71	819.88	267.62	820.9	271.61	821.09		
279.42	821.46	287.14	821.64	287.31	821.65	294.31	821.77	306.54	822		
308.49	822	315	822								

Manning's n Values num= 8											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.017	0	.017	4.5	.0066	20.44	.0066	20.56	.0066		
40.36	.0169	40.65	.0169	315	.0129						

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	4.5	49.03		47.67	47.67	47.67		.1	.3

Blocked Obstructions num= 2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825	305.21	315	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.	0.017	0.009
0.017				

		CPNPPLocalPMP		
W.S. Elev (ft)	820.06	Reach Len. (ft)	47.67	47.67
47.67		Flow Area (sq ft)	0.00	229.08
Crit w.s. (ft)		Area (sq ft)	0.00	229.08
267.43		Flow (cfs)	0.00	429.02
E.G. slope (ft/ft)	0.000016	Top width (ft)	0.11	44.53
267.43		Avg. vel. (ft/s)	0.03	1.87
Q Total (cfs)	538.00	Hydr. Depth (ft)	0.03	5.14
108.98		Conv. (cfs)	0.0	106919.6
Top width (ft)	260.00	wetted Per. (ft)	0.12	46.86
215.35		Shear (lb/sq ft)	0.00	0.00
Vel Total (ft/s)	1.08	Stream Power (lb/ft s)	315.00	0.00
0.41		Cum Volume (acre-ft)	0.19	1.43
Max Chl Dpth (ft)	6.76	Cum SA (acres)	0.00	0.15
1.24				
Conv. Total (cfs)	134079.6			
27160.0				
Length wtd. (ft)	47.67			
215.42				
Min Ch El (ft)	813.30			
0.00				
Alpha	2.41			
0.00				
Frctn Loss (ft)	0.00			
3.36				
C & E Loss (ft)	0.00			
0.91				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 5.33333*

INPUT

Description:

Station Elevation Data		num= 27									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	.5	822	4.5	820	19.96	813.38		
20.33	813.21	20.5	813.11	40.5	813.11	40.86	813.27	41.04	813.36		
49.09	817.33	134.11	818	143.07	818	159.4	818.67	184.17	818.82		
212.46	819	246.25	819.1	302.2	819.26	306.81	820.6	311.51	820.84		
320.71	821.31	329.82	821.52	330.02	821.53	338.27	821.7	352.69	822		
355	822	362.67	822								

Manning's n Values		num= 8									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.017	0	.017	4.5	.0066	20.46	.0066	20.59	.0066		
40.4	.0169	40.69	.0169	362.67	.0129						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 4.5 49.09 47.67 47.67 47.67 .1 .3

Blocked Obstructions		num= 2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev		
-10	0	825352.8067	362.67	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft) 820.09 Element Left OB Channel
 Page 155

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.03	wt. n-val.	0.017	0.009
0.017				
W.S. Elev (ft)	820.07	Reach Len. (ft)	47.67	47.67
47.67				
Crit w.s. (ft)		Flow Area (sq ft)	0.00	236.68
401.32				
E.G. slope (ft/ft)	0.000011	Area (sq ft)	0.00	236.68
401.32				
Q Total (cfs)	538.00	Flow (cfs)	0.00	378.21
159.79				
Top width (ft)	300.60	Top width (ft)	0.13	44.59
255.88				
Vel Total (ft/s)	0.84	Avg. Vel. (ft/s)	0.03	1.60
0.40				
Max Chl Dpth (ft)	6.96	Hydr. Depth (ft)	0.03	5.31
1.57				
Conv. Total (cfs)	160315.4	Conv. (cfs)	0.0	112699.8
47615.5				
Length wtd. (ft)	47.67	wetted Per. (ft)	0.15	46.99
256.02				
Min Ch El (ft)	813.11	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	2.59	Stream Power (lb/ft s)	362.67	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	1.17
2.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.10
0.65				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 5.16666*

INPUT

Description:

Station		Elevation Data		num= 27		Sta		Elev		Sta		Elev	
-10	822	0	822	.5	822	4.5	820	19.96	813.19				
20.33	813.01	20.5	812.92	40.5	812.92	40.86	813.09	41.05	813.18				
49.15	817.17	147.07	818	157.4	818	176.2	818.33	204.74	818.41				
237.32	818.5	276.24	818.55	340.68	818.63	345.99	820.3	351.41	820.59				
362.01	821.15	372.5	821.4	372.73	821.41	382.24	821.62	398.85	822				
401.5	822	410.33	822										

Manning's n Values		num= 8		Sta		n Val		Sta		n Val	
-10	.017	0	.017	4.5	.0066	20.48	.0066	20.61	.0067		
40.45	.017	40.74	.0169	410.33	.0129						

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	4.5	49.15		47.67	47.67	47.67		.1	.3

Blocked Obstructions		num= 2		Sta		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev		
-10	0	825400.4033	410.33		825		

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.09	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.	0.017	0.009
0.017				
W.S. Elev (ft)	820.07	Reach Len. (ft)	47.67	47.67
47.67				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	244.15
561.32				
E.G. slope (ft/ft)	0.000008	Area (sq ft)	0.01	244.15
561.32				
Q Total (cfs)	538.00	Flow (cfs)	0.00	328.01
209.99				
Top width (ft)	340.91	Top width (ft)	0.15	44.65
296.12				
Vel Total (ft/s)	0.67	Avg. vel. (ft/s)	0.02	1.34
0.37				
Max chl Dpth (ft)	7.15	Hydr. Depth (ft)	0.04	5.47
1.90				
Conv. Total (cfs)	193570.9	Conv. (cfs)	0.0	118017.4
75553.4				
Length wtd. (ft)	47.67	wetted Per. (ft)	0.16	47.14
296.35				
Min ch El (ft)	812.92	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	2.59	Stream Power (lb/ft s)	410.33	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	0.91
2.47				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.05
0.35				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Upper RS: 5

INPUT

Description:

Station Elevation Data		num=	18						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	.5	822	4.5	820	19.96	813
20.5	812.73	40.5	812.73	41.05	813	49.21	817	160.04	818
379.17	818	385.18	820	391.31	820.34	403.31	821	415.44	821.29
445	822	448	822	458	822				

Manning's n Values		num=	8						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.017	0	.017	20.5	.0066	40.5	.017	49.21	.0129
391.31	.0066	415.44	.0129	458	.0129				

Bank Sta: Left Right Coeff Contr. Expan.
 4.5 49.21 .1 .3

Blocked Obstructions		num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	448	458	825

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.09	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.	0.017	0.013
0.013				
w.s. Elev (ft)	820.08	Reach Len. (ft)	104.11	104.11
104.11				
Crit w.s. (ft)		Flow Area (sq ft)	0.01	251.72
748.70				
E.G. slope (ft/ft)	0.000005	Area (sq ft)	0.01	251.72
748.70				
Q Total (cfs)	538.00	Flow (cfs)	0.00	200.10
337.90				
Top width (ft)	382.31	Top width (ft)	0.16	44.71
337.43				
Vel Total (ft/s)	0.54	Avg. vel. (ft/s)	0.02	0.79
0.45				
Max chl Dpth (ft)	7.35	Hydr. Depth (ft)	0.04	5.63
2.22				
Conv. Total (cfs)	233433.3	Conv. (cfs)	0.1	86820.1
146613.2				
Length wtd. (ft)	104.11	wetted Per. (ft)	0.18	47.28
337.77				
Min ch El (ft)	812.73	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.26	Stream Power (lb/ft s)	458.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.19	0.64
1.75				
C & E Loss (ft)	0.00	Cum SA (acres)		

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Branch RS: 108

INPUT

Description:

Station Elevation Data num= 11

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	3	822	33	819	84.57	818
139.88	815	151.88	814	171.88	814	188.01	820	192.51	822
202.51	822								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	151.88	.0066	171.88	.017

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

139.88	188.01	9.44	9.44	9.44		.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
-10	0	825

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.013	0.012
0.017				
W.S. Elev (ft)	820.09	Reach Len. (ft)	9.44	9.44
9.44				
Crit w.s. (ft)	815.43	Flow Area (sq ft)	286.75	238.83
0.01				
E.G. slope (ft/ft)	0.000003	Area (sq ft)	286.75	238.83
0.01				
Q Total (cfs)	257.00	Flow (cfs)	107.38	149.62
0.00				
Top width (ft)	166.14	Top width (ft)	117.80	48.13
0.21				
Vel Total (ft/s)	0.49	Avg. vel. (ft/s)	0.37	0.63
0.02				
Max Chl Dpth (ft)	6.09	Hydr. Depth (ft)	2.43	4.96
0.05				
Conv. Total (cfs)	142935.3	Conv. (cfs)	59721.5	83213.7
0.1				
Length wtd. (ft)	9.44	wetted Per. (ft)	117.95	49.25
0.23				
Min Ch El (ft)	814.00	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.20	Stream Power (lb/ft s)	202.51	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.84	2.45
1.17				
C & E Loss (ft)	0.00	Cum SA (acres)	0.21	0.32
0.00				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Branch RS: 107.833*

INPUT

Description:

Station Elevation Data		num=	17							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	-1.19	822	1.45	822	20.97	820.15	27.87	819.5	
30.26	819.46	73.29	818.43	122	815.67	133.24	814.04	133.75	813.96	
153.75	813.96	154.2	814.14	169.87	820	173.8	821.78	174.29	821.96	
174.39	822	184.43	822							

Manning's n Values		num=	10							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-1.19	.0129	20.97	.012	122	.0086	132.75	.0066	
133.94	.0067	153.31	.0168	153.83	.017	169.87	.017	184.43	.017	

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
122	169.87	9.44	9.44	9.44		.1	.3

Blocked Obstructions			num=	1
Sta L	Sta R	Elev		
-10	0	825		

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.	0.012	0.011
0.017				
W.S. Elev (ft)	820.09	Reach Len. (ft)	9.44	9.44
9.44				
Crit w.s. (ft)		Flow Area (sq ft)	200.59	234.56
0.01				
E.G. Slope (ft/ft)	0.000004	Area (sq ft)	200.59	234.56
0.01				
Q Total (cfs)	257.00	Flow (cfs)	79.80	177.20
0.00				
Top Width (ft)	148.45	Top width (ft)	100.39	47.87
0.20				
Vel Total (ft/s)	0.59	Avg. Vel. (ft/s)	0.40	0.76
0.02				
Max Chl Dpth (ft)	6.13	Hydr. Depth (ft)	2.00	4.90
0.04				
Conv. Total (cfs)	126802.8	Conv. (cfs)	39375.1	87427.6
0.1				
Length wtd. (ft)	9.44	wetted Per. (ft)	100.51	49.09
0.22				
Min Ch El (ft)	813.96	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.27	Stream Power (lb/ft s)	184.43	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.79	2.40
1.17				
C & E Loss (ft)	0.00	Cum SA (acres)	0.19	0.31
0.00				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Branch RS: 107.666*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-2.39	822	-1	822	16.78	820.52	22.74	820		
24.81	819.96	62.01	818.86	104.13	816.33	115.12	814.03	115.61	813.92		
135.61	813.92	136.06	814.11	151.73	820	155.68	821.83	156.17	821.97		
156.27	822	166.34	822								

Manning's n Values num= 10

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.39	.0129	16.78	.0121	104.13	.0107	114.81	.0066
116	.0068	135.26	.0168	135.78	.017	151.73	.017	166.34	.017

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 104.13 151.73 9.44 9.44 9.44 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
-10	0	825

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.012	0.012
0.017				
W.S. Elev (ft)	820.09	Reach Len. (ft)	9.44	9.44
9.44				
Crit w.s. (ft)		Flow Area (sq ft)	130.32	230.45
0.01				
E.G. slope (ft/ft)	0.000006	Area (sq ft)	130.32	230.45
0.01				
Q Total (cfs)	257.00	Flow (cfs)	53.93	203.07
0.00				
Top width (ft)	130.16	Top width (ft)	82.37	47.60
0.19				
Vel Total (ft/s)	0.71	Avg. vel. (ft/s)	0.41	0.88
0.02				
Max Chl Dpth (ft)	6.17	Hydr. Depth (ft)	1.58	4.84
0.04				
Conv. Total (cfs)	103469.2	Conv. (cfs)	21711.7	81757.5
0.1				
Length wtd. (ft)	9.44	wetted Per. (ft)	82.47	48.96
0.20				
Min Ch El (ft)	813.92	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.28	Stream Power (lb/ft s)	166.34	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.76	2.35
1.17				
C & E Loss (ft)	0.00	Cum SA (acres)	0.17	0.30
0.00				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Branch RS: 107.5*

INPUT

Description:

Station Elevation Data				num=	17						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-3.58	822	-1.65	822	12.58	820.89	17.61	820.5		
19.36	820.47	50.73	819.3	86.25	817	96.99	814.02	97.48	813.89		
117.48	813.89	117.93	814.08	133.6	820	137.55	821.87	138.05	821.98		
138.14	822	148.26	822								

Manning's n Values				num=	10						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.58	.0129	12.58	.0123	86.25	.0127	96.88	.0066		
98.05	.0069	117.21	.0169	117.73	.017	133.6	.017	148.26	.017		

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
86.25	133.6	9.44	9.44	9.44	.1	.3	

Blocked Obstructions			num=	1
Sta L	Sta R	Elev		

CPNPPLocalPMP

-10 0 825

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.10	Element		
Right OB				
Vel Head (ft)	0.01	wt. n-Val.	0.012	0.012
0.017				
W.S. Elev (ft)	820.08	Reach Len. (ft)	9.44	9.44
9.44				
Crit w.s. (ft)		Flow Area (sq ft)	76.82	226.36
0.01				
E.G. slope (ft/ft)	0.000009	Area (sq ft)	76.82	226.36
0.01				
Q Total (cfs)	257.00	Flow (cfs)	33.34	223.66
0.00				
Top width (ft)	104.01	Top width (ft)	56.49	47.35
0.17				
Vel Total (ft/s)	0.85	Avg. vel. (ft/s)	0.43	0.99
0.03				
Max Chl Dpth (ft)	6.19	Hydr. Depth (ft)	1.36	4.78
0.04				
Conv. Total (cfs)	87711.6	Conv. (cfs)	11380.0	76331.5
0.1				
Length wtd. (ft)	9.44	wetted Per. (ft)	56.58	48.89
0.19				
Min Ch El (ft)	813.89	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.22	Stream Power (lb/ft s)	148.26	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.73	2.30
1.17				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	0.29
0.00				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Branch RS: 107.333*

INPUT

Description:

Station Elevation Data		num= 17									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-4.77	822	-3.2	822	8.39	821.26	12.49	821		
13.91	820.98	39.45	819.73	68.37	817.67	78.87	814.01	79.34	813.85		
99.34	813.85	99.79	814.06	115.46	820	119.43	821.91	119.92	821.99		
120.02	822	130.17	822								

Manning's n Values		num= 10									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.77	.0129	8.39	.0125	68.37	.0147	78.94	.0066		
80.11	.007	99.17	.0169	99.68	.017	115.46	.017	130.17	.017		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	68.37	115.46		9.44	9.44	9.44		.1	.3
Blocked Obstructions			num=	1					

CPNPPLocalPMP

Sta L Sta R Elev
-10 0 825

CROSS SECTION OUTPUT Profile #PF 1

			Element	Left OB	Channel
E.G. Elev (ft)	820.10				
Right OB					
Vel Head (ft)	0.02		wt. n-Val.	0.013	0.013
0.017					
W.S. Elev (ft)	820.08		Reach Len. (ft)	9.44	9.44
9.44					
Crit w.s. (ft)			Flow Area (sq ft)	41.10	222.48
0.01					
E.G. Slope (ft/ft)	0.000011		Area (sq ft)	41.10	222.48
0.01					
Q Total (cfs)	257.00		Flow (cfs)	17.88	239.12
0.00					
Top width (ft)	83.29		Top width (ft)	36.03	47.09
0.16					
Vel Total (ft/s)	0.98		Avg. Vel. (ft/s)	0.44	1.07
0.03					
Max Chl Dpth (ft)	6.23		Hydr. Depth (ft)	1.14	4.72
0.04					
Conv. Total (cfs)	76538.7		Conv. (cfs)	5324.6	71214.1
0.1					
Length wtd. (ft)	9.44		wetted Per. (ft)	36.12	48.87
0.18					
Min Ch El (ft)	813.85		Shear (lb/sq ft)	0.00	0.00
0.00					
Alpha	1.14		Stream Power (lb/ft s)	130.17	0.00
0.00					
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)	0.72	2.25
1.17					
C & E Loss (ft)	0.00		Cum SA (acres)	0.14	0.28
0.00					

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
REACH: Center N Branch RS: 107.166*

INPUT

Description:

Station Elevation Data		num= 17									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-5.96	822	-4.75	822	4.19	821.63	7.36	821.5		
8.45	821.49	28.17	820.16	50.5	818.33	60.74	814.01	61.21	813.81		
81.21	813.81	81.66	814.03	97.32	820	101.3	821.96	101.8	821.99		
101.9	822	112.09	822								

Manning's n Values		num= 10									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-5.96	.0129	4.19	.0127	50.5	.0168	61.01	.0066		
62.17	.0071	81.12	.017	81.63	.017	97.32	.017	112.09	.017		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	50.5	97.32		9.44	9.44		.1	.3

Blocked Obstructions num= CPNPPLocalPMP
 1
 Sta L Sta R Elev
 -10 0 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.09	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.	0.013	0.013
0.017				
W.S. Elev (ft)	820.08	Reach Len. (ft)	9.44	9.44
9.44				
Crit W.S. (ft)		Flow Area (sq ft)	18.58	218.88
0.01				
E.G. slope (ft/ft)	0.000014	Area (sq ft)	18.58	218.88
0.01				
Q Total (cfs)	257.00	Flow (cfs)	7.46	249.54
0.00				
Top width (ft)	68.27	Top width (ft)	21.29	46.82
0.15				
Vel Total (ft/s)	1.08	Avg. vel. (ft/s)	0.40	1.14
0.03				
Max Chl Dpth (ft)	6.27	Hydr. Depth (ft)	0.87	4.67
0.04				
Conv. Total (cfs)	68242.7	Conv. (cfs)	1980.5	66262.1
0.1				
Length wtd. (ft)	9.44	wetted Per. (ft)	21.37	48.89
0.17				
Min Ch El (ft)	813.81	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.08	Stream Power (lb/ft s)	112.09	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.71	2.20
1.17				
C & E Loss (ft)	0.00	Cum SA (acres)	0.13	0.27
0.00				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Branch RS: 107

INPUT

Description:

Station Elevation Data	num=	12							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 822 0 822 3 822 32.62 819 42.62 814									
43.07 813.77 63.07 813.77 63.52 814 79.18 820 83.18 822									
83.68 822 94 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 32.62 .0188 43.07 .0066 63.07 .017									
94 .017									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
32.62 79.18	176.5 176.5 176.5	.1	.3

Blocked Obstructions			num=	CPNPPLocalPMP	
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	83.68	94	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)		Element	Left OB	Channel
Right OB	820.09			
Vel Head (ft)	0.02	wt. n-val.	0.013	0.014
0.017				
W.S. Elev (ft)	820.07	Reach Len. (ft)	176.50	176.50
176.50				
Crit W.S. (ft)		Flow Area (sq ft)	5.68	215.47
0.01				
E.G. slope (ft/ft)	0.000017	Area (sq ft)	5.68	215.47
0.01				
Q Total (cfs)	257.00	Flow (cfs)	1.76	255.24
0.00				
Top width (ft)	57.30	Top width (ft)	10.59	46.56
0.15				
Vel Total (ft/s)	1.16	Avg. vel. (ft/s)	0.31	1.18
0.04				
Max Chl Dpth (ft)	6.30	Hydr. Depth (ft)	0.54	4.63
0.04				
Conv. Total (cfs)	62858.0	Conv. (cfs)	430.5	62427.5
0.0				
Length wtd. (ft)	176.50	wetted Per. (ft)	10.65	48.96
0.16				
Min Ch El (ft)	813.77	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	94.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.71	2.16
1.17				
C & E Loss (ft)	0.00	Cum SA (acres)	0.13	0.26
0.00				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Branch RS: 106

INPUT

Description:

Station Elevation Data		num=	13							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	0	822	3	822	17.83	821	36.13	819	
46.13	814	47.98	813.08	67.98	813.08	69.83	814	84.01	820	
88.01	822	88.51	822	98	822					

Manning's n Values		num=	6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	0	.0129	36.13	.017	47.98	.0066	67.98	.017	
98	.017									

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	36.13	84.01		31.83	31.83	.1	.3

Blocked Obstructions			num=	CPNPPLocalPMP		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825	88.51	98	825	2

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)		Element	Left OB	Channel
Right OB	820.09			
Vel Head (ft)	0.02	wt. n-val.	0.013	0.013
0.017				
W.S. Elev (ft)	820.07	Reach Len. (ft)	31.83	31.83
31.83				
Crit w.s. (ft)		Flow Area (sq ft)	5.27	243.36
0.01				
E.G. slope (ft/ft)	0.000011	Area (sq ft)	5.27	243.36
0.01				
Q Total (cfs)	257.00	Flow (cfs)	1.33	255.67
0.00				
Top width (ft)	57.85	Top width (ft)	9.82	47.88
0.15				
Vel Total (ft/s)	1.03	Avg. vel. (ft/s)	0.25	1.05
0.03				
Max Chl Dpth (ft)	6.99	Hydr. Depth (ft)	0.54	5.08
0.04				
Conv. Total (cfs)	77093.7	Conv. (cfs)	399.6	76694.1
0.0				
Length wtd. (ft)	31.83	wetted Per. (ft)	9.88	50.71
0.16				
Min Ch El (ft)	813.08	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	98.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.69	1.23
1.17				
C & E Loss (ft)	0.00	Cum SA (acres)	0.09	0.07
0.00				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Branch RS: 105.5*

INPUT

Description:

Station Elevation Data		num=	21							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	-3.6	822	-1.86	822	10.93	821	12.89	820.97	
19.76	820.86	53.71	819.81	73.25	819.03	95.61	818	104.02	813.68	
104.85	813.25	105.57	812.95	125.57	812.95	126.28	813.21	127.42	813.76	
141.6	820	145.57	821.99	145.62	822	146.07	822	146.12	822	
155.5	822									

Manning's n Values		num=	9							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-3.6	.0129	12.89	.0132	95.61	.017	104.04	.0079	
106.99	.0073	124.9	.0166	126.2	.017	155.5	.017			

Bank Sta:	Left	Right	Lengths:	CPNPPLocalPMP	Left Channel	Right	Coeff Contr.	Expan.
	95.61	141.6			31.83 31.83	31.83	.1	.3
Blocked Obstructions			num=	2				
Sta L	Sta R	Elev	Sta L	Sta R	Elev			
-10	0	825	146.095	155.5	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.09	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.	0.013	0.013
0.017				
W.S. Elev (ft)	820.08	Reach Len. (ft)	31.83	31.83
31.83				
Crit w.s. (ft)		Flow Area (sq ft)	48.83	246.42
0.01				
E.G. Slope (ft/ft)	0.000009	Area (sq ft)	48.83	246.42
0.01				
Q Total (cfs)	257.00	Flow (cfs)	15.94	241.06
0.00				
Top Width (ft)	96.62	Top width (ft)	50.48	45.99
0.15				
Vel Total (ft/s)	0.87	Avg. Vel. (ft/s)	0.33	0.98
0.03				
Max Chl Dpth (ft)	7.13	Hydr. Depth (ft)	0.97	5.36
0.04				
Conv. Total (cfs)	86615.3	Conv. (cfs)	5373.5	81241.7
0.1				
Length wtd. (ft)	31.83	wetted Per. (ft)	50.52	48.68
0.17				
Min Ch El (ft)	812.95	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.19	Stream Power (lb/ft s)	155.50	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.67	1.05
1.17				
C & E Loss (ft)	0.00	Cum SA (acres)	0.07	0.03
0.00				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Branch RS: 105

INPUT

Description:

Station Elevation Data	num=	14								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-10 822 0 822 2.72 822 22.72 820 120.13 818										
155.08 817 162.58 813 163.17 812.82 183.17 812.82 183.87 813										
199.18 820 203.18 822 203.68 822 213 822										

Manning's n Values	num=	6								
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val										
-10 .0129 0 .0129 155.08 .017 163.17 .0066 183.17 .017										
213 .017										

Bank Sta: Left Right Coeff Contr. Expan.
 155.08 199.18 .1 .3
 Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 203.68 213 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.09	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.	0.013	0.013
0.017				
W.S. Elev (ft)	820.08	Reach Len. (ft)	142.47	142.47
142.47				
Crit w.s. (ft)		Flow Area (sq ft)	195.38	247.35
0.01				
E.G. Slope (ft/ft)	0.000005	Area (sq ft)	195.38	247.35
0.01				
Q Total (cfs)	257.00	Flow (cfs)	65.24	191.76
0.00				
Top Width (ft)	177.42	Top width (ft)	133.16	44.10
0.16				
Vel Total (ft/s)	0.58	Avg. Vel. (ft/s)	0.33	0.78
0.02				
Max Chl Dpth (ft)	7.26	Hydr. Depth (ft)	1.47	5.61
0.04				
Conv. Total (cfs)	114444.2	Conv. (cfs)	29053.2	85390.9
0.1				
Length wtd. (ft)	142.47	wetted Per. (ft)	133.20	46.67
0.18				
Min Ch El (ft)	812.82	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.41	Stream Power (lb/ft s)	213.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.58	0.87
1.17				
C & E Loss (ft)	0.00	Cum SA (acres)		

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Lower RS: 4

INPUT

Description:

Station Elevation Data	num=	24							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 822 0 822 2.9 822 37.73 821 84.13 820.6									
96.13 820.5 108.13 820.17 114.13 820 120.13 818 179.73 817									
189.96 812 190.34 811.84 210.34 811.84 210.76 812 220.76 817									
320.77 818 540.12 818 546.13 820 551.71 820.32 563.71 821									
586.99 821.32 637.19 822 668.4 822 678 822									

Manning's n Values	num=	11							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 84.13 .0066 108.13 .0129 179.73 .017									

190.34	.0066	210.34	.017	220.76	.0129	551.71	.0066	586.99	.0129
678	.0129								
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	179.73	220.76		43.55	43.55		.1	.3	
Blocked Obstructions	num=		2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825	668.4	678	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.08	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	820.07	Reach Len. (ft)	43.55	43.55
43.55				
Crit w.s. (ft)		Flow Area (sq ft)	159.45	283.66
716.46				
E.G. slope (ft/ft)	0.000013	Area (sq ft)	159.45	283.66
716.46				
Q Total (cfs)	1033.00	Flow (cfs)	116.38	415.29
501.33				
Top width (ft)	435.51	Top width (ft)	67.95	41.03
326.53				
Vel Total (ft/s)	0.89	Avg. Vel. (ft/s)	0.73	1.46
0.70				
Max Chl Dpth (ft)	8.23	Hydr. Depth (ft)	2.35	6.91
2.19				
Conv. Total (cfs)	286937.3	Conv. (cfs)	32326.6	115354.5
139256.2				
Length wtd. (ft)	43.55	wetted Per. (ft)	68.29	43.43
326.86				
Min Ch El (ft)	811.84	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.46	Stream Power (lb/ft s)	678.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.21	3.86
2.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.17	0.47
2.12				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Lower RS: 3.5*

INPUT

Description:

Station	Elevation	Data	num=	41						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-5	820.88	.97	820.86	2.7	820.86	23.5	820.29	31.9	820.2	
51.2	819.88	58.37	819.76	59.58	819.72	65.53	819.26	68.8	819.01	
69.12	819	72.7	817.95	108.28	817	121.69	814.98	141.05	812.01	
141.15	811.99	142.26	811.42	162.26	811.42	162.71	811.63	164.03	812.31	
173.41	817	273.28	817.66	492.32	818	494.38	818.34	497.38	819.34	
498.32	819.54	503.4	819.88	503.89	819.89	515.42	820.34	515.87	820.35	

		CPNPPLocalPMP							
527.43	820.3	536.72	820.14	539.12	819.76	542.72	819.18	589.25	819.5
595.22	819.5	605.23	820	617.25	822	620.26	822	620.41	822
630	822								

Manning's n Values		num= 11							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-5	.0098	.97	.0103	31.9	.011	51.2	.0103	65.53	.0138
108.28	.017	125.13	.0097	150.15	.0107	156.87	.0142	164.74	.016
630	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	108.28	173.41		43.55	43.55		.1	.3
Blocked Obstructions			num=	1				
Sta L	Sta R	Elev						
620.335	630	825						

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	820.08	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.02		wt. n-val.	0.014	0.013
0.016					
W.S. Elev (ft)	820.07		Reach Len. (ft)	43.55	43.55
43.55					
Crit w.s. (ft)			Flow Area (sq ft)	108.04	430.30
817.09					
E.G. slope (ft/ft)	0.000011		Area (sq ft)	108.04	430.30
817.09					
Q Total (cfs)	1033.00		Flow (cfs)	65.12	545.53
422.36					
Top width (ft)	537.06		Top width (ft)	68.42	65.13
403.51					
Vel Total (ft/s)	0.76		Avg. vel. (ft/s)	0.60	1.27
0.52					
Max Chl Dpth (ft)	8.65		Hydr. Depth (ft)	1.58	6.61
2.02					
Conv. Total (cfs)	314342.8		Conv. (cfs)	19815.3	166004.2
128523.3					
Length wtd. (ft)	43.55		wetted Per. (ft)	68.62	66.97
403.82					
Min Ch El (ft)	811.42		Shear (lb/sq ft)	0.00	0.00
0.00					
Alpha	1.69		Stream Power (lb/ft s)	630.00	0.00
0.00					
Frctn Loss (ft)	0.00		Cum volume (acre-ft)	0.08	3.51
1.36					
C & E Loss (ft)	0.00		Cum SA (acres)	0.11	0.41
1.75					

Warning: Divided flow computed for this cross-section.
 Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Lower RS: 3

INPUT
 Description:

Station Elevation Data				num=	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	23	Sta	Elev	Sta	Elev	Sta	Elev
0	819.76	12	819.53		21	819	24	818	36.84	817
59.46	815	92.31	812		94.19	811	114.19	811	116.07	812
126.07	817	446.57	818		449.57	819	455.58	819.46	467.58	819.7
479.58	819.45	488.85	819		494.85	817	547.27	817	557.27	818
569.27	822	572.27	822		582	822				

Manning's n Values				num=						
Sta	n Val	Sta	n Val	9	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12	.0129		36.84	.017	94.19	.0066	114.19	.017
126.07	.0129	455.58	.0066		479.58	.0129	582	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	36.84	126.07		119.07	119.07	119.07		.1	.3

Blocked Obstructions			num=
Sta L	Sta R	Elev	1
572.27	582	825	

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.08			
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.012	0.015
0.013				
W.S. Elev (ft)	820.07	Reach Len. (ft)	119.07	119.07
119.07				
Crit w.s. (ft)	814.73	Flow Area (sq ft)	50.13	577.40
1059.51				
E.G. slope (ft/ft)	0.000007	Area (sq ft)	50.13	577.40
1059.51				
Q Total (cfs)	1168.00	Flow (cfs)	22.61	531.11
614.29				
Top width (ft)	563.49	Top width (ft)	36.84	89.23
437.42				
Vel Total (ft/s)	0.69	Avg. vel. (ft/s)	0.45	0.92
0.58				
Max Chl Dpth (ft)	9.07	Hydr. Depth (ft)	1.36	6.47
2.42				
Conv. Total (cfs)	429043.9	Conv. (cfs)	8303.7	195092.6
225647.6				
Length wtd. (ft)	119.07	wetted Per. (ft)	37.37	91.13
438.32				
Min Ch El (ft)	811.00	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.18	Stream Power (lb/ft s)	582.00	0.00
0.00				
Frctn Loss (ft)		Cum volume (acre-ft)	0.00	3.00
0.42				
C & E Loss (ft)		Cum SA (acres)	0.05	0.34
1.33				

INLINE STRUCTURE

RIVER: Center North
 REACH: Center N Lower RS: 2.5

INPUT
 Description:

CPNPPLocalPMP

Distance from Upstream XS = 57.81
 Deck/Roadway width = 24
 Weir Coefficient = 2.6
 Weir Embankment Coordinates num = 8

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	66.21	825	66.21	819.3	116.21	819	448.35	819
498.36	819.3	498.36	825	572.27	825				

Upstream Embankment side slope = 2 horiz. to 1.0 vertical
 Downstream Embankment side slope = 2 horiz. to 1.0 vertical
 Maximum allowable submergence for weir flow = .98
 Elevation at which weir flow begins =
 Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Center North
 REACH: Center N Lower RS: 2

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	1.01	819	28.01	810	48.05	810
72.05	818	84.87	819	131.54	819.84	143.56	820.06	155.54	819.84
202.74	819	275.5	818	386.42	818	426.15	819	432.15	819
442	819								

Manning's n Values num= 8

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.017	0	.017	28.01	.0066	48.05	.017	72.05	.0129
131.54	.0066	155.54	.0129	442	.0129				

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1.01 72.05 69.2 69.2 69.2 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	432.15	442	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.53	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-Val.	0.017	0.015
0.013				
w.s. Elev (ft)	819.47	Reach Len. (ft)	69.20	69.20
69.20				
Crit w.s. (ft)		Flow Area (sq ft)	0.47	455.20
299.58				
E.G. slope (ft/ft)	0.000037	Area (sq ft)	0.47	455.20
299.58				
Q Total (cfs)	1168.00	Flow (cfs)	0.12	950.31
217.57				
Top width (ft)	366.73	Top width (ft)	1.01	71.04
294.68				
Vel Total (ft/s)	1.55	Avg. vel. (ft/s)	0.25	2.09
0.73				
Max Chl Dpth (ft)	9.47	Hydr. Depth (ft)	0.47	6.41
1.02				
Conv. Total (cfs)	191793.9	Conv. (cfs)	19.4	156048.0

CPNPPLocalPMP

35726.5					
Length wtd. (ft)	69.20	wetted Per. (ft)	1.48	73.80	
295.22					
Min Ch El (ft)	810.00	Shear (lb/sq ft)	0.00	0.01	
0.00					
Alpha	1.52	Stream Power (lb/ft s)	442.00	0.00	
0.00					
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.00	0.74	
0.42					
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.12	
0.33					

Warning: Divided flow computed for this cross-section.
 Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center North
 REACH: Center N Lower RS: 1

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 0 819 .51 819 27.51 810 28.06 809.83									
48.06 809.83 48.57 810 81.57 821 92.06 822 131.54 822.9									
143.54 822.9 155.54 822.9 248.68 821 292.06 821 304.43 820									
311.56 818 360.93 817 388.51 817 426.15 819 432.15 819									
442 819									

Manning's n Values	num=	8							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .017 0 .017 28.06 .0066 48.06 .017 81.57 .0129									
131.54 .0066 155.54 .0129 442 .0129									

Bank Sta: Left Right Coeff Contr. Expan.
 .51 81.57 .1 .3

Blocked Obstructions	num=	3						
Sta L Sta R Elev Sta L Sta R Elev Sta L Sta R Elev								
-10 0 825 92.06 292.06 825 432.15 442 825								

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.52	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.	0.017	0.015
0.013				
w.s. Elev (ft)	819.47	Reach Len. (ft)		
Crit w.s. (ft)	813.70	Flow Area (sq ft)	0.24	471.64
227.38				
E.G. slope (ft/ft)	0.000036	Area (sq ft)	0.24	471.64
227.38				
Q Total (cfs)	1168.00	Flow (cfs)	0.05	935.21
232.74				
Top width (ft)	202.81	Top width (ft)	0.51	76.47
125.83				
Vel Total (ft/s)	1.67	Avg. vel. (ft/s)	0.21	1.98
1.02				

Max Chl Dpth (ft)	9.64	CPNPPLocalPMP		
1.81		Hydr. Depth (ft)	0.47	6.17
Conv. Total (cfs)	194247.5	Conv. (cfs)	8.2	155532.9
38706.4		Wetted Per. (ft)	0.98	79.52
Length Wtd. (ft)		Shear (lb/sq ft)	0.00	0.01
126.57		Stream Power (lb/ft s)	442.00	0.00
Min Ch El (ft)	809.83	Cum Volume (acre-ft)		
0.00		Cum SA (acres)		
Alpha	1.20			
0.00				
Frctn Loss (ft)				
C & E Loss (ft)				

Warning: Divided flow computed for this cross-section.
 Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 8

INPUT

Description:

Station Elevation Data	num=	8							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.9 12 821.66 27.5 821 147.99 820 372.44 820									
472.44 822 475.44 822 485 822									

Manning's n Values	num=	3
Sta n Val Sta n Val Sta n Val		
0 .0066 12 .0129 485 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
147.99 372.44	4.77 4.77 4.77	.1	.3
Blocked Obstructions	num=	1	
Sta L Sta R Elev			
475.44 485 825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	820.96	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)	820.38	Flow Area (sq ft)	55.58	215.59
23.06				
E.G. slope (ft/ft)	0.000119	Area (sq ft)	55.58	215.59
23.06				
Q Total (cfs)	324.00	Flow (cfs)	42.79	263.46
17.75				
Top width (ft)	388.21	Top width (ft)	115.73	224.45
48.03				
Vel Total (ft/s)	1.10	Avg. vel. (ft/s)	0.77	1.22
0.77				
Max Chl Dpth (ft)	0.96	Hydr. Depth (ft)	0.48	0.96

CPNPPLocalPMP

0.48				
Conv. Total (cfs)	29730.0	Conv. (cfs)	3926.2	24174.7
1629.1				
Length wtd. (ft)	4.77	wetted Per. (ft)	115.74	224.45
48.04				
Min Ch El (ft)	820.00	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.09	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.90	5.72
0.40				
C & E Loss (ft)	0.00	Cum SA (acres)	0.74	1.09
0.62				

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.91666*

INPUT

Description:

Station Elevation Data	num=	22							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.85 8.16 821.68 9.22 821.66 12.54 821.6 24.92 821.14									
28.73 821.05 31.72 821.06 35.22 821.04 129.71 820.35 134.19 820.32									
154.6 819.92 156.26 819.75 156.66 819.71 366.76 819.71 366.84 819.75									
367.01 819.83 368.27 819.92 471.98 821.99 475.09 822 475.98 822									
478.14 822 485 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.16 .0109 12.54 .0129 154.6 .0129 485 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
154.6 368.27	4.77 4.77 4.77	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.	0.013	0.013
0.013				
w.S. Elev (ft)	820.96	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.S. (ft)		Flow Area (sq ft)	45.79	267.35
27.27				
E.G. Slope (ft/ft)	0.000063	Area (sq ft)	45.79	267.35
27.27				
Q Total (cfs)	324.00	Flow (cfs)	23.53	284.28
16.18				
Top width (ft)	374.82	Top width (ft)	108.88	213.67
52.27				
Vel Total (ft/s)	0.95	Avg. vel. (ft/s)	0.51	1.06
0.59				
Max Chl Dpth (ft)	1.25	Hydr. Depth (ft)	0.42	1.25
0.52				
Conv. Total (cfs)	40749.6	Conv. (cfs)	2960.0	35754.4
2035.2				
Length wtd. (ft)	4.77	wetted Per. (ft)	108.89	213.71

CPNPPLocalPMP				
52.28				
Min Ch El (ft)	819.71	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.14	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.90	5.69
0.40				
C & E Loss (ft)	0.00	Cum SA (acres)	0.73	1.06
0.61				

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.833333*

INPUT

Description:

Station Elevation Data num= 22											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.8	8.51	821.62	9.62	821.6	13.07	821.55	25.98	821.13		
29.96	821.09	33.07	821.15	36.73	821.12	135.26	820.5	139.93	820.47		
161.21	819.83	164.54	819.5	165.34	819.42	361.09	819.42	361.25	819.5		
361.58	819.67	364.11	819.83	471.51	821.98	474.73	822	475.66	822		
477.89	822	485	822								

Manning's n Values num= 5											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.51	.0111	13.07	.0129	161.21	.0129	485	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	161.21	364.11		4.77	4.77	4.77		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	820.97	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)		Flow Area (sq ft)	36.79	311.80
32.19				
E.G. slope (ft/ft)	0.000038	Area (sq ft)	36.79	311.80
32.19				
Q Total (cfs)	324.00	Flow (cfs)	13.43	294.89
15.68				
Top width (ft)	359.50	Top width (ft)	99.89	202.90
56.71				
Vel Total (ft/s)	0.85	Avg. vel. (ft/s)	0.37	0.95
0.49				
Max Chl Dpth (ft)	1.55	Hydr. Depth (ft)	0.37	1.54
0.57				
Conv. Total (cfs)	52532.1	Conv. (cfs)	2177.6	47812.8
2541.7				
Length wtd. (ft)	4.77	wetted Per. (ft)	99.90	202.99
56.72				
Min Ch El (ft)	819.42	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.15	Stream Power (lb/ft s)	485.00	0.00

CPNPPLocalPMP				
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.89	5.66
0.39				
C & E Loss (ft)	0.00	Cum SA (acres)	0.71	1.04
0.61				

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.75*

INPUT

Description:

Station Elevation Data num= 22									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.74	8.86	821.57	10.01	821.54	13.61	821.49	27.05	821.12
31.18	821.14	34.43	821.23	38.23	821.21	140.8	820.65	145.67	820.62
167.82	819.75	172.82	819.25	174.01	819.13	355.41	819.13	355.65	819.25
356.15	819.5	359.94	819.75	471.05	821.97	474.38	821.99	475.34	822
477.65	822	485	822						

Manning's n Values num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.86	.0113	13.61	.0129	167.82	.0129	485	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	167.82	359.94		4.77	4.77		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	820.97	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)		Flow Area (sq ft)	28.11	348.91
37.04				
E.G. slope (ft/ft)	0.000025	Area (sq ft)	28.11	348.91
37.04				
Q Total (cfs)	324.00	Flow (cfs)	7.79	300.81
15.41				
Top width (ft)	338.02	Top width (ft)	85.01	192.12
60.89				
Vel Total (ft/s)	0.78	Avg. vel. (ft/s)	0.28	0.86
0.42				
Max Chl Dpth (ft)	1.84	Hydr. Depth (ft)	0.33	1.82
0.61				
Conv. Total (cfs)	64410.3	Conv. (cfs)	1547.8	59799.7
3062.7				
Length wtd. (ft)	4.77	wetted Per. (ft)	85.03	192.25
60.90				
Min Ch El (ft)	819.13	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.14	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.89	5.62
0.39				
C & E Loss (ft)	0.00	Cum SA (acres)	0.70	1.02

CPNPPLocalPMP

0.60

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.66666*

INPUT

Description:

Station Elevation Data		num= 22		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.69	9.21	821.51	10.41	821.48	14.14	821.44	28.11	821.1		
32.41	821.19	35.78	821.32	39.74	821.3	146.34	820.8	151.4	820.77		
174.42	819.67	181.09	819	182.69	818.84	349.73	818.84	350.05	819		
350.72	819.33	355.77	819.67	470.58	821.96	474.02	821.99	475.02	822		
477.4	822	485	822								

Manning's n Values		num= 5		Sta n val		Sta n val		Sta n val		Sta n val	
Sta	n val	Sta	n val	Sta	n val	Sta	n val	Sta	n val	Sta	n val
0	.0066	9.21	.0114	14.14	.0129	174.42	.0129	485	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	174.42	355.77		4.77	4.77	4.77		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	820.97	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)		Flow Area (sq ft)	21.12	378.81
42.20				
E.G. Slope (ft/ft)	0.000018	Area (sq ft)	21.12	378.81
42.20				
Q Total (cfs)	324.00	Flow (cfs)	4.96	303.53
15.51				
Top width (ft)	310.19	Top width (ft)	63.79	181.35
65.05				
Vel Total (ft/s)	0.73	Avg. vel. (ft/s)	0.23	0.80
0.37				
Max Chl Dpth (ft)	2.13	Hydr. Depth (ft)	0.33	2.09
0.65				
Conv. Total (cfs)	76062.2	Conv. (cfs)	1164.0	71255.9
3642.3				
Length wtd. (ft)	4.77	wetted Per. (ft)	63.81	181.52
65.06				
Min Ch El (ft)	818.84	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.13	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.89	5.58
0.39				
C & E Loss (ft)	0.00	Cum SA (acres)	0.70	1.00
0.60				

CPNPPLocalPMP

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.58333*

INPUT

Description:

Station Elevation Data		num= 22		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.64	9.56	821.45	10.8	821.42	14.68	821.39	29.18	821.09		
33.64	821.23	37.14	821.4	41.24	821.39	151.89	820.95	157.14	820.93		
181.03	819.58	189.37	818.75	191.36	818.55	344.06	818.55	344.46	818.75		
345.29	819.17	351.61	819.58	470.12	821.95	473.67	821.99	474.69	822		
477.16	822	485	822								

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.56	.0116	14.68	.0129	181.03	.0129	485	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	181.03	351.61		4.77	4.77	4.77	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.98	Element		
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	820.97	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)		Flow Area (sq ft)	17.23	401.58
48.18				
E.G. slope (ft/ft)	0.000014	Area (sq ft)	17.23	401.58
48.18				
Q Total (cfs)	324.00	Flow (cfs)	4.70	303.18
16.12				
Top width (ft)	273.71	Top width (ft)	33.71	170.58
69.42				
Vel Total (ft/s)	0.69	Avg. vel. (ft/s)	0.27	0.75
0.33				
Max Chl Dpth (ft)	2.42	Hydr. Depth (ft)	0.51	2.35
0.69				
Conv. Total (cfs)	87408.8	Conv. (cfs)	1267.4	81791.3
4350.1				
Length wtd. (ft)	4.77	wetted Per. (ft)	33.75	170.79
69.43				
Min Ch El (ft)	818.55	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.12	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.89	5.54
0.38				
C & E Loss (ft)	0.00	Cum SA (acres)	0.69	0.98
0.59				

CROSS SECTION

RIVER: Center South

CPNPPLocalPMP

REACH: Center South RS: 7.5*

INPUT

Description:

Station Elevation Data		num= 22		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.59	9.91	821.39	11.19	821.36	15.22	821.33	30.24	821.08		
34.87	821.28	38.5	821.49	42.75	821.47	157.43	821.1	162.87	821.08		
187.64	819.5	197.64	818.5	200.04	818.26	338.38	818.26	338.86	818.5		
339.86	819	347.44	819.5	469.65	821.94	473.32	821.99	474.37	822		
476.91	822	485	822								

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.91	.0118	15.22	.0129	187.64	.0129	485	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	187.64	347.44		4.77	4.77		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	820.97	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)		Flow Area (sq ft)	16.91	417.10
54.01				
E.G. slope (ft/ft)	0.000011	Area (sq ft)	16.91	417.10
54.01				
Q Total (cfs)	324.00	Flow (cfs)	5.25	301.94
16.80				
Top width (ft)	256.38	Top width (ft)	23.02	159.80
73.56				
Vel Total (ft/s)	0.66	Avg. vel. (ft/s)	0.31	0.72
0.31				
Max Chl Dpth (ft)	2.71	Hydr. Depth (ft)	0.73	2.61
0.73				
Conv. Total (cfs)	97629.1	Conv. (cfs)	1582.9	90982.7
5063.4				
Length wtd. (ft)	4.77	wetted Per. (ft)	23.07	160.05
73.57				
Min Ch El (ft)	818.26	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.12	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.88	5.50
0.38				
C & E Loss (ft)	0.00	Cum SA (acres)	0.69	0.96
0.58				

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.41666*

INPUT

Description:

Station Elevation Data				num=	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	22	Sta	Elev	Sta	Elev	Sta	Elev
0	821.53	10.26	821.33		11.59	821.3	15.75	821.27	31.31	821.06
36.1	821.33	39.85	821.57		44.25	821.56	162.98	821.25	168.61	821.23
194.25	819.42	205.91	818.25		208.71	817.97	332.7	817.97	333.26	818.25
334.43	818.83	343.27	819.42		469.19	821.93	472.96	821.99	474.05	822
476.67	822	485	822							

Manning's n Values				num=						
Sta	n Val	Sta	n Val	5	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.26	.012		15.75	.0129	194.25	.0129	485	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	194.25	343.27		4.77	4.77	4.77		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.	0.013	0.013
0.013				
w.s. Elev (ft)	820.97	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)		Flow Area (sq ft)	16.99	425.45
60.17				
E.G. Slope (ft/ft)	0.000009	Area (sq ft)	16.99	425.45
60.17				
Q Total (cfs)	324.00	Flow (cfs)	5.04	301.10
17.87				
Top width (ft)	248.66	Top width (ft)	21.94	149.02
77.70				
Vel Total (ft/s)	0.64	Avg. vel. (ft/s)	0.30	0.71
0.30				
Max Chl Dpth (ft)	3.00	Hydr. Depth (ft)	0.77	2.86
0.77				
Conv. Total (cfs)	105989.2	Conv. (cfs)	1647.7	98497.3
5844.2				
Length wtd. (ft)	4.77	wetted Per. (ft)	21.99	149.31
77.72				
Min Ch El (ft)	817.97	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.14	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.88	5.45
0.37				
C & E Loss (ft)	0.00	Cum SA (acres)	0.69	0.94
0.57				

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.33333*

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	22	Sta	Elev	Sta	Elev	Sta	Elev
0	821.48	10.6	821.27		11.98	821.24	16.29	821.22	32.37	821.05
37.32	821.37	41.21	821.66		45.76	821.65	168.52	821.4	174.35	821.39

200.86	819.33	214.19	818	217.38	817.68	327.03	817.68	327.67	818
329	818.67	339.11	819.33	468.72	821.93	472.61	821.98	473.73	822
476.42	822	485	822						

Manning's n	Values	num=	5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.6	.0122	16.29	.0129	200.86	.0129	485	.0129
Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
200.86	339.11		4.77	4.77	4.77	.1	.3		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	820.97	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)		Flow Area (sq ft)	17.28	426.73
66.95				
E.G. slope (ft/ft)	0.000008	Area (sq ft)	17.28	426.73
66.95				
Q Total (cfs)	324.00	Flow (cfs)	5.01	299.55
19.44				
Top width (ft)	241.04	Top width (ft)	21.09	138.25
81.70				
Vel Total (ft/s)	0.63	Avg. vel. (ft/s)	0.29	0.70
0.29				
Max Chl Dpth (ft)	3.29	Hydr. Depth (ft)	0.82	3.09
0.82				
Conv. Total (cfs)	112524.7	conv. (cfs)	1739.7	104033.4
6751.6				
Length wtd. (ft)	4.77	wetted Per. (ft)	21.15	138.59
81.71				
Min Ch El (ft)	817.68	shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.15	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.88	5.40
0.36				
C & E Loss (ft)	0.00	Cum SA (acres)	0.68	0.93
0.56				

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.25*

INPUT

Description:

Station	Elevation	Data	num=	22					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.43	10.95	821.21	12.38	821.18	16.82	821.16	33.44	821.04
38.55	821.42	42.56	821.74	47.26	821.74	174.07	821.55	180.08	821.54
207.46	819.25	222.46	817.75	226.06	817.39	321.35	817.39	322.07	817.75
323.57	818.5	334.94	819.25	468.26	821.92	472.26	821.98	473.41	822
476.18	822	485	822						

Manning's n Values		num=		CPNPPLocalPMP		num=			
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.95	.0124	16.82	.0129	207.46	.0129	485	.0129
Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.		
207.46	334.94	4.77	4.77	4.77	.1		.3		

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	Element	Left OB	Channel
0.013	820.98	wt. n-val.	0.013	0.013
0.013	820.97	Reach Len. (ft)	4.77	4.77
0.013	73.75	Flow Area (sq ft)	17.66	420.80
0.013	0.000008	Area (sq ft)	17.66	420.80
0.013	324.00	Flow (cfs)	5.09	297.60
0.013	233.85	Top width (ft)	20.55	127.48
0.013	0.63	Avg. vel. (ft/s)	0.29	0.71
0.013	3.58	Hydr. Depth (ft)	0.86	3.30
0.013	116758.7	Conv. (cfs)	1834.5	107246.1
0.013	4.77	wetted Per. (ft)	20.62	127.86
0.013	817.39	Shear (lb/sq ft)	0.00	0.00
0.013	1.17	Stream Power (lb/ft s)	485.00	0.00
0.013	0.00	Cum volume (acre-ft)	0.88	5.36
0.013	0.00	Cum SA (acres)	0.68	0.91

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.16666*

INPUT

Description:

Station Elevation Data		num=		22					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.38	11.3	821.15	12.77	821.12	17.36	821.11	34.5	821.03
39.78	821.47	43.92	821.83	48.77	821.82	179.61	821.7	185.82	821.69
214.07	819.17	230.74	817.5	234.73	817.1	315.67	817.1	316.47	817.5
318.14	818.33	330.77	819.17	467.79	821.91	471.9	821.98	473.08	822
475.93	822	485	822						

Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.3	.0125	17.36	.0129	214.07	.0129	485	.0129

Bank Sta: Left	Right	Lengths:	CPNPPLocalPMP					
214.07	330.77	Left Channel	Right	Coeff	Contr.	Expan.		
		4.77	4.77	.1		.3		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	820.97	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)		Flow Area (sq ft)	18.13	407.70
80.87				
E.G. Slope (ft/ft)	0.000007	Area (sq ft)	18.13	407.70
80.87				
Q Total (cfs)	324.00	Flow (cfs)	5.31	294.96
23.73				
Top width (ft)	226.80	Top width (ft)	20.16	116.70
89.94				
Vel Total (ft/s)	0.64	Avg. Vel. (ft/s)	0.29	0.72
0.29				
Max Chl Dpth (ft)	3.87	Hydr. Depth (ft)	0.90	3.49
0.90				
Conv. Total (cfs)	118485.6	Conv. (cfs)	1940.4	107867.5
8677.7				
Length wtd. (ft)	4.77	wetted Per. (ft)	20.24	117.12
89.95				
Min Ch El (ft)	817.10	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.18	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.88	5.31
0.35				
C & E Loss (ft)	0.00	Cum SA (acres)	0.68	0.90
0.54				

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7.08333*

INPUT

Description:

Station	Elevation	Data	num=	22						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	821.32	11.65	821.09	13.17	821.06	17.89	821.05	35.57	821.01	
41.01	821.51	45.27	821.91	50.27	821.91	185.16	821.85	191.55	821.85	
220.68	819.08	239.01	817.25	243.41	816.81	310	816.81	310.88	817.25	
312.71	818.17	326.61	819.08	467.33	821.9	471.55	821.98	472.76	822	
475.69	822	485	822							

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.65	.0127	17.89	.0129	220.68	.0129	485	.0129

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
220.68	326.61	Left Channel	Right	.1		.3	
		4.77	4.77				

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	820.97	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)		Flow Area (sq ft)	18.74	387.57
88.92				
E.G. slope (ft/ft)	0.000008	Area (sq ft)	18.74	387.57
88.92				
Q Total (cfs)	324.00	Flow (cfs)	5.70	291.15
27.15				
Top width (ft)	219.99	Top width (ft)	19.85	105.93
94.21				
Vel Total (ft/s)	0.65	Avg. vel. (ft/s)	0.30	0.75
0.31				
Max Chl Dpth (ft)	4.16	Hydr. Depth (ft)	0.94	3.66
0.94				
Conv. Total (cfs)	117618.9	Conv. (cfs)	2071.0	105692.6
9855.2				
Length wtd. (ft)	4.77	wetted Per. (ft)	19.94	106.39
94.23				
Min Ch El (ft)	816.81	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.21	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.87	5.27
0.34				
C & E Loss (ft)	0.00	Cum SA (acres)	0.68	0.89
0.53				

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 7

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.27 12 821.03 13.56 821 36.63 821 46.63 822									
51.78 822 190.7 822 197.29 822 227.29 819 247.29 817									
252.08 816.52 304.32 816.52 305.28 817 307.28 818 322.44 819									
472.44 822 475.44 822 485 822									

Manning's n Values	num=	3
Sta n Val Sta n Val Sta n Val		
0 .0066 12 .0129 485 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
227.29 322.44	57 57 57	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
51.78 190.7 825 475.44 485 825		

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	820.97	Reach Len. (ft)	57.00	57.00
57.00				
Crit w.s. (ft)		Flow Area (sq ft)	19.34	360.17
96.72				
E.G. slope (ft/ft)	0.000008	Area (sq ft)	19.34	360.17
96.72				
Q Total (cfs)	324.00	Flow (cfs)	6.26	286.32
31.41				
Top width (ft)	213.17	Top width (ft)	19.67	95.15
98.35				
Vel Total (ft/s)	0.68	Avg. Vel. (ft/s)	0.32	0.79
0.32				
Max Chl Dpth (ft)	4.45	Hydr. Depth (ft)	0.98	3.79
0.98				
Conv. Total (cfs)	113620.6	Conv. (cfs)	2196.2	100408.2
11016.2				
Length wtd. (ft)	57.00	wetted Per. (ft)	19.77	95.66
98.37				
Min Ch El (ft)	816.52	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.23	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.87	5.23
0.33				
C & E Loss (ft)	0.00	Cum SA (acres)	0.67	0.88
0.52				

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 6

INPUT

Description:

Station Elevation Data			num=	17							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.66	12	820.41	36.63	821	46.63	822	51.78	822		
190.7	822	197.29	822	227.29	819	267.29	815	267.69	814.8		
300.88	814.8	301.28	815	307.28	818	322.44	819	472.44	822		
475.44	822	485	822								

Manning's n Values			num=	3			
Sta	n Val	Sta	n Val	Sta	n Val		
0	.0066	12	.0129	485	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	227.29	322.44		39.1	39.1	.1	.3
Blocked Obstructions			num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev		
51.78	190.7	825	475.44	485	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.97	Element	Left OB	Channel
Right OB				

		CPNPPLocalPMP		
Vel Head (ft)	0.01	wt. n-Val.	0.012	0.013
0.013				
W.S. Elev (ft)	820.97	Reach Len. (ft)	39.10	39.10
39.10				
Crit w.s. (ft)		Flow Area (sq ft)	31.07	432.53
96.85				
E.G. Slope (ft/ft)	0.000005	Area (sq ft)	31.07	432.53
96.85				
Q Total (cfs)	324.00	Flow (cfs)	6.87	293.29
23.84				
Top width (ft)	248.54	Top width (ft)	54.98	95.15
98.41				
Vel Total (ft/s)	0.58	Avg. vel. (ft/s)	0.22	0.68
0.25				
Max Chl Dpth (ft)	6.17	Hydr. Depth (ft)	0.57	4.55
0.98				
Conv. Total (cfs)	149951.2	Conv. (cfs)	3178.8	135737.1
11035.3				
Length wtd. (ft)	39.10	wetted Per. (ft)	55.40	96.19
98.43				
Min Ch El (ft)	814.80	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.26	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.84	4.71
0.20				
C & E Loss (ft)	0.00	Cum SA (acres)	0.63	0.75
0.39				

Warning: Divided flow computed for this cross-section.
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 5

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.24	11.58	820	12	819.99	78	820	98	822		
145.91	822	165.91	820	177.8	819	237.29	818	267.29	815		
268.14	814.58	300.44	814.58	301.28	815	311.28	820	372.44	821		
393.46	822	396.72	822	441.72	822	475.44	822	485	822		

Manning's n Values		num= 3			
Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12	.0129	485	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	237.29	311.28		8.43	8.43	8.43		.1	.3

Blocked Obstructions		num= 3							
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R
91.65	151.65	825	396.72	441.72	825	475.44	485	825	

CROSS SECTION OUTPUT Profile #PF 1

	CPNPPLocalPMP		Left OB	Channel
E.G. Elev (ft)	820.97	Element		
Right OB				
Vel Head (ft)	0.01	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	820.97	Reach Len. (ft)	8.43	8.43
8.43				
Crit w.s. (ft)		Flow Area (sq ft)	248.28	385.58
28.72				
E.G. slope (ft/ft)	0.000003	Area (sq ft)	248.28	385.58
28.72				
Q Total (cfs)	324.00	Flow (cfs)	76.33	243.89
3.78				
Top width (ft)	302.02	Top width (ft)	168.76	73.99
59.27				
Vel Total (ft/s)	0.49	Avg. Vel. (ft/s)	0.31	0.63
0.13				
Max Chl Dpth (ft)	6.39	Hydr. Depth (ft)	1.47	5.21
0.48				
Conv. Total (cfs)	174950.5	Conv. (cfs)	41218.6	131691.2
2040.7				
Length wtd. (ft)	8.43	wetted Per. (ft)	169.64	75.52
59.28				
Min Ch El (ft)	814.58	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.35	Stream Power (lb/ft s)	485.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.71	4.34
0.14				
C & E Loss (ft)	0.00	Cum SA (acres)	0.52	0.67
0.32				

Warning: Divided flow computed for this cross-section.
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 4.8*

INPUT

Description:

Station Elevation Data		num= 38									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.15	11.17	819.94	11.58	819.93	14.04	819.92	75.27	819.99		
91.53	821.35	94.57	821.65	103.23	821.8	117.3	822	123.09	822		
140.8	822	160.1	820.4	162.29	820.25	168.09	819.84	171.57	819.55		
182.18	819.25	228.97	817.8	239.74	816.72	267.15	814.87	268.24	814.53		
300.34	814.53	301.19	814.96	301.63	815.17	311.28	820	370.96	820.98		
372.82	821.02	391.47	821.91	393.97	822	394.66	822	397.25	822		
438.57	822	442.53	822	455.7	822	458.63	821.8	459.78	821.8		
474.37	821.86	476.46	821.87	486.08	821.91						

Manning's n Values		num= 7									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.58	.0127	14.04	.0129	228.97	.0116	311.28	.0116		
474.37	.0116	486.08	.0116								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	228.97	311.28		8.43	8.43		.1	.3
					8.43			

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.97	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.013	0.012
0.012				
W.S. Elev (ft)	820.97	Reach Len. (ft)	8.43	8.43
8.43				
Crit w.s. (ft)		Flow Area (sq ft)	225.33	435.85
28.61				
E.G. slope (ft/ft)	0.000002	Area (sq ft)	225.33	435.85
28.61				
Q Total (cfs)	324.00	Flow (cfs)	55.92	264.51
3.57				
Top width (ft)	304.05	Top width (ft)	162.71	82.31
59.03				
Vel Total (ft/s)	0.47	Avg. vel. (ft/s)	0.25	0.61
0.12				
Max Chl Dpth (ft)	6.44	Hydr. Depth (ft)	1.38	5.30
0.48				
Conv. Total (cfs)	205343.1	Conv. (cfs)	35441.5	167641.2
2260.5				
Length wtd. (ft)	8.43	wetted Per. (ft)	163.66	83.77
59.03				
Min Ch El (ft)	814.53	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.41	Stream Power (lb/ft s)	486.08	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.67	4.26
0.14				
C & E Loss (ft)	0.00	Cum SA (acres)	0.49	0.66
0.31				

Warning: Divided flow computed for this cross-section.
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 4.6*

INPUT

Description:

Station Elevation Data	num=	38
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 820.07 10.77 819.87 11.16 819.87 13.53 819.85 72.53 819.97		
88.2 821.01 91.13 821.3 99.48 821.6 113.04 822 118.62 822		
135.68 822 154.28 820.8 156.39 820.69 161.98 820.38 165.34 820.1		
175.56 819.69 220.66 817.6 233.74 816.29 267.02 814.75 268.33 814.48		
300.24 814.48 301.1 814.91 301.54 815.13 311.28 820 371.33 820.98		
373.2 821.04 391.97 821.93 394.48 822 395.17 822 397.78 822		
439.36 822 443.34 822 456.6 822 459.54 821.6 460.7 821.6		
475.38 821.72 477.48 821.74 487.16 821.82		

Manning's n Values	num=	7
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 11.16 .0125 13.53 .0129 220.66 .0104 311.28 .0104		

CPNPPLocalPMP

475.38 .0104 487.16 .0104

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 220.66 311.28 8.43 8.43 8.43 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.97	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.012	0.010
0.010				
W.S. Elev (ft)	820.97	Reach Len. (ft)	8.43	8.43
8.43				
Crit w.s. (ft)		Flow Area (sq ft)	205.25	490.58
28.80				
E.G. slope (ft/ft)	0.000002	Area (sq ft)	205.25	490.58
28.80				
Q Total (cfs)	324.00	Flow (cfs)	40.44	280.23
3.33				
Top width (ft)	306.62	Top width (ft)	156.60	90.62
59.41				
Vel Total (ft/s)	0.45	Avg. vel. (ft/s)	0.20	0.57
0.12				
Max Chl Dpth (ft)	6.49	Hydr. Depth (ft)	1.31	5.41
0.48				
Conv. Total (cfs)	247256.5	Conv. (cfs)	30862.5	213855.4
2538.7				
Length wtd. (ft)	8.43	wetted Per. (ft)	157.62	92.05
59.41				
Min Ch El (ft)	814.48	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.44	Stream Power (lb/ft s)	487.16	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.63	4.17
0.13				
C & E Loss (ft)	0.00	Cum SA (acres)	0.46	0.64
0.30				

Warning: Divided flow computed for this cross-section.
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 4.4*

INPUT

Description:

Station	Elevation	Data	num=	38						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	819.98	10.36	819.81	10.74	819.8	13.02	819.79	69.8	819.96	
84.88	820.67	87.7	820.96	95.73	821.4	108.78	822	114.15	822	
130.57	822	148.47	821.2	150.5	821.12	155.88	820.92	159.11	820.65	
168.94	820.13	212.34	817.4	227.73	815.86	266.88	814.62	268.43	814.44	
300.15	814.44	301.01	814.87	301.45	815.09	311.28	820	371.7	820.99	
373.58	821.05	392.47	821.95	395	822	395.69	822	398.32	822	
440.14	822	444.16	822	457.49	822	460.46	821.4	461.62	821.4	
476.39	821.58	478.51	821.61	488.25	821.72					

CPNPPLocalPMP

Manning's n Values		num= 7		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.74	.0122	13.02	.0129	212.34	.0091	311.28	.0091		
476.39	.0091	488.25	.0091								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	212.34	311.28		8.43	8.43	8.43		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	820.97	Element	Left OB	Channel
0.009	Vel Head (ft)	0.00	wt. n-Val.	0.012	0.009
8.43	w.s. Elev (ft)	820.97	Reach Len. (ft)	8.43	8.43
28.70	Crit w.s. (ft)		Flow Area (sq ft)	188.75	549.95
28.70	E.G. Slope (ft/ft)	0.000001	Area (sq ft)	188.75	549.95
3.02	Q Total (cfs)	324.00	Flow (cfs)	29.51	291.47
59.19	Top width (ft)	303.80	Top width (ft)	145.68	98.94
0.11	Vel Total (ft/s)	0.42	Avg. Vel. (ft/s)	0.16	0.53
0.48	Max Chl Dpth (ft)	6.53	Hydr. Depth (ft)	1.30	5.56
2892.1	Conv. Total (cfs)	310265.2	Conv. (cfs)	28254.5	279118.6
59.19	Length wtd. (ft)	8.43	wetted Per. (ft)	146.81	100.36
0.00	Min Ch El (ft)	814.44	Shear (lb/sq ft)	0.00	0.00
0.00	Alpha	1.43	Stream Power (lb/ft s)	488.25	0.00
0.13	Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.59	4.07
0.29	C & E Loss (ft)	0.00	Cum SA (acres)	0.43	0.62

Warning: Divided flow computed for this cross-section.
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 4.2*

INPUT

Description:

Station Elevation Data		num= 38		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.9	9.96	819.75	10.32	819.74	12.51	819.72	67.07	819.94		
81.55	820.34	84.26	820.61	91.98	821.2	104.52	822	109.68	822		
125.46	822	142.65	821.6	144.6	821.56	149.77	821.46	152.88	821.2		
162.33	820.56	204.03	817.2	221.72	815.43	266.75	814.49	268.52	814.39		

				CPNPPLocalPMP					
300.05	814.39	300.92	814.82	301.37	815.04	311.28	820	372.07	820.99
373.96	821.07	392.96	821.98	395.51	822	396.2	822	398.85	822
440.93	822	444.97	822	458.39	822	461.37	821.2	462.54	821.2
477.4	821.44	479.53	821.47	489.33	821.63				

Manning's n Values		num=		7					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.32	.012	12.51	.0129	204.03	.0079	311.28	.0079
477.4	.0079	489.33	.0079						

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	204.03	311.28		8.43	8.43		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.97	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.012	0.008
0.008				
W.S. Elev (ft)	820.97	Reach Len. (ft)	8.43	8.43
8.43				
Crit w.s. (ft)		Flow Area (sq ft)	179.38	614.46
28.90				
E.G. slope (ft/ft)	0.000001	Area (sq ft)	179.38	614.46
28.90				
Q Total (cfs)	324.00	Flow (cfs)	22.21	299.05
2.74				
Top width (ft)	303.55	Top width (ft)	136.73	107.25
59.57				
Vel Total (ft/s)	0.39	Avg. vel. (ft/s)	0.12	0.49
0.09				
Max Chl Dpth (ft)	6.58	Hydr. Depth (ft)	1.31	5.73
0.49				
Conv. Total (cfs)	397410.2	Conv. (cfs)	27242.1	366812.9
3355.2				
Length wtd. (ft)	8.43	wetted Per. (ft)	137.98	108.67
59.58				
Min Ch El (ft)	814.39	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.42	Stream Power (lb/ft s)	489.33	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.55	3.96
0.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.41	0.60
0.28				

Warning: Divided flow computed for this cross-section.
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 4

INPUT

Description:

Station	Elevation	Data	num=	24	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev		Sta	Elev	Sta	Elev	Sta	Elev

				CPNPPLocalPMP					
0	819.81	12	819.65	78.23	820	88.23	821	100.26	822
105.21	822	138.71	822	143.67	822	155.71	821	195.71	817
215.71	815	268.62	814.34	299.95	814.34	301.28	815	311.28	820
372.44	821	393.46	822	396.72	822	441.72	822	459.28	822
462.28	821	463.46	821	478.41	821.3	490.41	821.54		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12	.0129	478.41	.0066

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

195.71	311.28	39.61	39.61	39.61	.1	.3
--------	--------	-------	-------	-------	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
105.21	138.71	825	396.72	441.72	825

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	Element	Left OB	Channel
0.013	820.97	wt. n-val.	0.012	0.013
0.013	820.97	Reach Len. (ft)	39.61	39.61
0.013	820.97	Flow Area (sq ft)	174.32	683.62
0.013	820.97	Area (sq ft)	174.32	683.62
0.013	324.00	Flow (cfs)	31.36	290.31
0.013	302.59	Top width (ft)	127.65	115.57
0.013	0.37	Avg. vel. (ft/s)	0.18	0.42
0.013	6.63	Hydr. Depth (ft)	1.37	5.92
0.013	285076.5	Conv. (cfs)	27591.5	255435.0
0.013	39.61	wetted Per. (ft)	129.05	117.01
0.013	814.34	Shear (lb/sq ft)	0.00	0.00
0.013	1.23	Stream Power (lb/ft s)	490.41	0.00
0.013	0.00	Cum volume (acre-ft)	0.52	3.83
0.013	0.00	Cum SA (acres)	0.38	0.58

Warning: Divided flow computed for this cross-section.
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 3

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.4	13.14	819.34	94.09	819	157.66	818	195.71	817		
215.71	815	269.07	814.11	299.5	814.11	301.28	815	311.28	820		
383.56	821	396.72	822	446.29	822	462.28	821	465.28	820		
477.2	820	478.41	820.02	490.41	820.27						

Manning's n Values		num= 3		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	13.14	.0129	478.41	.0066

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	195.71	311.28		21.35	21.35	21.35		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
396.72	441.72	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.97	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.013	0.013
0.011				
w.s. Elev (ft)	820.97	Reach Len. (ft)	21.35	21.35
21.35				
Crit w.s. (ft)		Flow Area (sq ft)	456.09	696.75
58.19				
E.G. Slope (ft/ft)	0.000001	Area (sq ft)	456.09	696.75
58.19				
Q Total (cfs)	324.00	Flow (cfs)	84.74	234.10
5.16				
Top width (ft)	409.55	Top width (ft)	195.71	115.57
98.27				
Vel Total (ft/s)	0.27	Avg. Vel. (ft/s)	0.19	0.34
0.09				
Max Chl Dpth (ft)	6.86	Hydr. Depth (ft)	2.33	6.03
0.59				
Conv. Total (cfs)	364801.5	Conv. (cfs)	95408.8	263580.3
5812.4				
Length wtd. (ft)	21.35	wetted Per. (ft)	197.30	117.07
99.14				
Min Ch El (ft)	814.11	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.27	Stream Power (lb/ft s)	490.41	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.23	3.21
0.08				
C & E Loss (ft)	0.00	Cum SA (acres)	0.23	0.48
0.19				

Warning: Divided flow computed for this cross-section.
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 2

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 17	
Sta	Elev	Sta	Elev
0	819.18	23.58	819.15
215.71	815	291.28	814
396.13	820	410.28	820.24
477.15	819.47	490.41	819.58

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	23.58	.0129
410.28	.0066	438.02	.0129
477.15	.0066		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	195.71	309.28		60.83	60.83		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)		Element	Left OB	Channel
Right OB	820.97				
Vel Head (ft)	0.01		wt. n-val.	0.012	0.013
0.011					
w.s. Elev (ft)	820.97		Reach Len. (ft)	60.83	60.83
60.83					
Crit w.s. (ft)	815.87		Flow Area (sq ft)	468.73	688.24
217.87					
E.G. slope (ft/ft)	0.000004		Area (sq ft)	468.73	688.24
217.87					
Q Total (cfs)	821.00		Flow (cfs)	213.28	539.77
67.95					
Top width (ft)	490.41		Top width (ft)	195.71	113.57
181.13					
Vel Total (ft/s)	0.60		Avg. vel. (ft/s)	0.46	0.78
0.31					
Max Chl Dpth (ft)	6.97		Hydr. Depth (ft)	2.40	6.06
1.20					
Conv. Total (cfs)	397801.9		conv. (cfs)	103342.2	261537.8
32921.9					
Length wtd. (ft)	60.83		wetted Per. (ft)	197.52	114.86
182.54					
Min ch El (ft)	814.00		Shear (lb/sq ft)	0.00	0.00
0.00					
Alpha	1.31		Stream Power (lb/ft s)	490.41	0.00
0.00					
Frctn Loss (ft)			Cum Volume (acre-ft)	0.01	2.87
0.01					
C & E Loss (ft)			Cum SA (acres)	0.14	0.42
0.13					

INLINE STRUCTURE

RIVER: Center South
 REACH: Center South RS: 1.5

INPUT

Description:

Distance from Upstream XS = 18
 Deck/Roadway width = 24

CPNPPLocalPMP

Weir Coefficient = 2.6
 Weir Embankment Coordinates num = 4

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	265.53	825	265.53	819	490.41	819

Upstream Embankment side slope = 2 horiz. to 1.0 vertical
 Downstream Embankment side slope = 2 horiz. to 1.0 vertical
 Maximum allowable submergence for weir flow = .98
 Elevation at which weir flow begins =
 Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Center South
 REACH: Center South RS: 1

INPUT

Description:

Station Elevation Data num= 4

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	812.98	8.51	813	295.11	814	490.41	812.84

Manning's n Values num= 1

Sta	n Val
0	.017

Bank Sta:	Left	Right	Coeff	Contr.	Expan.
	0	490.41		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.86	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.017
w.s. Elev (ft)	820.86	Reach Len. (ft)		
Crit w.s. (ft)	813.87	Flow Area (sq ft)		3629.37
E.G. slope (ft/ft)	0.000000	Area (sq ft)		3629.37
Q Total (cfs)	821.00	Flow (cfs)		821.00
Top width (ft)	490.41	Top width (ft)		490.41
vel Total (ft/s)	0.23	Avg. vel. (ft/s)		0.23
Max Chl Dpth (ft)	8.02	Hydr. Depth (ft)		7.40
Conv. Total (cfs)	1179374.0	Conv. (cfs)		1179374.0
Length Wtd. (ft)		wetted Per. (ft)		506.32
Min Ch El (ft)	812.84	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	490.41	0.00
0.00				
Frctn Loss (ft)		Cum volume (acre-ft)		
C & E Loss (ft)		Cum SA (acres)		

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 7

INPUT

Description:

Station Elevation Data num= 5

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	0	821	2	821	72.56	821.17	83	821.17

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	83	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

2	72.56	2	2	2	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	830	72.56	83	826.17

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.05	Element	Left OB	Channel
Right OB Vel Head (ft)	0.33	wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.72	Reach Len. (ft)	2.00	2.00
2.00 Crit w.s. (ft)	821.72	Flow Area (sq ft)	1.45	45.08
E.G. Slope (ft/ft)	0.002920	Area (sq ft)	1.45	45.08
Q Total (cfs)	213.00	Flow (cfs)	5.91	207.09
Top width (ft)	72.56	Top width (ft)	2.00	70.56
Vel Total (ft/s)	4.58	Avg. Vel. (ft/s)	4.08	4.59
Max Chl Dpth (ft)	0.72	Hydr. Depth (ft)	0.72	0.64
Conv. Total (cfs)	3941.9	Conv. (cfs)	109.4	3832.4
Length wtd. (ft)	2.00	wetted Per. (ft)	2.72	71.11
Min ch El (ft)	821.00	Shear (lb/sq ft)	0.10	0.12
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00 Frctn Loss (ft)		Cum Volume (acre-ft)	0.01	1.49
0.01 C & E Loss (ft)		Cum SA (acres)	0.02	0.69
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 6.98684*

INPUT

Description:

Station Elevation Data		num= 7									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.49	821	-3.39	821	.11	820.98	2.13	820.97		
72.56	821.14	83	821.14								

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.49	.0129	.11	.0129	2.13	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	2.13	72.56		2	2		.1	.3

Blocked Obstructions		num= 2							
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0829.934	272.55934		83826.1437					

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	822.04	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.41		wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.62		Reach Len. (ft)	2.00	2.00
2.00					
Crit w.s. (ft)	821.69		Flow Area (sq ft)	1.38	39.92
E.G. slope (ft/ft)	0.004298		Area (sq ft)	1.38	39.92
Q Total (cfs)	213.00		Flow (cfs)	7.49	205.51
Top width (ft)	72.56		Top width (ft)	2.13	70.43
Vel Total (ft/s)	5.16		Avg. vel. (ft/s)	5.44	5.15
Max Chl Dpth (ft)	0.65		Hydr. Depth (ft)	0.65	0.57
Conv. Total (cfs)	3249.0		Conv. (cfs)	114.2	3134.7
Length wtd. (ft)	2.00		wetted Per. (ft)	2.77	70.91
Min Ch El (ft)	820.97		Shear (lb/sq ft)	0.13	0.15
Alpha	1.00		Stream Power (lb/ft s)	83.00	0.00
0.00					
Frctn Loss (ft)	0.01		Cum volume (acre-ft)	0.01	1.49
0.01					
C & E Loss (ft)	0.01		Cum SA (acres)	0.02	0.69
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.97368*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data num= 7
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -4.43 821 -3.32 821 .22 820.97 2.26 820.95
 72.56 821.12 83 821.12

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -4.43 .0129 .22 .0129 2.26 .0129 83 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 2.26 72.56 2 2 2 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0829.868472.55869 83826.1174

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.00	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.37	wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.64	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.67	Flow Area (sq ft)	1.53	42.39
E.G. Slope (ft/ft)	0.003509	Area (sq ft)	1.53	42.39
Q Total (cfs)	213.00	Flow (cfs)	7.58	205.42
Top width (ft)	72.56	Top width (ft)	2.26	70.30
Vel Total (ft/s)	4.85	Avg. Vel. (ft/s)	4.96	4.85
Max Chl Dpth (ft)	0.69	Hydr. Depth (ft)	0.68	0.60
Conv. Total (cfs)	3595.5	Conv. (cfs)	128.0	3467.5
Length wtd. (ft)	2.00	wetted Per. (ft)	2.93	70.82
Min Ch El (ft)	820.95	Shear (lb/sq ft)	0.11	0.13
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.01	1.49
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.02	0.69
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.96052*

INPUT

Description:

Station Elevation Data num= 7

Sta	Elev	Sta	Elev	CPNPPLocalPMP	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.37	821	-3.25	821	.33	820.95	2.4	820.92	
72.56	821.09	83	821.09							
Manning's n Values		num=		5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-4.37	.0129	.33	.0129	2.4	.0129	83	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	2.4	72.56		2	2		.1	.3		
Blocked Obstructions		num=		2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev					
-10	0829.8026	72.55802	83	826.0911						

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)		Element	Left OB	Channel
Vel Head (ft)	821.99				
	0.43		wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.56		Reach Len. (ft)	2.00	2.00
2.00					
Crit w.s. (ft)	821.64		Flow Area (sq ft)	1.49	38.77
E.G. Slope (ft/ft)	0.004687		Area (sq ft)	1.49	38.77
Q Total (cfs)	213.00		Flow (cfs)	7.98	205.02
Top width (ft)	72.56		Top width (ft)	2.40	70.16
Vel Total (ft/s)	5.29		Avg. vel. (ft/s)	5.36	5.29
Max chl Dpth (ft)	0.64		Hydr. Depth (ft)	0.62	0.55
Conv. Total (cfs)	3111.1		Conv. (cfs)	116.5	2994.6
Length wtd. (ft)	2.00		wetted Per. (ft)	3.00	70.63
Min Ch El (ft)	820.92		Shear (lb/sq ft)	0.15	0.16
Alpha	1.00		Stream Power (lb/ft s)	83.00	0.00
0.00					
Frctn Loss (ft)	0.01		Cum Volume (acre-ft)	0.01	1.48
0.01					
C & E Loss (ft)	0.01		Cum SA (acres)	0.02	0.68
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.94736*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.31	821	-3.18	821	.44	820.93	2.53	820.89	
72.56	821.06	83	821.06							

CPNPPLocalPMP
 Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -4.31 .0129 .44 .0129 2.53 .0129 83 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 2.53 72.56 2 2 2 .1 .3
 Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0829.736872.55737 83826.0647

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.47	wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.51	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.61	Flow Area (sq ft)	1.50	37.16
E.G. slope (ft/ft)	0.005371	Area (sq ft)	1.50	37.16
Q Total (cfs)	213.00	Flow (cfs)	8.28	204.72
Top width (ft)	72.56	Top width (ft)	2.53	70.03
vel Total (ft/s)	5.51	Avg. vel. (ft/s)	5.53	5.51
Max Chl Dpth (ft)	0.62	Hydr. Depth (ft)	0.59	0.53
Conv. Total (cfs)	2906.3	Conv. (cfs)	113.0	2793.4
Length wtd. (ft)	2.00	wetted Per. (ft)	3.10	70.47
Min Ch El (ft)	820.89	Shear (lb/sq ft)	0.16	0.18
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	0.01	1.48
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.02	0.68
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.93421*

INPUT

Description:

Station	Elevation	Data	num=	7					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.25	821	-3.1	821	.55	820.92	2.66	820.87
72.56	821.04	83	821.04						

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.25	.0129	.55	.0129	2.66	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	CPNPPLocalPMP	Left Channel	Right	Coeff Contr.	Expan.
	2.66	72.56		2	2	2	.1	.3
Blocked Obstructions	num=		2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev			
-10		0829.671172.55671			83826.0384			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.92	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	821.58	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.59	Flow Area (sq ft)	1.80	43.64
E.G. Slope (ft/ft)	0.003140	Area (sq ft)	1.80	43.64
Q Total (cfs)	213.00	Flow (cfs)	8.28	204.72
Top width (ft)	72.56	Top width (ft)	2.66	69.90
Vel Total (ft/s)	4.69	Avg. Vel. (ft/s)	4.59	4.69
Max Chl Dpth (ft)	0.71	Hydr. Depth (ft)	0.68	0.62
Conv. Total (cfs)	3801.1	Conv. (cfs)	147.7	3653.4
Length wtd. (ft)	2.00	wetted Per. (ft)	3.31	70.44
Min Ch El (ft)	820.87	Shear (lb/sq ft)	0.11	0.12
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.01	1.48
0.01				
C & E Loss (ft)	0.04	Cum SA (acres)	0.02	0.68
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.92105*

INPUT

Description:

Station Elevation Data	num=	7								
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	
-10 821 -4.19 821	-3.03	821	.66	820.9	2.79	820.84				
72.56 821.01 83 821.01										

Manning's n Values	num=	5								
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	
-10 .0129 -4.19 .0129	.66	.0129	2.79	.0129	83	.0129				

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	2.79	72.56		2	2	.1	.3
Blocked Obstructions	num=		2				
Sta L	Sta R	Elev	Sta L	Sta R	Elev		

-10 0829.605372.55605 CPNPPLocalPMP
 83826.0121

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	821.91			
Right OB				
Vel Head (ft)	0.41	wt. n-val.	0.013	0.013
W.S. Elev (ft)	821.49	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.57	Flow Area (sq ft)	1.71	39.60
E.G. slope (ft/ft)	0.004309	Area (sq ft)	1.71	39.60
Q Total (cfs)	213.00	Flow (cfs)	8.65	204.35
Top width (ft)	72.56	Top width (ft)	2.79	69.77
Vel Total (ft/s)	5.16	Avg. vel. (ft/s)	5.05	5.16
Max chl Dpth (ft)	0.65	Hydr. Depth (ft)	0.61	0.57
Conv. Total (cfs)	3244.9	Conv. (cfs)	131.8	3113.1
Length wtd. (ft)	2.00	wetted Per. (ft)	3.37	70.25
Min ch El (ft)	820.84	Shear (lb/sq ft)	0.14	0.15
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frcn Loss (ft)	0.01	Cum Volume (acre-ft)	0.01	1.48
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.02	0.67
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.90789*

INPUT

Description:

Station Elevation Data num= 7

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.13	821	-2.96	821	.77	820.88	2.92	820.82		
72.56	820.99	83	820.99								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.13	.0129	.77	.0129	2.92	.0129	83	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

 2.92 72.56 2 2 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0829.539572.55539			83825.9858	

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	821.87	Element	Left OB	Channel
Right OB Vel Head (ft)	0.37	wt. n-val.	0.013	0.013
W.S. Elev (ft)	821.51	Reach Len. (ft)	2.00	2.00
2.00 Crit W.S. (ft)	821.55	Flow Area (sq ft)	1.89	42.02
E.G. Slope (ft/ft)	0.003522	Area (sq ft)	1.89	42.02
Q Total (cfs)	213.00	Flow (cfs)	8.92	204.08
Top Width (ft)	72.56	Top Width (ft)	2.92	69.64
Vel Total (ft/s)	4.85	Avg. Vel. (ft/s)	4.72	4.86
Max Chl Dpth (ft)	0.69	Hydr. Depth (ft)	0.65	0.60
Conv. Total (cfs)	3588.9	Conv. (cfs)	150.2	3438.6
Length wtd. (ft)	2.00	wetted Per. (ft)	3.52	70.15
Min Ch El (ft)	820.82	Shear (lb/sq ft)	0.12	0.13
Alpha 0.00	1.00	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	0.01	1.48
0.01 C & E Loss (ft)	0.01	Cum SA (acres)	0.02	0.67
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.89473*

INPUT

Description:

Station	Elevation	Data	num=	7							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.07	821	-2.89	821	.88	820.87	3.06	820.79		
72.55	820.96	83	820.96								

Manning's n Values	num=	5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.07	.0129	.88	.0129	3.06	.0129	83	.0129		

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
3.06	72.55	2	2	2	.1	.3	

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0829.473	772.55	473	838	25.9595

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.86	Element	Left OB	Channel
Right OB Vel Head (ft)	0.43	wt. n-val.	0.013	0.013

CPNPPLocalPMP				
0.000				
W.S. Elev (ft)	821.43	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.52	Flow Area (sq ft)	1.78	38.50
0.00				
E.G. Slope (ft/ft)	0.004644	Area (sq ft)	1.78	38.50
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.11	203.89
0.00				
Top width (ft)	72.55	Top width (ft)	3.06	69.49
Vel Total (ft/s)	5.29	Avg. Vel. (ft/s)	5.11	5.30
0.22				
Max Chl Dpth (ft)	0.64	Hydr. Depth (ft)	0.58	0.55
0.47				
Conv. Total (cfs)	3125.6	Conv. (cfs)	133.7	2991.9
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.59	69.49
0.47				
Min Ch El (ft)	820.79	Shear (lb/sq ft)	0.14	0.16
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.01	1.48
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.02	0.67
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.88157*

INPUT

Description:

Station Elevation Data		num= 7									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.01	821	-2.82	821	.99	820.85	3.19	820.76		
72.55	820.93	83	820.93								

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.01	.0129	.99	.0129	3.19	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	3.19	72.55		2	2	2		.1	.3

Blocked Obstructions		num= 2							
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10		0829.407972	55408		83825.9332				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.85	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.47	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	821.38	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.49	Flow Area (sq ft)	1.76	36.93

CPNPPLocalPMP				
0.00				
E.G. Slope (ft/ft)	0.005311	Area (sq ft)	1.76	36.93
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.34	203.66
0.00				
Top width (ft)	72.55	Top width (ft)	3.19	69.36
Vel Total (ft/s)	5.50	Avg. Vel. (ft/s)	5.30	5.51
0.21				
Max Chl Dpth (ft)	0.62	Hydr. Depth (ft)	0.55	0.53
0.45				
Conv. Total (cfs)	2922.6	Conv. (cfs)	128.2	2794.5
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.68	69.36
0.45				
Min Ch El (ft)	820.76	Shear (lb/sq ft)	0.16	0.18
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	0.00	1.47
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.02	0.66
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.86842*

INPUT

Description:

Station Elevation Data num= 7											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.95	821	-2.74	821	1.1	820.83	3.32	820.74		
72.55	820.91	83	820.91								

Manning's n Values num= 5											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.95	.0129	1.1	.0129	3.32	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	3.32	72.55		2	2	2		.1	.3

Blocked Obstructions num= 2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10		0829.342172.55342			83825.9068	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.79	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	821.45	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.47	Flow Area (sq ft)	2.14	43.35
0.00				
E.G. Slope (ft/ft)	0.003100	Area (sq ft)	2.14	43.35
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.49	203.51

CPNPPLocalPMP

0.00				
Top Width (ft)	72.55	Top Width (ft)	3.32	69.23
Vel Total (ft/s)	4.68	Avg. Vel. (ft/s)	4.44	4.69
0.14				
Max Chl Dpth (ft)	0.71	Hydr. Depth (ft)	0.64	0.63
0.54				
Conv. Total (cfs)	3825.3	Conv. (cfs)	170.4	3654.9
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.90	69.23
0.54				
Min Ch El (ft)	820.74	Shear (lb/sq ft)	0.11	0.12
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.47
0.01				
C & E Loss (ft)	0.04	Cum SA (acres)	0.02	0.66
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.85526*

INPUT

Description:

Station	Elevation	Data	num=	7						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-3.89	821	-2.67	821	1.21	820.82	3.45	820.71	
72.55	820.88	83	820.88							

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.89	.0129	1.21	.0129	3.45	.0129	83	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 3.45 72.55 2 2 2 .1 .3

Blocked Obstructions	num=	2		
Sta L Sta R Elev	Sta L Sta R Elev			
-10 0829.276372.55276	83825.8805			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.78	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.41	wt. n-val.	0.013	0.013
0.000				
w.s. Elev (ft)	821.36	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.44	Flow Area (sq ft)	1.97	39.38
0.00				
E.G. Slope (ft/ft)	0.004255	Area (sq ft)	1.97	39.38
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.59	203.41
0.00				
Top Width (ft)	72.55	Top Width (ft)	3.45	69.10
Vel Total (ft/s)	5.15	Avg. Vel. (ft/s)	4.87	5.17

CPNPPLocalPMP

0.15				
Max Chl Dpth (ft)	0.65	Hydr. Depth (ft)	0.57	0.57
0.48				
Conv. Total (cfs)	3265.2	Conv. (cfs)	147.0	3118.2
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.94	69.10
0.49				
Min Ch El (ft)	820.71	Shear (lb/sq ft)	0.13	0.15
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.47
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.02	0.66
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.84210*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821 -3.83 821	-2.6 821	1.32 820.8	3.58 820.68						
72.55 820.85	83 820.85								

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -3.83 .0129	1.32 .0129	3.58 .0129	83 .0129						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 3.58 72.55 2 2 2 .1 .3

Blocked Obstructions	num=	2		
Sta L Sta R Elev Sta L Sta R Elev				
-10 0829.2105 72.5521			83825.8542	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.76	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.44	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	821.32	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.41	Flow Area (sq ft)	1.94	37.97
0.00				
E.G. Slope (ft/ft)	0.004788	Area (sq ft)	1.94	37.97
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.73	203.27
0.00				
Top Width (ft)	72.55	Top width (ft)	3.58	68.97
Vel Total (ft/s)	5.34	Avg. vel. (ft/s)	5.02	5.35
0.13				
Max Chl Dpth (ft)	0.64	Hydr. Depth (ft)	0.54	0.55
0.47				
Conv. Total (cfs)	3078.3	Conv. (cfs)	140.6	2937.7

CPNPPLocalPMP				
0.0 Length Wtd. (ft)	2.00	Wetted Per. (ft)	4.03	68.97
0.47 Min Ch El (ft)	820.68	Shear (lb/sq ft)	0.14	0.16
Alpha 0.00	1.00	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.47
0.01 C & E Loss (ft)	0.00	Cum SA (acres)	0.02	0.65
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.82894*

INPUT

Description:

Station Elevation Data		num= 7		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.77	821	-2.53	821	1.43	820.78	3.72	820.66
72.55	820.83	83	820.83						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.77	.0129	1.43	.0129	3.72	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	3.72	72.55		2	2		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0829.144	772.55	145	838	25.82	79	279

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.72	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	821.36	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.39	Flow Area (sq ft)	2.22	42.02
0.00				
E.G. slope (ft/ft)	0.003396	Area (sq ft)	2.22	42.02
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.99	203.01
0.00				
Top width (ft)	72.55	Top width (ft)	3.72	68.83
Vel Total (ft/s)	4.81	Avg. vel. (ft/s)	4.50	4.83
0.09				
Max Chl Dpth (ft)	0.70	Hydr. Depth (ft)	0.60	0.61
0.53				
Conv. Total (cfs)	3655.1	Conv. (cfs)	171.5	3483.6
0.0				
Length Wtd. (ft)	2.00	wetted Per. (ft)	4.22	68.83
0.53				
Min Ch El (ft)	820.66	Shear (lb/sq ft)	0.11	0.13

CPNPPLocalPMP

Alpha 0.00	1.00	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft) 0.01	0.01	Cum Volume (acre-ft)	0.00	1.47
C & E Loss (ft) 0.02	0.02	Cum SA (acres)	0.02	0.65

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.81579*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.71	821	-2.46	821	1.54	820.77	3.85	820.63	
72.55	820.8	83	820.8							

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.71	.0129	1.54	.0129	3.85	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	3.85	72.55		2	2		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0829.078972	55079	83825	8016	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.69	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.40	wt. n-val.	0.013	0.013
0.000				
w.s. Elev (ft)	821.30	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.36	Flow Area (sq ft)	2.12	39.96
0.00				
E.G. Slope (ft/ft)	0.004008	Area (sq ft)	2.12	39.96
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.93	203.07
0.00				
Top Width (ft)	72.55	Top width (ft)	3.85	68.70
Vel Total (ft/s)	5.06	Avg. Vel. (ft/s)	4.68	5.08
0.06				
Max Chl Dpth (ft)	0.67	Hydr. Depth (ft)	0.55	0.58
0.50				
Conv. Total (cfs)	3364.5	Conv. (cfs)	156.9	3207.7
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	4.29	68.70
0.50				
Min Ch El (ft)	820.63	Shear (lb/sq ft)	0.12	0.15
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.46

0.01
 C & E Loss (ft) 0.00 Cum SA (acres) 0.02 0.65
 0.02

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.80263*

INPUT

Description:

Station Elevation Data num= 7
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -3.65 821 -2.39 821 1.65 820.75 3.98 820.61
 72.55 820.78 83 820.78

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -3.65 .0129 1.65 .0129 3.98 .0129 83 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 3.98 72.55 2 2 2 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0829.013272.55013 83825.7753

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.67	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.30	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.34	Flow Area (sq ft)	2.29	41.78
E.G. Slope (ft/ft)	0.003438	Area (sq ft)	2.29	41.78
0.00				
Q Total (cfs)	213.00	Flow (cfs)	10.18	202.82
Top width (ft)	72.55	Top width (ft)	3.98	68.57
Vel Total (ft/s)	4.83	Avg. vel. (ft/s)	4.46	4.85
Max chl Dpth (ft)	0.69	Hydr. Depth (ft)	0.57	0.61
Conv. Total (cfs)	3632.6	Conv. (cfs)	173.7	3458.9
Length wtd. (ft)	2.00	wetted Per. (ft)	4.44	68.57
Min ch El (ft)	820.61	Shear (lb/sq ft)	0.11	0.13
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.46
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.02	0.64
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.78947*

INPUT

Description:

Station Elevation Data		num= 7		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.59	821	-2.31	821	1.76	820.73	4.11	820.58
72.55	820.75	83	820.75						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.59	.0129	1.76	.0129	4.11	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	4.11	72.55		2	2		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0828.947472	54947	83825.7489				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.66	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.43	wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.22	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.31	Flow Area (sq ft)	2.11	38.28
E.G. slope (ft/ft)	0.004632	Area (sq ft)	2.11	38.28
Q Total (cfs)	213.00	Flow (cfs)	10.23	202.77
Top width (ft)	72.55	Top width (ft)	4.11	68.44
Vel Total (ft/s)	5.27	Avg. vel. (ft/s)	4.86	5.30
Max Chl Dpth (ft)	0.64	Hydr. Depth (ft)	0.51	0.56
Conv. Total (cfs)	3129.6	Conv. (cfs)	150.3	2979.3
Length wtd. (ft)	2.00	wetted Per. (ft)	4.50	68.91
Min Ch El (ft)	820.58	Shear (lb/sq ft)	0.14	0.16
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	0.00	1.46
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.02	0.64
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 6.77631*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.53			-2.24	821	1.87	820.72	4.24	820.55
72.55	820.72	83				820.72				

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129			1.87	.0129	4.24	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	4.24	72.55		2	2		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0828.881672	54881		83825.7226	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.65	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.48	wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.17	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.28	Flow Area (sq ft)	1.98	36.37
E.G. Slope (ft/ft)	0.005492	Area (sq ft)	1.98	36.37
Q Total (cfs)	213.00	Flow (cfs)	9.97	203.03
Top width (ft)	72.55	Top width (ft)	4.24	68.31
Vel Total (ft/s)	5.55	Avg. Vel. (ft/s)	5.04	5.58
Max Chl Dpth (ft)	0.62	Hydr. Depth (ft)	0.47	0.53
Conv. Total (cfs)	2874.2	Conv. (cfs)	134.5	2739.6
Length wtd. (ft)	2.00	wetted Per. (ft)	4.57	68.76
Min Ch El (ft)	820.55	Shear (lb/sq ft)	0.15	0.18
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.46
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.64
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.76315*

CPNPPLocalPMP

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.47	821	-2.17	821	1.98	820.7	4.38	820.53	
72.55	820.7	83	820.7							

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.47	.0129	1.98	.0129	4.38	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	4.38	72.55		2	2		.1	.3

Blocked Obstructions

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0828.8158	72.54816		83825.6963	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.59	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.25	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.26	Flow Area (sq ft)	2.48	43.41
E.G. Slope (ft/ft)	0.003028	Area (sq ft)	2.48	43.41
Q Total (cfs)	213.00	Flow (cfs)	10.42	202.58
Top width (ft)	72.55	Top width (ft)	4.38	68.17
Vel Total (ft/s)	4.64	Avg. vel. (ft/s)	4.20	4.67
Max chl Dpth (ft)	0.72	Hydr. Depth (ft)	0.57	0.64
Conv. Total (cfs)	3870.6	Conv. (cfs)	189.3	3681.3
Length wtd. (ft)	2.00	wetted Per. (ft)	4.80	68.72
Min Ch El (ft)	820.53	Shear (lb/sq ft)	0.10	0.12
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.46
0.01				
C & E Loss (ft)	0.04	Cum SA (acres)	0.01	0.63
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.75*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev

-10	821	-3.41	821	CPNPPLocalPMP	-2.1	821	2.09	820.68	4.51	820.5
72.55	820.67	83	820.67							
Manning's n Values				num=	5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-3.41	.0129	2.09	.0129	4.51	.0129	83	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	4.51	72.55		2	2		.1	.3		
Blocked Obstructions				num=	2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev					
-10	0	828.75	72.5475	83	825.67					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.57	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.42	wt. n-val.	0.013	0.013
w.s. Elev (ft)	821.16	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.23	Flow Area (sq ft)	2.21	39.02
E.G. slope (ft/ft)	0.004312	Area (sq ft)	2.21	39.02
Q Total (cfs)	213.00	Flow (cfs)	10.23	202.77
Top width (ft)	72.55	Top width (ft)	4.51	68.04
vel Total (ft/s)	5.17	Avg. vel. (ft/s)	4.63	5.20
Max chl Dpth (ft)	0.66	Hydr. Depth (ft)	0.49	0.57
Conv. Total (cfs)	3243.6	Conv. (cfs)	155.8	3087.9
Length wtd. (ft)	2.00	wetted Per. (ft)	4.84	68.53
Min ch El (ft)	820.50	Shear (lb/sq ft)	0.12	0.15
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	0.00	1.46
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.01	0.63
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.73684*

INPUT

Description:

Station	Elevation	Data	num=	7					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.35	821	-2.03	821	2.2	820.67	4.64	820.47
72.55	820.64	83	820.64						

Manning's n Values num= 5
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Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.35	.0129	2.2	.0129	4.64	.0129	83	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	4.64	72.55		2	2		.1	.3		
Blocked Obstructions			num=	2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev					
-10		821.684272	72.54684		83825.6437					

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	821.55			
Right OB				
Vel Head (ft)	0.44	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	821.11	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.20	Flow Area (sq ft)	2.11	37.82
E.G. Slope (ft/ft)	0.004786	Area (sq ft)	2.11	37.82
Q Total (cfs)	213.00	Flow (cfs)	9.89	203.11
Top width (ft)	72.55	Top width (ft)	4.64	67.91
Vel Total (ft/s)	5.33	Avg. Vel. (ft/s)	4.70	5.37
Max Chl Dpth (ft)	0.64	Hydr. Depth (ft)	0.45	0.56
Conv. Total (cfs)	3078.9	Conv. (cfs)	143.0	2935.9
Length wtd. (ft)	2.00	wetted Per. (ft)	4.93	68.38
Min Ch El (ft)	820.47	Shear (lb/sq ft)	0.13	0.17
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.45
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.63
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.72368*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.29		821	-1.95	821	2.31	820.65	4.77	820.45
72.55	820.62	83		820.62						

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.29	.0129	2.31	.0129	4.77	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.

		CPNPPLocalPMP							
4.77 72.55		num=		2 2		2		.1 .3	
Blocked Obstructions									
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10		0828.618472.54618		83825.6174					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.51	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	821.15	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.18	Flow Area (sq ft)	2.41	41.72
E.G. Slope (ft/ft)	0.003435	Area (sq ft)	2.41	41.72
Q Total (cfs)	213.00	Flow (cfs)	10.26	202.74
Top width (ft)	72.55	Top width (ft)	4.77	67.78
Vel Total (ft/s)	4.83	Avg. vel. (ft/s)	4.25	4.86
Max chl Dpth (ft)	0.70	Hydr. Depth (ft)	0.51	0.62
Conv. Total (cfs)	3634.1	Conv. (cfs)	175.1	3459.0
Length wtd. (ft)	2.00	wetted Per. (ft)	5.10	68.31
Min ch El (ft)	820.45	shear (lb/sq ft)	0.10	0.13
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.45
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)	0.01	0.63
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.71052*

INPUT

Description:

Station Elevation Data		num=		7					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.23	821	-1.88	821	2.42	820.63	4.9	820.42
72.55	820.59	83	820.59						

Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.23	.0129	2.42	.0129	4.9	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	4.9	72.55		2	2		.1	.3

Blocked Obstructions		num=		2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10		0828.552672.54552		83825.5911					

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.49	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.40	wt. n-val.	0.013	0.013
W.S. Elev (ft)	821.09	Reach Len. (ft)	2.00	2.00
2.00				
Crit W.S. (ft)	821.16	Flow Area (sq ft)	2.27	39.72
E.G. Slope (ft/ft)	0.004043	Area (sq ft)	2.27	39.72
Q Total (cfs)	213.00	Flow (cfs)	10.03	202.97
Top width (ft)	72.55	Top width (ft)	4.90	67.65
Vel Total (ft/s)	5.07	Avg. vel. (ft/s)	4.41	5.11
Max Chl Dpth (ft)	0.67	Hydr. Depth (ft)	0.46	0.59
Conv. Total (cfs)	3350.0	Conv. (cfs)	157.7	3192.2
Length wtd. (ft)	2.00	wetted Per. (ft)	5.17	68.15
Min Ch El (ft)	820.42	Shear (lb/sq ft)	0.11	0.15
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	0.00	1.45
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.62
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.69736*

INPUT

Description:

Station	Elevation	Data	num=	7						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-3.18	821	-1.81	821	2.53	820.62	5.04	820.39	
72.54	820.56	83	820.56							

Manning's n	Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-3.18	.0129	2.53	.0129	5.04	.0129	83	.0129	

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	5.04	72.54		2	2	2	.1	.3	

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0828.486872	54487	83825.5647		

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	821.48	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.45	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	821.03	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.13	Flow Area (sq ft)	2.07	37.44
0.00				
E.G. slope (ft/ft)	0.004888	Area (sq ft)	2.07	37.44
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.47	203.53
0.00				
Top width (ft)	72.54	Top width (ft)	5.04	67.50
Vel Total (ft/s)	5.39	Avg. Vel. (ft/s)	4.57	5.44
0.23				
Max Chl Dpth (ft)	0.64	Hydr. Depth (ft)	0.41	0.55
0.47				
Conv. Total (cfs)	3046.7	Conv. (cfs)	135.4	2911.3
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	5.25	67.50
0.47				
Min Ch El (ft)	820.39	Shear (lb/sq ft)	0.12	0.17
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.45
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.01	0.62
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.68421*

INPUT

Description:

Station	Elevation	Data	num=	7							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.12	821	-1.74	821	2.64	820.6	5.17	820.37		
72.54	820.54	83	820.54								

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.12	.0129	2.64	.0129	5.17	.0129	83	.0129		

Bank Sta: Left 5.17 Right 72.54 Lengths: Left Channel 2 Right 2 Coeff Contr. .1 Expan. .3

Blocked Obstructions		num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10		0828.421172.54421			83825.5384	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.44	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-Val.	0.013	0.013
0.000				

		CPNPPLocalPMP		
W.S. Elev (ft)	821.08	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.11	Flow Area (sq ft)	2.45	42.02
0.00				
E.G. slope (ft/ft)	0.003302	Area (sq ft)	2.45	42.02
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.98	203.02
0.00				
Top width (ft)	72.54	Top width (ft)	5.17	67.37
Vel Total (ft/s)	4.79	Avg. Vel. (ft/s)	4.08	4.83
0.17				
Max Chl Dpth (ft)	0.71	Hydr. Depth (ft)	0.47	0.62
0.54				
Conv. Total (cfs)	3706.7	Conv. (cfs)	173.6	3533.1
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	5.43	67.37
0.54				
Min ch El (ft)	820.37	Shear (lb/sq ft)	0.09	0.13
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.45
0.01				
C & E Loss (ft)	0.03	Cum SA (acres)	0.01	0.62
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.67105*

INPUT

Description:

Station	Elevation	Data	num=	7							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.06	821	-1.67	821	2.75	820.58	5.3	820.34		
72.54	820.51	83	820.51								

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.06	.0129	2.75	.0129	5.3	.0129	83	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 5.3 72.54 2 2 2 .1 .3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0828.355372	54355	83825.5121		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.42	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.40	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	821.02	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.08	Flow Area (sq ft)	2.26	39.82
0.00				

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.003954	Area (sq ft)	2.26
0.00			39.82
Q Total (cfs)	213.00	Flow (cfs)	9.60
0.00			203.40
Top Width (ft)	72.54	Top Width (ft)	5.30
			67.24
Vel Total (ft/s)	5.06	Avg. Vel. (ft/s)	4.24
0.17			5.11
Max Chl Dpth (ft)	0.68	Hydr. Depth (ft)	0.43
0.51			0.59
Conv. Total (cfs)	3387.2	Conv. (cfs)	152.7
0.0			3234.5
Length wtd. (ft)	2.00	wetted Per. (ft)	5.50
0.51			67.24
Min Ch El (ft)	820.34	Shear (lb/sq ft)	0.10
			0.15
Alpha	1.00	Stream Power (lb/ft s)	83.00
0.00			0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00
0.01			1.44
C & E Loss (ft)	0.00	Cum SA (acres)	0.01
0.02			0.61

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.65789*

INPUT

Description:

Station Elevation Data		num= 7	
Sta	Elev	Sta	Elev
-10	821	-3	821
72.54	820.49	83	820.49

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
-10	.0129	-3	.0129
		2.86	.0129
		5.43	.0129
		83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
				2	2		.1	.3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Sta L
-10	0828.289572	54289	83825.4858

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.39	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.38	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	821.02	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.06	Flow Area (sq ft)	2.35	41.08
0.00				
E.G. Slope (ft/ft)	0.003555	Area (sq ft)	2.35	41.08
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.60	203.40
0.00				

		CPNPPLocalPMP		
Top width (ft)	72.54	Top width (ft)	5.43	67.11
Vel Total (ft/s)	4.90	Avg. Vel. (ft/s)	4.08	4.95
0.14				
Max Chl Dpth (ft)	0.70	Hydr. Depth (ft)	0.43	0.61
0.53				
Conv. Total (cfs)	3572.6	Conv. (cfs)	161.0	3411.6
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	5.63	67.11
0.53				
Min Ch El (ft)	820.32	Shear (lb/sq ft)	0.09	0.14
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.44
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.01	0.61
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.64473*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821 -2.94 821	821	-1.52 821	2.97 820.55	5.56 820.29					
72.54 820.46	83 820.46								

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -2.94 .0129	.0129	2.97 .0129	5.56 .0129	83 .0129					

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 5.56 72.54 2 2 2 .1 .3

Blocked Obstructions	num=	2		
Sta L Sta R Elev Sta L Sta R Elev				
-10 0828.223772.54224		83825.4595		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.38	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.44	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	820.94	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.03	Flow Area (sq ft)	2.07	37.98
0.00				
E.G. slope (ft/ft)	0.004633	Area (sq ft)	2.07	37.98
0.00				
Q Total (cfs)	213.00	Flow (cfs)	9.00	204.00
0.00				
Top width (ft)	72.54	Top width (ft)	5.56	66.98
Vel Total (ft/s)	5.32	Avg. Vel. (ft/s)	4.34	5.37
0.13				

Max Chl Dpth (ft) 0.48	0.65	CPNPPLocalPMP Hydr. Depth (ft)	0.37	0.57
Conv. Total (cfs) 0.0	3129.2	Conv. (cfs)	132.3	2996.9
Length Wtd. (ft) 0.48	2.00	wetted Per. (ft)	5.68	66.98
Min Ch El (ft)	820.29	Shear (lb/sq ft)	0.11	0.16
Alpha 0.00	1.01	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft) 0.01	0.01	Cum Volume (acre-ft)	0.00	1.44
C & E Loss (ft) 0.02	0.01	Cum SA (acres)	0.01	0.61

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.63157*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev Sta Elev									
-10 821 -2.88 821 -1.45 821									
72.54 820.43 83 820.43									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val									
-10 .0129 -2.88 .0129 3.08 .0129									
5.7 .0129 83 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
5.7 72.54	2 2		.1	.3

Blocked Obstructions	num=	2		
Sta L Sta R Elev Sta L Sta R Elev				
-10 0828.157972.54158				
83825.4332				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.38	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.49	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	820.89	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	821.01	Flow Area (sq ft)	1.89	36.12
0.00				
E.G. slope (ft/ft)	0.005489	Area (sq ft)	1.89	36.12
0.00				
Q Total (cfs)	213.00	Flow (cfs)	8.51	204.49
0.00				
Top width (ft)	72.54	Top width (ft)	5.70	66.84
Vel Total (ft/s)	5.60	Avg. Vel. (ft/s)	4.51	5.66
0.12				
Max Chl Dpth (ft)	0.63	Hydr. Depth (ft)	0.33	0.54
0.46				
Conv. Total (cfs)	2875.0	Conv. (cfs)	114.8	2760.2
0.0				

Length wtd. (ft) 0.46	2.00	CPNPPLocalPMP Wetted Per. (ft)	5.77	66.84
Min Ch El (ft)	820.26	Shear (lb/sq ft)	0.11	0.19
Alpha 0.00	1.01	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft) 0.01	0.01	Cum Volume (acre-ft)	0.00	1.44
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.01	0.60

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.61842*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821 -2.82 821	-1.38 821	3.19 820.52	5.83 820.24	72.54 820.41	83 820.41				

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -2.82 .0129	3.19 .0129	5.83 .0129	83 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
5.83 72.54	2 2 2	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev	Sta L Sta R Elev	
-10 0828.092172.54092	83825.4068	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.37	Element	Left OB	Channel
Right OB Vel Head (ft) 0.000	0.51	wt. n-val.	0.013	0.013
W.S. Elev (ft) 2.00	820.86	Reach Len. (ft)	2.00	2.00
Crit w.s. (ft) 0.00	820.99	Flow Area (sq ft)	1.80	35.54
E.G. Slope (ft/ft) 0.00	0.005794	Area (sq ft)	1.80	35.54
Q Total (cfs) 0.00	213.00	Flow (cfs)	8.19	204.81
Top Width (ft)	72.54	Top Width (ft)	5.83	66.71
Vel Total (ft/s) 0.08	5.70	Avg. vel. (ft/s)	4.54	5.76
Max Chl Dpth (ft) 0.45	0.62	Hydr. Depth (ft)	0.31	0.53
Conv. Total (cfs) 0.0	2798.4	Conv. (cfs)	107.6	2690.8
Length wtd. (ft) 0.45	2.00	wetted Per. (ft)	5.87	66.71
Min Ch El (ft)	820.24	Shear (lb/sq ft)	0.11	0.19

	Alpha	CPNPPLocalPMP		
0.00	1.01	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.44
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.60
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.60526*

INPUT

Description:

Station	Elevation	Data	num=	7							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.76	821	-1.31	821	3.3	820.5	5.96	820.21		
72.54	820.38	83	820.38								

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.76	.0129	3.3	.0129	5.96	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	5.96	72.54		2	2	2		.1	.3

Blocked Obstructions	num=	2				
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10		0828.026372	54026		83825.3805	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.35	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.54	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	820.81	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.96	Flow Area (sq ft)	1.68	34.59
E.G. Slope (ft/ft)	0.006348	Area (sq ft)	1.68	34.59
0.00				
Q Total (cfs)	213.00	Flow (cfs)	7.87	205.13
Top width (ft)	72.14	Top width (ft)	5.56	66.58
Vel Total (ft/s)	5.87	Avg. vel. (ft/s)	4.69	5.93
Max chl Dpth (ft)	0.60	Hydr. Depth (ft)	0.30	0.52
Conv. Total (cfs)	2673.4	Conv. (cfs)	98.8	2574.7
Length wtd. (ft)	2.00	wetted Per. (ft)	5.59	66.58
Min ch El (ft)	820.21	Shear (lb/sq ft)	0.12	0.21
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.44
0.01				

C & E Loss (ft) 0.02
 0.00 CPNPPLocalPMP
 Cum SA (acres) 0.01 0.60

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.59210*

INPUT

Description:

Station Elevation Data num= 7
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -2.7 821 -1.23 821 3.41 820.48 6.09 820.18
 72.54 820.35 83 820.35

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -2.7 .0129 3.41 .0129 6.09 .0129 83 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 6.09 72.54 2 2 2 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0827.9605 72.5396 83825.3542

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.34	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.57	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.77	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.93	Flow Area (sq ft)	1.56	33.66
E.G. slope (ft/ft)	0.007006	Area (sq ft)	1.56	33.66
Q Total (cfs)	213.00	Flow (cfs)	7.60	205.40
Top width (ft)	71.73	Top width (ft)	5.28	66.45
Vel Total (ft/s)	6.05	Avg. vel. (ft/s)	4.86	6.10
Max Chl Dpth (ft)	0.59	Hydr. Depth (ft)	0.30	0.51
Conv. Total (cfs)	2544.8	Conv. (cfs)	90.8	2454.0
Length Wtd. (ft)	2.00	wetted Per. (ft)	5.32	66.87
Min Ch El (ft)	820.18	Shear (lb/sq ft)	0.13	0.22
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	0.00	1.43
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.59
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.57894*

INPUT

Description:

Station Elevation Data		num= 7		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.64	821	-1.16	821	3.52	820.47	6.22	820.16
72.54	820.33	83	820.33						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.64	.0129	3.52	.0129	6.22	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	6.22	72.54		2	2		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0827.894772	53895	83825.3279				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.32	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.56	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.76	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.91	Flow Area (sq ft)	1.56	34.04
E.G. Slope (ft/ft)	0.006740	Area (sq ft)	1.56	34.04
Q Total (cfs)	213.00	Flow (cfs)	7.50	205.50
Top width (ft)	71.56	Top width (ft)	5.25	66.32
Vel Total (ft/s)	5.98	Avg. vel. (ft/s)	4.80	6.04
Max Chl Dpth (ft)	0.60	Hydr. Depth (ft)	0.30	0.51
Conv. Total (cfs)	2594.5	Conv. (cfs)	91.4	2503.1
Length wtd. (ft)	2.00	wetted Per. (ft)	5.28	66.75
Min Ch El (ft)	820.16	Shear (lb/sq ft)	0.12	0.21
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.43
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.59
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel

RS: 6.56579*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.58			-1.09	821	3.63	820.45	6.36	820.13
72.54	820.3	83				820.3				

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129			-10	.0129	3.63	.0129	6.36	.0129
								83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	6.36	72.54		2	2		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0827.8289	72.53829		83825.3016	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.31	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.59	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.72	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.88	Flow Area (sq ft)	1.47	33.21
E.G. Slope (ft/ft)	0.007316	Area (sq ft)	1.47	33.21
Q Total (cfs)	213.00	Flow (cfs)	7.26	205.74
Top width (ft)	71.20	Top width (ft)	5.02	66.18
Vel Total (ft/s)	6.14	Avg. vel. (ft/s)	4.94	6.20
Max Chl Dpth (ft)	0.59	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2490.3	Conv. (cfs)	84.9	2405.4
Length wtd. (ft)	2.00	wetted Per. (ft)	5.05	66.60
Min Ch El (ft)	820.13	Shear (lb/sq ft)	0.13	0.23
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.43
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.59
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel

RS: 6.55263*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 7		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	-10	821	-1.02	821	3.74	820.43	6.49	820.11
72.54	820.28	-2.52	820.28								

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.52	.0129	3.74	.0129	6.49	.0129
						83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	6.49	72.54		2	2		.1	.3

Blocked Obstructions

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0827.763272	53763	83825.2753		

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	821.28			
Right OB Vel Head (ft)	0.58	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.70	Reach Len. (ft)	2.00	2.00
2.00 Crit w.s. (ft)	820.86	Flow Area (sq ft)	1.50	33.54
E.G. slope (ft/ft)	0.007056	Area (sq ft)	1.50	33.54
Q Total (cfs)	213.00	Flow (cfs)	7.35	205.65
Top width (ft)	71.08	Top width (ft)	5.03	66.05
vel Total (ft/s)	6.08	Avg. vel. (ft/s)	4.90	6.13
Max Chl Dpth (ft)	0.59	Hydr. Depth (ft)	0.30	0.51
Conv. Total (cfs)	2535.6	Conv. (cfs)	87.5	2448.1
Length wtd. (ft)	2.00	wetted Per. (ft)	5.06	66.47
Min Ch El (ft)	820.11	Shear (lb/sq ft)	0.13	0.22
Alpha 0.00	1.00	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft) 0.01	0.01	Cum volume (acre-ft)	0.00	1.43
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.01	0.59

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.53947*

INPUT

Description:

Station Elevation Data		num= 7		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	-10	821	-.95	821	3.85	820.42	6.62	820.08

72.54 820.25 83 820.25 CPNPPLocalPMP

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.46	.0129	3.85	.0129	6.62	.0129	83	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

Left	Right	Left	Channel	Right	Coeff	Contr.	Expan.
6.62	72.54	2	2	2	.1	.3	

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0827.697472	53697	83	825.2489	

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	821.27			
Right OB				
Vel Head (ft)	0.60	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.66	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.83	Flow Area (sq ft)	1.39	32.82
E.G. Slope (ft/ft)	0.007589	Area (sq ft)	1.39	32.82
Q Total (cfs)	213.00	Flow (cfs)	6.93	206.07
Top width (ft)	70.70	Top width (ft)	4.78	65.92
Vel Total (ft/s)	6.23	Avg. Vel. (ft/s)	4.99	6.28
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2445.0	Conv. (cfs)	79.6	2365.4
Length wtd. (ft)	2.00	wetted Per. (ft)	4.82	66.33
Min Ch El (ft)	820.08	Shear (lb/sq ft)	0.14	0.23
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.43
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.58
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.52631*

INPUT

Description:

Station Elevation Data num= 7

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.4	821	-.88	821	3.96	820.4	6.75	820.05
72.54	820.22	83	820.22						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.46	.0129	3.85	.0129	6.62	.0129	83	.0129

	-10	.0129	-2.4	.0129	CPNPPLocalPMP 3.96 .0129	6.75	.0129	83	.0129
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	6.75	72.54		2	2		.1	.3	
Blocked Obstructions	num=		2						
	Sta L	Sta R	Elev	Sta L	Sta R	Elev			
	-10	0827.6316	72.53632		83	25.2226			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.61	wt. n-val.	0.013	0.013
W.S. Elev (ft)	820.63	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.81	Flow Area (sq ft)	1.35	32.71
E.G. Slope (ft/ft)	0.007668	Area (sq ft)	1.35	32.71
Q Total (cfs)	213.00	Flow (cfs)	6.78	206.22
Top width (ft)	70.45	Top width (ft)	4.66	65.79
Vel Total (ft/s)	6.25	Avg. vel. (ft/s)	5.01	6.30
Max chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2432.4	Conv. (cfs)	77.4	2355.0
Length wtd. (ft)	2.00	wetted Per. (ft)	4.70	66.20
Min ch El (ft)	820.05	Shear (lb/sq ft)	0.14	0.24
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.43
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.58
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.51315*

INPUT

Description:

Station	Elevation	Data	num=	7						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-2.34	821	-.8	821	4.07	820.38	6.88	820.03	
72.54	820.2	83	820.2							

Manning's n	Values	num=	5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.34	.0129	4.07	.0129	6.88	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	6.88	72.54		2	2		.1	.3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0827.565872.53566 83825.1963

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.22	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.60	wt. n-val.	0.013	0.013
W.S. Elev (ft)	820.62	Reach Len. (ft)	2.00	2.00
2.00				
Crit W.S. (ft)	820.79	Flow Area (sq ft)	1.38	32.95
E.G. slope (ft/ft)	0.007456	Area (sq ft)	1.38	32.95
Q Total (cfs)	213.00	Flow (cfs)	6.87	206.13
Top width (ft)	70.33	Top width (ft)	4.67	65.66
vel Total (ft/s)	6.20	Avg. vel. (ft/s)	4.98	6.26
Max Chl Dpth (ft)	0.59	Hydr. Depth (ft)	0.30	0.50
Conv. Total (cfs)	2466.8	Conv. (cfs)	79.5	2387.3
Length wtd. (ft)	2.00	wetted Per. (ft)	4.71	66.07
Min Ch El (ft)	820.03	Shear (lb/sq ft)	0.14	0.23
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.42
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.58
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.5*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -2.28 821 -.73 821 4.18 820.37 7.01 820									
72.54 820.17 83 820.17									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -2.28 .0129 4.18 .0129 7.01 .0129 83 .0129									

Bank Sta: Left Right Lengths: Left Channel Right									
7.01 72.54 2 2 2									
Coeff Contr. Expan.									
.1 .3									

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 827.5 72.535 83 825.17

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.19	Element	Left OB	Channel
Right OB Vel Head (ft)	0.61	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	820.58	Reach Len. (ft)	2.00	2.00
2.00 Crit w.s. (ft)	820.76	Flow Area (sq ft)	1.31	32.75
E.G. Slope (ft/ft)	0.007616	Area (sq ft)	1.31	32.75
Q Total (cfs)	213.00	Flow (cfs)	6.54	206.46
Top width (ft)	70.03	Top width (ft)	4.50	65.53
Vel Total (ft/s)	6.25	Avg. Vel. (ft/s)	4.99	6.30
Max chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2440.7	Conv. (cfs)	75.0	2365.7
Length wtd. (ft)	2.00	wetted Per. (ft)	4.54	65.94
Min ch El (ft)	820.00	Shear (lb/sq ft)	0.14	0.24
Alpha 0.00	1.00	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.42
0.01 C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.57
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.48684*

INPUT

Description:

Station Elevation Data num= 7

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.22	821	-.66	821	4.29	820.35	7.15	819.97
72.53	820.14	83	820.14						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.22	.0129	4.29	.0129	7.15	.0129	83	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 7.15 72.53 2 2 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0827.434	272.53434	83	825.1437	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.17	Element	Left OB	Channel
----------------	--------	---------	---------	---------

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.62	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	820.55	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.73	Flow Area (sq ft)	1.29	32.63
0.00				
E.G. slope (ft/ft)	0.007632	Area (sq ft)	1.29	32.63
0.00				
Q Total (cfs)	213.00	Flow (cfs)	6.41	206.59
0.00				
Top width (ft)	69.80	Top width (ft)	4.41	65.38
Vel Total (ft/s)	6.28	Avg. Vel. (ft/s)	4.98	6.33
0.27				
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
0.41				
Conv. Total (cfs)	2438.2	Conv. (cfs)	73.4	2364.9
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	4.45	65.38
0.42				
Min Ch El (ft)	819.97	Shear (lb/sq ft)	0.14	0.24
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.42
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.57
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.47368*

INPUT

Description:

Station Elevation Data		num= 7	
Sta	Elev	Sta	Elev
-10	821	-2.16	821
72.53	820.12	83	820.12

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
-10	.0129	-2.16	.0129
7.28	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	7.28	72.53		2	2		.1	.3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Sta L
-10	0827.368472	53368	83825.1174

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.61	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	820.54	Reach Len. (ft)	2.00	2.00

CPNPPLocalPMP

2.00				
Crit w.s. (ft)	820.71	Flow Area (sq ft)	1.31	32.87
0.00				
E.G. slope (ft/ft)	0.007419	Area (sq ft)	1.31	32.87
0.00				
Q Total (cfs)	213.00	Flow (cfs)	6.49	206.51
0.00				
Top width (ft)	69.69	Top width (ft)	4.44	65.25
Vel Total (ft/s)	6.23	Avg. vel. (ft/s)	4.95	6.28
0.24				
Max Chl Dpth (ft)	0.59	Hydr. Depth (ft)	0.30	0.50
0.42				
Conv. Total (cfs)	2473.0	Conv. (cfs)	75.4	2397.6
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	4.47	65.25
0.42				
Min Ch El (ft)	819.95	Shear (lb/sq ft)	0.14	0.23
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	cum volume (acre-ft)	0.00	1.42
0.01				
C & E Loss (ft)	0.00	cum SA (acres)	0.01	0.57
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.46052*

INPUT

Description:

Station	Elevation	Data	num=	7						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-2.1	821	-.52	821	4.51	820.32	7.41	819.92	
72.53	820.09	83	820.09							

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.1	.0129	4.51	.0129	7.41	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	7.41	72.53		2	2	2		.1	.3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0827.302672	53303	83825.0911		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.61	wt. n-val.	0.013	0.013
0.000				
w.s. Elev (ft)	820.51	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.68	Flow Area (sq ft)	1.25	32.69
0.00				
E.G. slope (ft/ft)	0.007562	Area (sq ft)	1.25	32.69

		CPNPPLocalPMP		
0.00	Q Total (cfs)	213.00	Flow (cfs)	6.20 206.80
0.00	Top Width (ft)	69.41	Top width (ft)	4.28 65.12
	Vel Total (ft/s)	6.28	Avg. Vel. (ft/s)	4.95 6.33
0.21	Max Chl Dpth (ft)	0.59	Hydr. Depth (ft)	0.29 0.50
0.42	Conv. Total (cfs)	2449.3	Conv. (cfs)	71.3 2378.1
0.0	Length wtd. (ft)	2.00	wetted Per. (ft)	4.32 65.12
0.42	Min Ch El (ft)	819.92	Shear (lb/sq ft)	0.14 0.24
Alpha		1.00	Stream Power (lb/ft s)	83.00 0.00
0.00	Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00 1.42
0.01	C & E Loss (ft)	0.00	Cum SA (acres)	0.01 0.56
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.44736*

INPUT

Description:

Station Elevation Data		num= 7							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.04	821	-.44	821	4.62	820.3	7.54	819.89
72.53	820.06	83	820.06						

Manning's n Values		num= 5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.04	.0129	4.62	.0129	7.54	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	7.54	72.53		2	2		.1	.3

Blocked Obstructions		num= 2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10		0827.236872	53237	83825.0647	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.63	wt. n-Val.	0.013	0.013
0.000				
w.s. Elev (ft)	820.47	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.65	Flow Area (sq ft)	1.20	32.25
0.00				
E.G. slope (ft/ft)	0.007903	Area (sq ft)	1.20	32.25
0.00				
Q Total (cfs)	213.00	Flow (cfs)	6.03	206.97
0.00				
Top Width (ft)	69.15	Top width (ft)	4.16	64.99

CPNPPLocalPMP

Vel Total (ft/s) 0.18	6.37	Avg. Vel. (ft/s)	5.01	6.42
Max Chl Dpth (ft) 0.41	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs) 0.0	2395.9	Conv. (cfs)	67.9	2328.0
Length Wtd. (ft) 0.41	2.00	wetted Per. (ft)	4.20	64.99
Min Ch El (ft)	819.89	Shear (lb/sq ft)	0.14	0.24
Alpha 0.00	1.00	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft) 0.01	0.02	Cum Volume (acre-ft)	0.00	1.42
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.01	0.56

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.43421*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -1.98 821 -0.37 821 4.73 820.28 7.67 819.87									
72.53 820.04 83 820.04									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -1.98 .0129 4.73 .0129 7.67 .0129 83 .0129									

Bank Sta: Left Right Lengths: Left Channel Right									
7.67 72.53 2 2 2									
Coeff Contr. Expan.									
.1 .3									

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0827.171172.53171 83825.0384					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.08	Element	Left OB	Channel
Right OB				
Vel Head (ft) 0.000	0.62	wt. n-val.	0.013	0.013
W.S. Elev (ft) 2.00	820.46	Reach Len. (ft)	2.00	2.00
Crit w.s. (ft) 0.00	820.63	Flow Area (sq ft)	1.23	32.48
E.G. slope (ft/ft) 0.00	0.007690	Area (sq ft)	1.23	32.48
Q Total (cfs) 0.00	213.00	Flow (cfs)	6.12	206.88
Top width (ft)	69.05	Top width (ft)	4.18	64.86
Vel Total (ft/s) 0.14	6.32	Avg. Vel. (ft/s)	4.98	6.37
Max Chl Dpth (ft)	0.59	Hydr. Depth (ft)	0.29	0.50

CPNPPLocalPMP

0.42				
Conv. Total (cfs)	2429.0	Conv. (cfs)	69.8	2359.2
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	4.23	64.86
0.42				
Min Ch El (ft)	819.87	Shear (lb/sq ft)	0.14	0.24
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.42
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.56
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.42105*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821	-1.92 821	-.3 821	4.84 820.27	7.81 819.84					
72.53 820.01	83 820.01								

Manning's n Values	num=	5							
Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129	-1.92 .0129	4.84 .0129	7.81 .0129	83 .0129					

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
7.81	72.53	2	2	2	.1	.3	

Blocked Obstructions	num=	2				
Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev
-10 0827.105372.53105	83825.0121					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.06	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.64	wt. n-val.	0.013	0.013
0.000				
w.s. Elev (ft)	820.42	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.61	Flow Area (sq ft)	1.17	32.20
0.00				
E.G. Slope (ft/ft)	0.007915	Area (sq ft)	1.17	32.20
0.00				
Q Total (cfs)	213.00	Flow (cfs)	5.85	207.15
0.00				
Top Width (ft)	68.76	Top width (ft)	4.04	64.72
Vel Total (ft/s)	6.38	Avg. vel. (ft/s)	4.98	6.43
0.11				
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
0.41				
Conv. Total (cfs)	2394.1	Conv. (cfs)	65.7	2328.4
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	4.09	64.72

CPNPPLocalPMP				
0.41 Min Ch El (ft)	819.84	Shear (lb/sq ft)	0.14	0.25
Alpha 0.00	1.00	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft) 0.01	0.02	Cum Volume (acre-ft)	0.00	1.41
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.01	0.56

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.40789*

INPUT

Description:

Station Elevation Data		num= 7		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.86	821	-.23	821	4.95	820.25	7.94	819.82		
72.53	819.99	83	819.99								

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.86	.0129	4.95	.0129	7.94	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	7.94	72.53		2	2	2		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10		0827.0395	72.5304		83824.9858			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.03	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.63	wt. n-Val.	0.013	0.013
0.000				
w.s. Elev (ft)	820.41	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.59	Flow Area (sq ft)	1.20	32.42
0.00				
E.G. Slope (ft/ft)	0.007711	Area (sq ft)	1.20	32.42
0.00				
Q Total (cfs)	213.00	Flow (cfs)	5.93	207.07
0.00				
Top Width (ft)	68.66	Top width (ft)	4.07	64.59
Vel Total (ft/s)	6.34	Avg. vel. (ft/s)	4.96	6.39
0.06				
Max Chl Dpth (ft)	0.59	Hydr. Depth (ft)	0.29	0.50
0.42				
Conv. Total (cfs)	2425.6	Conv. (cfs)	67.6	2358.0
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	4.12	64.59
0.42				
Min Ch El (ft)	819.82	Shear (lb/sq ft)	0.14	0.24
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00

			CPNPPLocalPMP		
0.00	Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.41
0.01	C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.55
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.39473*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -1.8 821 -.16 821 5.06 820.23 8.07 819.79									
72.53 819.96 83 819.96									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -1.8 .0129 5.06 .0129 8.07 .0129 83 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
8.07 72.53	2 2		.1	.3

Blocked Obstructions	num=	2		
Sta L Sta R Elev Sta L Sta R Elev				
-10 0826.973772.52974 83824.9595				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.01	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.64	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.37	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.56	Flow Area (sq ft)	1.16	32.12
E.G. slope (ft/ft)	0.008002	Area (sq ft)	1.16	32.12
Q Total (cfs)	213.00	Flow (cfs)	5.82	207.18
Top width (ft)	68.44	Top width (ft)	3.98	64.46
vel Total (ft/s)	6.40	Avg. vel. (ft/s)	5.00	6.45
Max chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2381.1	Conv. (cfs)	65.1	2316.0
Length wtd. (ft)	2.00	wetted Per. (ft)	4.02	64.87
Min Ch El (ft)	819.79	Shear (lb/sq ft)	0.14	0.25
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.41
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.55

CPNPPLocalPMP

0.02

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.38157*

INPUT

Description:

Station Elevation Data num= 7
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -1.74 821 -.08 821 5.17 820.22 8.2 819.76
 72.53 819.93 83 819.93

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -1.74 .0129 5.17 .0129 8.2 .0129 83 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 8.2 72.53 2 2 2 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0826.907972.52908 83824.9332

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.99	Element	Left OB	Channel
Right OB Vel Head (ft)	0.65	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.34	Reach Len. (ft)	2.00	2.00
2.00 Crit w.s. (ft)	820.53	Flow Area (sq ft)	1.11	31.88
E.G. Slope (ft/ft)	0.008211	Area (sq ft)	1.11	31.88
Q Total (cfs)	213.00	Flow (cfs)	5.55	207.45
Top width (ft)	68.17	Top width (ft)	3.84	64.33
Vel Total (ft/s)	6.46	Avg. vel. (ft/s)	4.99	6.51
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2350.7	Conv. (cfs)	61.2	2289.4
Length wtd. (ft)	2.00	wetted Per. (ft)	3.88	64.74
Min Ch El (ft)	819.76	Shear (lb/sq ft)	0.15	0.25
Alpha 0.00	1.00	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.41
0.01 C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.55
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.36842*

INPUT

Description:

Station Elevation Data		num= 7		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.68	821	-.01	821	5.28	820.2	8.33	819.74		
72.53	819.91	83	819.91								

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.68	.0129	5.28	.0129	8.33	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	8.33	72.53		2	2		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.97	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.64	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.32	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.51	Flow Area (sq ft)	1.13	32.05
E.G. Slope (ft/ft)	0.008032	Area (sq ft)	1.13	32.05
Q Total (cfs)	213.00	Flow (cfs)	5.63	207.37
Top width (ft)	68.07	Top width (ft)	3.87	64.20
Vel Total (ft/s)	6.42	Avg. vel. (ft/s)	4.97	6.47
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2376.6	Conv. (cfs)	62.8	2313.8
Length wtd. (ft)	2.00	wetted Per. (ft)	3.92	64.61
Min Ch El (ft)	819.74	Shear (lb/sq ft)	0.14	0.25
Alpha	1.00	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.41
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.54
0.02				

CROSS SECTION

RIVER: East Channel

REACH: East Channel CPNPPLocalPMP
RS: 6.35526*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.62		821	.06	821	5.39	820.18	8.47	819.71
72.53	819.88	83		819.88						

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129		.0129	5.39	.0129	8.47	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	8.47	72.53		2	2		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0826.776372	52776		83824.8805	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.95	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.66	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.29	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.48	Flow Area (sq ft)	1.11	31.77
E.G. slope (ft/ft)	0.008256	Area (sq ft)	1.11	31.77
Q Total (cfs)	213.00	Flow (cfs)	5.52	207.48
Top width (ft)	67.86	Top width (ft)	3.80	64.06
vel Total (ft/s)	6.48	Avg. vel. (ft/s)	4.99	6.53
Max chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2344.2	Conv. (cfs)	60.7	2283.5
Length wtd. (ft)	2.00	wetted Per. (ft)	3.85	64.47
Min Ch El (ft)	819.71	Shear (lb/sq ft)	0.15	0.25
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.41
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.54
0.02				

CROSS SECTION

RIVER: East Channel
REACH: East Channel RS: 6.34210*

INPUT

Description:

Station Elevation Data	num=	7	CPNPPLocalPMP
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821 -1.56 821	.13 821	5.5 820.17	8.6 819.68
72.53 819.85 83 819.85			
Manning's n Values	num=	5	
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -1.56 .0129	5.5 .0129	8.6 .0129	83 .0129
Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff Contr. Expan.
8.6 72.53	2 2	2	.1 .3
Blocked Obstructions	num=	2	
Sta L Sta R Elev Sta L Sta R Elev			
-10 0826.710572.52711		83824.8542	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.93	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.67	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	820.26	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.45	Flow Area (sq ft)	1.06	31.54
E.G. Slope (ft/ft)	0.008462	Area (sq ft)	1.06	31.54
Q Total (cfs)	213.00	Flow (cfs)	5.25	207.75
Top width (ft)	67.60	Top width (ft)	3.67	63.93
Vel Total (ft/s)	6.53	Avg. Vel. (ft/s)	4.96	6.59
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.49
Conv. Total (cfs)	2315.4	Conv. (cfs)	57.1	2258.3
Length wtd. (ft)	2.00	wetted Per. (ft)	3.72	64.34
Min Ch El (ft)	819.68	Shear (lb/sq ft)	0.15	0.26
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.41
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.54
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.32894*

INPUT

Description:

Station Elevation Data	num=	7
Sta Elev Sta Elev	Sta Elev	Sta Elev
-10 821 -1.5 821	.2 821	5.61 820.15 8.73 819.66
72.53 819.83 83 819.83		

CPNPPLocalPMP

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -1.5 .0129 5.61 .0129 8.73 .0129 83 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 8.73 72.53 2 2 2 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0826.644772.52645 83824.8279

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.90	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.66	wt. n-val.	0.013	0.013
w.s. Elev (ft)	820.24	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.43	Flow Area (sq ft)	1.08	31.68
E.G. Slope (ft/ft)	0.008307	Area (sq ft)	1.08	31.68
Q Total (cfs)	213.00	Flow (cfs)	5.33	207.67
Top width (ft)	67.50	Top width (ft)	3.70	63.80
Vel Total (ft/s)	6.50	Avg. vel. (ft/s)	4.95	6.56
Max chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2337.0	Conv. (cfs)	58.4	2278.5
Length wtd. (ft)	2.00	wetted Per. (ft)	3.75	64.21
Min ch El (ft)	819.66	Shear (lb/sq ft)	0.15	0.26
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.40
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.53
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.31579*

INPUT

Description:

Station Elevation Data num= 7
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -1.44 821 .27 821 5.72 820.13 8.86 819.63
 72.53 819.8 83 819.8

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -1.44 .0129 5.72 .0129 8.86 .0129 83 .0129

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 8.86 72.53 2 2 2 .1 .3
 Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0826.578972.52579 83824.8016

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.88	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.67	wt. n-val.	0.013	0.013
W.S. Elev (ft)	820.21	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.40	Flow Area (sq ft)	1.05	31.42
E.G. slope (ft/ft)	0.008529	Area (sq ft)	1.05	31.42
Q Total (cfs)	213.00	Flow (cfs)	5.20	207.80
Top width (ft)	67.30	Top width (ft)	3.63	63.67
vel Total (ft/s)	6.56	Avg. vel. (ft/s)	4.95	6.61
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.49
Conv. Total (cfs)	2306.3	Conv. (cfs)	56.3	2250.0
Length wtd. (ft)	2.00	wetted Per. (ft)	3.68	64.07
Min ch El (ft)	819.63	Shear (lb/sq ft)	0.15	0.26
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.40
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.53
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.30263*

INPUT

Description:

Station Elevation Data num= 7

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.38	821	.35	821	5.83	820.12	8.99	819.61
72.53	819.78	83	819.78						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.38	.0129	5.83	.0129	8.99	.0129	83	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 8.99 72.53 2 2 2 .1 .3
 Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	CPNPPLocalPMP
-10	0826.513272	52513	83824.7753	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.86	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.67	wt. n-Val.	0.013	0.013
W.S. Elev (ft)	820.19	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.39	Flow Area (sq ft)	1.05	31.55
E.G. Slope (ft/ft)	0.008391	Area (sq ft)	1.05	31.55
Q Total (cfs)	213.00	Flow (cfs)	5.14	207.86
Top width (ft)	67.14	Top width (ft)	3.61	63.54
Vel Total (ft/s)	6.53	Avg. Vel. (ft/s)	4.90	6.59
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.50
Conv. Total (cfs)	2325.3	Conv. (cfs)	56.1	2269.2
Length wtd. (ft)	2.00	wetted Per. (ft)	3.65	63.95
Min Ch El (ft)	819.61	Shear (lb/sq ft)	0.15	0.26
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.40
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.53
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.28947*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.32			.42	821	5.94	820.1	9.13	819.58
72.52	819.75	83				819.75				

Manning's n Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.32	.0129	5.94	.0129	9.13	.0129	83	.0129	

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 9.13 72.52 2 2 2 .1 .3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10			0826.447472	52448		83824.7489		

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.84	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.68	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	820.16	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.36	Flow Area (sq ft)	1.03	31.28
0.00				
E.G. slope (ft/ft)	0.008543	Area (sq ft)	1.03	31.28
0.00				
Q Total (cfs)	213.00	Flow (cfs)	5.01	207.99
0.00				
Top width (ft)	66.94	Top width (ft)	3.55	63.39
Vel Total (ft/s)	6.59	Avg. vel. (ft/s)	4.88	6.65
0.29				
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.49
0.41				
Conv. Total (cfs)	2304.5	Conv. (cfs)	54.2	2250.3
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.60	63.39
0.41				
Min Ch El (ft)	819.58	Shear (lb/sq ft)	0.15	0.26
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.40
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.53
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.27631*

INPUT

Description:

Station Elevation Data		num= 7		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.26	821	.49	821	6.05	820.08	9.26	819.55
72.52	819.72	83	819.72						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.26	.0129	6.05	.0129	9.26	.0129	83	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 9.26 72.52 2 2 2 .1 .3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0826.381672	52382	83824.7226				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.82	Element	Left OB	Channel
Right OB				

		CPNPPLocalPMP		
Vel Head (ft)	0.69	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	820.13	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.33	Flow Area (sq ft)	1.00	31.04
0.00				
E.G. Slope (ft/ft)	0.008757	Area (sq ft)	1.00	31.04
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.89	208.11
0.00				
Top Width (ft)	66.75	Top Width (ft)	3.49	63.26
Vel Total (ft/s)	6.65	Avg. Vel. (ft/s)	4.87	6.71
0.26				
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.49
0.41				
Conv. Total (cfs)	2276.2	Conv. (cfs)	52.3	2224.0
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.53	63.26
0.41				
Min Ch El (ft)	819.55	Shear (lb/sq ft)	0.16	0.27
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.40
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.52
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.26315*

INPUT

Description:

Station	Elevation	Data	num=	7						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-1.2	821	.56	821	6.16	820.07	9.39	819.53	
72.52	819.7	83	819.7							

Manning's n	Values	num=	5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.2	.0129	6.16	.0129	9.39	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	9.39	72.52		2	2	2		.1	.3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0826.3158	72.52316	83	824.6963	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.79	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.69	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	820.11	Reach Len. (ft)	2.00	2.00
2.00				

		CPNPPLocalPMP		
Crit w.s. (ft)	820.31	Flow Area (sq ft)	1.00	31.14
0.00				
E.G. slope (ft/ft)	0.008640	Area (sq ft)	1.00	31.14
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.83	208.17
0.00				
Top width (ft)	66.59	Top width (ft)	3.46	63.13
Vel Total (ft/s)	6.63	Avg. vel. (ft/s)	4.82	6.68
0.23				
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)	0.29	0.49
0.41				
Conv. Total (cfs)	2291.6	Conv. (cfs)	51.9	2239.7
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.51	63.13
0.41				
Min Ch El (ft)	819.53	Shear (lb/sq ft)	0.15	0.27
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.40
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.52
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.25*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.14			.63	821	6.27	820.05	9.52	819.5
72.52	819.67	83				819.67				

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val		
-10	.0129	-1.14			.0129	6.27	.0129	9.52	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	9.52	72.52		2	2	2		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	826.25	72.5225	83	824.67

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.77	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.70	wt. n-Val.	0.013	0.013
0.000				
w.s. Elev (ft)	820.08	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.28	Flow Area (sq ft)	0.98	30.90
0.00				
E.G. slope (ft/ft)	0.008856	Area (sq ft)	0.98	30.90
0.00				

		CPNPPLocalPMP		
Q Total (cfs) 0.00	213.00	Flow (cfs)	4.70	208.30
Top width (ft)	66.40	Top width (ft)	3.40	63.00
Vel Total (ft/s) 0.20	6.68	Avg. Vel. (ft/s)	4.81	6.74
Max Chl Dpth (ft) 0.41	0.58	Hydr. Depth (ft)	0.29	0.49
Conv. Total (cfs) 0.0	2263.4	Conv. (cfs)	50.0	2213.4
Length Wtd. (ft) 0.41	2.00	wetted Per. (ft)	3.45	63.00
Min Ch El (ft)	819.50	Shear (lb/sq ft)	0.16	0.27
Alpha 0.00	1.01	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft) 0.01	0.02	Cum Volume (acre-ft)	0.00	1.40
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.01	0.52

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.23684*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.08	821	.71	821	6.38	820.03	9.65	819.47			
72.52	819.64	83	819.64									

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.08	.0129	6.38	.0129	9.65	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	9.65	72.52		2	2		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0826.184272.52184			83824.6437	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.75	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.71	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	820.04	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.25	Flow Area (sq ft)	0.96	30.67
0.00				
E.G. slope (ft/ft)	0.009065	Area (sq ft)	0.96	30.67
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.59	208.41
0.00				
Top width (ft)	66.22	Top width (ft)	3.34	62.87

		CPNPPLocalPMP		
Vel Total (ft/s)	6.73	Avg. Vel. (ft/s)	4.79	6.80
0.16				
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.29	0.49
0.40				
Conv. Total (cfs)	2237.1	Conv. (cfs)	48.2	2189.0
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.39	62.87
0.40				
Min Ch El (ft)	819.47	Shear (lb/sq ft)	0.16	0.28
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	cum volume (acre-ft)	0.00	1.39
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.51
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.22368*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821 -1.02 821	.78 821	6.49 820.02	9.79 819.45						
72.52 819.62 83 819.62									

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -1.02 .0129	6.49 .0129	9.79 .0129	83 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
9.79 72.52	2 2		.1	.3

Blocked Obstructions	num=	2		
Sta L Sta R Elev	Sta L Sta R Elev			
-10 0826.118472.52119	83824.6174			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.73	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.71	wt. n-val.	0.013	0.013
0.000				
w.s. Elev (ft)	820.02	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.23	Flow Area (sq ft)	0.96	30.73
0.00				
E.G. Slope (ft/ft)	0.008984	Area (sq ft)	0.96	30.73
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.53	208.47
0.00				
Top Width (ft)	66.06	Top width (ft)	3.33	62.73
Vel Total (ft/s)	6.72	Avg. vel. (ft/s)	4.73	6.78
0.12				
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.29	0.49
0.40				

		CPNPPLocalPMP		
Conv. Total (cfs)	2247.2	Conv. (cfs)	47.8	2199.4
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.38	62.73
0.41				
Min Ch El (ft)	819.45	Shear (lb/sq ft)	0.16	0.27
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.39
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.51
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.21052*

INPUT

Description:

Station	Elevation	Data	num=	7						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-.96	821	.85	821	6.6	820	9.92	819.42	
72.52	819.59	83	819.59							

Manning's n	Values	num=	5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.96	.0129	6.6	.0129	9.92	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	9.92	72.52		2	2	2		.1	.3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10		0826.052672	52053		83824.5911

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.71	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.72	wt. n-Val.	0.013	0.013
0.000				
w.s. Elev (ft)	819.99	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.20	Flow Area (sq ft)	0.94	30.49
0.00				
E.G. Slope (ft/ft)	0.009205	Area (sq ft)	0.94	30.49
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.45	208.55
0.00				
Top Width (ft)	65.87	Top width (ft)	3.27	62.60
Vel Total (ft/s)	6.78	Avg. vel. (ft/s)	4.75	6.84
0.07				
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.29	0.49
0.40				
Conv. Total (cfs)	2220.0	Conv. (cfs)	46.4	2173.7
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.32	62.60
0.40				

Min Ch El (ft)	819.42	CPNPPLocalPMP Shear (lb/sq ft)	0.16	0.28
Alpha 0.00	1.01	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft) 0.01	0.02	Cum Volume (acre-ft)	0.00	1.39
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.01	0.51

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.19736*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-	7	821	.92	821	6.71	819.98	10.05	819.39
72.52	819.56	83	7	819.56						

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	5	.0129	6.71	.0129	10.05	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	10.05	72.52	2	2	2	.1	.3	

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
	2		-10	0825.986872	51987	83824.5647		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.69	Element	Left OB	Channel
Right OB Vel Head (ft)	0.73	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.96	Reach Len. (ft)	2.00	2.00
2.00 Crit w.s. (ft)	820.17	Flow Area (sq ft)	0.92	30.26
E.G. slope (ft/ft)	0.009489	Area (sq ft)	0.92	30.26
Q Total (cfs)	213.00	Flow (cfs)	4.41	208.59
Top width (ft)	65.69	Top width (ft)	3.22	62.47
vel Total (ft/s)	6.83	Avg. vel. (ft/s)	4.81	6.89
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
Conv. Total (cfs)	2186.6	Conv. (cfs)	45.3	2141.3
Length wtd. (ft)	2.00	wetted Per. (ft)	3.27	62.87
Min Ch El (ft)	819.39	Shear (lb/sq ft)	0.17	0.29
Alpha 0.00	1.01	Stream Power (lb/ft s)	83.00	0.00

Frctn Loss (ft)	0.02	CPNPPLocalPMP		
0.01		Cum Volume (acre-ft)	0.00	1.39
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.51
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.18421*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821 -0.84 821	.99 821	6.82 819.97	10.18 819.37						
72.52 819.54	83 819.54								

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -0.84 .0129	6.82 .0129	10.18 .0129	83 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
10.18 72.52	2 2		.1	.3

Blocked Obstructions	num=	2		
Sta L Sta R Elev	Sta L Sta R Elev			
-10 0825.921172.51921	83824.5384			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.67	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.73	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.94	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.16	Flow Area (sq ft)	0.91	30.28
E.G. Slope (ft/ft)	0.009445	Area (sq ft)	0.91	30.28
Q Total (cfs)	213.00	Flow (cfs)	4.38	208.62
Top width (ft)	65.54	Top width (ft)	3.20	62.34
Vel Total (ft/s)	6.83	Avg. vel. (ft/s)	4.80	6.89
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.29	0.49
Conv. Total (cfs)	2191.7	Conv. (cfs)	45.1	2146.6
Length wtd. (ft)	2.00	wetted Per. (ft)	3.25	62.74
Min Ch El (ft)	819.37	Shear (lb/sq ft)	0.17	0.28
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.39
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.50
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.17105*

INPUT

Description:

Station	Elevation	Data	num=	7						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-.78	821	1.07	821	6.93	819.95	10.31	819.34	
72.52	819.51	83	819.51							

Manning's n	Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-.78	.0129	6.93	.0129	10.31	.0129	83	.0129	

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	10.31	72.52		2	2		.1	.3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10		0825.855372	51855		83824.5121

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.65	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.74	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.91	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.13	Flow Area (sq ft)	0.90	30.07
E.G. Slope (ft/ft)	0.009646	Area (sq ft)	0.90	30.07
Q Total (cfs)	213.00	Flow (cfs)	4.33	208.67
Top width (ft)	65.36	Top width (ft)	3.15	62.21
Vel Total (ft/s)	6.88	Avg. vel. (ft/s)	4.84	6.94
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
Conv. Total (cfs)	2168.8	Conv. (cfs)	44.1	2124.7
Length wtd. (ft)	2.00	wetted Per. (ft)	3.20	62.61
Min ch El (ft)	819.34	Shear (lb/sq ft)	0.17	0.29
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.39
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.50
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 6.15789*

INPUT

Description:

Station Elevation Data		num= 7		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-0.72	821	1.14	821	7.04	819.93	10.45	819.32		
72.52	819.49	83	819.49								

Manning's n Values		num= 5		Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-0.72	.0129	7.04	.0129	10.45	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	10.45	72.52		2	2		.1	.3

Blocked Obstructions		num= 2		Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0825.7895	72.5179		83	824.4858				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.63	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.74	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.89	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.11	Flow Area (sq ft)	0.91	30.06
E.G. slope (ft/ft)	0.009624	Area (sq ft)	0.91	30.06
Q Total (cfs)	213.00	Flow (cfs)	4.38	208.62
Top width (ft)	65.25	Top width (ft)	3.18	62.07
vel Total (ft/s)	6.88	Avg. vel. (ft/s)	4.84	6.94
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
Conv. Total (cfs)	2171.2	Conv. (cfs)	44.7	2126.5
Length wtd. (ft)	2.00	wetted Per. (ft)	3.23	62.47
Min Ch El (ft)	819.32	Shear (lb/sq ft)	0.17	0.29
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.39
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.50
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.14473*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data num= 7
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -.66 821 1.21 821 7.15 819.92 10.58 819.29
 72.52 819.46 83 819.46

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -.66 .0129 7.15 .0129 10.58 .0129 83 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 10.58 72.52 2 2 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0825.723772.51723 83824.4595

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.75	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.86	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.08	Flow Area (sq ft)	0.88	29.87
E.G. Slope (ft/ft)	0.009812	Area (sq ft)	0.88	29.87
Q Total (cfs)	213.00	Flow (cfs)	4.27	208.73
Top width (ft)	65.03	Top width (ft)	3.09	61.94
Vel Total (ft/s)	6.93	Avg. Vel. (ft/s)	4.87	6.99
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
Conv. Total (cfs)	2150.3	Conv. (cfs)	43.1	2107.2
Length wtd. (ft)	2.00	wetted Per. (ft)	3.14	62.33
Min Ch El (ft)	819.29	Shear (lb/sq ft)	0.17	0.29
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.38
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.49
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.13157*

INPUT

Description:

Station Elevation Data num= 7

Sta	Elev	Sta	Elev	CPNPPLocalPMP	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.6	821	1.28	821	7.26	819.9	10.71	819.26	
72.52	819.43	83	819.43							
Manning's n Values		num=		5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-.6	.0129	7.26	.0129	10.71	.0129	83	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	10.71	72.52		2	2		.1	.3		
Blocked Obstructions		num=		2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev					
-10	0825.6579	72.51658		83824.4332						

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)		Element	Left OB	Channel
	820.59				
Vel Head (ft)	0.76	wt. n-val.		0.013	0.013
w.s. Elev (ft)	819.83	Reach Len. (ft)		2.00	2.00
2.00					
Crit w.s. (ft)	820.05	Flow Area (sq ft)		0.86	29.68
E.G. Slope (ft/ft)	0.009999	Area (sq ft)		0.86	29.68
Q Total (cfs)	213.00	Flow (cfs)		4.22	208.78
Top width (ft)	64.85	Top width (ft)		3.05	61.81
Vel Total (ft/s)	6.97	Avg. vel. (ft/s)		4.90	7.03
Max chl Dpth (ft)	0.57	Hydr. Depth (ft)		0.28	0.48
Conv. Total (cfs)	2130.2	Conv. (cfs)		42.2	2087.9
Length wtd. (ft)	2.00	wetted Per. (ft)		3.10	62.20
Min Ch El (ft)	819.26	Shear (lb/sq ft)		0.17	0.30
Alpha	1.01	Stream Power (lb/ft s)		83.00	0.00
0.00					
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)		0.00	1.38
0.01					
C & E Loss (ft)	0.00	Cum SA (acres)		0.01	0.49
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.11842*

INPUT

Description:

Station	Elevation	Data	num=	7	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.54	821	1.35	821	7.37	819.88	10.84	819.24	
72.52	819.41	83	819.41							

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -.54 .0129 7.37 .0129 10.84 .0129 83 .0129

CPNPPLocalPMP
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 10.84 72.52 2 2 2 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0825.592172.51592 83824.4068

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.57	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.76	wt. n-val.	0.013	0.013
W.S. Elev (ft)	819.81	Reach Len. (ft)	2.00	2.00
2.00				
Crit W.S. (ft)	820.03	Flow Area (sq ft)	0.87	29.63
E.G. slope (ft/ft)	0.010025	Area (sq ft)	0.87	29.63
Q Total (cfs)	213.00	Flow (cfs)	4.26	208.74
Top width (ft)	64.74	Top width (ft)	3.07	61.68
vel Total (ft/s)	6.98	Avg. vel. (ft/s)	4.91	7.04
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
Conv. Total (cfs)	2127.3	Conv. (cfs)	42.5	2084.8
Length wtd. (ft)	2.00	wetted Per. (ft)	3.12	62.07
Min Ch El (ft)	819.24	Shear (lb/sq ft)	0.17	0.30
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.38
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	0.49
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.10526*

INPUT

Description:

Station Elevation Data num= 7
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -.48 821 1.42 821 7.48 819.87 10.97 819.21
 72.52 819.38 83 819.38

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -.48 .0129 7.48 .0129 10.97 .0129 83 .0129

Bank Sta:	Left	Right	Lengths:	CPNPP	Local	PMP			
	10.97	72.52		Left	Channel	Right	Coeff	Contr.	Expan.
Blocked			num=	2	2	2	.1	.3	
Obstructions				2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10		0825.526372	51527	83824	3805				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.54	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.76	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	819.78	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	820.00	Flow Area (sq ft)	0.85	29.69
E.G. Slope (ft/ft)	0.009941	Area (sq ft)	0.85	29.69
Q Total (cfs)	213.00	Flow (cfs)	4.17	208.83
Top width (ft)	64.55	Top width (ft)	3.00	61.55
Vel Total (ft/s)	6.97	Avg. Vel. (ft/s)	4.90	7.03
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
Conv. Total (cfs)	2136.3	Conv. (cfs)	41.8	2094.4
Length wtd. (ft)	2.00	wetted Per. (ft)	3.05	61.94
Min Ch El (ft)	819.21	Shear (lb/sq ft)	0.17	0.30
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.38
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.49
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.09210*

INPUT

Description:

Station	Elevation	Data	num=	7					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.42	821	1.5	821	7.59	819.85	11.11	819.18
72.51	819.35	83	819.35						

Manning's	n Values	num=	5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.42	.0129	7.59	.0129	11.11	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	11.11	72.51		2	2	2	.1	.3	
Blocked			num=	2					
Obstructions				2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev				

-10 0825.460572.51461 CPNPPLocalPMP
83824.3542

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.52	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.77	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	819.75	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	819.97	Flow Area (sq ft)	0.84	29.50
0.00				
E.G. slope (ft/ft)	0.010038	Area (sq ft)	0.84	29.50
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.13	208.87
0.00				
Top width (ft)	64.38	Top width (ft)	2.97	61.40
Vel Total (ft/s)	7.02	Avg. vel. (ft/s)	4.91	7.08
0.32				
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
0.40				
Conv. Total (cfs)	2126.0	Conv. (cfs)	41.2	2084.8
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.02	61.40
0.40				
Min Ch El (ft)	819.18	Shear (lb/sq ft)	0.17	0.30
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.38
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.48
0.02				

CROSS SECTION

RIVER: East Channel
REACH: East Channel RS: 6.07894*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.36 821 1.57 821 7.7 819.83 11.24 819.16									
72.51 819.33 83 819.33									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.36 .0129 7.7 .0129 11.24 .0129 83 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
11.24 72.51 2 2 2 .1 .3

Blocked Obstructions	num=	2		
Sta L Sta R Elev Sta L Sta R Elev				
-10 0825.394772.51395 83824.3279				

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.50	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.77	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	819.73	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	819.96	Flow Area (sq ft)	0.84	29.44
0.00				
E.G. Slope (ft/ft)	0.010075	Area (sq ft)	0.84	29.44
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.16	208.84
0.00				
Top Width (ft)	64.26	Top Width (ft)	2.99	61.27
Vel Total (ft/s)	7.03	Avg. Vel. (ft/s)	4.92	7.09
0.29				
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
0.40				
Conv. Total (cfs)	2122.0	Conv. (cfs)	41.4	2080.6
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.04	61.27
0.40				
Min Ch El (ft)	819.16	Shear (lb/sq ft)	0.17	0.30
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	cum volume (acre-ft)	0.00	1.38
0.01				
C & E Loss (ft)	0.00	cum SA (acres)	0.00	0.48
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.06579*

INPUT

Description:

Station	Elevation	Data	num=	7						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-.3	821	1.64	821	7.81	819.82	11.37	819.13	
72.51	819.3	83	819.3							

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.3	.0129	7.81	.0129	11.37	.0129	83	.0129

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
11.37	72.51	2	2	2	.1	.3	

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0825.328972	51329	83824	3016	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.47	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.77	wt. n-val.	0.013	0.013

CPNPPLocalPMP				
0.000				
W.S. Elev (ft)	819.70	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	819.93	Flow Area (sq ft)	0.83	29.50
0.00				
E.G. Slope (ft/ft)	0.009992	Area (sq ft)	0.83	29.50
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.08	208.92
0.00				
Top width (ft)	64.07	Top width (ft)	2.93	61.14
Vel Total (ft/s)	7.02	Avg. Vel. (ft/s)	4.91	7.08
0.25				
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
0.40				
Conv. Total (cfs)	2130.8	Conv. (cfs)	40.8	2090.0
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	2.98	61.14
0.40				
Min Ch El (ft)	819.13	Shear (lb/sq ft)	0.17	0.30
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.38
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.48
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.05263*

INPUT

Description:

Station Elevation Data num= 7									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.24	821	1.71	821	7.92	819.8	11.5	819.11
72.51	819.28	83	819.28						

Manning's n Values num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.24	.0129	7.92	.0129	11.5	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	11.5	72.51		2	2	2		.1	.3

Blocked Obstructions num= 2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0825.263272	51263	83824.2753		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.45	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.77	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	819.68	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	819.91	Flow Area (sq ft)	0.84	29.43

CPNPPLocalPMP				
0.00				
E.G. Slope (ft/ft)	0.010034	Area (sq ft)	0.84	29.43
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.11	208.89
0.00				
Top width (ft)	63.96	Top width (ft)	2.94	61.01
Vel Total (ft/s)	7.04	Avg. Vel. (ft/s)	4.92	7.10
0.22				
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
0.40				
Conv. Total (cfs)	2126.4	Conv. (cfs)	41.0	2085.4
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	3.00	61.01
0.40				
Min Ch El (ft)	819.11	Shear (lb/sq ft)	0.17	0.30
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.37
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.47
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.03947*

INPUT

Description:

Station Elevation Data		num= 7		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.18	821	1.78	821	8.03	819.78	11.63	819.08
72.51	819.25	83	819.25						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.18	.0129	8.03	.0129	11.63	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	11.63	72.51		2	2		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
	-10		0825.197472.51198		83824.2489		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.42	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.77	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	819.65	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	819.88	Flow Area (sq ft)	0.83	29.48
0.00				
E.G. Slope (ft/ft)	0.009950	Area (sq ft)	0.83	29.48
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.09	208.91

CPNPPLocalPMP

0.00				
Top Width (ft)	63.81	Top Width (ft)	2.93	60.88
Vel Total (ft/s)	7.03	Avg. Vel. (ft/s)	4.91	7.09
0.18				
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
0.40				
Conv. Total (cfs)	2135.4	Conv. (cfs)	41.0	2094.3
0.0				
Length wtd. (ft)	2.00	wetted Per. (ft)	2.98	60.88
0.40				
Min Ch El (ft)	819.08	Shear (lb/sq ft)	0.17	0.30
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.37
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.47
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.02631*

INPUT

Description:

Station	Elevation	Data	num=	7						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-.12	821	1.86	821	8.14	819.77	11.77	819.05	
72.51	819.22	83	819.22							

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.12	.0129	8.14	.0129	11.77	.0129	83	.0129

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
11.77	72.51	2	2	2	.1	.3	

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0825.1316	72.51131	83824.2226		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.39	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.77	wt. n-val.	0.013	0.013
0.000				
w.s. Elev (ft)	819.62	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	819.85	Flow Area (sq ft)	0.82	29.54
0.00				
E.G. Slope (ft/ft)	0.009860	Area (sq ft)	0.82	29.54
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.03	208.97
0.00				
Top Width (ft)	63.62	Top Width (ft)	2.88	60.74
Vel Total (ft/s)	7.01	Avg. Vel. (ft/s)	4.90	7.07

CPNPPLocalPMP

0.14					
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.29	0.49	
0.40					
Conv. Total (cfs)	2145.0	Conv. (cfs)	40.6	2104.5	
0.0					
Length wtd. (ft)	2.00	wetted Per. (ft)	2.94	60.74	
0.40					
Min Ch El (ft)	819.05	Shear (lb/sq ft)	0.17	0.30	
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00	
0.00					
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.37	
0.01					
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.47	
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6.01315*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821 -.06 821	1.93 821	8.25 819.75	11.9 819.03						
72.51 819.2 83 819.2									

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -.06 .0129	8.25 .0129	11.9 .0129	83 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
11.9 72.51	2 2 2	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev	Sta L Sta R Elev	
-10 0825.065872.51066	83824.1963	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.37	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.77	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	819.60	Reach Len. (ft)	2.00	2.00
2.00				
Crit w.s. (ft)	819.83	Flow Area (sq ft)	0.83	29.49
0.00				
E.G. Slope (ft/ft)	0.009891	Area (sq ft)	0.83	29.49
0.00				
Q Total (cfs)	213.00	Flow (cfs)	4.06	208.94
0.00				
Top Width (ft)	63.51	Top width (ft)	2.90	60.61
Vel Total (ft/s)	7.03	Avg. vel. (ft/s)	4.91	7.09
0.09				
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.29	0.49
0.40				
Conv. Total (cfs)	2141.7	Conv. (cfs)	40.8	2100.8

CPNPPLocalPMP				
0.0	Length Wtd. (ft)	2.00	wetted Per. (ft)	2.95 60.61
0.40	Min Ch El (ft)	819.03	Shear (lb/sq ft)	0.17 0.30
Alpha		1.01	Stream Power (lb/ft s)	83.00 0.00
0.00	Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00 1.37
0.01	C & E Loss (ft)	0.00	Cum SA (acres)	0.00 0.47
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 6

INPUT

Description:

Station Elevation Data		num= 6		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	0	821	2	821	12.03	819	72.51	819.17
83	819.17								

Manning's n Values		num= 3		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	12.03	72.51		9.7	9.7		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	72.51	83	824.17		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.35	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.78	wt. n-val.	0.013	0.013
W.S. Elev (ft)	819.57	Reach Len. (ft)	9.70	9.70
9.70				
Crit w.s. (ft)	819.80	Flow Area (sq ft)	0.81	29.30
E.G. Slope (ft/ft)	0.010159	Area (sq ft)	0.81	29.30
Q Total (cfs)	213.00	Flow (cfs)	4.03	208.97
Top width (ft)	63.34	Top width (ft)	2.86	60.48
Vel Total (ft/s)	7.07	Avg. Vel. (ft/s)	4.96	7.13
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)	0.28	0.48
Conv. Total (cfs)	2113.2	Conv. (cfs)	40.0	2073.2
Length Wtd. (ft)	9.70	wetted Per. (ft)	2.91	60.88
Min Ch El (ft)	819.00	Shear (lb/sq ft)	0.18	0.31

CPNPPLocalPMP

Alpha 0.00	1.01	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft) 0.01	0.02	Cum Volume (acre-ft)	0.00	1.37
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.00	0.46

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 5.8*

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821	0 821	2 821	12.03 819	24.12 818.9					
72.51 819.04	83 819.04								

Manning's n Values	num=	4							
Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129	0 .0129	12.03 .0129	83 .0129						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
12.03	72.51	9.7	9.7	9.7		.1	.3

Blocked Obstructions	num=	2				
Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev
-10 0 825	72.508 83 824.04					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.25	Element	Left OB	Channel
Right OB Vel Head (ft)	0.79	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.45	Reach Len. (ft)	9.70	9.70
9.70 Crit w.s. (ft)	819.69	Flow Area (sq ft)	0.51	29.37
E.G. Slope (ft/ft)	0.010268	Area (sq ft)	0.51	29.37
Q Total (cfs)	213.00	Flow (cfs)	2.18	210.82
Top Width (ft)	62.74	Top width (ft)	2.26	60.48
Vel Total (ft/s)	7.13	Avg. Vel. (ft/s)	4.27	7.18
Max Chl Dpth (ft)	0.55	Hydr. Depth (ft)	0.23	0.49
Conv. Total (cfs)	2102.0	Conv. (cfs)	21.6	2080.5
Length wtd. (ft)	9.70	wetted Per. (ft)	2.31	60.89
Min Ch El (ft)	818.90	Shear (lb/sq ft)	0.14	0.31
Alpha 0.00	1.01	Stream Power (lb/ft s)	83.00	0.00
Frctn Loss (ft)	0.10	Cum Volume (acre-ft)	0.00	1.36

0.01
C & E Loss (ft) 0.00 Cum SA (acres) 0.00 0.45
0.02

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
REACH: East Channel RS: 5.6*

INPUT

Description:

Station Elevation Data num= 7
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
-10 821 0 821 2 821 12.03 819 36.22 818.81
72.51 818.91 83 818.91

Manning's n Values num= 4
Sta n Val Sta n Val Sta n Val Sta n Val
-10 .0129 0 .0129 12.03 .0129 83 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
12.03 72.51 9.7 9.7 9.7 .1 .3
Blocked Obstructions num= 2
Sta L Sta R Elev Sta L Sta R Elev
-10 0 825 72.506 83 823.91

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.78	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.37	Reach Len. (ft)	9.70	9.70
9.70				
Crit w.s. (ft)	819.60	Flow Area (sq ft)	0.34	29.76
E.G. Slope (ft/ft)	0.009922	Area (sq ft)	0.34	29.76
Q Total (cfs)	213.00	Flow (cfs)	1.26	211.74
Top width (ft)	62.33	Top width (ft)	1.86	60.48
Vel Total (ft/s)	7.08	Avg. vel. (ft/s)	3.68	7.12
Max chl Dpth (ft)	0.56	Hydr. Depth (ft)	0.19	0.49
Conv. Total (cfs)	2138.3	Conv. (cfs)	12.7	2125.7
Length wtd. (ft)	9.70	wetted Per. (ft)	1.89	60.94
Min ch El (ft)	818.81	Shear (lb/sq ft)	0.11	0.30
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.10	Cum Volume (acre-ft)	0.00	1.36
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.44
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 5.4*

INPUT

Description:

Station Elevation Data		num= 7		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	0	821	2	821	12.03	819	48.31	818.71
72.5	818.78	83	818.78						

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	12.03	.0129	83	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	12.03	72.5		9.7	9.7		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	72.504	83	823.78		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.05	Element	Left OB	Channel
Right OB				
vel Head (ft)	0.72	wt. n-val.	0.013	0.013
0.000				
W.S. Elev (ft)	819.33	Reach Len. (ft)	9.70	9.70
9.70				
Crit w.s. (ft)	819.54	Flow Area (sq ft)	0.27	31.10
0.00				
E.G. slope (ft/ft)	0.008513	Area (sq ft)	0.27	31.10
0.00				
Q Total (cfs)	213.00	Flow (cfs)	0.83	212.17
0.00				
Top width (ft)	62.11	Top width (ft)	1.63	60.47
vel Total (ft/s)	6.79	Avg. vel. (ft/s)	3.13	6.82
0.27				
Max Chl Dpth (ft)	0.62	Hydr. Depth (ft)	0.16	0.51
0.55				
Conv. Total (cfs)	2308.5	Conv. (cfs)	9.0	2299.5
0.0				
Length wtd. (ft)	9.70	wetted Per. (ft)	1.66	60.47
0.55				
Min Ch El (ft)	818.71	Shear (lb/sq ft)	0.08	0.27
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.09	Cum volume (acre-ft)	0.00	1.35
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)	0.00	0.42
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 5.2*

INPUT

Description:

Station Elevation Data num= 7
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 0 821 2 821 12.03 819 60.41 818.62
 72.5 818.65 83 818.65

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 0 .0129 12.03 .0129 83 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 12.03 72.5 9.7 9.7 9.7 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 72.502 83 823.65

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	Element	Left OB	Channel
0.000	819.95	Vel Head (ft)	0.013	0.013
0.00	0.61	wt. n-Val.		
0.00	819.33	Reach Len. (ft)	9.70	9.70
0.00	819.50	Flow Area (sq ft)	0.28	33.74
0.00	0.006493	Area (sq ft)	0.28	33.74
0.00	213.00	Flow (cfs)	0.77	212.23
0.00	62.14	Top width (ft)	1.67	60.47
0.15	6.26	Avg. Vel. (ft/s)	2.77	6.29
0.68	0.71	Hydr. Depth (ft)	0.17	0.56
0.0	2643.3	Conv. (cfs)	9.6	2633.8
0.68	9.70	wetted Per. (ft)	1.70	60.47
0.02	818.62	Shear (lb/sq ft)	0.07	0.23
0.00	1.01	Stream Power (lb/ft s)	83.00	0.00
0.01	0.07	Cum volume (acre-ft)	0.00	1.34
0.02	0.03	Cum SA (acres)	0.00	0.41

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 5

CPNPPLocalPMP

INPUT

Description:

Station	Elevation	Data	num=	6	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	0	821	2	821	12.03	819	72.5	818.52	
83	818.52									

Manning's n	Values	num=	3	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	83	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	12.03	72.5	1.91	1.91	1.91	.1	.3	

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	72.5	83	823.52

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	819.85			
Right OB				
Vel Head (ft)	0.41	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.44	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	819.48	Flow Area (sq ft)	0.48	40.99
E.G. Slope (ft/ft)	0.003450	Area (sq ft)	0.48	40.99
Q Total (cfs)	213.00	Flow (cfs)	1.17	211.83
Top width (ft)	62.67	Top width (ft)	2.20	60.47
Vel Total (ft/s)	5.14	Avg. vel. (ft/s)	2.43	5.17
Max chl Dpth (ft)	0.92	Hydr. Depth (ft)	0.22	0.68
Conv. Total (cfs)	3626.2	Conv. (cfs)	19.8	3606.4
Length wtd. (ft)	1.91	wetted Per. (ft)	2.24	61.39
Min Ch El (ft)	818.52	Shear (lb/sq ft)	0.05	0.14
Alpha	1.01	Stream Power (lb/ft s)	83.00	0.00
0.00				
Frctn Loss (ft)	0.04	Cum Volume (acre-ft)	0.00	1.33
0.01				
C & E Loss (ft)	0.06	Cum SA (acres)	0.00	0.40
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.94444*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev

				CPNPPLocalPMP						
-10	821	-7.71	821	-1.44	821	2.46	820.98	4.95	820.96	
8.35	820.43	14.51	819.45	17.45	818.94	79.93	818.48	90.39	818.48	
Manning's n Values				num=	5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-7.71	.0129	2.46	.0129	17.45	.0129	90.39	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	17.45	79.93		1.91	1.91	1.91	.1	.3		
Blocked Obstructions				num=	2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev					
-10	0	825	79.925	90.39	823.4817					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.83	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.55	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.28	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	819.42	Flow Area (sq ft)	0.34	35.72
E.G. slope (ft/ft)	0.005698	Area (sq ft)	0.34	35.72
Q Total (cfs)	213.00	Flow (cfs)	0.89	212.11
Top width (ft)	64.44	Top width (ft)	1.97	62.48
vel Total (ft/s)	5.91	Avg. vel. (ft/s)	2.65	5.94
Max chl Dpth (ft)	0.80	Hydr. Depth (ft)	0.17	0.57
Conv. Total (cfs)	2821.9	Conv. (cfs)	11.8	2810.0
Length wtd. (ft)	1.91	wetted Per. (ft)	2.00	63.28
Min ch El (ft)	818.48	Shear (lb/sq ft)	0.06	0.20
Alpha	1.01	Stream Power (lb/ft s)	90.39	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	0.00	1.33
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.39
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.88888*

INPUT

Description:

Station Elevation Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-7.25	821	.26	821	4.92	820.96	7.91	820.93
11.97	820.41	19.35	819.42	22.88	818.89	87.35	818.44	97.78	818.44

Manning's n Values num= 5
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Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-7.25	.0129	4.92	.0129	22.88	.0129	97.78	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	22.88	87.35		1.91	1.91	1.91	.1	.3		
Blocked Obstructions			num=	2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev					
-10	0	825	87.35	97.78	823.44					

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	819.81			
Right OB				
Vel Head (ft)	0.62	wt. n-Val.	0.013	0.013
W.S. Elev (ft)	819.18	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	819.36	Flow Area (sq ft)	0.29	33.52
E.G. slope (ft/ft)	0.007337	Area (sq ft)	0.29	33.52
Q Total (cfs)	213.00	Flow (cfs)	0.79	212.21
Top width (ft)	66.43	Top width (ft)	1.96	64.47
Vel Total (ft/s)	6.30	Avg. Vel. (ft/s)	2.73	6.33
Max Chl Dpth (ft)	0.74	Hydr. Depth (ft)	0.15	0.52
Conv. Total (cfs)	2486.7	Conv. (cfs)	9.2	2477.4
Length wtd. (ft)	1.91	wetted Per. (ft)	1.99	65.22
Min Ch El (ft)	818.44	Shear (lb/sq ft)	0.07	0.24
Alpha	1.01	Stream Power (lb/ft s)	97.78	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.00	1.33
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.39
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.83333*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-6.8	821	1.95	821	7.38	820.93	10.86	820.89	
15.6	820.38	24.19	819.39	28.3	818.83	94.78	818.41	105.17	818.41	

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-6.8	.0129	7.38	.0129	28.3	.0129	105.17	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.

	28.3	94.78		CPNPPLocalPMP					
Blocked Obstructions			num=	1.91	1.91	1.91		.1	.3
				2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825	94.775	105.17	823.405				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.79	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.70	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	819.10	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	819.30	Flow Area (sq ft)	0.26	31.67
E.G. Slope (ft/ft)	0.009224	Area (sq ft)	0.26	31.67
Q Total (cfs)	213.00	Flow (cfs)	0.75	212.25
Top width (ft)	68.43	Top width (ft)	1.96	66.48
Vel Total (ft/s)	6.67	Avg. Vel. (ft/s)	2.87	6.70
Max chl Dpth (ft)	0.69	Hydr. Depth (ft)	0.13	0.48
Conv. Total (cfs)	2217.7	Conv. (cfs)	7.8	2210.0
Length wtd. (ft)	1.91	wetted Per. (ft)	1.97	67.16
Min ch El (ft)	818.41	Shear (lb/sq ft)	0.08	0.27
Alpha	1.01	Stream Power (lb/ft s)	105.17	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.33
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.39
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.77777*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -6.35 821 3.64 821 9.85 820.91 13.82 820.85									
19.22 820.36 29.03 819.37 33.72 818.78 102.2 818.37 112.56 818.37									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -6.35 .0129 9.85 .0129 33.72 .0129 112.56 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
33.72 102.2	1.91 1.91 1.91	.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 102.2 112.56823.3667					

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.77	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.74	wt. n-val.	0.013	0.013
w.s. Elev (ft)	819.02	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	819.24	Flow Area (sq ft)	0.23	30.65
E.G. slope (ft/ft)	0.010699	Area (sq ft)	0.23	30.65
Q Total (cfs)	213.00	Flow (cfs)	0.68	212.32
Top width (ft)	70.41	Top width (ft)	1.93	68.48
Vel Total (ft/s)	6.90	Avg. vel. (ft/s)	2.90	6.93
Max Chl Dpth (ft)	0.65	Hydr. Depth (ft)	0.12	0.45
Conv. Total (cfs)	2059.2	Conv. (cfs)	6.6	2052.7
Length wtd. (ft)	1.91	wetted Per. (ft)	1.94	69.13
Min Ch El (ft)	818.37	Shear (lb/sq ft)	0.08	0.30
Alpha	1.01	Stream Power (lb/ft s)	112.56	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	0.00	1.33
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.38
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.72222*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-5.89	821	5.33	821	12.31	820.89	16.77	820.82
22.85	820.33	33.87	819.34	39.14	818.72	109.62	818.33	119.94	818.33

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-5.89	.0129	12.31	.0129	39.14	.0129	119.94	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 39.14 109.62 1.91 1.91 1.91 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	109.625	119.948	23.3284

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	819.74	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.79	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	818.95	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	819.18	Flow Area (sq ft)	0.22	29.77
0.00				
E.G. slope (ft/ft)	0.012094	Area (sq ft)	0.22	29.77
0.00				
Q Total (cfs)	213.00	Flow (cfs)	0.65	212.35
0.00				
Top width (ft)	72.42	Top width (ft)	1.93	70.48
Vel Total (ft/s)	7.10	Avg. Vel. (ft/s)	2.96	7.13
0.37				
Max Chl Dpth (ft)	0.62	Hydr. Depth (ft)	0.11	0.42
0.62				
Conv. Total (cfs)	1936.9	Conv. (cfs)	5.9	1930.9
0.0				
Length wtd. (ft)	1.91	wetted Per. (ft)	1.95	70.48
0.62				
Min Ch El (ft)	818.33	Shear (lb/sq ft)	0.09	0.32
0.00				
Alpha	1.01	Stream Power (lb/ft s)	119.94	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.33
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.38
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.66666*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-5.44	821	7.02	821	14.77	820.87	19.72	820.78		
26.47	820.3	38.71	819.31	44.57	818.67	117.05	818.29	127.33	818.29		

Manning's n Values

num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-5.44	.0129	14.77	.0129	44.57	.0129	127.33	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 44.57 117.05 1.91 1.91 1.91 .1 .3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	117.05	127.33	823.29		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.71	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.82	wt. n-Val.	0.013	0.013

		CPNPPLocalPMP		
W.S. Elev (ft)	818.88	Reach Len. (ft)	1.91	1.91
1.91 Crit w.s. (ft)	819.12	Flow Area (sq ft)	0.21	29.14
E.G. Slope (ft/ft)	0.013647	Area (sq ft)	0.21	29.14
Q Total (cfs)	213.00	Flow (cfs)	0.62	212.38
Top width (ft)	74.42	Top width (ft)	1.94	72.48
Vel Total (ft/s)	7.26	Avg. Vel. (ft/s)	3.00	7.29
Max chl Dpth (ft)	0.59	Hydr. Depth (ft)	0.11	0.40
Conv. Total (cfs)	1823.3	Conv. (cfs)	5.3	1818.0
Length wtd. (ft)	1.91	wetted Per. (ft)	1.95	73.07
Min ch El (ft)	818.29	Shear (lb/sq ft)	0.09	0.34
Alpha 0.00	1.01	Stream Power (lb/ft s)	127.33	0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.00	1.33
0.01 C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.38
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.611111*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.99	821	8.71	821	17.23	820.85	22.68	820.75		
30.1	820.28	43.55	819.29	49.99	818.61	124.47	818.25	134.72	818.25		

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.99	.0129	17.23	.0129	49.99	.0129	134.72	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	49.99	124.47		1.91	1.91		.1	.3
Blocked Obstructions			num=	2				
	Sta L	Sta R	Elev	Sta L	Sta R	Elev		
	-10	0	825	124.475	134.728	23.2517		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.67	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.86	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	818.81	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	819.06	Flow Area (sq ft)	0.20	28.54
0.00				

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.014992	Area (sq ft)	0.20 28.54
Q Total (cfs)	213.00	Flow (cfs)	0.60 212.40
Top Width (ft)	76.41	Top Width (ft)	1.92 74.48
Vel Total (ft/s)	7.41	Avg. Vel. (ft/s)	3.06 7.44
Max Chl Dpth (ft)	0.56	Hydr. Depth (ft)	0.10 0.38
Conv. Total (cfs)	1739.6	Conv. (cfs)	4.9 1734.7
Length wtd. (ft)	1.91	wetted Per. (ft)	1.94 74.48
Min Ch El (ft)	818.25	Shear (lb/sq ft)	0.09 0.36
Alpha	1.01	Stream Power (lb/ft s)	134.72 0.00
Frctn Loss (ft)	0.03	Cum Volume (acre-ft)	0.00 1.32
C & E Loss (ft)	0.00	Cum SA (acres)	0.00 0.38

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.55555*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.53	821	10.4	821	19.69	820.82	25.63	820.71
33.72	820.25	48.39	819.26	55.41	818.56	131.9	818.21	142.11	818.21

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.53	.0129	19.69	.0129	55.41	.0129	142.11	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

55.41	131.9	1.91	1.91	1.91	.1	.3
-------	-------	------	------	------	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	131.9	142.11	823.2134

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.63	Element	Left OB	Channel
Right OB Vel Head (ft)	0.88	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.75	Reach Len. (ft)	1.91	1.91
1.91 Crit w.s. (ft)	819.00	Flow Area (sq ft)	0.19	28.22
E.G. Slope (ft/ft)	0.016288	Area (sq ft)	0.19	28.22
Q Total (cfs)	213.00	Flow (cfs)	0.58	212.42

		CPNPPLocalPMP		
Top width (ft)	78.44	Top width (ft)	1.95	76.49
Vel Total (ft/s)	7.50	Avg. Vel. (ft/s)	3.09	7.53
Max Chl Dpth (ft)	0.54	Hydr. Depth (ft)	0.10	0.37
Conv. Total (cfs)	1668.9	Conv. (cfs)	4.6	1664.4
Length wtd. (ft)	1.91	wetted Per. (ft)	1.95	77.03
Min ch El (ft)	818.21	Shear (lb/sq ft)	0.10	0.37
Alpha	1.01	Stream Power (lb/ft s)	142.11	0.00
0.00		Cum Volume (acre-ft)	0.00	1.32
Frctn Loss (ft)	0.03	Cum SA (acres)	0.00	0.37
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.5*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-4.08	821	12.1	821	22.15	820.8	28.58	820.67	
37.35	820.23	53.23	819.24	60.83	818.5	139.32	818.18	149.5	818.18	

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.08	.0129	22.15	.0129	60.83	.0129	149.5	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 60.83 139.32 1.91 1.91 1.91 .1 .3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	139.325	149.5	823.175			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.59	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.90	wt. n-Val.	0.013	0.013
0.000				
W.S. Elev (ft)	818.70	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	818.95	Flow Area (sq ft)	0.20	27.90
0.00				
E.G. slope (ft/ft)	0.017336	Area (sq ft)	0.20	27.90
0.00				
Q Total (cfs)	213.00	Flow (cfs)	0.63	212.37
0.00				
Top width (ft)	80.50	Top width (ft)	2.01	78.49
Vel Total (ft/s)	7.58	Avg. Vel. (ft/s)	3.21	7.61
0.44				

		CPNPPLocalPMP		
Max Chl Dpth (ft)	0.52	Hydr. Depth (ft)	0.10	0.36
Conv. Total (cfs)	1617.7	Conv. (cfs)	4.8	1612.9
Length Wtd. (ft)	1.91	wetted Per. (ft)	2.02	78.49
Min Ch El (ft)	818.18	Shear (lb/sq ft)	0.11	0.38
Alpha	1.01	Stream Power (lb/ft s)	149.50	0.00
Frctn Loss (ft)	0.03	Cum Volume (acre-ft)	0.00	1.32
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.37

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.44444*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.63	821	13.79	821	24.62	820.78	31.54	820.64			
40.97	820.2	58.07	819.21	66.26	818.44	146.75	818.14	156.89	818.14			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.63	.0129	24.62	.0129	66.26	.0129	156.89	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	66.26	146.75		1.91	1.91		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev
			-10	0	825
			146.75	156.89	823.1367

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.55	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.91	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.63	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	818.89	Flow Area (sq ft)	0.20	27.64
E.G. slope (ft/ft)	0.018657	Area (sq ft)	0.20	27.64
Q Total (cfs)	213.00	Flow (cfs)	0.66	212.34
Top width (ft)	82.55	Top width (ft)	2.06	80.49
Vel Total (ft/s)	7.65	Avg. Vel. (ft/s)	3.30	7.68
Max Chl Dpth (ft)	0.49	Hydr. Depth (ft)	0.10	0.34
Conv. Total (cfs)	1559.4	Conv. (cfs)	4.8	1554.6

		CPNPPLocalPMP		
Length wtd. (ft)	1.91	Wetted Per. (ft)	2.07	80.98
Min Ch El (ft)	818.14	Shear (lb/sq ft)	0.11	0.40
Alpha	1.01	Stream Power (lb/ft s)	156.89	0.00
0.00				
Frctn Loss (ft)	0.03	Cum Volume (acre-ft)	0.00	1.32
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.37
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.38888*

INPUT

Description:

Station Elevation Data		num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-3.17	821	15.48	821	27.08	820.76	34.49	820.6		
44.6	820.18	62.91	819.18	71.68	818.39	154.18	818.1	164.28	818.1		

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.17	.0129	27.08	.0129	71.68	.0129	164.28	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	71.68	154.18		1.91	1.91	1.91		.1	.3

Blocked Obstructions			num= 2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	154.175	164.288	23.0983

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.51	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.93	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.58	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	818.83	Flow Area (sq ft)	0.19	27.39
E.G. Slope (ft/ft)	0.019855	Area (sq ft)	0.19	27.39
Q Total (cfs)	213.00	Flow (cfs)	0.65	212.35
Top Width (ft)	84.57	Top Width (ft)	2.08	82.50
Vel Total (ft/s)	7.72	Avg. vel. (ft/s)	3.33	7.75
Max Chl Dpth (ft)	0.48	Hydr. Depth (ft)	0.09	0.33
Conv. Total (cfs)	1511.6	Conv. (cfs)	4.6	1507.0
Length wtd. (ft)	1.91	wetted Per. (ft)	2.08	82.97
Min Ch El (ft)	818.10	Shear (lb/sq ft)	0.12	0.41

	CPNPP	Local	PMP
Alpha 0.00	1.01	Stream Power (lb/ft s)	164.28 0.00
Frctn Loss (ft) 0.01	0.04	Cum Volume (acre-ft)	0.00 1.32
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.00 0.36

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.33333*

INPUT

Description:

Station	Elevation	Data	num=	10					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.72	821	17.17	821	29.54	820.73	37.45	820.56
48.22	820.15	67.76	819.16	77.1	818.33	161.6	818.06	171.67	818.06

Manning's n	Values	num=	5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.72	.0129	29.54	.0129	77.1	.0129	171.67	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	77.1	161.6		1.91	1.91	1.91	.1	.3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	161.6	171.67	823.06

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.46	Element	Left OB	Channel
Right OB Vel Head (ft)	0.95	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	818.52	Reach Len. (ft)	1.91	1.91
1.91 Crit w.s. (ft)	818.77	Flow Area (sq ft)	0.20	27.15
E.G. Slope (ft/ft)	0.021101	Area (sq ft)	0.20	27.15
Q Total (cfs)	213.00	Flow (cfs)	0.67	212.33
Top width (ft)	86.60	Top width (ft)	2.10	84.50
Vel Total (ft/s)	7.79	Avg. vel. (ft/s)	3.43	7.82
Max chl Dpth (ft)	0.46	Hydr. Depth (ft)	0.09	0.32
Conv. Total (cfs)	1466.3	Conv. (cfs)	4.6	1461.7
Length wtd. (ft)	1.91	wetted Per. (ft)	2.10	84.96
Min ch El (ft)	818.06	Shear (lb/sq ft)	0.12	0.42
Alpha 0.00	1.01	Stream Power (lb/ft s)	171.67	0.00
Frctn Loss (ft) 0.01	0.04	Cum Volume (acre-ft)	0.00	1.32

C & E Loss (ft) 0.02
 0.00 C N P P Local PMP Cum SA (acres) 0.00 0.36

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.27777*

INPUT

Description:

Station Elevation Data num= 10
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -2.27 821 18.86 821 32 820.71 40.4 820.53
 51.85 820.13 72.6 819.13 82.53 818.28 169.03 818.02 179.06 818.02

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -2.27 .0129 32 .0129 82.53 .0129 179.06 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 82.53 169.03 1.91 1.91 1.91 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 169.025 179.06823.0217

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.43	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.97	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.46	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	818.72	Flow Area (sq ft)	0.19	26.87
E.G. slope (ft/ft)	0.022519	Area (sq ft)	0.19	26.87
Q Total (cfs)	213.00	Flow (cfs)	0.66	212.34
Top width (ft)	88.61	Top width (ft)	2.11	86.50
Vel Total (ft/s)	7.87	Avg. vel. (ft/s)	3.47	7.90
Max Chl Dpth (ft)	0.44	Hydr. Depth (ft)	0.09	0.31
Conv. Total (cfs)	1419.4	Conv. (cfs)	4.4	1415.0
Length Wtd. (ft)	1.91	wetted Per. (ft)	2.12	86.94
Min Ch El (ft)	818.02	Shear (lb/sq ft)	0.13	0.43
Alpha	1.01	Stream Power (lb/ft s)	179.06	0.00
0.00				
Frctn Loss (ft)	0.04	Cum volume (acre-ft)	0.00	1.32
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.35
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.22222*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.81	821	20.55	821	34.46	820.69	43.35	820.49
55.47	820.1	77.44	819.1	87.95	818.22	176.45	817.98	186.44	817.98

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.81	.0129	34.46	.0129	87.95	.0129	186.44	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	87.95	176.45		1.91	1.91		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	176.45	186.44	822.9833		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.38	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.98	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.40	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	818.66	Flow Area (sq ft)	0.20	26.70
E.G. Slope (ft/ft)	0.023697	Area (sq ft)	0.20	26.70
Q Total (cfs)	213.00	Flow (cfs)	0.70	212.30
Top width (ft)	90.67	Top width (ft)	2.17	88.50
Vel Total (ft/s)	7.92	Avg. vel. (ft/s)	3.58	7.95
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)	0.09	0.30
Conv. Total (cfs)	1383.7	Conv. (cfs)	4.6	1379.1
Length wtd. (ft)	1.91	wetted Per. (ft)	2.18	88.92
Min Ch El (ft)	817.98	Shear (lb/sq ft)	0.13	0.44
Alpha	1.01	Stream Power (lb/ft s)	186.44	0.00
0.00				
Frctn Loss (ft)	0.04	Cum Volume (acre-ft)	0.00	1.32
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.35
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel

RS: 4.16666*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.36	821	22.25	821	36.92	820.67	46.31	820.46		
59.1	820.08	82.28	819.08	93.37	818.17	183.88	817.95	193.83	817.95		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.36	.0129	36.92	.0129	93.37	.0129	193.83	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 93.37 183.88 1.91 1.91 1.91 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	183.875	193.83	822.945

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	819.32			
Right OB Vel Head (ft)	0.96	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.36	Reach Len. (ft)	1.91	1.91
1.91 Crit w.s. (ft)	818.61	Flow Area (sq ft)	0.21	26.89
E.G. Slope (ft/ft)	0.023819	Area (sq ft)	0.21	26.89
Q Total (cfs)	213.00	Flow (cfs)	0.78	212.22
Top width (ft)	92.79	Top width (ft)	2.28	90.51
Vel Total (ft/s)	7.86	Avg. vel. (ft/s)	3.66	7.89
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)	0.09	0.30
Conv. Total (cfs)	1380.1	Conv. (cfs)	5.1	1375.1
Length wtd. (ft)	1.91	wetted Per. (ft)	2.29	90.91
Min Ch El (ft)	817.95	Shear (lb/sq ft)	0.14	0.44
Alpha	1.01	Stream Power (lb/ft s)	193.83	0.00
0.00 Frctn Loss (ft)	0.05	Cum Volume (acre-ft)	0.00	1.31
0.01 C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.35
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel

RS: 4.11111*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.91	821	23.94	821	39.38	820.65	49.26	820.42		
62.72	820.05	87.12	819.05	98.79	818.11	191.3	817.91	201.22	817.91		

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.91	.0129	39.38	.0129	98.79	.0129	201.22	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	98.79	191.3		1.91	1.91	1.91	.1	.3

Blocked Obstructions

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	191.3	201.22	822.9067

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	819.28			
Right OB				
Vel Head (ft)	0.98	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.30	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	818.55	Flow Area (sq ft)	0.22	26.61
E.G. slope (ft/ft)	0.025381	Area (sq ft)	0.22	26.61
Q Total (cfs)	213.00	Flow (cfs)	0.83	212.17
Top width (ft)	94.84	Top width (ft)	2.33	92.51
vel Total (ft/s)	7.94	Avg. vel. (ft/s)	3.78	7.97
Max Chl Dpth (ft)	0.39	Hydr. Depth (ft)	0.09	0.29
Conv. Total (cfs)	1337.0	Conv. (cfs)	5.2	1331.8
Length wtd. (ft)	1.91	wetted Per. (ft)	2.34	92.90
Min Ch El (ft)	817.91	Shear (lb/sq ft)	0.15	0.45
Alpha	1.01	Stream Power (lb/ft s)	201.22	0.00
0.00				
Frctn Loss (ft)	0.05	Cum volume (acre-ft)	0.00	1.31
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.34
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4.05555*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.45	821	25.63	821	41.85	820.62	52.22	820.38		

66.35	820.03	91.96	819.03	CPNPPLocalPMP	104.22	818.06	198.73	817.87	208.61	817.87	
Manning's n Values		num=		5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.45	.0129	41.85	.0129	104.22	.0129	208.61	.0129		
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.			
	104.22	198.73		1.91	1.91		.1	.3			
Blocked Obstructions		num=		2							
Sta L	Sta R	Elev	Sta L	Sta R	Elev						
-10	0	825	198.725	208.61822	8683						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.23	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.98	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	818.25	Reach Len. (ft)	1.91	1.91
1.91				
Crit w.s. (ft)	818.50	Flow Area (sq ft)	0.22	26.67
E.G. Slope (ft/ft)	0.025906	Area (sq ft)	0.22	26.67
Q Total (cfs)	213.00	Flow (cfs)	0.84	212.16
Top width (ft)	96.87	Top width (ft)	2.37	94.51
Vel Total (ft/s)	7.92	Avg. Vel. (ft/s)	3.81	7.96
Max Chl Dpth (ft)	0.38	Hydr. Depth (ft)	0.09	0.28
Conv. Total (cfs)	1323.4	Conv. (cfs)	5.2	1318.1
Length wtd. (ft)	1.91	wetted Per. (ft)	2.37	94.88
Min Ch El (ft)	817.87	Shear (lb/sq ft)	0.15	0.45
Alpha	1.01	Stream Power (lb/ft s)	208.61	0.00
0.00				
Frctn Loss (ft)	0.05	Cum Volume (acre-ft)	0.00	1.31
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.34
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 4

INPUT

Description:

Station	Elevation	Data	num=	8							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	0	821	27.32	821	69.97	820	96.8	819		
109.64	818	206.15	817.83	216	817.83						

Manning's n Values		num=		3							
Sta	n Val	Sta	n Val	Sta	n Val						

	-10	.0129	0	.0129	CPNPPLocalPMP 216 .0129			
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	109.64	206.15		1.94 1.94	1.94		.1	.3
Blocked Obstructions	num=			2				
	Sta L	Sta R	Elev	Sta L	Sta R	Elev		
	-10	0	825	206.15	216	822.83		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.99	wt. n-val.	0.013	0.013
W.S. Elev (ft)	818.19	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	818.44	Flow Area (sq ft)	0.23	26.50
E.G. Slope (ft/ft)	0.027170	Area (sq ft)	0.23	26.50
Q Total (cfs)	213.00	Flow (cfs)	0.91	212.09
Top width (ft)	98.94	Top width (ft)	2.43	96.51
Vel Total (ft/s)	7.97	Avg. vel. (ft/s)	3.94	8.00
Max chl Dpth (ft)	0.36	Hydr. Depth (ft)	0.09	0.27
Conv. Total (cfs)	1292.2	Conv. (cfs)	5.5	1286.7
Length wtd. (ft)	1.94	wetted Per. (ft)	2.44	96.87
Min ch El (ft)	817.83	Shear (lb/sq ft)	0.16	0.46
Alpha	1.01	Stream Power (lb/ft s)	216.00	0.00
0.00				
Frctn Loss (ft)	0.05	Cum Volume (acre-ft)	0.00	1.31
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.33
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.95652*

INPUT

Description:

Station Elevation Data	num=	17							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821 -3.3 821	-2.53 821	.23 820.97	1.19 820.96	10.88 820.91	28.18 820.91	71.8 819.93	99.25 818.96	112.38 818	137.21 817.83
206.18 817.49	206.26 817.49	207.3 817.71	207.57 817.79	216.66 817.81	219.13 817.81				

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -3.3 .0129	.23 .0129	112.38 .0129	219.13 .0129						

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	112.38	207.57		1.94	1.94		.1	.3
Blocked Obstructions			num=	2				
Sta L	Sta R	Elev	Sta L	Sta R	Elev			
-10	0	825209.2513	219.13822	219.13822	8079			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.12	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	817.99	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	818.26	Flow Area (sq ft)		24.76
0.33				
E.G. Slope (ft/ft)	0.032018	Area (sq ft)		24.76
0.33				
Q Total (cfs)	213.00	Flow (cfs)		210.90
2.10				
Top Width (ft)	94.81	Top width (ft)		93.13
1.68				
Vel Total (ft/s)	8.49	Avg. Vel. (ft/s)		8.52
6.43				
Max Chl Dpth (ft)	0.50	Hydr. Depth (ft)		0.27
0.19				
Conv. Total (cfs)	1190.4	Conv. (cfs)		1178.6
11.7				
Length wtd. (ft)	1.94	wetted Per. (ft)		93.17
1.87				
Min Ch El (ft)	817.49	Shear (lb/sq ft)		0.53
0.35				
Alpha	1.00	Stream Power (lb/ft s)	219.13	0.00
0.00				
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)		1.31
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.33
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.91304*

INPUT

Description:

Station Elevation Data	num=	17								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-10 821 -3.15 821 -2.36 821 .46 820.94 1.44 820.91										
11.35 820.83 29.03 820.81 73.64 819.86 101.7 818.92 115.13 818										
139.23 817.7 206.21 817.15 206.37 817.15 208.46 817.58 208.99 817.76										
219.42 817.79 222.26 817.79										

Manning's n Values	num=	5								
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val										
-10 .0129 -3.15 .0129 .46 .0129 115.13 .0129 222.26 .0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	115.13	208.99		1.94	1.94		.1	.3

Blocked Obstructions num= CPNPPLocalPMP
 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825212.3526 222.26822.7856

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.04	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.28	wt. n-val.		0.013
W.S. Elev (ft)	817.76	Reach Len. (ft)	1.94	1.94
1.94				
Crit W.S. (ft)	818.07	Flow Area (sq ft)		23.49
E.G. slope (ft/ft)	0.028907	Area (sq ft)		23.49
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	74.51	Top width (ft)		74.51
vel Total (ft/s)	9.07	Avg. vel. (ft/s)		9.07
Max Chl Dpth (ft)	0.61	Hydr. Depth (ft)		0.32
Conv. Total (cfs)	1252.8	Conv. (cfs)		1252.8
Length wtd. (ft)	1.94	wetted Per. (ft)		74.59
Min Ch El (ft)	817.15	Shear (lb/sq ft)		0.57
Alpha	1.00	Stream Power (lb/ft s)	222.26	0.00
0.00				
Frctn Loss (ft)	0.06	Cum volume (acre-ft)		1.31
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)		0.33
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.86956*

INPUT

Description:

Station Elevation Data	num=	17							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -3 821 -2.19 821 .69 820.9 1.69 820.87									
11.82 820.74 29.89 820.72 75.47 819.79 104.15 818.89 117.87 818									
141.26 817.57 206.24 816.81 206.47 816.81 209.61 817.46 210.4 817.72									
222.19 817.76 225.39 817.76									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -3 .0129 .69 .0129 117.87 .0129 225.39 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
117.87 210.4	1.94 1.94 1.94	.1	.3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 Page 292

-10 0 825215.4539 CPNPPLocalPMP
225.39822.7635

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.96	Element	Left OB	Channel
Right OB Vel Head (ft)	1.46	wt. n-Val.		0.013
W.S. Elev (ft)	817.50	Reach Len. (ft)	1.94	1.94
1.94 Crit w.s. (ft)	817.87	Flow Area (sq ft)		21.97
E.G. slope (ft/ft)	0.028860	Area (sq ft)		21.97
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	62.92	Top width (ft)		62.92
Vel Total (ft/s)	9.69	Avg. vel. (ft/s)		9.69
Max chl Dpth (ft)	0.69	Hydr. Depth (ft)		0.35
Conv. Total (cfs)	1253.8	Conv. (cfs)		1253.8
Length wtd. (ft)	1.94	wetted Per. (ft)		63.00
Min ch El (ft)	816.81	Shear (lb/sq ft)		0.63
Alpha 0.00	1.00	Stream Power (lb/ft s)	225.39	0.00
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)		1.31
0.01 C & E Loss (ft)	0.02	Cum SA (acres)		0.32
0.02				

CROSS SECTION

RIVER: East Channel
REACH: East Channel RS: 3.82608*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.85	821	-2.02	821	.92	820.87	1.94	820.83		
12.29	820.65	30.74	820.62	77.31	819.72	106.6	818.85	120.61	818		
143.28	817.44	206.27	816.47	206.58	816.47	210.76	817.34	211.82	817.69		
224.95	817.74	228.52	817.74								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.85	.0129	.92	.0129	120.61	.0129	228.52	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

Sta L	Sta R	Length	Length	Coeff	Contr.	Expan.
120.61	211.82	1.94	1.94	1.94	.1	.3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825218.5552	228.52	822.7413	

CROSS SECTION OUTPUT		Profile #PF 1	CPNPPLocalPMP		
E.G. Elev (ft)	818.89	Element		Left OB	Channel
Right OB Vel Head (ft)	1.66	wt. n-Val.			0.013
w.s. Elev (ft)	817.23	Reach Len. (ft)	1.94		1.94
1.94 Crit w.s. (ft)	817.63	Flow Area (sq ft)			20.60
E.G. Slope (ft/ft)	0.028892	Area (sq ft)			20.60
Q Total (cfs)	213.00	Flow (cfs)			213.00
Top width (ft)	53.61	Top width (ft)			53.61
Vel Total (ft/s)	10.34	Avg. Vel. (ft/s)			10.34
Max Chl Dpth (ft)	0.76	Hydr. Depth (ft)			0.38
Conv. Total (cfs)	1253.1	Conv. (cfs)			1253.1
Length wtd. (ft)	1.94	wetted Per. (ft)			53.69
Min Ch El (ft)	816.47	Shear (lb/sq ft)			0.69
Alpha 0.00	1.00	Stream Power (lb/ft s)	228.52		0.00
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)			1.31
0.01 C & E Loss (ft)	0.02	Cum SA (acres)			0.32
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.78260*

INPUT

Description:

Station Elevation Data		num= 17							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.7	821	-1.86	821	1.15	820.84	2.19	820.78
12.75	820.57	31.6	820.53	79.14	819.65	109.05	818.81	123.36	818
145.31	817.31	206.3	816.13	206.69	816.13	211.92	817.21	213.24	817.65
227.72	817.72	231.65	817.72						

Manning's n Values		num= 5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.7	.0129	1.15	.0129	123.36	.0129	231.65	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	123.36	213.24		1.94	1.94	1.94	.1	.3

Blocked Obstructions		num= 2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev		
-10	0	825221.6565	231.65822	231.65822	7191		

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	818.82	Element	Left OB	Channel
Right OB Vel Head (ft)	1.86	wt. n-val.		0.013
W.S. Elev (ft)	816.95	Reach Len. (ft)	1.94	1.94
1.94 Crit W.S. (ft)	817.40	Flow Area (sq ft)		19.44
E.G. Slope (ft/ft)	0.029329	Area (sq ft)		19.44
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top Width (ft)	46.89	Top Width (ft)		46.89
Vel Total (ft/s)	10.96	Avg. Vel. (ft/s)		10.96
Max Chl Dpth (ft)	0.82	Hydr. Depth (ft)		0.41
Conv. Total (cfs)	1243.7	Conv. (cfs)		1243.7
Length wtd. (ft)	1.94	wetted Per. (ft)		46.98
Min Ch El (ft)	816.13	Shear (lb/sq ft)		0.76
Alpha 0.00	1.00	Stream Power (lb/ft s)	231.65	0.00
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)		1.31
0.01 C & E Loss (ft)	0.02	Cum SA (acres)		0.32
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.73913*

INPUT

Description:

Station	Elevation	Data	num=	17					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.55	821	-1.69	821	1.38	820.81	2.45	820.74
13.22	820.48	32.45	820.43	80.97	819.58	111.49	818.77	126.1	818
147.34	817.18	206.34	815.79	206.8	815.79	213.07	817.09	214.66	817.61
230.48	817.7	234.78	817.7						

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.55	.0129	1.38	.0129	126.1	.0129	234.78	.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
126.1	214.66	1.94	1.94	1.94	.1	.3	

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825224.7578	234.78	822.697	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.74	Element	Left OB	Channel
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		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	2.07	wt. n-val.		0.013
w.s. Elev (ft)	816.66	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	817.16	Flow Area (sq ft)		18.43
E.G. slope (ft/ft)	0.030035	Area (sq ft)		18.43
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	41.74	Top width (ft)		41.74
Vel Total (ft/s)	11.56	Avg. Vel. (ft/s)		11.56
Max chl Dpth (ft)	0.87	Hydr. Depth (ft)		0.44
Conv. Total (cfs)	1229.0	Conv. (cfs)		1229.0
Length wtd. (ft)	1.94	wetted Per. (ft)		41.84
Min ch El (ft)	815.79	Shear (lb/sq ft)		0.83
Alpha	1.00	Stream Power (lb/ft s)	234.78	0.00
0.00				
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)		1.31
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)		0.32
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.69565*

INPUT

Description:

Station Elevation Data		num= 17		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.4	821	-1.52	821	1.61	820.77	2.7	820.7		
13.69	820.39	33.31	820.34	82.81	819.51	113.94	818.74	128.84	818		
149.36	817.06	206.37	815.45	206.9	815.45	214.22	816.97	216.08	817.58		
233.25	817.67	237.91	817.67								

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.4	.0129	1.61	.0129	128.84	.0129	237.91	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	128.84	216.08		1.94	1.94		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825227.8591	237.91822.6748					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.66	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.29	wt. n-val.		0.013

CPNPPLocalPMP

W.S. Elev (ft)	816.37	Reach Len. (ft)	1.94	1.94
1.94 Crit w.s. (ft)	816.90	Flow Area (sq ft)		17.55
E.G. Slope (ft/ft)	0.030759	Area (sq ft)		17.55
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	37.58	Top width (ft)		37.58
Vel Total (ft/s)	12.14	Avg. Vel. (ft/s)		12.14
Max Chl Dpth (ft)	0.92	Hydr. Depth (ft)		0.47
Conv. Total (cfs)	1214.5	Conv. (cfs)		1214.5
Length wtd. (ft)	1.94	wetted Per. (ft)		37.69
Min Ch El (ft)	815.45	Shear (lb/sq ft)		0.89
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.91	0.00
Frctn Loss (ft) 0.01	0.06	Cum Volume (acre-ft)		1.30
C & E Loss (ft) 0.02	0.02	Cum SA (acres)		0.31

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.65217*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-2.25	821	-1.35	821	1.83	820.74	2.95	820.65
14.16	820.3	34.17	820.25	84.64	819.44	116.39	818.7	131.59	818
151.39	816.93	206.4	815.11	207.01	815.11	215.37	816.85	217.5	817.54
236.01	817.65	241.04	817.65						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.25	.0129	1.83	.0129	131.59	.0129	241.04	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

131.59	217.5	1.94	1.94	1.94	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825230.9604	241.04	822.6526	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.58	Element	Left OB	Channel
Right OB Vel Head (ft)	2.51	wt. n-val.		0.013
w.s. Elev (ft)	816.07	Reach Len. (ft)	1.94	1.94

CPNPPLocalPMP

1.94			
Crit w.s. (ft)	816.64	Flow Area (sq ft)	16.76
E.G. Slope (ft/ft)	0.031718	Area (sq ft)	16.76
Q Total (cfs)	213.00	Flow (cfs)	213.00
Top Width (ft)	34.28	Top Width (ft)	34.28
Vel Total (ft/s)	12.71	Avg. Vel. (ft/s)	12.71
Max Chl Dpth (ft)	0.96	Hydr. Depth (ft)	0.49
Conv. Total (cfs)	1196.0	Conv. (cfs)	1196.0
Length wtd. (ft)	1.94	wetted Per. (ft)	34.39
Min Ch El (ft)	815.11	Shear (lb/sq ft)	0.97
Alpha	1.00	Stream Power (lb/ft s)	241.04
0.00			
Frctn Loss (ft)	0.06	Cum volume (acre-ft)	1.30
0.01			
C & E Loss (ft)	0.02	Cum SA (acres)	0.31
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.60869*

INPUT

Description:

Station Elevation Data	num=	17							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821 -2.1 821	-1.19 821	2.06 820.71	3.2 820.61	14.63 820.22	35.02 820.15	86.47 819.37	118.84 818.66	134.33 818	153.41 816.8
206.43 814.77	207.12 814.77	216.53 816.72	218.91 817.51	238.78 817.63	244.17 817.63				

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -2.1 .0129	2.06 .0129	134.33 .0129	244.17 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
134.33 218.91	1.94 1.94 1.94	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev	Sta L Sta R Elev	
-10 0 825234.0617	244.17822.6304	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.50	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.73	wt. n-Val.		0.013
w.s. Elev (ft)	815.77	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	816.38	Flow Area (sq ft)		16.06

CPNPPLocalPMP

E.G. slope (ft/ft)	0.032743	Area (sq ft)	16.06
Q Total (cfs)	213.00	Flow (cfs)	213.00
Top width (ft)	31.54	Top width (ft)	31.54
Vel Total (ft/s)	13.26	Avg. Vel. (ft/s)	13.26
Max Chl Dpth (ft)	1.00	Hydr. Depth (ft)	0.51
Conv. Total (cfs)	1177.1	Conv. (cfs)	1177.1
Length wtd. (ft)	1.94	wetted Per. (ft)	31.66
Min ch El (ft)	814.77	Shear (lb/sq ft)	1.04
Alpha 0.00	1.00	Stream Power (lb/ft s)	244.17
Frctn Loss (ft) 0.01	0.06	Cum Volume (acre-ft)	1.30
C & E Loss (ft) 0.02	0.02	Cum SA (acres)	0.31

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.56521*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.95	821	-1.02	821	2.29	820.68	3.45	820.57		
15.09	820.13	35.88	820.06	88.31	819.3	121.29	818.62	137.07	818		
155.44	816.67	206.46	814.43	207.23	814.43	217.68	816.6	220.33	817.47		
241.54	817.61	247.3	817.61								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.95	.0129	2.29	.0129	137.07	.0129	247.3	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 137.07 220.33 1.94 1.94 1.94 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	237.163	247.38	22.6083

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.42	Element	Left OB	Channel
Right OB Vel Head (ft)	2.96	wt. n-val.		0.013
w.s. Elev (ft)	815.46	Reach Len. (ft)	1.94	1.94
1.94 Crit w.s. (ft)	816.11	Flow Area (sq ft)		15.44
E.G. slope (ft/ft)	0.033757	Area (sq ft)		15.44

CPNPPLocalPMP

Q Total (cfs)	213.00	Flow (cfs)	213.00
Top width (ft)	29.20	Top width (ft)	29.20
Vel Total (ft/s)	13.80	Avg. Vel. (ft/s)	13.80
Max Chl Dpth (ft)	1.03	Hydr. Depth (ft)	0.53
Conv. Total (cfs)	1159.3	Conv. (cfs)	1159.3
Length wtd. (ft)	1.94	wetted Per. (ft)	29.33
Min Ch El (ft)	814.43	Shear (lb/sq ft)	1.11
Alpha	1.00	Stream Power (lb/ft s)	247.30
0.00			
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)	1.30
0.01			
C & E Loss (ft)	0.02	Cum SA (acres)	0.31
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.52173*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.8	821	-.85	821	2.52	820.65	3.7	820.52
15.56	820.04	36.73	819.96	90.14	819.23	123.74	818.58	139.82	818
157.46	816.54	206.49	814.09	207.34	814.09	218.83	816.48	221.75	817.43
244.31	817.59	250.43	817.59						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.8	.0129	2.52	.0129	139.82	.0129	250.43	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

139.82	221.75	1.94	1.94	1.94	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825240.2643	250.43	822.5861	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.34	Element	Left OB	Channel
Right OB				
Vel Head (ft)	3.19	wt. n-val.		0.013
w.s. Elev (ft)	815.15	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	815.83	Flow Area (sq ft)		14.87
E.G. slope (ft/ft)	0.034785	Area (sq ft)		14.87
Q Total (cfs)	213.00	Flow (cfs)		213.00

CPNPPLocalPMP

Top width (ft)	27.18	Top width (ft)	27.18
Vel Total (ft/s)	14.32	Avg. Vel. (ft/s)	14.32
Max Chl Dpth (ft)	1.06	Hydr. Depth (ft)	0.55
Conv. Total (cfs)	1142.0	Conv. (cfs)	1142.0
Length wtd. (ft)	1.94	wetted Per. (ft)	27.32
Min Ch El (ft)	814.09	Shear (lb/sq ft)	1.18
Alpha	1.00	Stream Power (lb/ft s)	250.43
0.00			0.00
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)	1.30
0.01			
C & E Loss (ft)	0.02	Cum SA (acres)	0.31
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.47826*

INPUT

Description:

Station	Elevation	Data	num=	17							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.65	821	-.68	821	2.75	820.61	3.95	820.48		
16.03	819.96	37.59	819.87	91.98	819.17	126.19	818.55	142.56	818		
159.49	816.41	206.52	813.74	207.44	813.74	219.99	816.35	223.17	817.4		
247.07	817.56	253.57	817.56								

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.65	.0129	2.75	.0129	142.56	.0129	253.57	.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
142.56	223.17	1.94	1.94	1.94	.1	.3	

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825243.3656	253.57822	253.57822	253.57822

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.25	Element	Left OB	Channel
Right OB				
Vel Head (ft)	3.42	wt. n-Val.		0.013
w.s. Elev (ft)	814.83	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	815.55	Flow Area (sq ft)		14.35
E.G. Slope (ft/ft)	0.035813	Area (sq ft)		14.35
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	25.38	Top width (ft)		25.38

CPNPPLocalPMP

Vel Total (ft/s)	14.85	Avg. Vel. (ft/s)	14.85
Max Chl Dpth (ft)	1.09	Hydr. Depth (ft)	0.57
Conv. Total (cfs)	1125.5	Conv. (cfs)	1125.5
Length Wtd. (ft)	1.94	wetted Per. (ft)	25.53
Min Ch El (ft)	813.74	Shear (lb/sq ft)	1.26
Alpha 0.00	1.00	Stream Power (lb/ft s)	253.57 0.00
Frctn Loss (ft) 0.01	0.07	Cum Volume (acre-ft)	1.30
C & E Loss (ft) 0.02	0.02	Cum SA (acres)	0.31

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.43478*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.5	821	-.52	821	2.98	820.58	4.2	820.43
16.5	819.87	38.45	819.77	93.81	819.1	128.64	818.51	145.31	818
161.51	816.28	206.55	813.4	207.55	813.4	221.14	816.23	224.59	817.36
249.83	817.54	256.7	817.54						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.5	.0129	2.98	.0129	145.31	.0129	256.7	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 145.31 224.59 1.94 1.94 1.94 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825246.4669	256.7822	256.7822	5417

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	3.64	wt. n-val.		0.013
W.S. Elev (ft)	814.52	Reach Len. (ft)	1.94	1.94
1.94				
Crit W.S. (ft)	815.27	Flow Area (sq ft)		13.91
E.G. Slope (ft/ft)	0.036641	Area (sq ft)		13.91
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top Width (ft)	23.86	Top width (ft)		23.86
Vel Total (ft/s)	15.32	Avg. Vel. (ft/s)		15.32

CPNPPLocalPMP

Max Chl Dpth (ft)	1.12	Hydr. Depth (ft)	0.58
Conv. Total (cfs)	1112.8	Conv. (cfs)	1112.8
Length wtd. (ft)	1.94	wetted Per. (ft)	24.01
Min Ch El (ft)	813.40	Shear (lb/sq ft)	1.32
Alpha	1.00	Stream Power (lb/ft s)	256.70
0.00			0.00
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)	1.30
0.01			
C & E Loss (ft)	0.02	Cum SA (acres)	0.31
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.39130*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.35	821	-.35	821	3.21	820.55	4.45	820.39
16.97	819.78	39.3	819.68	95.64	819.03	131.09	818.47	148.05	818
163.54	816.16	206.58	813.06	207.66	813.06	222.29	816.11	226.01	817.32
252.6	817.52	259.83	817.52						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.35	.0129	3.21	.0129	148.05	.0129	259.83	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

148.05	226.01	1.94	1.94	1.94	.1	.3
--------	--------	------	------	------	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825249.5683	259.83822	259.83822	5196

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.07	Element	Left OB	Channel
Right OB				
Vel Head (ft)	3.86	wt. n-val.		0.013
W.S. Elev (ft)	814.21	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	815.00	Flow Area (sq ft)		13.50
E.G. slope (ft/ft)	0.037358	Area (sq ft)		13.50
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	22.49	Top width (ft)		22.49
Vel Total (ft/s)	15.77	Avg. Vel. (ft/s)		15.77
Max Chl Dpth (ft)	1.15	Hydr. Depth (ft)		0.60

CPNPPLocalPMP

Conv. Total (cfs)	1102.0	Conv. (cfs)	1102.0
Length wtd. (ft)	1.94	wetted Per. (ft)	22.65
Min Ch El (ft)	813.06	Shear (lb/sq ft)	1.39
Alpha	1.00	Stream Power (lb/ft s)	259.83
0.00			0.00
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)	1.30
0.01			
C & E Loss (ft)	0.02	Cum SA (acres)	0.31
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.34782*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-1.2	821	-.18	821	3.44	820.52	4.7	820.35
17.44	819.7	40.16	819.58	97.48	818.96	133.54	818.43	150.79	818
165.57	816.03	206.61	812.72	207.77	812.72	223.45	815.98	227.42	817.29
255.36	817.5	262.96	817.5						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.2	.0129	3.44	.0129	150.79	.0129	262.96	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

150.79	227.42	1.94	1.94	1.94	.1	.3
--------	--------	------	------	------	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	252.6696	262.968	22.4974

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	4.09	wt. n-Val.		0.013
w.s. Elev (ft)	813.89	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	814.71	Flow Area (sq ft)		13.12
E.G. Slope (ft/ft)	0.038250	Area (sq ft)		13.12
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	21.28	Top width (ft)		21.28
Vel Total (ft/s)	16.23	Avg. vel. (ft/s)		16.23
Max chl Dpth (ft)	1.17	Hydr. Depth (ft)		0.62
Conv. Total (cfs)	1089.1	Conv. (cfs)		1089.1

CPNPPLocalPMP

Length wtd. (ft)	1.94	wetted Per. (ft)	21.45
Min Ch El (ft)	812.72	Shear (lb/sq ft)	1.46
Alpha	1.00	Stream Power (lb/ft s)	262.96
0.00			0.00
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)	1.30
0.01			
C & E Loss (ft)	0.02	Cum SA (acres)	0.30
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.30434*

INPUT

Description:

Station Elevation Data	num=	17								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-10 821 -1.05 821 -.01 821 3.67 820.48 4.95 820.3										
17.9 819.61 41.01 819.49 99.31 818.89 135.98 818.39 153.54 818										
167.59 815.9 206.64 812.38 207.88 812.38 224.6 815.86 228.84 817.25										
258.13 817.48 266.09 817.48										

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -1.05 .0129 3.67 .0129 153.54 .0129 266.09 .0129									

Bank Sta: Left Right Lengths: Left Channel Right									
153.54 228.84 1.94 1.94 1.94									
Coeff Contr. Expan.									
.1 .3									

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825255.7709 266.09822.4752					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.89	Element	Left OB	Channel
Right OB				
Vel Head (ft)	4.31	wt. n-val.		0.013
w.s. Elev (ft)	813.57	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	814.43	Flow Area (sq ft)		12.78
E.G. Slope (ft/ft)	0.038993	Area (sq ft)		12.78
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top Width (ft)	20.20	Top Width (ft)		20.20
Vel Total (ft/s)	16.67	Avg. Vel. (ft/s)		16.67
Max Chl Dpth (ft)	1.19	Hydr. Depth (ft)		0.63
Conv. Total (cfs)	1078.7	Conv. (cfs)		1078.7
Length wtd. (ft)	1.94	wetted Per. (ft)		20.37

CPNPPLocalPMP

Min Ch El (ft)	812.38	Shear (lb/sq ft)		1.53
Alpha	1.00	Stream Power (lb/ft s)	266.09	0.00
0.00				
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)		1.30
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)		0.30
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.26087*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.9	821	.15	821	3.9	820.45	5.2	820.26
18.37	819.52	41.87	819.4	101.14	818.82	138.43	818.36	156.28	818
169.62	815.77	206.67	812.04	207.98	812.04	225.75	815.74	230.26	817.22
260.89	817.45	269.22	817.45						

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.9	.0129	3.9	.0129	156.28	.0129	269.22	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

156.28	230.26	1.94	1.94	1.94	.1	.3
--------	--------	------	------	------	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825258.8722	269.22	822.4531	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.79	Element	Left OB	Channel
Right OB				
Vel Head (ft)	4.53	wt. n-val.		0.013
W.S. Elev (ft)	813.25	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	814.15	Flow Area (sq ft)		12.47
E.G. slope (ft/ft)	0.039674	Area (sq ft)		12.47
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	19.21	Top width (ft)		19.21
Vel Total (ft/s)	17.09	Avg. vel. (ft/s)		17.09
Max Chl Dpth (ft)	1.21	Hydr. Depth (ft)		0.65
Conv. Total (cfs)	1069.4	Conv. (cfs)		1069.4
Length wtd. (ft)	1.94	wetted Per. (ft)		19.40
Min Ch El (ft)	812.04	Shear (lb/sq ft)		1.59

CPNPPLocalPMP

Alpha	1.00	Stream Power (lb/ft s)	269.22	0.00
0.00				
Frctn Loss (ft)	0.08	Cum Volume (acre-ft)		1.30
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)		0.30
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.21739*

INPUT

Description:

Station Elevation Data	num=	17							
Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821	-0.75 821	0.32 821	4.13 820.42	5.46 820.22	18.84 819.43	42.72 819.3	102.98 818.75	140.88 818.32	159.02 818
171.64 815.64	206.71 811.7	208.09 811.7	226.9 815.62	231.68 817.18	263.66 817.43	272.35 817.43			

Manning's n Values	num=	5							
Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129	-0.75 .0129	4.13 .0129	159.02 .0129	272.35 .0129					

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
159.02	231.68	1.94	1.94	1.94	.1	.3	

Blocked Obstructions	num=	2			
Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev
-10 0 825261.9735	272.35822.4309				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.69	Element	Left OB	Channel
Right OB				
Vel Head (ft)	4.76	wt. n-val.		0.013
w.s. Elev (ft)	812.94	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)	813.86	Flow Area (sq ft)		12.17
E.G. Slope (ft/ft)	0.040396	Area (sq ft)		12.17
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	18.31	Top width (ft)		18.31
Vel Total (ft/s)	17.50	Avg. vel. (ft/s)		17.50
Max Chl Dpth (ft)	1.24	Hydr. Depth (ft)		0.66
Conv. Total (cfs)	1059.8	Conv. (cfs)		1059.8
Length wtd. (ft)	1.94	wetted Per. (ft)		18.51
Min ch El (ft)	811.70	Shear (lb/sq ft)		1.66
Alpha	1.00	Stream Power (lb/ft s)	272.35	0.00

		CPNPPLocalPMP	
0.00			
Frctn Loss (ft)	0.08	Cum Volume (acre-ft)	1.30
0.01			
C & E Loss (ft)	0.02	Cum SA (acres)	0.30
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.17391*

INPUT

Description:

Station Elevation Data	num=	17							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.6 821 .49 821 4.36 820.39 5.71 820.17									
19.31 819.35 43.58 819.21 104.81 818.68 143.33 818.28 161.77 818									
173.67 815.51 206.74 811.36 208.2 811.36 228.06 815.49 233.1 817.14									
266.42 817.41 275.48 817.41									

Manning's n Values	num=	5			
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val					
-10 .0129 -.6 .0129 4.36 .0129 161.77 .0129 275.48 .0129					

Bank Sta: Left Right Lengths: Left Channel Right	Coeff	Contr.	Expan.
161.77 233.1 1.94 1.94 1.94		.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825265.0748 275.48822.4087		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.		0.013
W.S. Elev (ft)	815.17	Reach Len. (ft)	1.94	1.94
1.94				
Crit W.S. (ft)	813.57	Flow Area (sq ft)		98.14
E.G. Slope (ft/ft)	0.000147	Area (sq ft)		98.14
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top Width (ft)	50.10	Top width (ft)		50.10
Vel Total (ft/s)	2.17	Avg. Vel. (ft/s)		2.17
Max Chl Dpth (ft)	3.81	Hydr. Depth (ft)		1.96
Conv. Total (cfs)	17550.9	Conv. (cfs)		17550.9
Length wtd. (ft)	1.94	wetted Per. (ft)		50.73
Min Ch El (ft)	811.36	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	275.48	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.29

CPNPPLocalPMP

0.01
 C & E Loss (ft) 0.00 Cum SA (acres) 0.30
 0.02

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.13043*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.45	821	.66	821	4.59	820.36	5.96	820.13		
19.78	819.26	44.44	819.11	106.65	818.61	145.78	818.24	164.51	818		
175.69	815.39	206.77	811.02	208.31	811.02	229.21	815.37	234.52	817.11		
269.19	817.39	278.61	817.39								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.45	.0129	4.59	.0129	164.51	.0129	278.61	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 164.51 234.52 1.94 1.94 1.94 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	268.1761	278.61822	3865

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	815.18	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)		Flow Area (sq ft)		109.34
E.G. slope (ft/ft)	0.000106	Area (sq ft)		109.34
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	51.07	Top width (ft)		51.07
vel Total (ft/s)	1.95	Avg. vel. (ft/s)		1.95
Max Chl Dpth (ft)	4.16	Hydr. Depth (ft)		2.14
Conv. Total (cfs)	20726.4	Conv. (cfs)		20726.4
Length wtd. (ft)	1.94	wetted Per. (ft)		51.79
Min Ch El (ft)	811.02	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	278.61	0.00
0.00				

Frctn Loss (ft)	0.01	0.00	CPNPPLocalPMP Cum Volume (acre-ft)	1.29
C & E Loss (ft)	0.02	0.00	Cum SA (acres)	0.30

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.08695*

INPUT

Description:

Station Elevation Data	num=	17
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-10 821 -.3 821 .82 821 4.82 820.32 6.21 820.09		
20.24 819.17 45.29 819.02 108.48 818.54 148.23 818.21 167.25 818		
177.72 815.26 206.8 810.68 208.41 810.68 230.36 815.25 235.93 817.07		
271.95 817.36 281.74 817.36		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
-10 .0129 -.3 .0129 4.82 .0129 167.25 .0129 281.74 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
167.25 235.93	1.94 1.94 1.94	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825271.2774 281.74822.3644		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.23	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.		0.013
w.s. Elev (ft)	815.18	Reach Len. (ft)	1.94	1.94
1.94				
Crit w.s. (ft)		Flow Area (sq ft)		120.34
E.G. Slope (ft/ft)	0.000078	Area (sq ft)		120.34
Q Total (cfs)	213.00	Flow (cfs)		213.00
Top width (ft)	51.83	Top width (ft)		51.83
Vel Total (ft/s)	1.77	Avg. vel. (ft/s)		1.77
Max chl Dpth (ft)	4.50	Hydr. Depth (ft)		2.32
Conv. Total (cfs)	24053.1	Conv. (cfs)		24053.1
Length wtd. (ft)	1.94	wetted Per. (ft)		52.65
Min ch El (ft)	810.68	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	281.74	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.29
0.01				

C & E Loss (ft) 0.02
 0.00 CPNPPLocalPMP Cum SA (acres) 0.30

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3.04347*

INPUT

Description:

Station Elevation Data		num= 17		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.15	821	.99	821	5.04	820.29	6.46	820.04		
20.71	819.09	46.15	818.92	110.31	818.47	150.68	818.17	170	818		
179.74	815.13	206.83	810.34	208.52	810.34	231.52	815.12	237.35	817.04		
274.72	817.34	284.87	817.34								

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.15	.0129	5.04	.0129	170	.0129	284.87	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	170	237.35		1.94	1.94	1.94		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825274.3787	284.87822.3422					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.23	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
w.s. Elev (ft)	815.19	Reach Len. (ft)	1.94	1.94
1.94		Flow Area (sq ft)		131.23
Crit w.s. (ft)		Area (sq ft)		131.23
E.G. Slope (ft/ft)	0.000059	Flow (cfs)		213.00
Q Total (cfs)	213.00	Top width (ft)		52.19
Top width (ft)	52.19	Avg. vel. (ft/s)		1.62
vel Total (ft/s)	1.62	Hydr. Depth (ft)		2.51
Max chl Dpth (ft)	4.85	Conv. (cfs)		27624.9
Conv. Total (cfs)	27624.9	wetted Per. (ft)		53.12
Length wtd. (ft)	1.94	Shear (lb/sq ft)		0.01
Min ch El (ft)	810.34	Stream Power (lb/ft s)	284.87	0.00
Alpha	1.00	Cum volume (acre-ft)		1.28
0.00		Cum SA (acres)		0.29
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.02			
0.02				

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CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 3

INPUT

Description:

Station	Elevation	Data	num=	13							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	0	821	1.16	821	6.71	820	21.18	819	819	819
172.74	818	181.77	815	206.86	810	208.63	810	232.67	815	815	815
238.77	817	277.48	817.32	288	817.32						

Manning's n	Values	num=	3		
Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	172.74	238.77		1	1		.1	.3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	277.48	288	822.32

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.21	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.28	wt. n-val.		0.013
w.s. Elev (ft)	814.92	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		127.77
E.G. Slope (ft/ft)	0.000404	Area (sq ft)		127.77
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	50.14	Top width (ft)		50.14
Vel Total (ft/s)	4.27	Avg. vel. (ft/s)		4.27
Max Chl Dpth (ft)	4.92	Hydr. Depth (ft)		2.55
Conv. Total (cfs)	27099.8	Conv. (cfs)		27099.8
Length wtd. (ft)	1.00	wetted Per. (ft)		51.13
Min Ch El (ft)	810.00	Shear (lb/sq ft)		0.06
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.27
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.29
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.98666*

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.01	821	1.09	821	1.15	821	2.5	820.76		
6.69	820	7.39	819.95	14.44	819.46	21.14	819	120.85	818.34		
172.5	817.99	181.56	814.98	189.78	813.33	206.76	809.99	208.5	809.99		
225.47	813.47	232.66	814.98	238.79	816.99	277.32	817.31	277.48	817.31		
288	817.31										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.01	.0129	1.09	.0129	172.5	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	172.5	238.79		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.4815	288822.3065					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.20	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.27	wt. n-val.		0.013
w.s. Elev (ft)	814.93	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		129.77
E.G. Slope (ft/ft)	0.000388	Area (sq ft)		129.77
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	50.59	Top width (ft)		50.59
Vel Total (ft/s)	4.20	Avg. vel. (ft/s)		4.20
Max Chl Dpth (ft)	4.94	Hydr. Depth (ft)		2.57
Conv. Total (cfs)	27650.6	Conv. (cfs)		27650.6
Length wtd. (ft)	1.00	wetted Per. (ft)		51.58
Min ch El (ft)	809.99	Shear (lb/sq ft)		0.06
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.27
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.29
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 2.97333*

INPUT

Description:

Station Elevation Data		num=		21							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.03	821	1.08	821	1.13	821	2.48	820.76		
6.67	820	7.37	819.95	14.41	819.45	21.1	819	120.68	818.33		
172.26	817.97	181.36	814.96	189.61	813.28	206.65	809.98	208.38	809.98		
225.43	813.42	232.65	814.95	238.8	816.97	277.33	817.29	277.49	817.29		
288	817.29										

Manning's n Values		num=		5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.03	.0129	1.08	.0129	172.26	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	172.26	238.8		1	1		.1	.3

Blocked Obstructions		num=		2							
Sta L	Sta R	Elev	Sta L	Sta R	Elev						
-10	0	825277.4829		288822.2931							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.20	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.26	wt. n-val.		0.013
w.s. Elev (ft)	814.93	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		132.13
Crit w.s. (ft)		Area (sq ft)		132.13
E.G. slope (ft/ft)	0.000370	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		51.09
Top width (ft)	51.09	Avg. vel. (ft/s)		4.12
vel Total (ft/s)	4.12	Hydr. Depth (ft)		2.59
Max Chl Dpth (ft)	4.95	Conv. (cfs)		28315.7
Conv. Total (cfs)	28315.7	wetted Per. (ft)		52.07
Length Wtd. (ft)	1.00	Shear (lb/sq ft)		0.06
Min Ch El (ft)	809.98	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum volume (acre-ft)		1.27
0.00		Cum SA (acres)		0.29
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 2.96*

INPUT

Description:

Station	Elevation	Data	num=	21	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.04	821	1.06	821	1.12	821	2.47	820.77	
6.64	820.01	7.34	819.95	14.38	819.44	21.06	819	120.5	818.33	
172.01	817.96	181.15	814.93	189.43	813.24	206.55	809.97	208.25	809.97	
225.38	813.37	232.63	814.93	238.82	816.96	277.33	817.28	277.49	817.28	
288	817.28									

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.04	.0129	1.06	.0129	172.01	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	172.01	238.82		1	1	1		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825277.4844	288822.2796		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.26	wt. n-Val.		0.013
w.s. Elev (ft)	814.94	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		134.33
Crit w.s. (ft)		Area (sq ft)		134.33
E.G. Slope (ft/ft)	0.000355	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		51.54
Top width (ft)	51.54	Avg. Vel. (ft/s)		4.06
Vel Total (ft/s)	4.06	Hydr. Depth (ft)		2.61
Max Chl Dpth (ft)	4.97	Conv. (cfs)		28938.6
Conv. Total (cfs)	28938.6	wetted Per. (ft)		52.52
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.06
Min Ch El (ft)	809.97	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum Volume (acre-ft)		1.26
0.00		Cum SA (acres)		0.29
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel

RS: 2.94666*

INPUT

Description:

Station	Elevation	Data	num=	21	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.05	821	1.05	821	1.1	821	2.45	820.77	
6.62	820.01	7.32	819.95	14.35	819.44	21.01	819	120.33	818.32	
171.77	817.95	180.95	814.91	189.26	813.19	206.45	809.96	208.12	809.96	
225.33	813.33	232.62	814.91	238.84	816.95	277.33	817.26	277.49	817.27	
288	817.27									

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.05	.0129	1.05	.0129	171.77	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	171.77	238.84		1	1		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825277.4859	288822.2661		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.25	wt. n-Val.		0.013
w.s. Elev (ft)	814.94	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		136.46
Crit w.s. (ft)		Area (sq ft)		136.46
E.G. Slope (ft/ft)	0.000339	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		51.88
Top width (ft)	51.88	Avg. vel. (ft/s)		3.99
Vel Total (ft/s)	3.99	Hydr. Depth (ft)		2.63
Max Chl Dpth (ft)	4.98	Conv. (cfs)		29579.1
Conv. Total (cfs)	29579.1	wetted Per. (ft)		52.86
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.05
Min ch El (ft)	809.96	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum Volume (acre-ft)		1.26
0.00		Cum SA (acres)		0.29
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel

REACH: East Channel CPNPPLocalPMP
RS: 2.93333*

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.07	821	1.03	821	1.09	821	2.43	820.77		
6.6	820.01	7.3	819.95	14.31	819.43	20.97	819	120.16	818.32		
171.53	817.93	180.74	814.89	189.09	813.15	206.35	809.96	208	809.96		
225.29	813.28	232.61	814.88	238.85	816.93	277.34	817.25	277.5	817.25		
288	817.25										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.07	.0129	1.03	.0129	171.53	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	171.53	238.85		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Elev		Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R	Elev
-10	0	825277.4873	288822.2527				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.24	wt. n-val.		0.013
w.s. Elev (ft)	814.95	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		138.48
E.G. slope (ft/ft)	0.000326	Area (sq ft)		138.48
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	52.26	Top width (ft)		52.26
vel Total (ft/s)	3.94	Avg. vel. (ft/s)		3.94
Max Chl Dpth (ft)	4.99	Hydr. Depth (ft)		2.65
Conv. Total (cfs)	30169.9	Conv. (cfs)		30169.9
Length wtd. (ft)	1.00	wetted Per. (ft)		53.24
Min Ch El (ft)	809.96	Shear (lb/sq ft)		0.05
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		1.26
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.29
0.02				

CROSS SECTION

RIVER: East Channel
REACH: East Channel RS: 2.92*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.08	821	1.02	821	1.07	821	2.42	820.78		
6.58	820.01	7.27	819.96	14.28	819.43	20.93	818.99	119.98	818.31		
171.29	817.92	180.54	814.87	188.92	813.1	206.24	809.95	207.87	809.95		
225.24	813.23	232.6	814.86	238.87	816.92	277.34	817.24	277.5	817.24		
288	817.24										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.08	.0129	1.02	.0129	171.29	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	171.29	238.87		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.4888	288822.2392					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.19	Element	Left OB	Channel
Right OB Vel Head (ft)	0.23	wt. n-Val.		0.013
w.s. Elev (ft)	814.95	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		140.79
E.G. Slope (ft/ft)	0.000311	Area (sq ft)		140.79
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	52.60	Top width (ft)		52.60
Vel Total (ft/s)	3.87	Avg. Vel. (ft/s)		3.87
Max Chl Dpth (ft)	5.00	Hydr. Depth (ft)		2.68
Conv. Total (cfs)	30880.9	Conv. (cfs)		30880.9
Length wtd. (ft)	1.00	wetted Per. (ft)		53.58
Min Ch El (ft)	809.95	Shear (lb/sq ft)		0.05
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.26
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.28
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.90666*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 21		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.09	821	1	821	1.06	821	2.4	820.78		
6.55	820.01	7.25	819.96	14.25	819.42	20.89	818.99	119.81	818.31		
171.04	817.91	180.33	814.84	188.75	813.06	206.14	809.94	207.75	809.94		
225.19	813.18	232.58	814.84	238.89	816.91	277.34	817.22	277.5	817.23		
288	817.23										

Manning's n Values		num= 5		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.09	.0129	1	.0129	171.04	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	171.04	238.89		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R
-10	0	825277.4903		288822.2258					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.23	wt. n-Val.		0.013
w.s. Elev (ft)	814.96	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		143.01
E.G. Slope (ft/ft)	0.000298	Area (sq ft)		143.01
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	52.97	Top width (ft)		52.97
Vel Total (ft/s)	3.81	Avg. Vel. (ft/s)		3.81
Max Chl Dpth (ft)	5.02	Hydr. Depth (ft)		2.70
Conv. Total (cfs)	31551.4	Conv. (cfs)		31551.4
Length wtd. (ft)	1.00	wetted Per. (ft)		53.95
Min Ch El (ft)	809.94	Shear (lb/sq ft)		0.05
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.25
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.28
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.89333*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 21		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.11	821	.99	821	1.04	821	2.38	820.78		
6.53	820.02	7.23	819.96	14.22	819.41	20.85	818.99	119.63	818.3		
170.8	817.89	180.13	814.82	188.57	813.01	206.04	809.93	207.62	809.93		
225.15	813.14	232.57	814.81	238.9	816.89	277.35	817.21	277.51	817.21		
288	817.21										

Manning's n Values		num= 5		Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.11	.0129	.99	.0129	170.8	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	170.8	238.9		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.4917		288822.2123					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.22	wt. n-val.		0.013
w.s. Elev (ft)	814.96	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		145.28
Crit w.s. (ft)		Area (sq ft)		145.28
E.G. slope (ft/ft)	0.000286	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		53.34
Top width (ft)	53.34	Avg. vel. (ft/s)		3.75
vel Total (ft/s)	3.75	Hydr. Depth (ft)		2.72
Max chl Dpth (ft)	5.03	Conv. (cfs)		32241.0
Conv. Total (cfs)	32241.0	wetted Per. (ft)		54.32
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.05
Min ch El (ft)	809.93	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum volume (acre-ft)		1.25
0.00		Cum SA (acres)		0.28
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.88*

INPUT
 Description:

Station Elevation Data				num=	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	21	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.12	821		.97	821	1.03	821	2.37	820.79
6.51	820.02	7.2	819.96		14.18	819.41	20.81	818.99	119.46	818.3
170.56	817.88	179.92	814.8		188.4	812.97	205.93	809.92	207.49	809.92
225.1	813.09	232.56	814.79		238.92	816.88	277.35	817.2	277.51	817.2
288	817.2									

Manning's n Values				num=						
Sta	n Val	Sta	n Val	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.12	.0129		.97	.0129	170.56	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	170.56	238.92		1	1	1		.1	.3

Blocked Obstructions				num=						
Sta L	Sta R	Elev	Sta L	2	Sta R	Elev				
-10	0	825277.4932	288822.1988							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.21	wt. n-val.		0.013
w.s. Elev (ft)	814.97	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		147.48
Crit w.s. (ft)		Area (sq ft)		147.48
E.G. Slope (ft/ft)	0.000274	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		53.68
Top width (ft)	53.68	Avg. Vel. (ft/s)		3.70
Vel Total (ft/s)	3.70	Hydr. Depth (ft)		2.75
Max Chl Dpth (ft)	5.05	Conv. (cfs)		32918.6
Conv. Total (cfs)	32918.6	wetted Per. (ft)		54.67
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.05
Min Ch El (ft)	809.92	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum Volume (acre-ft)		1.25
0.00		Cum SA (acres)		0.28
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.86666*

INPUT
 Description:
 Station Elevation Data num=

Sta	Elev	Sta	Elev	CPNPPLocalPMP	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.13	821	.96	821	1.01	821	2.35	820.79	
6.49	820.02	7.18	819.96	14.15	819.4	20.77	818.99	119.29	818.3	
170.32	817.87	179.72	814.78	188.23	812.92	205.83	809.91	207.37	809.91	
225.06	813.04	232.55	814.77	238.94	816.87	277.35	817.18	277.52	817.19	
288	817.19									

Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.13	.0129	.96	.0129	170.32	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	170.32	238.94		1	1		.1	.3	
Blocked Obstructions		num=		2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825277.4947		288822.1854					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.21	wt. n-Val.		0.013
w.s. Elev (ft)	814.97	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		149.85
Crit w.s. (ft)		Area (sq ft)		149.85
E.G. Slope (ft/ft)	0.000262	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		54.02
Top width (ft)	54.02	Avg. vel. (ft/s)		3.64
Vel Total (ft/s)	3.64	Hydr. Depth (ft)		2.77
Max chl Dpth (ft)	5.06	Conv. (cfs)		33665.1
Conv. Total (cfs)	33665.1	wetted Per. (ft)		55.01
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.04
Min ch El (ft)	809.91	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum Volume (acre-ft)		1.24
0.00		Cum SA (acres)		0.28
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.85333*

INPUT

Description:

Station	Elevation	Data	num=	21	Sta	Elev	Sta	Elev	Sta	Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPPLocalPMP									
-10	821	-.15	821	.94	821	1	821	2.33	820.79		
6.47	820.02	7.16	819.96	14.12	819.4	20.73	818.99	119.11	818.29		
170.07	817.85	179.51	814.75	188.06	812.88	205.73	809.9	207.24	809.9		
225.01	813	232.53	814.74	238.95	816.85	277.36	817.17	277.52	817.17		
288	817.17										

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.15	.0129	.94	.0129	170.07	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

Left	Right	Left	Channel	Right	Coeff	Contr.	Expan.
170.07	238.95	1	1	1		.1	.3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.4962	288822.1719		

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	815.17	Element	Left OB	Channel
	Vel Head (ft)	0.20	wt. n-val.		0.013
	w.s. Elev (ft)	814.97	Reach Len. (ft)	1.00	1.00
1.00	Crit w.s. (ft)		Flow Area (sq ft)		152.00
	E.G. slope (ft/ft)	0.000252	Area (sq ft)		152.00
	Q Total (cfs)	545.00	Flow (cfs)		545.00
	Top width (ft)	54.42	Top width (ft)		54.42
	vel Total (ft/s)	3.59	Avg. vel. (ft/s)		3.59
	Max Chl Dpth (ft)	5.07	Hydr. Depth (ft)		2.79
	Conv. Total (cfs)	34309.5	Conv. (cfs)		34309.5
	Length wtd. (ft)	1.00	wetted Per. (ft)		55.41
	Min Ch El (ft)	809.90	Shear (lb/sq ft)		0.04
Alpha		1.00	Stream Power (lb/ft s)	288.00	0.00
0.00	Frctn Loss (ft)	0.00	Cum volume (acre-ft)		1.24
0.01	C & E Loss (ft)	0.00	Cum SA (acres)		0.28
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.84*

INPUT

Description:

Station Elevation Data num= 21

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.16	821	.93	821	.98	821	2.32	820.79

				CPNPP	Local	PMP				
6.44	820.02	7.14	819.96	14.09	819.39	20.68	818.99	118.94	818.29	
169.83	817.84	179.3	814.73	187.89	812.83	205.63	809.89	207.11	809.89	
224.96	812.95	232.52	814.72	238.97	816.84	277.36	817.16	277.52	817.16	
288	817.16									

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.16	.0129	.93	.0129	169.83	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

169.83	238.97	1	1	1	.1	.3
--------	--------	---	---	---	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.4976	288822.1584		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.17	Element	Left OB	Channel
Right OB Vel Head (ft)	0.19	wt. n-Val.		0.013
w.s. Elev (ft)	814.98	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		154.35
E.G. Slope (ft/ft)	0.000242	Area (sq ft)		154.35
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	54.76	Top width (ft)		54.76
Vel Total (ft/s)	3.53	Avg. Vel. (ft/s)		3.53
Max Chl Dpth (ft)	5.09	Hydr. Depth (ft)		2.82
Conv. Total (cfs)	35053.5	Conv. (cfs)		35053.5
Length wtd. (ft)	1.00	wetted Per. (ft)		55.76
Min Ch El (ft)	809.89	Shear (lb/sq ft)		0.04
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.23
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.28
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.82666*

INPUT

Description:

Station Elevation Data num= 21

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.17	821	.91	821	.97	821	2.3	820.8
6.42	820.02	7.11	819.96	14.05	819.38	20.64	818.99	118.77	818.28

CPNPPLocalPMP
 169.59 817.83 179.1 814.71 187.71 812.79 205.52 809.88 206.99 809.88
 224.92 812.9 232.51 814.69 238.99 816.83 277.37 817.14 277.53 817.14
 288 817.14

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -.17 .0129 .91 .0129 169.59 .0129 288 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 169.59 238.99 1 1 1 .1 .3
 Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825277.4991 288 822.145

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.17	Element	Left OB	Channel
Right OB Vel Head (ft)	0.19	wt. n-val.		0.013
w.s. Elev (ft)	814.98	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		156.70
E.G. Slope (ft/ft)	0.000232	Area (sq ft)		156.70
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	55.12	Top width (ft)		55.12
Vel Total (ft/s)	3.48	Avg. vel. (ft/s)		3.48
Max Chl Dpth (ft)	5.10	Hydr. Depth (ft)		2.84
Conv. Total (cfs)	35790.7	Conv. (cfs)		35790.7
Length wtd. (ft)	1.00	wetted Per. (ft)		56.12
Min Ch El (ft)	809.88	Shear (lb/sq ft)		0.04
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.23
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.28
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.81333*

INPUT

Description:

Station Elevation Data num= 21
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -.19 821 .9 821 .95 821 2.28 820.8
 6.4 820.03 7.09 819.96 14.02 819.38 20.6 818.99 118.59 818.28
 169.35 817.81 178.89 814.69 187.54 812.74 205.42 809.87 206.86 809.87

224.87 812.86 232.5 814.67 CPNPPLocalPMP
 288 817.13 239 816.81 277.37 817.13 277.53 817.13
 Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -.19 .0129 .9 .0129 169.35 .0129 288 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 169.35 239 1 1 1 .1 .3
 Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825277.5005 288822.1315

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	814.99	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		158.94
E.G. slope (ft/ft)	0.000223	Area (sq ft)		158.94
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	55.47	Top width (ft)		55.47
vel Total (ft/s)	3.43	Avg. vel. (ft/s)		3.43
Max chl Dpth (ft)	5.11	Hydr. Depth (ft)		2.87
Conv. Total (cfs)	36495.2	Conv. (cfs)		36495.2
Length wtd. (ft)	1.00	wetted Per. (ft)		56.47
Min ch El (ft)	809.87	Shear (lb/sq ft)		0.04
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		1.23
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.27
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.8*

INPUT

Description:

Station Elevation Data num= 21
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 821 -.2 821 .88 821 .94 821 2.27 820.8
 6.38 820.03 7.07 819.96 13.99 819.37 20.56 818.99 118.42 818.27
 169.1 817.8 178.69 814.67 187.37 812.7 205.32 809.87 206.73 809.87
 224.82 812.81 232.49 814.65 239.02 816.8 277.37 817.12 277.53 817.12

CPNPPLocalPMP

288 817.12

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -.2 .0129 .88 .0129 169.1 .0129 288 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 169.1 239.02 1 1 1 .1 .3
 Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 277.502 288 822.118

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-Val.		0.013
w.s. Elev (ft)	814.99	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		160.96
E.G. Slope (ft/ft)	0.000215	Area (sq ft)		160.96
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	55.80	Top width (ft)		55.80
Vel Total (ft/s)	3.39	Avg. Vel. (ft/s)		3.39
Max Chl Dpth (ft)	5.12	Hydr. Depth (ft)		2.88
Conv. Total (cfs)	37125.9	Conv. (cfs)		37125.9
Length wtd. (ft)	1.00	wetted Per. (ft)		56.80
Min Ch El (ft)	809.87	Shear (lb/sq ft)		0.04
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.22
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.27
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.78666*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.21 821 .87 821 .92 821 2.25 820.81									
6.36 820.03 7.04 819.96 13.96 819.36 20.52 818.99 118.24 818.27									
168.86 817.79 178.48 814.64 187.2 812.65 205.22 809.86 206.61 809.86									
224.78 812.76 232.47 814.62 239.04 816.79 277.38 817.1 277.54 817.1									
288 817.1									

CPNPPLocalPMP

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -.21 .0129 .87 .0129 168.86 .0129 288 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 168.86 239.04 1 1 1 .1 .3
 Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825277.5035 288822.1046

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.17	wt. n-val.		0.013
w.s. Elev (ft)	814.99	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		163.50
E.G. Slope (ft/ft)	0.000206	Area (sq ft)		163.50
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	56.19	Top width (ft)		56.19
Vel Total (ft/s)	3.33	Avg. vel. (ft/s)		3.33
Max chl Dpth (ft)	5.13	Hydr. Depth (ft)		2.91
Conv. Total (cfs)	37932.9	Conv. (cfs)		37932.9
Length wtd. (ft)	1.00	wetted Per. (ft)		57.19
Min ch El (ft)	809.86	shear (lb/sq ft)		0.04
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.22
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.27
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.77333*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.23 821 .85 821 .91 821 2.23 820.81									
6.33 820.03 7.02 819.96 13.92 819.36 20.48 818.99 118.07 818.26									
168.62 817.77 178.28 814.62 187.03 812.61 205.11 809.85 206.48 809.85									
224.73 812.72 232.46 814.6 239.05 816.77 277.38 817.09 277.54 817.09									
288 817.09									

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -.23 .0129 .85 .0129 168.62 .0129 288 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 168.62 239.05 1 1 1 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825277.5049 288822.0911

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.17	wt. n-val.		0.013
w.s. Elev (ft)	814.99	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		165.63
E.G. slope (ft/ft)	0.000199	Area (sq ft)		165.63
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	56.52	Top width (ft)		56.52
vel Total (ft/s)	3.29	Avg. vel. (ft/s)		3.29
Max Chl Dpth (ft)	5.14	Hydr. Depth (ft)		2.93
Conv. Total (cfs)	38607.7	Conv. (cfs)		38607.7
Length wtd. (ft)	1.00	wetted Per. (ft)		57.53
Min Ch El (ft)	809.85	Shear (lb/sq ft)		0.04
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		1.22
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.27
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.76*

INPUT

Description:

Station	Elevation	Data	num=	21							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.24	821	.84	821	.89	821	2.22	820.81		
6.31	820.03	7	819.96	13.89	819.35	20.44	818.98	117.9	818.26		
168.38	817.76	178.07	814.6	186.85	812.56	205.01	809.84	206.35	809.84		
224.69	812.67	232.45	814.58	239.07	816.76	277.38	817.08	277.54	817.08		
288	817.08										

Manning's n Values num= 5
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Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.24	.0129	.84	.0129	168.38	.0129	288	.0129	
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.	
	168.38	239.07		1	1	1		.1	.3	
Blocked Obstructions			num=	2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev					
-10	0	825277.5064		288822.0776						

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	815.16			
Right OB Vel Head (ft)	0.16	wt. n-Val.		0.013
w.s. Elev (ft)	815.00	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		168.10
E.G. slope (ft/ft)	0.000191	Area (sq ft)		168.10
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	56.87	Top width (ft)		56.87
Vel Total (ft/s)	3.24	Avg. Vel. (ft/s)		3.24
Max Chl Dpth (ft)	5.16	Hydr. Depth (ft)		2.96
Conv. Total (cfs)	39416.4	Conv. (cfs)		39416.4
Length wtd. (ft)	1.00	wetted Per. (ft)		57.88
Min Ch El (ft)	809.84	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00 Frctn Loss (ft)	0.00	cum volume (acre-ft)		1.21
0.01 C & E Loss (ft)	0.00	cum SA (acres)		0.27
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.74666*

INPUT

Description:

Station	Elevation	Data	num=	21	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.25	821	.82	821	.88	821	2.2	820.82	
6.29	820.04	6.97	819.96	13.86	819.35	20.39	818.98	117.72	818.25	
168.13	817.75	177.87	814.58	186.68	812.52	204.91	809.83	206.23	809.83	
224.64	812.62	232.44	814.55	239.09	816.75	277.39	817.06	277.55	817.06	
288	817.06									

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val

	-10	.0129	-.25	.0129	CPNPPLocalPMP	.82	.0129	168.13	.0129	288	.0129
Bank Sta:	Left	Right	Lengths:		Left Channel	Right	Coeff	Contr.	Expan.		
	168.13	239.09			1	1	.1		.3		
Blocked Obstructions	num=		2								
	Sta L	Sta R	Elev	Sta L	Sta R	Elev					
	-10	0	825277.5079		288822.0641						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-Val.		0.013
w.s. Elev (ft)	815.00	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		170.45
E.G. Slope (ft/ft)	0.000184	Area (sq ft)		170.45
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	57.22	Top width (ft)		57.22
Vel Total (ft/s)	3.20	Avg. vel. (ft/s)		3.20
Max chl Dpth (ft)	5.17	Hydr. Depth (ft)		2.98
Conv. Total (cfs)	40171.1	Conv. (cfs)		40171.1
Length wtd. (ft)	1.00	wetted Per. (ft)		58.24
Min ch El (ft)	809.83	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.21
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.27
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.73333*

INPUT

Description:

Station	Elevation	Data	num=	21						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-.27	821	.81	821	.86	821	2.18	820.82	
6.27	820.04	6.95	819.96	13.83	819.34	20.35	818.98	117.55	818.25	
167.89	817.73	177.66	814.55	186.51	812.47	204.8	809.82	206.1	809.82	
224.59	812.58	232.42	814.53	239.1	816.73	277.39	817.05	277.55	817.05	
288	817.05									

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.27	.0129	.81	.0129	167.89	.0129	288	.0129

CPNPPLocalPMP

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
167.89	239.1		1 1	1	.1	.3
Blocked Obstructions			num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825277.5093		288822.0507		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.15	wt. n-val.		0.013
w.s. Elev (ft)	815.00	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		172.82
Crit w.s. (ft)		Area (sq ft)		172.82
E.G. slope (ft/ft)	0.000177	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		57.59
Top width (ft)	57.59	Avg. vel. (ft/s)		3.15
vel Total (ft/s)	3.15	Hydr. Depth (ft)		3.00
Max chl Dpth (ft)	5.18	Conv. (cfs)		40934.2
Conv. Total (cfs)	40934.2	wetted Per. (ft)		58.61
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.03
Min ch El (ft)	809.82	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum volume (acre-ft)		1.20
0.00		Cum SA (acres)		0.27
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.72*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.28 821 .8 821 .85 821 2.17 820.82									
6.24 820.04 6.93 819.97 13.79 819.33 20.31 818.98 117.38 818.25									
167.65 817.72 177.46 814.53 186.34 812.43 204.7 809.81 205.98 809.81									
224.55 812.53 232.41 814.51 239.12 816.72 277.39 817.04 277.55 817.04									
288 817.04									

Manning's n Values	num=	5				
Sta n Val Sta n Val Sta n Val Sta n Val						
-10 .0129 -.28 .0129 .8 .0129 167.65 .0129 288 .0129						

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	167.65	239.12		1	1	1	.1	.3	
Blocked Obstructions	num=		2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825277.5108		288822.0372					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.15	wt. n-Val.		0.013
w.s. Elev (ft)	815.01	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		175.16
E.G. Slope (ft/ft)	0.000171	Area (sq ft)		175.16
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	57.92	Top width (ft)		57.92
Vel Total (ft/s)	3.11	Avg. Vel. (ft/s)		3.11
Max Chl Dpth (ft)	5.20	Hydr. Depth (ft)		3.02
Conv. Total (cfs)	41702.9	Conv. (cfs)		41702.9
Length wtd. (ft)	1.00	wetted Per. (ft)		58.95
Min Ch El (ft)	809.81	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.20
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.27
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.70666*

INPUT

Description:

Station Elevation Data	num=	21								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-10 821 -.29 821 .78 821 .83 821 2.15 820.83										
6.22 820.04 6.9 819.97 13.76 819.33 20.27 818.98 117.2 818.24										
167.41 817.71 177.25 814.51 186.17 812.38 204.6 809.8 205.85 809.8										
224.5 812.48 232.4 814.48 239.14 816.71 277.4 817.02 277.56 817.02										
288 817.02										

Manning's n Values	num=	5								
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val										
-10 .0129 -.29 .0129 .78 .0129 167.41 .0129 288 .0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
Page 333									

Blocked Obstructions		num=	2	CPNPPLocalPMP	1	1	1	.1	.3
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825	277.5123	288	822.0237				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.15	wt. n-Val.		0.013
w.s. Elev (ft)	815.01	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		177.70
E.G. Slope (ft/ft)	0.000164	Area (sq ft)		177.70
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	58.28	Top width (ft)		58.28
Vel Total (ft/s)	3.07	Avg. vel. (ft/s)		3.07
Max chl Dpth (ft)	5.21	Hydr. Depth (ft)		3.05
Conv. Total (cfs)	42536.8	Conv. (cfs)		42536.8
Length wtd. (ft)	1.00	wetted Per. (ft)		59.32
Min ch El (ft)	809.80	shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.20
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.26
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.69333*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.31 821 .77 821 .82 821 2.13 820.83									
6.2 820.04 6.88 819.97 13.73 819.32 20.23 818.98 117.03 818.24									
167.16 817.69 177.04 814.49 185.99 812.34 204.5 809.79 205.72 809.79									
224.45 812.44 232.39 814.46 239.15 816.69 277.4 817.01 277.56 817.01									
288 817.01									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.31 .0129 .77 .0129 167.16 .0129 288 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
167.16 239.15	1 1 1	.1	.3

Blocked Obstructions num= CPNPPLocalPMP
 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825277.5137 288822.0103

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.14	wt. n-val.		0.013
W.S. Elev (ft)	815.01	Reach Len. (ft)	1.00	1.00
1.00				
Crit W.S. (ft)		Flow Area (sq ft)		179.92
E.G. slope (ft/ft)	0.000159	Area (sq ft)		179.92
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	58.63	Top width (ft)		58.63
vel Total (ft/s)	3.03	Avg. vel. (ft/s)		3.03
Max Chl Dpth (ft)	5.22	Hydr. Depth (ft)		3.07
Conv. Total (cfs)	43258.1	Conv. (cfs)		43258.1
Length wtd. (ft)	1.00	wetted Per. (ft)		59.67
Min Ch El (ft)	809.79	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		1.19
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.26
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.68*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.32 821 .75 821 .8 821 2.12 820.83									
6.18 820.05 6.86 819.97 13.7 819.32 20.19 818.98 116.85 818.23									
166.92 817.68 176.84 814.46 185.82 812.29 204.39 809.79 205.6 809.79									
224.41 812.39 232.38 814.44 239.17 816.68 277.41 817 277.57 817									
288 817									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.32 .0129 .75 .0129 166.92 .0129 288 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
166.92 239.17	1 1 1	.1	.3
Blocked Obstructions	num=	2	

Sta L	Sta R	Elev	Sta L	CPNPPLocalPMP
-10	0	825277.5152	288821.9968	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.14	wt. n-Val.		0.013
w.s. Elev (ft)	815.01	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		182.32
E.G. slope (ft/ft)	0.000153	Area (sq ft)		182.32
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	58.98	Top width (ft)		58.98
Vel Total (ft/s)	2.99	Avg. Vel. (ft/s)		2.99
Max Chl Dpth (ft)	5.22	Hydr. Depth (ft)		3.09
Conv. Total (cfs)	44044.0	Conv. (cfs)		44044.0
Length wtd. (ft)	1.00	wetted Per. (ft)		60.03
Min Ch El (ft)	809.79	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)		1.19
0.01				
C & E Loss (ft)	0.00	cum SA (acres)		0.26
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.66666*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.33 821 .74 821 .79 821 2.1 820.84									
6.16 820.05 6.83 819.97 13.66 819.31 20.15 818.98 116.68 818.23									
166.68 817.67 176.63 814.44 185.65 812.25 204.29 809.78 205.47 809.78									
224.36 812.34 232.36 814.41 239.19 816.67 277.41 816.98 277.57 816.98									
288 816.98									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.33 .0129 .74 .0129 166.68 .0129 288 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
166.68 239.19	1 1 1	.1	.3

Blocked Obstructions num= 2

Sta L Sta R Elev	Sta L Sta R Elev
------------------	------------------

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-10 0 825277.5167 CPNPPLocalPMP
 288821.9833

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.15	Element	Left OB	Channel
Right OB Vel Head (ft)	0.14	wt. n-Val.		0.013
W.S. Elev (ft)	815.02	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		184.73
E.G. slope (ft/ft)	0.000148	Area (sq ft)		184.73
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	59.33	Top width (ft)		59.33
Vel Total (ft/s)	2.95	Avg. vel. (ft/s)		2.95
Max chl Dpth (ft)	5.24	Hydr. Depth (ft)		3.11
Conv. Total (cfs)	44840.9	Conv. (cfs)		44840.9
Length wtd. (ft)	1.00	wetted Per. (ft)		60.38
Min ch El (ft)	809.78	Shear (lb/sq ft)		0.03
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.18
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.26
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.65333*

INPUT

Description:

Station Elevation Data num= 21

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.34	821	.72	821	.78	821	2.08	820.84
6.13	820.05	6.81	819.97	13.63	819.3	20.1	818.98	116.51	818.22
166.44	817.65	176.43	814.42	185.48	812.2	204.19	809.77	205.34	809.77
224.32	812.29	232.35	814.39	239.2	816.65	277.41	816.97	277.57	816.97
288	816.97								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.34	.0129	.72	.0129	166.44	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 166.44 239.2 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5181		288821.9698	

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CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.13	wt. n-val.		0.013
w.s. Elev (ft)	815.02	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		187.26
E.G. slope (ft/ft)	0.000142	Area (sq ft)		187.26
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	59.67	Top width (ft)		59.67
Vel Total (ft/s)	2.91	Avg. vel. (ft/s)		2.91
Max Chl Dpth (ft)	5.25	Hydr. Depth (ft)		3.14
Conv. Total (cfs)	45697.6	Conv. (cfs)		45697.6
Length wtd. (ft)	1.00	wetted Per. (ft)		60.73
Min Ch El (ft)	809.77	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		1.18
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.26
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.64*

INPUT

Description:

Station Elevation Data num= 21

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.36	821	.71	821	.76	821	2.07	820.84
6.11	820.05	6.79	819.97	13.6	819.3	20.06	818.98	116.33	818.22
166.2	817.64	176.22	814.4	185.31	812.16	204.08	809.76	205.22	809.76
224.27	812.25	232.34	814.37	239.22	816.64	277.42	816.96	277.58	816.96
288	816.96								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.36	.0129	.71	.0129	166.2	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

166.2	239.22	1	1	1	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5196	288821.9564		

CROSS SECTION OUTPUT		Profile #PF 1	CPNPPLocalPMP		
E.G. Elev (ft)	815.15	Element		Left OB	Channel
Right OB					
Vel Head (ft)	0.13	wt. n-Val.			0.013
w.s. Elev (ft)	815.02	Reach Len. (ft)		1.00	1.00
1.00					
Crit w.s. (ft)		Flow Area (sq ft)			189.53
E.G. Slope (ft/ft)	0.000138	Area (sq ft)			189.53
Q Total (cfs)	545.00	Flow (cfs)			545.00
Top width (ft)	60.01	Top width (ft)			60.01
Vel Total (ft/s)	2.88	Avg. Vel. (ft/s)			2.88
Max chl Dpth (ft)	5.26	Hydr. Depth (ft)			3.16
Conv. Total (cfs)	46451.3	Conv. (cfs)			46451.3
Length wtd. (ft)	1.00	wetted Per. (ft)			61.07
Min ch El (ft)	809.76	Shear (lb/sq ft)			0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00		0.00
0.00					
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)			1.18
0.01					
C & E Loss (ft)	0.00	Cum SA (acres)			0.26
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.62666*

INPUT

Description:

Station Elevation Data		num= 21									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.37	821	.69	821	.75	821	2.05	820.85		
6.09	820.05	6.77	819.97	13.57	819.29	20.02	818.98	116.16	818.21		
165.95	817.63	176.02	814.38	185.13	812.11	203.98	809.75	205.09	809.75		
224.22	812.2	232.33	814.34	239.24	816.63	277.42	816.94	277.58	816.94		
288	816.94										

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.37	.0129	.69	.0129	165.95	.0129	288	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 165.95 239.24 1 1 1 .1 .3

Blocked Obstructions		num= 2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev		
-10	0	825277.5211		288821.9429			

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	815.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.12	wt. n-val.		0.013
w.s. Elev (ft)	815.02	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		192.15
E.G. slope (ft/ft)	0.000133	Area (sq ft)		192.15
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	60.36	Top width (ft)		60.36
Vel Total (ft/s)	2.84	Avg. vel. (ft/s)		2.84
Max chl Dpth (ft)	5.27	Hydr. Depth (ft)		3.18
Conv. Total (cfs)	47340.5	Conv. (cfs)		47340.5
Length wtd. (ft)	1.00	wetted Per. (ft)		61.43
Min ch El (ft)	809.75	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.17
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.26
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.61333*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.38 821 .68 821 .73 821 2.03 820.85									
6.07 820.06 6.74 819.97 13.53 819.28 19.98 818.98 115.98 818.21									
165.71 817.61 175.81 814.35 184.96 812.07 203.88 809.74 204.96 809.74									
224.18 812.15 232.31 814.32 239.25 816.61 277.42 816.93 277.58 816.93									
288 816.93									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.38 .0129 .68 .0129 165.71 .0129 288 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 165.71 239.25 1 1 1 .1 .3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825277.5226 288821.9294					

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	815.15	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.12	wt. n-val.		0.013
w.s. Elev (ft)	815.02	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		194.65
E.G. Slope (ft/ft)	0.000128	Area (sq ft)		194.65
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	60.72	Top width (ft)		60.72
Vel Total (ft/s)	2.80	Avg. vel. (ft/s)		2.80
Max Chl Dpth (ft)	5.28	Hydr. Depth (ft)		3.21
Conv. Total (cfs)	48175.7	Conv. (cfs)		48175.7
Length wtd. (ft)	1.00	wetted Per. (ft)		61.80
Min Ch El (ft)	809.74	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		1.17
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.25
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.6*

INPUT

Description:

Station	Elevation	Data	num=	21						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	821	-.4	821	.66	821	.72	821	2.02	820.85	
6.05	820.06	6.72	819.97	13.5	819.28	19.94	818.97	115.81	818.2	
165.47	817.6	175.61	814.33	184.79	812.02	203.78	809.73	204.84	809.73	
224.13	812.11	232.3	814.3	239.27	816.6	277.43	816.92	277.59	816.92	
288	816.92									

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.4	.0129	.66	.0129	165.47	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 165.47 239.27 1 1 1 .1 .3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	277.524	288	821.916

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	CPNPPLocalPMP Element	Left OB	Channel
Right OB Vel Head (ft)	0.12	wt. n-Val.		0.013
W.S. Elev (ft)	815.03	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		197.07
E.G. Slope (ft/ft)	0.000124	Area (sq ft)		197.07
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	61.05	Top width (ft)		61.05
Vel Total (ft/s)	2.77	Avg. Vel. (ft/s)		2.77
Max Chl Dpth (ft)	5.30	Hydr. Depth (ft)		3.23
Conv. Total (cfs)	49004.2	Conv. (cfs)		49004.2
Length wtd. (ft)	1.00	wetted Per. (ft)		62.13
Min Ch El (ft)	809.73	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.16
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.25
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.58666*

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.41	821	.65	821	.7	821	2	820.86		
6.02	820.06	6.7	819.97	13.47	819.27	19.9	818.97	115.64	818.2		
165.23	817.59	175.4	814.31	184.62	811.98	203.67	809.72	204.71	809.72		
224.08	812.06	232.29	814.27	239.29	816.59	277.43	816.9	277.59	816.9		
288	816.9										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.41	.0129	.65	.0129	165.23	.0129	288	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 165.23 239.29 1 1 1 .1 .3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5255	288821.9025					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
----------------	--------	---------	---------	---------

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.12	wt. n-val.		0.013
w.s. Elev (ft)	815.03	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		199.59
E.G. slope (ft/ft)	0.000119	Area (sq ft)		199.59
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	61.40	Top width (ft)		61.40
Vel Total (ft/s)	2.73	Avg. Vel. (ft/s)		2.73
Max chl Dpth (ft)	5.31	Hydr. Depth (ft)		3.25
Conv. Total (cfs)	49859.3	Conv. (cfs)		49859.3
Length wtd. (ft)	1.00	wetted Per. (ft)		62.50
Min ch El (ft)	809.72	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.16
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.25
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.57333*

INPUT

Description:

Station Elevation Data		num= 21	
Sta	Elev	Sta	Elev
-10	821	-.42	821
6	820.06	6.67	819.97
164.98	817.57	175.2	814.29
224.04	812.01	232.28	814.25
288	816.89		

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
-10	.0129	-.42	.0129
6	.0129	6.67	.0129
164.98	.0129	175.2	.0129
224.04	.0129	232.28	.0129
288	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 164.98 239.3 1 1 1 .1 .3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Sta L
-10	0	825277.5269	288821.8891

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft) 815.14 Element Left OB Channel
 Right OB

Vel Head (ft)	0.11	CPNPPLocalPMP wt. n-Val.		0.013
W.S. Elev (ft)	815.03	Reach Len. (ft)	1.00	1.00
1.00 Crit W.S. (ft)		Flow Area (sq ft)		202.22
E.G. Slope (ft/ft)	0.000115	Area (sq ft)		202.22
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top Width (ft)	61.75	Top Width (ft)		61.75
Vel Total (ft/s)	2.70	Avg. Vel. (ft/s)		2.70
Max Chl Dpth (ft)	5.32	Hydr. Depth (ft)		3.28
Conv. Total (cfs)	50767.6	Conv. (cfs)		50767.6
Length wtd. (ft)	1.00	wetted Per. (ft)		62.85
Min Ch El (ft)	809.71	Shear (lb/sq ft)		0.02
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.15
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.25
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.56*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.44 821 .62 821 .67 821 1.97 820.86									
5.98 820.06 6.65 819.97 13.4 819.26 19.82 818.97 115.29 818.19									
164.74 817.56 174.99 814.26 184.27 811.89 203.47 809.71 204.46 809.71									
223.99 811.97 232.26 814.22 239.32 816.56 277.44 816.87 277.6 816.88									
288 816.88									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.44 .0129 .62 .0129 164.74 .0129 288 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
164.74 239.32	1 1 1	.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825277.5284 288821.8756					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.11	wt. n-Val.		0.013

CPNPPLocalPMP

w.s. Elev (ft)	815.03	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		204.47
E.G. Slope (ft/ft)	0.000112	Area (sq ft)		204.47
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	62.12	Top width (ft)		62.12
Vel Total (ft/s)	2.67	Avg. Vel. (ft/s)		2.67
Max Chl Dpth (ft)	5.32	Hydr. Depth (ft)		3.29
Conv. Total (cfs)	51509.0	Conv. (cfs)		51509.0
Length wtd. (ft)	1.00	wetted Per. (ft)		63.22
Min Ch El (ft)	809.71	Shear (lb/sq ft)		0.02
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00	0.00
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)		1.15
C & E Loss (ft) 0.02	0.00	Cum SA (acres)		0.25

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.54666*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.45 821 .6 821 .66 821 1.95 820.87									
5.96 820.07 6.63 819.97 13.37 819.25 19.77 818.97 115.12 818.19									
164.5 817.55 174.78 814.24 184.1 811.84 203.36 809.7 204.33 809.7									
223.95 811.92 232.25 814.2 239.34 816.55 277.44 816.86 277.6 816.86									
288 816.86									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.45 .0129 .6 .0129 164.5 .0129 288 .0129									

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff	Contr.	Expan.
164.5 239.34	1 1	1		.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825277.5299 288821.8621					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
Right OB Vel Head (ft)	0.11	wt. n-Val.		0.013

W.S. Elev (ft)	815.03	CPNPPLocalPMP		
1.00		Reach Len. (ft)	1.00	1.00
Crit w.s. (ft)		Flow Area (sq ft)		207.14
E.G. Slope (ft/ft)	0.000108	Area (sq ft)		207.14
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	62.45	Top width (ft)		62.45
Vel Total (ft/s)	2.63	Avg. Vel. (ft/s)		2.63
Max chl Dpth (ft)	5.33	Hydr. Depth (ft)		3.32
Conv. Total (cfs)	52443.5	Conv. (cfs)		52443.5
Length wtd. (ft)	1.00	wetted Per. (ft)		63.56
Min ch El (ft)	809.70	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00		Cum Volume (acre-ft)		1.14
Frctn Loss (ft)	0.00	Cum SA (acres)		0.25
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.53333*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.46 821 .59 821 .64 821 1.93 820.87									
5.93 820.07 6.6 819.97 13.34 819.25 19.73 818.97 114.94 818.18									
164.26 817.53 174.58 814.22 183.93 811.8 203.26 809.69 204.21 809.69									
223.9 811.87 232.24 814.18 239.35 816.53 277.45 816.85 277.6 816.85									
288 816.85									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.46 .0129 .59 .0129 164.26 .0129 288 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
164.26 239.35	1 1		.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825277.5313 288821.8487					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-val.		0.013
w.s. Elev (ft)	815.04	Reach Len. (ft)	1.00	1.00

CPNPPLocalPMP			
1.00			
Crit w.s. (ft)		Flow Area (sq ft)	209.63
E.G. Slope (ft/ft)	0.000105	Area (sq ft)	209.63
Q Total (cfs)	545.00	Flow (cfs)	545.00
Top Width (ft)	62.79	Top Width (ft)	62.79
Vel Total (ft/s)	2.60	Avg. Vel. (ft/s)	2.60
Max Chl Dpth (ft)	5.35	Hydr. Depth (ft)	3.34
Conv. Total (cfs)	53305.9	Conv. (cfs)	53305.9
Length wtd. (ft)	1.00	wetted Per. (ft)	63.91
Min Ch El (ft)	809.69	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.14
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.25
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.52*

INPUT

Description:

Station Elevation Data num= 21											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.48	821	.57	821	.63	821	1.92	820.87		
5.91	820.07	6.58	819.97	13.31	819.24	19.69	818.97	114.77	818.18		
164.01	817.52	174.37	814.2	183.76	811.75	203.16	809.68	204.08	809.68		
223.85	811.83	232.23	814.15	239.37	816.52	277.45	816.83	277.61	816.84		
288	816.84										

Manning's n Values num= 5											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.48	.0129	.57	.0129	164.01	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	164.01	239.37		1	1	1		.1	.3

Blocked Obstructions num= 2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825277.5328		288821.8352		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-val.		0.013
w.s. Elev (ft)	815.04	Reach Len. (ft)	1.00	1.00
1.00				

		CPNPPLocalPMP	
Crit w.s. (ft)		Flow Area (sq ft)	212.21
E.G. Slope (ft/ft)	0.000101	Area (sq ft)	212.21
Q Total (cfs)	545.00	Flow (cfs)	545.00
Top width (ft)	63.14	Top width (ft)	63.14
Vel Total (ft/s)	2.57	Avg. Vel. (ft/s)	2.57
Max Chl Dpth (ft)	5.36	Hydr. Depth (ft)	3.36
Conv. Total (cfs)	54198.9	Conv. (cfs)	54198.9
Length wtd. (ft)	1.00	wetted Per. (ft)	64.27
Min Ch El (ft)	809.68	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.13
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.24
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.50666*

INPUT

Description:

Station Elevation Data		num= 21	
Sta	Elev	Sta	Elev
-10	821	-.49	821
5.89	820.07	6.56	819.98
163.77	817.51	174.17	814.17
223.81	811.78	232.22	814.13
288	816.82		

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
-10	.0129	-.49	.0129
163.77	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	163.77	239.39		1	1		.1	.3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Sta L
-10	0	825277.5343	288821.8217

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-Val.		0.013
w.s. Elev (ft)	815.04	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		214.81
		Page 348		

CPNPPLocalPMP

E.G. Slope (ft/ft)	0.000098	Area (sq ft)	214.81
Q Total (cfs)	545.00	Flow (cfs)	545.00
Top width (ft)	63.49	Top width (ft)	63.49
Vel Total (ft/s)	2.54	Avg. Vel. (ft/s)	2.54
Max Chl Dpth (ft)	5.37	Hydr. Depth (ft)	3.38
Conv. Total (cfs)	55105.6	Conv. (cfs)	55105.6
Length wtd. (ft)	1.00	wetted Per. (ft)	64.63
Min ch El (ft)	809.67	Shear (lb/sq ft)	0.02
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.13
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.24
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.49333*

INPUT

Description:

Station Elevation Data	num=	21
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-10 821 -.5 821 .55 821 .6 821 1.88 820.88		
5.87 820.07 6.53 819.98 13.24 819.23 19.61 818.97 114.42 818.17		
163.53 817.49 173.96 814.15 183.41 811.66 202.95 809.66 203.83 809.66		
223.76 811.73 232.2 814.11 239.4 816.49 277.46 816.81 277.62 816.81		
288 816.81		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
-10 .0129 -.5 .0129 .55 .0129 163.53 .0129 288 .0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 163.53 239.4 1 1 1 .1 .3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825277.5357 288821.8083		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-Val.		0.013
w.s. Elev (ft)	815.04	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		217.52

		CPNPPLocalPMP		
E.G. Slope (ft/ft)	0.000094	Area (sq ft)		217.52
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top Width (ft)	63.83	Top Width (ft)		63.83
Vel Total (ft/s)	2.51	Avg. Vel. (ft/s)		2.51
Max Chl Dpth (ft)	5.38	Hydr. Depth (ft)		3.41
Conv. Total (cfs)	56069.3	Conv. (cfs)		56069.3
Length wtd. (ft)	1.00	wetted Per. (ft)		64.98
Min Ch El (ft)	809.66	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.12
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.24
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.48*

INPUT

Description:

Station Elevation Data num= 21

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.52	821	.53	821	.58	821	1.87	820.88
5.85	820.07	6.51	819.98	13.21	819.22	19.57	818.97	114.25	818.16
163.29	817.48	173.76	814.13	183.24	811.62	202.85	809.65	203.7	809.65
223.71	811.69	232.19	814.08	239.42	816.48	277.46	816.79	277.62	816.79
288	816.79								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.52	.0129	.53	.0129	163.29	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 163.29 239.42 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5372	288821.7948		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-val.		0.013
w.s. Elev (ft)	815.04	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		219.97
E.G. slope (ft/ft)	0.000092	Area (sq ft)		219.97

CPNPPLocalPMP

Q Total (cfs)	545.00	Flow (cfs)	545.00
Top width (ft)	64.17	Top width (ft)	64.17
Vel Total (ft/s)	2.48	Avg. Vel. (ft/s)	2.48
Max Chl Dpth (ft)	5.39	Hydr. Depth (ft)	3.43
Conv. Total (cfs)	56920.8	Conv. (cfs)	56920.8
Length wtd. (ft)	1.00	wetted Per. (ft)	65.33
Min ch El (ft)	809.65	Shear (lb/sq ft)	0.02
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	1.12
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.24

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.46666*

INPUT

Description:

Station Elevation Data num= 21

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.53	821	.52	821	.57	821	1.85	820.89
5.82	820.08	6.49	819.98	13.18	819.22	19.53	818.97	114.07	818.16
163.04	817.47	173.55	814.11	183.07	811.57	202.75	809.64	203.57	809.64
223.67	811.64	232.18	814.06	239.44	816.47	277.46	816.78	277.62	816.78
288	816.78								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.53	.0129	.52	.0129	163.04	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 163.04 239.44 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5387	288	21.7813	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
Right OB Vel Head (ft)	0.09	wt. n-Val.		0.013
w.s. Elev (ft)	815.04	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		222.71
E.G. slope (ft/ft)	0.000089	Area (sq ft)		222.71

Q Total (cfs)	545.00	CPNPPLocalPMP Flow (cfs)	545.00
Top width (ft)	64.51	Top width (ft)	64.51
Vel Total (ft/s)	2.45	Avg. Vel. (ft/s)	2.45
Max Chl Dpth (ft)	5.40	Hydr. Depth (ft)	3.45
Conv. Total (cfs)	57903.1	Conv. (cfs)	57903.1
Length Wtd. (ft)	1.00	wetted Per. (ft)	65.68
Min ch El (ft)	809.64	Shear (lb/sq ft)	0.02
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.11
0.01		Cum SA (acres)	0.24
C & E Loss (ft)	0.00		
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.45333*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821	-.54 821	.5 821	.55 821	1.83 820.89					
5.8 820.08	6.47 819.98	13.14 819.21	19.48 818.97	113.9 818.15					
162.8 817.45	173.35 814.09	182.9 811.53	202.65 809.63	203.45 809.63					
223.62 811.59	232.17 814.04	239.45 816.45	277.47 816.77	277.63 816.77					
288 816.77									

Manning's n Values	num=	5							
Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129	-.54 .0129	.5 .0129	162.8 .0129	288 .0129					

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
162.8	239.45	1	1	1	.1	.3	

Blocked Obstructions	num=	2			
Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev
-10 0 825277.5401		288821.7679			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-val.		0.013
w.s. Elev (ft)	815.04	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		225.28
Crit w.s. (ft)		Area (sq ft)		225.28
E.G. slope (ft/ft)	0.000086	Flow (cfs)		545.00
Q Total (cfs)	545.00	Page 352		

CPNPPLocalPMP

Top Width (ft)	64.85	Top Width (ft)	64.85
Vel Total (ft/s)	2.42	Avg. Vel. (ft/s)	2.42
Max Chl Dpth (ft)	5.41	Hydr. Depth (ft)	3.47
Conv. Total (cfs)	58813.3	Conv. (cfs)	58813.3
Length wtd. (ft)	1.00	wetted Per. (ft)	66.03
Min Ch El (ft)	809.63	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.11
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.24
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.44*

INPUT

Description:

Station Elevation Data num= 21

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.56	821	.49	821	.54	821	1.82	820.89
5.78	820.08	6.44	819.98	13.11	819.2	19.44	818.96	113.73	818.15
162.56	817.44	173.14	814.06	182.73	811.48	202.54	809.62	203.32	809.62
223.58	811.55	232.15	814.01	239.47	816.44	277.47	816.75	277.63	816.75
288	816.75								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.56	.0129	.49	.0129	162.56	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

162.56	239.47	1	1	1	.1	.3
--------	--------	---	---	---	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5416	288821.7544		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-val.		0.013
w.s. Elev (ft)	815.05	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		228.04
E.G. Slope (ft/ft)	0.000083	Area (sq ft)		228.04
Q Total (cfs)	545.00	Flow (cfs)		545.00

Top width (ft)	65.22	CPNPPLocalPMP Top width (ft)	65.22
Vel Total (ft/s)	2.39	Avg. Vel. (ft/s)	2.39
Max Chl Dpth (ft)	5.43	Hydr. Depth (ft)	3.50
Conv. Total (cfs)	59791.3	Conv. (cfs)	59791.3
Length wtd. (ft)	1.00	wetted Per. (ft)	66.40
Min ch El (ft)	809.62	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.10
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.24
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.42666*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.57 821 .47 821 .52 821 1.8 820.9									
5.76 820.08 6.42 819.98 13.08 819.2 19.4 818.96 113.55 818.15									
162.32 817.43 172.94 814.04 182.55 811.44 202.44 809.62 203.19 809.62									
223.53 811.5 232.14 813.99 239.49 816.43 277.47 816.74 277.63 816.74									
288 816.74									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.57 .0129 .47 .0129 162.32 .0129 288 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
162.32 239.49	1 1 1	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825277.5431 288821.7409		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-Val.		0.013
w.s. Elev (ft)	815.05	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		230.43
E.G. Slope (ft/ft)	0.000081	Area (sq ft)		230.43
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	65.54	Top width (ft)		65.54

CPNPPLocalPMP

Vel Total (ft/s)	2.37	Avg. Vel. (ft/s)	2.37
Max Chl Dpth (ft)	5.43	Hydr. Depth (ft)	3.52
Conv. Total (cfs)	60638.5	Conv. (cfs)	60638.5
Length Wtd. (ft)	1.00	wetted Per. (ft)	66.73
Min Ch El (ft)	809.62	Shear (lb/sq ft)	0.02
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.10
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.23
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.41333*

INPUT

Description:

Station Elevation Data	num=	21
Sta Elev Sta Elev Sta Elev Sta Elev		
-10 821 -.58 821 .46 821 .51 821		
5.73 820.08 6.4 819.98 13.05 819.19 19.36 818.96 113.38 818.14		
162.07 817.41 172.73 814.02 182.38 811.39 202.34 809.61 203.07 809.61		
223.48 811.45 232.13 813.97 239.5 816.41 277.48 816.73 277.64 816.73		
288 816.73		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val		
-10 .0129 -.58 .0129 .46 .0129 162.07 .0129 288 .0129		

Bank Sta: Left Right Lengths: Left Channel Right	Coeff	Contr.	Expan.
162.07 239.5 1 1 1		.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825277.5445 288821.7275		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.		0.013
w.s. Elev (ft)	815.05	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		233.23
E.G. slope (ft/ft)	0.000078	Area (sq ft)		233.23
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	65.89	Top width (ft)		65.89

		CPNPPLocalPMP	
Vel Total (ft/s)	2.34	Avg. Vel. (ft/s)	2.34
Max Chl Dpth (ft)	5.44	Hydr. Depth (ft)	3.54
Conv. Total (cfs)	61646.0	Conv. (cfs)	61646.0
Length wtd. (ft)	1.00	wetted Per. (ft)	67.10
Min Ch El (ft)	809.61	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00
0.00			
Frctn Loss (ft)	0.00	cum volume (acre-ft)	1.09
0.01			
C & E Loss (ft)	0.00	cum SA (acres)	0.23
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.4*

INPUT

Description:

Station Elevation Data		num=		21	
Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.6	821	.44	821
5.71	820.09	6.37	819.98	13.01	819.19
161.83	817.4	172.52	814	182.21	811.35
223.44	811.4	232.12	813.94	239.52	816.4
288	816.71			277.48	816.71

Manning's n Values		num=		5	
Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.6	.0129	.44	.0129
161.83	.0129	172.52	.0129	182.21	.0129
223.44	.0129	232.12	.0129	239.52	.0129
288	.0129			277.48	.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
161.83	239.52	1	1	1	.1	.3	

Blocked Obstructions		num=		2	
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	277.546	288	821.714

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.		0.013
w.s. Elev (ft)	815.05	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		235.97
E.G. Slope (ft/ft)	0.000076	Area (sq ft)		235.97
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	66.24	Top width (ft)		66.24
Vel Total (ft/s)	2.31	Avg. vel. (ft/s)		2.31

CPNPPLocalPMP

Max Chl Dpth (ft)	5.45	Hydr. Depth (ft)	3.56
Conv. Total (cfs)	62634.1	Conv. (cfs)	62634.1
Length wtd. (ft)	1.00	wetted Per. (ft)	67.46
Min ch El (ft)	809.60	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.09
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.23
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.38666*

INPUT

Description:

Station Elevation Data num= 21

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.61	821	.43	821	.48	821	1.75	820.91
5.69	820.09	6.35	819.98	12.98	819.18	19.28	818.96	113.03	818.13
161.59	817.39	172.32	813.97	182.04	811.3	202.13	809.59	202.82	809.59
223.39	811.36	232.1	813.92	239.54	816.39	277.49	816.7	277.64	816.7
288	816.7								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.61	.0129	.43	.0129	161.59	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 161.59 239.54 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5475	288	21.7006	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-Val.		0.013
w.s. Elev (ft)	815.05	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		238.66
E.G. Slope (ft/ft)	0.000073	Area (sq ft)		238.66
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	66.58	Top width (ft)		66.58
Vel Total (ft/s)	2.28	Avg. Vel. (ft/s)		2.28

Max Chl Dpth (ft)	5.46	CPNPPLocalPMP Hydr. Depth (ft)	3.58
Conv. Total (cfs)	63610.5	Conv. (cfs)	63610.5
Length Wtd. (ft)	1.00	wetted Per. (ft)	67.81
Min Ch El (ft)	809.59	Shear (lb/sq ft)	0.02
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	1.08
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.23

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.37333*

INPUT

Description:

Station Elevation Data	num=	21
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-10 821 -.62 821 .41 821 .46 821 1.73 820.91		
5.67 820.09 6.33 819.98 12.95 819.17 19.24 818.96 112.86 818.13		
161.35 817.37 172.11 813.95 181.87 811.26 202.03 809.58 202.69 809.58		
223.34 811.31 232.09 813.9 239.55 816.37 277.49 816.69 277.65 816.69		
288 816.69		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
-10 .0129 -.62 .0129 .41 .0129 161.35 .0129 288 .0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 161.35 239.55 1 1 1 .1 .3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825 277.549 288 821.6871		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB Vel Head (ft)	0.08	wt. n-val.		0.013
w.s. Elev (ft)	815.05	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		241.33
E.G. Slope (ft/ft)	0.000071	Area (sq ft)		241.33
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	66.93	Top width (ft)		66.93
Vel Total (ft/s)	2.26	Avg. Vel. (ft/s)		2.26
Max Chl Dpth (ft)	5.47	Hydr. Depth (ft)		3.61

CPNPPLocalPMP

Conv. Total (cfs)	64572.3	Conv. (cfs)	64572.3
Length wtd. (ft)	1.00	wetted Per. (ft)	68.16
Min Ch El (ft)	809.58	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00
0.00		Cum Volume (acre-ft)	1.08
Frctn Loss (ft)	0.00	Cum SA (acres)	0.23
0.01			
C & E Loss (ft)	0.00		
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.36*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821	-.64 821	.4 821	.45 821	1.72 820.91					
5.65 820.09	6.3 819.98	12.92 819.17	19.19 818.96	112.68 818.12					
161.1 817.36	171.91 813.93	181.69 811.21	201.93 809.57	202.56 809.57					
223.3 811.26	232.08 813.87	239.57 816.36	277.49 816.67	277.65 816.67					
288 816.67									

Manning's n Values	num=	5							
Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129	-.64 .0129	.4 .0129	161.1 .0129	288 .0129					

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 161.1 239.57 1 1 1 .1 .3

Blocked Obstructions	num=	2			
Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev
-10 0 825277.5504	288821.6736				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.		0.013
w.s. Elev (ft)	815.05	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		244.25
Crit w.s. (ft)		Area (sq ft)		244.25
E.G. Slope (ft/ft)	0.000069	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		67.27
Top width (ft)	67.27	Avg. vel. (ft/s)		2.23
vel Total (ft/s)	2.23	Hydr. Depth (ft)		3.63
Max Chl Dpth (ft)	5.48			

Conv. Total (cfs)	65653.7	CPNPPLocalPMP Conv. (cfs)	65653.7
Length wtd. (ft)	1.00	wetted Per. (ft)	68.52
Min Ch El (ft)	809.57	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	288.00
0.00		Cum Volume (acre-ft)	1.07
Frctn Loss (ft)	0.00	Cum SA (acres)	0.23
0.01			
C & E Loss (ft)	0.00		
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.34666*

INPUT

Description:

Station Elevation Data	num=	21
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-10 821 -.65 821 .38 821 .43 821 1.7 820.92		
5.62 820.09 6.28 819.98 12.88 819.16 19.15 818.96 112.51 818.12		
160.86 817.35 171.7 813.91 181.52 811.17 201.82 809.56 202.44 809.56		
223.25 811.22 232.07 813.85 239.59 816.35 277.5 816.66 277.65 816.66		
288 816.66		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
-10 .0129 -.65 .0129 .38 .0129 160.86 .0129 288 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
160.86 239.59	1 1 1	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825277.5519 288821.6602		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-Val.		0.013
w.s. Elev (ft)	815.05	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		246.80
Crit w.s. (ft)		Area (sq ft)		246.80
E.G. Slope (ft/ft)	0.000067	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		67.60
Top width (ft)	67.60	Avg. vel. (ft/s)		2.21
Vel Total (ft/s)	2.21	Hydr. Depth (ft)		3.65
Max chl Dpth (ft)	5.49	Conv. (cfs)		66582.1
Conv. Total (cfs)	66582.1	Page 360		

CPNPPLocalPMP

Length wtd. (ft)	1.00	wetted Per. (ft)	68.86
Min Ch El (ft)	809.56	Shear (lb/sq ft)	0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.07
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.22
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.33333*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.66 821 .37 821 .42 821 1.69 820.92									
5.6 820.1 6.26 819.98 12.85 819.15 19.11 818.96 112.34 818.11									
160.62 817.33 171.5 813.88 181.35 811.12 201.72 809.55 202.31 809.55									
223.21 811.17 232.06 813.83 239.6 816.33 277.5 816.65 277.66 816.65									
288 816.65									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.66 .0129 .37 .0129 160.62 .0129 288 .0129									

Bank Sta: Left Right Lengths: Left Channel Right									
160.62 239.6 1 1 1									
Coeff Contr. Expan.									
.1 .3									

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825277.5533 288821.6467					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		249.75
E.G. slope (ft/ft)	0.000065	Area (sq ft)		249.75
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	67.96	Top width (ft)		67.96
Vel Total (ft/s)	2.18	Avg. Vel. (ft/s)		2.18
Max Chl Dpth (ft)	5.51	Hydr. Depth (ft)		3.67
Conv. Total (cfs)	67667.3	Conv. (cfs)		67667.3

Length wtd. (ft)	1.00	CPNPPLocalPMP Wetted Per. (ft)	69.23
Min Ch El (ft)	809.55	Shear (lb/sq ft)	0.01
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	1.06
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.22

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.32*

INPUT

Description:

Station Elevation Data	num=	21
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-10 821 -.68 821 .35 821 .41 821 1.67 820.92		
5.58 820.1 6.23 819.98 12.82 819.15 19.07 818.96 112.16 818.11		
160.38 817.32 171.29 813.86 181.18 811.08 201.62 809.54 202.18 809.54		
223.16 811.12 232.04 813.8 239.62 816.32 277.5 816.63 277.66 816.63		
288 816.63		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
-10 .0129 -.68 .0129 .35 .0129 160.38 .0129 288 .0129		

Bank Sta: Left Right Lengths: Left Channel Right	Coeff	Contr.	Expan.
160.38 239.62 1 1 1		.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825277.5548 288821.6332		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB Vel Head (ft)	0.07	wt. n-val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		252.52
E.G. Slope (ft/ft)	0.000063	Area (sq ft)		252.52
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top Width (ft)	68.30	Top Width (ft)		68.30
Vel Total (ft/s)	2.16	Avg. Vel. (ft/s)		2.16
Max Chl Dpth (ft)	5.52	Hydr. Depth (ft)		3.70
Conv. Total (cfs)	68690.4	Conv. (cfs)		68690.4
Length wtd. (ft)	1.00	wetted Per. (ft)		69.59

CPNPPLocalPMP

Min Ch El (ft)	809.54	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.05
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.22
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.30666*

INPUT

Description:

Station Elevation Data	num=	21								
Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 821	-.69 821	.34 821	.39 821	1.65 820.93						
5.56 820.1	6.21 819.99	12.79 819.14	19.03 818.96	111.99 818.1						
160.14 817.31	171.09 813.84	181.01 811.03	201.51 809.54	202.06 809.54						
223.11 811.08	232.03 813.78	239.64 816.31	277.51 816.62	277.67 816.62						
288 816.62										

Manning's n Values	num=	5							
Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129	-.69 .0129	.34 .0129	160.14 .0129	288 .0129					

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
160.14	239.64	1	1	1	.1	.3	

Blocked Obstructions	num=	2			
Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev
-10 0 825277.5563					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-Val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		255.03
E.G. Slope (ft/ft)	0.000061	Area (sq ft)		255.03
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	68.62	Top width (ft)		68.62
Vel Total (ft/s)	2.14	Avg. Vel. (ft/s)		2.14
Max Chl Dpth (ft)	5.52	Hydr. Depth (ft)		3.72
Conv. Total (cfs)	69608.8	Conv. (cfs)		69608.8
Length wtd. (ft)	1.00	wetted Per. (ft)		69.92

Min Ch El (ft)	809.54	CPNPPLocalPMP Shear (lb/sq ft)	0.01
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	1.05
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.22

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.29333*

INPUT

Description:

Station Elevation Data num= 21

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.7	821	.32	821	.38	821	1.64	820.93
5.54	820.1	6.19	819.99	12.75	819.14	18.99	818.96	111.81	818.1
159.89	817.29	170.88	813.82	180.83	810.99	201.41	809.53	201.93	809.53
223.07	811.03	232.02	813.75	239.65	816.29	277.51	816.61	277.67	816.61
288	816.61								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.7	.0129	.32	.0129	159.89	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 159.89 239.65 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5577	288821.6063		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB Vel Head (ft)	0.07	wt. n-val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		257.91
E.G. slope (ft/ft)	0.000059	Area (sq ft)		257.91
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	68.99	Top width (ft)		68.99
Vel Total (ft/s)	2.11	Avg. vel. (ft/s)		2.11
Max Chl Dpth (ft)	5.53	Hydr. Depth (ft)		3.74
Conv. Total (cfs)	70668.9	Conv. (cfs)		70668.9
Length wtd. (ft)	1.00	wetted Per. (ft)		70.30
Min Ch El (ft)	809.53	Shear (lb/sq ft)		0.01

CPNPPLocalPMP

Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00	0.00
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)		1.04
C & E Loss (ft) 0.02	0.00	Cum SA (acres)		0.22

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.28*

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.72	821	.31	821	.36	821	1.62	820.93		
5.51	820.1	6.17	819.99	12.72	819.13	18.95	818.95	111.64	818.1		
159.65	817.28	170.68	813.8	180.66	810.94	201.31	809.52	201.8	809.52		
223.02	810.98	232.01	813.73	239.67	816.28	277.51	816.59	277.67	816.59		
288	816.59										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.72	.0129	.31	.0129	159.65	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	159.65	239.67		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5592	288821.5928					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		260.81
Crit w.s. (ft)		Area (sq ft)		260.81
E.G. Slope (ft/ft)	0.000058	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		69.31
Top width (ft)	69.31	Avg. vel. (ft/s)		2.09
vel Total (ft/s)	2.09	Hydr. Depth (ft)		3.76
Max chl Dpth (ft)	5.54	Conv. (cfs)		71767.2
Conv. Total (cfs)	71767.2	wetted Per. (ft)		70.64
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.01
Min ch El (ft)	809.52			

	Alpha	CPNPPLocalPMP	Stream Power (lb/ft s)	288.00	0.00
0.00	1.00				
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)		1.04
0.01					
C & E Loss (ft)	0.00		Cum SA (acres)		0.22
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.26666*

INPUT

Description:

Station	Elevation	Data	num=	21	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.73			.29	821	.35	821	1.6	820.93
5.49	820.11	6.14			12.69	819.12	18.91	818.95	111.47	818.09
159.41	817.27	170.47			180.49	810.9	201.21	809.51	201.68	809.51
222.97	810.94	231.99			239.69	816.27	277.52	816.58	277.68	816.58
288	816.58									

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129			.29	.0129	159.41	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 159.41 239.69 1 1 1 .1 .3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825277.5607	288821.5793		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-Val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		263.50
E.G. Slope (ft/ft)	0.000056	Area (sq ft)		263.50
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	69.66	Top width (ft)		69.66
Vel Total (ft/s)	2.07	Avg. vel. (ft/s)		2.07
Max Chl Dpth (ft)	5.55	Hydr. Depth (ft)		3.78
Conv. Total (cfs)	72762.0	Conv. (cfs)		72762.0
Length wtd. (ft)	1.00	wetted Per. (ft)		70.99
Min Ch El (ft)	809.51	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00

				CPNPPLocalPMP
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.03
0.01	C & E Loss (ft)	0.00	Cum SA (acres)	0.22
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.25333*

INPUT

Description:

Station Elevation Data	num=	21								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-10 821 -.74 821 .28 821 .33 821 1.59 820.94										
5.47 820.11 6.12 819.99 12.66 819.12 18.86 818.95 111.29 818.09										
159.17 817.25 170.26 813.75 180.32 810.85 201.1 809.5 201.55 809.5										
222.93 810.89 231.98 813.68 239.7 816.25 277.52 816.57 277.68 816.57										
288 816.57										

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -.74 .0129 .28 .0129 159.17 .0129 288 .0129									

Bank Sta: Left Right Lengths: Left Channel Right	Coeff	Contr.	Expan.
159.17 239.7 1 1 1		.1	.3

Blocked Obstructions	num=	2				
Sta L Sta R Elev Sta L Sta R Elev						
-10 0 825277.5621 288821.5659						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		266.57
E.G. slope (ft/ft)	0.000054	Area (sq ft)		266.57
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	70.02	Top width (ft)		70.02
vel Total (ft/s)	2.04	Avg. vel. (ft/s)		2.04
Max Chl Dpth (ft)	5.56	Hydr. Depth (ft)		3.81
Conv. Total (cfs)	73918.5	Conv. (cfs)		73918.5
Length wtd. (ft)	1.00	wetted Per. (ft)		71.37
Min Ch El (ft)	809.50	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				

Frctn Loss (ft)	0.00	CPNPPLocalPMP	
0.01		Cum Volume (acre-ft)	1.02
C & E Loss (ft)	0.00	Cum SA (acres)	0.21
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.24*

INPUT

Description:

Station Elevation Data	num=	21							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 821 -.76 821 .27 821 .32 821 1.57 820.94									
5.45 820.11 6.1 819.99 12.62 819.11 18.82 818.95 111.12 818.08									
158.92 817.24 170.06 813.73 180.15 810.81 201 809.49 201.43 809.49									
222.88 810.84 231.97 813.66 239.72 816.24 277.52 816.55 277.68 816.55									
288 816.55									

Manning's n Values	num=	5					
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val							
-10 .0129 -.76 .0129 .27 .0129 158.92 .0129 288 .0129							

Bank Sta: Left Right Lengths: Left Channel Right								
158.92 239.72 1 1 1								
Coeff Contr. Expan.								
.1 .3								

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825277.5636 288821.5524					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		269.36
E.G. Slope (ft/ft)	0.000053	Area (sq ft)		269.36
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	70.35	Top width (ft)		70.35
Vel Total (ft/s)	2.02	Avg. Vel. (ft/s)		2.02
Max Chl Dpth (ft)	5.57	Hydr. Depth (ft)		3.83
Conv. Total (cfs)	74974.1	Conv. (cfs)		74974.1
Length wtd. (ft)	1.00	wetted Per. (ft)		71.71
Min Ch El (ft)	809.49	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.02
		Page 368		

0.01
 C & E Loss (ft) 0.00 Cum SA (acres) 0.21
 0.02

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.22666*

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.77	821	.25	821	.3	821	1.55	820.94		
5.42	820.11	6.07	819.99	12.59	819.11	18.78	818.95	110.94	818.08		
158.68	817.23	169.85	813.71	179.97	810.76	200.9	809.48	201.3	809.48		
222.84	810.8	231.96	813.64	239.74	816.23	277.53	816.54	277.69	816.54		
288	816.54										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.77	.0129	.25	.0129	158.68	.0129	288	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 158.68 239.74 1 1 1 .1 .3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
-10	0	825277.5651	288821.5389				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.13	Element	Left OB	Channel
Right OB Vel Head (ft)	0.06	wt. n-Val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		272.22
E.G. Slope (ft/ft)	0.000051	Area (sq ft)		272.22
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	70.68	Top width (ft)		70.68
Vel Total (ft/s)	2.00	Avg. vel. (ft/s)		2.00
Max chl Dpth (ft)	5.58	Hydr. Depth (ft)		3.85
Conv. Total (cfs)	76065.4	Conv. (cfs)		76065.4
Length wtd. (ft)	1.00	wetted Per. (ft)		72.05
Min ch El (ft)	809.48	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		1.01
0.01				

C & E Loss (ft) 0.02
 0.00 CPNPPLocalPMP Cum SA (acres) 0.21

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.21333*

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.78	821	.24	821	.29	821	1.54	820.95		
5.4	820.11	6.05	819.99	12.56	819.1	18.74	818.95	110.77	818.07		
158.44	817.21	169.65	813.68	179.8	810.72	200.79	809.47	201.17	809.47		
222.79	810.75	231.94	813.61	239.75	816.21	277.53	816.53	277.69	816.53		
288	816.53										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.78	.0129	.24	.0129	158.44	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	158.44	239.75		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825277.5665	288821.5255				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		275.20
Crit w.s. (ft)		Area (sq ft)		275.20
E.G. slope (ft/ft)	0.000050	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		71.05
Top width (ft)	71.05	Avg. vel. (ft/s)		1.98
vel Total (ft/s)	1.98	Hydr. Depth (ft)		3.87
Max Chl Dpth (ft)	5.59	Conv. (cfs)		77181.0
Conv. Total (cfs)	77181.0	wetted Per. (ft)		72.43
Length Wtd. (ft)	1.00	Shear (lb/sq ft)		0.01
Min Ch El (ft)	809.47	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum volume (acre-ft)		1.01
0.00		Cum SA (acres)		0.21
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			

CPNPPLocalPMP

0.02

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.2*

INPUT

Description:

Station	Elevation	Data	num=	21	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.8	821	.22	821	.27	821	1.52	820.95	
5.38	820.11	6.03	819.99	12.53	819.09	18.7	818.95	110.6	818.07	
158.2	817.2	169.44	813.66	179.63	810.67	200.69	809.46	201.05	809.46	
222.74	810.7	231.93	813.59	239.77	816.2	277.54	816.51	277.69	816.51	
288	816.51									

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.8	.0129	.22	.0129	158.2	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	158.2	239.77		1	1	1		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825	277.568	288	821.512

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	815.06	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		278.21
Crit w.s. (ft)		Area (sq ft)		278.21
E.G. Slope (ft/ft)	0.000048	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		71.38
Top width (ft)	71.38	Avg. vel. (ft/s)		1.96
Vel Total (ft/s)	1.96	Hydr. Depth (ft)		3.90
Max Chl Dpth (ft)	5.60	Conv. (cfs)		78348.3
Conv. Total (cfs)	78348.3	wetted Per. (ft)		72.78
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.01
Min ch El (ft)	809.46	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum Volume (acre-ft)		1.00
0.00		Cum SA (acres)		0.21
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.18666*

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.81	821	.21	821	.26	821	1.5	820.95		
5.36	820.12	6	819.99	12.49	819.09	18.66	818.95	110.42	818.06		
157.95	817.19	169.24	813.64	179.46	810.63	200.59	809.46	200.92	809.46		
222.7	810.66	231.92	813.57	239.79	816.19	277.54	816.5	277.7	816.5		
288	816.5										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.81	.0129	.21	.0129	157.95	.0129	288	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 157.95 239.79 1 1 1 .1 .3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5695	288	821.4985				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-Val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		280.69
E.G. Slope (ft/ft)	0.000047	Area (sq ft)		280.69
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	71.71	Top width (ft)		71.71
Vel Total (ft/s)	1.94	Avg. vel. (ft/s)		1.94
Max Chl Dpth (ft)	5.61	Hydr. Depth (ft)		3.91
Conv. Total (cfs)	79271.8	Conv. (cfs)		79271.8
Length wtd. (ft)	1.00	wetted Per. (ft)		73.11
Min Ch El (ft)	809.46	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.99
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.21
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.17333*

INPUT

Description:

Station Elevation Data		num=		21							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.82	821	.19	821	.24	821	1.49	820.96		
5.34	820.12	5.98	819.99	12.46	819.08	18.62	818.95	110.25	818.06		
157.71	817.17	169.03	813.62	179.29	810.58	200.49	809.45	200.79	809.45		
222.65	810.61	231.91	813.54	239.8	816.17	277.54	816.48	277.7	816.49		
288	816.49										

Manning's n Values		num=		5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.82	.0129	.19	.0129	157.71	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	157.71	239.8		1	1		.1	.3

Blocked Obstructions		num=		2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825	277.5709	288	821.485				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		283.83
E.G. slope (ft/ft)	0.000046	Area (sq ft)		283.83
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	72.07	Top width (ft)		72.07
Vel Total (ft/s)	1.92	Avg. vel. (ft/s)		1.92
Max Chl Dpth (ft)	5.62	Hydr. Depth (ft)		3.94
Conv. Total (cfs)	80475.2	Conv. (cfs)		80475.2
Length wtd. (ft)	1.00	wetted Per. (ft)		73.49
Min Ch El (ft)	809.45	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.99
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.20
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.16*

INPUT

Description:

Station		Elevation		Data		num=		21	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.84	821	.18	821	.23	821	1.47	820.96
5.31	820.12	5.96	819.99	12.43	819.07	18.57	818.95	110.08	818.05
157.47	817.16	168.83	813.59	179.11	810.54	200.38	809.44	200.67	809.44
222.6	810.56	231.9	813.52	239.82	816.16	277.55	816.47	277.7	816.47
288	816.47								

Manning's n		Values		num=		5	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.84	.0129	.18	.0129	157.47	.0129
						288	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	157.47	239.82		1	1		.1	.3

Blocked Obstructions		num=		2	
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5724	288821.4716		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		286.81
E.G. Slope (ft/ft)	0.000045	Area (sq ft)		286.81
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	72.41	Top width (ft)		72.41
Vel Total (ft/s)	1.90	Avg. vel. (ft/s)		1.90
Max Chl Dpth (ft)	5.63	Hydr. Depth (ft)		3.96
Conv. Total (cfs)	81628.5	Conv. (cfs)		81628.5
Length wtd. (ft)	1.00	wetted Per. (ft)		73.85
Min Ch El (ft)	809.44	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.98
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.20
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.14666*

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.85	821	.16	821	.21	821	1.45	820.96		
5.29	820.12	5.93	819.99	12.4	819.07	18.53	818.95	109.9	818.05		
157.23	817.15	168.62	813.57	178.94	810.49	200.28	809.43	200.54	809.43		
222.56	810.52	231.88	813.5	239.84	816.15	277.55	816.46	277.71	816.46		
288	816.46										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.85	.0129	.16	.0129	157.23	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	157.23	239.84		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5739	288821.4581					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		289.72
E.G. Slope (ft/ft)	0.000043	Area (sq ft)		289.72
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	72.73	Top width (ft)		72.73
Vel Total (ft/s)	1.88	Avg. Vel. (ft/s)		1.88
Max Chl Dpth (ft)	5.64	Hydr. Depth (ft)		3.98
Conv. Total (cfs)	82757.8	Conv. (cfs)		82757.8
Length wtd. (ft)	1.00	wetted Per. (ft)		74.19
Min ch El (ft)	809.43	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.97
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.20
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 2.13333*

INPUT

Description:

Station Elevation Data		num=		21							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.86	821	.15	821	.2	821	1.44	820.97		
5.27	820.12	5.91	819.99	12.36	819.06	18.49	818.95	109.73	818.05		
156.98	817.13	168.42	813.55	178.77	810.45	200.18	809.42	200.41	809.42		
222.51	810.47	231.87	813.47	239.85	816.13	277.55	816.44	277.71	816.44		
288	816.44										

Manning's n Values		num=		5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.86	.0129	.15	.0129	156.98	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	156.98	239.85		1	1		.1	.3

Blocked Obstructions		num=		2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825277.5753	288821.4446						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		292.71
Crit w.s. (ft)		Area (sq ft)		292.71
E.G. slope (ft/ft)	0.000042	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		73.10
Top width (ft)	73.10	Avg. vel. (ft/s)		1.86
vel Total (ft/s)	1.86	Hydr. Depth (ft)		4.00
Max chl Dpth (ft)	5.65	Conv. (cfs)		83907.2
Conv. Total (cfs)	83907.2	wetted Per. (ft)		74.56
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.01
Min ch El (ft)	809.42	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum volume (acre-ft)		0.97
0.00		Cum SA (acres)		0.20
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 2.12*

INPUT

Description:

Station	Elevation	Data	num=	21	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.88	821	.13	821	.18	821	1.42	820.97	
5.25	820.13	5.89	819.99	12.33	819.06	18.45	818.94	109.55	818.04	
156.74	817.12	168.21	813.53	178.6	810.4	200.08	809.41	200.29	809.41	
222.47	810.42	231.86	813.45	239.87	816.12	277.56	816.43	277.72	816.43	
288	816.43									

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.88	.0129	.13	.0129	156.74	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	156.74	239.87		1	1	1		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825277.5768	288821.4312		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		295.84
Crit w.s. (ft)		Area (sq ft)		295.84
E.G. Slope (ft/ft)	0.000041	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		73.43
Top width (ft)	73.43	Avg. Vel. (ft/s)		1.84
Vel Total (ft/s)	1.84	Hydr. Depth (ft)		4.03
Max Chl Dpth (ft)	5.66	Conv. (cfs)		85143.8
Conv. Total (cfs)	85143.8	wetted Per. (ft)		74.91
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.01
Min Ch El (ft)	809.41	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum Volume (acre-ft)		0.96
0.00		Cum SA (acres)		0.20
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel

RS: 2.10666*

INPUT

Description:

Station	Elevation	Data	num=	21	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.89	821	.12	821	.17	821	1.4	820.97	
5.22	820.13	5.86	819.99	12.3	819.05	18.41	818.94	109.38	818.04	
156.5	817.11	168	813.51	178.43	810.36	199.97	809.4	200.16	809.4	
222.42	810.37	231.85	813.43	239.89	816.11	277.56	816.42	277.72	816.42	
288	816.42									

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.89	.0129	.12	.0129	156.5	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	156.5	239.89		1	1		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825277.5783	288821.4177		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		298.80
Crit w.s. (ft)		Area (sq ft)		298.80
E.G. Slope (ft/ft)	0.000040	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		73.75
Top width (ft)	73.75	Avg. vel. (ft/s)		1.82
Vel Total (ft/s)	1.82	Hydr. Depth (ft)		4.05
Max Chl Dpth (ft)	5.67	Conv. (cfs)		86303.5
Conv. Total (cfs)	86303.5	wetted Per. (ft)		75.25
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.01
Min ch El (ft)	809.40	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum Volume (acre-ft)		0.95
0.00		Cum SA (acres)		0.20
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel

REACH: East Channel CPNPPLocalPMP
RS: 2.09333*

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.9	821	.1	821	.15	821	1.39	820.98		
5.2	820.13	5.84	820	12.27	819.04	18.37	818.94	109.21	818.03		
156.26	817.09	167.8	813.48	178.25	810.31	199.87	809.39	200.03	809.39		
222.37	810.33	231.83	813.4	239.9	816.09	277.56	816.4	277.72	816.4		
288	816.4										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.9	.0129	.1	.0129	156.26	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	156.26	239.9		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Elev		Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R	Elev
-10	0	825277.5797	288821.4042				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		301.92
E.G. slope (ft/ft)	0.000039	Area (sq ft)		301.92
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	74.13	Top width (ft)		74.13
vel Total (ft/s)	1.81	Avg. vel. (ft/s)		1.81
Max Chl Dpth (ft)	5.68	Hydr. Depth (ft)		4.07
Conv. Total (cfs)	87515.1	Conv. (cfs)		87515.1
Length wtd. (ft)	1.00	wetted Per. (ft)		75.64
Min Ch El (ft)	809.39	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.95
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.19
0.02				

CROSS SECTION

RIVER: East Channel
REACH: East Channel RS: 2.08*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 21		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.92	821	.09	821	.14	821	1.37	820.98		
5.18	820.13	5.82	820	12.23	819.04	18.33	818.94	109.03	818.03		
156.01	817.08	167.59	813.46	178.08	810.27	199.77	809.38	199.91	809.38		
222.33	810.28	231.82	813.38	239.92	816.08	277.57	816.39	277.73	816.39		
288	816.39										

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.92	.0129	.09	.0129	156.01	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	156.01	239.92		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Elev		Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Elev
-10	0	825277.5812	288821.3908				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB Vel Head (ft)	0.05	wt. n-Val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		304.93
E.G. Slope (ft/ft)	0.000038	Area (sq ft)		304.93
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	74.46	Top width (ft)		74.46
Vel Total (ft/s)	1.79	Avg. Vel. (ft/s)		1.79
Max Chl Dpth (ft)	5.69	Hydr. Depth (ft)		4.10
Conv. Total (cfs)	88703.3	Conv. (cfs)		88703.3
Length wtd. (ft)	1.00	wetted Per. (ft)		75.98
Min Ch El (ft)	809.38	Shear (lb/sq ft)		0.01
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.94
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.19
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.06666*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 21		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.93	821	.07	821	.12	821	1.35	820.98		
5.16	820.13	5.8	820	12.2	819.03	18.28	818.94	108.86	818.02		
155.77	817.07	167.39	813.44	177.91	810.22	199.66	809.37	199.78	809.37		
222.28	810.23	231.81	813.36	239.94	816.07	277.57	816.38	277.73	816.38		
288	816.38										

Manning's n Values		num= 5		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.93	.0129	.07	.0129	155.77	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	155.77	239.94		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R
-10	0	825277.5827	277.5827	288	821.3773				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		308.07
E.G. Slope (ft/ft)	0.000037	Area (sq ft)		308.07
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	74.78	Top width (ft)		74.78
Vel Total (ft/s)	1.77	Avg. vel. (ft/s)		1.77
Max Chl Dpth (ft)	5.70	Hydr. Depth (ft)		4.12
Conv. Total (cfs)	89961.7	Conv. (cfs)		89961.7
Length wtd. (ft)	1.00	wetted Per. (ft)		76.32
Min Ch El (ft)	809.37	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.93
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.19
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.05333*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 21		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.94	821	.06	821	.11	821	1.34	820.99		
5.14	820.14	5.77	820	12.17	819.02	18.24	818.94	108.69	818.02		
155.53	817.05	167.18	813.42	177.74	810.18	199.56	809.37	199.66	809.37		
222.23	810.19	231.8	813.33	239.95	816.05	277.58	816.36	277.73	816.36		
288	816.36										

Manning's n Values		num= 5		Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.94	.0129	.06	.0129	155.53	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	155.53	239.95		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825277.5841		288821.3639					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		310.80
Crit w.s. (ft)		Area (sq ft)		310.80
E.G. slope (ft/ft)	0.000036	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		75.14
Top width (ft)	75.14	Avg. vel. (ft/s)		1.75
vel Total (ft/s)	1.75	Hydr. Depth (ft)		4.14
Max chl Dpth (ft)	5.70	Conv. (cfs)		90997.5
Conv. Total (cfs)	90997.5	wetted Per. (ft)		76.70
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.01
Min Ch El (ft)	809.37	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum volume (acre-ft)		0.93
0.00		Cum SA (acres)		0.19
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.04*

INPUT
 Description:

Station Elevation Data				num=	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	21	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.96	821		.04	821	.09	821	1.32	820.99
5.11	820.14	5.75	820		12.14	819.02	18.2	818.94	108.51	818.01
155.29	817.04	166.98	813.39		177.57	810.13	199.46	809.36	199.53	809.36
222.19	810.14	231.79	813.31		239.97	816.04	277.58	816.35	277.74	816.35
288	816.35									

Manning's n Values				num=						
Sta	n Val	Sta	n Val	5	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.96	.0129		.04	.0129	155.29	.0129	288	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	155.29	239.97		1	1	1		.1	.3

Blocked Obstructions				num=							
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	277.5856	288	821.3504						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		314.08
Crit w.s. (ft)		Area (sq ft)		314.08
E.G. Slope (ft/ft)	0.000035	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		75.48
Top width (ft)	75.48	Avg. Vel. (ft/s)		1.74
Vel Total (ft/s)	1.74	Hydr. Depth (ft)		4.16
Max Chl Dpth (ft)	5.71	Conv. (cfs)		92315.8
Conv. Total (cfs)	92315.8	wetted Per. (ft)		77.05
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.01
Min Ch El (ft)	809.36	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum Volume (acre-ft)		0.92
0.00		Cum SA (acres)		0.19
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.02666*

INPUT
 Description:
 Station Elevation Data num=

Sta	Elev	Sta	Elev	CPNPPLocalPMP	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	-.97	821	.03	821	.08	821	1.3	820.99	
5.09	820.14	5.73	820	12.1	819.01	18.16	818.94	108.34	818.01	
155.04	817.03	166.77	813.37	177.39	810.09	199.36	809.35	199.4	809.35	
222.14	810.09	231.77	813.29	239.99	816.03	277.58	816.34	277.74	816.34	
288	816.34									

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.97	.0129	.03	.0129	155.04	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

Sta L	Sta R	Elev	Sta L	Sta R	Elev			
155.04	239.99					1	1	1
								.1
								.3
-10	0	825277.5871		288821.3369				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-Val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		317.12
Crit w.s. (ft)		Area (sq ft)		317.12
E.G. Slope (ft/ft)	0.000034	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		75.81
Top width (ft)	75.81	Avg. vel. (ft/s)		1.72
Vel Total (ft/s)	1.72	Hydr. Depth (ft)		4.18
Max Chl Dpth (ft)	5.72	conv. (cfs)		93530.7
Conv. Total (cfs)	93530.7	wetted Per. (ft)		77.40
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.01
Min Ch El (ft)	809.35	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum Volume (acre-ft)		0.91
0.00		Cum SA (acres)		0.19
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2.01333*

INPUT

Description:

Station	Elevation	Data	num=	21	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPPLocalPMP									
-10	821	-.98	821	.01	821	.06	821	1.29	821		
5.07	820.14	5.7	820	12.07	819.01	18.12	818.94	108.16	818		
154.8	817.01	166.57	813.35	177.22	810.04	199.25	809.34	199.28	809.34		
222.1	810.05	231.76	813.26	240	816.01	277.59	816.32	277.74	816.32		
288	816.32										

Manning's n Values		num=		5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.98	.0129	.01	.0129	154.8	.0129	288	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	154.8	240		1	1		.1	.3

Blocked Obstructions		num=		2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825	277.5885	288	821.3235				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		320.28
E.G. slope (ft/ft)	0.000033	Area (sq ft)		320.28
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	76.17	Top width (ft)		76.17
vel Total (ft/s)	1.70	Avg. vel. (ft/s)		1.70
Max Chl Dpth (ft)	5.73	Hydr. Depth (ft)		4.20
Conv. Total (cfs)	94784.3	Conv. (cfs)		94784.3
Length wtd. (ft)	1.00	wetted Per. (ft)		77.77
Min Ch El (ft)	809.34	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	288.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.90
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.18
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 2

INPUT

Description:

Station Elevation Data		num=		13							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	0	821	1.27	821	5.68	820	12.04	819		

107.99	818	154.56	817	177.05	810	199.15	809.33	222.05	810
240.02	816	277.59	816.31	288	816.31				

CPNPPLocalPMP

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	288	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	154.56	240.02	.99	.99	.99	.1	.3
--	--------	--------	-----	-----	-----	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	277.59	288	821.31

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
w.s. Elev (ft)	815.07	Reach Len. (ft)	0.99	0.99
0.99		Flow Area (sq ft)		323.38
Crit w.s. (ft)		Area (sq ft)		323.38
E.G. slope (ft/ft)	0.000032	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		76.50
Top width (ft)	76.50	Avg. vel. (ft/s)		1.69
vel Total (ft/s)	1.69	Hydr. Depth (ft)		4.23
Max chl Dpth (ft)	5.74	Conv. (cfs)		96034.7
Conv. Total (cfs)	96034.7	wetted Per. (ft)		78.12
Length wtd. (ft)	0.99	Shear (lb/sq ft)		0.01
Min ch El (ft)	809.33	Stream Power (lb/ft s)	288.00	0.00
Alpha	1.00	Cum volume (acre-ft)		0.90
0.00		Cum SA (acres)		0.18
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.98630*

INPUT

Description:

Station	Elevation	Data	num=	16						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-9.86	820.95	0	820.95	1.25	820.95	5.6	819.96	11.88	818.97	
106.51	817.99	152.44	817	169.8	811.63	175.23	809.98	197.62	809.31	
220.68	809.98	228.11	812.42	238.78	815.97	276.39	816.29	277.53	816.29	
286.81	816.29									

CPNPPLocalPMP

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 -9.86 .0129 0 .0129 152.44 .0129 286.81 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 152.44 238.78 .99 .99 .99 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 276.404 286.81 821.251

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
w.s. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		328.62
E.G. Slope (ft/ft)	0.000031	Area (sq ft)		328.62
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	77.43	Top width (ft)		77.43
Vel Total (ft/s)	1.66	Avg. vel. (ft/s)		1.66
Max chl Dpth (ft)	5.77	Hydr. Depth (ft)		4.24
Conv. Total (cfs)	97872.1	Conv. (cfs)		97872.1
Length wtd. (ft)	0.99	wetted Per. (ft)		79.04
Min ch El (ft)	809.31	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	286.81	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.89
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.18
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.97260*

INPUT

Description:

Station Elevation Data num= 16									
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-9.73 820.89 0 820.89 1.24 820.89 5.52 819.92 11.71 818.95									
105.03 817.97 150.33 817 167.91 811.59 173.41 809.97 196.08 809.3									
219.31 809.97 226.8 812.37 237.53 815.95 275.18 816.27 276.33 816.27									
285.62 816.27									

Manning's n Values num= 4
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	Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val
	-9.73	.0129	0	.0129	150.33	.0129	285.62	.0129	
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	150.33	237.53		.99	.99	.99		.1	.3
Blocked Obstructions			num=	1					
	Sta L	Sta R	Elev						
	275.218	285.628	21.1919						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-Val.		0.013
w.s. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		333.40
E.G. slope (ft/ft)	0.000030	Area (sq ft)		333.40
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	78.33	Top width (ft)		78.33
Vel Total (ft/s)	1.63	Avg. Vel. (ft/s)		1.63
Max Chl Dpth (ft)	5.78	Hydr. Depth (ft)		4.26
Conv. Total (cfs)	99516.5	Conv. (cfs)		99516.5
Length wtd. (ft)	0.99	wetted Per. (ft)		79.93
Min Ch El (ft)	809.30	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	285.62	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.88
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.18
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.95890*

INPUT

Description:

Station	Elevation	Data	num=	16						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-9.59	820.84	0	820.84	1.22	820.84	5.45	819.88	11.55	818.92	
103.55	817.96	148.21	817	166.02	811.56	171.58	809.95	194.55	809.28	
217.94	809.95	225.48	812.32	236.29	815.92	273.98	816.25	275.13	816.26	
284.42	816.26									

Manning's n Values	num=	4			
Sta	n Val	Sta	n Val	Sta	n Val
-9.59	.0129	0	.0129	148.21	.0129
				284.42	.0129

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 148.21 236.29 .99 .99 .99 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 274.0319 284.42821.1329

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
w.s. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99		Flow Area (sq ft)		338.68
Crit w.s. (ft)		Area (sq ft)		338.68
E.G. slope (ft/ft)	0.000029	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		79.26
Top width (ft)	79.26	Avg. vel. (ft/s)		1.61
vel Total (ft/s)	1.61	Hydr. Depth (ft)		4.27
Max chl Dpth (ft)	5.80	Conv. (cfs)		101381.9
Conv. Total (cfs)	101381.9	wetted Per. (ft)		80.84
Length wtd. (ft)	0.99	Shear (lb/sq ft)		0.01
Min ch El (ft)	809.28	Stream Power (lb/ft s)	284.42	0.00
Alpha	1.00	Cum volume (acre-ft)		0.87
0.00		Cum SA (acres)		0.18
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.94520*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-9.45	820.78	0	820.78	1.2	820.78	5.37	819.84	11.38	818.89
102.07	817.95	146.09	817	164.13	811.52	169.76	809.94	193.02	809.26
216.57	809.93	224.16	812.27	235.05	815.89	272.78	816.24	273.93	816.24
283.23	816.24								

Manning's n Values

num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-9.45	.0129	0	.0129	146.09	.0129	283.23	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
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Blocked Obstructions num= 1
 146.09 235.05 CPNPPLocalPMP
 Sta L Sta R Elev .99 .99 .99 .1 .3
 272.8459 283.23821.0739

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
w.s. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		343.95
E.G. Slope (ft/ft)	0.000028	Area (sq ft)		343.95
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	80.19	Top width (ft)		80.19
Vel Total (ft/s)	1.58	Avg. Vel. (ft/s)		1.58
Max chl Dpth (ft)	5.82	Hydr. Depth (ft)		4.29
Conv. Total (cfs)	103238.9	Conv. (cfs)		103238.9
Length wtd. (ft)	0.99	wetted Per. (ft)		81.77
Min ch El (ft)	809.26	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	283.23	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.87
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.17
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.93150*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-9.32 820.73 0 820.73 1.18 820.73 5.29 819.79 11.22 818.86									
100.59 817.93 143.97 817 162.23 811.48 167.94 809.92 191.49 809.25									
215.2 809.92 222.84 812.23 233.8 815.86 271.58 816.22 272.73 816.22									
282.04 816.22									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-9.32 .0129 0 .0129 143.97 .0129 282.04 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
143.97 233.8	.99 .99 .99	.1	.3
Blocked Obstructions	num=	1	

CPNPPLocalPMP

Sta L Sta R Elev
271.6599 282.04821.0148

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB Vel Head (ft)	0.04	wt. n-Val.		0.013
w.s. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99 Crit w.s. (ft)		Flow Area (sq ft)		348.93
E.G. slope (ft/ft)	0.000027	Area (sq ft)		348.93
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	81.12	Top width (ft)		81.12
Vel Total (ft/s)	1.56	Avg. Vel. (ft/s)		1.56
Max Chl Dpth (ft)	5.83	Hydr. Depth (ft)		4.30
Conv. Total (cfs)	104964.1	Conv. (cfs)		104964.1
Length wtd. (ft)	0.99	wetted Per. (ft)		82.68
Min Ch El (ft)	809.25	Shear (lb/sq ft)		0.01
Alpha 0.00	1.00	Stream Power (lb/ft s)	282.04	0.00
Frctn Loss (ft)	0.00	cum volume (acre-ft)		0.86
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.17
0.02				

CROSS SECTION

RIVER: East Channel
REACH: East Channel RS: 1.91780*

INPUT

Description:

Station Elevation Data	num=	16								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-9.18 820.67 0 820.67 1.17 820.67 5.21 819.75 11.05 818.84										
99.11 817.92 141.86 817 160.34 811.45 166.12 809.9 189.95 809.23										
213.83 809.9 221.52 812.18 232.56 815.84 270.37 816.2 271.53 816.2										
280.85 816.2										

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val						
-9.18 .0129 0 .0129 141.86 .0129 280.85 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
141.86 232.56	.99 .99 .99	.1	.3
Blocked Obstructions	num=	1	
Sta L Sta R Elev			
270.4738 280.85820.9557			

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
w.S. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.S. (ft)		Flow Area (sq ft)		354.27
E.G. slope (ft/ft)	0.000026	Area (sq ft)		354.27
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	82.01	Top width (ft)		82.01
Vel Total (ft/s)	1.54	Avg. vel. (ft/s)		1.54
Max Chl Dpth (ft)	5.85	Hydr. Depth (ft)		4.32
Conv. Total (cfs)	106886.9	Conv. (cfs)		106886.9
Length wtd. (ft)	0.99	wetted Per. (ft)		83.57
Min Ch El (ft)	809.23	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	280.85	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.85
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.17
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.90411*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-9.04	820.62	0	820.62	1.15	820.62	5.14	819.71	10.89	818.81
97.63	817.9	139.74	817	158.45	811.41	164.29	809.89	188.42	809.21
212.46	809.88	220.2	812.13	231.32	815.81	269.17	816.18	270.32	816.18
279.66	816.18								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-9.04	.0129	0	.0129	139.74	.0129	279.66	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

139.74	231.32	.99	.99	.99	.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
269.2878	279.6682	820.8967

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.		0.013
w.s. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		359.66
E.G. slope (ft/ft)	0.000025	Area (sq ft)		359.66
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	82.95	Top width (ft)		82.95
Vel Total (ft/s)	1.52	Avg. vel. (ft/s)		1.52
Max chl Dpth (ft)	5.87	Hydr. Depth (ft)		4.34
Conv. Total (cfs)	108806.6	Conv. (cfs)		108806.6
Length wtd. (ft)	0.99	wetted Per. (ft)		84.50
Min ch El (ft)	809.21	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	279.66	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.84
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.17
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.89041*

INPUT

Description:

Station	Elevation	Data	num=	16					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-8.9	820.56	0	820.56	1.13	820.56	5.06	819.67	10.72	818.78
96.16	817.89	137.62	817	156.56	811.37	162.47	809.87	186.89	809.19
211.09	809.87	218.89	812.08	230.07	815.78	267.97	816.16	269.12	816.17
278.47	816.17								

Manning's n Values	num=	4					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-8.9	.0129	0	.0129	137.62	.0129	278.47	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 137.62 230.07 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 268.1018 278.47820.8376

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-Val.		0.013
W.S. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		365.08
E.G. Slope (ft/ft)	0.000024	Area (sq ft)		365.08
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	83.88	Top width (ft)		83.88
Vel Total (ft/s)	1.49	Avg. Vel. (ft/s)		1.49
Max Chl Dpth (ft)	5.89	Hydr. Depth (ft)		4.35
Conv. Total (cfs)	110750.2	Conv. (cfs)		110750.2
Length wtd. (ft)	0.99	wetted Per. (ft)		85.42
Min Ch El (ft)	809.19	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	278.47	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.83
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.17
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.87671*

INPUT

Description:

Station Elevation Data			num=								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-8.77	820.51	0	820.51	1.11	820.51	4.98	819.63	10.56	818.75		
94.68	817.88	135.5	817	154.66	811.34	160.65	809.85	185.36	809.18		
209.72	809.85	217.57	812.04	228.83	815.75	266.76	816.14	267.92	816.15		
277.27	816.15										

Manning's n Values			num=								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-8.77	.0129	0	.0129	135.5	.0129	277.27	.0129				

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	135.5	228.83		.99	.99		.1	.3
Blocked Obstructions			num=	1				
Sta L	Sta R	Elev						
266.9157	277.27820	7786						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				

Vel Head (ft)	0.03	CPNPPLocalPMP wt. n-Val.		0.013
W.S. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99 Crit W.S. (ft)		Flow Area (sq ft)		370.27
E.G. Slope (ft/ft)	0.000023	Area (sq ft)		370.27
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top Width (ft)	84.81	Top Width (ft)		84.81
Vel Total (ft/s)	1.47	Avg. Vel. (ft/s)		1.47
Max Chl Dpth (ft)	5.90	Hydr. Depth (ft)		4.37
Conv. Total (cfs)	112581.1	Conv. (cfs)		112581.1
Length wtd. (ft)	0.99	wetted Per. (ft)		86.34
Min Ch El (ft)	809.18	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	277.27	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.83
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.17
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.86301*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-8.63	820.45	0	820.45	1.1	820.45	4.9	819.59	10.39	818.73
93.2	817.86	133.39	817	152.77	811.3	158.83	809.84	183.82	809.16
208.35	809.83	216.25	811.99	227.59	815.73	265.56	816.13	266.72	816.13
276.08	816.13								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-8.63	.0129	0	.0129	133.39	.0129	276.08	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 133.39 227.59 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 265.7297 276.08820.7196

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB Vel Head (ft)	0.03	wt. n-Val.		0.013

W.S. Elev (ft)	815.08	CPNPPLocalPMP		
0.99		Reach Len. (ft)	0.99	0.99
Crit W.S. (ft)		Flow Area (sq ft)		375.72
E.G. Slope (ft/ft)	0.000023	Area (sq ft)		375.72
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	85.72	Top width (ft)		85.72
Vel Total (ft/s)	1.45	Avg. Vel. (ft/s)		1.45
Max Chl Dpth (ft)	5.92	Hydr. Depth (ft)		4.38
Conv. Total (cfs)	114556.6	Conv. (cfs)		114556.6
Length wtd. (ft)	0.99	wetted Per. (ft)		87.24
Min ch El (ft)	809.16	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	276.08	0.00
0.00		Cum Volume (acre-ft)		0.82
Frctn Loss (ft)	0.00	Cum SA (acres)		0.16
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.84931*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-8.49 820.4 0 820.4 1.08 820.4 4.82 819.55 10.23 818.7									
91.72 817.85 131.27 817 150.88 811.26 157 809.82 182.29 809.14									
206.97 809.82 214.93 811.94 226.34 815.7 264.36 816.11 265.52 816.11									
274.89 816.11									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-8.49 .0129 0 .0129 131.27 .0129 274.89 .0129						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 131.27 226.34 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 264.5437 274.89820.6605

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
W.S. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99				

		CPNPPLocalPMP		
Crit w.s. (ft)		Flow Area (sq ft)		381.22
E.G. Slope (ft/ft)	0.000022	Area (sq ft)		381.22
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	86.65	Top width (ft)		86.65
Vel Total (ft/s)	1.43	Avg. Vel. (ft/s)		1.43
Max Chl Dpth (ft)	5.94	Hydr. Depth (ft)		4.40
Conv. Total (cfs)	116546.6	Conv. (cfs)		116546.6
Length wtd. (ft)	0.99	wetted Per. (ft)		88.17
Min Ch El (ft)	809.14	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	274.89	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.81
C & E Loss (ft)	0.00	Cum SA (acres)		0.16

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.83561*

INPUT

Description:

Station Elevation Data		num=	16						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-8.36	820.34	0	820.34	1.06	820.34	4.75	819.51	10.06	818.67
90.24	817.84	129.15	817	148.99	811.23	155.18	809.81	180.76	809.13
205.6	809.8	213.61	811.9	225.1	815.67	263.15	816.09	264.32	816.09
273.7	816.09								

Manning's n Values		num=	4		
Sta	n Val	Sta	n Val	Sta	n Val
-8.36	.0129	0	.0129	129.15	.0129
				273.7	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	129.15	225.1		.99	.99		.1	.3
Blocked Obstructions			num=	1				
	Sta L	Sta R	Elev					
	263.3577	273.7820	6015					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-Val.		0.013
w.s. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		386.33

E.G. Slope (ft/ft)	0.000021	CPNPPLocalPMP Area (sq ft)	386.33
Q Total (cfs)	545.00	Flow (cfs)	545.00
Top Width (ft)	87.58	Top Width (ft)	87.58
Vel Total (ft/s)	1.41	Avg. Vel. (ft/s)	1.41
Max Chl Dpth (ft)	5.95	Hydr. Depth (ft)	4.41
Conv. Total (cfs)	118340.2	Conv. (cfs)	118340.2
Length wtd. (ft)	0.99	wetted Per. (ft)	89.08
Min Ch El (ft)	809.13	Shear (lb/sq ft)	0.01
Alpha 0.00	1.00	Stream Power (lb/ft s)	273.70
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	0.80
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.16

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.82191*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-8.22	820.29	0	820.29	1.04	820.29	4.67	819.47	9.9	818.64
88.76	817.82	127.04	817	147.09	811.19	153.36	809.79	179.23	809.11
204.23	809.78	212.29	811.85	223.86	815.64	261.95	816.07	263.11	816.08
272.51	816.08								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-8.22	.0129	0	.0129	127.04	.0129	272.51	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 127.04 223.86 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 262.1716 272.51820.5425

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB Vel Head (ft)	0.03	wt. n-Val.		0.013
w.s. Elev (ft)	815.08	Reach Len. (ft)	0.99	0.99
0.99 Crit w.s. (ft)		Flow Area (sq ft)		392.11
E.G. Slope (ft/ft)	0.000020	Area (sq ft)		392.11

Q Total (cfs)	545.00	CPNPPLocalPMP Flow (cfs)	545.00
Top width (ft)	88.51	Top width (ft)	88.51
Vel Total (ft/s)	1.39	Avg. Vel. (ft/s)	1.39
Max Chl Dpth (ft)	5.97	Hydr. Depth (ft)	4.43
Conv. Total (cfs)	120469.4	Conv. (cfs)	120469.4
Length Wtd. (ft)	0.99	wetted Per. (ft)	90.02
Min ch El (ft)	809.11	Shear (lb/sq ft)	0.01
Alpha 0.00	1.00	Stream Power (lb/ft s)	272.51
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	0.79
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.16

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.80821*

INPUT

Description:

Station Elevation Data	num=	16
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-8.08 820.23 0 820.23 1.03 820.23 4.59 819.42 9.73 818.62		
87.28 817.81 124.92 817 145.2 811.15 151.54 809.77 177.69 809.09		
202.86 809.77 210.98 811.8 222.61 815.62 260.75 816.05 261.91 816.06		
271.32 816.06		

Manning's n Values	num=	4
Sta n Val Sta n Val Sta n Val Sta n Val		
-8.08 .0129 0 .0129 124.92 .0129 271.32 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
124.92 222.61	.99 .99 .99	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
260.9856 271.32820.4834		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99		Flow Area (sq ft)		397.73
Crit w.s. (ft)		Area (sq ft)		397.73
E.G. Slope (ft/ft)	0.000020	Flow (cfs)		545.00
Q Total (cfs)	545.00			

		CPNPPLocalPMP		
Top width (ft)	89.42	Top width (ft)		89.42
Vel Total (ft/s)	1.37	Avg. Vel. (ft/s)		1.37
Max Chl Dpth (ft)	6.00	Hydr. Depth (ft)		4.45
Conv. Total (cfs)	122536.9	Conv. (cfs)		122536.9
Length wtd. (ft)	0.99	wetted Per. (ft)		90.92
Min ch El (ft)	809.09	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	271.32	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.78
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.16
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.79452*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-7.95 820.18 0 820.18 1.01 820.18 4.51 819.38 9.57 818.59									
85.8 817.79 122.8 817 143.31 811.12 149.71 809.76 176.16 809.08									
201.49 809.75 209.66 811.75 221.37 815.59 259.55 816.03 260.71 816.04									
270.12 816.04									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val					
-7.95 .0129 0 .0129 122.8 .0129 270.12 .0129					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
122.8 221.37	.99 .99 .99	.1	.3
Blocked Obstructions	num=	1	
Sta L Sta R Elev			
259.7996 270.12820.4244			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		403.04
E.G. slope (ft/ft)	0.000019	Area (sq ft)		403.04
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	90.35	Top width (ft)		90.35

		CPNPPLocalPMP		
Vel Total (ft/s)	1.35	Avg. Vel. (ft/s)		1.35
Max Chl Dpth (ft)	6.01	Hydr. Depth (ft)		4.46
Conv. Total (cfs)	124435.0	Conv. (cfs)		124435.0
Length wtd. (ft)	0.99	wetted Per. (ft)		91.85
Min Ch El (ft)	809.08	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	270.12	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.77
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.15
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.78082*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-7.81	820.12	0	820.12	.99	820.12	4.44	819.34	9.4	818.56
84.32	817.78	120.68	817	141.42	811.08	147.89	809.74	174.63	809.06
200.12	809.73	208.34	811.71	220.13	815.56	258.34	816.02	259.51	816.02
268.93	816.02								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-7.81	.0129	0	.0129	120.68	.0129	268.93	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 120.68 220.13 .99 .99 .99 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 258.6136 268.93820.3654

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-Val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		408.83
E.G. Slope (ft/ft)	0.000019	Area (sq ft)		408.83
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	91.29	Top width (ft)		91.29
Vel Total (ft/s)	1.33	Avg. Vel. (ft/s)		1.33

Max Chl Dpth (ft)	6.03	CPNPPLocalPMP Hydr. Depth (ft)	4.48
Conv. Total (cfs)	126570.4	Conv. (cfs)	126570.4
Length Wtd. (ft)	0.99	wetted Per. (ft)	92.78
Min Ch El (ft)	809.06	Shear (lb/sq ft)	0.01
Alpha	1.00	Stream Power (lb/ft s)	268.93
0.00		Cum Volume (acre-ft)	0.76
Frctn Loss (ft)	0.00	Cum SA (acres)	0.15
0.01			
C & E Loss (ft)	0.00		
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.76712*

INPUT

Description:

Station Elevation Data	num=	16
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-7.67 820.07 0 820.07 .97 820.07 4.36 819.3 9.24 818.53		
82.84 817.77 118.57 817 139.52 811.05 146.07 809.73 173.1 809.04		
198.75 809.72 207.02 811.66 218.88 815.53 257.14 816 258.31 816		
267.74 816		

Manning's n Values	num=	4
Sta n Val Sta n Val Sta n Val Sta n Val		
-7.67 .0129 0 .0129 118.57 .0129 267.74 .0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 118.57 218.88 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 257.4275 267.74820.3063

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99		Flow Area (sq ft)		414.30
Crit w.s. (ft)		Area (sq ft)		414.30
E.G. Slope (ft/ft)	0.000018	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		92.21
Top width (ft)	92.21	Avg. vel. (ft/s)		1.32
vel Total (ft/s)	1.32	Hydr. Depth (ft)		4.49
Max Chl Dpth (ft)	6.05			

Conv. Total (cfs)	128561.9	CPNPPLocalPMP Conv. (cfs)	128561.9
Length wtd. (ft)	0.99	wetted Per. (ft)	93.70
Min Ch El (ft)	809.04	Shear (lb/sq ft)	0.00
Alpha	1.00	Stream Power (lb/ft s)	267.74
0.00		Cum Volume (acre-ft)	0.75
Frctn Loss (ft)	0.00	Cum SA (acres)	0.15
0.01			
C & E Loss (ft)	0.00		
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.75342*

INPUT

Description:

Station Elevation Data	num=	16
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-7.53 820.01 0 820.01 .96 820.01 4.28 819.26 9.07 818.51		
81.36 817.75 116.45 817 137.63 811.01 144.25 809.71 171.56 809.02		
197.38 809.7 205.7 811.61 217.64 815.51 255.94 815.98 257.1 815.99		
266.55 815.99		

Manning's n Values	num=	4
Sta n Val Sta n Val Sta n Val Sta n Val		
-7.53 .0129 0 .0129 116.45 .0129 266.55 .0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 116.45 217.64 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 256.2415 266.55820.2473

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99		Flow Area (sq ft)		420.21
Crit w.s. (ft)		Area (sq ft)		420.21
E.G. slope (ft/ft)	0.000017	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		93.13
Top width (ft)	93.13	Avg. vel. (ft/s)		1.30
Vel Total (ft/s)	1.30	Hydr. Depth (ft)		4.51
Max Chl Dpth (ft)	6.07	Conv. (cfs)		130785.1
Conv. Total (cfs)	130785.1			

Length wtd. (ft)	0.99	CPNPPLocalPMP Wetted Per. (ft)	94.61
Min Ch El (ft)	809.02	Shear (lb/sq ft)	0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	266.55
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	0.74
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.15

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.73972*

INPUT

Description:

Station Elevation Data	num=	16
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-7.4 819.96 0 819.96 .94 819.96 4.2 819.22 8.91 818.48		
79.88 817.74 114.33 817 135.74 810.97 142.42 809.69 170.03 809.01		
196.01 809.68 204.39 811.56 216.4 815.48 254.73 815.96 255.9 815.97		
265.36 815.97		

Manning's n Values	num=	4
Sta n Val Sta n Val Sta n Val Sta n Val		
-7.4 .0129 0 .0129 114.33 .0129 265.36 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
114.33 216.4	.99 .99 .99	.1	.3
Blocked Obstructions	num=	1	
Sta L Sta R Elev			
255.0555 265.36820.1882			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB Vel Head (ft)	0.03	wt. n-Val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99 Crit w.s. (ft)		Flow Area (sq ft)		425.99
E.G. Slope (ft/ft)	0.000017	Area (sq ft)		425.99
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	94.08	Top width (ft)		94.08
Vel Total (ft/s)	1.28	Avg. Vel. (ft/s)		1.28
Max Chl Dpth (ft)	6.08	Hydr. Depth (ft)		4.53
Conv. Total (cfs)	132915.6	Conv. (cfs)		132915.6
Length wtd. (ft)	0.99	wetted Per. (ft)		95.55

Min Ch El (ft)	809.01	CPNPPLocalPMP Shear (lb/sq ft)	0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	265.36
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	0.73
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.14

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.72602*

INPUT

Description:

Station Elevation Data	num=	16
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-7.26 819.9 0 819.9 .92 819.9 4.12 819.18 8.74 818.45		
78.4 817.73 112.21 817 133.85 810.94 140.6 809.68 168.5 808.99		
194.64 809.67 203.07 811.52 215.15 815.45 253.53 815.94 254.7 815.95		
264.16 815.95		

Manning's n Values	num=	4
Sta n Val Sta n Val Sta n Val Sta n Val		
-7.26 .0129 0 .0129 112.21 .0129 264.16 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
112.21 215.15	.99 .99 .99	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
253.8694 264.16820.1292		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99		Flow Area (sq ft)		431.44
Crit w.s. (ft)		Area (sq ft)		431.44
E.G. Slope (ft/ft)	0.000016	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		95.00
Top width (ft)	95.00	Avg. vel. (ft/s)		1.26
Vel Total (ft/s)	1.26	Hydr. Depth (ft)		4.54
Max Chl Dpth (ft)	6.10	Conv. (cfs)		134901.7
Conv. Total (cfs)	134901.7	wetted Per. (ft)		96.47
Length wtd. (ft)	0.99	Shear (lb/sq ft)		0.00
Min Ch El (ft)	808.99			

		CPNPPLocalPMP		
Alpha	1.00	Stream Power (lb/ft s)	264.16	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.73
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.14
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.71232*

INPUT

Description:

Station	Elevation	Data	num=	16							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-7.12	819.85	0	819.85	.9	819.85	4.05	819.14	8.58	818.42		
76.92	817.71	110.1	817	131.95	810.9	138.78	809.66	166.97	808.97		
193.27	809.65	201.75	811.47	213.91	815.42	252.33	815.92	253.5	815.93		
262.97	815.93										

Manning's n	Values	num=	4				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-7.12	.0129	0	.0129	110.1	.0129	262.97	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	110.1	213.91		.99	.99	.99		.1	.3
Blocked Obstructions			num=	1					
Sta L	Sta R	Elev							
252.6834	262.97820	0701							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		437.55
E.G. slope (ft/ft)	0.000016	Area (sq ft)		437.55
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	95.94	Top width (ft)		95.94
vel Total (ft/s)	1.25	Avg. vel. (ft/s)		1.25
Max Chl Dpth (ft)	6.12	Hydr. Depth (ft)		4.56
Conv. Total (cfs)	137207.1	Conv. (cfs)		137207.1
Length wtd. (ft)	0.99	wetted Per. (ft)		97.41
Min Ch El (ft)	808.97	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	262.97	0.00
0.00				

Frctn Loss (ft)	0.00	CPNPPLocalPMP	
0.01		Cum Volume (acre-ft)	0.72
C & E Loss (ft)	0.00	Cum SA (acres)	0.14
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.69863*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-6.99 819.79 0 819.79 .89 819.79 3.97 819.1 8.41 818.4									
75.45 817.7 107.98 817 130.06 810.86 136.96 809.65 165.43 808.96									
191.9 809.63 200.43 811.42 212.67 815.4 251.12 815.91 252.3 815.92									
261.78 815.92									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-6.99 .0129 0 .0129 107.98 .0129 261.78 .0129					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
107.98 212.67	.99 .99 .99	.1	.3
Blocked Obstructions	num=	1	
Sta L Sta R Elev			
251.4974 261.78820.0111			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-Val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		443.17
E.G. Slope (ft/ft)	0.000015	Area (sq ft)		443.17
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	96.86	Top width (ft)		96.86
Vel Total (ft/s)	1.23	Avg. vel. (ft/s)		1.23
Max chl Dpth (ft)	6.13	Hydr. Depth (ft)		4.58
Conv. Total (cfs)	139286.7	Conv. (cfs)		139286.7
Length wtd. (ft)	0.99	wetted Per. (ft)		98.33
Min ch El (ft)	808.96	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	261.78	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.71
0.01				

C & E Loss (ft) 0.02
 0.02 CPNPPLocalPMP Cum SA (acres) 0.14

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.68493*

INPUT

Description:

Station	Elevation	Data	num=	16	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-6.85	819.74	0	819.74	.87	819.74	3.89	819.05	8.25	818.37			
73.97	817.68	105.86	817	128.17	810.83	135.14	809.63	163.9	808.94			
190.53	809.62	199.11	811.37	211.42	815.37	249.92	815.89	251.1	815.9			
260.59	815.9											

Manning's n	Values	num=	4	Sta	n val	Sta	n val
-6.85	.0129	0	.0129	105.86	.0129	260.59	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	105.86	211.42		.99	.99	.99		.1	.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
250.3114	260.59	819.952

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99		Flow Area (sq ft)		449.01
Crit w.s. (ft)		Area (sq ft)		449.01
E.G. Slope (ft/ft)	0.000015	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		97.79
Top width (ft)	97.79	Avg. vel. (ft/s)		1.21
Vel Total (ft/s)	1.21	Hydr. Depth (ft)		4.59
Max Chl Dpth (ft)	6.15	Conv. (cfs)		141474.5
Conv. Total (cfs)	141474.5	wetted Per. (ft)		99.25
Length wtd. (ft)	0.99	Shear (lb/sq ft)		0.00
Min ch El (ft)	808.94	Stream Power (lb/ft s)	260.59	0.00
Alpha	1.00	Cum volume (acre-ft)		0.70
0.00		Cum SA (acres)		0.14
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.67123*

INPUT

Description:

Station	Elevation	Data	num=	16	Station	Elevation	Station	Elevation	Station	Elevation
-6.71	819.68	0	819.68	.85	819.68	3.81	819.01	8.08	818.34	
72.49	817.67	103.75	817	126.28	810.79	133.31	809.61	162.37	808.92	
189.16	809.6	197.79	811.33	210.18	815.34	248.72	815.87	249.89	815.88	
259.4	815.88									

Manning's n	Values	num=	4	Station	n Val	Station	n Val
-6.71	.0129	0	.0129	103.75	.0129	259.4	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 103.75 210.18 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 249.1253 259.4 819.893

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		455.11
E.G. slope (ft/ft)	0.000014	Area (sq ft)		455.11
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	98.73	Top width (ft)		98.73
Vel Total (ft/s)	1.20	Avg. vel. (ft/s)		1.20
Max Chl Dpth (ft)	6.17	Hydr. Depth (ft)		4.61
Conv. Total (cfs)	143788.8	Conv. (cfs)		143788.8
Length wtd. (ft)	0.99	wetted Per. (ft)		100.19
Min Ch El (ft)	808.92	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	259.40	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.68
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.13
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.65753*

INPUT

Description:

Station Elevation Data		num= 16		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-6.58	819.63	0	819.63	.84	819.63	3.73	818.97	7.92	818.32		
71.01	817.66	101.63	817	124.38	810.75	131.49	809.6	160.83	808.91		
187.79	809.58	196.48	811.28	208.94	815.32	247.52	815.85	248.69	815.86		
258.21	815.86										

Manning's n Values		num= 4		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-6.58	.0129	0	.0129	101.63	.0129	258.21	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 101.63 208.94 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 247.9393 258.21 819.834

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB Vel Head (ft)	0.02	wt. n-Val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99 Crit w.s. (ft)		Flow Area (sq ft)		460.90
E.G. Slope (ft/ft)	0.000014	Area (sq ft)		460.90
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	99.65	Top width (ft)		99.65
Vel Total (ft/s)	1.18	Avg. Vel. (ft/s)		1.18
Max Chl Dpth (ft)	6.18	Hydr. Depth (ft)		4.63
Conv. Total (cfs)	145956.4	Conv. (cfs)		145956.4
Length wtd. (ft)	0.99	wetted Per. (ft)		101.11
Min ch El (ft)	808.91	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	258.21	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.67
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.13
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 1.64383*

INPUT

Description:

Station Elevation Data		num=		16							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-6.44	819.58	0	819.58	.82	819.58	3.66	818.93	7.75	818.29		
69.53	817.64	99.51	817	122.49	810.72	129.67	809.58	159.3	808.89		
186.42	809.56	195.16	811.23	207.69	815.29	246.31	815.83	247.49	815.84		
257.01	815.84										

Manning's n Values		num=		4					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-6.44	.0129	0	.0129	99.51	.0129	257.01	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	99.51	207.69		.99	.99	.99		.1	.3

Blocked Obstructions		num=		1	
Sta L	Sta R	Elev			
246.7533	257.01819	7749			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99		Flow Area (sq ft)		467.04
Crit w.s. (ft)		Area (sq ft)		467.04
E.G. Slope (ft/ft)	0.000014	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		100.58
Top width (ft)	100.58	Avg. vel. (ft/s)		1.17
Vel Total (ft/s)	1.17	Hydr. Depth (ft)		4.64
Max Chl Dpth (ft)	6.20	Conv. (cfs)		148301.9
Conv. Total (cfs)	148301.9	wetted Per. (ft)		102.04
Length wtd. (ft)	0.99	Shear (lb/sq ft)		0.00
Min Ch El (ft)	808.89	Stream Power (lb/ft s)	257.01	0.00
Alpha	1.00	Cum Volume (acre-ft)		0.66
0.00		Cum SA (acres)		0.13
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel

RS: 1.63013*

INPUT

Description:

Station	Elevation	Data	num=	16	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-6.3	819.52	0	819.52	.8	819.52	3.58	818.89	7.59	818.26			
68.05	817.63	97.39	817	120.6	810.68	127.85	809.56	157.77	808.87			
185.05	809.55	193.84	811.18	206.45	815.26	245.11	815.81	246.29	815.83			
255.82	815.83											

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-6.3	.0129	0	.0129	97.39	.0129	255.82	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 97.39 206.45 .99 .99 .99 .1 .3

Blocked Obstructions

Sta L	Sta R	Elev
245.5673	255.82819	7159

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		473.18
E.G. slope (ft/ft)	0.000013	Area (sq ft)		473.18
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	101.53	Top width (ft)		101.53
Vel Total (ft/s)	1.15	Avg. vel. (ft/s)		1.15
Max Chl Dpth (ft)	6.22	Hydr. Depth (ft)		4.66
Conv. Total (cfs)	150639.4	Conv. (cfs)		150639.4
Length wtd. (ft)	0.99	wetted Per. (ft)		102.99
Min Ch El (ft)	808.87	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	255.82	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.65
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.13
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel

RS: 1.61643*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-6.16	819.47	0	819.47	.78	819.47	3.5	818.85	7.42	818.23
66.57	817.62	95.28	817	118.71	810.64	126.02	809.55	156.24	808.85
183.68	809.53	192.52	811.14	205.21	815.23	243.91	815.8	245.09	815.81
254.63	815.81								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-6.16	.0129	0	.0129	95.28	.0129	254.63	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	95.28	205.21	.99	.99	.99	.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
244.3812	254.63819	6569

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99 Crit w.s. (ft)		Flow Area (sq ft)		479.25
E.G. Slope (ft/ft)	0.000013	Area (sq ft)		479.25
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	102.47	Top width (ft)		102.47
Vel Total (ft/s)	1.14	Avg. vel. (ft/s)		1.14
Max Chl Dpth (ft)	6.24	Hydr. Depth (ft)		4.68
Conv. Total (cfs)	152944.8	Conv. (cfs)		152944.8
Length wtd. (ft)	0.99	wetted Per. (ft)		103.93
Min Ch El (ft)	808.85	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	254.63	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.64
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.12
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.60274*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 16		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-6.03	819.41	0	819.41	.77	819.41	3.42	818.81	7.26	818.21		
65.09	817.6	93.16	817	116.81	810.61	124.2	809.53	154.7	808.84		
182.31	809.51	191.2	811.09	203.96	815.21	242.7	815.78	243.89	815.79		
253.44	815.79										

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-6.03	.0129	0	.0129	93.16	.0129	253.44	.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
93.16	203.96	.99	.99	.99	.1	.3	

Blocked Obstructions num= 1

Sta L	Sta R	Elev
243.1952	253.44819	5978

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99		Flow Area (sq ft)		485.18
Crit w.s. (ft)		Area (sq ft)		485.18
E.G. Slope (ft/ft)	0.000012	Flow (cfs)		545.00
Q Total (cfs)	545.00	Top width (ft)		103.37
Top width (ft)	103.37	Avg. Vel. (ft/s)		1.12
Vel Total (ft/s)	1.12	Hydr. Depth (ft)		4.69
Max Chl Dpth (ft)	6.25	Conv. (cfs)		155211.1
Conv. Total (cfs)	155211.1	wetted Per. (ft)		104.83
Length wtd. (ft)	0.99	Shear (lb/sq ft)		0.00
Min Ch El (ft)	808.84	Stream Power (lb/ft s)	253.44	0.00
Alpha	1.00	Cum Volume (acre-ft)		0.63
0.00		Cum SA (acres)		0.12
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.58904*

INPUT

Description:
 Station Elevation Data num= 16

Sta	Elev	Sta	Elev	CPNPPLocal	PMP	Sta	Elev	Sta	Elev
-5.89	819.36	0	819.36	.75	819.36	3.35	818.77	7.09	818.18
63.61	817.59	91.04	817	114.92	810.57	122.38	809.52	153.17	808.82
180.94	809.5	189.88	811.04	202.72	815.18	241.5	815.76	242.68	815.77
252.25	815.77								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-5.89	.0129	0	.0129	91.04	.0129	252.25	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

91.04	202.72	.99	.99	.99	.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
242.0092	252.25819	5388

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99 Crit w.s. (ft)		Flow Area (sq ft)		491.25
E.G. slope (ft/ft)	0.000012	Area (sq ft)		491.25
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	104.32	Top width (ft)		104.32
vel Total (ft/s)	1.11	Avg. vel. (ft/s)		1.11
Max Chl Dpth (ft)	6.27	Hydr. Depth (ft)		4.71
Conv. Total (cfs)	157513.8	Conv. (cfs)		157513.8
Length wtd. (ft)	0.99	wetted Per. (ft)		105.78
Min Ch El (ft)	808.82	Shear (lb/sq ft)		0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	252.25	0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.62
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.12
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.57534*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-5.75	819.3	0	819.3	.73	819.3	3.27	818.73
						6.93	818.15

				CPNPPLocalPMP					
62.13	817.58	88.92	817	113.03	810.53	120.56	809.5	151.64	808.8
179.56	809.48	188.57	810.99	201.48	815.15	240.3	815.74	241.48	815.75
251.05	815.75								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-5.75	.0129	0	.0129	88.92	.0129	251.05	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	88.92	201.48		.99	.99	.99		.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
240.8232	251.05819	4797

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99 Crit w.s. (ft)		Flow Area (sq ft)		497.76
E.G. Slope (ft/ft)	0.000012	Area (sq ft)		497.76
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	105.27	Top width (ft)		105.27
Vel Total (ft/s)	1.09	Avg. vel. (ft/s)		1.09
Max chl Dpth (ft)	6.29	Hydr. Depth (ft)		4.73
Conv. Total (cfs)	160046.9	Conv. (cfs)		160046.9
Length wtd. (ft)	0.99	wetted Per. (ft)		106.73
Min Ch El (ft)	808.80	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	251.05	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.61
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.12
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.56164*

INPUT

Description:

Station Elevation Data	num=	16
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-5.62 819.25 0 819.25 .71 819.25 3.19 818.68 6.76 818.12		
60.65 817.56 86.81 817 111.14 810.5 118.73 809.48 150.11 808.79		
178.19 809.46 187.25 810.95 200.23 815.12 239.1 815.72 240.28 815.74		

CPNPPLocalPMP

249.86 815.74

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 -5.62 .0129 0 .0129 86.81 .0129 249.86 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 86.81 200.23 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 239.6371 249.86819.4207

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-Val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		503.71
E.G. Slope (ft/ft)	0.000011	Area (sq ft)		503.71
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	106.19	Top width (ft)		106.19
Vel Total (ft/s)	1.08	Avg. Vel. (ft/s)		1.08
Max Chl Dpth (ft)	6.30	Hydr. Depth (ft)		4.74
Conv. Total (cfs)	162312.7	Conv. (cfs)		162312.7
Length wtd. (ft)	0.99	wetted Per. (ft)		107.65
Min Ch El (ft)	808.79	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	249.86	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.60
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.12
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.54794*

INPUT

Description:

Station Elevation Data num= 16									
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-5.48 819.19 0 819.19 .7 819.19 3.11 818.64 6.6 818.1									
59.17 817.55 84.69 817 109.24 810.46 116.91 809.47 148.57 808.77									
176.82 809.45 185.93 810.9 198.99 815.1 237.89 815.7 239.08 815.72									
248.67 815.72									

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 -5.48 .0129 0 .0129 84.69 .0129 248.67 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 84.69 198.99 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 238.4511 248.67819.3616

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		509.86
E.G. slope (ft/ft)	0.000011	Area (sq ft)		509.86
Q Total (cfs)	545.00	Flow (cfs)		545.00
Top width (ft)	107.12	Top width (ft)		107.12
vel Total (ft/s)	1.07	Avg. vel. (ft/s)		1.07
Max Chl Dpth (ft)	6.32	Hydr. Depth (ft)		4.76
Conv. Total (cfs)	164691.0	Conv. (cfs)		164691.0
Length wtd. (ft)	0.99	wetted Per. (ft)		108.58
Min Ch El (ft)	808.77	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	248.67	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.59
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.11
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.53424*

INPUT

Description:

Station	Elevation	Data	num=	16							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-5.34	819.14	0	819.14	.68	819.14	3.03	818.6	6.43	818.07		
57.69	817.53	82.57	817	107.35	810.42	115.09	809.45	147.04	808.75		
175.45	809.43	184.61	810.85	197.75	815.07	236.69	815.69	237.88	815.7		
247.48	815.7										

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val
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-5.34 .0129 0 .0129 CPNPPLocalPMP
 82.57 .0129 247.48 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 82.57 197.75 .99 .99 .99 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 237.2651 247.48819.3026

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		516.48
0.02				
E.G. Slope (ft/ft)	0.000011	Area (sq ft)		516.48
0.02				
Q Total (cfs)	545.00	Flow (cfs)		545.00
0.00				
Top width (ft)	109.46	Top width (ft)		108.00
1.46				
Vel Total (ft/s)	1.06	Avg. vel. (ft/s)		1.06
0.02				
Max Chl Dpth (ft)	6.34	Hydr. Depth (ft)		4.78
0.01				
Conv. Total (cfs)	167367.9	Conv. (cfs)		167367.8
0.1				
Length wtd. (ft)	0.99	wetted Per. (ft)		109.46
1.46				
Min Ch El (ft)	808.75	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.00	Stream Power (lb/ft s)	247.48	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.57
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.11
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.52054*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-5.21 819.08 0 819.08 .66 819.08 2.96 818.56 6.27 818.04									
56.21 817.52 80.46 817 105.46 810.39 113.27 809.44 145.51 808.74									
174.08 809.41 183.29 810.8 196.5 815.04 235.49 815.67 236.68 815.68									
246.29 815.68									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val					
-5.21 .0129 0 .0129 80.46 .0129 246.29 .0129					

Bank Sta: Left Right Lengths: CPNPPLocalPMP
 80.46 196.5 Left Channel Right Coeff Contr. Expan.
 Blocked Obstructions num= 1 .99 .99 .99 .1 .3
 Sta L Sta R Elev
 236.0791 246.29819.2436

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		522.43
0.09				
E.G. Slope (ft/ft)	0.000010	Area (sq ft)		522.43
0.09				
Q Total (cfs)	545.00	Flow (cfs)		545.00
0.00				
Top Width (ft)	112.14	Top width (ft)		108.83
3.31				
Vel Total (ft/s)	1.04	Avg. Vel. (ft/s)		1.04
0.03				
Max Chl Dpth (ft)	6.35	Hydr. Depth (ft)		4.80
0.03				
Conv. Total (cfs)	169742.1	Conv. (cfs)		169741.2
0.9				
Length wtd. (ft)	0.99	wetted Per. (ft)		110.28
3.31				
Min Ch El (ft)	808.74	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.00	Stream Power (lb/ft s)	246.29	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.56
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.11
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.50685*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-5.07	819.03	0	819.03	.64	819.03	2.88	818.52	6.1	818.01
54.73	817.51	78.34	817	103.56	810.35	111.44	809.42	143.98	808.72
172.71	809.4	181.97	810.76	195.26	815.01	234.28	815.65	235.47	815.66
245.1	815.66								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-5.07	.0129	0	.0129	78.34	.0129	245.1	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 78.34 195.26 .99 .99 .99 .1 .3

Blocked Obstructions num= CPNPPLocalPMP
 1
 Sta L Sta R Elev
 234.893 245.1819.1845

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		528.86
0.21				
E.G. slope (ft/ft)	0.000010	Area (sq ft)		528.86
0.21				
Q Total (cfs)	545.00	Flow (cfs)		544.99
0.01				
Top width (ft)	114.80	Top width (ft)		109.69
5.11				
vel Total (ft/s)	1.03	Avg. vel. (ft/s)		1.03
0.04				
Max Chl Dpth (ft)	6.37	Hydr. Depth (ft)		4.82
0.04				
Conv. Total (cfs)	172348.4	Conv. (cfs)		172345.4
3.0				
Length wtd. (ft)	0.99	wetted Per. (ft)		111.14
5.11				
Min Ch El (ft)	808.72	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.00	Stream Power (lb/ft s)	245.10	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.55
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.11
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.49315*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-4.93	818.97	0	818.97	.63	818.97	2.8	818.48	5.94	817.99
53.26	817.49	76.22	817	101.67	810.31	109.62	809.4	142.44	808.7
171.34	809.38	180.66	810.71	194.02	814.99	233.08	815.63	234.27	815.65
243.9	815.65								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-4.93	.0129	0	.0129	76.22	.0129	243.9	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 76.22 194.02 .99 .99 .99 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev

CPNPPLocalPMP

233.707 243.9819.1255

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		535.55
0.33				
E.G. slope (ft/ft)	0.000010	Area (sq ft)		535.55
0.33				
Q Total (cfs)	545.00	Flow (cfs)		544.98
0.02				
Top width (ft)	116.90	Top width (ft)		110.55
6.35				
Vel Total (ft/s)	1.02	Avg. vel. (ft/s)		1.02
0.05				
Max Chl Dpth (ft)	6.39	Hydr. Depth (ft)		4.84
0.05				
Conv. Total (cfs)	175095.9	Conv. (cfs)		175090.6
5.3				
Length wtd. (ft)	0.99	wetted Per. (ft)		112.00
6.35				
Min Ch El (ft)	808.70	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.00	Stream Power (lb/ft s)	243.90	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.54
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.10
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.47945*

INPUT

Description:

Station Elevation Data	num=	16
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-4.79 818.92 0 818.92 .61 818.92 2.72 818.44 5.77 817.96		
51.78 817.48 74.1 817 99.78 810.28 107.8 809.39 140.91 808.68		
169.97 809.36 179.34 810.66 192.78 814.96 231.88 815.61 233.07 815.63		
242.71 815.63		

Manning's n Values	num=	4
Sta n Val Sta n Val Sta n Val Sta n Val		
-4.79 .0129 0 .0129 74.1 .0129 242.71 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
74.1 192.78	.99 .99 .99	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
232.521 242.71819.0665		

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		541.95
0.54				
E.G. Slope (ft/ft)	0.000009	Area (sq ft)		541.95
0.54				
Q Total (cfs)	545.00	Flow (cfs)		544.97
0.03				
Top width (ft)	119.48	Top width (ft)		111.40
8.08				
Vel Total (ft/s)	1.00	Avg. Vel. (ft/s)		1.01
0.06				
Max Chl Dpth (ft)	6.41	Hydr. Depth (ft)		4.86
0.07				
Conv. Total (cfs)	177710.0	Conv. (cfs)		177699.6
10.3				
Length wtd. (ft)	0.99	wetted Per. (ft)		112.84
8.08				
Min Ch El (ft)	808.68	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.00	Stream Power (lb/ft s)	242.71	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.53
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.10
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.46575*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-4.66	818.86	0	818.86	.59	818.86	2.65	818.4	5.61	817.93
50.3	817.47	71.99	817	97.89	810.24	105.98	809.37	139.38	808.67
168.6	809.35	178.02	810.61	191.53	814.93	230.67	815.59	231.87	815.61
241.52	815.61								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-4.66	.0129	0	.0129	71.99	.0129	241.52	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	71.99	191.53		.99	.99	.99	.1	.3
Blocked Obstructions num= 1								
Sta L Sta R Elev								
231.3349	241.52819	0074						

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit W.S. (ft)		Flow Area (sq ft)		548.20
0.80				
E.G. Slope (ft/ft)	0.000009	Area (sq ft)		548.20
0.80				
Q Total (cfs)	545.00	Flow (cfs)		544.95
0.05				
Top width (ft)	122.00	Top width (ft)		112.24
9.76				
Vel Total (ft/s)	0.99	Avg. vel. (ft/s)		0.99
0.07				
Max Chl Dpth (ft)	6.42	Hydr. Depth (ft)		4.88
0.08				
Conv. Total (cfs)	180255.7	Conv. (cfs)		180238.2
17.5				
Length wtd. (ft)	0.99	wetted Per. (ft)		113.68
9.76				
Min Ch El (ft)	808.67	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.00	Stream Power (lb/ft s)	241.52	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.51
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.10
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.45205*

INPUT

Description:

Station	Elevation	Data	num=	16
Sta	Elev	Sta	Elev	Sta
-4.52	818.81	0	818.81	.57
48.82	817.45	69.87	817	95.99
167.23	809.33	176.7	810.57	190.29
240.33	815.59			814.9
				229.47
				815.58
				230.67
				815.59

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-4.52	.0129	0	.0129	69.87	.0129	240.33	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 69.87 190.29 .99 .99 .99 .1 .3

Blocked obstructions num= 1
 Sta L Sta R Elev
 230.1489 240.33818.9484

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
----------------	--------	---------	---------	---------

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.09	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		554.80
1.09				
E.G. slope (ft/ft)	0.000009	Area (sq ft)		554.80
1.09				
Q Total (cfs)	545.00	Flow (cfs)		544.92
0.08				
Top width (ft)	124.31	Top width (ft)		113.09
11.22				
Vel Total (ft/s)	0.98	Avg. Vel. (ft/s)		0.98
0.07				
Max Chl Dpth (ft)	6.44	Hydr. Depth (ft)		4.91
0.10				
Conv. Total (cfs)	182984.8	Conv. (cfs)		182958.1
26.6				
Length wtd. (ft)	0.99	wetted Per. (ft)		114.53
11.22				
Min Ch El (ft)	808.65	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.00	Stream Power (lb/ft s)	240.33	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.50
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.10
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.43835*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-4.38 818.75 0 818.75 .56 818.75 2.49 818.32 5.28 817.88									
47.34 817.44 67.75 817 94.1 810.17 102.33 809.34 136.31 808.63									
165.86 809.31 175.38 810.52 189.05 814.88 228.27 815.56 229.47 815.57									
239.14 815.57									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-4.38 .0129 0 .0129 67.75 .0129 239.14 .0129					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
67.75 189.05	.99 .99 .99		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
228.9629 239.14818.8893		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013

CPNPPLocalPMP				
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		561.40
1.33				
E.G. Slope (ft/ft)	0.000009	Area (sq ft)		561.40
1.33				
Q Total (cfs)	545.00	Flow (cfs)		544.90
0.10				
Top width (ft)	126.35	Top width (ft)		113.95
12.40				
Vel Total (ft/s)	0.97	Avg. Vel. (ft/s)		0.97
0.08				
Max Chl Dpth (ft)	6.46	Hydr. Depth (ft)		4.93
0.11				
Conv. Total (cfs)	185705.5	Conv. (cfs)		185670.8
34.7				
Length wtd. (ft)	0.99	wetted Per. (ft)		115.39
12.40				
Min Ch El (ft)	808.63	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.00	Stream Power (lb/ft s)	239.14	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.49
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.09
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.42465*

INPUT

Description:

Station Elevation Data num= 16											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-4.25	818.7	0	818.7	.54	818.7	2.41	818.27	5.11	817.85		
45.86	817.42	65.64	817	92.21	810.13	100.51	809.32	134.78	808.62		
164.49	809.3	174.07	810.47	187.8	814.85	227.07	815.54	228.26	815.56		
237.95	815.56										

Manning's n Values num= 4							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-4.25	.0129	0	.0129	65.64	.0129	237.95	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	65.64	187.8		.99	.99		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
227.7769	237.95818	8303

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99

CPNPPLocalPMP			
0.99			
Crit w.s. (ft)		Flow Area (sq ft)	567.79
1.71			
E.G. Slope (ft/ft)	0.000008	Area (sq ft)	567.79
1.71			
Q Total (cfs)	545.00	Flow (cfs)	544.86
0.14			
Top width (ft)	128.75	Top width (ft)	114.79
13.96			
Vel Total (ft/s)	0.96	Avg. vel. (ft/s)	0.96
0.08			
Max Chl Dpth (ft)	6.48	Hydr. Depth (ft)	4.95
0.12			
Conv. Total (cfs)	188339.2	Conv. (cfs)	188290.5
48.7			
Length wtd. (ft)	0.99	wetted Per. (ft)	116.23
13.96			
Min Ch El (ft)	808.62	Shear (lb/sq ft)	0.00
0.00			
Alpha	1.01	Stream Power (lb/ft s)	237.95
0.00			
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.48
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.09
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.41095*

INPUT

Description:

Station Elevation Data		num=	16						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-4.11	818.64	0	818.64	.52	818.64	2.33	818.23	4.95	817.82
44.38	817.41	63.52	817	90.32	810.1	98.69	809.31	133.25	808.6
163.12	809.28	172.75	810.42	186.56	814.82	225.86	815.52	227.06	815.54
236.75	815.54								

Manning's n Values		num=	4				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-4.11	.0129	0	.0129	63.52	.0129	236.75	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	63.52	186.56		.99	.99	.99		.1	.3

Blocked Obstructions			num=	1	
Sta L	Sta R	Elev			
226.5908	236.75818	18.7712			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		574.35
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2.13				
E.G. Slope (ft/ft)	0.000008	Area (sq ft)		574.35
2.13				
Q Total (cfs)	545.00	Flow (cfs)		544.81
0.19				
Top width (ft)	131.10	Top width (ft)		115.64
15.46				
Vel Total (ft/s)	0.95	Avg. Vel. (ft/s)		0.95
0.09				
Max Chl Dpth (ft)	6.50	Hydr. Depth (ft)		4.97
0.14				
Conv. Total (cfs)	191073.0	Conv. (cfs)		191007.6
65.4				
Length wtd. (ft)	0.99	wetted Per. (ft)		117.08
15.46				
Min Ch El (ft)	808.60	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.01	Stream Power (lb/ft s)	236.75	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.46
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.09
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.39726*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-3.97 818.59 0 818.59 .5 818.59 2.26 818.19 4.78 817.79									
42.9 817.4 61.4 817 88.42 810.06 96.87 809.29 131.72 808.58									
161.75 809.26 171.43 810.38 185.32 814.79 224.66 815.5 225.86 815.52									
235.56 815.52									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-3.97 .0129 0 .0129 61.4 .0129 235.56 .0129					

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 61.4 185.32 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 225.4048 235.56818.7122

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		581.26
2.59				
E.G. Slope (ft/ft)	0.000008	Area (sq ft)		581.26

		CPNPPLocalPMP	
2.59			
Q Total (cfs)	545.00	Flow (cfs)	544.76
0.24			
Top width (ft)	133.44	Top width (ft)	116.51
16.94			
Vel Total (ft/s)	0.93	Avg. Vel. (ft/s)	0.94
0.09			
Max Chl Dpth (ft)	6.52	Hydr. Depth (ft)	4.99
0.15			
Conv. Total (cfs)	193988.3	Conv. (cfs)	193903.1
85.2			
Length wtd. (ft)	0.99	wetted Per. (ft)	117.94
16.94			
Min ch El (ft)	808.58	Shear (lb/sq ft)	0.00
0.00			
Alpha	1.01	Stream Power (lb/ft s)	235.56
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.45
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.08
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.38356*

INPUT

Description:

Station Elevation Data		num= 16	
Sta	Elev	Sta	Elev
-3.84	818.53	0	818.53
41.42	817.38	59.28	817
160.38	809.25	170.11	810.33
234.37	815.5		

Manning's n Values		num= 4	
Sta	n Val	Sta	n Val
-3.84	.0129	0	.0129
		59.28	.0129
		234.37	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	59.28	184.07		.99	.99	.99		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
224.2188	234.37818	6531	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		587.67
2.94				
E.G. slope (ft/ft)	0.000008	Area (sq ft)		587.67
2.94				
Q Total (cfs)	545.00	Flow (cfs)		544.72
		Page 429		

CPNPPLocalPMP			
0.28			
Top width (ft)	135.43	Top width (ft)	117.36
18.08			
Vel Total (ft/s)	0.92	Avg. vel. (ft/s)	0.93
0.10			
Max Chl Dpth (ft)	6.53	Hydr. Depth (ft)	5.01
0.16			
Conv. Total (cfs)	196635.7	Conv. (cfs)	196534.6
101.2			
Length wtd. (ft)	0.99	wetted Per. (ft)	118.79
18.08			
Min Ch El (ft)	808.57	Shear (lb/sq ft)	0.00
0.00			
Alpha	1.01	Stream Power (lb/ft s)	234.37
0.00			
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.44
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.08
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.36986*

INPUT

Description:

Station Elevation Data		num=	16						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-3.7	818.48	0	818.48	.47	818.48	2.1	818.11	4.45	817.74
39.94	817.37	57.17	817	84.64	809.99	93.22	809.26	128.65	808.55
159.01	809.23	168.79	810.28	182.83	814.74	222.25	815.47	223.46	815.48
233.18	815.48								

Manning's n Values		num=	4				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-3.7	.0129	0	.0129	57.17	.0129	233.18	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 57.17 182.83 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 223.0328 233.18818.5941

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		594.32
3.42				
E.G. Slope (ft/ft)	0.000007	Area (sq ft)		594.32
3.42				
Q Total (cfs)	545.00	Flow (cfs)		544.66
0.34				
Top width (ft)	137.42	Top width (ft)		118.20

CPNPPLocalPMP			
19.22			
Vel Total (ft/s)	0.91	Avg. Vel. (ft/s)	0.92
0.10			
Max Chl Dpth (ft)	6.55	Hydr. Depth (ft)	5.03
0.18			
Conv. Total (cfs)	199439.9	Conv. (cfs)	199315.2
124.7			
Length Wtd. (ft)	0.99	wetted Per. (ft)	119.63
19.23			
Min Ch El (ft)	808.55	Shear (lb/sq ft)	0.00
0.00			
Alpha	1.01	Stream Power (lb/ft s)	233.18
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.42
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.08
0.02			

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.35616*

INPUT

Description:

Station Elevation Data num= 16											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-3.56	818.42	0	818.42	.45	818.42	2.02	818.07	4.29	817.71		
38.46	817.36	55.05	817	82.75	809.95	91.4	809.24	127.12	808.53		
157.64	809.21	167.47	810.23	181.59	814.71	221.05	815.45	222.25	815.47		
231.99	815.47										

Manning's n Values num= 4							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-3.56	.0129	0	.0129	55.05	.0129	231.99	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 55.05 181.59 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 221.8467 231.99818.5351

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
w.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.S. (ft)		Flow Area (sq ft)		601.43
3.98				
E.G. Slope (ft/ft)	0.000007	Area (sq ft)		601.43
3.98				
Q Total (cfs)	545.00	Flow (cfs)		544.59
0.41				
Top width (ft)	139.65	Top width (ft)		119.06
20.59				
Vel Total (ft/s)	0.90	Avg. vel. (ft/s)		0.91
		Page 431		

CPNPPLocalPMP

0.10				
Max Chl Dpth (ft)	6.57	Hydr. Depth (ft)		5.05
0.19				
Conv. Total (cfs)	202486.1	Conv. (cfs)		202333.1
153.0				
Length wtd. (ft)	0.99	wetted Per. (ft)		120.49
20.60				
Min Ch El (ft)	808.53	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.01	Stream Power (lb/ft s)	231.99	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.41
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.08
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.34246*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-3.42	818.37	0	818.37	.43	818.37	1.95	818.03	4.12	817.68
36.98	817.34	52.93	817	80.85	809.91	89.58	809.23	125.59	808.51
156.27	809.2	166.16	810.19	180.34	814.68	219.85	815.43	221.05	815.45
230.79	815.45								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-3.42	.0129	0	.0129	52.93	.0129	230.79	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	52.93	180.34	.99	.99	.99	.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
220.6607	230.79	818.476

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		608.06
4.57				
E.G. slope (ft/ft)	0.000007	Area (sq ft)		608.06
4.57				
Q Total (cfs)	545.00	Flow (cfs)		544.51
0.49				
Top width (ft)	141.85	Top width (ft)		119.91
21.94				
Vel Total (ft/s)	0.89	Avg. vel. (ft/s)		0.90
0.11				
Max Chl Dpth (ft)	6.59	Hydr. Depth (ft)		5.07

	CPNPPLocalPMP			
0.21				
Conv. Total (cfs)	205285.8	Conv. (cfs)		205101.0
184.8				
Length wtd. (ft)	0.99	wetted Per. (ft)		121.35
21.94				
Min Ch El (ft)	808.51	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.01	Stream Power (lb/ft s)	230.79	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.40
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.07
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.32876*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-3.29 818.32 0 818.32	.42 818.32	1.87 817.99	3.96 817.66	35.5 817.33	50.81 817	78.96 809.88	87.75 809.21	124.05 808.5	154.9 809.18
164.84 810.14	179.1 814.66	218.65 815.41	219.85 815.43	229.6 815.43					

Manning's n Values	num=	4				
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-3.29 .0129 0 .0129	50.81 .0129	229.6 .0129				

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
50.81 179.1	.99 .99	.99	.1	.3
Blocked Obstructions	num=	1		
Sta L Sta R Elev				
219.4747 229.6 818.417				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		614.68
5.03				
E.G. Slope (ft/ft)	0.000007	Area (sq ft)		614.68
5.03				
Q Total (cfs)	545.00	Flow (cfs)		544.45
0.55				
Top width (ft)	143.79	Top width (ft)		120.76
23.03				
Vel Total (ft/s)	0.88	Avg. vel. (ft/s)		0.89
0.11				
Max Chl Dpth (ft)	6.60	Hydr. Depth (ft)		5.09
0.22				
Conv. Total (cfs)	208068.7	Conv. (cfs)		207858.8

CPNPPLocalPMP

209.9				
Length wtd. (ft)	0.99	wetted Per. (ft)		122.20
23.03				
Min Ch El (ft)	808.50	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.01	Stream Power (lb/ft s)	229.60	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.38
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.07
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.31506*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-3.15 818.26 0 818.26 .4 818.26 1.79 817.95 3.79 817.63									
34.02 817.32 48.7 817 77.07 809.84 85.93 809.19 122.52 808.48									
153.53 809.16 163.52 810.09 177.86 814.63 217.44 815.39 218.65 815.41									
228.41 815.41									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-3.15 .0129 0 .0129 48.7 .0129 228.41 .0129					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
48.7 177.86	.99 .99 .99		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
218.2887 228.41 818.358		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
w.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.S. (ft)		Flow Area (sq ft)		621.87
5.67				
E.G. Slope (ft/ft)	0.000007	Area (sq ft)		621.87
5.67				
Q Total (cfs)	545.00	Flow (cfs)		544.36
0.64				
Top width (ft)	145.93	Top width (ft)		121.62
24.31				
Vel Total (ft/s)	0.87	Avg. vel. (ft/s)		0.88
0.11				
Max Chl Dpth (ft)	6.62	Hydr. Depth (ft)		5.11
0.23				
Conv. Total (cfs)	211192.4	Conv. (cfs)		210944.7
247.6				
Length wtd. (ft)	0.99	wetted Per. (ft)		123.05

CPNPPLocalPMP				
24.31	Min Ch El (ft)	808.48	Shear (lb/sq ft)	0.00
0.00	Alpha	1.01	Stream Power (lb/ft s)	228.41
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.37
0.01	C & E Loss (ft)	0.00	Cum SA (acres)	0.07
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.30137*

INPUT

Description:

Station Elevation Data num= 16											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-3.01	818.21	0	818.21	.38	818.21	1.71	817.9	3.63	817.6		
32.54	817.3	46.58	817	75.18	809.8	84.11	809.18	120.99	808.46		
152.15	809.15	162.2	810.04	176.61	814.6	216.24	815.37	217.45	815.39		
227.22	815.39										

Manning's n Values num= 4							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-3.01	.0129	0	.0129	46.58	.0129	227.22	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 46.58 176.61 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 217.1026 227.22818.2989

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		628.66
6.36				
E.G. slope (ft/ft)	0.000006	Area (sq ft)		628.66
6.36				
Q Total (cfs)	545.00	Flow (cfs)		544.26
0.74				
Top width (ft)	148.05	Top width (ft)		122.47
25.58				
Vel Total (ft/s)	0.86	Avg. vel. (ft/s)		0.87
0.12				
Max Chl Dpth (ft)	6.64	Hydr. Depth (ft)		5.13
0.25				
Conv. Total (cfs)	214103.1	Conv. (cfs)		213813.8
289.4				
Length wtd. (ft)	0.99	wetted Per. (ft)		123.91
25.58				
Min Ch El (ft)	808.46	Shear (lb/sq ft)		0.00

		CPNPPLocalPMP			
0.00	Alpha	1.02	Stream Power (lb/ft s)	227.22	0.00
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.35
0.01	C & E Loss (ft)	0.00	Cum SA (acres)		0.07
0.02					

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.28767*

INPUT

Description:

Station Elevation Data		num= 16		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-2.88	818.15	0	818.15	.37	818.15	1.63	817.86	3.46	817.58		
31.07	817.29	44.46	817	73.28	809.77	82.29	809.16	119.45	808.45		
150.78	809.13	160.88	810	175.37	814.58	215.04	815.36	216.25	815.38		
226.03	815.38										

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-2.88	.0129	0	.0129	44.46	.0129	226.03	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	44.46	175.37		.99	.99	.99		.1	.3
Blocked Obstructions	num= 1								
Sta L	Sta R	Elev							
215.9166	226.03818	2399							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		635.28
6.80				
E.G. Slope (ft/ft)	0.000006	Area (sq ft)		635.28
6.80				
Q Total (cfs)	545.00	Flow (cfs)		544.20
0.80				
Top Width (ft)	149.63	Top width (ft)		123.33
26.30				
Vel Total (ft/s)	0.85	Avg. vel. (ft/s)		0.86
0.12				
Max Chl Dpth (ft)	6.65	Hydr. Depth (ft)		5.15
0.26				
Conv. Total (cfs)	216900.8	Conv. (cfs)		216582.8
317.9				
Length wtd. (ft)	0.99	wetted Per. (ft)		124.76
26.31				
Min Ch El (ft)	808.45	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	226.03	0.00

				CPNPPLocalPMP
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.34
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.06
0.02				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.27397*

INPUT

Description:

Station Elevation Data	num=	16								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-2.74 818.1 0 818.1 .35 818.1 1.56 817.82 3.3 817.55										
29.59 817.27 42.35 817 71.39 809.73 80.46 809.15 117.92 808.43										
149.41 809.11 159.56 809.95 174.13 814.55 213.83 815.34 215.04 815.36										
224.84 815.36										

Manning's n Values	num=	4								
Sta n Val Sta n Val Sta n Val Sta n Val										
-2.74 .0129 0 .0129 42.35 .0129 224.84 .0129										

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
42.35 174.13	.99 .99 .99		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
214.7306 224.84818.1808		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		642.37
7.53				
E.G. Slope (ft/ft)	0.000006	Area (sq ft)		642.37
7.53				
Q Total (cfs)	545.00	Flow (cfs)		544.09
0.91				
Top width (ft)	151.69	Top width (ft)		124.18
27.51				
Vel Total (ft/s)	0.84	Avg. vel. (ft/s)		0.85
0.12				
Max Chl Dpth (ft)	6.67	Hydr. Depth (ft)		5.17
0.27				
Conv. Total (cfs)	219987.3	Conv. (cfs)		219621.9
365.5				
Length wtd. (ft)	0.99	wetted Per. (ft)		125.62
27.51				
Min Ch El (ft)	808.43	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	224.84	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.32

0.01
 C & E Loss (ft) 0.00 Cum SA (acres) 0.06
 0.02

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.26027*

INPUT

Description:

Station Elevation Data		num= 16		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-2.6	818.04	0	818.04	.33	818.04	1.48	817.78	3.13	817.52		
28.11	817.26	40.23	817	69.5	809.69	78.64	809.13	116.39	808.41		
148.04	809.1	158.25	809.9	172.88	814.52	212.63	815.32	213.84	815.34		
223.64	815.34										

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-2.6	.0129	0	.0129	40.23	.0129	223.64	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 40.23 172.88 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 213.5445 223.64818.1218

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	815.11			
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		649.53
8.29				
E.G. slope (ft/ft)	0.000006	Area (sq ft)		649.53
8.29				
Q Total (cfs)	545.00	Flow (cfs)		543.98
1.02				
Top width (ft)	153.73	Top width (ft)		125.03
28.70				
Vel Total (ft/s)	0.83	Avg. vel. (ft/s)		0.84
0.12				
Max Chl Dpth (ft)	6.69	Hydr. Depth (ft)		5.19
0.29				
Conv. Total (cfs)	223126.6	Conv. (cfs)		222709.7
416.9				
Length wtd. (ft)	0.99	wetted Per. (ft)		126.47
28.70				
Min Ch El (ft)	808.41	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	223.64	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.31
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.06

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0.02

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.24657*

INPUT

Description:

Station Elevation Data		num= 16	
Sta	Elev	Sta	Elev
-2.47	817.99	0	817.99
26.63	817.25	38.11	817
146.67	809.08	156.93	809.85
222.45	815.32		

Manning's n Values		num= 4	
Sta	n Val	Sta	n Val
-2.47	.0129	0	.0129
38.11	.0129	222.45	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	38.11	171.64		.99	.99		.1	.3
Blocked Obstructions	num= 1							
Sta L	Sta R	Elev						
212.3585	222.45818	18.0627						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		656.41
9.07				
E.G. Slope (ft/ft)	0.000006	Area (sq ft)		656.41
9.07				
Q Total (cfs)	545.00	Flow (cfs)		543.86
1.14				
Top Width (ft)	155.74	Top width (ft)		125.88
29.85				
Vel Total (ft/s)	0.82	Avg. vel. (ft/s)		0.83
0.13				
Max Chl Dpth (ft)	6.70	Hydr. Depth (ft)		5.21
0.30				
Conv. Total (cfs)	226114.5	Conv. (cfs)		225642.3
472.2				
Length wtd. (ft)	0.99	wetted Per. (ft)		127.32
29.86				
Min Ch El (ft)	808.40	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	222.45	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.30
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.05
0.02				

CPNPPLocalPMP

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.23287*

INPUT

Description:

Station Elevation Data		num= 16		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-2.33	817.93	0	817.93	.3	817.93	1.32	817.7	2.8	817.47		
25.15	817.23	35.99	817	65.71	809.62	75	809.1	113.32	808.38		
145.3	809.06	155.61	809.81	170.4	814.47	210.22	815.28	211.44	815.31		
221.26	815.31										

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-2.33	.0129	0	.0129	35.99	.0129	221.26	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	35.99	170.4		.99	.99		.1	.3
Blocked Obstructions	num= 1							
Sta L	Sta R	Elev						
211.1725	221.26818	818.0037						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		663.45
9.69				
E.G. Slope (ft/ft)	0.000006	Area (sq ft)		663.45
9.69				
Q Total (cfs)	545.00	Flow (cfs)		543.77
1.23				
Top width (ft)	157.61	Top width (ft)		126.75
30.86				
Vel Total (ft/s)	0.81	Avg. vel. (ft/s)		0.82
0.13				
Max Chl Dpth (ft)	6.72	Hydr. Depth (ft)		5.23
0.31				
Conv. Total (cfs)	229169.7	Conv. (cfs)		228654.3
515.5				
Length wtd. (ft)	0.99	wetted Per. (ft)		128.19
30.87				
Min Ch El (ft)	808.38	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	221.26	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.28
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.05
0.01				

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CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.21917*

INPUT

Description:

Station Elevation Data		num= 16		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-2.19	817.88	0	817.88	.28	817.88	1.24	817.66	2.64	817.44		
23.67	817.22	33.88	817	63.82	809.58	73.17	809.08	111.79	808.36		
143.93	809.05	154.29	809.76	169.15	814.44	209.02	815.26	210.24	815.29		
220.07	815.29										

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-2.19	.0129	0	.0129	33.88	.0129	220.07	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 33.88 169.15 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 209.9865 220.07817.9446

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	815.11			
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		670.68
10.53				
E.G. slope (ft/ft)	0.000006	Area (sq ft)		670.68
10.53				
Q Total (cfs)	545.00	Flow (cfs)		543.64
1.36				
Top width (ft)	159.59	Top width (ft)		127.60
31.99				
Vel Total (ft/s)	0.80	Avg. vel. (ft/s)		0.81
0.13				
Max Chl Dpth (ft)	6.74	Hydr. Depth (ft)		5.26
0.33				
Conv. Total (cfs)	232379.8	Conv. (cfs)		231802.0
577.8				
Length wtd. (ft)	0.99	wetted Per. (ft)		129.04
32.00				
Min Ch El (ft)	808.36	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	220.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.27
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.05
0.01				

CROSS SECTION

CPNPPLocalPMP

RIVER: East Channel
 REACH: East Channel RS: 1.20548*

INPUT

Description:

Station Elevation Data			num=	16					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-2.05	817.82	0	817.82	.26	817.82	1.17	817.62	2.47	817.41
22.19	817.21	31.76	817	61.93	809.55	71.35	809.06	110.26	808.34
142.56	809.03	152.97	809.71	167.91	814.41	207.82	815.25	209.04	815.27
218.88	815.27								

Manning's n Values			num=	4			
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-2.05	.0129	0	.0129	31.76	.0129	218.88	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	31.76	167.91		.99	.99	.99		.1	.3
Blocked Obstructions			num=	1					
Sta L	Sta R	Elev							
208.8004	218.888	17.8856							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		678.02
11.25				
E.G. slope (ft/ft)	0.000005	Area (sq ft)		678.02
11.25				
Q Total (cfs)	545.00	Flow (cfs)		543.53
1.47				
Top width (ft)	161.15	Top width (ft)		128.45
32.70				
Vel Total (ft/s)	0.79	Avg. vel. (ft/s)		0.80
0.13				
Max Chl Dpth (ft)	6.76	Hydr. Depth (ft)		5.28
0.34				
Conv. Total (cfs)	235646.1	Conv. (cfs)		235009.7
636.4				
Length wtd. (ft)	0.99	wetted Per. (ft)		129.89
32.71				
Min Ch El (ft)	808.34	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	218.88	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.25
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.05
0.01				

CROSS SECTION

RIVER: East Channel

REACH: East Channel CPNPPLocalPMP
RS: 1.19178*

INPUT

Description:

Station Elevation Data		num= 16		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-1.92	817.77	0	817.77	.24	817.77	1.09	817.58	2.31	817.38		
20.71	817.19	29.64	817	60.04	809.51	69.53	809.05	108.73	808.33		
141.19	809.01	151.66	809.66	166.67	814.38	206.62	815.23	207.83	815.25		
217.68	815.25										

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-1.92	.0129	0	.0129	29.64	.0129	217.68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
29.64 166.67 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
Sta L Sta R Elev
207.6144 217.68817.8266

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	815.11			
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
w.s. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		685.01
12.13				
E.G. Slope (ft/ft)	0.000005	Area (sq ft)		685.01
12.13				
Q Total (cfs)	545.00	Flow (cfs)		543.39
1.61				
Top width (ft)	163.07	Top width (ft)		129.31
33.76				
Vel Total (ft/s)	0.78	Avg. vel. (ft/s)		0.79
0.13				
Max Chl Dpth (ft)	6.77	Hydr. Depth (ft)		5.30
0.36				
Conv. Total (cfs)	238709.5	Conv. (cfs)		238003.9
705.6				
Length wtd. (ft)	0.99	wetted Per. (ft)		130.76
33.77				
Min Ch El (ft)	808.33	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	217.68	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.23
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.04
0.01				

CROSS SECTION

RIVER: East Channel
REACH: East Channel RS: 1.17808*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 16		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-1.78	817.71	0	817.71	.23	817.71	1.01	817.53	2.14	817.36		
19.23	817.18	27.52	817	58.14	809.47	67.71	809.03	107.19	808.31		
139.82	809	150.34	809.62	165.42	814.36	205.41	815.21	206.63	815.23		
216.49	815.23										

Manning's n Values

num= 4		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-1.78	.0129	0	.0129	27.52	.0129	216.49	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	27.52	165.42		.99	.99		.1	.3

Blocked Obstructions

num= 1		Sta L Sta R Elev	
Sta L	Sta R	Elev	
206.4284	216.498	17.7675	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		692.20
12.83				
E.G. slope (ft/ft)	0.000005	Area (sq ft)		692.20
12.83				
Q Total (cfs)	545.00	Flow (cfs)		543.29
1.71				
Top width (ft)	164.91	Top width (ft)		130.17
34.74				
Vel Total (ft/s)	0.77	Avg. vel. (ft/s)		0.78
0.13				
Max Chl Dpth (ft)	6.79	Hydr. Depth (ft)		5.32
0.37				
Conv. Total (cfs)	241888.9	Conv. (cfs)		241128.4
760.5				
Length wtd. (ft)	0.99	wetted Per. (ft)		131.62
34.75				
Min Ch El (ft)	808.31	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	216.49	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.22
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.04
0.01				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel

RS: 1.16438*

INPUT

Description:

Station Elevation Data				num=	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	16	Sta	Elev	Sta	Elev	Sta	Elev
-1.64	817.66	0	817.66		.21	817.66	.93	817.49	1.98	817.33
17.75	817.16	25.41	817		56.25	809.44	65.89	809.02	105.66	808.29
138.45	808.98	149.02	809.57		164.18	814.33	204.21	815.19	205.43	815.22
215.3	815.22									

Manning's n Values				num=				
Sta	n Val	Sta	n Val	4	Sta	n Val	Sta	n Val
-1.64	.0129	0	.0129		25.41	.0129	215.3	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	25.41	164.18		.99	.99		.1	.3
Blocked Obstructions			num=	1				
Sta L	Sta R	Elev						
205.2424	215.3817	7085						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		699.38
13.75				
E.G. slope (ft/ft)	0.000005	Area (sq ft)		699.38
13.75				
Q Total (cfs)	545.00	Flow (cfs)		543.14
1.86				
Top width (ft)	166.79	Top width (ft)		131.01
35.78				
Vel Total (ft/s)	0.76	Avg. vel. (ft/s)		0.78
0.14				
Max chl Dpth (ft)	6.81	Hydr. Depth (ft)		5.34
0.38				
Conv. Total (cfs)	245099.6	Conv. (cfs)		244262.5
837.0				
Length wtd. (ft)	0.99	wetted Per. (ft)		132.47
35.79				
Min Ch El (ft)	808.29	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	215.30	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.20
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.04
0.01				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.15068*

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	16	Sta	Elev	Sta	Elev	Sta	Elev

-1.51	817.6	0	817.6	CPNPPLocalPMP	.19	817.6	.86	817.45	1.81	817.3
16.27	817.15	23.29	817		54.36	809.4	64.06	809	104.13	808.28
137.08	808.96	147.7	809.52		162.94	814.3	203.01	815.17	204.23	815.2
214.11	815.2									

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-1.51	.0129	0	.0129	23.29	.0129	214.11	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

23.29	162.94	.99	.99	.99	.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
204.0563	214.11817.6495	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		706.69
14.69				
E.G. Slope (ft/ft)	0.000005	Area (sq ft)		706.69
14.69				
Q Total (cfs)	545.00	Flow (cfs)		542.99
2.01				
Top width (ft)	168.67	Top width (ft)		131.88
36.79				
Vel Total (ft/s)	0.76	Avg. vel. (ft/s)		0.77
0.14				
Max Chl Dpth (ft)	6.82	Hydr. Depth (ft)		5.36
0.40				
Conv. Total (cfs)	248374.1	Conv. (cfs)		247456.4
917.7				
Length wtd. (ft)	0.99	wetted Per. (ft)		133.33
36.80				
Min Ch El (ft)	808.28	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	214.11	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.19
0.00				
C & E Loss (ft)	0.00	Cum SA (acres)		0.03
0.01				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.13698*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-1.37	817.55	0	817.55	.17	817.55	.78	817.41
14.79	817.14	21.17	817	52.47	809.37	62.24	808.98
						102.6	808.26

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135.71	808.95	146.38	809.47	161.69	814.27	201.8	815.15	203.03	815.18
212.92	815.18								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-1.37	.0129	0	.0129	21.17	.0129	212.92	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	21.17	161.69	.99	.99	.99	.1	.3
--	-------	--------	-----	-----	-----	----	----

Blocked Obstructions num= 1

Sta L	Sta R	Elev
202.8703	212.92817	17.5904

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		713.97
15.66				
E.G. slope (ft/ft)	0.000005	Area (sq ft)		713.97
15.66				
Q Total (cfs)	545.00	Flow (cfs)		542.83
2.17				
Top width (ft)	170.50	Top width (ft)		132.72
37.78				
Vel Total (ft/s)	0.75	Avg. vel. (ft/s)		0.76
0.14				
Max Chl Dpth (ft)	6.84	Hydr. Depth (ft)		5.38
0.41				
Conv. Total (cfs)	251661.8	Conv. (cfs)		250659.3
1002.5				
Length wtd. (ft)	0.99	wetted Per. (ft)		134.18
37.79				
Min Ch El (ft)	808.26	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	212.92	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.17
0.00				
C & E Loss (ft)	0.00	Cum SA (acres)		0.03
0.01				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.12328*

INPUT

Description:

Station	Elevation	Data	num=	16					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-1.23	817.49	0	817.49	.16	817.49	.7	817.37	1.48	817.25
13.31	817.12	19.06	817	50.57	809.33	60.42	808.97	101.06	808.24
134.34	808.93	145.06	809.43	160.45	814.25	200.6	815.14	201.83	815.16
211.73	815.16								

CPNPPLocalPMP

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 -1.23 .0129 0 .0129 19.06 .0129 211.73 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 19.06 160.45 .99 .99 .99 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 201.6843 211.73817.5314

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		721.28
16.26				
E.G. slope (ft/ft)	0.000005	Area (sq ft)		721.28
16.26				
Q Total (cfs)	545.00	Flow (cfs)		542.74
2.26				
Top width (ft)	171.88	Top width (ft)		133.58
38.30				
Vel Total (ft/s)	0.74	Avg. vel. (ft/s)		0.75
0.14				
Max Chl Dpth (ft)	6.86	Hydr. Depth (ft)		5.40
0.42				
Conv. Total (cfs)	254921.2	Conv. (cfs)		253863.4
1057.8				
Length wtd. (ft)	0.99	wetted Per. (ft)		135.04
38.31				
Min Ch El (ft)	808.24	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	211.73	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.15
0.00				
C & E Loss (ft)	0.00	Cum SA (acres)		0.03
0.01				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.10959*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-1.1 817.44 0 817.44 .14 817.44 .62 817.33 1.32 817.22									
11.83 817.11 16.94 817 48.68 809.29 58.6 808.95 99.53 808.23									
132.97 808.91 143.75 809.38 159.21 814.22 199.4 815.12 200.62 815.14									
210.53 815.14									

Manning's n Values num= 4
 Page 448

Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val
-1.1	.0129	0	.0129	16.94	.0129	210.53	.0129	
Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	16.94	159.21	.99	.99	.99	.1	.3	
Blocked Obstructions			num=	1				
Sta L	Sta R	Elev						
200.4982	210.53817	17.4724						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
w.s. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		728.73
17.26				
E.G. slope (ft/ft)	0.000004	Area (sq ft)		728.73
17.26				
Q Total (cfs)	545.00	Flow (cfs)		542.58
2.42				
Top width (ft)	173.71	Top width (ft)		134.44
39.26				
Vel Total (ft/s)	0.73	Avg. Vel. (ft/s)		0.74
0.14				
Max Chl Dpth (ft)	6.87	Hydr. Depth (ft)		5.42
0.44				
Conv. Total (cfs)	258295.0	Conv. (cfs)		257145.8
1149.2				
Length wtd. (ft)	0.99	wetted Per. (ft)		135.91
39.27				
Min Ch El (ft)	808.23	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.03	Stream Power (lb/ft s)	210.53	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)		0.14
0.00				
C & E Loss (ft)	0.00	cum SA (acres)		0.03
0.01				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.09589*

INPUT

Description:

Station	Elevation	Data	num=	16						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-.96	817.38	0	817.38	.12	817.38	.54	817.29	1.15	817.19	
10.36	817.1	14.82	817	46.79	809.26	56.77	808.94	98	808.21	
131.6	808.9	142.43	809.33	157.96	814.19	198.19	815.1	199.42	815.13	
209.34	815.13									

Manning's n Values	num=	4						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-.96	.0129	0	.0129	14.82	.0129	209.34	.0129	

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 14.82 157.96 .99 .99 .99 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 199.3122 209.34817.4133

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		735.84
18.27				
E.G. slope (ft/ft)	0.000004	Area (sq ft)		735.84
18.27				
Q Total (cfs)	545.00	Flow (cfs)		542.41
2.59				
Top width (ft)	175.49	Top width (ft)		135.29
40.20				
Vel Total (ft/s)	0.72	Avg. vel. (ft/s)		0.74
0.14				
Max Chl Dpth (ft)	6.89	Hydr. Depth (ft)		5.44
0.45				
Conv. Total (cfs)	261507.1	Conv. (cfs)		260262.8
1244.4				
Length wtd. (ft)	0.99	wetted Per. (ft)		136.76
40.21				
Min Ch El (ft)	808.21	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.04	Stream Power (lb/ft s)	209.34	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)		0.12
0.00				
C & E Loss (ft)	0.00	cum SA (acres)		0.02
0.01				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.08219*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-.82	817.33	0	817.33	.1	817.33	.47	817.25	.99	817.16
8.88	817.08	12.7	817	44.9	809.22	54.95	808.92	96.47	808.19
130.23	808.88	141.11	809.28	156.72	814.16	196.99	815.08	198.22	815.11
208.15	815.11								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-.82	.0129	0	.0129	12.7	.0129	208.15	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
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Blocked Obstructions	12.7	156.72	num=	1	CPNPPLocalPMP	.99	.99	.99	.1	.3
Sta L	Sta R	Elev								
198.1262	208.15817	17.3542								

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		743.71
19.31				
E.G. slope (ft/ft)	0.000004	Area (sq ft)		743.71
19.31				
Q Total (cfs)	545.00	Flow (cfs)		542.24
2.76				
Top width (ft)	177.22	Top width (ft)		136.15
41.06				
Vel Total (ft/s)	0.71	Avg. vel. (ft/s)		0.73
0.14				
Max chl Dpth (ft)	6.91	Hydr. Depth (ft)		5.46
0.47				
Conv. Total (cfs)	265147.2	Conv. (cfs)		263802.1
1345.0				
Length wtd. (ft)	0.99	wetted Per. (ft)		137.62
41.07				
Min ch El (ft)	808.19	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.04	Stream Power (lb/ft s)	208.15	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.10
0.00				
C & E Loss (ft)	0.00	Cum SA (acres)		0.02
0.01				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.06849*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-.68 817.27 0 817.27 .09 817.27 .39 817.21 .82 817.14									
7.4 817.07 10.59 817 43 809.18 53.13 808.9 94.93 808.17									
128.86 808.86 139.79 809.24 155.48 814.14 195.79 815.06 197.02 815.09									
206.96 815.09									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-.68 .0129 0 .0129 10.59 .0129 206.96 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
10.59 155.48	.99 .99 .99	.1	.3
Blocked Obstructions	num=	1	

CPNPPLocalPMP

Sta L Sta R Elev
196.9402 206.96817.2952

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		751.42
20.16				
E.G. Slope (ft/ft)	0.000004	Area (sq ft)		751.42
20.16				
Q Total (cfs)	545.00	Flow (cfs)		542.09
2.91				
Top width (ft)	178.47	Top width (ft)		137.01
41.46				
Vel Total (ft/s)	0.71	Avg. Vel. (ft/s)		0.72
0.14				
Max Chl Dpth (ft)	6.93	Hydr. Depth (ft)		5.48
0.49				
Conv. Total (cfs)	268694.9	Conv. (cfs)		267259.1
1435.8				
Length wtd. (ft)	0.99	wetted Per. (ft)		138.49
41.48				
Min Ch El (ft)	808.17	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.04	Stream Power (lb/ft s)	206.96	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)		0.09
0.00				
C & E Loss (ft)	0.00	cum SA (acres)		0.02
0.00				

CROSS SECTION

RIVER: East Channel
REACH: East Channel RS: 1.05479*

INPUT

Description:

Station Elevation Data	num=	16								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-.55 817.22 0 817.22 .07 817.22 .31 817.16 .66 817.11										
5.92 817.05 8.47 817 41.11 809.15 51.31 808.89 93.4 808.16										
127.49 808.85 138.47 809.19 154.23 814.11 194.59 815.04 195.82 815.07										
205.77 815.07										

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val						
-.55 .0129 0 .0129 8.47 .0129 205.77 .0129						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
8.47 154.23 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
Sta L Sta R Elev
195.7542 205.77817.2361

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		758.26
21.23				
E.G. slope (ft/ft)	0.000004	Area (sq ft)		758.26
21.23				
Q Total (cfs)	545.00	Flow (cfs)		541.87
3.13				
Top width (ft)	179.38	Top width (ft)		137.86
41.52				
Vel Total (ft/s)	0.70	Avg. vel. (ft/s)		0.71
0.15				
Max Chl Dpth (ft)	6.94	Hydr. Depth (ft)		5.50
0.51				
Conv. Total (cfs)	271788.3	Conv. (cfs)		270226.1
1562.1				
Length wtd. (ft)	0.99	wetted Per. (ft)		139.34
41.57				
Min Ch El (ft)	808.16	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.04	Stream Power (lb/ft s)	205.77	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.07
0.00				
C & E Loss (ft)	0.00	Cum SA (acres)		0.01
0.00				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.04109*

INPUT

Description:

Station Elevation Data num= 16

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-.41	817.16	0	817.16	.05	817.16	.23	817.12	.49	817.08
4.44	817.04	6.35	817	39.22	809.11	49.48	808.87	91.87	808.14
126.12	808.83	137.15	809.14	152.99	814.08	193.38	815.03	194.62	815.05
204.58	815.05								

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-.41	.0129	0	.0129	6.35	.0129	204.58	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 6.35 152.99 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 194.5681 204.58817.1771

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		766.25
22.07				
E.G. slope (ft/ft)	0.000004	Area (sq ft)		766.25
22.07				
Q Total (cfs)	545.00	Flow (cfs)		541.71
3.29				
Top width (ft)	180.30	Top width (ft)		138.72
41.58				
Vel Total (ft/s)	0.69	Avg. vel. (ft/s)		0.71
0.15				
Max Chl Dpth (ft)	6.96	Hydr. Depth (ft)		5.52
0.53				
Conv. Total (cfs)	275513.0	Conv. (cfs)		273847.8
1665.2				
Length wtd. (ft)	0.99	wetted Per. (ft)		140.21
41.64				
Min ch El (ft)	808.14	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.04	Stream Power (lb/ft s)	204.58	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.05
0.00				
C & E Loss (ft)	0.00	Cum SA (acres)		0.01
0.00				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.02739*

INPUT

Description:

Station	Elevation	Data	num=	16					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-.27	817.11	0	817.11	.03	817.11	.16	817.08	.33	817.05
2.96	817.03	4.23	817	37.33	809.07	47.66	808.85	90.34	808.12
124.74	808.81	135.84	809.09	151.75	814.05	192.18	815.01	193.41	815.04
203.38	815.04								

Manning's n Values

num=	4						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-.27	.0129	0	.0129	4.23	.0129	203.38	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 4.23 151.75 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 193.3821 203.38817.1181

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit w.s. (ft)		Flow Area (sq ft)		774.28
23.13				
E.G. Slope (ft/ft)	0.000004	Area (sq ft)		774.28
23.13				
Q Total (cfs)	545.00	Flow (cfs)		541.49
3.51				
Top Width (ft)	181.22	Top width (ft)		139.59
41.63				
Vel Total (ft/s)	0.68	Avg. Vel. (ft/s)		0.70
0.15				
Max Chl Dpth (ft)	6.98	Hydr. Depth (ft)		5.55
0.56				
Conv. Total (cfs)	279303.5	Conv. (cfs)		277505.4
1798.1				
Length wtd. (ft)	0.99	wetted Per. (ft)		141.08
41.70				
Min Ch El (ft)	808.12	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.04	Stream Power (lb/ft s)	203.38	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)		0.04
0.00				
C & E Loss (ft)	0.00	Cum SA (acres)		0.01
0.00				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel RS: 1.01369*

INPUT

Description:

Station Elevation Data		num=	16		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-.14	817.05	0	817.05	.02	817.05	.08	817.04	.16	817.03			
1.48	817.01	2.12	817	35.43	809.04	45.84	808.84	88.8	808.11			
123.37	808.79	134.52	809.05	150.5	814.03	190.98	814.99	192.21	815.02			
202.19	815.02											

Manning's n Values

num=		4		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-.14	.0129	0	.0129	2.12	.0129	202.19	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 2.12 150.5 .99 .99 .99 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 192.1961 202.19 817.059

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				

		CPNPPLocalPMP		
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)	0.99	0.99
0.99				
Crit W.S. (ft)		Flow Area (sq ft)		781.25
23.99				
E.G. Slope (ft/ft)	0.000004	Area (sq ft)		781.25
23.99				
Q Total (cfs)	545.00	Flow (cfs)		541.32
3.68				
Top width (ft)	182.12	Top width (ft)		140.43
41.70				
Vel Total (ft/s)	0.68	Avg. vel. (ft/s)		0.69
0.15				
Max Chl Dpth (ft)	6.99	Hydr. Depth (ft)		5.56
0.58				
Conv. Total (cfs)	282470.9	Conv. (cfs)		280561.5
1909.4				
Length wtd. (ft)	0.99	wetted Per. (ft)		141.92
41.79				
Min Ch El (ft)	808.11	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.04	Stream Power (lb/ft s)	202.19	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)		0.02
0.00				
C & E Loss (ft)	0.00	cum SA (acres)		0.00
0.00				

CROSS SECTION

RIVER: East Channel
 REACH: East Channel

RS: 1

INPUT

Description:

Station	Elevation	Data	num=	7							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	33.54	809	87.27	808.09	133.2	809	149.26			814
191.01	815	201	815								

Manning's n Values

num= 2

Sta	n Val	Sta	n Val
0	.0129	201	.0129

Bank Sta: Left Right Coeff Contr. Expan.
 0 149.26 .1 .3

Blocked Obstructions

num= 1

Sta L	Sta R	Elev
191.01	201	817

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	815.10	Reach Len. (ft)		

		CPNPPLocalPMP		
Crit w.s. (ft)	809.52	Flow Area (sq ft)		789.08
25.05		Area (sq ft)		789.08
E.G. Slope (ft/ft)	0.000004	Flow (cfs)		541.10
25.05		Top width (ft)		141.29
Q Total (cfs)	545.00	Avg. vel. (ft/s)		0.69
3.90		Hydr. Depth (ft)		5.58
Top width (ft)	183.04	Conv. (cfs)		284106.8
41.75		wetted Per. (ft)		142.79
Vel Total (ft/s)	0.67	Shear (lb/sq ft)		0.00
0.16		Stream Power (lb/ft s)	201.00	0.00
Max Chl Dpth (ft)	7.01	Cum Volume (acre-ft)		
0.60		Cum SA (acres)		
Conv. Total (cfs)	286155.7			
2048.8				
Length wtd. (ft)				
41.86				
Min Ch El (ft)	808.09			
0.00				
Alpha	1.04			
0.00				
Frctn Loss (ft)				
C & E Loss (ft)				

CROSS SECTION

RIVER: Offsite
 REACH: Offsite

RS: 6

INPUT

Description:

Station Elevation Data		num=	14							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	0	822	4	821.95	73.22	821	142	820.09	
149	820	152	819	164	815	166.51	815	198.22	815	
210.37	819	219.5	822	223.78	822.15	239.13	822.47			

Manning's n Values

Manning's n Values		num=	9							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	0	.0129	4	.0066	142	.0129	149	.017	
166.51	.0066	210.37	.017	219.5	.0129	223.78	.0066			

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	149	219.5		4.88	4.88	4.88		.1	.3
Blocked Obstructions			num=	1					
Sta L	Sta R	Elev							
-10	0	827							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.46	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.81	wt. n-Val.		0.010
w.s. Elev (ft)	819.65	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)	819.65	Flow Area (sq ft)		224.49

		CPNPPLocalPMP		
E.G. Slope (ft/ft)	0.001043	Area (sq ft)		224.49
Q Total (cfs)	2421.00	Flow (cfs)		2421.00
Top Width (ft)	62.31	Top Width (ft)		62.31
Vel Total (ft/s)	10.78	Avg. Vel. (ft/s)		10.78
Max Chl Dpth (ft)	4.65	Hydr. Depth (ft)		3.60
Conv. Total (cfs)	74948.7	Conv. (cfs)		74948.7
Length wtd. (ft)	4.88	wetted Per. (ft)		63.81
Min ch El (ft)	815.00	Shear (lb/sq ft)		0.23
Alpha	1.00	Stream Power (lb/ft s)	239.13	0.00
0.00				
Frctn Loss (ft)		Cum Volume (acre-ft)	3.90	53.31
6.12				
C & E Loss (ft)		Cum SA (acres)	0.30	1.05

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.94117*

INPUT

Description:

Station Elevation Data		num= 23									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.15	822	.01	822	2.81	821.91	3.8	821.9		
4.01	821.89	73.3	820.97	128.7	820.25	139.78	820.08	142.14	820.05		
149.15	819.94	152.15	818.94	161.15	815.94	164.15	814.94	166.68	814.94		
198.71	814.94	202.31	816.09	211.13	819	211.3	819.05	220.47	822.06		
224.77	822.2	225.9	822.23	240.19	822.52						

Manning's n Values		num= 16									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.15	.0129	.01	.0129	3.8	.0069	4.01	.0066		
139.78	.0128	142.14	.013	149.15	.017	161.82	.0094	166.86	.0067		
195.64	.0136	211.23	.0168	220.47	.0129	224.77	.0067	225.9	.0066		
240.19	.0066										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 149.15 220.47 4.88 4.88 4.88 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.42	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.21	wt. n-Val.		0.011

		CPNPPLocalPMP		
W.S. Elev (ft)	819.21	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)	819.57	Flow Area (sq ft)		202.76
E.G. slope (ft/ft)	0.001623	Area (sq ft)		202.76
Q Total (cfs)	2421.00	Flow (cfs)		2421.00
Top width (ft)	60.43	Top width (ft)		60.43
Vel Total (ft/s)	11.94	Avg. Vel. (ft/s)		11.94
Max chl Dpth (ft)	4.27	Hydr. Depth (ft)		3.36
Conv. Total (cfs)	60102.5	Conv. (cfs)		60102.5
Length wtd. (ft)	4.88	wetted Per. (ft)		61.80
Min ch El (ft)	814.94	Shear (lb/sq ft)		0.33
Alpha	1.00	Stream Power (lb/ft s)	240.19	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.90	53.28
6.12				
C & E Loss (ft)	0.04	Cum SA (acres)	0.30	1.04

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.88235*

INPUT

Description:

Station Elevation Data		num= 23									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.14	822	.02	821.99	2.82	821.85	3.81	821.84		
4.03	821.84	73.37	820.93	128.83	820.24	139.92	820.04	142.28	820		
149.3	819.88	152.3	818.88	161.3	815.88	164.3	814.88	166.86	814.88		
199.2	814.88	202.88	816.02	211.89	818.99	212.07	819.05	221.43	822.12		
225.75	822.26	226.89	822.28	241.24	822.57						

Manning's n Values		num= 16									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.14	.0129	.02	.0129	3.81	.0069	4.03	.0066		
139.92	.0128	142.28	.013	149.3	.017	162.11	.0092	167.21	.0068		
196.32	.0138	212.09	.0167	221.43	.0129	225.75	.0068	226.89	.0066		
241.24	.0066										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 149.3 221.43 4.88 4.88 4.88 .1 .3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
-10	0	827	

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP Element	Left OB	Channel
E.G. Elev (ft)	821.39			
Right OB Vel Head (ft)	2.41	wt. n-Val.		0.011
W.S. Elev (ft)	818.98	Reach Len. (ft)	4.88	4.88
4.88 Crit w.s. (ft)	819.47	Flow Area (sq ft)		194.36
E.G. Slope (ft/ft)	0.001826	Area (sq ft)		194.36
Q Total (cfs)	2421.00	Flow (cfs)		2421.00
Top width (ft)	59.84	Top width (ft)		59.84
Vel Total (ft/s)	12.46	Avg. Vel. (ft/s)		12.46
Max Chl Dpth (ft)	4.10	Hydr. Depth (ft)		3.25
Conv. Total (cfs)	56651.3	Conv. (cfs)		56651.3
Length wtd. (ft)	4.88	wetted Per. (ft)		61.15
Min Ch El (ft)	814.88	Shear (lb/sq ft)		0.36
Alpha 0.00	1.00	Stream Power (lb/ft s)	241.24	0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.90	53.26
6.12 C & E Loss (ft)	0.02	Cum SA (acres)	0.30	1.03

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
REACH: Offsite RS: 5.82352*

INPUT

Description:

Station	Elevation	Data	num=	23							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.13	822	.03	821.99	2.83	821.79	3.82	821.78		
4.04	821.78	73.45	820.9	128.96	820.22	140.05	820	142.42	819.96		
149.44	819.82	152.44	818.82	161.44	815.82	164.44	814.82	167.03	814.82		
199.69	814.82	203.44	815.95	212.66	818.99	212.83	819.04	222.4	822.18		
226.74	822.31	227.88	822.34	242.3	822.62						

Manning's n Values		num=	16								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.13	.0129	.03	.0129	3.82	.0069	4.04	.0066		
140.05	.0128	142.42	.0131	149.44	.017	162.41	.009	167.56	.0069		
197	.014	212.95	.0165	222.4	.0129	226.74	.0068	227.88	.0066		
242.3	.0066										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	149.44	222.4		4.88	4.88		.1	.3
Blocked Obstructions			num=	1				
Sta L	Sta R	Elev						
-10	0	827						

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.37	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.60	wt. n-val.		0.011
w.s. Elev (ft)	818.76	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)	819.38	Flow Area (sq ft)		187.05
E.G. slope (ft/ft)	0.002050	Area (sq ft)		187.05
Q Total (cfs)	2421.00	Flow (cfs)		2421.00
Top width (ft)	59.37	Top width (ft)		59.37
vel Total (ft/s)	12.94	Avg. vel. (ft/s)		12.94
Max Chl Dpth (ft)	3.94	Hydr. Depth (ft)		3.15
Conv. Total (cfs)	53469.9	Conv. (cfs)		53469.9
Length wtd. (ft)	4.88	wetted Per. (ft)		60.63
Min Ch El (ft)	814.82	Shear (lb/sq ft)		0.39
Alpha	1.00	Stream Power (lb/ft s)	242.30	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	3.90	53.24
6.12				
C & E Loss (ft)	0.02	Cum SA (acres)	0.30	1.03

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.76470*

INPUT

Description:

Station Elevation Data				num=	23					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	-.12	822	.04	821.99	2.85	821.74	3.83	821.73	
4.05	821.72	73.53	820.87	129.09	820.2	140.19	819.97	142.56	819.91	
149.59	819.76	152.59	818.76	161.59	815.76	164.59	814.76	167.2	814.76	
200.18	814.76	204.01	815.89	213.42	818.98	213.6	819.04	223.37	822.24	
227.72	822.37	228.87	822.39	243.36	822.67					

Manning's n Values				num=	16					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-.12	.0129	.04	.0128	3.83	.0069	4.05	.0066	
140.19	.0128	142.56	.0131	149.59	.017	162.7	.0089	167.91	.007	
197.68	.0142	213.81	.0164	223.37	.0129	227.72	.0069	228.87	.0066	
243.36	.0066									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
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Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827
 CPNPPLocalPMP
 4.88 4.88 4.88 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.35	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.76	wt. n-val.		0.011
W.S. Elev (ft)	818.58	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)	819.30	Flow Area (sq ft)		181.46
E.G. Slope (ft/ft)	0.002258	Area (sq ft)		181.46
Q Total (cfs)	2421.00	Flow (cfs)		2421.00
Top width (ft)	59.09	Top width (ft)		59.09
Vel Total (ft/s)	13.34	Avg. Vel. (ft/s)		13.34
Max chl Dpth (ft)	3.82	Hydr. Depth (ft)		3.07
Conv. Total (cfs)	50950.2	Conv. (cfs)		50950.2
Length wtd. (ft)	4.88	wetted Per. (ft)		60.30
Min ch El (ft)	814.76	Shear (lb/sq ft)		0.42
Alpha	1.00	Stream Power (lb/ft s)	243.36	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.90	53.22
6.12				
C & E Loss (ft)	0.02	Cum SA (acres)	0.30	1.02

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.70588*

INPUT

Description:

Station Elevation Data	num=	23							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 822 -.11 822 .05 821.98 2.86 821.68 3.85 821.67									
4.07 821.67 73.61 820.84 129.22 820.19 140.33 819.93 142.71 819.87									
149.74 819.71 152.74 818.71 161.74 815.71 164.74 814.71 167.37 814.71									
200.67 814.71 204.58 815.82 214.18 818.98 214.36 819.04 224.33 822.29									
228.71 822.42 229.86 822.44 244.42 822.73									

Manning's n Values

Sta n Val Sta n Val Sta n Val Sta n Val	num=	16				
-10 .0129 -.11 .0129 .05 .0128 3.85 .0068 4.07 .0066						
140.33 .0128 142.71 .0132 149.74 .017 162.99 .0087 168.27 .0071						

198.36	.0144	214.67	.0162	CPNPPLocalPMP	224.33	.0129	228.71	.007	229.86	.0066
244.42	.0066									
Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.			
	149.74	224.33	4.88	4.88	4.88	.1	.3			
Blocked Obstructions	num=		1							
Sta L	Sta R	Elev								
-10	0	827								

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.32	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.88	wt. n-Val.		0.011
w.s. Elev (ft)	818.44	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)	819.22	Flow Area (sq ft)		177.71
E.G. slope (ft/ft)	0.002423	Area (sq ft)		177.71
Q Total (cfs)	2421.00	Flow (cfs)		2421.00
Top width (ft)	58.99	Top width (ft)		58.99
Vel Total (ft/s)	13.62	Avg. Vel. (ft/s)		13.62
Max Chl Dpth (ft)	3.73	Hydr. Depth (ft)		3.01
Conv. Total (cfs)	49185.3	Conv. (cfs)		49185.3
Length wtd. (ft)	4.88	wetted Per. (ft)		60.17
Min Ch El (ft)	814.71	Shear (lb/sq ft)		0.45
Alpha	1.00	Stream Power (lb/ft s)	244.42	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.90	53.20
6.12				
C & E Loss (ft)	0.01	Cum SA (acres)	0.30	1.01

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.64705*

INPUT

Description:

Station	Elevation	Data	num=	23						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	-.1	822	.06	821.98	2.87	821.62	3.86	821.61	
4.08	821.61	73.68	820.8	129.34	820.17	140.47	819.89	142.85	819.83	
149.89	819.65	152.89	818.65	161.89	815.65	164.89	814.65	167.55	814.65	
201.16	814.65	205.15	815.75	214.94	818.97	215.13	819.04	225.3	822.35	
229.7	822.48	230.85	822.5	245.47	822.78					

Manning's n Values				CPNPPLocalPMP					
Sta	n Val	Sta	num=	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.1	.0129	.06	.0128	3.86	.0068	4.08	.0066
140.47	.0128	142.85	.0133	149.89	.017	163.29	.0085	168.62	.0071
199.04	.0146	215.53	.0161	225.3	.0129	229.7	.0071	230.85	.0066
245.47	.0066								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	149.89	225.3		4.88	4.88		.1	.3

Blocked Obstructions			num=
Sta L	Sta R	Elev	
-10	0	827	1

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	821.29	Element		
Right OB				
Vel Head (ft)	3.00	wt. n-val.		0.011
w.s. Elev (ft)	818.29	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)	819.15	Flow Area (sq ft)		174.05
E.G. slope (ft/ft)	0.002582	Area (sq ft)		174.05
Q Total (cfs)	2421.00	Flow (cfs)		2421.00
Top width (ft)	58.90	Top width (ft)		58.90
vel Total (ft/s)	13.91	Avg. vel. (ft/s)		13.91
Max chl Dpth (ft)	3.64	Hydr. Depth (ft)		2.95
Conv. Total (cfs)	47645.3	Conv. (cfs)		47645.3
Length wtd. (ft)	4.88	wetted Per. (ft)		60.05
Min ch El (ft)	814.65	Shear (lb/sq ft)		0.47
Alpha	1.00	Stream Power (lb/ft s)	245.47	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	3.90	53.18
6.12				
C & E Loss (ft)	0.01	Cum SA (acres)	0.30	1.01

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.58823*

INPUT

Description:

Station Elevation Data			num=						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.09	822	.07	821.98	2.88	821.57	3.87	821.56
4.09	821.55	73.76	820.77	129.47	820.16	140.61	819.85	142.99	819.78

				CPNPPLocalPMP					
150.03	819.59	153.03	818.59	162.03	815.59	165.03	814.59	167.72	814.59
201.65	814.59	205.72	815.68	215.7	818.97	215.89	819.03	226.27	822.41
230.68	822.53	231.85	822.55	246.53	822.83				

Manning's n Values		num=		16					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.09	.0129	.07	.0128	3.87	.0068	4.09	.0066
140.61	.0128	142.99	.0133	150.03	.017	163.58	.0083	168.97	.0072
199.73	.0149	216.39	.0159	226.27	.0129	230.68	.0071	231.85	.0066
246.53	.0066								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	150.03	226.27		4.88	4.88		.1	.3
Blocked Obstructions			num=	1				
Sta L	Sta R	Elev						
-10	0	827						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.01	wt. n-val.	0.012	0.012
w.s. Elev (ft)	820.13	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)	819.05	Flow Area (sq ft)	5.23	298.66
E.G. Slope (ft/ft)	0.000617	Area (sq ft)	5.23	298.66
Q Total (cfs)	2421.00	Flow (cfs)	8.06	2412.95
Top width (ft)	88.60	Top width (ft)	19.37	69.23
Vel Total (ft/s)	7.97	Avg. vel. (ft/s)	1.54	8.08
Max Chl Dpth (ft)	5.54	Hydr. Depth (ft)	0.27	4.31
Conv. Total (cfs)	97464.7	Conv. (cfs)	324.3	97140.4
Length wtd. (ft)	4.88	wetted Per. (ft)	19.38	70.90
Min Ch El (ft)	814.59	Shear (lb/sq ft)	0.01	0.16
Alpha	1.03	Stream Power (lb/ft s)	246.53	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.90	53.15
6.12				
C & E Loss (ft)	0.02	Cum SA (acres)	0.29	1.00

Note: Manning's n values were composited to a single value in the main channel.
 Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.52941*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 23		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.08	822	.07	821.98	2.89	821.51	3.88	821.5		
4.1	821.5	73.84	820.74	129.6	820.14	140.75	819.81	143.13	819.74		
150.18	819.53	153.18	818.53	162.18	815.53	165.18	814.53	167.89	814.53		
202.14	814.53	206.29	815.61	216.46	818.96	216.66	819.03	227.23	822.47		
231.67	822.58	232.84	822.6	247.59	822.88						

Manning's n Values

num= 16

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.08	.0129	.07	.0128	3.88	.0068	4.1	.0066
140.75	.0128	143.13	.0134	150.18	.017	163.87	.0082	169.32	.0073
200.41	.0151	217.25	.0158	227.23	.0129	231.67	.0072	232.84	.0066
247.59	.0066								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	150.18	227.23		4.88	4.88		.1	.3
Blocked Obstructions			num=	1				
Sta L	Sta R	Elev						
-10	0	827						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.94	wt. n-val.	0.011	0.012
w.s. Elev (ft)	820.17	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)		Flow Area (sq ft)	6.93	308.31
E.G. Slope (ft/ft)	0.000569	Area (sq ft)	6.93	308.31
Q Total (cfs)	2421.00	Flow (cfs)	11.47	2409.53
Top width (ft)	93.37	Top width (ft)	23.39	69.98
Vel Total (ft/s)	7.68	Avg. vel. (ft/s)	1.66	7.82
Max Chl Dpth (ft)	5.64	Hydr. Depth (ft)	0.30	4.41
Conv. Total (cfs)	101510.1	Conv. (cfs)	481.1	101029.0
Length wtd. (ft)	4.88	wetted Per. (ft)	23.40	71.66
Min Ch El (ft)	814.53	Shear (lb/sq ft)	0.01	0.15
Alpha	1.03	Stream Power (lb/ft s)	247.59	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.90	53.12
6.12				
C & E Loss (ft)	0.02	Cum SA (acres)	0.29	0.99

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

CPNPPLocalPMP

RIVER: Offsite
 REACH: Offsite RS: 5.47058*

INPUT

Description:

Station	Elevation	Data	num=	23	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.07	822	.08	821.97	2.9	821.45	3.9	821.44	
4.12	821.44	73.92	820.7	129.73	820.13	140.89	819.77	143.27	819.7	
150.33	819.47	153.33	818.47	162.33	815.47	165.33	814.47	168.06	814.47	
202.62	814.47	206.85	815.55	217.23	818.96	217.43	819.03	228.2	822.53	
232.66	822.64	233.83	822.66	248.64	822.93					

Manning's n	Values	num=	16	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.07	.0129	.08	.0128	3.9	.0068	4.12	.0066		
140.89	.0128	143.27	.0134	150.33	.017	164.16	.008	169.67	.0074		
201.09	.0153	218.11	.0156	228.2	.0129	232.66	.0073	233.83	.0066		
248.64	.0066										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 150.33 228.2 4.88 4.88 4.88 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.09	Element	Left OB	Channel
Right OB Vel Head (ft)	0.89	wt. n-val.	0.011	0.012
w.s. Elev (ft)	820.21	Reach Len. (ft)	4.88	4.88
4.88 Crit w.s. (ft)		Flow Area (sq ft)	8.71	317.58
E.G. Slope (ft/ft)	0.000527	Area (sq ft)	8.71	317.58
Q Total (cfs)	2421.00	Flow (cfs)	15.02	2405.98
Top width (ft)	98.99	Top width (ft)	28.26	70.73
Vel Total (ft/s)	7.42	Avg. vel. (ft/s)	1.72	7.58
Max Chl Dpth (ft)	5.74	Hydr. Depth (ft)	0.31	4.49
Conv. Total (cfs)	105476.5	Conv. (cfs)	654.2	104822.3
Length wtd. (ft)	4.88	wetted Per. (ft)	28.27	72.42
Min Ch El (ft)	814.47	Shear (lb/sq ft)	0.01	0.14
Alpha 0.00	1.04	Stream Power (lb/ft s)	248.64	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.90	53.08
6.12 C & E Loss (ft)	0.02	Cum SA (acres)	0.29	0.98

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite

REACH: Offsite

RS: 5.41176*

INPUT

Description:

Station Elevation Data		num= 23		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.06	822	.09	821.97	2.92	821.4	3.91	821.39		
4.13	821.38	73.99	820.67	129.86	820.11	141.03	819.73	143.41	819.65		
150.48	819.41	153.48	818.41	162.48	815.41	165.48	814.41	168.24	814.41		
203.11	814.41	207.42	815.48	217.99	818.96	218.19	819.02	229.16	822.59		
233.64	822.69	234.82	822.71	249.7	822.98						

Manning's n Values

num= 16

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.06	.0129	.09	.0128	3.91	.0067	4.13	.0066
141.03	.0129	143.41	.0135	150.48	.017	164.46	.0078	170.02	.0075
201.77	.0155	218.97	.0155	229.16	.0129	233.64	.0074	234.82	.0066
249.7	.0066								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	150.48	229.16		4.88	4.88	4.88		.1	.3

Blocked Obstructions

num= 1

Sta L	Sta R	Elev
-10	0	827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.08	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.83	wt. n-val.	0.011	0.012
w.s. Elev (ft)	820.24	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)		Flow Area (sq ft)	10.87	326.87
E.G. slope (ft/ft)	0.000489	Area (sq ft)	10.87	326.87
Q Total (cfs)	2421.00	Flow (cfs)	19.32	2401.68
Top width (ft)	105.41	Top width (ft)	33.94	71.47
vel Total (ft/s)	7.17	Avg. vel. (ft/s)	1.78	7.35
Max Chl Dpth (ft)	5.83	Hydr. Depth (ft)	0.32	4.57
Conv. Total (cfs)	109433.8	Conv. (cfs)	873.3	108560.5
Length wtd. (ft)	4.88	wetted Per. (ft)	33.96	73.17
Min Ch El (ft)	814.41	Shear (lb/sq ft)	0.01	0.14
Alpha	1.04	Stream Power (lb/ft s)	249.70	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.90	53.05
6.12				
C & E Loss (ft)	0.01	Cum SA (acres)	0.29	0.98

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.35294*

INPUT

Description:

Station Elevation Data		num= 23		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.05	822	.1	821.97	2.93	821.34	3.92	821.33		
4.14	821.33	74.07	820.64	129.99	820.09	141.17	819.69	143.55	819.61		
150.62	819.35	153.62	818.35	162.62	815.35	165.62	814.35	168.41	814.35		
203.6	814.35	207.99	815.41	218.75	818.95	218.96	819.02	230.13	822.65		
234.63	822.75	235.81	822.77	250.76	823.03						

Manning's n Values		num= 16		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.05	.0129	.1	.0127	3.92	.0067	4.14	.0066		
141.17	.0129	143.55	.0136	150.62	.017	164.75	.0076	170.37	.0076		
202.45	.0157	219.83	.0153	230.13	.0129	234.63	.0074	235.81	.0066		
250.76	.0066										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	150.62	230.13		4.88	4.88	4.88		.1	.3
Blocked Obstructions			num=	1					
	Sta L	Sta R	Elev						
	-10	0	827						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.06	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.78	wt. n-val.	0.011	0.012
w.s. Elev (ft)	820.28	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)		Flow Area (sq ft)	13.20	336.17
E.G. Slope (ft/ft)	0.000455	Area (sq ft)	13.20	336.17
Q Total (cfs)	2421.00	Flow (cfs)	23.99	2397.01
Top width (ft)	111.76	Top width (ft)	39.55	72.21
Vel Total (ft/s)	6.93	Avg. vel. (ft/s)	1.82	7.13
Max Chl Dpth (ft)	5.93	Hydr. Depth (ft)	0.33	4.66
Conv. Total (cfs)	113484.7	Conv. (cfs)	1124.4	112360.3
Length wtd. (ft)	4.88	wetted Per. (ft)	39.57	73.92
Min Ch El (ft)	814.35	Shear (lb/sq ft)	0.01	0.13
Alpha	1.05	Stream Power (lb/ft s)	250.76	0.00

CPNPPLocalPMP

0.00					
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.90	53.01	
6.12					
C & E Loss (ft)	0.01	Cum SA (acres)	0.28	0.97	

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite

REACH: Offsite

RS: 5.29411*

INPUT

Description:

Station Elevation Data	num=	23							
Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 822	-.05 822	.11 821.96	2.94 821.28	3.94 821.27	4.16 821.27	74.15 820.6	130.12 820.08	141.31 819.65	143.69 819.56
150.77 819.29	153.77 818.29	162.77 815.29	165.77 814.29	168.58 814.29	204.09 814.29	208.56 815.34	219.51 818.95	219.72 819.02	231.1 822.71
235.61 822.8	236.8 822.82	251.81 823.08							

Manning's n Values

num= 16

Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129	-.05 .0129	.11 .0127	3.94 .0067	4.16 .0066	141.31 .0129	143.69 .0136	150.77 .017	165.04 .0075	170.72 .0077
203.13 .0159	220.7 .0152	231.1 .0129	235.61 .0075	236.8 .0066					

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
150.77	231.1	4.88	4.88	4.88	.1	.3	

Blocked Obstructions

num= 1

Sta L	Sta R	Elev
-10	0	827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.04	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.74	wt. n-val.	0.010	0.012
w.s. Elev (ft)	820.31	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)		Flow Area (sq ft)	15.56	345.21
E.G. Slope (ft/ft)	0.000426	Area (sq ft)	15.56	345.21
Q Total (cfs)	2421.00	Flow (cfs)	28.84	2392.17
Top Width (ft)	117.82	Top width (ft)	44.91	72.91
Vel Total (ft/s)	6.71	Avg. vel. (ft/s)	1.85	6.93
Max Chl Dpth (ft)	6.02	Hydr. Depth (ft)	0.35	4.73
Conv. Total (cfs)	117339.9	Conv. (cfs)	1397.6	115942.3
Length wtd. (ft)	4.88	wetted Per. (ft)	44.92	74.64

CPNPPLocalPMP

Min Ch El (ft)	814.29	Shear (lb/sq ft)	0.01	0.12
Alpha	1.05	Stream Power (lb/ft s)	251.81	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.90	52.97
6.12				
C & E Loss (ft)	0.01	Cum SA (acres)	0.28	0.96

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite

RS: 5.23529*

INPUT

Description:

Station Elevation Data num= 23

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.04	822	.12	821.96	2.95	821.23	3.95	821.22
4.17	821.21	74.22	820.57	130.25	820.06	141.44	819.62	143.83	819.52
150.92	819.24	153.92	818.24	162.92	815.24	165.92	814.24	168.76	814.24
204.58	814.24	209.13	815.27	220.27	818.94	220.49	819.01	232.06	822.76
236.6	822.85	237.79	822.87	252.87	823.14				

Manning's n Values num= 16

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.04	.0129	.12	.0127	3.95	.0067	4.17	.0066
141.44	.0129	143.83	.0137	150.92	.017	165.34	.0073	171.07	.0078
203.81	.0161	221.56	.015	232.06	.0129	236.6	.0076	237.79	.0066
252.87	.0066								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

150.92	232.06	4.88	4.88	4.88	.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
-10	0	827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.03	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.70	wt. n-val.	0.010	0.012
W.S. Elev (ft)	820.33	Reach Len. (ft)	4.88	4.88
4.88				
Crit W.S. (ft)		Flow Area (sq ft)	18.06	353.60
E.G. Slope (ft/ft)	0.000401	Area (sq ft)	18.06	353.60
Q Total (cfs)	2421.00	Flow (cfs)	33.83	2387.17
Top width (ft)	124.03	Top width (ft)	50.38	73.64
Vel Total (ft/s)	6.51	Avg. Vel. (ft/s)	1.87	6.75
Max Chl Dpth (ft)	6.09	Hydr. Depth (ft)	0.36	4.80

CPNPPLocalPMP

Conv. Total (cfs)	120895.8	Conv. (cfs)	1689.3	119206.5
Length wtd. (ft)	4.88	wetted Per. (ft)	50.40	75.38
Min Ch El (ft)	814.24	Shear (lb/sq ft)	0.01	0.12
Alpha	1.06	Stream Power (lb/ft s)	252.87	0.00
0.00		Cum Volume (acre-ft)	3.89	52.93
Frctn Loss (ft)	0.00	Cum SA (acres)	0.27	0.95
6.12				
C & E Loss (ft)	0.01			

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.17647*

INPUT

Description:

Station Elevation Data num= 23

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.03	822	.13	821.96	2.96	821.17	3.96	821.16
4.18	821.16	74.3	820.54	130.37	820.05	141.58	819.58	143.98	819.48
151.07	819.18	154.07	818.18	163.07	815.18	166.07	814.18	168.93	814.18
205.07	814.18	209.7	815.2	221.04	818.94	221.25	819.01	233.03	822.82
237.59	822.91	238.79	822.93	253.93	823.19				

Manning's n Values num= 16

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.03	.0129	.13	.0127	3.96	.0067	4.18	.0066
141.58	.0129	143.98	.0138	151.07	.017	165.63	.0071	171.42	.0079
204.5	.0164	222.42	.0149	233.03	.0129	237.59	.0077	238.79	.0066
253.93	.0066								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 151.07 233.03 4.88 4.88 4.88 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.02	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.66	wt. n-Val.	0.010	0.012
w.s. Elev (ft)	820.36	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)		Flow Area (sq ft)	20.64	362.53
E.G. Slope (ft/ft)	0.000378	Area (sq ft)	20.64	362.53
Q Total (cfs)	2421.00	Flow (cfs)	38.98	2382.03
Top width (ft)	129.97	Top width (ft)	55.63	74.34

CPNPPLocalPMP

Vel Total (ft/s)	6.32	Avg. Vel. (ft/s)	1.89	6.57
Max Chl Dpth (ft)	6.18	Hydr. Depth (ft)	0.37	4.88
Conv. Total (cfs)	124506.3	Conv. (cfs)	2004.4	122501.9
Length Wtd. (ft)	4.88	wetted Per. (ft)	55.65	76.09
Min Ch El (ft)	814.18	Shear (lb/sq ft)	0.01	0.11
Alpha	1.07	Stream Power (lb/ft s)	253.93	0.00
0.00		Cum Volume (acre-ft)	3.89	52.89
Frctn Loss (ft)	0.00	Cum SA (acres)	0.27	0.94
6.12				
C & E Loss (ft)	0.01			

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.11764*

INPUT

Description:

Station Elevation Data num= 23

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.02	822	.14	821.95	2.98	821.11	3.97	821.1
4.2	821.1	74.38	820.51	130.5	820.03	141.72	819.54	144.12	819.43
151.21	819.12	154.21	818.12	163.21	815.12	166.21	814.12	169.1	814.12
205.56	814.12	210.26	815.14	221.8	818.93	222.02	819.01	234	822.88
238.57	822.96	239.78	822.98	254.99	823.24				

Manning's n Values num= 16

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.02	.0129	.14	.0127	3.97	.0066	4.2	.0066
141.72	.0129	144.12	.0138	151.21	.017	165.92	.0069	171.78	.008
205.18	.0166	223.28	.0147	234	.0129	238.57	.0078	239.78	.0066
254.99	.0066								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 151.21 234 4.88 4.88 4.88 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.00	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.62	wt. n-val.	0.010	0.013
w.s. Elev (ft)	820.38	Reach Len. (ft)	4.88	4.88
4.88				
Crit w.s. (ft)		Flow Area (sq ft)	23.74	371.48
E.G. slope (ft/ft)	0.000355	Area (sq ft)	23.74	371.48

CPNPPLocalPMP

Q Total (cfs)	2421.00	Flow (cfs)	45.36	2375.64
Top width (ft)	136.53	Top width (ft)	61.49	75.05
Vel Total (ft/s)	6.13	Avg. Vel. (ft/s)	1.91	6.40
Max Chl Dpth (ft)	6.26	Hydr. Depth (ft)	0.39	4.95
Conv. Total (cfs)	128480.8	Conv. (cfs)	2407.2	126073.5
Length wtd. (ft)	4.88	wetted Per. (ft)	61.51	76.80
Min Ch El (ft)	814.12	Shear (lb/sq ft)	0.01	0.11
Alpha	1.07	Stream Power (lb/ft s)	254.99	0.00
0.00		Cum Volume (acre-ft)	3.89	52.85
Frctn Loss (ft)	0.00	Cum SA (acres)	0.26	0.94
6.12				
C & E Loss (ft)	0.01			

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5.05882*

INPUT

Description:

Station Elevation Data num= 23

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.01	822	.15	821.95	2.99	821.06	3.99	821.05
4.21	821.04	74.46	820.47	130.63	820.02	141.86	819.5	144.26	819.39
151.36	819.06	154.36	818.06	163.36	815.06	166.36	814.06	169.27	814.06
206.05	814.06	210.83	815.07	222.56	818.93	222.78	819	234.96	822.94
239.56	823.02	240.77	823.04	256.04	823.29				

Manning's n Values num= 16

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.01	.0129	.15	.0127	3.99	.0066	4.21	.0066
141.86	.0129	144.26	.0139	151.36	.017	166.22	.0068	172.13	.0081
205.86	.0168	224.14	.0146	234.96	.0129	239.56	.0078	240.77	.0066
256.04	.0066								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 151.36 234.96 4.88 4.88 4.88 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.99	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.59	wt. n-val.	0.010	0.013
w.s. Elev (ft)	820.40	Reach Len. (ft)	4.88	4.88

		CPNPPLocalPMP		
4.88	Crit W.S. (ft)		Flow Area (sq ft)	26.85 380.37
	E.G. Slope (ft/ft)	0.000335	Area (sq ft)	26.85 380.37
	Q Total (cfs)	2421.00	Flow (cfs)	51.18 2369.82
	Top Width (ft)	143.94	Top Width (ft)	68.19 75.75
	Vel Total (ft/s)	5.95	Avg. Vel. (ft/s)	1.91 6.23
	Max Chl Dpth (ft)	6.34	Hydr. Depth (ft)	0.39 5.02
	Conv. Total (cfs)	132284.7	Conv. (cfs)	2796.3 129488.4
	Length wtd. (ft)	4.88	wetted Per. (ft)	68.21 77.52
	Min Ch El (ft)	814.06	Shear (lb/sq ft)	0.01 0.10
	Alpha	1.08	Stream Power (lb/ft s)	256.04 0.00
0.00	Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.89 52.81
6.12	C & E Loss (ft)	0.01	Cum SA (acres)	0.25 0.93

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 5

INPUT

Description:

Station Elevation Data		num= 15	
Sta	Elev	Sta	Elev
-10	822	0	822
142	819.46	151.51	819
211.4	815	223.55	819

Manning's n Values		num= 9	
Sta	n Val	Sta	n Val
-10	.0129	0	.0129
166.51	.0066	206.54	.017

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 151.51 235.93 27.64 27.64 27.64 .1 .3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
-10	0	827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.98	Element	Left OB	Channel
Right OB Vel Head (ft)	0.56	wt. n-Val.	0.009	0.012
w.s. Elev (ft)	820.42	Reach Len. (ft)	27.64	27.64

		CPNPPLocalPMP	
27.64			
Crit W.S. (ft)		Flow Area (sq ft)	30.41 389.28
E.G. Slope (ft/ft)	0.000295	Area (sq ft)	30.41 389.28
Q Total (cfs)	2421.00	Flow (cfs)	57.70 2363.30
Top Width (ft)	151.03	Top Width (ft)	74.60 76.44
Vel Total (ft/s)	5.77	Avg. Vel. (ft/s)	1.90 6.07
Max Chl Dpth (ft)	6.42	Hydr. Depth (ft)	0.41 5.09
Conv. Total (cfs)	140957.9	Conv. (cfs)	3359.7 137598.2
Length wtd. (ft)	27.64	wetted Per. (ft)	74.62 78.22
Min Ch El (ft)	814.00	Shear (lb/sq ft)	0.01 0.09
Alpha	1.08	Stream Power (lb/ft s)	257.10 0.00
0.00			
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.88 52.77
6.12			
C & E Loss (ft)	0.05	Cum SA (acres)	0.24 0.92

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 4.5*

INPUT

Description:

Station Elevation Data		num= 26	
Sta	Elev	Sta	Elev
-10	822	-.05	822
3.93	820.99	24.12	820.76
141.24	819.29	150.7	819
166.51	813.78	211.64	813.78
225.68	818.01	228.65	818.98
263.09	823.53		

Manning's n Values		num= 16	
Sta	n Val	Sta	n Val
-10	.0129	-.05	.0129
114.67	.0123	141.24	.0144
209.59	.0166	213.45	.0167
263.09	.0066		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 150.7 241.04 27.64 27.64 27.64 .1 .3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
-10	0	827

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP Element	Left OB	Channel
E.G. Elev (ft)	820.93			
Right OB Vel Head (ft)	0.40	wt. n-Val.	0.011	0.012
W.S. Elev (ft)	820.52	Reach Len. (ft)	27.64	27.64
27.64 Crit w.s. (ft)		Flow Area (sq ft)	63.59	446.61
E.G. Slope (ft/ft)	0.000197	Area (sq ft)	63.59	446.61
Q Total (cfs)	2421.00	Flow (cfs)	102.49	2318.51
Top width (ft)	188.26	Top width (ft)	105.55	82.71
Vel Total (ft/s)	4.75	Avg. Vel. (ft/s)	1.61	5.19
Max Chl Dpth (ft)	6.74	Hydr. Depth (ft)	0.60	5.40
Conv. Total (cfs)	172505.4	Conv. (cfs)	7302.8	165202.6
Length wtd. (ft)	27.64	wetted Per. (ft)	105.56	84.58
Min Ch El (ft)	813.78	Shear (lb/sq ft)	0.01	0.06
Alpha 0.00	1.15	Stream Power (lb/ft s)	263.09	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.85	52.50
6.12 C & E Loss (ft)	0.03	Cum SA (acres)	0.19	0.87

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
REACH: Offsite RS: 4

INPUT

Description:

Station	Elevation	Data	num=	17							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	3	821	23.95	820.69	70.96	820		
114.05	819.45	149.9	819	161.9	815	164.9	814	166.51	813.56		
216.75	813.56	218.51	814	221.58	815	230.79	818	246.14	823		
253.73	823.33	269.08	823.72								

Manning's n Values	num=	9									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	23.95	.0066	114.05	.0129	149.9	.017		
166.51	.0066	216.75	.017	246.14	.0129	253.73	.0066				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
149.9	246.14	10.99	10.99	10.99		.1	.3
Blocked Obstructions num= 1							
Sta L	Sta R	Elev					
-10	0	827					

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.89	Element	Left OB	Channel
Right OB Vel Head (ft)	0.29	wt. n-val.	0.010	0.012
W.S. Elev (ft)	820.60	Reach Len. (ft)	10.99	10.99
10.99 Crit W.S. (ft)		Flow Area (sq ft)	99.02	504.86
E.G. Slope (ft/ft)	0.000128	Area (sq ft)	99.02	504.86
Q Total (cfs)	2421.00	Flow (cfs)	168.97	2252.03
Top Width (ft)	208.55	Top Width (ft)	119.68	88.87
Vel Total (ft/s)	4.01	Avg. Vel. (ft/s)	1.71	4.46
Max Chl Dpth (ft)	7.04	Hydr. Depth (ft)	0.83	5.68
Conv. Total (cfs)	213842.0	Conv. (cfs)	14924.9	198917.1
Length wtd. (ft)	10.99	wetted Per. (ft)	119.69	90.84
Min Ch El (ft)	813.56	Shear (lb/sq ft)	0.01	0.04
Alpha 0.00	1.16	Stream Power (lb/ft s)	269.08	0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.80	52.20
6.12 C & E Loss (ft)	0.03	Cum SA (acres)	0.12	0.81

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
REACH: Offsite RS: 3.5*

INPUT

Description:

Station Elevation Data	num=	25
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-10 822 -.74 822 .87 821.71 2.03 821.32 7.4 820.46		
21.43 819.85 21.7 819.84 64.94 819.5 104.83 819.22 138.01 819		
152.15 815.23 154.01 814.74 155.69 814.29 158 813.84 160.15 813.47		
218.65 813.47 220.44 813.9 221.34 814.14 223.56 814.87 224.35 815.13		
232.92 817.92 233.41 818.08 248.52 823 256.11 823.31 271.46 823.79		

Manning's n Values	num=	13
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
-10 .0129 -.74 .0129 .87 .0127 21.43 .0101 104.83 .0145		
138.01 .017 157.08 .0078 162.52 .0071 214.77 .0164 221.64 .0166		
248.52 .0129 256.11 .0066 271.46 .0066		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
138.01 248.52	10.99 10.99 10.99	.1	.3
Blocked Obstructions	num=	1	
Sta L Sta R Elev			
-10 0 827			

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.86	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.19	wt. n-val.	0.012	0.012
W.S. Elev (ft)	820.67	Reach Len. (ft)	10.99	10.99
10.99				
Crit W.S. (ft)		Flow Area (sq ft)	154.37	606.14
E.G. Slope (ft/ft)	0.000084	Area (sq ft)	154.37	606.14
Q Total (cfs)	2421.00	Flow (cfs)	210.09	2210.91
Top width (ft)	235.24	Top width (ft)	131.90	103.34
Vel Total (ft/s)	3.18	Avg. vel. (ft/s)	1.36	3.65
Max Chl Dpth (ft)	7.20	Hydr. Depth (ft)	1.17	5.87
Conv. Total (cfs)	264882.8	Conv. (cfs)	22985.9	241896.9
Length wtd. (ft)	10.99	wetted Per. (ft)	131.93	105.15
Min Ch El (ft)	813.47	Shear (lb/sq ft)	0.01	0.03
Alpha	1.21	Stream Power (lb/ft s)	271.46	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.77	52.06
6.12				
C & E Loss (ft)	0.02	Cum SA (acres)	0.08	0.79

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite

RS: 3

INPUT

Description:

Station	Elevation	Data	num=	15						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	0	822	6	820	19.15	819	126.12	819	
143.79	815	148.21	814	153.79	813.39	220.55	813.39	223.28	814	
226.34	815	235.55	818	250.9	823	258.49	823.29	273.84	823.87	

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	126.12	.017	153.79	.0066	220.55	.017
250.9	.0129	258.49	.0066						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 126.12 250.9 1.98 1.98 1.98 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.84	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.14	wt. n-val.	0.013	0.012
W.S. Elev (ft)	820.70	Reach Len. (ft)	1.98	1.98
1.98				
Crit W.S. (ft)		Flow Area (sq ft)	198.95	708.42
E.G. slope (ft/ft)	0.000056	Area (sq ft)	198.95	708.42
Q Total (cfs)	2421.00	Flow (cfs)	236.29	2184.71
Top width (ft)	239.97	Top width (ft)	122.23	117.73
Vel Total (ft/s)	2.67	Avg. vel. (ft/s)	1.19	3.08
Max Chl Dpth (ft)	7.31	Hydr. Depth (ft)	1.63	6.02
Conv. Total (cfs)	324614.5	Conv. (cfs)	31682.0	292932.5
Length wtd. (ft)	1.98	wetted Per. (ft)	122.39	119.46
Min Ch El (ft)	813.39	Shear (lb/sq ft)	0.01	0.02
Alpha	1.22	Stream Power (lb/ft s)	273.84	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.72	51.89
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.05	0.76

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 2.91666*

INPUT

Description:

Station Elevation Data			num=	24						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	-.68	822	4.91	820.17	17.17	819.25	40.23	819.25	
70.37	819.08	116.88	819	133.51	814.96	137.67	813.95	142.92	813.27	
204.12	813.27	208.36	813.85	213.12	814.78	227.45	817.57	231.55	818.37	
237.23	819.48	244.96	820.96	245.72	821.17	246.35	821.38	248.21	821.99	
251.33	823	258.89	823.29	259.25	823.31	274.18	823.88			

Manning's n Values			num=	12						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-.68	.0129	40.23	.0142	116.88	.017	121.39	.0147	
146.7	.0067	218.63	.0166	233.8	.0149	251.33	.0129	258.89	.0066	
259.25	.0066	274.18	.0066							

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
116.88	251.33	1.98	1.98	1.98	.1	.3	

Blocked Obstructions num= CPNPPLocalPMP
 1
 Sta L Sta R Elev
 -10 0 827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.84	Element	Left OB	Channel
Right OB Vel Head (ft)	0.14	wt. n-val.	0.014	0.011
W.S. Elev (ft)	820.70	Reach Len. (ft)	1.98	1.98
1.98 Crit W.S. (ft)		Flow Area (sq ft)	169.67	730.67
E.G. slope (ft/ft)	0.000051	Area (sq ft)	169.67	730.67
Q Total (cfs)	2421.00	Flow (cfs)	170.34	2250.66
Top width (ft)	240.33	Top width (ft)	113.59	126.73
vel Total (ft/s)	2.69	Avg. vel. (ft/s)	1.00	3.08
Max Chl Dpth (ft)	7.43	Hydr. Depth (ft)	1.49	5.77
Conv. Total (cfs)	339961.6	Conv. (cfs)	23920.2	316041.4
Length wtd. (ft)	1.98	wetted Per. (ft)	113.71	128.08
Min Ch El (ft)	813.27	Shear (lb/sq ft)	0.00	0.02
Alpha 0.00	1.23	Stream Power (lb/ft s)	274.18	0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.72	51.86
6.12 C & E Loss (ft)	0.00	Cum SA (acres)	0.05	0.76

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 2.83333*

INPUT

Description:

Station Elevation Data	num=	24
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-10 822 -1.36 822 3.83 820.33 15.19 819.5 36.57 819.5		
64.52 819.17 107.64 819 123.23 814.92 127.13 813.9 132.05 813.16		
187.68 813.16 193.44 813.69 199.9 814.55 219.35 817.14 224.91 817.88		
232.62 818.91 243.11 820.26 244.15 820.52 244.99 820.8 247.53 821.62		
251.76 823 259.29 823.3 259.64 823.31 274.52 823.89		

Manning's n Values	num=	12
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
-10 .0129 -1.36 .0129 36.57 .0141 107.64 .017 112.47 .014		
139.6 .0068 216.7 .0162 232.97 .0147 251.76 .0129 259.29 .0066		
259.64 .0066 274.52 .0066		

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 107.64 251.76 1.98 1.98 1.98 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.84	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.13	wt. n-val.	0.014	0.011
w.s. Elev (ft)	820.71	Reach Len. (ft)	1.98	1.98
1.98				
Crit w.s. (ft)		Flow Area (sq ft)	143.19	764.78
E.G. slope (ft/ft)	0.000048	Area (sq ft)	143.19	764.78
Q Total (cfs)	2421.00	Flow (cfs)	133.51	2287.49
Top width (ft)	242.05	Top width (ft)	104.98	137.07
vel Total (ft/s)	2.67	Avg. vel. (ft/s)	0.93	2.99
Max chl Dpth (ft)	7.55	Hydr. Depth (ft)	1.36	5.58
Conv. Total (cfs)	348128.2	Conv. (cfs)	19198.1	328930.1
Length wtd. (ft)	1.98	wetted Per. (ft)	105.07	138.30
Min ch El (ft)	813.16	Shear (lb/sq ft)	0.00	0.02
Alpha	1.20	Stream Power (lb/ft s)	274.52	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.71	51.83
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.04	0.75

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 2.75*

INPUT

Description:

Station	Elevation	Data	num=	24						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	-2.04	822	2.74	820.5	13.21	819.75	32.92	819.75	
58.67	819.25	98.4	819	112.95	814.88	116.58	813.85	121.17	813.04	
171.24	813.04	178.53	813.54	186.69	814.33	211.25	816.71	218.27	817.39	
228.01	818.34	241.27	819.55	242.57	819.87	243.64	820.22	246.85	821.26	
252.18	823	259.69	823.3	260.04	823.32	274.87	823.9			

Manning's n Values	num=	12							
Sta n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta

				CPNPPLocalPMP					
-10	.0129	-2.04	.0129	32.92	.014	98.4	.017	103.56	.0132
132.51	.007	214.78	.0158	232.14	.0145	252.18	.0129	259.69	.0067
260.04	.0066	274.87	.0066						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 98.4 252.18 1.98 1.98 1.98 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.83	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.12	wt. n-val.	0.014	0.011
w.s. Elev (ft)	820.71	Reach Len. (ft)	1.98	1.98
1.98				
Crit w.s. (ft)		Flow Area (sq ft)	119.51	811.70
E.G. slope (ft/ft)	0.000043	Area (sq ft)	119.51	811.70
Q Total (cfs)	2421.00	Flow (cfs)	100.79	2320.21
Top width (ft)	243.10	Top width (ft)	96.34	146.76
vel Total (ft/s)	2.60	Avg. vel. (ft/s)	0.84	2.86
Max Chl Dpth (ft)	7.67	Hydr. Depth (ft)	1.24	5.53
Conv. Total (cfs)	367439.6	Conv. (cfs)	15297.5	352142.1
Length wtd. (ft)	1.98	wetted Per. (ft)	96.40	148.02
Min Ch El (ft)	813.04	Shear (lb/sq ft)	0.00	0.01
Alpha	1.16	Stream Power (lb/ft s)	274.87	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.70	51.79
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.04	0.74

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 2.66666*

INPUT

Description:

Station	Elevation	Data	num=	24					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-2.71	822	1.66	820.67	11.24	820	29.26	820
52.81	819.33	89.17	819	102.66	814.84	106.04	813.8	110.3	812.93
154.81	812.93	163.61	813.38	173.47	814.11	203.15	816.28	211.63	816.91
223.4	817.76	239.42	818.84	241	819.22	242.29	819.64	246.16	820.9
252.61	823	260.09	823.3	260.44	823.32	275.21	823.91		

CPNPPLocalPMP

Manning's n Values		num= 12		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.71	.0129	29.26	.0139	89.17	.017	94.64	.0125		
125.41	.0071	212.86	.0153	231.31	.0144	252.61	.0129	260.09	.0067		
260.44	.0066	275.21	.0066								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	89.17	252.61		1.98	1.98		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
-10	0	827	

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.83			
Right OB				
Vel Head (ft)	0.11	wt. n-val.	0.014	0.010
w.s. Elev (ft)	820.72	Reach Len. (ft)	1.98	1.98
1.98				
Crit w.s. (ft)		Flow Area (sq ft)	98.16	870.19
E.G. slope (ft/ft)	0.000037	Area (sq ft)	98.16	870.19
Q Total (cfs)	2421.00	Flow (cfs)	73.46	2347.55
Top width (ft)	244.12	Top width (ft)	87.68	156.44
vel Total (ft/s)	2.50	Avg. vel. (ft/s)	0.75	2.70
Max chl Dpth (ft)	7.79	Hydr. Depth (ft)	1.12	5.56
Conv. Total (cfs)	397324.3	Conv. (cfs)	12055.1	385269.2
Length wtd. (ft)	1.98	wetted Per. (ft)	87.72	157.80
Min ch El (ft)	812.93	Shear (lb/sq ft)	0.00	0.01
Alpha	1.13	Stream Power (lb/ft s)	275.21	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.70	51.75
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.03	0.74

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 2.58333*

INPUT

Description:

Station Elevation Data		num= 24		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-3.39	822	.57	820.83	9.26	820.25	25.6	820.25		
46.96	819.42	79.93	819	92.38	814.8	95.5	813.75	99.43	812.81		

CPNPPLocalPMP									
138.38	812.81	148.69	813.23	160.25	813.89	195.05	815.85	204.99	816.42
218.79	817.19	237.57	818.14	239.43	818.57	240.94	819.06	245.48	820.54
253.04	823	260.49	823.31	260.84	823.32	275.55	823.92		
Manning's n Values				num=	12				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.39	.0129	25.6	.0137	79.93	.017	85.73	.0117
118.32	.0072	210.94	.0149	230.47	.0142	253.04	.0129	260.49	.0067
260.84	.0066	275.55	.0066						
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	79.93	253.04		1.98	1.98	1.98		.1	.3
Blocked Obstructions				num=	1				
Sta L	Sta R	Elev							
-10	0	827							

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	820.83	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.10		wt. n-val.	0.014	0.010
w.s. Elev (ft)	820.73		Reach Len. (ft)	1.98	1.98
1.98					
Crit w.s. (ft)			Flow Area (sq ft)	78.84	940.96
E.G. slope (ft/ft)	0.000030		Area (sq ft)	78.84	940.96
Q Total (cfs)	2421.00		Flow (cfs)	52.07	2368.93
Top width (ft)	244.01		Top width (ft)	77.87	166.14
vel Total (ft/s)	2.37		Avg. vel. (ft/s)	0.66	2.52
Max Chl Dpth (ft)	7.92		Hydr. Depth (ft)	1.01	5.66
Conv. Total (cfs)	438690.8		Conv. (cfs)	9435.9	429254.9
Length wtd. (ft)	1.98		wetted Per. (ft)	77.90	167.64
Min Ch El (ft)	812.81		Shear (lb/sq ft)	0.00	0.01
Alpha	1.10		Stream Power (lb/ft s)	275.55	0.00
0.00					
Frctn Loss (ft)	0.00		Cum volume (acre-ft)	3.69	51.71
6.12					
C & E Loss (ft)	0.00		Cum SA (acres)	0.03	0.73

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 2.5*

INPUT
 Description:
 Station Elevation Data num= 24

		CPNPPLocalPMP								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	-4.07	822	-.52	821	7.28	820.5	21.94	820.5	
41.11	819.5	70.69	819	82.1	814.76	84.96	813.71	88.56	812.7	
121.94	812.7	133.77	813.08	147.03	813.66	186.95	815.43	198.36	815.93	
214.18	816.62	235.73	817.43	237.85	817.91	239.59	818.48	244.79	820.17	
253.47	823	260.89	823.31	261.24	823.33	275.89	823.93			
Manning's n Values		num=		12						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-4.07	.0129	21.94	.0136	70.69	.017	76.82	.011	
111.22	.0073	209.01	.0145	229.64	.014	253.47	.0129	260.89	.0067	
261.24	.0066	275.89	.0066							
Bank Sta:	Left	Right	Lengths:		Left	Channel	Right	Coeff	Contr.	Expan.
	70.69	253.47	1.98	1.98	1.98			.1	.3	
Blocked Obstructions		num=		1						
Sta L	Sta R	Elev								
-10	0	827								

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.82	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.	0.014	0.010
w.s. Elev (ft)	820.74	Reach Len. (ft)	1.98	1.98
1.98				
Crit w.s. (ft)		Flow Area (sq ft)	62.21	1023.22
E.G. slope (ft/ft)	0.000024	Area (sq ft)	62.21	1023.22
Q Total (cfs)	2421.00	Flow (cfs)	36.20	2384.80
Top width (ft)	243.00	Top width (ft)	67.15	175.85
vel Total (ft/s)	2.23	Avg. vel. (ft/s)	0.58	2.33
Max chl Dpth (ft)	8.04	Hydr. Depth (ft)	0.93	5.82
Conv. Total (cfs)	490024.0	Conv. (cfs)	7326.9	482697.1
Length wtd. (ft)	1.98	wetted Per. (ft)	67.19	177.54
Min ch El (ft)	812.70	Shear (lb/sq ft)	0.00	0.01
Alpha	1.08	Stream Power (lb/ft s)	275.89	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.69	51.67
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.03	0.72

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite

RS: 2.41666*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 24		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-4.75	822	-1.6	821.17	5.3	820.75	18.29	820.75		
35.26	819.58	61.45	819	71.82	814.73	74.41	813.66	77.69	812.58		
105.51	812.58	118.85	812.92	133.81	813.44	178.85	815	191.72	815.44		
209.57	816.05	233.88	816.73	236.28	817.26	238.24	817.9	244.11	819.81		
253.9	823	261.29	823.32	261.64	823.33	276.24	823.95				

Manning's n Values

num= 12		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.75	.0129	18.29	.0135	61.45	.017	67.9	.0103
104.13	.0074	207.09	.0141	228.81	.0138	253.9	.0129	261.29	.0068
261.64	.0066	276.24	.0066						

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	61.45	253.9		1.98	1.98		.1	.3

Blocked Obstructions

num= 1		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	827					

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	820.82	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.07		wt. n-val.	0.014	0.010
w.s. Elev (ft)	820.75		Reach Len. (ft)	1.98	1.98
1.98					
Crit w.s. (ft)			Flow Area (sq ft)	48.10	1117.58
E.G. slope (ft/ft)	0.000019		Area (sq ft)	48.10	1117.58
Q Total (cfs)	2421.00		Flow (cfs)	24.88	2396.12
Top width (ft)	228.68		Top width (ft)	43.14	185.54
Vel Total (ft/s)	2.08		Avg. vel. (ft/s)	0.52	2.14
Max Chl Dpth (ft)	8.17		Hydr. Depth (ft)	1.11	6.02
Conv. Total (cfs)	553564.5		Conv. (cfs)	5688.5	547876.0
Length wtd. (ft)	1.98		wetted Per. (ft)	43.18	187.45
Min Ch El (ft)	812.58		Shear (lb/sq ft)	0.00	0.01
Alpha	1.06		Stream Power (lb/ft s)	276.24	0.00
0.00					
Frctn Loss (ft)	0.00		Cum volume (acre-ft)	3.69	51.62
6.12					
C & E Loss (ft)	0.00		Cum SA (acres)	0.02	0.71

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

CPNPPLocalPMP

RIVER: Offsite
 REACH: Offsite

RS: 2.33333*

INPUT

Description:

Station	Elevation	Data	num=	24	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-5.43	822	-2.69	821.33	3.32	821	14.63	821	821
29.41	819.67	52.21	819	61.54	814.69	63.87	813.61	66.82	812.46	812.46
89.07	812.46	103.93	812.77	120.6	813.22	170.75	814.57	185.08	814.95	814.95
204.96	815.48	232.04	816.02	234.71	816.61	236.89	817.32	243.43	819.45	819.45
254.33	823	261.69	823.32	262.04	823.33	276.58	823.96			

Manning's n	Values	num=	12	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-5.43	.0129	14.63	.0134	52.21	.017	58.99	.0095		
97.03	.0075	205.17	.0137	227.98	.0136	254.33	.0129	261.69	.0068		
262.04	.0066	276.58	.0066								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	52.21	254.33		1.98	1.98	1.98		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			-10	0	827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.82	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.013	0.010
w.s. Elev (ft)	820.76	Reach Len. (ft)	1.98	1.98
1.98		Flow Area (sq ft)	38.96	1223.61
Crit w.s. (ft)		Area (sq ft)	38.96	1223.61
E.G. slope (ft/ft)	0.000015	Flow (cfs)	17.82	2403.18
Q Total (cfs)	2421.00	Top width (ft)	34.87	195.23
Top width (ft)	230.10	Avg. vel. (ft/s)	0.46	1.96
vel Total (ft/s)	1.92	Hydr. Depth (ft)	1.12	6.27
Max Chl Dpth (ft)	8.30	Conv. (cfs)	4646.5	626501.8
Conv. Total (cfs)	631148.3	wetted Per. (ft)	34.93	197.40
Length Wtd. (ft)	1.98	Shear (lb/sq ft)	0.00	0.01
Min Ch El (ft)	812.46	Stream Power (lb/ft s)	276.58	0.00
Alpha	1.04	Cum volume (acre-ft)	3.69	51.57
0.00		Cum SA (acres)	0.02	0.70
Frctn Loss (ft)	0.00			
6.12				
C & E Loss (ft)	0.00			

Note: Manning's n values were composited to a single value in the main channel.

CPNPPLocalPMP

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 2.25*

INPUT

Description:

Station	Elevation	Data	num=	24	Station	Elevation	Station	Elevation	Station	Elevation
-10	822	-6.11	822	-3.77	821.5	1.34	821.25	10.97	821.25	
23.56	819.75	42.98	819	51.26	814.65	53.33	813.56	55.95	812.35	
72.64	812.35	89.02	812.62	107.38	813	162.64	814.14	178.44	814.46	
200.36	814.91	230.19	815.32	233.13	815.96	235.53	816.74	242.74	819.09	
254.76	823	262.09	823.32	262.43	823.34	276.92	823.97			

Manning's n	Values	num=	12	Station	n Val	Station	n Val	Station	n Val
-10	.0129	-6.11	.0129	10.97	.0133	42.98	.017	50.07	.0088
89.94	.0077	203.24	.0133	227.15	.0134	254.76	.0129	262.09	.0068
262.43	.0066	276.92	.0066						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 42.98 254.76 1.98 1.98 1.98 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.81	Element	Left OB	Channel
Right OB Vel Head (ft)	0.05	wt. n-val.	0.013	0.010
w.s. Elev (ft)	820.76	Reach Len. (ft)	1.98	1.98
1.98 Crit w.s. (ft)		Flow Area (sq ft)	31.26	1340.66
E.G. slope (ft/ft)	0.000011	Area (sq ft)	31.26	1340.66
Q Total (cfs)	2421.00	Flow (cfs)	12.69	2408.31
Top width (ft)	232.82	Top width (ft)	27.92	204.90
Vel Total (ft/s)	1.76	Avg. vel. (ft/s)	0.41	1.80
Max Chl Dpth (ft)	8.41	Hydr. Depth (ft)	1.12	6.54
Conv. Total (cfs)	716905.8	Conv. (cfs)	3758.8	713147.0
Length wtd. (ft)	1.98	wetted Per. (ft)	28.00	207.37
Min Ch El (ft)	812.35	Shear (lb/sq ft)	0.00	0.00
Alpha 0.00	1.03	Stream Power (lb/ft s)	276.92	0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	51.51
6.12 C & E Loss (ft)	0.00	Cum SA (acres)	0.02	0.70

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 2.16666*

INPUT

Description:

Station	Elevation	Data	num=	24	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-6.79	822	-4.86	821.67	-.63	821.5	7.31	821.5	
17.7	819.83	33.74	819	40.98	814.61	42.79	813.51	45.07	812.23	
56.2	812.23	74.1	812.46	94.16	812.77	154.54	813.71	171.81	813.98	
195.75	814.34	228.34	814.61	231.56	815.3	234.18	816.16	242.06	818.72	
255.18	823	262.49	823.33	262.83	823.34	277.27	823.98			

Manning's n	Values	num=	12	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-6.79	.0129	7.31	.0131	33.74	.017	41.16	.0081		
82.84	.0078	201.32	.0129	226.31	.0133	255.18	.0129	262.49	.0068		
262.83	.0066	277.27	.0066								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	33.74	255.18		1.98	1.98	1.98		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			-10	0	827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.81	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.013	0.010
w.s. Elev (ft)	820.77	Reach Len. (ft)	1.98	1.98
1.98		Flow Area (sq ft)	24.45	1470.29
Crit w.s. (ft)		Area (sq ft)	24.45	1470.29
E.G. slope (ft/ft)	0.000009	Flow (cfs)	8.80	2412.20
Q Total (cfs)	2421.00	Top width (ft)	21.88	214.60
Top width (ft)	236.48	Avg. vel. (ft/s)	0.36	1.64
vel Total (ft/s)	1.62	Hydr. Depth (ft)	1.12	6.85
Max Chl Dpth (ft)	8.54	Conv. (cfs)	2978.5	816381.1
Conv. Total (cfs)	819359.6	wetted Per. (ft)	21.98	217.43
Length Wtd. (ft)	1.98	Shear (lb/sq ft)	0.00	0.00
Min Ch El (ft)	812.23	Stream Power (lb/ft s)	277.27	0.00
Alpha	1.02	Cum volume (acre-ft)	3.68	51.44
0.00		Cum SA (acres)	0.02	0.69
Frctn Loss (ft)	0.00			
6.12				
C & E Loss (ft)	0.00			

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 2.08333*

INPUT

Description:

Station Elevation Data		num= 24		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-7.47	822	-5.94	821.83	-2.61	821.75	3.66	821.75		
11.85	819.92	24.5	819	30.69	814.57	32.24	813.46	34.2	812.12		
39.77	812.12	59.18	812.31	80.94	812.55	146.44	813.28	165.17	813.49		
191.14	813.77	226.5	813.91	229.98	814.65	232.83	815.58	241.37	818.36		
255.61	823	262.89	823.33	263.23	823.35	277.61	823.99				

Manning's n Values		num= 12		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-7.47	.0129	3.66	.013	24.5	.017	32.24	.0073		
75.75	.0079	199.4	.0125	225.48	.0131	255.61	.0129	262.89	.0069		
263.23	.0066	277.61	.0066								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	24.5	255.61		1.98	1.98	1.98		.1	.3
Blocked Obstructions	num= 1								
Sta L	Sta R	Elev							
-10	0	827							

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	820.81	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.03		wt. n-val.	0.013	0.009
w.s. Elev (ft)	820.77		Reach Len. (ft)	1.98	1.98
1.98					
Crit w.s. (ft)			Flow Area (sq ft)	18.24	1610.61
E.G. slope (ft/ft)	0.000007		Area (sq ft)	18.24	1610.61
Q Total (cfs)	2421.00		Flow (cfs)	5.73	2415.27
Top width (ft)	240.75		Top width (ft)	16.47	224.28
vel Total (ft/s)	1.49		Avg. vel. (ft/s)	0.31	1.50
Max Chl Dpth (ft)	8.65		Hydr. Depth (ft)	1.11	7.18
Conv. Total (cfs)	938097.5		Conv. (cfs)	2221.1	935876.4
Length wtd. (ft)	1.98		wetted Per. (ft)	16.60	227.53
Min Ch El (ft)	812.12		Shear (lb/sq ft)	0.00	0.00
Alpha	1.02		Stream Power (lb/ft s)	277.61	0.00
0.00					

Frctn Loss (ft)	0.00	CPNPPLocalPMP Cum Volume (acre-ft)	3.68	51.37
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.02	0.68

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Offsite
REACH: Offsite RS: 2

INPUT

Description:

Station	Elevation	Data	num=	14	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	6	820	15.26	819	23.33	812	812
158.53	813	186.53	813.2	224.65	813.2	228.41	814	231.48	815	815
240.69	818	256.04	823	263.63	823.35	277.95	824			

Manning's n	Values	num=	7	Sta	n val	Sta	n val	Sta	n val
-10	.0129	0	.0129	15.26	.017	23.33	.0066	224.65	.0129
256.04	.0129	263.63	.0066						

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
15.26	256.04	127.7	127.7	127.7		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			-10	0	827

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.81	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.	0.013	0.008
W.S. Elev (ft)	820.78	Reach Len. (ft)	127.70	127.70
127.70				
Crit w.s. (ft)	814.34	Flow Area (sq ft)	12.73	1762.99
E.G. slope (ft/ft)	0.000004	Area (sq ft)	12.73	1762.99
Q Total (cfs)	2421.00	Flow (cfs)	2.99	2418.01
Top width (ft)	245.55	Top width (ft)	11.59	233.96
vel Total (ft/s)	1.36	Avg. vel. (ft/s)	0.23	1.37
Max Chl Dpth (ft)	8.78	Hydr. Depth (ft)	1.10	7.54
Conv. Total (cfs)	1250673.0	Conv. (cfs)	1545.8	1249127.0
Length wtd. (ft)	127.70	wetted Per. (ft)	11.77	237.73
Min Ch El (ft)	812.00	Shear (lb/sq ft)	0.00	0.00
Alpha	1.01	Stream Power (lb/ft s)	277.95	0.00
0.00				

Frctn Loss (ft)	CPNPPLocalPMP		
6.12	Cum Volume (acre-ft)	3.68	51.30
C & E Loss (ft)	Cum SA (acres)	0.02	0.67

INLINE STRUCTURE

RIVER: Offsite
 REACH: Offsite RS: 1.5

INPUT

Description:

Distance from Upstream XS = 17.7
 Deck/Roadway width = 10
 Weir Coefficient = 2.6
 Weir Embankment Coordinates num = 8

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	6	820	62.83	819	70.32	818
245.5	818	260.5	823	281.9	824				

Upstream Embankment side slope = 2 horiz. to 1.0 vertical
 Downstream Embankment side slope = 2 horiz. to 1.0 vertical
 Maximum allowable submergence for weir flow = .98
 Elevation at which weir flow begins =
 Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Offsite
 REACH: Offsite RS: 1

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	822	6	820	46.59	819	58.97	818	70.72	817
247.44	817	268.21	818	283.53	823	291.11	823.35	305.23	824

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.0129	291.11	.0066

Bank Sta: Left	Right	Coeff Contr.	Expan.
0	283.53	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.47	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.78	wt. n-Val.		0.013
w.s. Elev (ft)	818.69	Reach Len. (ft)		
Crit w.s. (ft)	818.69	Flow Area (sq ft)		340.79
E.G. slope (ft/ft)	0.002123	Area (sq ft)		340.79

Q Total (cfs)	2421.00	CPNPPLocalPMP Flow (cfs)	2421.00
Top width (ft)	219.88	Top width (ft)	219.88
Vel Total (ft/s)	7.10	Avg. Vel. (ft/s)	7.10
Max Chl Dpth (ft)	1.69	Hydr. Depth (ft)	1.55
Conv. Total (cfs)	52540.5	Conv. (cfs)	52540.5
Length Wtd. (ft)		wetted Per. (ft)	220.08
Min ch El (ft)	817.00	Shear (lb/sq ft)	0.21
Alpha 0.00	1.00	Stream Power (lb/ft s)	305.23
Frctn Loss (ft)		Cum volume (acre-ft)	0.00
C & E Loss (ft)		Cum SA (acres)	

Warning: Slope too steep for slope area to converge during supercritical flow calculations (normal depth is below critical depth).
 water surface set to critical depth.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 5

INPUT

Description:

Station Elevation Data	num=	8					
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 821.38 12 821.14	18.9 821	68.9 820	204.22 820				
224.22 822 227.22 822	237 822						

Manning's n Values	num=	3		
Sta n Val Sta n Val	Sta n Val	Sta n Val		
0 .0066 12 .0129	237 .0129			

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
18.9 224.22	.5 .5	.5	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.57	Element	Left OB	Channel
Right OB Vel Head (ft)	0.16	wt. n-Val.		0.013
w.s. Elev (ft)	820.41	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.39	Flow Area (sq ft)		60.83
E.G. slope (ft/ft)	0.002842	Area (sq ft)		60.83

Q Total (cfs)	196.00	CPNPPLocalPMP Flow (cfs)	196.00
Top width (ft)	160.04	Top width (ft)	160.04
Vel Total (ft/s)	3.22	Avg. Vel. (ft/s)	3.22
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)	0.38
Conv. Total (cfs)	3676.6	Conv. (cfs)	3676.6
Length Wtd. (ft)	0.50	wetted Per. (ft)	160.06
Min ch El (ft)	820.00	Shear (lb/sq ft)	0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00
Frctn Loss (ft) 6.12	0.00	Cum Volume (acre-ft)	3.68
C & E Loss (ft) 0.00	0.00	Cum SA (acres)	1.16

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.98795*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 821.37 8.18 821.21 12.07 821.13 19.01 820.99 68.9 819.99		
204.12 819.99 209.97 820.57 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 8.18 .0109 12.07 .0129 19.01 .0129 237 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
19.01 224.22	.5 .5 .5	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.56	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.38	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.38	Flow Area (sq ft)		58.06
E.G. slope (ft/ft)	0.003288	Area (sq ft)		58.06
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	158.90	Top width (ft)		158.90

Vel Total (ft/s)	3.38	CPNPPLocalPMP	Avg. Vel. (ft/s)	3.38
Max Chl Dpth (ft)	0.39		Hydr. Depth (ft)	0.37
Conv. Total (cfs)	3418.2		Conv. (cfs)	3418.2
Length wtd. (ft)	0.50		wetted Per. (ft)	158.92
Min Ch El (ft)	819.99		Shear (lb/sq ft)	0.07
Alpha	1.00		Stream Power (lb/ft s)	237.00
0.00				
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)	3.68
6.12				
C & E Loss (ft)	0.00		Cum SA (acres)	1.16
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.97590*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.36 8.22 821.2 12.14 821.12 19.12 820.98 68.9 819.98									
204.02 819.98 209.9 820.57 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.22 .0109 12.14 .0129 19.12 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
19.12 224.22	.5 .5 .5		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.55	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.39	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.37	Flow Area (sq ft)		60.63
E.G. Slope (ft/ft)	0.002865	Area (sq ft)		60.63
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	159.69	Top width (ft)		159.69
Vel Total (ft/s)	3.23	Avg. vel. (ft/s)		3.23
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38

Conv. Total (cfs)	3661.5	CPNPPLocalPMP Conv. (cfs)	3661.5
Length wtd. (ft)	0.50	wetted Per. (ft)	159.72
Min Ch El (ft)	819.98	Shear (lb/sq ft)	0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00
0.00		Cum Volume (acre-ft)	3.68
Frctn Loss (ft)	0.00	Cum SA (acres)	1.16
6.12			
C & E Loss (ft)	0.00		
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.96385*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 821.35 8.27 821.18	12.21 821.11	19.23 820.96	68.9 819.97						
203.92 819.97 209.83 820.56	224.22 822	227.22 822	237 822						

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 8.27 .0109	12.21 .0129	19.23 .0129	237 .0129						

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff	Contr.	Expan.
19.23 224.22	.5 .5	.5		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.54	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-Val.		0.013
w.s. Elev (ft)	820.37	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.36	Flow Area (sq ft)		58.23
E.G. Slope (ft/ft)	0.003257	Area (sq ft)		58.23
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	158.87	Top width (ft)		158.87
Vel Total (ft/s)	3.37	Avg. vel. (ft/s)		3.37
Max chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3434.4	Conv. (cfs)		3434.4
Length wtd. (ft)	0.50	wetted Per. (ft)		158.89

Min Ch El (ft)	819.97	CPNPPLocalPMP Shear (lb/sq ft)	0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00
Frctn Loss (ft) 6.12	0.00	Cum Volume (acre-ft)	3.68
C & E Loss (ft) 0.00	0.00	Cum SA (acres)	49.02
			1.16

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.95180*

INPUT

Description:

Station	Elevation	Data	num=	10
Sta	Elev	Sta	Elev	Sta
0	821.34	8.32	821.17	12.28
203.82	819.96	209.76	820.55	224.22
			822	822
			19.33	820.95
			68.9	819.96
			237	822

Manning's n Values	num=	5
Sta	n Val	Sta
0	.0066	8.32
		12.28
		19.33
		237
		.0129
		.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
19.33	224.22	.5	.5	.5	.1	.3	

Blocked Obstructions	num=	1
Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.53	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.37	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.35	Flow Area (sq ft)		60.82
E.G. slope (ft/ft)	0.002838	Area (sq ft)		60.82
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	159.74	Top width (ft)		159.74
vel Total (ft/s)	3.22	Avg. vel. (ft/s)		3.22
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3679.4	Conv. (cfs)		3679.4
Length wtd. (ft)	0.50	wetted Per. (ft)		159.77
Min Ch El (ft)	819.96	Shear (lb/sq ft)		0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00

Frctn Loss (ft)	0.00	CPNPPLocalPMP		
6.12		Cum Volume (acre-ft)	3.68	49.02
C & E Loss (ft)	0.00	Cum SA (acres)		1.15
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.93975*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.33 8.36 821.16 12.34 821.08 19.44 820.94 68.9 819.95									
203.73 819.95 209.69 820.55 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.36 .011 12.34 .0129 19.44 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
19.44 224.22	.5 .5 .5	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.52	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.35	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.34	Flow Area (sq ft)		58.14
E.G. Slope (ft/ft)	0.003265	Area (sq ft)		58.14
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	158.57	Top width (ft)		158.57
Vel Total (ft/s)	3.37	Avg. vel. (ft/s)		3.37
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3430.1	Conv. (cfs)		3430.1
Length wtd. (ft)	0.50	wetted Per. (ft)		158.59
Min ch El (ft)	819.95	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.02
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.15
0.00				

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.92771*

INPUT

Description:

Station	Elevation	Data	num=	10	Station	Elevation	Station	Elevation	Station	Elevation
0	821.32	8.41	821.15	12.41	821.07	19.55	820.93	68.9	819.94	822
203.63	819.94	209.62	820.54	224.22	822	227.22	822	237	822	

Manning's n	Values	num=	5	Station	n Val	Station	n Val	Station	n Val	Station	n Val
0	.0066	8.41	.011	12.41	.0129	19.55	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	19.55	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.51	Element	Left OB	Channel
Right OB Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.35	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.33	Flow Area (sq ft)		60.72
E.G. Slope (ft/ft)	0.002845	Area (sq ft)		60.72
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	159.43	Top width (ft)		159.43
Vel Total (ft/s)	3.23	Avg. vel. (ft/s)		3.23
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3674.6	Conv. (cfs)		3674.6
Length wtd. (ft)	0.50	wetted Per. (ft)		159.46
Min ch El (ft)	819.94	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.02
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.15
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.91566*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.31	8.46			12.48	821.06	19.66	820.92	68.9	819.93		
203.53	819.93	209.55			224.22	822	227.22	822	237	822		

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066			8.46	.011	12.48	.0129	19.66	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	19.66	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	820.50	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.18		wt. n-val.		0.013
w.s. Elev (ft)	820.33		Reach Len. (ft)	0.50	0.50
0.50					
Crit w.s. (ft)	820.32		Flow Area (sq ft)		58.04
E.G. slope (ft/ft)	0.003277		Area (sq ft)		58.04
Q Total (cfs)	196.00		Flow (cfs)		196.00
Top width (ft)	158.31		Top width (ft)		158.31
vel Total (ft/s)	3.38		Avg. vel. (ft/s)		3.38
Max Chl Dpth (ft)	0.40		Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3424.0		Conv. (cfs)		3424.0
Length wtd. (ft)	0.50		wetted Per. (ft)		158.34
Min Ch El (ft)	819.93		Shear (lb/sq ft)		0.07
Alpha	1.00		Stream Power (lb/ft s)	237.00	0.00
0.00					
Frctn Loss (ft)	0.00		Cum volume (acre-ft)	3.68	49.02
6.12					
C & E Loss (ft)	0.00		Cum SA (acres)		1.15
0.00					

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.90361*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data num= 10
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 0 821.3 8.5 821.13 12.55 821.05 19.77 820.9 68.9 819.92
 203.43 819.92 209.48 820.53 224.22 822 227.22 822 237 822

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 0 .0066 8.5 .0111 12.55 .0129 19.77 .0129 237 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 19.77 224.22 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.50	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.33	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.31	Flow Area (sq ft)		60.71
E.G. Slope (ft/ft)	0.002845	Area (sq ft)		60.71
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	159.34	Top width (ft)		159.34
Vel Total (ft/s)	3.23	Avg. Vel. (ft/s)		3.23
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3674.5	Conv. (cfs)		3674.5
Length wtd. (ft)	0.50	wetted Per. (ft)		159.36
Min Ch El (ft)	819.92	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.01
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.15
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.89156*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	CPNPPLocalPMP Sta	Elev	Sta	Elev	Sta	Elev
0	821.29	8.55	821.12	12.62	821.04	19.88	820.89	68.9	819.91
203.33	819.91	209.4	820.52	224.22	822	227.22	822	237	822

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.55	.0111	12.62	.0129	19.88	.0129	237	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

Left	Right	Left	Channel	Right	Coeff	Contr.	Expan.
19.88	224.22	.5	.5	.5		.1	.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.48			
Right OB Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.31	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.30	Flow Area (sq ft)		58.16
E.G. Slope (ft/ft)	0.003253	Area (sq ft)		58.16
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	158.26	Top width (ft)		158.26
Vel Total (ft/s)	3.37	Avg. vel. (ft/s)		3.37
Max chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3436.6	Conv. (cfs)		3436.6
Length wtd. (ft)	0.50	wetted Per. (ft)		158.29
Min Ch El (ft)	819.91	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.01
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.14
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.87951*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	821.28	8.6	821.11	12.69	821.03	19.98	820.88	68.9	819.9	
203.23	819.9	209.33	820.51	224.22	822	227.22	822	237	822	

CPNPPLocalPMP
 num= 5
 Manning's n Values
 Sta n Val Sta n Val Sta n Val Sta n Val
 0 .0066 8.6 .0111 12.69 .0129 19.98 .0129 237 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 19.98 224.22 .5 .5 .5 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.48	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.31	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.29	Flow Area (sq ft)		60.72
E.G. slope (ft/ft)	0.002838	Area (sq ft)		60.72
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	159.13	Top width (ft)		159.13
vel Total (ft/s)	3.23	Avg. vel. (ft/s)		3.23
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3679.1	Conv. (cfs)		3679.1
Length wtd. (ft)	0.50	wetted Per. (ft)		159.15
Min Ch El (ft)	819.90	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	49.01
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.14
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.86747*

INPUT

Description:

Station Elevation Data num= 10
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 0 821.27 8.64 821.1 12.76 821.02 20.09 820.87 68.9 819.89
 203.13 819.89 209.26 820.5 224.22 822 227.22 822 237 822

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 0 .0066 8.64 .0111 12.76 .0129 20.09 .0129 237 .0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	20.09	224.22		.5	.5	.5		.1	.3
Blocked Obstructions	num=			1					
Sta L	Sta R	Elev							
227.22	237	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.46	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-Val.		0.013
w.s. Elev (ft)	820.29	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.28	Flow Area (sq ft)		57.94
E.G. Slope (ft/ft)	0.003285	Area (sq ft)		57.94
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	157.97	Top width (ft)		157.97
Vel Total (ft/s)	3.38	Avg. Vel. (ft/s)		3.38
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3419.8	Conv. (cfs)		3419.8
Length wtd. (ft)	0.50	wetted Per. (ft)		157.99
Min Ch El (ft)	819.89	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.01
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.14
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.85542*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.26 8.69 821.09 12.83 821 20.2 820.86 68.9 819.88									
203.03 819.88 209.19 820.5 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.69 .0112 12.83 .0129 20.2 .0129 237 .0129									

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	20.2	224.22		.5	.5	.5		.1	.3
Blocked Obstructions	num=			1					
Sta L	Sta R	Elev							

CPNPPLocalPMP

227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.46	Element	Left OB	Channel
Right OB Vel Head (ft)	0.16	wt. n-Val.		0.013
W.S. Elev (ft)	820.29	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.27	Flow Area (sq ft)		60.49
E.G. slope (ft/ft)	0.002865	Area (sq ft)		60.49
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	158.76	Top width (ft)		158.76
Vel Total (ft/s)	3.24	Avg. vel. (ft/s)		3.24
Max chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3662.1	Conv. (cfs)		3662.1
Length wtd. (ft)	0.50	wetted Per. (ft)		158.79
Min ch El (ft)	819.88	Shear (lb/sq ft)		0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.01
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.14
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.84337*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 821.25 8.74 821.08 12.9 820.99 20.31 820.84 68.9 819.87		
202.94 819.87 209.12 820.49 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 8.74 .0112 12.9 .0129 20.31 .0129 237 .0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 20.31 224.22 .5 .5 .5 .1 .3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.44	Element	Left OB	Channel
Right OB Vel Head (ft)	0.18	wt. n-val.		0.013
W.S. Elev (ft)	820.27	Reach Len. (ft)	0.50	0.50
0.50 Crit W.S. (ft)	820.26	Flow Area (sq ft)		58.10
E.G. Slope (ft/ft)	0.003255	Area (sq ft)		58.10
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	157.94	Top Width (ft)		157.94
Vel Total (ft/s)	3.37	Avg. Vel. (ft/s)		3.37
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3435.2	Conv. (cfs)		3435.2
Length wtd. (ft)	0.50	wetted Per. (ft)		157.96
Min Ch El (ft)	819.87	Shear (lb/sq ft)		0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.01
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.14
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.83132*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.24	8.78	821.07	12.96	820.98	20.42	820.83	68.9	819.86
202.84	819.86	209.05	820.48	224.22	822	227.22	822	237	822

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.78	.0112	12.96	.0129	20.42	.0129	237	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 20.42 224.22 .5 .5 .5 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.44	Element	Left OB	Channel
Right OB Vel Head (ft)	0.16	wt. n-val.		0.013

CPNPPLocalPMP

W.S. Elev (ft)	820.27	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.25	Flow Area (sq ft)		60.68
E.G. Slope (ft/ft)	0.002837	Area (sq ft)		60.68
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	158.81	Top width (ft)		158.81
Vel Total (ft/s)	3.23	Avg. Vel. (ft/s)		3.23
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3680.0	Conv. (cfs)		3680.0
Length wtd. (ft)	0.50	wetted Per. (ft)		158.84
Min Ch El (ft)	819.86	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.01
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.14
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.81927*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.23 8.83 821.06 13.03 820.97 20.53 820.82 68.9 819.85									
202.74 819.85 208.98 820.48 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.83 .0112 13.03 .0129 20.53 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
20.53 224.22	.5 .5 .5		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.43	Element	Left OB	Channel
Right OB Vel Head (ft)	0.18	wt. n-Val.		0.013
W.S. Elev (ft)	820.25	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.24	Flow Area (sq ft)		58.09

CPNPPLocalPMP

E.G. Slope (ft/ft)	0.003249	Area (sq ft)	58.09
Q Total (cfs)	196.00	Flow (cfs)	196.00
Top width (ft)	157.66	Top width (ft)	157.66
Vel Total (ft/s)	3.37	Avg. Vel. (ft/s)	3.37
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)	0.37
Conv. Total (cfs)	3438.6	Conv. (cfs)	3438.6
Length Wtd. (ft)	0.50	wetted Per. (ft)	157.69
Min ch El (ft)	819.85	Shear (lb/sq ft)	0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
6.12			49.01
C & E Loss (ft)	0.00	Cum SA (acres)	1.13
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.80722*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 821.22 8.88 821.04 13.1 820.96 20.63 820.81 68.9 819.84		
202.64 819.84 208.91 820.47 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 8.88 .0113 13.1 .0129 20.63 .0129 237 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr. Expan.
20.63 224.22	.5 .5 .5	.1 .3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.42	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.26	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.23	Flow Area (sq ft)		60.64
E.G. Slope (ft/ft)	0.002836	Area (sq ft)		60.64
Q Total (cfs)	196.00	Flow (cfs)		196.00

CPNPPLocalPMP

Top Width (ft)	158.52	Top Width (ft)	158.52
Vel Total (ft/s)	3.23	Avg. Vel. (ft/s)	3.23
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)	0.38
Conv. Total (cfs)	3680.5	Conv. (cfs)	3680.5
Length wtd. (ft)	0.50	wetted Per. (ft)	158.55
Min Ch El (ft)	819.84	Shear (lb/sq ft)	0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
6.12			49.01
C & E Loss (ft)	0.00	Cum SA (acres)	1.13
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.79518*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 821.21 8.92 821.03 13.17 820.95 20.74 820.8 68.9 819.83		
202.54 819.83 208.84 820.46 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 8.92 .0113 13.17 .0129 20.74 .0129 237 .0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 20.74 224.22 .5 .5 .5 .1 .3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.41	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.23	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.22	Flow Area (sq ft)		57.97
E.G. Slope (ft/ft)	0.003264	Area (sq ft)		57.97
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	157.40	Top Width (ft)		157.40
Vel Total (ft/s)	3.38	Avg. Vel. (ft/s)		3.38

CPNPPLocalPMP

Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)	0.37
Conv. Total (cfs)	3430.7	Conv. (cfs)	3430.7
Length wtd. (ft)	0.50	wetted Per. (ft)	157.43
Min Ch El (ft)	819.83	Shear (lb/sq ft)	0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
6.12			
C & E Loss (ft)	0.00	Cum SA (acres)	1.13
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.78313*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.2 8.97 821.02 13.24 820.94 20.85 820.78 68.9 819.82									
202.44 819.82 208.77 820.46 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.97 .0113 13.24 .0129 20.85 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
20.85 224.22	.5 .5 .5	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.40	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.24	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.21	Flow Area (sq ft)		60.63
E.G. Slope (ft/ft)	0.002836	Area (sq ft)		60.63
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	158.43	Top width (ft)		158.43
Vel Total (ft/s)	3.23	Avg. vel. (ft/s)		3.23
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3680.4	Conv. (cfs)		3680.4

CPNPPLocalPMP

Length Wtd. (ft)	0.50	wetted Per. (ft)	158.46
Min Ch El (ft)	819.82	Shear (lb/sq ft)	0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00
0.00			0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
6.12			49.01
C & E Loss (ft)	0.00	Cum SA (acres)	1.13
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.77108*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 821.19 9.02 821.01 13.31 820.93 20.96 820.77 68.9 819.81		
202.34 819.81 208.7 820.45 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 9.02 .0113 13.31 .0129 20.96 .0129 237 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr. Expan.
20.96 224.22	.5 .5 .5	.1 .3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.39	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.21	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.20	Flow Area (sq ft)		58.01
E.G. slope (ft/ft)	0.003255	Area (sq ft)		58.01
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	157.33	Top width (ft)		157.33
Vel Total (ft/s)	3.38	Avg. Vel. (ft/s)		3.38
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3435.2	Conv. (cfs)		3435.2
Length Wtd. (ft)	0.50	wetted Per. (ft)		157.35
Min Ch El (ft)	819.81	Shear (lb/sq ft)		0.07

CPNPPLocalPMP

Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft) 6.12	0.00	Cum Volume (acre-ft)	3.68	49.01
C & E Loss (ft) 0.00	0.00	Cum SA (acres)		1.13

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.75903*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 821.18 9.06 821 13.38 820.91 21.07 820.76 68.9 819.8		
202.24 819.8 208.63 820.44 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 9.06 .0114 13.38 .0129 21.07 .0129 237 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
21.07 224.22	.5 .5 .5	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.38	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.22	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.19	Flow Area (sq ft)		60.57
E.G. Slope (ft/ft)	0.002839	Area (sq ft)		60.57
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	158.19	Top Width (ft)		158.19
Vel Total (ft/s)	3.24	Avg. Vel. (ft/s)		3.24
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3678.4	Conv. (cfs)		3678.4
Length wtd. (ft)	0.50	wetted Per. (ft)		158.22
Min Ch El (ft)	819.80	Shear (lb/sq ft)		0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.01

CPNPPLocalPMP

6.12 C & E Loss (ft) 0.00	0.00	Cum SA (acres)	1.12
---------------------------------	------	----------------	------

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.74698*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.17 9.11 820.99 13.45 820.9 21.18 820.75 68.9 819.79									
202.15 819.79 208.56 820.43 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 9.11 .0114 13.45 .0129 21.18 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
21.18 224.22	.5 .5 .5		.1	.3

Blocked Obstructions num= 1

Sta L Sta R Elev
227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.37	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.19	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.18	Flow Area (sq ft)		57.93
E.G. Slope (ft/ft)	0.003263	Area (sq ft)		57.93
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	157.08	Top width (ft)		157.08
Vel Total (ft/s)	3.38	Avg. vel. (ft/s)		3.38
Max chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3431.1	Conv. (cfs)		3431.1
Length wtd. (ft)	0.50	wetted Per. (ft)		157.11
Min ch El (ft)	819.79	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.01
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.12
0.00				

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.73494*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.16	9.16	820.98	13.51	820.89	21.29	820.73	68.9	819.78		
202.05	819.78	208.49	820.43	224.22	822	227.22	822	237	822		

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.16	.0114	13.51	.0129	21.29	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21.29	224.22		.5	.5	.5		.1	.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.36	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.20	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.17	Flow Area (sq ft)		60.55
E.G. slope (ft/ft)	0.002840	Area (sq ft)		60.55
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	158.11	Top width (ft)		158.11
Vel Total (ft/s)	3.24	Avg. vel. (ft/s)		3.24
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3677.6	Conv. (cfs)		3677.6
Length Wtd. (ft)	0.50	wetted Per. (ft)		158.13
Min Ch El (ft)	819.78	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	49.01
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.12
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.72289*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.15	9.2	820.97	13.58	820.88	21.39	820.72	68.9	819.77
201.95	819.77	208.42	820.42	224.22	822	227.22	822	237	822

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.2	.0114	13.58	.0129	21.39	.0129	237	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21.39 224.22 .5 .5 .5 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.35			
Right OB Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.17	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.16	Flow Area (sq ft)		58.06
E.G. Slope (ft/ft)	0.003238	Area (sq ft)		58.06
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	157.05	Top width (ft)		157.05
Vel Total (ft/s)	3.38	Avg. Vel. (ft/s)		3.38
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3444.4	Conv. (cfs)		3444.4
Length wtd. (ft)	0.50	wetted Per. (ft)		157.08
Min Ch El (ft)	819.77	Shear (lb/sq ft)		0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	49.00
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.12
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.71084*

CPNPPLocalPMP

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	821.14	9.25	820.96	13.65	820.87	21.5	820.71	68.9	819.76	
201.85	819.76	208.35	820.41	224.22	822	227.22	822	237	822	

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.25	.0115	13.65	.0129	21.5	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	21.5	224.22		.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.34	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-Val.		0.013
w.s. Elev (ft)	820.18	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.15	Flow Area (sq ft)		60.61
E.G. Slope (ft/ft)	0.002826	Area (sq ft)		60.61
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	157.91	Top width (ft)		157.91
Vel Total (ft/s)	3.23	Avg. vel. (ft/s)		3.23
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3686.7	Conv. (cfs)		3686.7
Length wtd. (ft)	0.50	wetted Per. (ft)		157.94
Min Ch El (ft)	819.76	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.00
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.12
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.69879*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPPLocalPMP							
0	821.13	9.29	820.95	13.72	820.86	21.61	820.7	68.9	819.75
201.75	819.75	208.28	820.41	224.22	822	227.22	822	237	822
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.29	.0115	13.72	.0129	21.61	.0129	237	.0129
Bank Sta:	Left	Right	Lengths:		Left Channel	Right	Coeff Contr.		Expan.
	21.61	224.22			.5	.5	.1		.3
Blocked Obstructions		num=		1					
Sta L	Sta R	Elev							
227.22	237	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.33	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.15	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.14	Flow Area (sq ft)		57.81
E.G. slope (ft/ft)	0.003274	Area (sq ft)		57.81
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	156.68	Top width (ft)		156.68
vel Total (ft/s)	3.39	Avg. vel. (ft/s)		3.39
Max chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3425.5	Conv. (cfs)		3425.5
Length wtd. (ft)	0.50	wetted Per. (ft)		156.70
Min ch El (ft)	819.75	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	49.00
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.12
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.68674*

INPUT

Description:

Station Elevation Data		num=		10					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.12	9.34	820.94	13.79	820.85	21.72	820.69	68.9	819.74
201.65	819.74	208.21	820.4	224.22	822	227.22	822	237	822

Manning's n Values num= 5
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Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.34	.0115	13.79	.0129	21.72	.0129	237	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	21.72	224.22		.5	.5	.5	.1	.3		
Blocked Obstructions	num=		1							
Sta L	Sta R	Elev								
227.22	237	825								

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.32			
Right OB Vel Head (ft)	0.16	wt. n-Val.		0.013
w.s. Elev (ft)	820.16	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.14	Flow Area (sq ft)		60.38
E.G. slope (ft/ft)	0.002853	Area (sq ft)		60.38
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	157.55	Top width (ft)		157.55
Vel Total (ft/s)	3.25	Avg. Vel. (ft/s)		3.25
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3669.6	Conv. (cfs)		3669.6
Length wtd. (ft)	0.50	wetted Per. (ft)		157.57
Min Ch El (ft)	819.74	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00 Frctn Loss (ft)	0.00	cum volume (acre-ft)	3.68	49.00
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.11
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.67469*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	821.11	9.39	820.93	13.86	820.84	21.83	820.67	68.9	819.73	
201.55	819.73	208.14	820.39	224.22	822	227.22	822	237	822	

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.39	.0115	13.86	.0129	21.83	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.

	21.83	224.22		CPNPPLocalPMP					
Blocked Obstructions			num=	.5	.5	.5	.1	.3	
	Sta L	Sta R	Elev	1					
	227.22	237	825						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.31	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-Val.		0.013
w.s. Elev (ft)	820.13	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.13	Flow Area (sq ft)		57.98
E.G. Slope (ft/ft)	0.003243	Area (sq ft)		57.98
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	156.72	Top width (ft)		156.72
Vel Total (ft/s)	3.38	Avg. Vel. (ft/s)		3.38
Max chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3441.8	Conv. (cfs)		3441.8
Length wtd. (ft)	0.50	wetted Per. (ft)		156.74
Min ch El (ft)	819.73	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.00
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.11
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.66265*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.1 9.43 820.91 13.93 820.82 21.94 820.66 68.9 819.72									
201.45 819.72 208.07 820.39 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 9.43 .0116 13.93 .0129 21.94 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
21.94 224.22	.5 .5 .5	.1	.3
Blocked Obstructions	num=	1	
Sta L Sta R Elev			
227.22 237 825			

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.30	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.14	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.12	Flow Area (sq ft)		60.51
E.G. slope (ft/ft)	0.002832	Area (sq ft)		60.51
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	157.52	Top width (ft)		157.52
Vel Total (ft/s)	3.24	Avg. vel. (ft/s)		3.24
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3683.2	Conv. (cfs)		3683.2
Length wtd. (ft)	0.50	wetted Per. (ft)		157.54
Min Ch El (ft)	819.72	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	49.00
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.11
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.65060*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 821.09 9.48 820.9 14 820.81 22.04 820.65 68.9 819.71									
201.35 819.71 208 820.38 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 9.48 .0116 14 .0129 22.04 .0129 237 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 22.04 224.22 .5 .5 .5 .1 .3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	820.29	Element	Left OB	Channel
Right OB Vel Head (ft)	0.18	wt. n-Val.		0.013
W.S. Elev (ft)	820.11	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.11	Flow Area (sq ft)		57.91
E.G. Slope (ft/ft)	0.003248	Area (sq ft)		57.91
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	156.42	Top width (ft)		156.42
Vel Total (ft/s)	3.38	Avg. Vel. (ft/s)		3.38
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3438.9	Conv. (cfs)		3438.9
Length wtd. (ft)	0.50	wetted Per. (ft)		156.44
Min Ch El (ft)	819.71	Shear (lb/sq ft)		0.08
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.00
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.11
0.00				

CROSS SECTION

RIVER: Unit 3 East
REACH: Unit 3 East

RS: 4.63855*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.08	9.53	820.89	14.07	820.8	22.15	820.64	68.9	819.7		
201.26	819.7	207.93	820.37	224.22	822	227.22	822	237	822		

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.53	.0116	14.07	.0129	22.15	.0129	237	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
22.15 224.22 .5 .5 .5 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	820.28			
Right OB Vel Head (ft)	0.16	wt. n-Val.		0.013

		CPNPPLocalPMP		
W.S. Elev (ft)	820.12	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.10	Flow Area (sq ft)		60.46
E.G. Slope (ft/ft)	0.002835	Area (sq ft)		60.46
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	157.28	Top width (ft)		157.28
Vel Total (ft/s)	3.24	Avg. Vel. (ft/s)		3.24
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3681.4	Conv. (cfs)		3681.4
Length wtd. (ft)	0.50	wetted Per. (ft)		157.30
Min ch El (ft)	819.70	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.00
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.11
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.62650*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.07	9.57	820.88	14.13	820.79	22.26	820.63	68.9	819.69		
201.16	819.69	207.86	820.36	224.22	822	227.22	822	237	822		

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.57	.0116	14.13	.0129	22.26	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	22.26	224.22		.5	.5	.5		.1	.3
Blocked Obstructions			num=	1					
	Sta L	Sta R	Elev						
	227.22	237	825						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.27	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
W.S. Elev (ft)	820.09	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.09	Flow Area (sq ft)		57.82

		CPNPPLocalPMP		
E.G. Slope (ft/ft)	0.003258	Area (sq ft)		57.82
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	156.16	Top Width (ft)		156.16
Vel Total (ft/s)	3.39	Avg. Vel. (ft/s)		3.39
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3433.8	Conv. (cfs)		3433.8
Length wtd. (ft)	0.50	wetted Per. (ft)		156.19
Min Ch El (ft)	819.69	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.00
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.10
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.61445*

INPUT

Description:

Station Elevation Data		num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.06	9.62	820.87	14.2	820.78	22.37	820.61	68.9	819.68		
201.06	819.68	207.79	820.36	224.22	822	227.22	822	237	822		

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.62	.0117	14.2	.0129	22.37	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	22.37	224.22		.5	.5	.5		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
227.22	237	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.26	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.10	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.08	Flow Area (sq ft)		60.44
E.G. Slope (ft/ft)	0.002835	Area (sq ft)		60.44
Q Total (cfs)	196.00	Flow (cfs)		196.00

		CPNPPLocalPMP		
Top width (ft)	157.20	Top width (ft)		157.20
Vel Total (ft/s)	3.24	Avg. Vel. (ft/s)		3.24
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3681.2	Conv. (cfs)		3681.2
Length wtd. (ft)	0.50	wetted Per. (ft)		157.22
Min ch El (ft)	819.68	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00		Cum Volume (acre-ft)	3.68	49.00
Frctn Loss (ft)	0.00	Cum SA (acres)		1.10
6.12				
C & E Loss (ft)	0.00			
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 4.60240*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.05	9.67	820.86	14.27	820.77	22.48	820.6	68.9	819.67			
200.96	819.67	207.72	820.35	224.22	822	227.22	822	237	822			

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.67	.0117	14.27	.0129	22.48	.0129	237	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 22.48 224.22 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.25	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-Val.		0.013
w.s. Elev (ft)	820.07	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.07	Flow Area (sq ft)		58.01
E.G. Slope (ft/ft)	0.003223	Area (sq ft)		58.01
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	156.15	Top width (ft)		156.15
Vel Total (ft/s)	3.38	Avg. Vel. (ft/s)		3.38

Max Chl Dpth (ft)	0.40	CPNPPLocalPMP Hydr. Depth (ft)	0.37
Conv. Total (cfs)	3452.4	Conv. (cfs)	3452.4
Length Wtd. (ft)	0.50	wetted Per. (ft)	156.18
Min Ch El (ft)	819.67	Shear (lb/sq ft)	0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00
0.00		Cum Volume (acre-ft)	3.68
Frctn Loss (ft)	0.00	Cum SA (acres)	1.10
6.12			
C & E Loss (ft)	0.00		
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.59036*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 821.04 9.71 820.85 14.34 820.76 22.59 820.59 68.9 819.66		
200.86 819.66 207.65 820.34 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 9.71 .0117 14.34 .0129 22.59 .0129 237 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr. Expan.
22.59 224.22	.5 .5 .5	.1 .3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.08	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.06	Flow Area (sq ft)		60.54
E.G. slope (ft/ft)	0.002816	Area (sq ft)		60.54
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	157.01	Top width (ft)		157.01
Vel Total (ft/s)	3.24	Avg. Vel. (ft/s)		3.24
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3693.8	Conv. (cfs)		3693.8

Length wtd. (ft)	0.50	CPNPPLocalPMP Wetted Per. (ft)	157.03
Min Ch El (ft)	819.66	Shear (lb/sq ft)	0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
C & E Loss (ft)	0.00	Cum SA (acres)	1.10

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.57831*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 821.03 9.76 820.84 14.41 820.75 22.7 820.58 68.9 819.65		
200.76 819.65 207.58 820.34 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 9.76 .0117 14.41 .0129 22.7 .0129 237 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
22.7 224.22	.5 .5 .5	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.23	Element	Left OB	Channel
Right OB Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.05	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.05	Flow Area (sq ft)		57.62
E.G. Slope (ft/ft)	0.003284	Area (sq ft)		57.62
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	155.73	Top Width (ft)		155.73
Vel Total (ft/s)	3.40	Avg. vel. (ft/s)		3.40
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3420.1	Conv. (cfs)		3420.1
Length wtd. (ft)	0.50	wetted Per. (ft)		155.75
Min Ch El (ft)	819.65	Shear (lb/sq ft)		0.08

	Alpha	CPNPPLocalPMP		
	0.00	1.00	Stream Power (lb/ft s)	237.00 0.00
Frctn Loss (ft)	6.12	0.00	Cum Volume (acre-ft)	3.68 49.00
C & E Loss (ft)	0.00	0.00	Cum SA (acres)	1.10

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.56626*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.02	9.81	820.83	14.48	820.73	22.8	820.57	68.9	819.64		
200.66	819.64	207.51	820.33	224.22	822	227.22	822	237	822		

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.81	.0117	14.48	.0129	22.8	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	22.8	224.22		.5	.5	.5		.1	.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.22	Element	Left OB	Channel
Right OB Vel Head (ft)	0.16	wt. n-Val.		0.013
w.s. Elev (ft)	820.06	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.04	Flow Area (sq ft)		60.18
E.G. Slope (ft/ft)	0.002862	Area (sq ft)		60.18
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	156.60	Top width (ft)		156.60
Vel Total (ft/s)	3.26	Avg. vel. (ft/s)		3.26
Max chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3664.0	Conv. (cfs)		3664.0
Length wtd. (ft)	0.50	wetted Per. (ft)		156.62
Min ch El (ft)	819.64	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	49.00
6.12				

C & E Loss (ft) 0.00 CPNPPLocalPMP Cum SA (acres) 1.10

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.55421*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821.01	9.85	820.82	14.55	820.72	22.91	820.55	68.9	819.63
200.56	819.63	207.44	820.32	224.22	822	227.22	822	237	822

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.85	.0118	14.55	.0129	22.91	.0129	237	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 22.91 224.22 .5 .5 .5 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.21	Element	Left OB	Channel
Right OB Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.03	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	820.03	Flow Area (sq ft)		58.16
E.G. slope (ft/ft)	0.003188	Area (sq ft)		58.16
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.91	Top width (ft)		155.91
Vel Total (ft/s)	3.37	Avg. vel. (ft/s)		3.37
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3471.1	Conv. (cfs)		3471.1
Length Wtd. (ft)	0.50	wetted Per. (ft)		155.94
Min Ch El (ft)	819.63	Shear (lb/sq ft)		0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	49.00
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.09
0.00				

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.54216*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	821	9.9	820.81	14.62	820.71	23.02	820.54	68.9	819.62		
200.47	819.62	207.37	820.32	224.22	822	227.22	822	237	822		

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.9	.0118	14.62	.0129	23.02	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.02	224.22		.5	.5	.5		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
227.22	237	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.20	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	820.04	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.02	Flow Area (sq ft)		60.67
E.G. Slope (ft/ft)	0.002789	Area (sq ft)		60.67
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	156.71	Top width (ft)		156.71
Vel Total (ft/s)	3.23	Avg. vel. (ft/s)		3.23
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3711.6	Conv. (cfs)		3711.6
Length wtd. (ft)	0.50	wetted Per. (ft)		156.73
Min Ch El (ft)	819.62	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.09
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 4.53012*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	820.99	9.95	820.8	14.69	820.7	23.13	820.53	68.9	819.61	822
200.37	819.61	207.3	820.31	224.22	822	227.22	822	237	822	

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.95	.0118	14.69	.0129	23.13	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.13	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	820.01	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.01	Flow Area (sq ft)		56.85
E.G. Slope (ft/ft)	0.003417	Area (sq ft)		56.85
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.13	Top width (ft)		155.13
Vel Total (ft/s)	3.45	Avg. Vel. (ft/s)		3.45
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3353.2	Conv. (cfs)		3353.2
Length wtd. (ft)	0.50	wetted Per. (ft)		155.16
Min Ch El (ft)	819.61	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.09
0.00				

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.
 Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program

CPNPPLocalPMP

defaulted to critical depth.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.51807*

INPUT

Description:

Station Elevation Data		num= 10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.98	9.99	820.78	14.75	820.69	23.24	820.52	68.9	819.6
200.27	819.6	207.23	820.3	224.22	822	227.22	822	237	822

Manning's n Values		num= 5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.99	.0118	14.75	.0129	23.24	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.24	224.22		.5	.5	.5		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
227.22	237	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.23	wt. n-val.		0.013
w.s. Elev (ft)	819.96	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	820.00	Flow Area (sq ft)		50.82
E.G. slope (ft/ft)	0.004862	Area (sq ft)		50.82
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	152.68	Top width (ft)		152.68
Vel Total (ft/s)	3.86	Avg. vel. (ft/s)		3.86
Max Chl Dpth (ft)	0.36	Hydr. Depth (ft)		0.33
Conv. Total (cfs)	2810.8	Conv. (cfs)		2810.8
Length wtd. (ft)	0.50	wetted Per. (ft)		152.71
Min Ch El (ft)	819.60	Shear (lb/sq ft)		0.10
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.09
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.50602*

INPUT

Description:

Station Elevation Data			num= 10			Sta Elev			Sta Elev		
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.97	10.04	820.77	14.82	820.68	23.35	820.51	68.9	819.59		
200.17	819.59	207.16	820.29	224.22	822	227.22	822	237	822		

Manning's n Values			num= 5			Sta n Val			Sta n Val		
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.04	.0119	14.82	.0129	23.35	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.35	224.22		.5	.5	.5		.1	.3

Blocked Obstructions			num= 1		
Sta L	Sta R	Elev			
227.22	237	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.18	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.21	wt. n-Val.		0.013
w.s. Elev (ft)	819.96	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.99	Flow Area (sq ft)		52.73
E.G. Slope (ft/ft)	0.004323	Area (sq ft)		52.73
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.32	Top width (ft)		153.32
Vel Total (ft/s)	3.72	Avg. Vel. (ft/s)		3.72
Max Chl Dpth (ft)	0.37	Hydr. Depth (ft)		0.34
Conv. Total (cfs)	2980.9	Conv. (cfs)		2980.9
Length wtd. (ft)	0.50	wetted Per. (ft)		153.34
Min Ch El (ft)	819.59	Shear (lb/sq ft)		0.09
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.09
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.49397*

CPNPPLocalPMP

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	820.97	10.09			14.89	820.67	23.45	820.49	68.9	819.59
200.07	819.59	207.09			224.22	822	227.22	822	237	822

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.09	.0119	14.89	.0129	23.45	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	23.45	224.22		.5	.5		.1	.3

Blocked Obstructions

Sta L	Sta R	Elev	num=	1
227.22	237	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.21	wt. n-Val.		0.013
w.s. Elev (ft)	819.96	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.99	Flow Area (sq ft)		52.76
E.G. Slope (ft/ft)	0.004325	Area (sq ft)		52.76
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.60	Top width (ft)		153.60
Vel Total (ft/s)	3.71	Avg. vel. (ft/s)		3.71
Max Chl Dpth (ft)	0.37	Hydr. Depth (ft)		0.34
Conv. Total (cfs)	2980.4	Conv. (cfs)		2980.4
Length wtd. (ft)	0.50	wetted Per. (ft)		153.62
Min Ch El (ft)	819.59	Shear (lb/sq ft)		0.09
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.08
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.48192*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev

	CP	N	P	Local	PMP					
0	820.96	10.13	820.75	14.96	820.66	23.56	820.48	68.9	819.58	
199.97	819.58	207.02	820.28	224.22	822	227.22	822	237	822	
Manning's n Values num= 5										
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
0	.0066	10.13	.0119	14.96	.0129	23.56	.0129	237	.0129	
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.										
	23.56	224.22		.5	.5	.5		.1	.3	
Blocked Obstructions num= 1										
Sta L	Sta R	Elev								
227.22	237	825								

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.16	Element		
Right OB				
Vel Head (ft)	0.20	wt. n-val.		0.013
w.s. Elev (ft)	819.96	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.98	Flow Area (sq ft)		54.62
E.G. slope (ft/ft)	0.003873	Area (sq ft)		54.62
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	154.22	Top width (ft)		154.22
vel Total (ft/s)	3.59	Avg. vel. (ft/s)		3.59
Max chl Dpth (ft)	0.38	Hydr. Depth (ft)		0.35
Conv. Total (cfs)	3149.5	Conv. (cfs)		3149.5
Length wtd. (ft)	0.50	wetted Per. (ft)		154.24
Min ch El (ft)	819.58	Shear (lb/sq ft)		0.09
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.08
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.46988*

INPUT

Description:

Station	Elevation	Data	num=	10						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	820.95	10.18	820.74	15.03	820.64	23.67	820.47	68.9	819.57	
199.87	819.57	206.95	820.27	224.22	822	227.22	822	237	822	

Manning's n Values num= 5
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Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.18	.0119	15.03	.0129	23.67	.0129	237	.0129	
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.	
	23.67	224.22		.5	.5	.5		.1	.3	
Blocked Obstructions			num=	1						
Sta L	Sta R	Elev								
227.22	237	825								

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	820.15			
Right OB Vel Head (ft)	0.16	wt. n-Val.		0.013
w.s. Elev (ft)	819.99	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	819.97	Flow Area (sq ft)		60.40
E.G. slope (ft/ft)	0.002822	Area (sq ft)		60.40
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	156.35	Top width (ft)		156.35
Vel Total (ft/s)	3.25	Avg. Vel. (ft/s)		3.25
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3689.6	Conv. (cfs)		3689.6
Length wtd. (ft)	0.50	wetted Per. (ft)		156.38
Min Ch El (ft)	819.57	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.99
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.08
0.00				

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.45783*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	820.94	10.23	820.73	15.1	820.63	23.78	820.46	68.9	819.56	
199.77	819.56	206.88	820.27	224.22	822	227.22	822	237	822	

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val

0	.0066	10.23	.012	CPNPPLocalPMP	15.1	.0129	23.78	.0129	237	.0129
Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.			
23.78	224.22		.5	.5	.5	.1	.3			
Blocked Obstructions			num=	1						
Sta L	Sta R	Elev								
227.22	237	825								

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
W.S. Elev (ft)	819.96	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.96	Flow Area (sq ft)		57.60
E.G. Slope (ft/ft)	0.003270	Area (sq ft)		57.60
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.10	Top width (ft)		155.10
Vel Total (ft/s)	3.40	Avg. vel. (ft/s)		3.40
Max chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3427.5	Conv. (cfs)		3427.5
Length wtd. (ft)	0.50	wetted Per. (ft)		155.12
Min ch El (ft)	819.56	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.08
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.44578*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.93	10.27	820.72	15.17	820.62	23.89	820.45	68.9	819.55		
199.68	819.55	206.81	820.26	224.22	822	227.22	822	237	822		

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.27	.012	15.17	.0129	23.89	.0129	237	.0129		

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
23.89	224.22		.5	.5	.5	.1	.3

Blocked Obstructions num= CPNPPLocalPMP
 1
 Sta L Sta R Elev
 227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
W.S. Elev (ft)	819.97	Reach Len. (ft)	0.50	0.50
0.50				
Crit W.S. (ft)	819.95	Flow Area (sq ft)		60.14
E.G. slope (ft/ft)	0.002854	Area (sq ft)		60.14
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.97	Top width (ft)		155.97
vel Total (ft/s)	3.26	Avg. vel. (ft/s)		3.26
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3669.1	Conv. (cfs)		3669.1
Length wtd. (ft)	0.50	wetted Per. (ft)		155.99
Min Ch El (ft)	819.55	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.08
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.43373*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 820.92 10.32 820.71 15.24 820.61 24 820.43 68.9 819.54		
199.58 819.54 206.74 820.25 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 10.32 .012 15.24 .0129 24 .0129 237 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr. Expan.
24 224.22	.5 .5 .5	.1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 227.22 237 825

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.12	Element	Left OB	Channel
Right OB Vel Head (ft)	0.18	wt. n-Val.		0.013
W.S. Elev (ft)	819.94	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	819.94	Flow Area (sq ft)		57.80
E.G. Slope (ft/ft)	0.003234	Area (sq ft)		57.80
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.16	Top width (ft)		155.16
Vel Total (ft/s)	3.39	Avg. Vel. (ft/s)		3.39
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3446.5	Conv. (cfs)		3446.5
Length wtd. (ft)	0.50	wetted Per. (ft)		155.18
Min Ch El (ft)	819.54	Shear (lb/sq ft)		0.08
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.99
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.08
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.42168*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.91	10.37	820.7	15.3	820.6	24.1	820.42	68.9	819.53
199.48	819.53	206.67	820.25	224.22	822	227.22	822	237	822

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.37	.012	15.3	.0129	24.1	.0129	237	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 24.1 224.22 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.11	Element	Left OB	Channel
		Page 539		

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	819.95	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.93	Flow Area (sq ft)		60.29
E.G. slope (ft/ft)	0.002830	Area (sq ft)		60.29
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.96	Top width (ft)		155.96
Vel Total (ft/s)	3.25	Avg. Vel. (ft/s)		3.25
Max chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3684.4	Conv. (cfs)		3684.4
Length wtd. (ft)	0.50	wetted Per. (ft)		155.99
Min ch El (ft)	819.53	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.07
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.40963*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
0	820.9	10.41	820.69
15.37	820.59	24.21	820.41
22.22	822	27.22	822
237	822	237	822

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	10.41	.0121
15.37	.0129	24.21	.0129
237	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	24.21	224.22		.5	.5	.5		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
227.22	237	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	819.93	Reach Len. (ft)	0.50	0.50

CPNPPLocalPMP

0.50				
Crit w.s. (ft)	819.92	Flow Area (sq ft)		57.78
E.G. Slope (ft/ft)	0.003230	Area (sq ft)		57.78
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	154.88	Top Width (ft)		154.88
Vel Total (ft/s)	3.39	Avg. Vel. (ft/s)		3.39
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3448.8	Conv. (cfs)		3448.8
Length wtd. (ft)	0.50	wetted Per. (ft)		154.90
Min Ch El (ft)	819.52	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.99
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.07
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.39759*

INPUT

Description:

Station Elevation Data	num=	10								
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.89 10.46 820.68	15.44	820.58	24.32	820.4	68.9	819.51				
199.28 819.51 206.53 820.23	224.22	822	227.22	822	237	822				

Manning's n Values	num=	5								
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 10.46 .0121	15.44	.0129	24.32	.0129	237	.0129				

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff	Contr.	Expan.
24.32 224.22	.5 .5	.5		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	819.93	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.91	Flow Area (sq ft)		60.28
E.G. slope (ft/ft)	0.002825	Area (sq ft)		60.28

CPNPPLocalPMP

Q Total (cfs)	196.00	Flow (cfs)	196.00
Top width (ft)	155.73	Top width (ft)	155.73
Vel Total (ft/s)	3.25	Avg. Vel. (ft/s)	3.25
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)	0.39
Conv. Total (cfs)	3687.7	Conv. (cfs)	3687.7
Length wtd. (ft)	0.50	wetted Per. (ft)	155.76
Min ch El (ft)	819.51	Shear (lb/sq ft)	0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00
0.00		Cum Volume (acre-ft)	3.68
Frctn Loss (ft)	0.00	Cum SA (acres)	1.07
6.12			
C & E Loss (ft)	0.00		
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.38554*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.88 10.51 820.67 15.51 820.57 24.43 820.39 68.9 819.5									
199.18 819.5 206.46 820.22 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 10.51 .0121 15.51 .0129 24.43 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
24.43 224.22	.5 .5 .5	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.08	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-Val.		0.013
w.s. Elev (ft)	819.90	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.90	Flow Area (sq ft)		57.63
E.G. Slope (ft/ft)	0.003250	Area (sq ft)		57.63
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	154.59	Top width (ft)		154.59

CPNPPLocalPMP

Vel Total (ft/s)	3.40	Avg. Vel. (ft/s)	3.40
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)	0.37
Conv. Total (cfs)	3438.1	Conv. (cfs)	3438.1
Length Wtd. (ft)	0.50	wetted Per. (ft)	154.61
Min ch El (ft)	819.50	Shear (lb/sq ft)	0.08
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
6.12 C & E Loss (ft)	0.00	Cum SA (acres)	1.07
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.37349*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.87	10.55	820.66	15.58	820.55	24.54	820.37	68.9	819.49		
199.08	819.49	206.39	820.22	224.22	822	227.22	822	237	822		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.55	.0121	15.58	.0129	24.54	.0129	237	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

24.54	224.22	.5	.5	.5	.1	.3
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Blocked Obstructions num= 1

Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.08	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	819.91	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.89	Flow Area (sq ft)		60.24
E.G. slope (ft/ft)	0.002830	Area (sq ft)		60.24
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.65	Top width (ft)		155.65
Vel Total (ft/s)	3.25	Avg. Vel. (ft/s)		3.25
Max chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39

CPNPPLocalPMP

Conv. Total (cfs)	3684.7	Conv. (cfs)	3684.7
Length wtd. (ft)	0.50	wetted Per. (ft)	155.67
Min Ch El (ft)	819.49	Shear (lb/sq ft)	0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00
0.00		Cum Volume (acre-ft)	3.68
Frctn Loss (ft)	0.00	Cum SA (acres)	1.07
6.12			
C & E Loss (ft)	0.00		
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.36144*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 820.86 10.6 820.64 15.65 820.54 24.65 820.36 68.9 819.48		
198.98 819.48 206.32 820.21 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 10.6 .0122 15.65 .0129 24.65 .0129 237 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
24.65 224.22	.5 .5 .5	.1	.3

Blocked Obstructions num= 1

Sta L Sta R Elev
227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.06	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	819.89	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.88	Flow Area (sq ft)		57.81
E.G. Slope (ft/ft)	0.003217	Area (sq ft)		57.81
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	154.59	Top Width (ft)		154.59
Vel Total (ft/s)	3.39	Avg. Vel. (ft/s)		3.39
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3455.6	Conv. (cfs)		3455.6
Length wtd. (ft)	0.50	wetted Per. (ft)		154.61

CPNPPLocalPMP

Min Ch El (ft)	819.48	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.07
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.34939*

INPUT

Description:

Station Elevation Data	num=	10								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
0 820.85 10.65 820.63 15.72 820.53 24.76 820.35 68.9 819.47										
198.89 819.47 206.25 820.2 224.22 822 227.22 822 237 822										

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 10.65 .0122 15.72 .0129 24.76 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
24.76 224.22	.5 .5 .5	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.06	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-Val.		0.013
w.s. Elev (ft)	819.89	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.87	Flow Area (sq ft)		60.31
E.G. Slope (ft/ft)	0.002813	Area (sq ft)		60.31
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.45	Top width (ft)		155.45
Vel Total (ft/s)	3.25	Avg. vel. (ft/s)		3.25
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3695.4	Conv. (cfs)		3695.4
Length wtd. (ft)	0.50	wetted Per. (ft)		155.47
Min Ch El (ft)	819.47	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00

CPNPPLocalPMP				
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	48.98
6.12	C & E Loss (ft)	0.00	Cum SA (acres)	1.06
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.33735*

INPUT

Description:

Station Elevation Data num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.84	10.69	820.62	15.79	820.52	24.86	820.34	68.9	819.46
198.79	819.46	206.18	820.2	224.22	822	227.22	822	237	822

Manning's n Values num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.69	.0122	15.79	.0129	24.86	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	24.86	224.22		.5	.5	.5		.1	.3

Blocked Obstructions num= 1			
Sta L	Sta R	Elev	
227.22	237	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.05	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	819.87	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.86	Flow Area (sq ft)		57.52
E.G. slope (ft/ft)	0.003259	Area (sq ft)		57.52
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	154.20	Top width (ft)		154.20
vel Total (ft/s)	3.41	Avg. vel. (ft/s)		3.41
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3433.3	Conv. (cfs)		3433.3
Length Wtd. (ft)	0.50	wetted Per. (ft)		154.23
Min Ch El (ft)	819.46	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.06

CPNPPLocalPMP

0.00

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 4.32530*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.83	10.74	820.61	15.86	820.51	24.97	820.33	68.9	819.45			
198.69	819.45	206.11	820.19	224.22	822	227.22	822	237	822			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.74	.0122	15.86	.0129	24.97	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	24.97	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.04	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.17	wt. n-val.		0.013
w.s. Elev (ft)	819.87	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.85	Flow Area (sq ft)		60.04
E.G. Slope (ft/ft)	0.002846	Area (sq ft)		60.04
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.06	Top width (ft)		155.06
Vel Total (ft/s)	3.26	Avg. vel. (ft/s)		3.26
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3673.8	Conv. (cfs)		3673.8
Length wtd. (ft)	0.50	wetted Per. (ft)		155.09
Min Ch El (ft)	819.45	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.06
0.00				

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.31325*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.82	10.79	820.6	15.92	820.5	25.08	820.31	68.9	819.44		
198.59	819.44	206.04	820.18	224.22	822	227.22	822	237	822		

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.79	.0123	15.92	.0129	25.08	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	25.08	224.22		.5	.5	.5		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
227.22	237	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.03	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	819.85	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.84	Flow Area (sq ft)		57.73
E.G. Slope (ft/ft)	0.003222	Area (sq ft)		57.73
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	154.26	Top width (ft)		154.26
Vel Total (ft/s)	3.40	Avg. vel. (ft/s)		3.40
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3452.9	Conv. (cfs)		3452.9
Length wtd. (ft)	0.50	wetted Per. (ft)		154.29
Min Ch El (ft)	819.44	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.06
0.00				

CROSS SECTION

RIVER: Unit 3 East

REACH: Unit 3 East CPNPPLocalPMP
 RS: 4.30120*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.81	10.83	820.59	15.99	820.49	25.19	820.3	68.9	819.43			
198.49	819.43	205.97	820.18	224.22	822	227.22	822	237	822			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.83	.0123	15.99	.0129	25.19	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	25.19	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.02	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	819.85	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.83	Flow Area (sq ft)		60.21
E.G. slope (ft/ft)	0.002820	Area (sq ft)		60.21
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	155.06	Top width (ft)		155.06
vel Total (ft/s)	3.26	Avg. vel. (ft/s)		3.26
Max chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3690.8	Conv. (cfs)		3690.8
Length wtd. (ft)	0.50	wetted Per. (ft)		155.09
Min ch El (ft)	819.43	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.06
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.28915*

INPUT

Description:

Station Elevation Data			num=	CPNPPLocalPMP		num=					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.8	10.88	820.58	16.06	820.48	25.3	820.29	68.9	819.42		
198.39	819.42	205.9	820.17	224.22	822	227.22	822	237	822		

Manning's n Values			num=			num=					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.88	.0123	16.06	.0129	25.3	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	25.3	224.22		.5	.5	.5		.1	.3

Blocked Obstructions			num=		
Sta L	Sta R	Elev			
227.22	237	825	1		

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.01	Element		
Right OB				
Vel Head (ft)	0.18	wt. n-Val.		0.013
w.s. Elev (ft)	819.83	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.82	Flow Area (sq ft)		57.66
E.G. Slope (ft/ft)	0.003226	Area (sq ft)		57.66
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.95	Top width (ft)		153.95
Vel Total (ft/s)	3.40	Avg. Vel. (ft/s)		3.40
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3450.7	Conv. (cfs)		3450.7
Length wtd. (ft)	0.50	wetted Per. (ft)		153.98
Min Ch El (ft)	819.42	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.05
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.27710*

INPUT

Description:

Station Elevation Data			num=			num=					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.79	10.93	820.57	16.13	820.46	25.41	820.28	68.9	819.41		
198.29	819.41	205.83	820.16	224.22	822	227.22	822	237	822		

CPNPPLocalPMP

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 0 .0066 10.93 .0123 16.13 .0129 25.41 .0129 237 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 25.41 224.22 .5 .5 .5 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.00	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	819.83	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.81	Flow Area (sq ft)		60.17
E.G. Slope (ft/ft)	0.002819	Area (sq ft)		60.17
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	154.81	Top width (ft)		154.81
Vel Total (ft/s)	3.26	Avg. vel. (ft/s)		3.26
Max chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3691.3	Conv. (cfs)		3691.3
Length wtd. (ft)	0.50	wetted Per. (ft)		154.84
Min ch El (ft)	819.41	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.05
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.26506*

INPUT

Description:

Station Elevation Data num= 10									
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.78 10.97 820.56 16.2 820.45 25.51 820.27 68.9 819.4									
198.19 819.4 205.76 820.15 224.22 822 227.22 822 237 822									

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val
 0 .0066 10.97 .0124 16.2 .0129 25.51 .0129 237 .0129

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 25.51 224.22 .5 .5 .5 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.99	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	819.81	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.80	Flow Area (sq ft)		57.55
E.G. slope (ft/ft)	0.003240	Area (sq ft)		57.55
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.68	Top width (ft)		153.68
vel Total (ft/s)	3.41	Avg. vel. (ft/s)		3.41
Max chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3443.4	Conv. (cfs)		3443.4
Length wtd. (ft)	0.50	wetted Per. (ft)		153.71
Min ch El (ft)	819.40	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.05
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.25301*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.77	11.02	820.55	16.27	820.44	25.62	820.25	68.9	819.39
198.09	819.39	205.69	820.15	224.22	822	227.22	822	237	822

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.02	.0124	16.27	.0129	25.62	.0129	237	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 25.62 224.22 .5 .5 .5 .1 .3
 Blocked Obstructions num= 1

CPNPPLocalPMP

Sta L Sta R Elev
227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-Val.		0.013
W.S. Elev (ft)	819.81	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.79	Flow Area (sq ft)		60.15
E.G. Slope (ft/ft)	0.002821	Area (sq ft)		60.15
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	154.75	Top width (ft)		154.75
Vel Total (ft/s)	3.26	Avg. Vel. (ft/s)		3.26
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3690.1	Conv. (cfs)		3690.1
Length wtd. (ft)	0.50	wetted Per. (ft)		154.78
Min Ch El (ft)	819.39	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.05
0.00				

CROSS SECTION

RIVER: Unit 3 East
REACH: Unit 3 East RS: 4.24096*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.76	11.07	820.54	16.34	820.43	25.73	820.24	68.9	819.38		
198	819.38	205.62	820.14	224.22	822	227.22	822	237	822		

Manning's n Values	num=	5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.07	.0124	16.34	.0129	25.73	.0129	237	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
25.73 224.22 .5 .5 .5 .1 .3

Blocked Obstructions num= 1
Sta L Sta R Elev
227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	819.97	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	819.79	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.78	Flow Area (sq ft)		57.68
E.G. slope (ft/ft)	0.003215	Area (sq ft)		57.68
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.67	Top width (ft)		153.67
Vel Total (ft/s)	3.40	Avg. vel. (ft/s)		3.40
Max chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3456.7	Conv. (cfs)		3456.7
Length wtd. (ft)	0.50	wetted Per. (ft)		153.69
Min ch El (ft)	819.38	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.05
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.22891*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.75	11.11	820.53	16.41	820.42	25.84	820.23	68.9	819.37		
197.9	819.37	205.55	820.13	224.22	822	227.22	822	237	822		

Manning's n Values	num=	5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.11	.0124	16.41	.0129	25.84	.0129	237	.0129		

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
25.84	224.22	.5	.5	.5		.1	.3

Blocked Obstructions	num=	1
Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.96	Element	Left OB	Channel
Right OB				

Vel Head (ft)	0.16	CPNPPLocalPMP wt. n-Val.		0.013
W.S. Elev (ft)	819.79	Reach Len. (ft)	0.50	0.50
0.50 Crit W.S. (ft)	819.77	Flow Area (sq ft)		60.17
E.G. Slope (ft/ft)	0.002813	Area (sq ft)		60.17
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	154.52	Top Width (ft)		154.52
Vel Total (ft/s)	3.26	Avg. Vel. (ft/s)		3.26
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3695.3	Conv. (cfs)		3695.3
Length wtd. (ft)	0.50	wetted Per. (ft)		154.55
Min Ch El (ft)	819.37	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.98
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.05
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.21686*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.74 11.16 820.51 16.48 820.41 25.95 820.22 68.9 819.36									
197.8 819.36 205.48 820.13 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 11.16 .0125 16.48 .0129 25.95 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
25.95 224.22	.5 .5 .5		.1	.3

Blocked Obstructions num= 1

Sta L Sta R Elev
227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.95	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-Val.		0.013
W.S. Elev (ft)	819.77	Reach Len. (ft)	0.50	0.50
0.50				

		CPNPPLocalPMP		
Crit w.s. (ft)	819.76	Flow Area (sq ft)		57.50
E.G. Slope (ft/ft)	0.003239	Area (sq ft)		57.50
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.31	Top width (ft)		153.31
Vel Total (ft/s)	3.41	Avg. Vel. (ft/s)		3.41
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3443.9	Conv. (cfs)		3443.9
Length wtd. (ft)	0.50	wetted Per. (ft)		153.34
Min Ch El (ft)	819.36	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.04
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 4.20482*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.73	11.21	820.5	16.54	820.4	26.06	820.2	68.9	819.35		
197.7	819.35	205.41	820.12	224.22	822	227.22	822	237	822		

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.21	.0125	16.54	.0129	26.06	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	26.06	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1
Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.94	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.17	wt. n-Val.		0.013
w.s. Elev (ft)	819.77	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.75	Flow Area (sq ft)		60.12
E.G. slope (ft/ft)	0.002819	Area (sq ft)		60.12

Q Total (cfs)	196.00	CPNPPLocalPMP Flow (cfs)	196.00
Top width (ft)	154.44	Top width (ft)	154.44
Vel Total (ft/s)	3.26	Avg. Vel. (ft/s)	3.26
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)	0.39
Conv. Total (cfs)	3691.4	Conv. (cfs)	3691.4
Length Wtd. (ft)	0.50	wetted Per. (ft)	154.47
Min ch El (ft)	819.35	Shear (lb/sq ft)	0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00
Frctn Loss (ft) 6.12	0.00	Cum Volume (acre-ft)	3.68
C & E Loss (ft) 0.00	0.00	Cum SA (acres)	1.04

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.19277*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 820.72 11.25 820.49 16.61 820.39 26.17 820.19 68.9 819.34		
197.6 819.34 205.34 820.11 224.22 822 227.22 822 237 822		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 11.25 .0125 16.61 .0129 26.17 .0129 237 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr. Expan.
26.17 224.22	.5 .5 .5	.1 .3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.93	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	819.75	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.74	Flow Area (sq ft)		57.59
E.G. slope (ft/ft)	0.003222	Area (sq ft)		57.59
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.34	Top width (ft)		153.34

		CPNPPLocalPMP		
Vel Total (ft/s)	3.40	Avg. Vel. (ft/s)		3.40
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3452.8	Conv. (cfs)		3452.8
Length wtd. (ft)	0.50	wetted Per. (ft)		153.36
Min Ch El (ft)	819.34	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.98
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.04
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.18072*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.71 11.3 820.48 16.68 820.37 26.27 820.18 68.9 819.33									
197.5 819.33 205.27 820.11 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 11.3 .0125 16.68 .0129 26.27 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
26.27 224.22	.5 .5 .5		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.92	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.17	wt. n-val.		0.013
w.s. Elev (ft)	819.75	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.73	Flow Area (sq ft)		60.06
E.G. Slope (ft/ft)	0.002820	Area (sq ft)		60.06
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	154.14	Top width (ft)		154.14
Vel Total (ft/s)	3.26	Avg. vel. (ft/s)		3.26
Max Chl Dpth (ft)	0.42	Hydr. Depth (ft)		0.39

Conv. Total (cfs)	3690.6	CPNPPLocalPMP Conv. (cfs)	3690.6
Length wtd. (ft)	0.50	wetted Per. (ft)	154.17
Min Ch El (ft)	819.33	Shear (lb/sq ft)	0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
6.12 C & E Loss (ft)	0.00	Cum SA (acres)	1.04
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.16867*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.7 11.35 820.47 16.75 820.36 26.38 820.17 68.9 819.32									
197.4 819.32 205.2 820.1 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 11.35 .0126 16.75 .0129 26.38 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
26.38 224.22	.5 .5 .5		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.91	Element	Left OB	Channel
Right OB Vel Head (ft)	0.18	wt. n-Val.		0.013
w.s. Elev (ft)	819.73	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	819.72	Flow Area (sq ft)		57.69
E.G. Slope (ft/ft)	0.003197	Area (sq ft)		57.69
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.09	Top width (ft)		153.09
Vel Total (ft/s)	3.40	Avg. Vel. (ft/s)		3.40
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3466.3	Conv. (cfs)		3466.3
Length wtd. (ft)	0.50	wetted Per. (ft)		153.12

	819.32	CPNPPLocalPMP Shear (lb/sq ft)		0.08
Min Ch El (ft)				
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft) 6.12	0.00	Cum Volume (acre-ft)	3.68	48.97
C & E Loss (ft) 0.00	0.00	Cum SA (acres)		1.04

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.15662*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.69	11.39			16.82	820.35	26.49	820.16	68.9	819.31		
197.3	819.31	205.13			820.09	224.22	822	227.22	822	237		822

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.39			.0126	16.82	.0129	26.49	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	26.49	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.90	Element	Left OB	Channel
Right OB Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	819.74	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	819.71	Flow Area (sq ft)		60.17
E.G. slope (ft/ft)	0.002799	Area (sq ft)		60.17
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.94	Top width (ft)		153.94
vel Total (ft/s)	3.26	Avg. vel. (ft/s)		3.26
Max Chl Dpth (ft)	0.43	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3704.5	Conv. (cfs)		3704.5
Length wtd. (ft)	0.50	wetted Per. (ft)		153.97
Min Ch El (ft)	819.31	Shear (lb/sq ft)		0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00

Frctn Loss (ft)	0.00	CPNPPLocalPMP		
6.12		Cum Volume (acre-ft)	3.68	48.97
C & E Loss (ft)	0.00	Cum SA (acres)		1.04
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.14457*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.68 11.44 820.45 16.89 820.34 26.6 820.14 68.9 819.3									
197.21 819.3 205.06 820.08 224.22 822 227.22 822 237 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 11.44 .0126 16.89 .0129 26.6 .0129 237 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
26.6 224.22	.5 .5 .5	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
227.22 237 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.89	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.19	wt. n-val.		0.013
w.s. Elev (ft)	819.70	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.70	Flow Area (sq ft)		56.49
E.G. Slope (ft/ft)	0.003415	Area (sq ft)		56.49
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	152.61	Top width (ft)		152.61
Vel Total (ft/s)	3.47	Avg. vel. (ft/s)		3.47
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3354.0	Conv. (cfs)		3354.0
Length wtd. (ft)	0.50	wetted Per. (ft)		152.63
Min Ch El (ft)	819.30	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.97
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.03
0.00				

CPNPPLocalPMP

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.
 Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.13253*

INPUT

Description:

Station	Elev	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	820.67	11.49	820.44	16.96	820.33	26.71	820.13	68.9	819.29	
197.11	819.29	204.99	820.08	224.22	822	227.22	822	237	822	

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.49	.0126	16.96	.0129	26.71	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	26.71	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.89	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.23	wt. n-Val.		0.013
w.s. Elev (ft)	819.65	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.69	Flow Area (sq ft)		50.42
E.G. Slope (ft/ft)	0.004875	Area (sq ft)		50.42
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	150.03	Top width (ft)		150.03
Vel Total (ft/s)	3.89	Avg. vel. (ft/s)		3.89
Max Chl Dpth (ft)	0.36	Hydr. Depth (ft)		0.34
Conv. Total (cfs)	2807.1	Conv. (cfs)		2807.1
Length wtd. (ft)	0.50	wetted Per. (ft)		150.05
Min Ch El (ft)	819.29	Shear (lb/sq ft)		0.10
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00

CPNPPLocalPMP				
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	48.97
6.12	C & E Loss (ft)	0.00	Cum SA (acres)	1.03
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.12048*

INPUT

Description:

Station Elevation Data num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.66	11.53	820.43	17.03	820.32	26.82	820.12	68.9	819.28
197.01	819.28	204.92	820.07	224.22	822	227.22	822	237	822

Manning's n Values num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.53	.0127	17.03	.0129	26.82	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	26.82	224.22		.5	.5	.5		.1	.3

Blocked Obstructions num= 1			
Sta L	Sta R	Elev	
227.22	237	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.87	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.22	wt. n-val.		0.013
w.s. Elev (ft)	819.66	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.68	Flow Area (sq ft)		52.30
E.G. slope (ft/ft)	0.004341	Area (sq ft)		52.30
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	150.66	Top width (ft)		150.66
vel Total (ft/s)	3.75	Avg. vel. (ft/s)		3.75
Max Chl Dpth (ft)	0.38	Hydr. Depth (ft)		0.35
Conv. Total (cfs)	2974.8	Conv. (cfs)		2974.8
Length Wtd. (ft)	0.50	wetted Per. (ft)		150.68
Min Ch El (ft)	819.28	Shear (lb/sq ft)		0.09
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.97
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.03

CPNPPLocalPMP

0.00

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.10843*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.65	11.58	820.42	17.09	820.31	26.92	820.11	68.9	819.27			
196.91	819.27	204.85	820.06	224.22	822	227.22	822	237	822			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.58	.0127	17.09	.0129	26.92	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	26.92	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1	Sta L	Sta R	Elev
			227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.86	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.20	wt. n-val.		0.013
w.s. Elev (ft)	819.66	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.67	Flow Area (sq ft)		54.10
E.G. Slope (ft/ft)	0.003897	Area (sq ft)		54.10
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	151.27	Top width (ft)		151.27
Vel Total (ft/s)	3.62	Avg. vel. (ft/s)		3.62
Max Chl Dpth (ft)	0.39	Hydr. Depth (ft)		0.36
Conv. Total (cfs)	3139.8	Conv. (cfs)		3139.8
Length wtd. (ft)	0.50	wetted Per. (ft)		151.29
Min Ch El (ft)	819.27	Shear (lb/sq ft)		0.09
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.97
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.03
0.00				

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.09638*

INPUT

Description:

Station	Elevation	Data	num=	10	Station	Elevation	Station	Elevation	Station	Elevation
0	820.64	11.63	820.41	17.16	820.3	27.03	820.1	68.9	819.26	
196.81	819.26	204.78	820.06	224.22	822	227.22	822	237	822	

Manning's n	Values	num=	5	Station	n Val	Station	n Val	Station	n Val
0	.0066	11.63	.0127	17.16	.0129	27.03	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	27.03	224.22		.5	.5	.5		.1	.3
Blocked Obstructions	num=	1							
Sta L	Sta R	Elev							
227.22	237	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.85	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	819.67	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.66	Flow Area (sq ft)		57.75
E.G. Slope (ft/ft)	0.003170	Area (sq ft)		57.75
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	152.54	Top width (ft)		152.54
Vel Total (ft/s)	3.39	Avg. vel. (ft/s)		3.39
Max Chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3481.3	Conv. (cfs)		3481.3
Length wtd. (ft)	0.50	wetted Per. (ft)		152.57
Min Ch El (ft)	819.26	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.97
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.03
0.00				

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.08433*

INPUT

Description:

Station Elevation Data			num=	10					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.63	11.67	820.4	17.23	820.28	27.14	820.08	68.9	819.25
196.71	819.25	204.71	820.05	224.22	822	227.22	822	237	822

Manning's n Values			num=	5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.67	.0127	17.23	.0129	27.14	.0129	237	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	27.14	224.22		.5	.5		.1	.3

Blocked Obstructions			num=	1	
Sta L	Sta R	Elev			
227.22	237	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.84	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	819.68	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.65	Flow Area (sq ft)		60.33
E.G. slope (ft/ft)	0.002768	Area (sq ft)		60.33
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.66	Top width (ft)		153.66
vel Total (ft/s)	3.25	Avg. vel. (ft/s)		3.25
Max Chl Dpth (ft)	0.43	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3725.3	Conv. (cfs)		3725.3
Length wtd. (ft)	0.50	wetted Per. (ft)		153.69
Min Ch El (ft)	819.25	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.97
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.02
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.07228*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.62 11.72 820.38 17.3 820.27 27.25 820.07 68.9 819.24									
196.61 819.24 204.64 820.04 224.22 822 227.22 822 237 822									
Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 11.72 .0128 17.3 .0129 27.25 .0129 237 .0129									
Bank Sta: Left Right Lengths: Left Channel Right									
27.25 224.22 .5 .5 .5									
Coeff Contr. Expan.									
.1 .3									
Blocked Obstructions	num=	1							
Sta L Sta R Elev									
227.22 237 825									

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.83	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.19	wt. n-Val.		0.013
w.s. Elev (ft)	819.64	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.64	Flow Area (sq ft)		56.41
E.G. Slope (ft/ft)	0.003413	Area (sq ft)		56.41
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	152.00	Top width (ft)		152.00
Vel Total (ft/s)	3.47	Avg. Vel. (ft/s)		3.47
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3354.9	Conv. (cfs)		3354.9
Length wtd. (ft)	0.50	wetted Per. (ft)		152.02
Min Ch El (ft)	819.24	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.97
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.02
0.00				

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth

for the water surface and continued on with the calculations.

Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water

surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program

defaulted to critical depth.

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.06024*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.61	11.77	820.37	17.37	820.26	27.36	820.06	68.9	819.23		
196.51	819.23	204.57	820.04	224.22	822	227.22	822	237	822		

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.77	.0128	17.37	.0129	27.36	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	27.36	224.22		.5	.5		.1	.3
Blocked Obstructions	num= 1							
	Sta L	Sta R	Elev					
	227.22	237	825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.83	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.24	wt. n-val.		0.013
w.s. Elev (ft)	819.59	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.63	Flow Area (sq ft)		50.29
E.G. Slope (ft/ft)	0.004890	Area (sq ft)		50.29
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	149.40	Top width (ft)		149.40
Vel Total (ft/s)	3.90	Avg. vel. (ft/s)		3.90
Max Chl Dpth (ft)	0.36	Hydr. Depth (ft)		0.34
Conv. Total (cfs)	2802.9	Conv. (cfs)		2802.9
Length wtd. (ft)	0.50	wetted Per. (ft)		149.42
Min Ch El (ft)	819.23	Shear (lb/sq ft)		0.10
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.97
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.02
0.00				

CROSS SECTION

RIVER: Unit 3 East

CPNPPLocalPMP

REACH: Unit 3 East RS: 4.04819*

INPUT
Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.6	11.81	820.36	17.44	820.25	27.47	820.05	68.9	819.22		
196.42	819.22	204.5	820.03	224.22	822	227.22	822	237	822		

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.81	.0128	17.44	.0129	27.47	.0129	237	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	27.47	224.22		.5	.5	.5		.1	.3

Blocked Obstructions	num=	1
Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.82	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.22	wt. n-val.		0.013
w.s. Elev (ft)	819.60	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.62	Flow Area (sq ft)		52.18
E.G. slope (ft/ft)	0.004350	Area (sq ft)		52.18
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	150.04	Top width (ft)		150.04
vel Total (ft/s)	3.76	Avg. vel. (ft/s)		3.76
Max chl Dpth (ft)	0.38	Hydr. Depth (ft)		0.35
Conv. Total (cfs)	2971.9	Conv. (cfs)		2971.9
Length wtd. (ft)	0.50	wetted Per. (ft)		150.06
Min ch El (ft)	819.22	Shear (lb/sq ft)		0.09
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.97
6.12				
C & E Loss (ft)	0.01	Cum SA (acres)		1.02
0.00				

CROSS SECTION

RIVER: Unit 3 East
REACH: Unit 3 East RS: 4.03614*

INPUT
Description:

Station Elevation Data			num=	CPNPPLocalPMP		num=	Manning's n Values		Bank Sta: Left Right		Lengths: Left Channel		Right		Coeff Contr.		Expan.	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	n Val	Sta	n Val	Left	Right	Left	Channel	Right	Coeff	Contr.	Expan.	
0	820.59	11.86	820.35	17.51	820.24	27.57	820.04	68.9	819.21	27.57	224.22	.5	.5	.5	.1	.3		
196.32	819.21	204.43	820.02	224.22	822	227.22	822	237	822									
Blocked Obstructions			num=															
Sta L	Sta R	Elev																
227.22	237	825	1															

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	819.80			
Right OB Vel Head (ft)	0.20	wt. n-val.		0.013
w.s. Elev (ft)	819.60	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	819.61	Flow Area (sq ft)		53.96
E.G. Slope (ft/ft)	0.003910	Area (sq ft)		53.96
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	150.63	Top width (ft)		150.63
Vel Total (ft/s)	3.63	Avg. Vel. (ft/s)		3.63
Max Chl Dpth (ft)	0.39	Hydr. Depth (ft)		0.36
Conv. Total (cfs)	3134.7	Conv. (cfs)		3134.7
Length wtd. (ft)	0.50	wetted Per. (ft)		150.66
Min Ch El (ft)	819.21	Shear (lb/sq ft)		0.09
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.97
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.02
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.02409*

INPUT

Description:

Station Elevation Data			num=	CPNPPLocalPMP		num=	Manning's n Values		Bank Sta: Left Right		Lengths: Left Channel		Right		Coeff Contr.		Expan.	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	n Val	Sta	n Val	Left	Right	Left	Channel	Right	Coeff	Contr.	Expan.	
0	820.58	11.91	820.34	17.58	820.23	27.68	820.02	68.9	819.2	27.68	224.22	.5	.5	.5	.1	.3		
196.22	819.2	204.36	820.01	224.22	822	227.22	822	237	822									

CPNPPLocalPMP

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 0 .0066 11.91 .0129 17.58 .0129 27.68 .0129 237 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 27.68 224.22 .5 .5 .5 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.79	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	819.61	Reach Len. (ft)	0.50	0.50
0.50				
Crit w.s. (ft)	819.60	Flow Area (sq ft)		57.81
E.G. Slope (ft/ft)	0.003151	Area (sq ft)		57.81
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	152.27	Top width (ft)		152.27
Vel Total (ft/s)	3.39	Avg. vel. (ft/s)		3.39
Max chl Dpth (ft)	0.41	Hydr. Depth (ft)		0.38
Conv. Total (cfs)	3491.6	Conv. (cfs)		3491.6
Length wtd. (ft)	0.50	wetted Per. (ft)		152.29
Min ch El (ft)	819.20	Shear (lb/sq ft)		0.07
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.97
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.02
0.00				

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4.01204*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 820.57 11.95 820.33 17.65 820.22 27.79 820.01 68.9 819.19									
196.12 819.19 204.29 820.01 224.22 822 227.22 822 237 822									

CPNPPLocalPMP
 num= 5

Manning's n	Values	Sta	num=	Sta	num=	Sta	num=	Sta	num=	Sta	num=
0	.0066	11.95	.0129	17.65	.0129	27.79	.0129	237	.0129		

Bank Sta: Left 27.79 Right 224.22 Lengths: Left .5 Channel .5 Right .5 Coeff Contr. .1 Expan. .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
227.22	237	825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	819.78			
Right OB Vel Head (ft)	0.16	wt. n-val.		0.013
w.s. Elev (ft)	819.62	Reach Len. (ft)	0.50	0.50
0.50 Crit w.s. (ft)	819.59	Flow Area (sq ft)		60.25
E.G. slope (ft/ft)	0.002765	Area (sq ft)		60.25
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.06	Top width (ft)		153.06
vel Total (ft/s)	3.25	Avg. vel. (ft/s)		3.25
Max Chl Dpth (ft)	0.43	Hydr. Depth (ft)		0.39
Conv. Total (cfs)	3727.2	Conv. (cfs)		3727.2
Length wtd. (ft)	0.50	wetted Per. (ft)		153.08
Min Ch El (ft)	819.19	Shear (lb/sq ft)		0.07
Alpha 0.00	1.00	Stream Power (lb/ft s)	237.00	0.00
Frctn Loss (ft) 6.12	0.00	Cum volume (acre-ft)	3.68	48.97
C & E Loss (ft) 0.00	0.00	Cum SA (acres)		1.01

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 4

INPUT

Description:

Station	Elevation	Data	num=	Station	Elevation	Station	Elevation	Station	Elevation	Station	Elevation
0	820.56	12	9	27.9	820	68.9	819.18	196.02	819.18		
204.22	820	224.22		227.22	822	237	822				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12	.0129	237	.0129

Bank Sta: Left Right Lengths: CPNPPLocalPMP
 27.9 224.22 1 1 1
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 227.22 237 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.77	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.19	wt. n-Val.		0.013
W.S. Elev (ft)	819.58	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.58	Flow Area (sq ft)		56.30
E.G. Slope (ft/ft)	0.003416	Area (sq ft)		56.30
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	151.38	Top width (ft)		151.38
Vel Total (ft/s)	3.48	Avg. Vel. (ft/s)		3.48
Max Chl Dpth (ft)	0.40	Hydr. Depth (ft)		0.37
Conv. Total (cfs)	3353.3	Conv. (cfs)		3353.3
Length wtd. (ft)	1.00	wetted Per. (ft)		151.40
Min Ch El (ft)	819.18	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.96
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.01
0.00				

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.
 Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.98305*

INPUT

Description:

Station	Elevation	Data	num=	10						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	820.54	11.93	820.3	17.62	820.19	27.75	819.98	68.61	819.16	
198.85	819.16	206.91	819.97	226.57	821.93	229.52	821.93	239.14	821.93	

CPNPPLocalPMP

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 0 .0066 11.93 .0129 17.62 .0129 27.75 .0129 239.14 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 27.75 226.57 1 1 1 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.77	Element	Left OB	Channel
Right OB Vel Head (ft)	0.28	Wt. n-Val.		0.013
W.S. Elev (ft)	819.49	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	819.56	Flow Area (sq ft)		46.39
E.G. Slope (ft/ft)	0.006435	Area (sq ft)		46.39
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	150.03	Top width (ft)		150.03
Vel Total (ft/s)	4.22	Avg. Vel. (ft/s)		4.22
Max chl Dpth (ft)	0.33	Hydr. Depth (ft)		0.31
Conv. Total (cfs)	2443.4	Conv. (cfs)		2443.4
Length wtd. (ft)	1.00	wetted Per. (ft)		150.05
Min ch El (ft)	819.16	Shear (lb/sq ft)		0.12
Alpha	1.00	Stream Power (lb/ft s)	239.14	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.96
6.12 C & E Loss (ft)	0.01	Cum SA (acres)		1.01
0.00				

Note: Program found supercritical flow starting at this cross section.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.96610*

INPUT

Description:

Station	Elevation	Data	num=	10					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.52	11.87	820.28	17.52	820.17	27.59	819.97	68.32	819.14
201.68	819.14	209.6	819.93	228.93	821.86	231.83	821.86	241.27	821.86

Manning's n Values num= 5
 Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val
 0 .0066 11.87 .0128 17.52 .0129 27.59 .0129 241.27 .0129

Bank Sta: Left Right Lengths: CPNPPLocalPMP
 27.59 228.93 1 1 1 Right Coeff Contr. Expan.
 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.76	Element	Left OB	Channel
Right OB Vel Head (ft)	0.32	wt. n-Val.		0.013
W.S. Elev (ft)	819.44	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	819.53	Flow Area (sq ft)		43.21
E.G. Slope (ft/ft)	0.008247	Area (sq ft)		43.21
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	151.30	Top width (ft)		151.30
Vel Total (ft/s)	4.54	Avg. Vel. (ft/s)		4.54
Max Chl Dpth (ft)	0.30	Hydr. Depth (ft)		0.29
Conv. Total (cfs)	2158.3	Conv. (cfs)		2158.3
Length wtd. (ft)	1.00	wetted Per. (ft)		151.32
Min Ch El (ft)	819.14	Shear (lb/sq ft)		0.15
Alpha 0.00	1.00	Stream Power (lb/ft s)	241.27	0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.68	48.96
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		1.01
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.94915*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.5 11.8 820.26	17.42	820.15	27.44	819.95	68.03	819.12			
204.51 819.12 212.3	819.9	231.28	821.8	234.13	821.8	243.41	821.8		

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 11.8 .0128	17.42	.0129	27.44	.0129	243.41	.0129			

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 27.44 231.28 1 1 1 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.75	Element	Left OB	Channel
		Page 575		

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.35	wt. n-val.		0.013
w.s. Elev (ft)	819.41	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.51	Flow Area (sq ft)		41.39
E.G. slope (ft/ft)	0.009689	Area (sq ft)		41.39
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	153.30	Top width (ft)		153.30
Vel Total (ft/s)	4.74	Avg. Vel. (ft/s)		4.74
Max chl Dpth (ft)	0.29	Hydr. Depth (ft)		0.27
Conv. Total (cfs)	1991.2	Conv. (cfs)		1991.2
Length wtd. (ft)	1.00	wetted Per. (ft)		153.32
Min ch El (ft)	819.12	Shear (lb/sq ft)		0.16
Alpha	1.00	Stream Power (lb/ft s)	243.41	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.68	48.96
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.00
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.93220*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
0	820.48	11.74	820.25
207.35	819.1	214.99	819.86

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	11.74	.0128
		17.33	.0129
		27.29	.0129
		245.55	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	27.29	233.63		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.74	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.		0.013
w.s. Elev (ft)	819.37	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.48	Flow Area (sq ft)		40.53

		CPNPPLocalPMP		
E.G. Slope (ft/ft)	0.010607	Area (sq ft)		40.53
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	155.75	Top Width (ft)		155.75
Vel Total (ft/s)	4.84	Avg. Vel. (ft/s)		4.84
Max Chl Dpth (ft)	0.27	Hydr. Depth (ft)		0.26
Conv. Total (cfs)	1903.1	Conv. (cfs)		1903.1
Length wtd. (ft)	1.00	wetted Per. (ft)		155.76
Min Ch El (ft)	819.10	Shear (lb/sq ft)		0.17
Alpha	1.00	Stream Power (lb/ft s)	245.55	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.68	48.96
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		1.00
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.91525*

INPUT

Description:

Station Elevation Data		num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.46	11.67	820.23	17.23	820.11	27.14	819.92	67.45	819.08		
210.18	819.08	217.68	819.83	235.99	821.66	238.73	821.66	247.68	821.66		

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.67	.0127	17.23	.0129	27.14	.0129	247.68	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	27.14	235.99		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.72	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.37	wt. n-val.		0.013
W.S. Elev (ft)	819.35	Reach Len. (ft)	1.00	1.00
1.00				
Crit W.S. (ft)	819.46	Flow Area (sq ft)		39.98
E.G. Slope (ft/ft)	0.011335	Area (sq ft)		39.98
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	158.14	Top Width (ft)		158.14
Vel Total (ft/s)	4.90	Avg. Vel. (ft/s)		4.90
		Page 577		

CPNPPLocalPMP

Max Chl Dpth (ft)	0.27	Hydr. Depth (ft)	0.25
Conv. Total (cfs)	1841.0	Conv. (cfs)	1841.0
Length wtd. (ft)	1.00	wetted Per. (ft)	158.16
Min Ch El (ft)	819.08	Shear (lb/sq ft)	0.18
Alpha	1.00	Stream Power (lb/ft s)	247.68
0.00			0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.68
6.12			48.96
C & E Loss (ft)	0.00	Cum SA (acres)	1.00
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.89830*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.44 11.61 820.21	17.13	820.1	26.98	819.9	67.16	819.06			
213.01 819.06 220.37	819.8	238.34	821.59	241.04	821.59	249.82	821.59		

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 11.61 .0127	17.13	.0129	26.98	.0129	249.82	.0129			

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
26.98 238.34	1 1 1	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.70	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.38	wt. n-Val.		0.013
w.s. Elev (ft)	819.32	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.43	Flow Area (sq ft)		39.37
E.G. Slope (ft/ft)	0.012181	Area (sq ft)		39.37
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	160.69	Top width (ft)		160.69
Vel Total (ft/s)	4.98	Avg. Vel. (ft/s)		4.98
Max Chl Dpth (ft)	0.26	Hydr. Depth (ft)		0.25
Conv. Total (cfs)	1775.9	Conv. (cfs)		1775.9
Length wtd. (ft)	1.00	wetted Per. (ft)		160.71

Min Ch El (ft)	819.06	CPNPPLocalPMP Shear (lb/sq ft)		0.19
Alpha 0.00	1.00	Stream Power (lb/ft s)	249.82	0.00
Frctn Loss (ft) 6.12	0.01	Cum Volume (acre-ft)	3.68	48.96
C & E Loss (ft) 0.00	0.00	Cum SA (acres)		0.99

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.88135*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.42	11.54	820.19	17.04	820.08	26.83	819.88	66.87	819.04			
215.84	819.04	223.07	819.76	240.69	821.53	243.34	821.53	251.96	821.53			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.54	.0127	17.04	.0129	26.83	.0129	251.96	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	26.83	240.69		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.68	Element	Left OB	Channel
Right OB Vel Head (ft)	0.39	wt. n-val.		0.013
w.s. Elev (ft)	819.29	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	819.41	Flow Area (sq ft)		38.94
E.G. slope (ft/ft)	0.012925	Area (sq ft)		38.94
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	163.36	Top width (ft)		163.36
vel Total (ft/s)	5.03	Avg. vel. (ft/s)		5.03
Max Chl Dpth (ft)	0.25	Hydr. Depth (ft)		0.24
Conv. Total (cfs)	1724.0	Conv. (cfs)		1724.0
Length Wtd. (ft)	1.00	wetted Per. (ft)		163.37
Min Ch El (ft)	819.04	Shear (lb/sq ft)		0.19
Alpha 0.00	1.00	Stream Power (lb/ft s)	251.96	0.00
Frctn Loss (ft) 6.12	0.01	Cum Volume (acre-ft)	3.68	48.96
C & E Loss (ft) 0.00	0.00	Cum SA (acres)		0.99

CPNPPLocalPMP

0.00

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.86440*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.4	11.48	820.17	16.94	820.06	26.68	819.86	66.57	819.02			
218.67	819.02	225.76	819.73	243.05	821.46	245.64	821.46	254.09	821.46			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.48	.0126	16.94	.0129	26.68	.0129	254.09	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	26.68	243.05		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.67	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.41	wt. n-val.		0.013
w.s. Elev (ft)	819.26	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.38	Flow Area (sq ft)		38.36
E.G. Slope (ft/ft)	0.013873	Area (sq ft)		38.36
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	165.96	Top width (ft)		165.96
Vel Total (ft/s)	5.11	Avg. vel. (ft/s)		5.11
Max Chl Dpth (ft)	0.24	Hydr. Depth (ft)		0.23
Conv. Total (cfs)	1664.1	Conv. (cfs)		1664.1
Length wtd. (ft)	1.00	wetted Per. (ft)		165.98
Min Ch El (ft)	819.02	Shear (lb/sq ft)		0.20
Alpha	1.00	Stream Power (lb/ft s)	254.09	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	3.68	48.96
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.98
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.84745*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	820.38	11.41	820.15	16.84	820.04	26.53	819.85	66.28	819	
221.5	819	228.45	819.69	245.4	821.39	247.94	821.39	256.23	821.39	

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.41	.0126	16.84	.0129	26.53	.0129	256.23	.0129

Bank Sta: Left 26.53 Right 245.4 Lengths: Left Channel 1 Right 1 Coeff Contr. .1 Expan. .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.64	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.41	wt. n-val.		0.013
w.s. Elev (ft)	819.24	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.36	Flow Area (sq ft)		38.29
E.G. Slope (ft/ft)	0.014260	Area (sq ft)		38.29
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	168.66	Top width (ft)		168.66
Vel Total (ft/s)	5.12	Avg. vel. (ft/s)		5.12
Max Chl Dpth (ft)	0.24	Hydr. Depth (ft)		0.23
Conv. Total (cfs)	1641.3	Conv. (cfs)		1641.3
Length wtd. (ft)	1.00	wetted Per. (ft)		168.67
Min Ch El (ft)	819.00	Shear (lb/sq ft)		0.20
Alpha	1.00	Stream Power (lb/ft s)	256.23	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.68	48.96
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.98
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.83050*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPPLocalPMP							
0	820.36	11.34	820.13	16.75	820.02	26.37	819.83	65.99	818.98
224.33	818.98	231.14	819.66	247.75	821.32	250.25	821.32	258.37	821.32
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.34	.0126	16.75	.0129	26.37	.0129	258.37	.0129
Bank Sta:	Left	Right	Lengths:		Left Channel	Right	Coeff	Contr.	Expan.
	26.37	247.75	1	1	1		.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.62	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.41	wt. n-val.		0.013
w.s. Elev (ft)	819.21	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.33	Flow Area (sq ft)		38.06
E.G. slope (ft/ft)	0.014869	Area (sq ft)		38.06
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	171.41	Top width (ft)		171.41
vel Total (ft/s)	5.15	Avg. vel. (ft/s)		5.15
Max Chl Dpth (ft)	0.23	Hydr. Depth (ft)		0.22
Conv. Total (cfs)	1607.4	Conv. (cfs)		1607.4
Length wtd. (ft)	1.00	wetted Per. (ft)		171.42
Min Ch El (ft)	818.98	Shear (lb/sq ft)		0.21
Alpha	1.00	Stream Power (lb/ft s)	258.37	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	3.68	48.96
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.98
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.81355*

INPUT

Description:

Station Elevation Data		num=		10					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.34	11.28	820.11	16.65	820.01	26.22	819.81	65.7	818.96
227.16	818.96	233.84	819.63	250.11	821.25	252.55	821.25	260.5	821.25
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.28	.0125	16.65	.0129	26.22	.0129	260.5	.0129

Bank Sta: Left Right Lengths: CPNPPLocalPMP
 26.22 250.11 1 1 1 Right Coeff Contr. Expan.
 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.61	Element	Left OB	Channel
Right OB Vel Head (ft)	0.42	wt. n-Val.		0.013
W.S. Elev (ft)	819.18	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	819.31	Flow Area (sq ft)		37.48
E.G. Slope (ft/ft)	0.015978	Area (sq ft)		37.48
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	174.06	Top width (ft)		174.06
Vel Total (ft/s)	5.23	Avg. Vel. (ft/s)		5.23
Max Chl Dpth (ft)	0.22	Hydr. Depth (ft)		0.22
Conv. Total (cfs)	1550.6	Conv. (cfs)		1550.6
Length wtd. (ft)	1.00	wetted Per. (ft)		174.08
Min Ch El (ft)	818.96	Shear (lb/sq ft)		0.21
Alpha 0.00	1.00	Stream Power (lb/ft s)	260.50	0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.95
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		0.97
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.79661*

INPUT

Description:

Station Elevation Data	num=	10								
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.32 11.21 820.1	16.55	819.99	26.07	819.8	65.41	818.94				
230 818.94 236.53 819.59	252.46	821.19	254.85	821.19	262.64	821.19				

Manning's n Values	num=	5								
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 11.21 .0125	16.55	.0129	26.07	.0129	262.64	.0129				

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 26.07 252.46 1 1 1 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.59	Element	Left OB	Channel
----------------	--------	---------	---------	---------

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.43	wt. n-Val.		0.013
w.S. Elev (ft)	819.16	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.S. (ft)	819.29	Flow Area (sq ft)		37.35
E.G. Slope (ft/ft)	0.016498	Area (sq ft)		37.35
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	176.80	Top width (ft)		176.80
Vel Total (ft/s)	5.25	Avg. Vel. (ft/s)		5.25
Max chl Dpth (ft)	0.22	Hydr. Depth (ft)		0.21
Conv. Total (cfs)	1526.0	Conv. (cfs)		1526.0
Length wtd. (ft)	1.00	wetted Per. (ft)		176.81
Min ch El (ft)	818.94	Shear (lb/sq ft)		0.22
Alpha	1.00	Stream Power (lb/ft s)	262.64	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.95
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.97
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.77966*

INPUT

Description:

Station Elevation Data	num=	10								
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.3 11.15 820.08	16.46 819.97	25.92 819.78	65.12 818.92	232.83 818.92	239.22 819.56	254.81 821.12	257.15 821.12	264.78 821.12		

Manning's n Values	num=	5								
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 11.15 .0125	16.46 .0129	25.92 .0129	264.78 .0129							

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff	Contr.	Expan.
25.92 254.81	1 1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.56	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.43	wt. n-Val.		0.013
w.S. Elev (ft)	819.14	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.S. (ft)	819.26	Flow Area (sq ft)		37.45

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.016715	Area (sq ft)	37.45
Q Total (cfs)	196.00	Flow (cfs)	196.00
Top Width (ft)	179.69	Top Width (ft)	179.69
Vel Total (ft/s)	5.23	Avg. Vel. (ft/s)	5.23
Max Chl Dpth (ft)	0.22	Hydr. Depth (ft)	0.21
Conv. Total (cfs)	1516.0	Conv. (cfs)	1516.0
Length wtd. (ft)	1.00	wetted Per. (ft)	179.70
Min Ch El (ft)	818.92	Shear (lb/sq ft)	0.22
Alpha	1.00	Stream Power (lb/ft s)	264.78
0.00			0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68
6.12			48.95
C & E Loss (ft)	0.00	Cum SA (acres)	0.96
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.76271*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
0	820.28	11.08	820.06
235.66	818.9	241.91	819.53

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	11.08	.0124
		16.36	.0129
		25.76	.0129
		266.91	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	25.76	257.17		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.54	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.43	wt. n-val.		0.013
W.S. Elev (ft)	819.11	Reach Len. (ft)	1.00	1.00
1.00				
Crit W.S. (ft)	819.24	Flow Area (sq ft)		37.03
E.G. Slope (ft/ft)	0.017700	Area (sq ft)		37.03
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	182.43	Top Width (ft)		182.43
Vel Total (ft/s)	5.29	Avg. Vel. (ft/s)		5.29
		Page 585		

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Max Chl Dpth (ft)	0.21	Hydr. Depth (ft)	0.20
Conv. Total (cfs)	1473.2	Conv. (cfs)	1473.2
Length wtd. (ft)	1.00	wetted Per. (ft)	182.45
Min Ch El (ft)	818.90	Shear (lb/sq ft)	0.22
Alpha	1.00	Stream Power (lb/ft s)	266.91
0.00			0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68
6.12			48.95
C & E Loss (ft)	0.00	Cum SA (acres)	0.96
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.74576*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.26 11.02 820.04	16.26 819.93	25.61 819.75	64.54 818.88	238.49 818.88	244.61 819.49	259.52 820.98	261.76 820.98	269.05 820.98	

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 11.02 .0124	16.26 .0129	25.61 .0129	269.05 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
25.61 259.52	1 1 1	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.52	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.43	wt. n-Val.		0.013
w.s. Elev (ft)	819.09	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.21	Flow Area (sq ft)		37.12
E.G. Slope (ft/ft)	0.017926	Area (sq ft)		37.12
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	185.27	Top width (ft)		185.27
Vel Total (ft/s)	5.28	Avg. Vel. (ft/s)		5.28
Max Chl Dpth (ft)	0.21	Hydr. Depth (ft)		0.20
Conv. Total (cfs)	1463.9	Conv. (cfs)		1463.9
Length wtd. (ft)	1.00	wetted Per. (ft)		185.28

Min Ch El (ft)	818.88	CPNPPLocalPMP Shear (lb/sq ft)		0.22
Alpha 0.00	1.00	Stream Power (lb/ft s)	269.05	0.00
Frctn Loss (ft) 6.12	0.02	Cum Volume (acre-ft)	3.68	48.95
C & E Loss (ft) 0.00	0.00	Cum SA (acres)		0.96

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.72881*

INPUT

Description:

Station	Elevation	Data	num=	10					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.24	10.95	820.02	16.16	819.92	25.46	819.73	64.25	818.86
241.32	818.86	247.3	819.46	261.87	820.92	264.06	820.92	271.19	820.92

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val		
0	.0066	10.95	.0123	16.16	.0129	25.46	.0129	271.19	.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
25.46	261.87	1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.49	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.43	wt. n-val.		0.013
w.s. Elev (ft)	819.06	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.19	Flow Area (sq ft)		37.36
E.G. slope (ft/ft)	0.017923	Area (sq ft)		37.36
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	188.23	Top width (ft)		188.23
vel Total (ft/s)	5.25	Avg. vel. (ft/s)		5.25
Max Chl Dpth (ft)	0.20	Hydr. Depth (ft)		0.20
Conv. Total (cfs)	1464.0	Conv. (cfs)		1464.0
Length wtd. (ft)	1.00	wetted Per. (ft)		188.24
Min Ch El (ft)	818.86	Shear (lb/sq ft)		0.22
Alpha	1.00	Stream Power (lb/ft s)	271.19	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.95
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.95
0.00				

CPNPPLocalPMP

0.00

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.71186*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.22	10.88	820	16.07	819.9	25.31	819.71	63.96	818.84			
244.15	818.84	249.99	819.42	264.23	820.85	266.36	820.85	273.33	820.85			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.88	.0123	16.07	.0129	25.31	.0129	273.33	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	25.31	264.23		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.46	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.42	wt. n-val.		0.013
w.s. Elev (ft)	819.04	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.17	Flow Area (sq ft)		37.57
E.G. Slope (ft/ft)	0.017954	Area (sq ft)		37.57
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	191.22	Top width (ft)		191.22
Vel Total (ft/s)	5.22	Avg. vel. (ft/s)		5.22
Max Chl Dpth (ft)	0.20	Hydr. Depth (ft)		0.20
Conv. Total (cfs)	1462.8	Conv. (cfs)		1462.8
Length wtd. (ft)	1.00	wetted Per. (ft)		191.23
Min Ch El (ft)	818.84	Shear (lb/sq ft)		0.22
Alpha	1.00	Stream Power (lb/ft s)	273.33	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.95
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.95
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.69491*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	820.2	10.82	819.98	15.97	819.88	25.15	819.69	63.67	818.82	
246.98	818.82	252.68	819.39	266.58	820.78	268.67	820.78	275.46	820.78	

Manning's n Values

num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.82	.0123	15.97	.0129	25.15	.0129	275.46	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	25.15	266.58		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.44	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.42	wt. n-val.		0.013
w.s. Elev (ft)	819.02	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.14	Flow Area (sq ft)		37.77
E.G. Slope (ft/ft)	0.018004	Area (sq ft)		37.77
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	194.17	Top width (ft)		194.17
Vel Total (ft/s)	5.19	Avg. vel. (ft/s)		5.19
Max chl Dpth (ft)	0.20	Hydr. Depth (ft)		0.19
Conv. Total (cfs)	1460.8	Conv. (cfs)		1460.8
Length wtd. (ft)	1.00	wetted Per. (ft)		194.18
Min ch El (ft)	818.82	Shear (lb/sq ft)		0.22
Alpha	1.00	Stream Power (lb/ft s)	275.46	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.95
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.94
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.67796*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPP		Local		PMP				
0	820.18	10.75	819.96	15.87	819.86	25	819.68	63.38	818.8	
249.82	818.8	255.38	819.36	268.93	820.71	270.97	820.71	277.6	820.71	
Manning's n Values		num=		5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
0	.0066	10.75	.0122	15.87	.0129	25	.0129	277.6	.0129	
Bank Sta:	Left	Right	Lengths:		Left	Channel	Right	Coeff	Contr.	Expan.
	25	268.93	1	1	1			.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.41	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.41	wt. n-val.		0.013
w.s. Elev (ft)	819.00	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.12	Flow Area (sq ft)		37.93
E.G. slope (ft/ft)	0.018110	Area (sq ft)		37.93
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	197.03	Top width (ft)		197.03
vel Total (ft/s)	5.17	Avg. vel. (ft/s)		5.17
Max Chl Dpth (ft)	0.20	Hydr. Depth (ft)		0.19
Conv. Total (cfs)	1456.5	Conv. (cfs)		1456.5
Length wtd. (ft)	1.00	wetted Per. (ft)		197.04
Min Ch El (ft)	818.80	Shear (lb/sq ft)		0.22
Alpha	1.00	Stream Power (lb/ft s)	277.60	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.95
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.94
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.66101*

INPUT

Description:

Station		Elevation Data		num=		10			
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.16	10.69	819.95	15.78	819.84	24.85	819.66	63.09	818.78
252.65	818.78	258.07	819.32	271.29	820.64	273.27	820.64	279.74	820.64
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.69	.0122	15.78	.0129	24.85	.0129	279.74	.0129

Bank Sta: Left Right Lengths: CPNPPLocalPMP
 24.85 271.29 1 1 1 Coeff Contr. Expan.
 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.39	Element	Left OB	Channel
Right OB Vel Head (ft)	0.41	wt. n-Val.		0.013
w.s. Elev (ft)	818.98	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	819.10	Flow Area (sq ft)		38.17
E.G. Slope (ft/ft)	0.018099	Area (sq ft)		38.17
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	200.04	Top width (ft)		200.04
Vel Total (ft/s)	5.14	Avg. Vel. (ft/s)		5.14
Max Chl Dpth (ft)	0.20	Hydr. Depth (ft)		0.19
Conv. Total (cfs)	1456.9	Conv. (cfs)		1456.9
Length wtd. (ft)	1.00	wetted Per. (ft)		200.05
Min Ch El (ft)	818.78	Shear (lb/sq ft)		0.22
Alpha 0.00	1.00	Stream Power (lb/ft s)	279.74	0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.95
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		0.93
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.64406*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.14 10.62 819.93	15.68	819.83	24.7	819.64	62.8	818.76			
255.48 818.76 260.76 819.29	273.64	820.58	275.57	820.58	281.87	820.58			

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 10.62 .0122	15.68	.0129	24.7	.0129	281.87	.0129			

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 24.7 273.64 1 1 1 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.36	Element	Left OB	Channel
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		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.41	wt. n-Val.		0.013
w.s. Elev (ft)	818.95	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.07	Flow Area (sq ft)		38.28
E.G. slope (ft/ft)	0.018277	Area (sq ft)		38.28
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	202.98	Top width (ft)		202.98
Vel Total (ft/s)	5.12	Avg. Vel. (ft/s)		5.12
Max chl Dpth (ft)	0.19	Hydr. Depth (ft)		0.19
Conv. Total (cfs)	1449.8	Conv. (cfs)		1449.8
Length wtd. (ft)	1.00	wetted Per. (ft)		203.00
Min ch El (ft)	818.76	Shear (lb/sq ft)		0.22
Alpha	1.00	Stream Power (lb/ft s)	281.87	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.95
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.93
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.62711*

INPUT

Description:

Station Elevation Data	num=	10								
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.12 10.56 819.91	15.58 819.81	24.54 819.63	62.51 818.74	258.31 818.74	263.45 819.25	275.99 820.51	277.88 820.51	284.01 820.51		

Manning's n Values	num=	5								
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 10.56 .0121	15.58 .0129	24.54 .0129	284.01 .0129							

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff	Contr.	Expan.
24.54 275.99	1 1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.34	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.41	wt. n-Val.		0.013
w.s. Elev (ft)	818.93	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.05	Flow Area (sq ft)		38.17

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.018798	Area (sq ft)	38.17
Q Total (cfs)	196.00	Flow (cfs)	196.00
Top Width (ft)	205.82	Top Width (ft)	205.82
Vel Total (ft/s)	5.14	Avg. Vel. (ft/s)	5.14
Max Chl Dpth (ft)	0.19	Hydr. Depth (ft)	0.19
Conv. Total (cfs)	1429.6	Conv. (cfs)	1429.6
Length wtd. (ft)	1.00	wetted Per. (ft)	205.84
Min Ch El (ft)	818.74	Shear (lb/sq ft)	0.22
Alpha	1.00	Stream Power (lb/ft s)	284.01
0.00			
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68
6.12			
C & E Loss (ft)	0.00	Cum SA (acres)	0.92
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.61016*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
0	820.1	10.49	819.89
261.14	818.72	266.14	819.22

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	10.49	.0121
		15.49	.0129
		24.39	.0129
		286.15	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	24.39	278.35		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.32	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.41	wt. n-val.		0.013
W.S. Elev (ft)	818.91	Reach Len. (ft)	1.00	1.00
1.00				
Crit W.S. (ft)	819.03	Flow Area (sq ft)		38.18
E.G. Slope (ft/ft)	0.019128	Area (sq ft)		38.18
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	208.76	Top Width (ft)		208.76
Vel Total (ft/s)	5.13	Avg. Vel. (ft/s)		5.13
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Max Chl Dpth (ft)	0.19	Hydr. Depth (ft)	0.18
Conv. Total (cfs)	1417.2	Conv. (cfs)	1417.2
Length wtd. (ft)	1.00	wetted Per. (ft)	208.77
Min Ch El (ft)	818.72	Shear (lb/sq ft)	0.22
Alpha	1.00	Stream Power (lb/ft s)	286.15
0.00			0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68
6.12			48.94
C & E Loss (ft)	0.00	Cum SA (acres)	0.92
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.59322*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 820.08 10.43 819.87	15.39 819.77	24.24 819.59	61.92 818.7	263.97 818.7	268.84 819.19	280.7 820.37	282.48 820.37	288.28 820.37	

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 10.43 .0121	15.39 .0129	24.24 .0129	288.28 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
24.24 280.7	1 1 1	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.29	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.41	wt. n-Val.		0.013
w.s. Elev (ft)	818.89	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.00	Flow Area (sq ft)		38.30
E.G. Slope (ft/ft)	0.019296	Area (sq ft)		38.30
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	211.73	Top width (ft)		211.73
Vel Total (ft/s)	5.12	Avg. Vel. (ft/s)		5.12
Max Chl Dpth (ft)	0.19	Hydr. Depth (ft)		0.18
Conv. Total (cfs)	1411.0	Conv. (cfs)		1411.0
Length wtd. (ft)	1.00	wetted Per. (ft)		211.74

Min Ch El (ft)	818.70	CPNPPLocalPMP Shear (lb/sq ft)	0.22
Alpha 0.00	1.00	Stream Power (lb/ft s)	288.28
Frctn Loss (ft) 6.12	0.02	Cum Volume (acre-ft)	3.68
C & E Loss (ft) 0.00	0.00	Cum SA (acres)	0.91

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.57627*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 820.06 10.36 819.85 15.29 819.75 24.09 819.58 61.63 818.68		
266.8 818.68 271.53 819.15 283.05 820.31 284.78 820.31 290.42 820.31		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 10.36 .012 15.29 .0129 24.09 .0129 290.42 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
24.09 283.05	1 1 1	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.27	Element	Left OB	Channel
Right OB Vel Head (ft)	0.40	wt. n-val.		0.013
w.s. Elev (ft)	818.86	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	818.98	Flow Area (sq ft)		38.42
E.G. slope (ft/ft)	0.019442	Area (sq ft)		38.42
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	214.65	Top width (ft)		214.65
vel Total (ft/s)	5.10	Avg. vel. (ft/s)		5.10
Max Chl Dpth (ft)	0.18	Hydr. Depth (ft)		0.18
Conv. Total (cfs)	1405.7	Conv. (cfs)		1405.7
Length Wtd. (ft)	1.00	wetted Per. (ft)		214.66
Min Ch El (ft)	818.68	Shear (lb/sq ft)		0.22
Alpha 0.00	1.00	Stream Power (lb/ft s)	290.42	0.00
Frctn Loss (ft) 6.12	0.02	Cum Volume (acre-ft)	3.68	48.94
C & E Loss (ft) 0.00	0.00	Cum SA (acres)		0.91

CPNPPLocalPMP

0.00

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.55932*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	820.04	10.29	819.83	15.2	819.74	23.93	819.56	61.34	818.66			
269.64	818.66	274.22	819.12	285.41	820.24	287.09	820.24	292.56	820.24			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.29	.012	15.2	.0129	23.93	.0129	292.56	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.93	285.41		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.40	wt. n-val.		0.013
w.s. Elev (ft)	818.84	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.96	Flow Area (sq ft)		38.59
E.G. Slope (ft/ft)	0.019514	Area (sq ft)		38.59
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	217.64	Top width (ft)		217.64
Vel Total (ft/s)	5.08	Avg. vel. (ft/s)		5.08
Max Chl Dpth (ft)	0.18	Hydr. Depth (ft)		0.18
Conv. Total (cfs)	1403.1	Conv. (cfs)		1403.1
Length wtd. (ft)	1.00	wetted Per. (ft)		217.65
Min Ch El (ft)	818.66	Shear (lb/sq ft)		0.22
Alpha	1.00	Stream Power (lb/ft s)	292.56	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.94
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.90
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.54237*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	820.02	10.23	819.82	15.1	819.72	23.78	819.54	61.05	818.64	
272.47	818.64	276.91	819.08	287.76	820.17	289.39	820.17	294.69	820.17	

Manning's n Values

num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.23	.012	15.1	.0129	23.78	.0129	294.69	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.78	287.76		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.22	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.40	wt. n-val.		0.013
w.s. Elev (ft)	818.82	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.94	Flow Area (sq ft)		38.81
E.G. Slope (ft/ft)	0.019514	Area (sq ft)		38.81
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	220.67	Top width (ft)		220.67
Vel Total (ft/s)	5.05	Avg. vel. (ft/s)		5.05
Max chl Dpth (ft)	0.18	Hydr. Depth (ft)		0.18
Conv. Total (cfs)	1403.1	Conv. (cfs)		1403.1
Length wtd. (ft)	1.00	wetted Per. (ft)		220.68
Min Ch El (ft)	818.64	Shear (lb/sq ft)		0.21
Alpha	1.00	Stream Power (lb/ft s)	294.69	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.94
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.90
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.52542*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPP		Local		PMP				
0	820	10.16	819.8	15	819.7	23.63	819.53	60.76	818.62	
275.3	818.62	279.61	819.05	290.11	820.1	291.69	820.1	296.83	820.1	
Manning's n Values		num=		5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
0	.0066	10.16	.0119	15	.0129	23.63	.0129	296.83	.0129	
Bank Sta:	Left	Right	Lengths:		Left	Channel	Right	Coeff	Contr.	Expan.
	23.63	290.11	1	1	1			.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.39	wt. n-val.		0.013
w.s. Elev (ft)	818.80	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.91	Flow Area (sq ft)		39.02
E.G. slope (ft/ft)	0.019508	Area (sq ft)		39.02
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	223.59	Top width (ft)		223.59
vel Total (ft/s)	5.02	Avg. vel. (ft/s)		5.02
Max Chl Dpth (ft)	0.18	Hydr. Depth (ft)		0.17
Conv. Total (cfs)	1403.3	Conv. (cfs)		1403.3
Length wtd. (ft)	1.00	wetted Per. (ft)		223.60
Min Ch El (ft)	818.62	Shear (lb/sq ft)		0.21
Alpha	1.00	Stream Power (lb/ft s)	296.83	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.94
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.89
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.50847*

INPUT

Description:

Station Elevation Data		num=		10					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.98	10.1	819.78	14.91	819.68	23.48	819.51	60.47	818.6
278.13	818.6	282.3	819.02	292.47	820.03	293.99	820.03	298.97	820.03
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.1	.0119	14.91	.0129	23.48	.0129	298.97	.0129

Bank Sta: Left Right Lengths: CPNPPLocalPMP
 23.48 292.47 1 1 1 Right Coeff Contr. Expan.
 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.16	Element	Left OB	Channel
Right OB Vel Head (ft)	0.39	wt. n-Val.		0.013
w.s. Elev (ft)	818.78	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	818.89	Flow Area (sq ft)		39.22
E.G. Slope (ft/ft)	0.019512	Area (sq ft)		39.22
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	226.59	Top width (ft)		226.59
Vel Total (ft/s)	5.00	Avg. Vel. (ft/s)		5.00
Max Chl Dpth (ft)	0.18	Hydr. Depth (ft)		0.17
Conv. Total (cfs)	1403.2	Conv. (cfs)		1403.2
Length wtd. (ft)	1.00	wetted Per. (ft)		226.60
Min Ch El (ft)	818.60	Shear (lb/sq ft)		0.21
Alpha 0.00	1.00	Stream Power (lb/ft s)	298.97	0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.94
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		0.89
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.49152*

INPUT

Description:

Station Elevation Data	num=	10								
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 819.96 10.03 819.76	14.81 819.66	23.32 819.49	60.18 818.58	280.96 818.58	284.99 818.98	294.82 819.97	296.3 819.97	301.1 819.97		

Manning's n Values	num=	5								
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 10.03 .0119	14.81 .0129	23.32 .0129	301.1 .0129							

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 23.32 294.82 1 1 1 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.14	Element	Left OB	Channel
		Page 599		

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.38	wt. n-Val.		0.013
w.s. Elev (ft)	818.76	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.87	Flow Area (sq ft)		39.44
E.G. Slope (ft/ft)	0.019504	Area (sq ft)		39.44
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	229.64	Top width (ft)		229.64
Vel Total (ft/s)	4.97	Avg. Vel. (ft/s)		4.97
Max chl Dpth (ft)	0.18	Hydr. Depth (ft)		0.17
Conv. Total (cfs)	1403.4	Conv. (cfs)		1403.4
Length wtd. (ft)	1.00	wetted Per. (ft)		229.65
Min ch El (ft)	818.58	Shear (lb/sq ft)		0.21
Alpha	1.00	Stream Power (lb/ft s)	301.10	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.94
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.88
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.47457*

INPUT

Description:

Station Elevation Data		num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.94	9.97	819.74	14.71	819.65	23.17	819.47	59.89	818.56		
283.79	818.56	287.68	818.95	297.18	819.9	298.6	819.9	303.24	819.9		

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.97	.0118	14.71	.0129	23.17	.0129	303.24	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.17	297.18		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.11	Element		Left OB	Channel
Right OB					
Vel Head (ft)	0.38	wt. n-Val.			0.013
w.s. Elev (ft)	818.73	Reach Len. (ft)		1.00	1.00
1.00					
Crit w.s. (ft)	818.84	Flow Area (sq ft)			39.64

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.019511	Area (sq ft)	39.64
Q Total (cfs)	196.00	Flow (cfs)	196.00
Top Width (ft)	232.64	Top Width (ft)	232.64
Vel Total (ft/s)	4.94	Avg. Vel. (ft/s)	4.94
Max Chl Dpth (ft)	0.17	Hydr. Depth (ft)	0.17
Conv. Total (cfs)	1403.2	Conv. (cfs)	1403.2
Length wtd. (ft)	1.00	wetted Per. (ft)	232.65
Min Ch El (ft)	818.56	Shear (lb/sq ft)	0.21
Alpha	1.00	Stream Power (lb/ft s)	303.24
0.00			
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68
6.12			
C & E Loss (ft)	0.00	Cum SA (acres)	0.88
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.45762*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
0	819.92	9.9	819.72
286.62	818.54	290.38	818.92

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	9.9	.0118

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	23.02	299.53		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.09	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.38	wt. n-val.		0.013
W.S. Elev (ft)	818.71	Reach Len. (ft)	1.00	1.00
1.00				
Crit W.S. (ft)	818.82	Flow Area (sq ft)		39.84
E.G. Slope (ft/ft)	0.019508	Area (sq ft)		39.84
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	235.57	Top Width (ft)		235.57
Vel Total (ft/s)	4.92	Avg. Vel. (ft/s)		4.92
		Page 601		

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Max Chl Dpth (ft)	0.17	Hydr. Depth (ft)	0.17
Conv. Total (cfs)	1403.3	Conv. (cfs)	1403.3
Length wtd. (ft)	1.00	wetted Per. (ft)	235.58
Min Ch El (ft)	818.54	Shear (lb/sq ft)	0.21
Alpha	1.00	Stream Power (lb/ft s)	305.38
0.00			
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68
6.12			
C & E Loss (ft)	0.00	Cum SA (acres)	0.87
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.44067*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 819.9 9.83 819.7	14.52 819.61	22.87 819.44	59.31 818.52	289.45 818.52	293.07 818.88	301.88 819.76	303.2 819.76	307.51 819.76	

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 9.83 .0118	14.52 .0129	22.87 .0129	307.51 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
22.87 301.88	1 1 1	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.06	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.37	wt. n-val.		0.013
w.s. Elev (ft)	818.69	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.80	Flow Area (sq ft)		40.04
E.G. Slope (ft/ft)	0.019513	Area (sq ft)		40.04
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	238.62	Top width (ft)		238.62
Vel Total (ft/s)	4.89	Avg. vel. (ft/s)		4.89
Max Chl Dpth (ft)	0.17	Hydr. Depth (ft)		0.17
Conv. Total (cfs)	1403.1	Conv. (cfs)		1403.1
Length wtd. (ft)	1.00	wetted Per. (ft)		238.64

Min Ch El (ft)	818.52	CPNPPLocalPMP Shear (lb/sq ft)	0.20
Alpha 0.00	1.00	Stream Power (lb/ft s)	307.51
Frctn Loss (ft) 6.12	0.02	Cum Volume (acre-ft)	3.68
C & E Loss (ft) 0.00	0.00	Cum SA (acres)	0.87

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.42372*

INPUT

Description:

Station	Elevation	Data	num=	10
Sta	Elev	Sta	Elev	Sta
0	819.88	9.77	819.68	14.42
292.29	818.5	295.76	818.85	304.24
				819.59
				22.71
				819.42
				59.02
				818.5
				819.69
				309.65
				819.69

Manning's n Values	num=	5
Sta	n Val	Sta
0	.0066	9.77
		14.42
		.0129
		22.71
		.0129
		309.65
		.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
22.71	304.24	1	1	1	.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.04	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.37	wt. n-val.		0.013
w.s. Elev (ft)	818.67	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.78	Flow Area (sq ft)		40.23
E.G. Slope (ft/ft)	0.019529	Area (sq ft)		40.23
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	241.64	Top width (ft)		241.64
Vel Total (ft/s)	4.87	Avg. Vel. (ft/s)		4.87
Max Chl Dpth (ft)	0.17	Hydr. Depth (ft)		0.17
Conv. Total (cfs)	1402.5	Conv. (cfs)		1402.5
Length Wtd. (ft)	1.00	wetted Per. (ft)		241.65
Min Ch El (ft)	818.50	Shear (lb/sq ft)		0.20
Alpha	1.00	Stream Power (lb/ft s)	309.65	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.93
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.86
0.00				

CPNPPLocalPMP

0.00

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.40678*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.86	9.7	819.67	14.32	819.57	22.56	819.41	58.73	818.48			
295.12	818.48	298.45	818.81	306.59	819.63	307.81	819.63	311.79	819.63			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.7	.0117	14.32	.0129	22.56	.0129	311.79	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	22.56	306.59		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.01	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.		0.013
w.s. Elev (ft)	818.65	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.75	Flow Area (sq ft)		40.43
E.G. Slope (ft/ft)	0.019535	Area (sq ft)		40.43
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	244.62	Top width (ft)		244.62
Vel Total (ft/s)	4.85	Avg. vel. (ft/s)		4.85
Max Chl Dpth (ft)	0.17	Hydr. Depth (ft)		0.17
Conv. Total (cfs)	1402.3	Conv. (cfs)		1402.3
Length wtd. (ft)	1.00	wetted Per. (ft)		244.63
Min Ch El (ft)	818.48	Shear (lb/sq ft)		0.20
Alpha	1.00	Stream Power (lb/ft s)	311.79	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.93
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.86
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.38983*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	819.84	9.64	819.65	14.23	819.56	22.41	819.39	58.44	818.46	
297.95	818.46	301.15	818.78	308.94	819.56	310.11	819.56	313.92	819.56	

Manning's n Values

num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.64	.0117	14.23	.0129	22.41	.0129	313.92	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	22.41	308.94		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.99	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.		0.013
w.s. Elev (ft)	818.63	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.73	Flow Area (sq ft)		40.63
E.G. Slope (ft/ft)	0.019527	Area (sq ft)		40.63
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	247.64	Top width (ft)		247.64
Vel Total (ft/s)	4.82	Avg. vel. (ft/s)		4.82
Max chl Dpth (ft)	0.17	Hydr. Depth (ft)		0.16
Conv. Total (cfs)	1402.6	Conv. (cfs)		1402.6
Length wtd. (ft)	1.00	wetted Per. (ft)		247.65
Min ch El (ft)	818.46	Shear (lb/sq ft)		0.20
Alpha	1.00	Stream Power (lb/ft s)	313.92	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.93
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.85
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.37288*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPP		Local		PMP				
0	819.82	9.57	819.63	14.13	819.54	22.26	819.37	58.14	818.44	
300.78	818.44	303.84	818.75	311.3	819.49	312.41	819.49	316.06	819.49	
Manning's n Values		num=		5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
0	.0066	9.57	.0116	14.13	.0129	22.26	.0129	316.06	.0129	
Bank Sta:	Left	Right	Lengths:		Left	Channel	Right	Coeff	Contr.	Expan.
	22.26	311.3	1	1	1			.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.96	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.		0.013
w.s. Elev (ft)	818.61	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.71	Flow Area (sq ft)		40.81
E.G. slope (ft/ft)	0.019553	Area (sq ft)		40.81
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	250.66	Top width (ft)		250.66
vel Total (ft/s)	4.80	Avg. vel. (ft/s)		4.80
Max Chl Dpth (ft)	0.17	Hydr. Depth (ft)		0.16
Conv. Total (cfs)	1401.7	Conv. (cfs)		1401.7
Length wtd. (ft)	1.00	wetted Per. (ft)		250.67
Min Ch El (ft)	818.44	Shear (lb/sq ft)		0.20
Alpha	1.00	Stream Power (lb/ft s)	316.06	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.93
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.85
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.35593*

INPUT

Description:

Station Elevation Data		num=		10					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.8	9.51	819.61	14.03	819.52	22.1	819.36	57.85	818.42
303.61	818.42	306.53	818.71	313.65	819.42	314.72	819.42	318.2	819.42
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.51	.0116	14.03	.0129	22.1	.0129	318.2	.0129

Bank Sta: Left Right Lengths: CPNPPLocalPMP
 22.1 313.65 1 1 1 Right Coeff Contr. Expan.
 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.94	Element	Left OB	Channel
Right OB Vel Head (ft)	0.35	wt. n-Val.		0.013
w.s. Elev (ft)	818.58	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	818.69	Flow Area (sq ft)		41.01
E.G. Slope (ft/ft)	0.019542	Area (sq ft)		41.01
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	253.66	Top width (ft)		253.66
Vel Total (ft/s)	4.78	Avg. Vel. (ft/s)		4.78
Max Chl Dpth (ft)	0.16	Hydr. Depth (ft)		0.16
Conv. Total (cfs)	1402.1	Conv. (cfs)		1402.1
Length wtd. (ft)	1.00	wetted Per. (ft)		253.67
Min Ch El (ft)	818.42	Shear (lb/sq ft)		0.20
Alpha 0.00	1.00	Stream Power (lb/ft s)	318.20	0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.93
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		0.84
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.33898*

INPUT

Description:

Station Elevation Data	num=	10								
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 819.78 9.44 819.59	13.94 819.5	21.95 819.34	57.56 818.4	306.44 818.4	309.22 818.68	316 819.36	317.02 819.36	320.33 819.36		

Manning's n Values	num=	5								
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 9.44 .0116	13.94 .0129	21.95 .0129	320.33 .0129							

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21.95 316 1 1 1 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.91	Element	Left OB	Channel
		Page 607		

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.35	wt. n-Val.		0.013
w.S. Elev (ft)	818.56	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.S. (ft)	818.67	Flow Area (sq ft)		41.22
E.G. Slope (ft/ft)	0.019516	Area (sq ft)		41.22
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	256.68	Top width (ft)		256.68
Vel Total (ft/s)	4.75	Avg. Vel. (ft/s)		4.75
Max chl Dpth (ft)	0.16	Hydr. Depth (ft)		0.16
Conv. Total (cfs)	1403.0	Conv. (cfs)		1403.0
Length wtd. (ft)	1.00	wetted Per. (ft)		256.69
Min ch El (ft)	818.40	Shear (lb/sq ft)		0.20
Alpha	1.00	Stream Power (lb/ft s)	320.33	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.93
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.83
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.32203*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 819.76 9.38 819.57	13.84 819.48	21.8 819.32	57.27 818.38	309.27 818.38	311.91 818.64	318.36 819.29	319.32 819.29	322.47 819.29	

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 9.38 .0115	13.84 .0129	21.8 .0129	322.47 .0129						

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
21.8 318.36	1 1	1	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.89	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.35	wt. n-Val.		0.013
w.S. Elev (ft)	818.54	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.S. (ft)	818.64	Flow Area (sq ft)		41.42

		CPNPPLocalPMP		
E.G. Slope (ft/ft)	0.019522	Area (sq ft)		41.42
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	259.75	Top Width (ft)		259.75
Vel Total (ft/s)	4.73	Avg. Vel. (ft/s)		4.73
Max Chl Dpth (ft)	0.16	Hydr. Depth (ft)		0.16
Conv. Total (cfs)	1402.8	Conv. (cfs)		1402.8
Length wtd. (ft)	1.00	wetted Per. (ft)		259.76
Min Ch El (ft)	818.38	Shear (lb/sq ft)		0.19
Alpha	1.00	Stream Power (lb/ft s)	322.47	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.93
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.83
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.30508*

INPUT

Description:

Station Elevation Data		num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.74	9.31	819.55	13.74	819.46	21.65	819.31	56.98	818.36		
312.11	818.36	314.61	818.61	320.71	819.22	321.62	819.22	324.61	819.22		

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.31	.0115	13.74	.0129	21.65	.0129	324.61	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21.65	320.71		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.87	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-val.		0.013
W.S. Elev (ft)	818.52	Reach Len. (ft)	1.00	1.00
1.00				
Crit W.S. (ft)	818.62	Flow Area (sq ft)		41.63
E.G. Slope (ft/ft)	0.019490	Area (sq ft)		41.63
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	262.72	Top Width (ft)		262.72
Vel Total (ft/s)	4.71	Avg. Vel. (ft/s)		4.71
		Page 609		

CPNPPLocalPMP

Max Chl Dpth (ft)	0.16	Hydr. Depth (ft)	0.16
Conv. Total (cfs)	1403.9	Conv. (cfs)	1403.9
Length wtd. (ft)	1.00	wetted Per. (ft)	262.73
Min Ch El (ft)	818.36	Shear (lb/sq ft)	0.19
Alpha	1.00	Stream Power (lb/ft s)	324.61
0.00			0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68
6.12			48.93
C & E Loss (ft)	0.00	Cum SA (acres)	0.82
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.28813*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 819.72 9.24 819.54	13.65 819.45	21.49 819.29	56.69 818.34	314.94 818.34	317.3 818.58	323.06 819.15	323.93 819.15	326.74 819.15	

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 9.24 .0115	13.65 .0129	21.49 .0129	326.74 .0129						

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
21.49 323.06	1 1	1	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.84	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-val.		0.013
w.s. Elev (ft)	818.50	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.60	Flow Area (sq ft)		41.82
E.G. Slope (ft/ft)	0.019492	Area (sq ft)		41.82
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	265.73	Top width (ft)		265.73
Vel Total (ft/s)	4.69	Avg. vel. (ft/s)		4.69
Max Chl Dpth (ft)	0.16	Hydr. Depth (ft)		0.16
Conv. Total (cfs)	1403.9	Conv. (cfs)		1403.9
Length wtd. (ft)	1.00	wetted Per. (ft)		265.74

Min Ch El (ft)	818.34	CPNPPLocalPMP Shear (lb/sq ft)	0.19
Alpha 0.00	1.00	Stream Power (lb/ft s)	326.74
Frctn Loss (ft) 6.12	0.02	Cum Volume (acre-ft)	3.68
C & E Loss (ft) 0.00	0.00	Cum SA (acres)	0.82

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.27118*

INPUT

Description:

Station	Elevation	Data	num=	10
Sta	Elev	Sta	Elev	Sta
0	819.7	9.18	819.52	13.55
317.77	818.32	319.99	818.54	325.42
				819.43
				21.34
				819.27
				56.4
				818.32
				819.08
				326.23
				819.08
				328.88
				819.08

Manning's n Values	num=	5
Sta	n Val	Sta
0	.0066	9.18
		.0114
		13.55
		.0129
		21.34
		.0129
		328.88
		.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
21.34	325.42	1	1	1	.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.82	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-val.		0.013
w.s. Elev (ft)	818.48	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.58	Flow Area (sq ft)		41.99
E.G. slope (ft/ft)	0.019526	Area (sq ft)		41.99
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	268.81	Top width (ft)		268.81
vel Total (ft/s)	4.67	Avg. vel. (ft/s)		4.67
Max Chl Dpth (ft)	0.16	Hydr. Depth (ft)		0.16
Conv. Total (cfs)	1402.7	Conv. (cfs)		1402.7
Length Wtd. (ft)	1.00	wetted Per. (ft)		268.82
Min Ch El (ft)	818.32	Shear (lb/sq ft)		0.19
Alpha	1.00	Stream Power (lb/ft s)	328.88	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.93
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.81

CPNPPLocalPMP

0.00

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.25423*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.68	9.11	819.5	13.45	819.41	21.19	819.25	56.11	818.3			
320.6	818.3	322.68	818.51	327.77	819.02	328.53	819.02	331.02	819.02			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.11	.0114	13.45	.0129	21.19	.0129	331.02	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21.19	327.77		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.79	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-val.		0.013
w.s. Elev (ft)	818.46	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.55	Flow Area (sq ft)		42.18
E.G. Slope (ft/ft)	0.019521	Area (sq ft)		42.18
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	271.83	Top width (ft)		271.83
Vel Total (ft/s)	4.65	Avg. vel. (ft/s)		4.65
Max Chl Dpth (ft)	0.16	Hydr. Depth (ft)		0.16
Conv. Total (cfs)	1402.8	Conv. (cfs)		1402.8
Length wtd. (ft)	1.00	wetted Per. (ft)		271.84
Min Ch El (ft)	818.30	Shear (lb/sq ft)		0.19
Alpha	1.00	Stream Power (lb/ft s)	331.02	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.92
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.80
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.23728*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	819.66	9.05	819.48	13.36	819.39	21.04	819.24	55.82	818.28	
323.43	818.28	325.38	818.47	330.12	818.95	330.83	818.95	333.16	818.95	

Manning's n Values

num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.05	.0113	13.36	.0129	21.04	.0129	333.16	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21.04	330.12		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.77	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.		0.013
w.s. Elev (ft)	818.44	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.53	Flow Area (sq ft)		42.38
E.G. Slope (ft/ft)	0.019497	Area (sq ft)		42.38
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	274.88	Top width (ft)		274.88
Vel Total (ft/s)	4.62	Avg. vel. (ft/s)		4.62
Max chl Dpth (ft)	0.16	Hydr. Depth (ft)		0.15
Conv. Total (cfs)	1403.7	conv. (cfs)		1403.7
Length wtd. (ft)	1.00	wetted Per. (ft)		274.88
Min ch El (ft)	818.28	Shear (lb/sq ft)		0.19
Alpha	1.00	Stream Power (lb/ft s)	333.16	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.92
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.80
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.22033*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPPLocalPMP									
0	819.64	8.98	819.46	13.26	819.37	20.88	819.22	55.53	818.26		
326.26	818.26	328.07	818.44	332.48	818.88	333.14	818.88	335.29	818.88		
Manning's n Values		num=		5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.98	.0113	13.26	.0129	20.88	.0129	335.29	.0129		
Bank Sta:	Left	Right	Lengths:		Left Channel	Right	Coeff Contr.		Expan.		
	20.88	332.48			1	1		.1		.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.74	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.		0.013
w.s. Elev (ft)	818.42	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.51	Flow Area (sq ft)		42.56
E.G. slope (ft/ft)	0.019509	Area (sq ft)		42.56
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	277.89	Top width (ft)		277.89
vel Total (ft/s)	4.61	Avg. vel. (ft/s)		4.61
Max Chl Dpth (ft)	0.16	Hydr. Depth (ft)		0.15
Conv. Total (cfs)	1403.3	Conv. (cfs)		1403.3
Length wtd. (ft)	1.00	wetted Per. (ft)		277.90
Min Ch El (ft)	818.26	Shear (lb/sq ft)		0.19
Alpha	1.00	Stream Power (lb/ft s)	335.29	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.92
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.79
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.20339*

INPUT

Description:

Station Elevation Data		num=		10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.62	8.92	819.44	13.16	819.36	20.73	819.2	55.24	818.24		
329.09	818.24	330.76	818.41	334.83	818.81	335.44	818.81	337.43	818.81		
Manning's n Values		num=		5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.92	.0113	13.16	.0129	20.73	.0129	337.43	.0129		

Bank Sta: Left Right Lengths: CPNPPLocalPMP
 20.73 334.83 1 1 1 Right Coeff Contr. Expan.
 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.72	Element	Left OB	Channel
Right OB Vel Head (ft)	0.33	wt. n-Val.		0.013
w.s. Elev (ft)	818.39	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	818.49	Flow Area (sq ft)		42.78
E.G. Slope (ft/ft)	0.019451	Area (sq ft)		42.78
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	280.91	Top width (ft)		280.91
Vel Total (ft/s)	4.58	Avg. Vel. (ft/s)		4.58
Max Chl Dpth (ft)	0.15	Hydr. Depth (ft)		0.15
Conv. Total (cfs)	1405.3	Conv. (cfs)		1405.3
Length wtd. (ft)	1.00	wetted Per. (ft)		280.92
Min Ch El (ft)	818.24	Shear (lb/sq ft)		0.18
Alpha 0.00	1.00	Stream Power (lb/ft s)	337.43	0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.92
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		0.78
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.18644*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 819.6 8.85 819.42	13.07	819.34	20.58	819.19	54.95	818.22			
331.93 818.22 333.45	818.37	337.18	818.75	337.74	818.75	339.57	818.75		

Manning's n Values	num=	5							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .0066 8.85 .0112	13.07	.0129	20.58	.0129	339.57	.0129			

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 20.58 337.18 1 1 1 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.70	Element	Left OB	Channel
		Page 615		

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.32	wt. n-Val.		0.013
w.S. Elev (ft)	818.37	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.S. (ft)	818.47	Flow Area (sq ft)		42.95
E.G. Slope (ft/ft)	0.019476	Area (sq ft)		42.95
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	283.96	Top width (ft)		283.96
Vel Total (ft/s)	4.56	Avg. Vel. (ft/s)		4.56
Max Chl Dpth (ft)	0.15	Hydr. Depth (ft)		0.15
Conv. Total (cfs)	1404.4	Conv. (cfs)		1404.4
Length wtd. (ft)	1.00	wetted Per. (ft)		283.97
Min ch El (ft)	818.22	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	339.57	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.92
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.78
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.16949*

INPUT

Description:

Station Elevation Data		num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.58	8.79	819.4	12.97	819.32	20.43	819.17	54.66	818.2		
334.76	818.2	336.15	818.34	339.54	818.68	340.04	818.68	341.7	818.68		

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.79	.0112	12.97	.0129	20.43	.0129	341.7	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	20.43	339.54		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.67	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.32	wt. n-Val.		0.013
w.S. Elev (ft)	818.35	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.S. (ft)	818.45	Flow Area (sq ft)		43.14

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.019460	Area (sq ft)	43.14
Q Total (cfs)	196.00	Flow (cfs)	196.00
Top Width (ft)	286.98	Top Width (ft)	286.98
Vel Total (ft/s)	4.54	Avg. Vel. (ft/s)	4.54
Max Chl Dpth (ft)	0.15	Hydr. Depth (ft)	0.15
Conv. Total (cfs)	1405.0	Conv. (cfs)	1405.0
Length wtd. (ft)	1.00	wetted Per. (ft)	286.99
Min Ch El (ft)	818.20	Shear (lb/sq ft)	0.18
Alpha	1.00	Stream Power (lb/ft s)	341.70
0.00			
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68
6.12			
C & E Loss (ft)	0.00	Cum SA (acres)	0.77
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.15254*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
0	819.56	8.72	819.39
337.59	818.18	338.84	818.31

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	8.72	.0112

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	20.27	341.89		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.65	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.32	wt. n-val.		0.013
W.S. Elev (ft)	818.33	Reach Len. (ft)	1.00	1.00
1.00				
Crit W.S. (ft)	818.42	Flow Area (sq ft)		43.33
E.G. Slope (ft/ft)	0.019451	Area (sq ft)		43.33
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	290.00	Top Width (ft)		290.00
Vel Total (ft/s)	4.52	Avg. Vel. (ft/s)		4.52
		Page 617		

CPNPPLocalPMP

Max Chl Dpth (ft)	0.15	Hydr. Depth (ft)	0.15
Conv. Total (cfs)	1405.3	Conv. (cfs)	1405.3
Length wtd. (ft)	1.00	wetted Per. (ft)	290.01
Min Ch El (ft)	818.18	Shear (lb/sq ft)	0.18
Alpha	1.00	Stream Power (lb/ft s)	343.84
0.00			
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68
6.12			
C & E Loss (ft)	0.00	Cum SA (acres)	0.77
0.00			

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.13559*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.54 8.65 819.37 12.77 819.28 20.12 819.14 54.08 818.16									
340.42 818.16 341.53 818.27 344.24 818.54 344.65 818.54 345.98 818.54									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.65 .0111 12.77 .0129 20.12 .0129 345.98 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
20.12 344.24	1 1 1	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.63	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.32	wt. n-val.		0.013
w.s. Elev (ft)	818.31	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.40	Flow Area (sq ft)		43.52
E.G. Slope (ft/ft)	0.019447	Area (sq ft)		43.52
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	293.06	Top width (ft)		293.06
Vel Total (ft/s)	4.50	Avg. vel. (ft/s)		4.50
Max Chl Dpth (ft)	0.15	Hydr. Depth (ft)		0.15
Conv. Total (cfs)	1405.5	Conv. (cfs)		1405.5
Length wtd. (ft)	1.00	wetted Per. (ft)		293.07

	CPNPPLocalPMP			
Min Ch El (ft)	818.16	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	345.98	0.00
0.00		Cum Volume (acre-ft)	3.68	48.92
Frctn Loss (ft)	0.02	Cum SA (acres)		0.76
6.12				
C & E Loss (ft)	0.00			
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.11864*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.52	8.59	819.35	12.68	819.27	19.97	819.12	53.78	818.14		
343.25	818.14	344.22	818.24	346.6	818.47	346.95	818.47	348.11	818.47		

Manning's n	Values	num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.59	.0111	12.68	.0129	19.97	.0129	348.11	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	19.97	346.6		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.60	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.31	wt. n-val.		0.013
w.s. Elev (ft)	818.29	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.38	Flow Area (sq ft)		43.71
E.G. slope (ft/ft)	0.019427	Area (sq ft)		43.71
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	296.10	Top width (ft)		296.10
vel Total (ft/s)	4.48	Avg. vel. (ft/s)		4.48
Max Chl Dpth (ft)	0.15	Hydr. Depth (ft)		0.15
Conv. Total (cfs)	1406.2	Conv. (cfs)		1406.2
Length Wtd. (ft)	1.00	wetted Per. (ft)		296.11
Min Ch El (ft)	818.14	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	348.11	0.00
0.00		Cum Volume (acre-ft)	3.68	48.92
Frctn Loss (ft)	0.02	Cum SA (acres)		0.75
6.12				
C & E Loss (ft)	0.00			

CPNPPLocalPMP

0.00

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.10169*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
0	819.5	8.52	819.33
346.08	818.12	346.92	818.2

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	8.52	.0111

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	19.82	348.95		1	1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.58	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.31	wt. n-val.		0.013
w.s. Elev (ft)	818.27	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.36	Flow Area (sq ft)		43.89
E.G. Slope (ft/ft)	0.019432	Area (sq ft)		43.89
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	299.19	Top width (ft)		299.19
Vel Total (ft/s)	4.47	Avg. vel. (ft/s)		4.47
Max Chl Dpth (ft)	0.15	Hydr. Depth (ft)		0.15
Conv. Total (cfs)	1406.0	Conv. (cfs)		1406.0
Length wtd. (ft)	1.00	wetted Per. (ft)		299.20
Min Ch El (ft)	818.12	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	350.25	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.92
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.74
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.08474*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	819.48	8.46	819.31	12.48	819.23	19.66	819.08	53.2	818.1	
348.91	818.1	349.61	818.17	351.3	818.34	351.56	818.34	352.39	818.34	

Manning's n Values

num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.46	.011	12.48	.0129	19.66	.0129	352.39	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	19.66	351.3		1	1		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.55	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.31	wt. n-val.		0.013
w.s. Elev (ft)	818.25	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.34	Flow Area (sq ft)		44.05
E.G. Slope (ft/ft)	0.019454	Area (sq ft)		44.05
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	302.22	Top width (ft)		302.22
Vel Total (ft/s)	4.45	Avg. vel. (ft/s)		4.45
Max chl Dpth (ft)	0.15	Hydr. Depth (ft)		0.15
Conv. Total (cfs)	1405.2	conv. (cfs)		1405.2
Length wtd. (ft)	1.00	wetted Per. (ft)		302.23
Min ch El (ft)	818.10	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	352.39	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.91
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.74
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3.06779*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev

		CPNPPLocalPMP							
0	819.46	8.39	819.29	12.39	819.21	19.51	819.07	52.91	818.08
351.74	818.08	352.3	818.14	353.66	818.27	353.86	818.27	354.52	818.27
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.39	.011	12.39	.0129	19.51	.0129	354.52	.0129
Bank Sta:	Left	Right	Lengths:		Left Channel	Right	Coeff	Contr.	Expan.
	19.51	353.66	1	1	1		.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.53	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.30	wt. n-val.		0.013
w.s. Elev (ft)	818.23	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.32	Flow Area (sq ft)		44.26
E.G. slope (ft/ft)	0.019405	Area (sq ft)		44.26
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	305.24	Top width (ft)		305.24
vel Total (ft/s)	4.43	Avg. vel. (ft/s)		4.43
Max Chl Dpth (ft)	0.15	Hydr. Depth (ft)		0.14
Conv. Total (cfs)	1407.0	Conv. (cfs)		1407.0
Length wtd. (ft)	1.00	wetted Per. (ft)		305.25
Min Ch El (ft)	818.08	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	354.52	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.91
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.73
0.00				

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.05084*

INPUT

Description:

Station Elevation Data		num=		10					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.44	8.33	819.27	12.29	819.19	19.36	819.05	52.62	818.06
354.58	818.06	354.99	818.1	356.01	818.2	356.16	818.2	356.66	818.2
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.33	.011	12.29	.0129	19.36	.0129	356.66	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 19.36 356.01 1 1 1 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.51	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.30	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	818.21	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.29	Flow Area (sq ft)		44.42
0.00				
E.G. Slope (ft/ft)	0.019426	Area (sq ft)		44.42
0.00				
Q Total (cfs)	196.00	Flow (cfs)		196.00
0.00				
Top width (ft)	308.93	Top width (ft)		308.28
0.65				
Vel Total (ft/s)	4.41	Avg. Vel. (ft/s)		4.41
0.50				
Max Chl Dpth (ft)	0.15	Hydr. Depth (ft)		0.14
0.01				
Conv. Total (cfs)	1406.3	Conv. (cfs)		1406.3
0.0				
Length wtd. (ft)	1.00	wetted Per. (ft)		308.29
0.66				
Min Ch El (ft)	818.06	Shear (lb/sq ft)		0.17
0.01				
Alpha	1.00	Stream Power (lb/ft s)	356.66	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.91
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.72
0.00				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.03389*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.42 8.26 819.25 12.19 819.18 19.21 819.03 52.33 818.04									
357.41 818.04 357.69 818.07 358.36 818.14 358.46 818.14 358.8 818.14									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.26 .0109 12.19 .0129 19.21 .0129 358.8 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 19.21 358.36 1 1 1 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	818.48	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.30	wt. n-val.		0.013
0.013				
W.S. Elev (ft)	818.18	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.27	Flow Area (sq ft)		44.59
0.02				
E.G. slope (ft/ft)	0.019389	Area (sq ft)		44.59
0.02				
Q Total (cfs)	196.00	Flow (cfs)		195.96
0.04				
Top width (ft)	311.31	Top width (ft)		310.87
0.44				
Vel Total (ft/s)	4.39	Avg. vel. (ft/s)		4.39
1.89				
Max Chl Dpth (ft)	0.14	Hydr. Depth (ft)		0.14
0.04				
Conv. Total (cfs)	1407.6	Conv. (cfs)		1407.3
0.3				
Length wtd. (ft)	1.00	wetted Per. (ft)		310.88
0.48				
Min Ch El (ft)	818.04	Shear (lb/sq ft)		0.17
0.05				
Alpha	1.00	Stream Power (lb/ft s)	358.80	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68	48.91
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.72
0.00				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 3.01695*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.4 8.19 819.24 12.1 819.16 19.05 819.02 52.04 818.02									
360.24 818.02 360.38 818.03 360.72 818.07 360.77 818.07 360.93 818.07									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 8.19 .0109 12.1 .0129 19.05 .0129 360.93 .0129									

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
19.05 360.72	1 1	1	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.46	Element	Left OB	Channel
Right OB				

		CPNPPLocalPMP		
Vel Head (ft)	0.30	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	818.16	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.25	Flow Area (sq ft)		44.76
0.02				
E.G. Slope (ft/ft)	0.019356	Area (sq ft)		44.76
0.02				
Q Total (cfs)	196.00	Flow (cfs)		195.95
0.05				
Top width (ft)	313.64	Top width (ft)		313.43
0.21				
Vel Total (ft/s)	4.38	Avg. vel. (ft/s)		4.38
2.59				
Max Chl Dpth (ft)	0.14	Hydr. Depth (ft)		0.14
0.09				
Conv. Total (cfs)	1408.8	Conv. (cfs)		1408.4
0.4				
Length wtd. (ft)	1.00	wetted Per. (ft)		313.43
0.30				
Min Ch El (ft)	818.02	Shear (lb/sq ft)		0.17
0.08				
Alpha	1.00	Stream Power (lb/ft s)	360.93	0.00
0.00				
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68	48.91
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.71
0.00				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East

RS: 3

INPUT

Description:

Station	Elevation	Data	num=	5						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	819.38	12	819.14	18.9	819	51.75	818	363.07	818	

Manning's n Values

Sta	n Val	Sta	n Val	num=	2
0	.0066	12	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	18.9	363.07		.49	.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.44	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.30	wt. n-Val.		0.013
W.S. Elev (ft)	818.14	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)	818.23	Flow Area (sq ft)		44.91
		Page 625		

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E.G. Slope (ft/ft)	0.019363	Area (sq ft)	44.91
Q Total (cfs)	196.00	Flow (cfs)	196.00
Top width (ft)	316.02	Top width (ft)	316.02
Vel Total (ft/s)	4.36	Avg. Vel. (ft/s)	4.36
Max Chl Dpth (ft)	0.14	Hydr. Depth (ft)	0.14
Conv. Total (cfs)	1408.5	Conv. (cfs)	1408.5
Length Wtd. (ft)	0.49	wetted Per. (ft)	316.17
Min ch El (ft)	818.00	Shear (lb/sq ft)	0.17
Alpha	1.00	Stream Power (lb/ft s)	363.07
0.00			0.00
Frctn Loss (ft)	0.02	Cum volume (acre-ft)	3.68
6.12			48.91
C & E Loss (ft)	0.00	Cum SA (acres)	0.70

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.97368*

INPUT

Description:

Station Elevation Data	num=	13
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 819.37 8.34 819.2 12.22 819.12 19.24 818.97 20.91 818.9		
21.56 818.86 38.81 818.37 54.35 817.93 55.65 817.88 358.88 817.88		
359.04 817.89 360.95 817.92 363.07 817.95		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 8.34 .011 12.22 .0129 19.24 .013 363.07 .013		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
19.24 363.07	.49 .49 .49	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.41	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.40	wt. n-Val.		0.013
w.s. Elev (ft)	818.01	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)	818.11	Flow Area (sq ft)		38.49
E.G. Slope (ft/ft)	0.032235	Area (sq ft)		38.49

		CPNPPLocalPMP		
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	311.37	Top width (ft)		311.37
Vel Total (ft/s)	5.09	Avg. Vel. (ft/s)		5.09
Max Chl Dpth (ft)	0.13	Hydr. Depth (ft)		0.12
Conv. Total (cfs)	1091.7	Conv. (cfs)		1091.7
Length Wtd. (ft)	0.49	wetted Per. (ft)		311.43
Min ch El (ft)	817.88	Shear (lb/sq ft)		0.25
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.68	48.91
6.12				
C & E Loss (ft)	0.01	Cum SA (acres)		0.70

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.94736*

INPUT

Description:

Station Elevation Data		num= 13									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.36	8.49	819.18	12.43	819.1	19.58	818.95	21.41	818.85		
22.12	818.78	41.07	818.28	58.12	817.82	59.55	817.76	354.69	817.76		
355.01	817.79	358.83	817.84	363.07	817.89						

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.49	.011	12.43	.013	19.58	.0131	363.07	.0131		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	19.58	363.07		.49	.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.38	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.50	wt. n-Val.		0.013
w.s. Elev (ft)	817.88	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)	818.00	Flow Area (sq ft)		34.47
E.G. Slope (ft/ft)	0.046154	Area (sq ft)		34.47
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	305.73	Top width (ft)		305.73

CPNPPLocalPMP

Vel Total (ft/s)	5.69	Avg. Vel. (ft/s)	5.69
Max Chl Dpth (ft)	0.12	Hydr. Depth (ft)	0.11
Conv. Total (cfs)	912.3	Conv. (cfs)	912.3
Length Wtd. (ft)	0.49	wetted Per. (ft)	305.73
Min Ch El (ft)	817.76	Shear (lb/sq ft)	0.32
Alpha 0.00	1.00	Stream Power (lb/ft s)	363.07 0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.68 48.91
6.12 C & E Loss (ft)	0.01	Cum SA (acres)	0.70

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.92105*

INPUT

Description:

Station Elevation Data	num=	13
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 819.35 8.63 819.17 12.65 819.08 19.92 818.92 21.91 818.8		
22.69 818.7 43.32 818.19 61.89 817.72 63.45 817.64 350.5 817.64		
350.98 817.68 356.71 817.76 363.07 817.84		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 8.63 .0111 12.65 .013 19.92 .0132 363.07 .0132		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr. Expan.
19.92 363.07	.49 .49 .49	.1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.34	Element	Left OB Channel
Right OB Vel Head (ft)	0.59	wt. n-Val.	0.013
w.s. Elev (ft)	817.75	Reach Len. (ft)	0.49 0.49
0.49 Crit w.s. (ft)	817.88	Flow Area (sq ft)	31.75
E.G. Slope (ft/ft)	0.058775	Area (sq ft)	31.75
Q Total (cfs)	196.00	Flow (cfs)	196.00
Top width (ft)	295.23	Top width (ft)	295.23
Vel Total (ft/s)	6.17	Avg. Vel. (ft/s)	6.17
Max Chl Dpth (ft)	0.11	Hydr. Depth (ft)	0.11
Conv. Total (cfs)	808.5	Conv. (cfs)	808.5

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Length wtd. (ft)	0.49	wetted Per. (ft)	295.23
Min Ch El (ft)	817.64	Shear (lb/sq ft)	0.39
Alpha	1.00	Stream Power (lb/ft s)	363.07
0.00			0.00
Frctn Loss (ft)	0.03	Cum Volume (acre-ft)	3.68
6.12			48.91
C & E Loss (ft)	0.01	Cum SA (acres)	0.69

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.89473*

INPUT

Description:

Station Elevation Data	num=	13
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
0 819.34 8.78 819.15 12.86 819.06 20.26 818.89 22.42 818.75		
23.26 818.63 45.57 818.1 65.67 817.61 67.35 817.53 346.32 817.53		
346.95 817.58 354.58 817.68 363.07 817.79		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val		
0 .0066 8.78 .0111 12.86 .0131 20.26 .0133 363.07 .0133		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
20.26 363.07	.49 .49 .49	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.30	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.66	wt. n-Val.		0.013
w.s. Elev (ft)	817.64	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)	817.78	Flow Area (sq ft)		29.99
E.G. Slope (ft/ft)	0.069391	Area (sq ft)		29.99
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	286.68	Top width (ft)		286.68
Vel Total (ft/s)	6.53	Avg. vel. (ft/s)		6.53
Max Chl Dpth (ft)	0.11	Hydr. Depth (ft)		0.10
Conv. Total (cfs)	744.1	Conv. (cfs)		744.1
Length wtd. (ft)	0.49	wetted Per. (ft)		286.68
Min Ch El (ft)	817.53	Shear (lb/sq ft)		0.45
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00

CPNPPLocalPMP					
0.00	Frctn Loss (ft)	0.03	Cum Volume (acre-ft)	3.68	48.91
6.12	C & E Loss (ft)	0.01	Cum SA (acres)		0.69

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.86842*

INPUT

Description:

Station Elevation Data		num= 13		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.33	8.93	819.13	13.08	819.04	20.6	818.87	22.92	818.7		
23.82	818.55	47.82	818.01	69.44	817.5	71.24	817.41	342.13	817.41		
342.92	817.47	352.46	817.61	363.07	817.74						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	8.93	.0112	13.08	.0131	20.6	.0134	363.07	.0134		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	20.6	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.25	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.74	wt. n-Val.		0.013
w.s. Elev (ft)	817.51	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)	817.66	Flow Area (sq ft)		28.41
E.G. Slope (ft/ft)	0.080669	Area (sq ft)		28.41
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	277.07	Top width (ft)		277.07
Vel Total (ft/s)	6.90	Avg. vel. (ft/s)		6.90
Max chl Dpth (ft)	0.10	Hydr. Depth (ft)		0.10
Conv. Total (cfs)	690.1	Conv. (cfs)		690.1
Length wtd. (ft)	0.49	wetted Per. (ft)		277.08
Min ch El (ft)	817.41	Shear (lb/sq ft)		0.52
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.04	Cum Volume (acre-ft)	3.68	48.91
6.12				
C & E Loss (ft)	0.01	Cum SA (acres)		0.69

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.84210*

INPUT

Description:

Station Elevation Data		num= 13		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.32	9.07	819.11	13.29	819.02	20.94	818.84	23.42	818.65		
24.39	818.47	50.08	817.92	73.21	817.4	75.14	817.29	337.94	817.29		
338.89	817.37	350.34	817.53	363.07	817.68						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.07	.0112	13.29	.0131	20.94	.0135	363.07	.0135		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	20.94	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.92	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.014
w.s. Elev (ft)	817.90	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)	817.54	Flow Area (sq ft)		175.85
E.G. Slope (ft/ft)	0.000220	Area (sq ft)		175.85
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	312.02	Top width (ft)		312.02
Vel Total (ft/s)	1.11	Avg. vel. (ft/s)		1.11
Max Chl Dpth (ft)	0.61	Hydr. Depth (ft)		0.56
Conv. Total (cfs)	13199.4	Conv. (cfs)		13199.4
Length wtd. (ft)	0.49	wetted Per. (ft)		312.26
Min Ch El (ft)	817.29	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.91
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.68

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.81578*

INPUT

Description:

Station Elevation Data		num= 13		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.31	9.22	819.1	13.51	819	21.27	818.82	23.92	818.59
24.95	818.4	52.33	817.82	76.98	817.29	79.04	817.17	333.75	817.17
334.86	817.26	348.22	817.45	363.07	817.63				

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.22	.0113	13.51	.0132	21.27	.0137	363.07	.0137

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21.27	363.07		.49	.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	817.92	Element		
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.014
w.s. Elev (ft)	817.90	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)		Flow Area (sq ft)		210.06
E.G. slope (ft/ft)	0.000127	Area (sq ft)		210.06
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	314.62	Top width (ft)		314.62
vel Total (ft/s)	0.93	Avg. vel. (ft/s)		0.93
Max Chl Dpth (ft)	0.73	Hydr. Depth (ft)		0.67
Conv. Total (cfs)	17394.2	Conv. (cfs)		17394.2
Length wtd. (ft)	0.49	wetted Per. (ft)		314.91
Min Ch El (ft)	817.17	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.90
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.68

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.78947*

INPUT

Description:

Station Elevation Data		num= 13	
Sta	Elev	Sta	Elev
0	819.3	9.37	819.08
25.52	818.32	54.58	817.73
330.83	817.16	346.1	817.37

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	9.37	.0113
		13.72	.0132
		21.61	.0138
		363.07	.0138

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	21.61	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.014
w.s. Elev (ft)	817.90	Reach Len. (ft)	0.49	0.49
0.49		Flow Area (sq ft)		242.90
Crit w.s. (ft)		Area (sq ft)		242.90
E.G. slope (ft/ft)	0.000080	Flow (cfs)		196.00
Q Total (cfs)	196.00	Top width (ft)		317.08
Top width (ft)	317.08	Avg. vel. (ft/s)		0.81
vel Total (ft/s)	0.81	Hydr. Depth (ft)		0.77
Max chl Dpth (ft)	0.85	Conv. (cfs)		21881.4
Conv. Total (cfs)	21881.4	wetted Per. (ft)		317.43
Length wtd. (ft)	0.49	Shear (lb/sq ft)		0.00
Min Ch El (ft)	817.05	Stream Power (lb/ft s)	363.07	0.00
Alpha	1.00	Cum volume (acre-ft)	3.68	48.90
0.00		Cum SA (acres)		0.68
Frctn Loss (ft)	0.00			
6.12				
C & E Loss (ft)	0.00			

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.76315*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 13		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.29	9.52	819.06	13.94	818.96	21.95	818.76	24.93	818.49		
26.09	818.24	56.84	817.64	84.52	817.08	86.84	816.93	325.37	816.93		
326.8	817.05	343.98	817.29	363.07	817.53						

Manning's n Values		num= 5		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.52	.0114	13.94	.0132	21.95	.0139	363.07	.0139		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	21.95	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	817.91	Element		
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.014
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)		Flow Area (sq ft)		275.27
E.G. slope (ft/ft)	0.000054	Area (sq ft)		275.27
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	319.87	Top width (ft)		319.87
vel Total (ft/s)	0.71	Avg. vel. (ft/s)		0.71
Max Chl Dpth (ft)	0.98	Hydr. Depth (ft)		0.86
Conv. Total (cfs)	26601.2	Conv. (cfs)		26601.2
Length wtd. (ft)	0.49	wetted Per. (ft)		320.26
Min Ch El (ft)	816.93	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.90
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.67

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.73684*

INPUT
 Description:

Station Elevation Data				num=	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	13	Sta	Elev	Sta	Elev	Sta	Elev
0	819.28	9.66	819.05		14.15	818.94	22.29	818.74	25.43	818.44
26.65	818.16	59.09	817.55		88.3	816.97	90.74	816.82	321.19	816.82
322.76	816.95	341.85	817.21		363.07	817.47				

Manning's n Values				num=						
Sta	n Val	Sta	n Val	5	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.66	.0114		14.15	.0133	22.29	.014	363.07	.014

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	22.29	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)		Element	Left OB	Channel
Right OB		817.91			
Vel Head (ft)		0.01	wt. n-val.		0.014
w.s. Elev (ft)		817.91	Reach Len. (ft)	0.49	0.49
0.49			Flow Area (sq ft)		304.71
Crit w.s. (ft)			Area (sq ft)		304.71
E.G. slope (ft/ft)	0.000040		Flow (cfs)		196.00
Q Total (cfs)	196.00		Top width (ft)		322.97
Top width (ft)	322.97		Avg. vel. (ft/s)		0.64
vel Total (ft/s)	0.64		Hydr. Depth (ft)		0.94
Max chl Dpth (ft)	1.09		Conv. (cfs)		31081.1
Conv. Total (cfs)	31081.1		wetted Per. (ft)		323.43
Length wtd. (ft)	0.49		Shear (lb/sq ft)		0.00
Min ch El (ft)	816.82		Stream Power (lb/ft s)	363.07	0.00
Alpha	1.00		Cum volume (acre-ft)	3.68	48.90
0.00			Cum SA (acres)		0.67
Frctn Loss (ft)	0.00				
6.12					
C & E Loss (ft)	0.00				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.71052*

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	13	Sta	Elev	Sta	Elev	Sta	Elev
0	819.27	9.81	819.03		14.37	818.92	22.63	818.71	25.93	818.39

		CPNPPLocalPMP							
27.22	818.09	61.34	817.46	92.07	816.87	94.64	816.7	317	816.7
318.73	816.84	339.73	817.13	363.07	817.42				
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.81	.0115	14.37	.0133	22.63	.0141	363.07	.0141
Bank Sta:	Left	Right	Lengths:		Left Channel	Right	Coeff	Contr.	Expan.
	22.63	363.07			.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.014
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)		Flow Area (sq ft)		335.83
E.G. slope (ft/ft)	0.000030	Area (sq ft)		335.83
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	325.98	Top width (ft)		325.98
vel Total (ft/s)	0.58	Avg. vel. (ft/s)		0.58
Max Chl Dpth (ft)	1.21	Hydr. Depth (ft)		1.03
Conv. Total (cfs)	36063.2	Conv. (cfs)		36063.2
Length wtd. (ft)	0.49	wetted Per. (ft)		326.50
Min Ch El (ft)	816.70	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.89
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.66

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.68421*

INPUT

Description:

Station Elevation Data		num=		13					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.26	9.96	819.01	14.58	818.9	22.97	818.68	26.44	818.34
27.78	818.01	63.59	817.37	95.84	816.76	98.54	816.58	312.81	816.58
314.7	816.74	337.61	817.05	363.07	817.37				

Manning's n Values		num=		CPNPPLocalPMP		num=		num=	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	9.96	.0115	14.58	.0134	22.97	.0142	363.07	.0142
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	22.97	363.07		.49	.49	.49	.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	817.91			
Right OB Vel Head (ft)	0.00	wt. n-val.		0.014
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49 Crit w.s. (ft)		Flow Area (sq ft)		366.66
E.G. slope (ft/ft)	0.000023	Area (sq ft)		366.66
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	329.61	Top width (ft)		329.61
vel Total (ft/s)	0.53	Avg. vel. (ft/s)		0.53
Max chl Dpth (ft)	1.33	Hydr. Depth (ft)		1.11
Conv. Total (cfs)	41145.0	Conv. (cfs)		41145.0
Length wtd. (ft)	0.49	wetted Per. (ft)		330.17
Min ch El (ft)	816.58	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00 Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.89
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		0.66

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.65789*

INPUT

Description:

Station Elevation Data		num=		13		num=		num=	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.25	10.1	819	14.8	818.88	23.31	818.66	26.94	818.29
28.35	817.93	65.85	817.28	99.61	816.66	102.44	816.46	308.62	816.46
310.67	816.63	335.49	816.97	363.07	817.32				

Manning's n Values		num=		num=		num=		num=	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	10.1	.0116	14.8	.0134	23.31	.0143	363.07	.0143

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 23.31 363.07 .49 .49 .49 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.014
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit W.S. (ft)		Flow Area (sq ft)		397.05
E.G. slope (ft/ft)	0.000018	Area (sq ft)		397.05
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	333.51	Top width (ft)		333.51
vel Total (ft/s)	0.49	Avg. vel. (ft/s)		0.49
Max Chl Dpth (ft)	1.45	Hydr. Depth (ft)		1.19
Conv. Total (cfs)	46287.9	Conv. (cfs)		46287.9
Length wtd. (ft)	0.49	wetted Per. (ft)		334.12
Min Ch El (ft)	816.46	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.88
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.66

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.63157*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.24 10.25 818.98 15.02 818.86 23.65 818.63 27.44 818.23									
28.92 817.85 68.1 817.19 103.38 816.55 106.34 816.34 304.43 816.34									
306.64 816.53 333.37 816.89 363.07 817.26									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 10.25 .0116 15.02 .0134 23.65 .0144 363.07 .0144									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 23.65 363.07 .49 .49 .49 .1 .3

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.014
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit W.S. (ft)		Flow Area (sq ft)		427.19
E.G. Slope (ft/ft)	0.000014	Area (sq ft)		427.19
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	334.38	Top width (ft)		334.38
Vel Total (ft/s)	0.46	Avg. vel. (ft/s)		0.46
Max Chl Dpth (ft)	1.57	Hydr. Depth (ft)		1.28
Conv. Total (cfs)	51830.0	Conv. (cfs)		51830.0
Length wtd. (ft)	0.49	wetted Per. (ft)		335.07
Min Ch El (ft)	816.34	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.88
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.65

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.60526*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.23 10.4 818.96 15.23 818.84 23.99 818.61 27.94 818.18									
29.48 817.78 70.35 817.1 107.16 816.44 110.23 816.22 300.24 816.22									
302.61 816.42 331.25 816.82 363.07 817.21									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 10.4 .0117 15.23 .0135 23.99 .0145 363.07 .0145									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
23.99 363.07	.49 .49 .49	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.015
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit W.S. (ft)		Flow Area (sq ft)		456.22
E.G. Slope (ft/ft)	0.000012	Area (sq ft)		456.22
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	334.09	Top Width (ft)		334.09
Vel Total (ft/s)	0.43	Avg. Vel. (ft/s)		0.43
Max Chl Dpth (ft)	1.69	Hydr. Depth (ft)		1.37
Conv. Total (cfs)	57459.2	Conv. (cfs)		57459.2
Length wtd. (ft)	0.49	wetted Per. (ft)		334.84
Min Ch El (ft)	816.22	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.87
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.65

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.57894*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.22 10.55 818.94 15.45 818.81 24.33 818.58 28.45 818.13									
30.05 817.7 72.61 817 110.93 816.34 114.13 816.11 296.06 816.11									
298.58 816.32 329.12 816.74 363.07 817.16									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 10.55 .0117 15.45 .0135 24.33 .0146 363.07 .0146									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
24.33 363.07	.49 .49 .49	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				

Vel Head (ft)	0.00	CPNPPLocalPMP wt. n-Val.		0.015
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49 Crit W.S. (ft)		Flow Area (sq ft)		483.22
E.G. Slope (ft/ft)	0.000010	Area (sq ft)		483.22
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	333.80	Top Width (ft)		333.80
Vel Total (ft/s)	0.41	Avg. Vel. (ft/s)		0.41
Max Chl Dpth (ft)	1.80	Hydr. Depth (ft)		1.45
Conv. Total (cfs)	62833.1	Conv. (cfs)		62833.1
Length wtd. (ft)	0.49	wetted Per. (ft)		334.61
Min Ch El (ft)	816.11	Shear (lb/sq ft)		0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	363.07	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.87
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		0.65

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
REACH: Unit 3 East RS: 2.55263*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.21 10.69 818.93 15.66 818.79 24.67 818.55 28.95 818.08									
30.61 817.62 74.86 816.91 114.7 816.23 118.03 815.99 291.87 815.99									
294.55 816.21 327 816.66 363.07 817.11									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 10.69 .0118 15.66 .0136 24.67 .0147 363.07 .0147									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
24.67 363.07	.49 .49 .49	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-Val.		0.015
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49

		CPNPPLocalPMP	
0.49			
Crit W.S. (ft)		Flow Area (sq ft)	511.53
E.G. Slope (ft/ft)	0.000008	Area (sq ft)	511.53
Q Total (cfs)	196.00	Flow (cfs)	196.00
Top Width (ft)	333.51	Top Width (ft)	333.51
Vel Total (ft/s)	0.38	Avg. Vel. (ft/s)	0.38
Max Chl Dpth (ft)	1.92	Hydr. Depth (ft)	1.53
Conv. Total (cfs)	68648.5	Conv. (cfs)	68648.5
Length wtd. (ft)	0.49	wetted Per. (ft)	334.38
Min Ch El (ft)	815.99	Shear (lb/sq ft)	0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
6.12			
C & E Loss (ft)	0.00	Cum SA (acres)	0.64

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.52631*

INPUT

Description:

Station Elevation Data		num= 13	
Sta	Elev	Sta	Elev
0	819.2	10.84	818.91
31.18	817.55	77.11	816.82
290.52	816.11	324.88	816.58

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	10.84	.0118
		15.88	.0136
		25.01	.0148

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	25.01	363.07		.49	.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.		0.015
w.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit W.S. (ft)		Flow Area (sq ft)		538.92

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.000007	Area (sq ft)	538.92
Q Total (cfs)	196.00	Flow (cfs)	196.00
Top Width (ft)	333.19	Top Width (ft)	333.19
Vel Total (ft/s)	0.36	Avg. Vel. (ft/s)	0.36
Max Chl Dpth (ft)	2.04	Hydr. Depth (ft)	1.62
Conv. Total (cfs)	74415.8	Conv. (cfs)	74415.8
Length wtd. (ft)	0.49	wetted Per. (ft)	334.13
Min Ch El (ft)	815.87	Shear (lb/sq ft)	0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
6.12			
C & E Loss (ft)	0.00	Cum SA (acres)	0.64

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.5*

INPUT

Description:

Station Elevation Data		num= 13	
Sta	Elev	Sta	Elev
0	819.19	10.99	818.89
31.75	817.47	79.36	816.73
286.49	816	322.76	816.5
			363.07
			817

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	10.99	.0119
		16.09	.0136
		25.34	.0149
		363.07	.0149

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	25.34	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.015
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)		Flow Area (sq ft)		565.69
E.G. Slope (ft/ft)	0.000006	Area (sq ft)		565.69
Q Total (cfs)	196.00	Flow (cfs)		196.00
		Page 643		

CPNPPLocalPMP

Top width (ft)	332.87	Top width (ft)	332.87
Vel Total (ft/s)	0.35	Avg. Vel. (ft/s)	0.35
Max Chl Dpth (ft)	2.16	Hydr. Depth (ft)	1.70
Conv. Total (cfs)	80175.3	Conv. (cfs)	80175.3
Length wtd. (ft)	0.49	wetted Per. (ft)	333.88
Min Ch El (ft)	815.75	Shear (lb/sq ft)	0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07
0.00		Cum volume (acre-ft)	3.68
Frctn Loss (ft)	0.00	Cum SA (acres)	0.63
6.12			
C & E Loss (ft)	0.00		

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.47368*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.18 11.13 818.88 16.31 818.73 25.68 818.47 30.46 817.93									
32.31 817.39 81.62 816.64 126.02 815.91 129.73 815.63 279.3 815.63									
282.46 815.89 320.64 816.42 363.07 816.95									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 11.13 .012 16.31 .0137 25.68 .0151 363.07 .0151									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
25.68 363.07	.49 .49 .49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.015
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49		Flow Area (sq ft)		592.04
Crit w.s. (ft)		Area (sq ft)		592.04
E.G. slope (ft/ft)	0.000005	Flow (cfs)		196.00
Q Total (cfs)	196.00	Top width (ft)		332.54
Top width (ft)	332.54			

		CPNPPLocalPMP		
Vel Total (ft/s)	0.33	Avg. Vel. (ft/s)		0.33
Max Chl Dpth (ft)	2.28	Hydr. Depth (ft)		1.78
Conv. Total (cfs)	85395.3	Conv. (cfs)		85395.3
Length wtd. (ft)	0.49	wetted Per. (ft)		333.62
Min Ch El (ft)	815.63	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.84
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.63

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.44736*

INPUT

Description:

Station Elevation Data		num=	13								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.17	11.28	818.86	16.52	818.71	26.02	818.45	30.96	817.87		
32.88	817.31	83.87	816.55	129.79	815.81	133.63	815.51	275.11	815.51		
278.43	815.79	318.52	816.34	363.07	816.89						

Manning's n Values		num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.28	.012	16.52	.0137	26.02	.0152	363.07	.0152		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	26.02	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.015
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit W.S. (ft)		Flow Area (sq ft)		617.52
E.G. Slope (ft/ft)	0.000005	Area (sq ft)		617.52
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	332.45	Top width (ft)		332.45
Vel Total (ft/s)	0.32	Avg. Vel. (ft/s)		0.32
Max Chl Dpth (ft)	2.40	Hydr. Depth (ft)		1.86

CPNPPLocalPMP

Conv. Total (cfs)	91009.0	Conv. (cfs)	91009.0
Length wtd. (ft)	0.49	wetted Per. (ft)	333.60
Min Ch El (ft)	815.51	Shear (lb/sq ft)	0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07
0.00		Cum Volume (acre-ft)	3.68
Frctn Loss (ft)	0.00	Cum SA (acres)	0.63
6.12			
C & E Loss (ft)	0.00		

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.42105*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.16 11.43 818.84 16.74 818.69 26.36 818.42 31.46 817.82									
33.44 817.24 86.12 816.46 133.56 815.7 137.53 815.39 270.92 815.39									
274.4 815.68 316.4 816.26 363.07 816.84									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 11.43 .0121 16.74 .0137 26.36 .0153 363.07 .0153									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
26.36 363.07	.49 .49 .49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.		0.015
w.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.S. (ft)		Flow Area (sq ft)		642.34
E.G. slope (ft/ft)	0.000004	Area (sq ft)		642.34
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	332.38	Top width (ft)		332.38
Vel Total (ft/s)	0.31	Avg. Vel. (ft/s)		0.31
Max Chl Dpth (ft)	2.52	Hydr. Depth (ft)		1.93
Conv. Total (cfs)	96555.6	Conv. (cfs)		96555.6

Length wtd. (ft)	0.49	CPNPPLocalPMP Wetted Per. (ft)	333.58
Min Ch El (ft)	815.39	Shear (lb/sq ft)	0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	363.07
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68
6.12 C & E Loss (ft)	0.00	Cum SA (acres)	0.62

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
REACH: Unit 3 East RS: 2.39473*

INPUT

Description:

Station Elevation Data	num=	13
Sta Elev Sta Elev Sta Elev	Sta Elev	Sta Elev
0 819.15 11.57 818.83 16.95 818.67	26.7 818.39 31.96 817.77	
34.01 817.16 88.38 816.37 137.33 815.59	141.43 815.28 266.74 815.28	
270.37 815.58 314.27 816.18 363.07 816.79		

Manning's n Values	num=	5
Sta n Val Sta n Val Sta n Val	Sta n Val	Sta n Val
0 .0066 11.57 .0121 16.95 .0138	26.7 .0154 363.07 .0154	

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr. Expan.
26.7 363.07	.49 .49 .49	.1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-val.		0.015
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49 Crit W.S. (ft)		Flow Area (sq ft)		665.27
E.G. Slope (ft/ft)	0.000004	Area (sq ft)		665.27
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	332.30	Top width (ft)		332.30
Vel Total (ft/s)	0.29	Avg. Vel. (ft/s)		0.29
Max Chl Dpth (ft)	2.63	Hydr. Depth (ft)		2.00
Conv. Total (cfs)	101706.1	Conv. (cfs)		101706.1
Length wtd. (ft)	0.49	wetted Per. (ft)		333.56
Min Ch El (ft)	815.28	Shear (lb/sq ft)		0.00

CPNPPLocalPMP

Alpha 0.00	1.00	Stream Power (lb/ft s)	363.07	0.00
Frctn Loss (ft) 6.12	0.00	Cum Volume (acre-ft)	3.68	48.82
C & E Loss (ft)	0.00	Cum SA (acres)		0.62

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.36842*

INPUT

Description:

Station Elevation Data num= 13

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.14	11.72	818.81	17.17	818.65	27.04	818.37	32.47	817.72
34.58	817.08	90.63	816.28	141.1	815.49	145.32	815.16	262.55	815.16
266.34	815.47	312.15	816.11	363.07	816.74				

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	11.72	.0122	17.17	.0138	27.04	.0155	363.07	.0155

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

27.04	363.07	.49	.49	.49	.1	.3
-------	--------	-----	-----	-----	----	----

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-val.		0.016
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49 Crit w.s. (ft)		Flow Area (sq ft)		688.43
E.G. slope (ft/ft)	0.000003	Area (sq ft)		688.43
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	332.19	Top width (ft)		332.19
vel Total (ft/s)	0.28	Avg. vel. (ft/s)		0.28
Max chl Dpth (ft)	2.75	Hydr. Depth (ft)		2.07
Conv. Total (cfs)	106991.6	Conv. (cfs)		106991.6
Length wtd. (ft)	0.49	wetted Per. (ft)		333.52
Min ch El (ft)	815.16	Shear (lb/sq ft)		0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	363.07	0.00

Frctn Loss (ft)	0.00	CPNPPLocalPMP Cum Volume (acre-ft)	3.68	48.82
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.62

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.34210*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev									
0 819.13 11.87 818.79 17.38 818.63									
35.14 817 92.88 816.18 144.88 815.38									
262.31 815.37 310.03 816.03 363.07 816.68									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val									
0 .0066 11.87 .0122 17.38 .0139									
27.38 .0156 363.07 .0156									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expans.
27.38 363.07	.49 .49 .49	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.016
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)		Flow Area (sq ft)		712.27
E.G. slope (ft/ft)	0.000003	Area (sq ft)		712.27
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	332.11	Top width (ft)		332.11
vel Total (ft/s)	0.28	Avg. vel. (ft/s)		0.28
Max Chl Dpth (ft)	2.87	Hydr. Depth (ft)		2.14
Conv. Total (cfs)	112516.5	Conv. (cfs)		112516.5
Length Wtd. (ft)	0.49	wetted Per. (ft)		333.50
Min Ch El (ft)	815.04	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.81
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.61

CPNPPLocalPMP

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.31579*

INPUT

Description:

Station Elevation Data		num= 13		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.12	12.02	818.77	17.6	818.61	27.72	818.32	33.47	817.62		
35.71	816.93	95.14	816.09	148.65	815.27	153.12	814.92	254.17	814.92		
258.28	815.26	307.91	815.95	363.07	816.63						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12.02	.0123	17.6	.0139	27.72	.0157	363.07	.0157		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	27.72	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.016
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)		Flow Area (sq ft)		734.62
E.G. slope (ft/ft)	0.000003	Area (sq ft)		734.62
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	331.99	Top width (ft)		331.99
Vel Total (ft/s)	0.27	Avg. vel. (ft/s)		0.27
Max Chl Dpth (ft)	2.99	Hydr. Depth (ft)		2.21
Conv. Total (cfs)	117721.3	Conv. (cfs)		117721.3
Length wtd. (ft)	0.49	wetted Per. (ft)		333.44
Min Ch El (ft)	814.92	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.80
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.61

CPNPPLocalPMP

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
REACH: Unit 3 East RS: 2.28947*

INPUT

Description:

Station Elevation Data		num= 13	
Sta	Elev	Sta	Elev
0	819.11	12.16	818.76
36.27	816.85	97.39	816
254.25	815.16	305.79	815.87
			363.07
			816.58

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	12.16	.0123
			17.82
			.0139
			28.06
			.0158
			363.07
			.0158

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	28.06	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.016
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49		Flow Area (sq ft)		756.10
Crit w.s. (ft)		Area (sq ft)		756.10
E.G. slope (ft/ft)	0.000003	Flow (cfs)		196.00
Q Total (cfs)	196.00	Top width (ft)		331.90
Top width (ft)	331.90	Avg. vel. (ft/s)		0.26
vel Total (ft/s)	0.26	Hydr. Depth (ft)		2.28
Max Chl Dpth (ft)	3.11	Conv. (cfs)		122738.5
Conv. Total (cfs)	122738.5	wetted Per. (ft)		333.41
Length Wtd. (ft)	0.49	Shear (lb/sq ft)		0.00
Min Ch El (ft)	814.80	Stream Power (lb/ft s)	363.07	0.00
Alpha	1.00	Cum volume (acre-ft)	3.68	48.79
0.00		Cum SA (acres)		0.60
Frctn Loss (ft)	0.00			
6.12				
C & E Loss (ft)	0.00			

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.26315*

INPUT

Description:

Station Elevation Data		num= 13		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.1	12.31	818.74	18.03	818.57	28.4	818.26	34.48	817.51		
36.84	816.77	99.64	815.91	156.19	815.06	160.92	814.68	245.79	814.68		
250.22	815.05	303.67	815.79	363.07	816.53						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12.31	.0124	18.03	.014	28.4	.0159	363.07	.0159		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	28.4	363.07		.49	.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.016
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)		Flow Area (sq ft)		777.53
E.G. slope (ft/ft)	0.000002	Area (sq ft)		777.53
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	331.84	Top width (ft)		331.84
vel Total (ft/s)	0.25	Avg. vel. (ft/s)		0.25
Max Chl Dpth (ft)	3.23	Hydr. Depth (ft)		2.34
Conv. Total (cfs)	127783.5	Conv. (cfs)		127783.5
Length wtd. (ft)	0.49	wetted Per. (ft)		333.41
Min Ch El (ft)	814.68	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.78
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.60

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.23684*

INPUT

Description:

Station Elevation Data		num= 13	
Sta	Elev	Sta	Elev
0	819.09	12.46	818.72
37.41	816.7	101.89	815.82
246.18	814.95	301.54	815.71

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	12.46	.0124
		18.25	.014
		28.74	.016
		363.07	.016

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	28.74	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.016
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)		Flow Area (sq ft)		796.84
E.G. slope (ft/ft)	0.000002	Area (sq ft)		796.84
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	331.70	Top width (ft)		331.70
vel Total (ft/s)	0.25	Avg. vel. (ft/s)		0.25
Max chl Dpth (ft)	3.34	Hydr. Depth (ft)		2.40
Conv. Total (cfs)	132303.5	Conv. (cfs)		132303.5
Length wtd. (ft)	0.49	wetted Per. (ft)		333.34
Min Ch El (ft)	814.57	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.77
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.60

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.21052*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 13	
Sta	Elev	Sta	Elev
0	819.08	12.6	818.71
37.97	816.62	104.15	815.73
242.15	814.84	299.42	815.63

Manning's n Values		num= 5	
Sta	n Val	Sta	n Val
0	.0066	12.6	.0125
		18.46	.0141
		29.08	.0161

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	29.08	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.00		wt. n-val.		0.016
w.s. Elev (ft)	817.91		Reach Len. (ft)	0.49	0.49
0.49					
Crit w.s. (ft)			Flow Area (sq ft)		817.06
E.G. slope (ft/ft)	0.000002		Area (sq ft)		817.06
Q Total (cfs)	196.00		Flow (cfs)		196.00
Top width (ft)	331.60		Top width (ft)		331.60
vel Total (ft/s)	0.24		Avg. vel. (ft/s)		0.24
Max Chl Dpth (ft)	3.46		Hydr. Depth (ft)		2.46
Conv. Total (cfs)	137099.3		Conv. (cfs)		137099.3
Length wtd. (ft)	0.49		wetted Per. (ft)		333.30
Min Ch El (ft)	814.45		Shear (lb/sq ft)		0.00
Alpha	1.00		Stream Power (lb/ft s)	363.07	0.00
0.00					
Frctn Loss (ft)	0.00		Cum volume (acre-ft)	3.68	48.77
6.12					
C & E Loss (ft)	0.00		Cum SA (acres)		0.59

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.18421*

INPUT
 Description:

Station Elevation Data				num=		CPNPPLocalPMP		13			
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.07	12.75	818.69	18.68	818.51	29.42	818.18	35.98	817.36		
38.54	816.54	106.4	815.64	167.51	814.74	172.62	814.33	233.23	814.33		
238.12	814.74	297.3	815.55	363.07	816.37						

Manning's n Values				num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12.75	.0125	18.68	.0141	29.42	.0162	363.07	.0162		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	29.42	363.07		.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)		Element	Left OB	Channel
Right OB	817.91				
Vel Head (ft)	0.00		wt. n-val.		0.016
w.s. Elev (ft)	817.91		Reach Len. (ft)	0.49	0.49
0.49			Flow Area (sq ft)		836.35
Crit w.s. (ft)			Area (sq ft)		836.35
E.G. slope (ft/ft)	0.000002		Flow (cfs)		196.00
Q Total (cfs)	196.00		Top width (ft)		331.50
Top width (ft)	331.50		Avg. vel. (ft/s)		0.23
vel Total (ft/s)	0.23		Hydr. Depth (ft)		2.52
Max chl Dpth (ft)	3.58		Conv. (cfs)		141667.1
Conv. Total (cfs)	141667.1		wetted Per. (ft)		333.26
Length wtd. (ft)	0.49		Shear (lb/sq ft)		0.00
Min ch El (ft)	814.33		Stream Power (lb/ft s)	363.07	0.00
Alpha	1.00		Cum volume (acre-ft)	3.68	48.76
0.00			Cum SA (acres)		0.59
Frctn Loss (ft)	0.00				
6.12					
C & E Loss (ft)	0.00				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.15789*

INPUT

Description:

Station Elevation Data				num=		13					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.06	12.9	818.67	18.89	818.49	29.75	818.16	36.49	817.31		

		CPNPPLocalPMP							
39.1	816.46	108.65	815.55	171.28	814.64	176.52	814.21	229.04	814.21
234.09	814.63	295.18	815.47	363.07	816.32				
Manning's n Values		num=		5					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12.9	.0126	18.89	.0141	29.75	.0164	363.07	.0164
Bank Sta:	Left	Right	Lengths:		Left Channel	Right	Coeff	Contr.	Expan.
	29.75	363.07			.49	.49		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.016
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit w.s. (ft)		Flow Area (sq ft)		854.98
E.G. slope (ft/ft)	0.000002	Area (sq ft)		854.98
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	331.35	Top width (ft)		331.35
vel Total (ft/s)	0.23	Avg. vel. (ft/s)		0.23
Max Chl Dpth (ft)	3.70	Hydr. Depth (ft)		2.58
Conv. Total (cfs)	145200.4	Conv. (cfs)		145200.4
Length wtd. (ft)	0.49	wetted Per. (ft)		333.17
Min Ch El (ft)	814.21	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.75
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.59

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.13157*

INPUT

Description:

Station Elevation Data		num=		13					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.05	13.04	818.66	19.11	818.47	30.09	818.13	36.99	817.26
39.67	816.39	110.91	815.46	175.05	814.53	180.42	814.09	224.85	814.09
230.06	814.53	293.06	815.39	363.07	816.26				

Manning's n Values				num=	CPNPPLocalPMP					
Sta	n Val	Sta	n Val	5	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	13.04	.0126		19.11	.0142	30.09	.0165	363.07	.0165
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.	
	30.09	363.07		.49	.49	.49		.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.017
w.s. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49		Flow Area (sq ft)		872.94
Crit w.s. (ft)		Area (sq ft)		872.94
E.G. slope (ft/ft)	0.000002	Flow (cfs)		196.00
Q Total (cfs)	196.00	Top width (ft)		331.24
Top width (ft)	331.24	Avg. vel. (ft/s)		0.22
vel Total (ft/s)	0.22	Hydr. Depth (ft)		2.64
Max chl Dpth (ft)	3.82	Conv. (cfs)		149419.8
Conv. Total (cfs)	149419.8	wetted Per. (ft)		333.13
Length wtd. (ft)	0.49	Shear (lb/sq ft)		0.00
Min ch El (ft)	814.09	Stream Power (lb/ft s)	363.07	0.00
Alpha	1.00	Cum volume (acre-ft)	3.68	48.74
0.00		Cum SA (acres)		0.58
Frctn Loss (ft)	0.00			
6.12				
C & E Loss (ft)	0.00			

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.10526*

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	13	Sta	Elev	Sta	Elev	Sta	Elev
0	819.04	13.19	818.64		19.32	818.45	30.43	818.11	37.49	817.21
40.24	816.31	113.16	815.36		178.82	814.42	184.31	813.97	220.66	813.97
226.03	814.42	290.94	815.32		363.07	816.21				

Manning's n Values				num=						
Sta	n Val	Sta	n Val	5	Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	13.19	.0127		19.32	.0142	30.43	.0166	363.07	.0166

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 30.43 363.07 .49 .49 .49 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.017
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit W.S. (ft)		Flow Area (sq ft)		890.67
E.G. slope (ft/ft)	0.000002	Area (sq ft)		890.67
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	331.08	Top width (ft)		331.08
vel Total (ft/s)	0.22	Avg. vel. (ft/s)		0.22
Max Chl Dpth (ft)	3.94	Hydr. Depth (ft)		2.69
Conv. Total (cfs)	153612.9	Conv. (cfs)		153612.9
Length wtd. (ft)	0.49	wetted Per. (ft)		333.03
Min Ch El (ft)	813.97	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.73
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.58

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.07894*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.03 13.34 818.62 19.54 818.43 30.77 818.08 37.99 817.15									
40.8 816.23 115.41 815.27 182.59 814.32 188.21 813.86 216.48 813.86									
222 814.32 288.81 815.24 363.07 816.16									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 13.34 .0127 19.54 .0142 30.77 .0167 363.07 .0167									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 30.77 363.07 .49 .49 .49 .1 .3

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.017
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit W.S. (ft)		Flow Area (sq ft)		906.75
E.G. Slope (ft/ft)	0.000002	Area (sq ft)		906.75
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	330.99	Top width (ft)		330.99
Vel Total (ft/s)	0.22	Avg. vel. (ft/s)		0.22
Max Chl Dpth (ft)	4.05	Hydr. Depth (ft)		2.74
Conv. Total (cfs)	157323.8	Conv. (cfs)		157323.8
Length wtd. (ft)	0.49	wetted Per. (ft)		333.00
Min Ch El (ft)	813.86	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.72
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.57

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.05263*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.02 13.49 818.6 19.75 818.41 31.11 818.05 38.5 817.1									
41.37 816.15 117.66 815.18 186.37 814.21 192.11 813.74 212.29 813.74									
217.97 814.21 286.69 815.16 363.07 816.11									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 13.49 .0128 19.75 .0143 31.11 .0168 363.07 .0168									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
31.11 363.07	.49 .49 .49	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.017
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49				
Crit W.S. (ft)		Flow Area (sq ft)		923.28
E.G. Slope (ft/ft)	0.000001	Area (sq ft)		923.28
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	330.88	Top Width (ft)		330.88
Vel Total (ft/s)	0.21	Avg. Vel. (ft/s)		0.21
Max Chl Dpth (ft)	4.17	Hydr. Depth (ft)		2.79
Conv. Total (cfs)	161185.1	Conv. (cfs)		161185.1
Length wtd. (ft)	0.49	wetted Per. (ft)		332.95
Min Ch El (ft)	813.74	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	48.71
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)		0.57

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 2.02631*

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819.01 13.63 818.59 19.97 818.39 31.45 818.03 39 817.05									
41.93 816.08 119.92 815.09 190.14 814.11 196.01 813.62 208.1 813.62									
213.94 814.11 284.57 815.08 363.07 816.05									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0066 13.63 .0128 19.97 .0143 31.45 .0169 363.07 .0169									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
31.45 363.07	.49 .49 .49	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB				

Vel Head (ft)	0.00	CPNPPLocalPMP wt. n-Val.		0.017
W.S. Elev (ft)	817.91	Reach Len. (ft)	0.49	0.49
0.49 Crit W.S. (ft)		Flow Area (sq ft)		938.39
E.G. Slope (ft/ft)	0.000001	Area (sq ft)		938.39
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	330.70	Top Width (ft)		330.70
Vel Total (ft/s)	0.21	Avg. Vel. (ft/s)		0.21
Max Chl Dpth (ft)	4.29	Hydr. Depth (ft)		2.84
Conv. Total (cfs)	164659.8	Conv. (cfs)		164659.8
Length wtd. (ft)	0.49	wetted Per. (ft)		332.84
Min Ch El (ft)	813.62	Shear (lb/sq ft)		0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	363.07	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.68	48.70
6.12 C & E Loss (ft)	0.00	Cum SA (acres)		0.57

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 East
REACH: Unit 3 East RS: 2

INPUT

Description:

Station Elevation Data	num=	12							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 819 13.78 818.57 31.79 818 39.5 817 42.5 816									
122.17 815 193.91 814 199.91 813.5 203.91 813.5 209.91 814									
282.45 815 363.07 816									

Manning's n Values	num=	3			
Sta n Val Sta n Val Sta n Val					
0 .0066 13.78 .0129 31.79 .017					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
31.79 363.07	70.85 70.85 70.85	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	817.91	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-Val.		0.017
W.S. Elev (ft)	817.91	Reach Len. (ft)	70.85	70.85

CPNPPLocalPMP

70.85				
Crit W.S. (ft)	814.69	Flow Area (sq ft)		953.67
E.G. Slope (ft/ft)	0.000001	Area (sq ft)		953.67
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top Width (ft)	330.60	Top Width (ft)		330.60
Vel Total (ft/s)	0.21	Avg. Vel. (ft/s)		0.21
Max Chl Dpth (ft)	4.41	Hydr. Depth (ft)		2.88
Conv. Total (cfs)	168173.9	Conv. (cfs)		168173.9
Length wtd. (ft)	70.85	wetted Per. (ft)		332.80
Min Ch El (ft)	813.50	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	363.07	0.00
0.00		Cum volume (acre-ft)	3.68	48.69
Frctn Loss (ft)		Cum SA (acres)		0.56
6.12				
C & E Loss (ft)				

INLINE STRUCTURE

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 1.5

INPUT

Description:

Distance from Upstream XS = 15.85

Deck/Roadway width = 24

Weir Coefficient = 2.6

Weir Embankment Coordinates num = 6

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819	50	818	75	817.5	353.88	817.5	353.88	825
363.07	825								

Upstream Embankment side slope = 2 horiz. to 1.0 vertical

Downstream Embankment side slope = 2 horiz. to 1.0 vertical

Maximum allowable submergence for weir flow = .98

Elevation at which weir flow begins =

Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Unit 3 East
 REACH: Unit 3 East RS: 1

INPUT

Description:

Station Elevation Data num= 4

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	818	25.49	810	333.65	810	378.15	816

Manning's n Values num= CPNPPLocalPMP
 Sta n Val 1
 0 .0129
 Bank Sta: Left Right Coeff Contr. Expan.
 0 378.15 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.10	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-val.		0.013
w.s. Elev (ft)	815.10	Reach Len. (ft)		
Crit w.s. (ft)	810.23	Flow Area (sq ft)		1709.50
E.G. slope (ft/ft)	0.000000	Area (sq ft)		1709.50
Q Total (cfs)	196.00	Flow (cfs)		196.00
Top width (ft)	362.23	Top width (ft)		362.23
vel Total (ft/s)	0.11	Avg. vel. (ft/s)		0.11
Max Chl Dpth (ft)	5.10	Hydr. Depth (ft)		4.72
Conv. Total (cfs)	552878.4	Conv. (cfs)		552878.4
Length wtd. (ft)		wetted Per. (ft)		363.36
Min ch El (ft)	810.00	Shear (lb/sq ft)		0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	378.15	0.00
Frctn Loss (ft)		Cum volume (acre-ft)		
C & E Loss (ft)		Cum SA (acres)		

CROSS SECTION

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 8

INPUT

Description:

Station Elevation Data	num=	12							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819.3 0 819.3 3.92 819.3 7.92 819.23 20.16 819									
31.92 818.37 38.92 818 48.51 817 94.51 817 109.95 822									
112.95 822 122 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 7.92 .0066 31.92 .0129 122 .0129									

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff Contr.	Expan.
38.92 109.95	38.08 38.08	38.08	.1	.3

Blocked Obstructions num= CPNPPLocalPMP
 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 112.95 122 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.008	0.013
W.S. Elev (ft)	820.12	Reach Len. (ft)	38.08	38.08
38.08				
Crit W.S. (ft)	817.71	Flow Area (sq ft)	49.48	183.88
E.G. slope (ft/ft)	0.000010	Area (sq ft)	49.48	183.88
Q Total (cfs)	164.00	Flow (cfs)	32.97	131.03
Top width (ft)	104.15	Top width (ft)	38.92	65.23
vel Total (ft/s)	0.70	Avg. vel. (ft/s)	0.67	0.71
Max Chl Dpth (ft)	3.12	Hydr. Depth (ft)	1.27	2.82
Conv. Total (cfs)	52607.5	Conv. (cfs)	10577.0	42030.5
Length wtd. (ft)	38.08	wetted Per. (ft)	39.77	65.78
Min Ch El (ft)	817.00	Shear (lb/sq ft)	0.00	0.00
Alpha	1.00	Stream Power (lb/ft s)	122.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.68	47.40
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.50	0.88
0.13				

CROSS SECTION

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 7

INPUT

Description:

Station Elevation Data num= 14

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819.3	0	819.3	3.9	819.3	7.9	819.23	20.14	819
31.9	818.37	38.9	818	48.51	817	52.78	816.64	93.44	816.64
94.51	817	109.95	822	112.95	822	122	822		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	7.9	.0066	31.9	.0129
						122	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 38.9 109.95 58.25 58.25 58.25 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	112.95	122	825

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.008	0.013
W.S. Elev (ft)	820.12	Reach Len. (ft)	58.25	58.25
58.25				
Crit W.S. (ft)		Flow Area (sq ft)	49.47	199.55
E.G. slope (ft/ft)	0.000008	Area (sq ft)	49.47	199.55
Q Total (cfs)	164.00	Flow (cfs)	29.56	134.44
Top width (ft)	104.16	Top width (ft)	38.90	65.26
Vel Total (ft/s)	0.66	Avg. vel. (ft/s)	0.60	0.67
Max Chl Dpth (ft)	3.48	Hydr. Depth (ft)	1.27	3.06
Conv. Total (cfs)	58701.6	Conv. (cfs)	10579.5	48122.1
Length wtd. (ft)	58.25	wetted Per. (ft)	39.75	65.87
Min Ch El (ft)	816.64	Shear (lb/sq ft)	0.00	0.00
Alpha	1.01	Stream Power (lb/ft s)	122.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.64	47.23
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.47	0.82
0.13				

CROSS SECTION

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 6

INPUT

Description:

Station Elevation Data num= 14

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819.3	0	819.3	3.89	819.3	7.89	819.23	20.13	819
31.89	818.37	38.89	818	48.52	817	59.31	816.1	91.82	816.1
94.52	817	109.95	822	112.95	822	122	822		

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	7.89	.0066	31.89	.0129	122	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 38.89 109.95 134.06 134.06 134.06 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	112.95	122	825

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	820.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.008	0.013
W.S. Elev (ft)	820.12	Reach Len. (ft)	134.06	134.06
134.06				
Crit W.S. (ft)		Flow Area (sq ft)	49.47	219.34
E.G. Slope (ft/ft)	0.000006	Area (sq ft)	49.47	219.34
Q Total (cfs)	164.00	Flow (cfs)	25.96	138.04
Top Width (ft)	104.16	Top Width (ft)	38.89	65.27
Vel Total (ft/s)	0.61	Avg. vel. (ft/s)	0.52	0.63
Max Chl Dpth (ft)	4.02	Hydr. Depth (ft)	1.27	3.36
Conv. Total (cfs)	66848.0	Conv. (cfs)	10582.0	56266.0
Length wtd. (ft)	134.06	wetted Per. (ft)	39.74	66.00
Min Ch El (ft)	816.10	Shear (lb/sq ft)	0.00	0.00
Alpha	1.01	Stream Power (lb/ft s)	122.00	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)	3.57	46.95
6.12				
C & E Loss (ft)	0.00	cum SA (acres)	0.42	0.73
0.13				

CROSS SECTION

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 5

INPUT

Description:

Station	Elevation	Data	num=	16							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819.3	0	819.3	3.84	819.3	7.84	819.23	20.09	819		
33.16	818.45	43.7	818	58.6	817	63.92	816	69.51	815		
79.51	815	85.02	816	97.42	820	115.42	821.66	119.73	822		
128.73	822.19										

Manning's n Values	num=	5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	7.84	.0066	33.16	.0129	115.42	.0066		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 43.7 97.42 58 58 58 .1 .3

Blocked Obstructions	num=	1
Sta L	Sta R	Elev
-10	0	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.13	Element	Left OB	Channel
----------------	--------	---------	---------	---------

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.009	0.013
0.013				
W.S. Elev (ft)	820.12	Reach Len. (ft)	58.00	58.00
58.00				
Crit w.s. (ft)	816.52	Flow Area (sq ft)	57.14	187.14
0.08				
E.G. slope (ft/ft)	0.000007	Area (sq ft)	57.14	187.14
0.08				
Q Total (cfs)	164.00	Flow (cfs)	32.19	131.80
0.00				
Top width (ft)	98.74	Top width (ft)	43.70	53.72
1.32				
Vel Total (ft/s)	0.67	Avg. Vel. (ft/s)	0.56	0.70
0.05				
Max Chl Dpth (ft)	5.12	Hydr. Depth (ft)	1.31	3.48
0.06				
Conv. Total (cfs)	60931.1	Conv. (cfs)	11960.2	48969.4
1.4				
Length wtd. (ft)	58.00	wetted Per. (ft)	44.55	54.65
1.32				
Min Ch El (ft)	815.00	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	128.73	0.00
0.00				
Frctn Loss (ft)		Cum Volume (acre-ft)	3.41	46.33
6.12				
C & E Loss (ft)		Cum SA (acres)	0.29	0.55
0.12				

INLINE STRUCTURE

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 4.5

INPUT

Description:

Distance from Upstream XS = 17
 Deck/Roadway width = 24
 Weir Coefficient = 2.6

Weir Embankment Coordinates		num = 7									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.3	3.83	819.3	20.08	819	45.13	819	74.53	820		
103.93	821	128.78	821.6								

Upstream Embankment side slope = 2 horiz. to 1.0 vertical
 Downstream Embankment side slope = 2 horiz. to 1.0 vertical
 Maximum allowable submergence for weir flow = .98
 Elevation at which weir flow begins =
 Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 4

INPUT

Description:

Station Elevation Data				num=	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	17	Sta	Elev	Sta	Elev	Sta	Elev
-10	819.3	0	819.3		3.82	819.3	7.82	819.23	20.07	819
33.13	818.68	60.82	818		70.11	815	71.46	814.5	77.46	814.5
78.83	815	88.12	818		101.49	819	107.58	820	115.41	820.39
127.73	821	128.73	821.02							

Manning's n Values				num=						
Sta	n Val	Sta	n Val	9	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129		7.82	.0066	33.13	.0129	60.82	.017
71.46	.0066	77.46	.017		88.12	.0129	115.41	.0066		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	60.82	88.12		35.13	35.13	35.13		.1	.3

Blocked Obstructions			num=						
Sta L	Sta R	Elev	1						
-10	0	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.68	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.	0.011	0.015
0.013				
W.S. Elev (ft)	819.66	Reach Len. (ft)	35.13	35.13
35.13				
Crit w.s. (ft)		Flow Area (sq ft)	57.15	103.14
16.91				
E.G. Slope (ft/ft)	0.000023	Area (sq ft)	57.15	103.14
16.91				
Q Total (cfs)	164.00	Flow (cfs)	40.07	114.80
9.14				
Top width (ft)	105.54	Top width (ft)	60.82	27.30
17.42				
Vel Total (ft/s)	0.93	Avg. Vel. (ft/s)	0.70	1.11
0.54				
Max Chl Dpth (ft)	5.16	Hydr. Depth (ft)	0.94	3.78
0.97				
Conv. Total (cfs)	34164.5	Conv. (cfs)	8346.5	23914.8
1903.2				
Length wtd. (ft)	35.13	wetted Per. (ft)	61.20	28.42
17.51				
Min Ch El (ft)	814.50	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.17	Stream Power (lb/ft s)	128.73	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.41	46.17
6.12				
C & E Loss (ft)	0.00	Cum SA (acres)	0.22	0.49
0.11				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 3.5*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 26		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819.3	-.45	819.3	.49	819.3	3.2	819.3	4.47	819.29		
7.03	819.24	8.67	819.21	18.73	819.02	21.52	818.96	31.21	818.7		
39.81	818.47	57.67	818	64.99	815.59	69.71	814.65	71.46	814.28		
77.46	814.28	79.24	814.65	84	815.59	91.32	818	103.63	818.85		
109.1	819.49	109.24	819.5	115.61	819.86	116.46	819.89	127.81	820.3		
128.73	820.32										

Manning's n Values

num= 16		Sta		n Val		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.45	.0129	.49	.0125	7.03	.0072	8.67	.0068				
31.21	.012	39.81	.0136	57.67	.017	70.78	.007	71.92	.0074				
76.97	.0162	78.18	.0168	91.32	.0129	115.61	.0067	116.46	.0066				
128.73	.0066												

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	57.67	91.32		35.13	35.13	.1	.3
Blocked Obstructions			num=	1			
Sta L	Sta R	Elev					
-10	0	825					

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	819.68	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.01		wt. n-val.	0.011	0.015
0.013					
W.S. Elev (ft)	819.67		Reach Len. (ft)	35.13	35.13
35.13					
Crit w.s. (ft)			Flow Area (sq ft)	53.81	135.82
18.27					
E.G. slope (ft/ft)	0.000015		Area (sq ft)	53.81	135.82
18.27					
Q Total (cfs)	164.00		Flow (cfs)	29.81	126.71
7.48					
Top width (ft)	112.19		Top width (ft)	57.67	33.65
20.87					
Vel Total (ft/s)	0.79		Avg. vel. (ft/s)	0.55	0.93
0.41					
Max Chl Dpth (ft)	5.39		Hydr. Depth (ft)	0.93	4.04
0.88					
Conv. Total (cfs)	42136.0		Conv. (cfs)	7660.1	32554.5
1921.4					
Length wtd. (ft)	35.13		wetted Per. (ft)	58.05	34.68
20.94					
Min Ch El (ft)	814.28		Shear (lb/sq ft)	0.00	0.00
0.00					
Alpha	1.18		Stream Power (lb/ft s)	128.73	0.00
0.00					
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)	3.36	46.08
6.10					
C & E Loss (ft)	0.00		Cum SA (acres)	0.17	0.47
0.10					

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 3

INPUT

Description:

Station Elevation Data			num=	15			Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	819.3	0	819.3	3.8	819.3	7.8	819.23	20.05	819			
37.49	818.49	54.51	818	63.51	815	71.46	814.05	77.46	814.05			
85.51	815	94.51	818	110.78	819	116.73	819.37	128.73	819.61			

Manning's n Values			num=	9			Sta	n Val	Sta	n Val	Sta	n Val
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	0	.0129	7.8	.0066	37.49	.0129	54.51	.017			
71.46	.0066	77.46	.017	94.51	.0129	116.73	.0066					

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.			
	54.51	94.51		18.2	18.2		.1	.3			
Blocked Obstructions			num=	1							
Sta L	Sta R	Elev									
-10	0	825									

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.68	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.010	0.016
0.013				
W.S. Elev (ft)	819.67	Reach Len. (ft)	18.20	18.20
18.20				
Crit w.s. (ft)		Flow Area (sq ft)	50.13	173.04
24.03				
E.G. slope (ft/ft)	0.000009	Area (sq ft)	50.13	173.04
24.03				
Q Total (cfs)	164.00	Flow (cfs)	24.72	131.14
8.13				
Top width (ft)	128.73	Top width (ft)	54.51	40.00
34.22				
Vel Total (ft/s)	0.66	Avg. vel. (ft/s)	0.49	0.76
0.34				
Max Chl Dpth (ft)	5.62	Hydr. Depth (ft)	0.92	4.33
0.70				
Conv. Total (cfs)	53342.9	Conv. (cfs)	8041.2	42655.8
2645.8				
Length wtd. (ft)	18.20	wetted Per. (ft)	54.90	41.09
34.32				
Min Ch El (ft)	814.05	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.14	Stream Power (lb/ft s)	128.73	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.32	45.95
6.09				
C & E Loss (ft)	0.00	Cum SA (acres)	0.13	0.44
0.07				

warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 2

INPUT

Description:

Station Elevation Data			num=	16					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819.3	0	819.3	10.16	819.18	26.12	819	53.75	818.26
63.69	818	73.05	815	75.61	814	77.56	813.5	83.56	813.5
85.61	814	87.97	815	97.21	818	122.84	818.99	123.45	819
134.84	819.22								

Manning's n Values			num=	9					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	10.16	.0066	53.75	.0129	63.69	.017
77.56	.0066	83.56	.017	97.21	.0129	122.84	.0066		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 63.69 97.21 137.8 137.8 137.8 .1 .3

Blocked Obstructions			num=	1	
Sta L	Sta R	Elev			
-10	0	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.68	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.008	0.015
0.012				
W.S. Elev (ft)	819.67	Reach Len. (ft)	137.80	137.80
137.80				
Crit w.s. (ft)	815.49	Flow Area (sq ft)	57.54	145.03
36.83				
E.G. slope (ft/ft)	0.000010	Area (sq ft)	57.54	145.03
36.83				
Q Total (cfs)	164.00	Flow (cfs)	33.33	115.08
15.59				
Top width (ft)	134.84	Top width (ft)	63.69	33.52
37.63				
Vel Total (ft/s)	0.69	Avg. vel. (ft/s)	0.58	0.79
0.42				
Max Chl Dpth (ft)	6.17	Hydr. Depth (ft)	0.90	4.33
0.98				
Conv. Total (cfs)	51161.7	Conv. (cfs)	10396.4	35901.3
4864.0				
Length wtd. (ft)	137.80	wetted Per. (ft)	64.07	34.98
38.10				
Min Ch El (ft)	813.50	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.12	Stream Power (lb/ft s)	134.84	0.00
0.00				
Frctn Loss (ft)		Cum Volume (acre-ft)	3.30	45.89
6.07				
C & E Loss (ft)		Cum SA (acres)	0.10	0.42
0.06				

INLINE STRUCTURE

CPNPPLocalPMP

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 1.5

INPUT

Description:

Distance from Upstream XS = 19.04
 Deck/Roadway width = 36.16
 Weir Coefficient = 2.6
 Weir Embankment Coordinates num = 3

Sta	Elev	Sta	Elev	Sta	Elev
0	819.3	61.47	819	170.17	819

Upstream Embankment side slope = 2 horiz. to 1.0 vertical
 Downstream Embankment side slope = 2 horiz. to 1.0 vertical
 Maximum allowable submergence for weir flow = .98
 Elevation at which weir flow begins =
 Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Unit 3 North
 REACH: Unit 3 North RS: 1

INPUT

Description:

Station Elevation Data num= 5

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	814	218.56	813	224.68	813	228.76	814	234.88	816

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.0066	228.76	.017

Bank Sta: Left Right Coeff Contr. Expan.
 0 234.88 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.007
w.s. Elev (ft)	818.12	Reach Len. (ft)		
Crit w.s. (ft)	813.64	Flow Area (sq ft)		1079.02
E.G. Slope (ft/ft)	0.000000	Area (sq ft)		1079.02
Q Total (cfs)	164.00	Flow (cfs)		164.00
Top width (ft)	234.88	Top width (ft)		234.88
Vel Total (ft/s)	0.15	Avg. Vel. (ft/s)		0.15
Max Chl Dpth (ft)	5.12	Hydr. Depth (ft)		4.59
Conv. Total (cfs)	614233.5	Conv. (cfs)		614233.5

Length wtd. (ft)		CPNPPLocalPMP Wetted Per. (ft)		241.56
Min Ch El (ft)	813.00	Shear (lb/sq ft)		0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	234.88	0.00
Frctn Loss (ft)		Cum Volume (acre-ft)		
C & E Loss (ft)		Cum SA (acres)		

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 11

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev									
-10 822 0 822 2.59 822 20.78 821 52.64 820									
58.53 819.69 64.44 820 78.48 821 80.48 821 90 821									

Manning's n Values	num=	3
Sta n Val Sta n Val Sta n Val		
-10 .0129 0 .0129 90 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
52.64 64.44	4.92 4.92 4.92	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 827 80.48 90 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.59	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.11	wt. n-Val.	0.013	0.013
0.013				
w.s. Elev (ft)	822.48	Reach Len. (ft)	4.92	4.92
4.92				
Crit w.s. (ft)	821.52	Flow Area (sq ft)	82.19	31.10
30.77				
E.G. slope (ft/ft)	0.000227	Area (sq ft)	82.19	31.10
30.77				
Q Total (cfs)	371.00	Flow (cfs)	190.59	102.83
77.58				
Top width (ft)	80.48	Top width (ft)	52.64	11.80
16.04				
Vel Total (ft/s)	2.58	Avg. vel. (ft/s)	2.32	3.31
2.52				
Max Chl Dpth (ft)	2.79	Hydr. Depth (ft)	1.56	2.64
1.92				
Conv. Total (cfs)	24639.6	Conv. (cfs)	12657.8	6829.4
5152.4				
Length wtd. (ft)	4.92	wetted Per. (ft)	53.16	11.82
17.56				

		CPNPPLocalPMP		
Min Ch El (ft)	819.69	Shear (lb/sq ft)	0.02	0.04
0.02				
Alpha	1.07	Stream Power (lb/ft s)	90.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.30	44.31
6.07				
C & E Loss (ft)	0.00	Cum SA (acres)	1.11	0.57
0.05				

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.9090*

INPUT

Description:

Station Elevation Data		num=	18								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.27	-2.15	822.27	-1.29	822.27	.28	822.26	2.94	822.25		
13.12	821.69	21.65	821.22	27.47	821.02	37.83	820.64	50.78	820.19		
54.4	820	60.43	819.66	66.45	820	79.37	820.93	80.43	821		
81.56	821	82.43	821	91.91	821						

Manning's n Values		num=	5								
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.15	.0129	.28	.0129	54.4	.0129	91.91	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	54.4	66.45		4.92	4.92	4.92		.1	.3

Blocked Obstructions		num=	2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10		0827.272782	782.35091	91.91	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.59	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.13	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	822.46	Reach Len. (ft)	4.92	4.92
4.92				
Crit w.s. (ft)		Flow Area (sq ft)	73.79	31.67
30.13				
E.G. Slope (ft/ft)	0.000275	Area (sq ft)	73.79	31.67
30.13				
Q Total (cfs)	371.00	Flow (cfs)	172.95	115.05
83.00				
Top width (ft)	82.35	Top width (ft)	54.40	12.05
15.90				
Vel Total (ft/s)	2.74	Avg. vel. (ft/s)	2.34	3.63
2.75				
Max Chl Dpth (ft)	2.80	Hydr. Depth (ft)	1.36	2.63
1.90				
Conv. Total (cfs)	22378.4	Conv. (cfs)	10432.1	6939.5
5006.7				
Length wtd. (ft)	4.92	wetted Per. (ft)	54.65	12.07
17.39				
Min Ch El (ft)	819.66	Shear (lb/sq ft)	0.02	0.05
0.03				

	CPNPPLocalPMP			
Alpha	1.12	Stream Power (lb/ft s)	91.91	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.29	44.30
6.07				
C & E Loss (ft)	0.00	Cum SA (acres)	1.11	0.56
0.05				

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.8181*

INPUT

Description:

Station	Elevation	Data	num=	18							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.55	-1.93	822.55	-1.05	822.55	.56	822.53	3.3	822.49		
13.75	821.92	22.51	821.44	28.5	821.22	39.14	820.78	52.44	820.27		
56.17	820	62.32	819.62	68.46	820	81.32	820.94	82.39	821		
83.51	821	84.37	821	93.82	821						

Manning's n Values	num=	5							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.93	.0129	.56	.0129	56.17	.0129	93.82	.0129

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
56.17	68.46	4.92	4.92	4.92	.1	.3	

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0827.545584.22182	93.82	93.82	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.58	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.15	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	822.43	Reach Len. (ft)	4.92	4.92
4.92				
Crit w.s. (ft)		Flow Area (sq ft)	64.62	32.19
29.38				
E.G. slope (ft/ft)	0.000328	Area (sq ft)	64.62	32.19
29.38				
Q Total (cfs)	371.00	Flow (cfs)	156.14	127.41
87.45				
Top width (ft)	79.81	Top width (ft)	51.76	12.29
15.76				
Vel Total (ft/s)	2.94	Avg. vel. (ft/s)	2.42	3.96
2.98				
Max Chl Dpth (ft)	2.81	Hydr. Depth (ft)	1.25	2.62
1.86				
Conv. Total (cfs)	20491.8	Conv. (cfs)	8624.4	7037.3
4830.1				
Length wtd. (ft)	4.92	wetted Per. (ft)	51.82	12.31
17.23				
Min Ch El (ft)	819.62	Shear (lb/sq ft)	0.03	0.05
0.03				
Alpha	1.15	Stream Power (lb/ft s)	93.82	0.00
0.00				

Frctn Loss (ft)	0.00	CPNPPLocalPMP		
6.07		Cum Volume (acre-ft)	3.28	44.30
C & E Loss (ft)	0.00	Cum SA (acres)	1.10	0.56
0.05				

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.7272*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 822.82 -1.72 822.82 -.82 822.82 .84 822.79 3.65 822.74									
14.39 822.15 23.38 821.66 29.52 821.42 40.45 820.91 54.1 820.35									
57.93 820 64.22 819.59 70.47 820 83.28 820.94 84.34 821									
85.46 821 86.32 821 95.73 821									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -1.72 .0129 .84 .0129 57.93 .0129 95.73 .0129									

Bank Sta: Left Right Lengths: Left Channel Right									
57.93 70.47 4.92 4.92 4.92									
Coeff Contr. Expan.									
.1 .3									

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0827.818286.09273 95.73 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.58	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	822.40	Reach Len. (ft)	4.92	4.92
4.92				
Crit W.S. (ft)		Flow Area (sq ft)	56.43	32.65
28.68				
E.G. slope (ft/ft)	0.000381	Area (sq ft)	56.43	32.65
28.68				
Q Total (cfs)	371.00	Flow (cfs)	141.07	138.77
91.16				
Top width (ft)	76.23	Top width (ft)	48.07	12.54
15.62				
Vel Total (ft/s)	3.15	Avg. vel. (ft/s)	2.50	4.25
3.18				
Max Chl Dpth (ft)	2.81	Hydr. Depth (ft)	1.17	2.60
1.84				
Conv. Total (cfs)	19005.5	Conv. (cfs)	7226.6	7108.8
4670.1				
Length wtd. (ft)	4.92	wetted Per. (ft)	48.14	12.57
17.06				
Min Ch El (ft)	819.59	Shear (lb/sq ft)	0.03	0.06
0.04				
Alpha	1.17	Stream Power (lb/ft s)	95.73	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.28	44.29
6.06				

C & E Loss (ft) 0.05
 0.00 CPNPPLocalPMP Cum SA (acres) 1.09 0.56

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.6363*

INPUT

Description:

Station		Elevation Data		num= 18		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	823.09	-1.5	823.09	-.58	823.09	1.13	823.05	4.01	822.98				
15.02	822.38	24.24	821.87	30.55	821.61	41.76	821.05	55.77	820.43				
59.69	820	66.12	819.55	72.48	820	85.24	820.95	86.3	821				
87.41	821	88.27	821	97.64	821								

Manning's n Values		num= 5		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.5	.0129	1.13	.0129	59.69	.0129	97.64	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	59.69	72.48		4.92	4.92	4.92		.1	.3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R
-10		0828.090987	97.96364	97.64	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.57	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.21	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	822.36	Reach Len. (ft)	4.92	4.92
4.92				
Crit w.s. (ft)		Flow Area (sq ft)	48.81	33.09
27.81				
E.G. Slope (ft/ft)	0.000443	Area (sq ft)	48.81	33.09
27.81				
Q Total (cfs)	371.00	Flow (cfs)	126.04	150.91
94.05				
Top width (ft)	72.61	Top width (ft)	44.34	12.79
15.48				
Vel Total (ft/s)	3.38	Avg. vel. (ft/s)	2.58	4.56
3.38				
Max Chl Dpth (ft)	2.81	Hydr. Depth (ft)	1.10	2.59
1.80				
Conv. Total (cfs)	17626.8	Conv. (cfs)	5988.5	7169.8
4468.5				
Length wtd. (ft)	4.92	wetted Per. (ft)	44.41	12.82
16.88				
Min Ch El (ft)	819.55	Shear (lb/sq ft)	0.03	0.07
0.05				
Alpha	1.19	Stream Power (lb/ft s)	97.64	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.27	44.29
6.06				
C & E Loss (ft)	0.00	Cum SA (acres)	1.09	0.56
0.05				

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.5454*

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	823.36	-1.29	823.36	-.34	823.36	1.41	823.31	4.36	823.23		
15.65	822.61	25.11	822.09	31.58	821.81	43.07	821.19	57.43	820.51		
61.45	820	68.01	819.52	74.49	820	87.2	820.96	88.25	821		
89.36	821	90.21	821	99.55	821						

Manning's n Values		num= 5		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.29	.0129	1.41	.0129	61.45	.0129	99.55	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	61.45	74.49		4.92	4.92		.1	.3

Blocked Obstructions		num= 2		Sta L Elev		Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Elev
-10	0828.363689.83455	99.55	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.57	Element	Left OB	Channel
Right OB				
vel Head (ft)	0.25	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	822.32	Reach Len. (ft)	4.92	4.92
4.92				
Crit w.s. (ft)		Flow Area (sq ft)	41.73	33.39
26.89				
E.G. slope (ft/ft)	0.000516	Area (sq ft)	41.73	33.39
26.89				
Q Total (cfs)	371.00	Flow (cfs)	111.16	163.19
96.65				
Top width (ft)	68.92	Top width (ft)	40.53	13.04
15.34				
vel Total (ft/s)	3.64	Avg. vel. (ft/s)	2.66	4.89
3.59				
Max Chl Dpth (ft)	2.80	Hydr. Depth (ft)	1.03	2.56
1.75				
Conv. Total (cfs)	16334.8	Conv. (cfs)	4894.2	7185.2
4255.4				
Length wtd. (ft)	4.92	wetted Per. (ft)	40.61	13.08
16.70				
Min Ch El (ft)	819.52	Shear (lb/sq ft)	0.03	0.08
0.05				
Alpha	1.21	Stream Power (lb/ft s)	99.55	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	3.26	44.29
6.06				
C & E Loss (ft)	0.00	Cum SA (acres)	1.08	0.56
0.05				

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.4545*

INPUT

Description:

Station Elevation Data		num= 18		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	823.64	-1.07	823.64	-1	823.64	1.69	823.58	4.72	823.48		
16.29	822.84	25.98	822.31	32.6	822.01	44.37	821.32	59.09	820.6		
63.22	820	69.91	819.48	76.49	820	89.16	820.97	90.2	821		
91.31	821	92.16	821	101.45	821						

Manning's n Values		num= 5		Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.07	.0129	1.69	.0129	63.22	.0129	101.45	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	63.22	76.49		4.92	4.92		.1	.3

Blocked Obstructions		num= 2		Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10		0828.636491	70545	101.45		825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.56	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.29	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	822.28	Reach Len. (ft)	4.92	4.92
4.92				
Crit W.S. (ft)		Flow Area (sq ft)	35.49	33.65
25.95				
E.G. slope (ft/ft)	0.000593	Area (sq ft)	35.49	33.65
25.95				
Q Total (cfs)	371.00	Flow (cfs)	97.57	175.12
98.31				
Top width (ft)	64.97	Top width (ft)	36.48	13.27
15.22				
Vel Total (ft/s)	3.90	Avg. vel. (ft/s)	2.75	5.20
3.79				
Max Chl Dpth (ft)	2.80	Hydr. Depth (ft)	0.97	2.54
1.71				
Conv. Total (cfs)	15236.8	Conv. (cfs)	4007.1	7192.1
4037.6				
Length wtd. (ft)	4.92	wetted Per. (ft)	36.57	13.31
16.53				
Min Ch El (ft)	819.48	Shear (lb/sq ft)	0.04	0.09
0.06				
Alpha	1.22	Stream Power (lb/ft s)	101.45	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.26	44.28
6.05				
C & E Loss (ft)	0.00	Cum SA (acres)	1.08	0.56
0.04				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.3636*

INPUT

Description:

Station Elevation Data		num= 18		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	823.91	-.86	823.91	.14	823.91	1.97	823.84	5.07	823.72		
16.92	823.07	26.84	822.53	33.63	822.21	45.68	821.46	60.76	820.68		
64.98	820	71.8	819.45	78.5	820	91.12	820.97	92.16	821		
93.26	821	94.1	821	103.36	821						

Manning's n Values		num= 5		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.86	.0129	1.97	.0129	64.98	.0129	103.36	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	64.98	78.5		4.92	4.92	4.92		.1	.3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R
-10		0828.909193.57636	103.36		825				

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	822.56	Element		
Right OB				
Vel Head (ft)	0.32	wt. n-Val.	0.013	0.013
0.013				
w.s. Elev (ft)	822.24	Reach Len. (ft)	4.92	4.92
4.92				
Crit w.s. (ft)		Flow Area (sq ft)	30.40	33.94
25.14				
E.G. Slope (ft/ft)	0.000660	Area (sq ft)	30.40	33.94
25.14				
Q Total (cfs)	371.00	Flow (cfs)	86.92	185.02
99.06				
Top Width (ft)	60.48	Top width (ft)	31.88	13.52
15.08				
Vel Total (ft/s)	4.15	Avg. Vel. (ft/s)	2.86	5.45
3.94				
Max Chl Dpth (ft)	2.79	Hydr. Depth (ft)	0.95	2.51
1.67				
Conv. Total (cfs)	14446.1	Conv. (cfs)	3384.6	7204.4
3857.1				
Length wtd. (ft)	4.92	wetted Per. (ft)	31.98	13.56
16.35				
Min Ch El (ft)	819.45	Shear (lb/sq ft)	0.04	0.10
0.06				
Alpha	1.21	Stream Power (lb/ft s)	103.36	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.26	44.28
6.05				
C & E Loss (ft)	0.00	Cum SA (acres)	1.08	0.56
0.04				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.2727*

INPUT

Description:

Station Elevation Data		num= 18		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	824.18	-.64	824.18	.38	824.18	2.25	824.1	5.42	823.97		
17.55	823.31	27.71	822.75	34.65	822.41	46.99	821.59	62.42	820.76		
66.74	820	73.7	819.41	80.51	820	93.07	820.98	94.11	821		
95.21	821	96.05	821	105.27	821						

Manning's n Values		num= 5		Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.64	.0129	2.25	.0129	66.74	.0129	105.27	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	66.74	80.51		4.92	4.92		.1	.3

Blocked Obstructions		num= 2		Sta L	Sta R	Elev
-10	0829.181895.44727	105.27	825			

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	822.55	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.013	0.36	wt. n-val.	0.013	0.013
W.S. Elev (ft)	4.92	822.19	Reach Len. (ft)	4.92	4.92
Crit w.s. (ft)	24.20		Flow Area (sq ft)	26.21	34.23
E.G. slope (ft/ft)	24.20	0.000734	Area (sq ft)	26.21	34.23
Q Total (cfs)	98.84	371.00	Flow (cfs)	76.64	195.53
Top width (ft)	14.94	57.50	Top width (ft)	28.79	13.77
Vel Total (ft/s)	4.08	4.38	Avg. vel. (ft/s)	2.92	5.71
Max Chl Dpth (ft)	1.62	2.78	Hydr. Depth (ft)	0.91	2.49
Conv. Total (cfs)	3648.3	13694.4	Conv. (cfs)	2828.8	7217.3
Length wtd. (ft)	16.17	4.92	wetted Per. (ft)	28.90	13.82
Min Ch El (ft)	0.07	819.41	Shear (lb/sq ft)	0.04	0.11
Alpha	0.00	1.22	Stream Power (lb/ft s)	105.27	0.00
Frctn Loss (ft)	6.05	0.00	Cum volume (acre-ft)	3.25	44.28
C & E Loss (ft)	0.04	0.00	Cum SA (acres)	1.07	0.55

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.1818*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 18		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	824.45	-.43	824.45	.61	824.45	2.53	824.37	5.78	824.21		
18.18	823.54	28.58	822.97	35.68	822.6	48.3	821.73	64.08	820.84		
68.5	820	75.6	819.38	82.52	820	95.03	820.99	96.07	821		
97.16	821	98	821	107.18	821						

Manning's n Values		num= 5		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.43	.0129	2.53	.0129	68.5	.0129	107.18	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	68.5	82.52		4.92	4.92		.1	.3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R
-10		0829.454597.31818	107.18		825				

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	822.55	Element	Left OB	Channel
	Vel Head (ft)	0.41	wt. n-val.	0.013	0.013
0.013	W.S. Elev (ft)	822.14	Reach Len. (ft)	4.92	4.92
4.92	Crit w.s. (ft)		Flow Area (sq ft)	22.27	34.33
23.17	E.G. slope (ft/ft)	0.000829	Area (sq ft)	22.27	34.33
23.17	Q Total (cfs)	371.00	Flow (cfs)	66.22	206.31
98.47	Top width (ft)	54.94	Top width (ft)	26.12	14.02
14.80	Vel Total (ft/s)	4.65	Avg. vel. (ft/s)	2.97	6.01
4.25	Max Chl Dpth (ft)	2.76	Hydr. Depth (ft)	0.85	2.45
1.57	Conv. Total (cfs)	12882.0	Conv. (cfs)	2299.3	7163.6
3419.0	Length wtd. (ft)	4.92	wetted Per. (ft)	26.24	14.07
15.98	Min Ch El (ft)	819.38	Shear (lb/sq ft)	0.04	0.13
0.08	Alpha	1.22	Stream Power (lb/ft s)	107.18	0.00
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.25	44.27
6.05	C & E Loss (ft)	0.00	Cum SA (acres)	1.07	0.55
0.04					

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10.0909*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 18		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	824.73	-.21	824.73	.85	824.73	2.81	824.63	6.13	824.46		
18.82	823.77	29.44	823.19	36.7	822.8	49.61	821.86	65.75	820.92		
70.27	820	77.49	819.34	84.53	820	96.99	820.99	98.02	821		
99.11	821	99.94	821	109.09	821						

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.21	.0129	2.81	.0129	70.27	.0129	109.09	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	70.27	84.53		4.92	4.92		.1	.3

Blocked Obstructions

Sta L	Sta R	Elev	num= 2	Sta L	Sta R	Elev
-10		0829.727399		18909	109.09	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	822.54	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.46	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	822.09	Reach Len. (ft)	4.92	4.92
4.92				
Crit w.s. (ft)	821.85	Flow Area (sq ft)	18.92	34.45
22.21				
E.G. Slope (ft/ft)	0.000924	Area (sq ft)	18.92	34.45
22.21				
Q Total (cfs)	371.00	Flow (cfs)	56.75	216.57
97.68				
Top width (ft)	52.68	Top width (ft)	23.76	14.26
14.66				
Vel Total (ft/s)	4.91	Avg. Vel. (ft/s)	3.00	6.29
4.40				
Max Chl Dpth (ft)	2.75	Hydr. Depth (ft)	0.80	2.42
1.52				
Conv. Total (cfs)	12201.9	Conv. (cfs)	1866.3	7122.8
3212.7				
Length wtd. (ft)	4.92	wetted Per. (ft)	23.89	14.32
15.78				
Min Ch El (ft)	819.34	Shear (lb/sq ft)	0.05	0.14
0.08				
Alpha	1.23	Stream Power (lb/ft s)	109.09	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	3.25	44.27
6.04				
C & E Loss (ft)	0.02	Cum SA (acres)	1.07	0.55
0.04				

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 10

INPUT

Description:
 Station Elevation Data num= 13

Sta	Elev	Sta	Elev	CPNPP	Local	PMP	Sta	Elev	Sta	Elev
-10	825	0	825	1.09	825	19.45	824	37.73	823	
50.92	822	67.41	821	72.03	820	79.39	819.31	86.54	820	
98.95	821	101.06	821	111	821					

Manning's n Values		num=		3	
Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	111	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	72.03	86.54		4.77	4.77		.1	.3

Blocked Obstructions		num=		2	
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	830	101.06	111	825

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	822.52	Element		
Right OB				
Vel Head (ft)	0.66	wt. n-Val.	0.013	0.013
0.013				
w.s. Elev (ft)	821.86	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)	821.86	Flow Area (sq ft)	12.31	31.94
18.63				
E.G. Slope (ft/ft)	0.001461	Area (sq ft)	12.31	31.94
18.63				
Q Total (cfs)	371.00	Flow (cfs)	40.74	237.18
93.08				
Top width (ft)	47.76	Top width (ft)	18.73	14.51
14.52				
Vel Total (ft/s)	5.90	Avg. Vel. (ft/s)	3.31	7.43
5.00				
Max Chl Dpth (ft)	2.55	Hydr. Depth (ft)	0.66	2.20
1.28				
Conv. Total (cfs)	9707.1	Conv. (cfs)	1066.0	6205.7
2435.4				
Length wtd. (ft)	4.77	wetted Per. (ft)	18.87	14.58
15.42				
Min Ch El (ft)	819.31	Shear (lb/sq ft)	0.06	0.20
0.11				
Alpha	1.23	Stream Power (lb/ft s)	111.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	3.25	44.26
6.04				
C & E Loss (ft)	0.01	Cum SA (acres)	1.06	0.55
0.04				

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.

Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.92857*

INPUT

Description:

Station Elevation Data		num= 22		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	824.79	-4.33	824.79	-2.83	824.79	.62	824.76	1.78	824.75		
6.89	824.47	21.28	823.76	40.7	822.79	44.38	822.54	46.09	822.36		
54.71	821.78	63.43	821.32	69.29	821.02	72.23	820.85	77.14	819.92		
86.46	819.23	89.69	819.57	93.86	820.07	97.83	820.38	105.82	821		
107.85	821	117.43	821								

Manning's n Values		num= 6		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.33	.0129	.62	.0129	63.43	.0125	77.14	.0129		
117.43	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	77.14	93.86		4.77	4.77	4.77		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10		0829.6429	107.3464	117.43	825			

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	822.47	Element		
Right OB				
Vel Head (ft)	1.04	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	821.43	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)	821.72	Flow Area (sq ft)	8.15	30.48
11.29				
E.G. Slope (ft/ft)	0.002789	Area (sq ft)	8.15	30.48
11.29				
Q Total (cfs)	371.00	Flow (cfs)	35.35	275.98
59.68				
Top Width (ft)	45.92	Top width (ft)	15.71	16.72
13.49				
Vel Total (ft/s)	7.43	Avg. vel. (ft/s)	4.33	9.05
5.28				
Max Chl Dpth (ft)	2.20	Hydr. Depth (ft)	0.52	1.82
0.84				
Conv. Total (cfs)	7024.6	Conv. (cfs)	669.3	5225.4
1129.9				
Length wtd. (ft)	4.77	wetted Per. (ft)	15.81	16.79
13.95				
Min Ch El (ft)	819.23	Shear (lb/sq ft)	0.09	0.32
0.14				
Alpha	1.22	Stream Power (lb/ft s)	117.43	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	3.25	44.26
6.04				
C & E Loss (ft)	0.04	Cum SA (acres)	1.06	0.55
0.03				

Note: Program found supercritical flow starting at this cross section.

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.85714*

INPUT

Description:

Station Elevation Data		num= 22		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	824.57	-3.99	824.57	-2.41	824.57	1.25	824.52	2.47	824.5		
7.88	824.2	23.12	823.52	43.67	822.59	47.57	822.35	49.38	822.1		
58.51	821.57	67.74	821.13	73.94	820.86	77.05	820.71	82.25	819.83		
93.53	819.15	96.87	819.52	101.19	820.14	105.01	820.43	112.69	821		
114.64	821	123.86	821								

Manning's n Values		num= 6		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.99	.0129	1.25	.0128	67.74	.012	82.25	.0129		
123.86	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	82.25	101.19		4.77	4.77		.1	.3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L
-10		0829.2857	113.6329	123.86	825				

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	822.44	Element	Left OB	Channel
	Vel Head (ft)	1.25	wt. n-val.	0.012	0.013
	0.013				
	W.S. Elev (ft)	821.19	Reach Len. (ft)	4.77	4.77
	4.77				
	Crit w.s. (ft)	821.57	Flow Area (sq ft)	7.29	31.25
	7.29				
	E.G. slope (ft/ft)	0.003633	Area (sq ft)	7.29	31.25
	7.29				
	Q Total (cfs)	371.00	Flow (cfs)	34.00	302.02
	34.98				
	Top width (ft)	47.15	Top width (ft)	15.77	18.94
	12.44				
	Vel Total (ft/s)	8.10	Avg. vel. (ft/s)	4.66	9.67
	4.80				
	Max Chl Dpth (ft)	2.04	Hydr. Depth (ft)	0.46	1.65
	0.59				
	Conv. Total (cfs)	6154.9	Conv. (cfs)	564.0	5010.5
	580.4				
	Length wtd. (ft)	4.77	wetted Per. (ft)	15.85	19.03
	12.67				
	Min Ch El (ft)	819.15	Shear (lb/sq ft)	0.10	0.37
	0.13				
	Alpha	1.22	Stream Power (lb/ft s)	123.86	0.00
	0.00				
	Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.24	44.26
	6.04				
	C & E Loss (ft)	0.02	Cum SA (acres)	1.06	0.55
	0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.78571*

INPUT

Description:

Station Elevation Data		num= 22		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	824.36	-3.66	824.36	-1.99	824.36	1.87	824.28	3.16	824.26		
8.87	823.94	24.95	823.27	46.65	822.38	50.75	822.15	52.67	821.84		
62.3	821.35	72.04	820.95	78.59	820.71	81.87	820.56	87.36	819.75		
100.59	819.07	104.05	819.48	108.51	820.21	112.18	820.48	119.56	821		
121.44	821	130.29	821								

Manning's n Values		num= 6		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.66	.0129	1.87	.0128	72.04	.0115	87.36	.0129		
130.29	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	87.36	108.51		4.77	4.77		.1	.3

Blocked Obstructions		num= 2		Sta		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Elev
-10		0828.9286	119.9193	130.29	825		

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	822.41			
Right OB				
Vel Head (ft)	1.43	wt. n-val.	0.012	0.013
0.013				
W.S. Elev (ft)	820.98	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)	821.43	Flow Area (sq ft)	6.63	31.70
4.09				
E.G. slope (ft/ft)	0.004549	Area (sq ft)	6.63	31.70
4.09				
Q Total (cfs)	371.00	Flow (cfs)	32.87	321.49
16.64				
Top width (ft)	47.90	Top width (ft)	16.01	21.15
10.74				
Vel Total (ft/s)	8.75	Avg. vel. (ft/s)	4.96	10.14
4.07				
Max Chl Dpth (ft)	1.91	Hydr. Depth (ft)	0.41	1.50
0.38				
Conv. Total (cfs)	5500.8	Conv. (cfs)	487.4	4766.7
246.8				
Length wtd. (ft)	4.77	wetted Per. (ft)	16.08	21.25
10.77				
Min Ch El (ft)	819.07	Shear (lb/sq ft)	0.12	0.42
0.11				
Alpha	1.20	Stream Power (lb/ft s)	130.29	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.24	44.25
6.04				
C & E Loss (ft)	0.02	Cum SA (acres)	1.06	0.54
0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.71428*

INPUT

Description:

Station Elevation Data			num=	22	
Sta	Elev	Sta	Elev	Sta	Elev
-10	824.14	-3.33	824.14	-1.57	824.14
9.86	823.67	26.79	823.03	49.62	822.17
66.1	821.13	76.35	820.76	83.24	820.56
107.66	818.99	111.23	819.44	115.83	820.29
128.23	821	136.71	821		

Manning's n Values			num=	6	
Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.33	.0129	2.49	.0128
136.71	.0129			76.35	.0111
				92.46	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 92.46 115.83 4.77 4.77 4.77 .1 .3

Blocked Obstructions			num=	2	
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10		0828.5714	126.2057	136.71	825

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	822.37			
Right OB				
Vel Head (ft)	1.59	wt. n-val.	0.011	0.013
0.013				
W.S. Elev (ft)	820.77	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)	821.29	Flow Area (sq ft)	5.97	31.70
1.77				
E.G. slope (ft/ft)	0.005619	Area (sq ft)	5.97	31.70
1.77				
Q Total (cfs)	371.00	Flow (cfs)	30.85	334.17
5.98				
Top width (ft)	47.13	Top width (ft)	16.50	23.37
7.27				
Vel Total (ft/s)	9.41	Avg. vel. (ft/s)	5.16	10.54
3.37				
Max Chl Dpth (ft)	1.78	Hydr. Depth (ft)	0.36	1.36
0.24				
Conv. Total (cfs)	4949.3	Conv. (cfs)	411.6	4458.0
79.7				
Length wtd. (ft)	4.77	wetted Per. (ft)	16.55	23.49
7.28				
Min Ch El (ft)	818.99	Shear (lb/sq ft)	0.13	0.47
0.09				
Alpha	1.16	Stream Power (lb/ft s)	136.71	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	3.24	44.25
6.04				
C & E Loss (ft)	0.02	Cum SA (acres)	1.06	0.54
0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.64285*

INPUT

Description:

Station Elevation Data		num= 22		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	823.93	-2.99	823.93	-1.15	823.93	3.11	823.8	4.54	823.76		
10.85	823.4	28.62	822.79	52.59	821.96	57.13	821.76	59.24	821.32		
69.89	820.91	80.65	820.58	87.88	820.41	91.51	820.27	97.57	819.58		
114.73	818.91	118.41	819.39	123.16	820.36	126.52	820.57	133.3	821		
135.02	821	143.14	821								

Manning's n Values		num= 6		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.99	.0129	3.11	.0127	80.65	.0107	97.57	.0129		
143.14	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 97.57 123.16 4.77 4.77 4.77 .1 .3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L
-10	0828.2143	132.4921	143.14	825					

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	822.32	Element		
Right OB				
Vel Head (ft)	1.75	wt. n-val.	0.011	0.013
0.013				
W.S. Elev (ft)	820.57	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)	821.13	Flow Area (sq ft)	5.25	31.21
0.35				
E.G. slope (ft/ft)	0.006989	Area (sq ft)	5.25	31.21
0.35				
Q Total (cfs)	371.00	Flow (cfs)	28.49	341.78
0.73				
Top width (ft)	45.32	Top width (ft)	16.40	25.59
3.32				
Vel Total (ft/s)	10.08	Avg. vel. (ft/s)	5.42	10.95
2.13				
Max Chl Dpth (ft)	1.66	Hydr. Depth (ft)	0.32	1.22
0.10				
Conv. Total (cfs)	4437.7	Conv. (cfs)	340.8	4088.2
8.8				
Length wtd. (ft)	4.77	wetted Per. (ft)	16.44	25.73
3.33				
Min Ch El (ft)	818.91	Shear (lb/sq ft)	0.14	0.53
0.05				
Alpha	1.11	Stream Power (lb/ft s)	143.14	0.00
0.00				
Frctn Loss (ft)	0.03	Cum Volume (acre-ft)	3.24	44.25
6.04				
C & E Loss (ft)	0.02	Cum SA (acres)	1.06	0.54
0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.57142*

INPUT

Description:

Station Elevation Data			num=	22	
Sta	Elev	Sta	Elev	Sta	Elev
-10	823.71	-2.66	823.71	-.73	823.71
11.84	823.14	30.45	822.55	55.56	821.76
73.68	820.7	84.96	820.4	92.53	820.26
121.8	818.83	125.59	819.35	130.48	820.43
141.81	821	149.57	821		

Manning's n Values			num=	6	
Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.66	.0129	3.74	.0127
149.57	.0129			84.96	.0102
				102.68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	102.68	130.48		4.77	4.77		.1	.3

Blocked Obstructions			num=	2	
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10		0827.8571138	7786	149.57	825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	822.26			
Right OB				
Vel Head (ft)	1.88	wt. n-val.	0.010	0.013
w.s. Elev (ft)	820.38	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)	820.95	Flow Area (sq ft)	4.62	30.42
E.G. Slope (ft/ft)	0.008529	Area (sq ft)	4.62	30.42
Q Total (cfs)	371.00	Flow (cfs)	26.60	344.40
Top width (ft)	44.00	Top width (ft)	16.45	27.56
Vel Total (ft/s)	10.59	Avg. vel. (ft/s)	5.76	11.32
Max Chl Dpth (ft)	1.55	Hydr. Depth (ft)	0.28	1.10
Conv. Total (cfs)	4017.2	Conv. (cfs)	288.0	3729.1
Length wtd. (ft)	4.77	wetted Per. (ft)	16.48	27.72
Min ch El (ft)	818.83	Shear (lb/sq ft)	0.15	0.58
Alpha	1.08	Stream Power (lb/ft s)	149.57	0.00
0.00				
Frctn Loss (ft)	0.04	Cum Volume (acre-ft)	3.24	44.24
6.04				
C & E Loss (ft)	0.01	Cum SA (acres)	1.05	0.54
0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.5*

INPUT

Description:

Station Elevation Data		num= 22		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	823.5	-2.33	823.5	-.31	823.5	4.36	823.32	5.92	823.26		
12.83	822.87	32.29	822.31	58.54	821.55	63.5	821.37	65.82	820.81		
77.48	820.48	89.26	820.21	97.18	820.1	101.16	819.98	107.79	819.42		
128.86	818.75	132.77	819.31	137.81	820.5	140.87	820.67	147.04	821		
148.61	821	156	821								

Manning's n Values		num= 6		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.33	.0129	4.36	.0127	89.26	.0098	107.79	.0129		
156	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	107.79	137.81		4.77	4.77	4.77		.1	.3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R
-10	0	827.5	145.065	156	825				

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	822.21	Element	Left OB	Channel
Right OB					
Vel Head (ft)	2.01		wt. n-val.	0.010	0.013
w.s. Elev (ft)	820.20		Reach Len. (ft)	4.77	4.77
4.77					
Crit w.s. (ft)	820.78		Flow Area (sq ft)	4.24	29.62
E.G. Slope (ft/ft)	0.009952		Area (sq ft)	4.24	29.62
Q Total (cfs)	371.00		Flow (cfs)	24.86	346.14
Top width (ft)	46.23		Top width (ft)	17.50	28.73
Vel Total (ft/s)	10.96		Avg. vel. (ft/s)	5.87	11.69
Max Chl Dpth (ft)	1.45		Hydr. Depth (ft)	0.24	1.03
Conv. Total (cfs)	3718.9		Conv. (cfs)	249.2	3469.7
Length wtd. (ft)	4.77		wetted Per. (ft)	17.52	28.88
Min ch El (ft)	818.75		Shear (lb/sq ft)	0.15	0.64
Alpha	1.08		Stream Power (lb/ft s)	156.00	0.00
0.00					
Frctn Loss (ft)	0.04		Cum Volume (acre-ft)	3.24	44.24
6.04					
C & E Loss (ft)	0.01		Cum SA (acres)	1.05	0.53
0.03					

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.42857*

INPUT

Description:

Station Elevation Data		num=		22							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	823.29	-2	823.29	.11	823.29	4.98	823.08	6.62	823.01		
13.82	822.6	34.12	822.07	61.51	821.34	66.69	821.17	69.11	820.55		
81.27	820.26	93.57	820.03	101.83	819.95	105.98	819.84	112.9	819.33		
135.93	818.67	139.95	819.26	145.13	820.57	148.04	820.71	153.91	821		
155.4	821	162.43	821								

Manning's n Values		num=		6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2	.0129	4.98	.0126	93.57	.0093	112.9	.0129		
162.43	.0129										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 112.9 145.13 4.77 4.77 4.77 .1 .3

Blocked Obstructions		num=		2							
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0827.1429	151.35	14	162.43	825						

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	822.15	Element	Left OB	Channel
	Vel Head (ft)	2.13	wt. n-val.	0.009	0.013
	w.s. Elev (ft)	820.02	Reach Len. (ft)	4.77	4.77
	4.77				
	Crit w.s. (ft)	820.60	Flow Area (sq ft)	3.87	29.02
	E.G. Slope (ft/ft)	0.011436	Area (sq ft)	3.87	29.02
	Q Total (cfs)	371.00	Flow (cfs)	23.06	347.94
	Top width (ft)	48.88	Top width (ft)	18.80	30.07
	Vel Total (ft/s)	11.28	Avg. vel. (ft/s)	5.95	11.99
	Max Chl Dpth (ft)	1.35	Hydr. Depth (ft)	0.21	0.96
	Conv. Total (cfs)	3469.3	Conv. (cfs)	215.6	3253.7
	Length wtd. (ft)	4.77	wetted Per. (ft)	18.82	30.22
	Min Ch El (ft)	818.67	Shear (lb/sq ft)	0.15	0.69
	Alpha	1.08	Stream Power (lb/ft s)	162.43	0.00
	0.00				
	Frctn Loss (ft)	0.05	Cum Volume (acre-ft)	3.24	44.24
	6.04				
	C & E Loss (ft)	0.01	Cum SA (acres)	1.05	0.53
	0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.35714*

INPUT

Description:

Station Elevation Data		num=		22							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	823.07	-1.66	823.07	.53	823.07	5.6	822.84	7.31	822.77		
14.81	822.34	35.96	821.82	64.48	821.13	69.88	820.98	72.4	820.29		
85.07	820.05	97.87	819.84	106.48	819.8	110.8	819.69	118.01	819.25		
143	818.59	147.13	819.22	152.45	820.64	155.22	820.76	160.78	821		
162.19	821	168.86	821								

Manning's n Values		num=		6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.66	.0129	5.6	.0126	97.87	.0088	118.01	.0129		
168.86	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	118.01	152.45		4.77	4.77	4.77		.1	.3

Blocked Obstructions		num=		2							
Sta L	Sta R	Elev	Sta L	Sta R	Elev						
-10		0826.7857157	157.6379	168.86	825						

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	822.09	Element	Left OB	Channel
Right OB					
Vel Head (ft)	2.22	wt. n-val.	0.009	0.013	
w.s. Elev (ft)	819.86	Reach Len. (ft)	4.77	4.77	
4.77					
Crit w.s. (ft)	820.43	Flow Area (sq ft)	3.76	28.34	
E.G. Slope (ft/ft)	0.013138	Area (sq ft)	3.76	28.34	
Q Total (cfs)	371.00	Flow (cfs)	23.58	347.42	
Top width (ft)	53.16	Top width (ft)	21.62	31.53	
Vel Total (ft/s)	11.56	Avg. vel. (ft/s)	6.27	12.26	
Max Chl Dpth (ft)	1.27	Hydr. Depth (ft)	0.17	0.90	
Conv. Total (cfs)	3236.7	Conv. (cfs)	205.7	3031.0	
Length wtd. (ft)	4.77	wetted Per. (ft)	21.64	31.68	
Min ch El (ft)	818.59	Shear (lb/sq ft)	0.14	0.73	
Alpha	1.07	Stream Power (lb/ft s)	168.86	0.00	
0.00					
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)	3.24	44.23	
6.04					
C & E Loss (ft)	0.01	Cum SA (acres)	1.05	0.53	
0.03					

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.28571*

INPUT

Description:

Station Elevation Data			num= 22							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822.86	-1.33	822.86	.95	822.86	6.23	822.6	8	822.52	
15.8	822.07	37.79	821.58	67.45	820.93	73.07	820.78	75.69	820.03	
88.86	819.83	102.18	819.66	111.13	819.65	115.62	819.54	123.12	819.16	
150.07	818.51	154.31	819.17	159.78	820.71	162.39	820.81	167.64	821	
168.98	821	175.29	821							

Manning's n Values				num= 6					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.33	.0129	6.23	.0126	102.18	.0084	123.12	.0129
175.29	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 123.12 159.78 4.77 4.77 4.77 .1 .3

Blocked Obstructions			num= 2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0826.4286	163.9243	175.29		825

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	822.02	Element	Left OB	Channel
Vel Head (ft)	2.31	wt. n-val.	0.008	0.013	
w.s. Elev (ft)	819.71	Reach Len. (ft)	4.77	4.77	
4.77		Flow Area (sq ft)	3.73	27.69	
Crit w.s. (ft)	820.25	Area (sq ft)	3.73	27.69	
E.G. Slope (ft/ft)	0.015034	Flow (cfs)	24.74	346.26	
Q Total (cfs)	371.00	Top width (ft)	24.62	33.10	
Top width (ft)	57.72	Avg. vel. (ft/s)	6.63	12.51	
Vel Total (ft/s)	11.81	Hydr. Depth (ft)	0.15	0.84	
Max Chl Dpth (ft)	1.20	Conv. (cfs)	201.8	2824.0	
Conv. Total (cfs)	3025.8	wetted Per. (ft)	24.63	33.23	
Length wtd. (ft)	4.77	Shear (lb/sq ft)	0.14	0.78	
Min Ch El (ft)	818.51	Stream Power (lb/ft s)	175.29	0.00	
Alpha	1.07	Cum Volume (acre-ft)	3.24	44.23	
0.00		Cum SA (acres)	1.04	0.52	
Frctn Loss (ft)	0.07				
6.04					
C & E Loss (ft)	0.01				
0.03					

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.21428*

INPUT

Description:

Station Elevation Data			num=	22	
Sta	Elev	Sta	Elev	Sta	Elev
-10	822.64	-1	822.64	1.37	822.64
16.79	821.8	39.62	821.34	70.43	820.72
92.65	819.61	106.48	819.47	115.77	819.5
157.14	818.43	161.49	819.13	167.1	820.79
175.78	821	181.71	821		

Manning's n Values			num=	6	
Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1	.0129	6.85	.0125
181.71	.0129			106.48	.0079
				128.22	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 128.22 167.1 4.77 4.77 4.77 .1 .3

Blocked Obstructions			num=	2	
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0826.0714	170.2107	181.71		825

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	821.93	Element	Left OB	Channel
Vel Head (ft)	2.37	wt. n-val.	0.008	0.013	
w.s. Elev (ft)	819.56	Reach Len. (ft)	4.77	4.77	
4.77		Flow Area (sq ft)	4.07	26.95	
Crit w.s. (ft)	820.07	Area (sq ft)	4.07	26.95	
E.G. Slope (ft/ft)	0.017156	Flow (cfs)	28.45	342.55	
Q Total (cfs)	371.00	Top width (ft)	30.52	34.72	
Top width (ft)	65.24	Avg. vel. (ft/s)	7.00	12.71	
Vel Total (ft/s)	11.96	Hydr. Depth (ft)	0.13	0.78	
Max Chl Dpth (ft)	1.13	Conv. (cfs)	217.2	2615.3	
Conv. Total (cfs)	2832.5	wetted Per. (ft)	30.53	34.84	
Length wtd. (ft)	4.77	Shear (lb/sq ft)	0.14	0.83	
Min ch El (ft)	818.43	Stream Power (lb/ft s)	181.71	0.00	
Alpha	1.07	Cum Volume (acre-ft)	3.24	44.23	
0.00		Cum SA (acres)	1.04	0.52	
Frctn Loss (ft)	0.08				
6.04					
C & E Loss (ft)	0.01				
0.03					

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.14285*

INPUT

Description:

Station Elevation Data			num=	22						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822.43	-.67	822.43	1.79	822.43	7.47	822.12	9.38	822.02	
17.78	821.53	41.46	821.1	73.4	820.51	79.44	820.39	82.26	819.52	
96.45	819.39	110.79	819.29	120.42	819.34	125.26	819.25	133.33	819	
164.2	818.35	168.67	819.09	174.42	820.86	176.73	820.9	181.38	821	
182.57	821	188.14	821							

Manning's n Values				num=	6					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-.67	.0129	7.47	.0125	110.79	.0075	133.33	.0129	
188.14	.0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 133.33 174.42 4.77 4.77 4.77 .1 .3

Blocked Obstructions						num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0825.7143	176.4971	188.14		825				

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	821.84			
Right OB				
Vel Head (ft)	2.43	wt. n-val.	0.008	0.013
w.s. Elev (ft)	819.41	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)	819.89	Flow Area (sq ft)	4.84	25.98
E.G. Slope (ft/ft)	0.019839	Area (sq ft)	4.84	25.98
Q Total (cfs)	371.00	Flow (cfs)	35.03	335.97
Top width (ft)	75.55	Top width (ft)	39.17	36.38
Vel Total (ft/s)	12.04	Avg. vel. (ft/s)	7.24	12.93
Max Chl Dpth (ft)	1.06	Hydr. Depth (ft)	0.12	0.71
Conv. Total (cfs)	2634.0	Conv. (cfs)	248.7	2385.3
Length wtd. (ft)	4.77	wetted Per. (ft)	39.18	36.50
Min ch El (ft)	818.35	Shear (lb/sq ft)	0.15	0.88
Alpha	1.08	Stream Power (lb/ft s)	188.14	0.00
0.00				
Frctn Loss (ft)	0.09	Cum Volume (acre-ft)	3.24	44.23
6.04				
C & E Loss (ft)	0.01	Cum SA (acres)	1.04	0.51
0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9.07142*

INPUT

Description:

Station Elevation Data			num=	22					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822.21	-.33	822.21	2.21	822.21	8.1	821.88	10.07	821.77
18.77	821.27	43.29	820.86	76.37	820.31	82.63	820.2	85.55	819.26
100.24	819.18	115.09	819.1	125.07	819.19	130.08	819.11	138.44	818.91
171.27	818.27	175.85	819.04	181.75	820.93	183.91	820.95	188.25	821
189.36	821	194.57	821						

Manning's n Values				num=	6		
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.33	.0129	8.1	.0125	115.09	.007
194.57	.0129					138.44	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	138.44	181.75		4.77	4.77		.1	.3

Blocked Obstructions			num=	2	
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0825.3571	1182.7836	194.57	825	

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	821.73	Element		
Right OB				
Vel Head (ft)	2.47	wt. n-val.	0.008	0.013
w.s. Elev (ft)	819.26	Reach Len. (ft)	4.77	4.77
4.77				
Crit w.s. (ft)	819.72	Flow Area (sq ft)	6.13	24.82
E.G. Slope (ft/ft)	0.023206	Area (sq ft)	6.13	24.82
Q Total (cfs)	371.00	Flow (cfs)	44.19	326.81
Top width (ft)	90.90	Top width (ft)	52.80	38.10
Vel Total (ft/s)	11.98	Avg. vel. (ft/s)	7.20	13.16
Max Chl Dpth (ft)	0.99	Hydr. Depth (ft)	0.12	0.65
Conv. Total (cfs)	2435.4	Conv. (cfs)	290.1	2145.3
Length wtd. (ft)	4.77	wetted Per. (ft)	52.80	38.20
Min ch El (ft)	818.27	Shear (lb/sq ft)	0.17	0.94
Alpha	1.11	Stream Power (lb/ft s)	194.57	0.00
0.00				
Frctn Loss (ft)	0.10	Cum Volume (acre-ft)	3.24	44.22
6.04				
C & E Loss (ft)	0.00	Cum SA (acres)	1.03	0.51
0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 9

INPUT

Description:

Station Elevation Data		num= 14		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	2.63	822	19.76	821	85.82	820		
88.84	819	119.4	818.92	129.72	819.04	143.55	818.83	178.34	818.19		
183.03	819	189.07	821	191.08	821	201	821				

Manning's n Values		num= 5		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	119.4	.0066	143.55	.0129	201	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	143.55	189.07		10	10		.1	.3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Elev
-10	0	825	189.07	201	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.60	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.50	wt. n-val.	0.009	0.013
w.s. Elev (ft)	819.10	Reach Len. (ft)	10.00	10.00
10.00				
Crit w.s. (ft)	819.55	Flow Area (sq ft)	7.96	23.02
E.G. Slope (ft/ft)	0.028402	Area (sq ft)	7.96	23.02
Q Total (cfs)	371.00	Flow (cfs)	61.26	309.74
Top width (ft)	94.81	Top width (ft)	55.02	39.79
Vel Total (ft/s)	11.97	Avg. vel. (ft/s)	7.69	13.46
Max Chl Dpth (ft)	0.91	Hydr. Depth (ft)	0.14	0.58
Conv. Total (cfs)	2201.4	Conv. (cfs)	363.5	1837.9
Length wtd. (ft)	10.00	wetted Per. (ft)	55.04	39.88
Min Ch El (ft)	818.19	Shear (lb/sq ft)	0.26	1.02
Alpha	1.12	Stream Power (lb/ft s)	201.00	0.00
0.00				
Frctn Loss (ft)	0.12	Cum Volume (acre-ft)	3.24	44.22
6.04				
C & E Loss (ft)	0.00	Cum SA (acres)	1.03	0.51
0.03				

CROSS SECTION

RIVER: Unit 3 Southeast

CPNPPLocalPMP

REACH: Unit 3 Southeast RS: 8.83333*

INPUT

Description:

Station Elevation Data		num= 25		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.01	822	.04	822	2.62	822	3.33	821.97		
19.74	821.04	24.27	820.94	85.74	820	85.76	820	88.76	819		
97.82	818.48	101.47	818.43	105.5	818.42	110.25	818.45	113.26	818.61		
119.29	818.63	129.6	818.78	131.35	818.76	143.42	818.61	172.41	818.08		
179.62	818.8	185.62	819.91	188.9	821	190.91	821	200.83	821		

Manning's n Values		num= 10		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.01	.0129	.04	.0129	85.76	.0098	101.47	.0074		
105.5	.0089	113.26	.0079	119.29	.0066	143.42	.0129	200.83	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	143.42	188.9		10	10		.1	.3	
Blocked Obstructions	num= 2		Sta L	Sta R	Elev				
	-10	0	825189.2383	200.83	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.31	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.46	wt. n-Val.	0.008	0.013
w.s. Elev (ft)	818.85	Reach Len. (ft)	10.00	10.00
10.00				
Crit w.s. (ft)	819.33	Flow Area (sq ft)	12.08	17.45
E.G. Slope (ft/ft)	0.029858	Area (sq ft)	12.08	17.45
Q Total (cfs)	371.00	Flow (cfs)	158.56	212.44
Top width (ft)	88.42	Top width (ft)	51.97	36.45
Vel Total (ft/s)	12.56	Avg. vel. (ft/s)	13.12	12.17
Max Chl Dpth (ft)	0.77	Hydr. Depth (ft)	0.23	0.48
Conv. Total (cfs)	2147.1	Conv. (cfs)	917.6	1229.4
Length wtd. (ft)	10.00	wetted Per. (ft)	51.99	36.49
Min ch El (ft)	818.08	Shear (lb/sq ft)	0.43	0.89
Alpha	1.00	Stream Power (lb/ft s)	200.83	0.00
0.00				
Frctn Loss (ft)	0.29	Cum Volume (acre-ft)	3.24	44.22
6.04				
C & E Loss (ft)	0.01	Cum SA (acres)	1.01	0.50
0.03				

CROSS SECTION

RIVER: Unit 3 Southeast

CPNPPLocalPMP

REACH: Unit 3 Southeast RS: 8.66666*

INPUT

Description:

Station Elevation Data		num= 25		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.02	822	.03	822	2.61	822	3.31	821.97		
19.71	821.07	24.24	820.95	85.66	820	85.68	820	88.68	819		
97.73	817.98	101.38	817.89	105.4	817.89	110.15	817.96	113.16	818.29		
119.19	818.34	129.49	818.51	131.24	818.51	143.3	818.39	166.49	817.96		
176.22	818.59	184.31	819.53	188.74	821	190.74	821	200.67	821		

Manning's n Values		num= 10		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.02	.0129	.03	.0129	85.68	.0112	101.38	.0072		
105.4	.0106	113.16	.0089	119.19	.0066	143.3	.0129	200.67	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	143.3	188.74		10	10		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	189.4067	200.67	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	821.05	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.43	wt. n-val.	0.009	0.013
w.s. Elev (ft)	818.61	Reach Len. (ft)	10.00	10.00
10.00				
Crit w.s. (ft)	819.11	Flow Area (sq ft)	17.85	13.50
E.G. Slope (ft/ft)	0.020777	Area (sq ft)	17.85	13.50
Q Total (cfs)	371.00	Flow (cfs)	247.94	123.06
Top width (ft)	84.33	Top width (ft)	51.20	33.13
Vel Total (ft/s)	11.84	Avg. vel. (ft/s)	13.89	9.12
Max Chl Dpth (ft)	0.72	Hydr. Depth (ft)	0.35	0.41
Conv. Total (cfs)	2573.9	Conv. (cfs)	1720.1	853.8
Length wtd. (ft)	10.00	wetted Per. (ft)	51.26	33.16
Min Ch El (ft)	817.96	Shear (lb/sq ft)	0.45	0.53
Alpha	1.12	Stream Power (lb/ft s)	200.67	0.00
0.00				
Frctn Loss (ft)	0.25	Cum Volume (acre-ft)	3.23	44.21
6.04				
C & E Loss (ft)	0.01	Cum SA (acres)	1.00	0.49
0.03				

CROSS SECTION

RIVER: Unit 3 Southeast

CPNPPLocalPMP

REACH: Unit 3 Southeast RS: 8.5*

INPUT

Description:

Station Elevation Data		num= 25		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.02	822	.02	822	2.6	822	3.3	821.98		
19.69	821.11	24.21	820.97	85.58	820	85.6	820	88.6	819		
97.64	817.49	101.29	817.36	105.31	817.35	110.05	817.47	113.06	817.97		
119.08	818.04	129.37	818.25	131.12	818.26	143.17	818.16	160.56	817.84		
172.81	818.39	183	819.15	188.57	821	190.58	821	200.5	821		

Manning's n Values		num= 10		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.02	.0129	.02	.0129	85.6	.0127	101.29	.0071		
105.31	.0122	113.06	.0099	119.08	.0066	143.17	.0129	200.5	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	143.17	188.57		10	10		.1	.3
Blocked Obstructions	num= 2							
Sta L	Sta R	Elev	Sta L	Sta R	Elev			
-10	0	825	189.575	200.5	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.78	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.11	wt. n-Val.	0.009	0.013
w.s. Elev (ft)	819.67	Reach Len. (ft)	10.00	10.00
10.00				
Crit w.s. (ft)	818.88	Flow Area (sq ft)	93.52	57.74
E.G. Slope (ft/ft)	0.000144	Area (sq ft)	93.52	57.74
Q Total (cfs)	371.00	Flow (cfs)	271.63	99.37
Top width (ft)	97.99	Top width (ft)	56.59	41.40
Vel Total (ft/s)	2.45	Avg. vel. (ft/s)	2.90	1.72
Max Chl Dpth (ft)	2.32	Hydr. Depth (ft)	1.65	1.39
Conv. Total (cfs)	30931.1	Conv. (cfs)	22646.5	8284.6
Length wtd. (ft)	10.00	wetted Per. (ft)	56.87	41.53
Min Ch El (ft)	817.84	Shear (lb/sq ft)	0.01	0.01
Alpha	1.16	Stream Power (lb/ft s)	200.50	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.22	44.20
6.04				
C & E Loss (ft)	0.01	Cum SA (acres)	0.99	0.48
0.03				

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 8.333333*

INPUT

Description:

Station Elevation Data			num= 25							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	-.03	822	.02	822	2.59	822	3.29	821.99	
19.66	821.14	24.19	820.98	85.5	820	85.52	820	88.51	819	
97.55	816.99	101.19	816.82	105.21	816.82	109.95	816.98	112.95	817.65	
118.97	817.75	129.26	817.98	131	818	143.04	817.94	154.64	817.73	
169.4	818.18	181.69	818.76	188.41	821	190.41	821	200.33	821	

Manning's n Values			num= 10						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.03	.0129	.02	.0129	85.52	.0141	101.19	.0069
105.21	.0138	112.95	.0109	118.97	.0066	143.04	.0129	200.33	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 143.04 188.41 10 10 10 .1 .3

Blocked Obstructions num= 2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	189.7433	200.33	825

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	819.77	Element	Left OB	Channel
Vel Head (ft)	0.08	wt. n-val.	0.009	0.013	
w.s. Elev (ft)	819.69	Reach Len. (ft)	10.00	10.00	
10.00		Flow Area (sq ft)	112.49	63.42	
Crit w.s. (ft)		Area (sq ft)	112.49	63.42	
E.G. Slope (ft/ft)	0.000089	Flow (cfs)	279.80	91.20	
Q Total (cfs)	371.00	Top width (ft)	56.59	41.44	
Top width (ft)	98.03	Avg. vel. (ft/s)	2.49	1.44	
Vel Total (ft/s)	2.11	Hydr. Depth (ft)	1.99	1.53	
Max Chl Dpth (ft)	2.87	Conv. (cfs)	29681.6	9675.2	
Conv. Total (cfs)	39356.8	wetted Per. (ft)	57.01	41.61	
Length wtd. (ft)	10.00	Shear (lb/sq ft)	0.01	0.01	
Min ch El (ft)	817.73	Stream Power (lb/ft s)	200.33	0.00	
Alpha	1.16	Cum Volume (acre-ft)	3.20	44.19	
0.00		Cum SA (acres)	0.98	0.47	
Frctn Loss (ft)	0.00				
6.04					
C & E Loss (ft)	0.01				
0.03					

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 8.16666*

INPUT

Description:

Station Elevation Data		num= 25		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.04	822	.01	822	2.58	822	3.28	821.99		
19.64	821.18	24.16	820.99	85.42	820	85.44	820	88.43	819		
97.46	816.5	101.1	816.29	105.12	816.28	109.85	816.49	112.85	817.32		
118.87	817.46	129.14	817.72	130.89	817.75	142.92	817.72	148.71	817.61		
165.99	817.98	180.38	818.38	188.24	821	190.25	821	200.17	821		

Manning's n Values		num= 10		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.04	.0129	.01	.0129	85.44	.0156	101.1	.0068		
105.12	.0154	112.85	.0119	118.87	.0066	142.92	.0129	200.17	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	142.92	188.24		10	10		.1	.3

Blocked Obstructions		num= 2		Sta L		Sta R		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L
-10	0	825	189.9	117	200.17	825			

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	819.76	Element		
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.009	0.013
w.s. Elev (ft)	819.70	Reach Len. (ft)	10.00	10.00
10.00				
Crit w.s. (ft)		Flow Area (sq ft)	130.95	69.28
E.G. Slope (ft/ft)	0.000059	Area (sq ft)	130.95	69.28
Q Total (cfs)	371.00	Flow (cfs)	284.69	86.31
Top width (ft)	98.02	Top width (ft)	56.59	41.43
Vel Total (ft/s)	1.85	Avg. vel. (ft/s)	2.17	1.25
Max Chl Dpth (ft)	3.42	Hydr. Depth (ft)	2.31	1.67
Conv. Total (cfs)	48162.5	Conv. (cfs)	36958.5	11204.0
Length wtd. (ft)	10.00	wetted Per. (ft)	57.17	41.65
Min ch El (ft)	817.61	Shear (lb/sq ft)	0.01	0.01
Alpha	1.16	Stream Power (lb/ft s)	200.17	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	3.17	44.17
6.04				
C & E Loss (ft)	0.00	Cum SA (acres)	0.96	0.46
0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 8

INPUT

Description:

Station Elevation Data			num=	17					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	3.27	822	24.13	821	85.36	820
97.37	816	101.01	815.75	105.02	815.75	109.75	816	112.75	817
118.76	817.17	130.77	817.5	142.79	817.5	179.07	818	188.08	821
190.08	821	200	821						

Manning's n Values			num=	9					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	85.36	.017	101.01	.0066	105.02	.017
112.75	.0129	118.76	.0066	142.79	.0129	200	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	142.79	188.08		12.19	12.19	12.19		.1	.3

Blocked Obstructions			num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825	190.08	200	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.76	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.010	0.013
W.S. Elev (ft)	819.71	Reach Len. (ft)	12.19	12.19
12.19		Flow Area (sq ft)	149.19	75.54
Crit w.s. (ft)		Area (sq ft)	149.19	75.54
E.G. slope (ft/ft)	0.000041	Flow (cfs)	287.91	83.09
Q Total (cfs)	371.00	Top width (ft)	56.56	41.42
Top width (ft)	97.98	Avg. vel. (ft/s)	1.93	1.10
Vel Total (ft/s)	1.65	Hydr. Depth (ft)	2.64	1.82
Max Chl Dpth (ft)	3.96	Conv. (cfs)	44797.9	12929.4
Conv. Total (cfs)	57727.3	wetted Per. (ft)	57.35	41.70
Length Wtd. (ft)	12.19	Shear (lb/sq ft)	0.01	0.00
Min Ch El (ft)	817.50	Stream Power (lb/ft s)	200.00	0.00
Alpha	1.16	Cum volume (acre-ft)	3.14	44.16
0.00		Cum SA (acres)	0.95	0.45
Frctn Loss (ft)	0.00			
6.04				
C & E Loss (ft)	0.00			
0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 7

INPUT

Description:

Station Elevation Data				num=	18				
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	3	822	103.11	821	155.31	820
167.35	819	176.36	816	180	815.66	184	815.66	188.73	816
191.74	817	197.74	817.17	209.76	817.5	221.77	817.5	258.06	818
267.07	821	269.07	821	279	821				

Manning's n Values				num=	9				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	167.35	.017	180	.0066	184	.017
191.74	.0129	197.74	.0066	221.77	.0129	279	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	221.77	267.07		35.05	35.05	35.05		.1	.3

Blocked Obstructions			num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825	269.07	279	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.76	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.010	0.013
w.s. Elev (ft)	819.71	Reach Len. (ft)	35.05	35.05
35.05		Flow Area (sq ft)	152.21	75.58
Crit w.s. (ft)		Area (sq ft)	152.21	75.58
E.G. Slope (ft/ft)	0.000040	Flow (cfs)	289.26	81.74
Q Total (cfs)	371.00	Top width (ft)	62.98	41.43
Top width (ft)	104.41	Avg. vel. (ft/s)	1.90	1.08
Vel Total (ft/s)	1.63	Hydr. Depth (ft)	2.42	1.82
Max Chl Dpth (ft)	4.05	Conv. (cfs)	45788.5	12938.4
Conv. Total (cfs)	58726.9	wetted Per. (ft)	63.70	41.71
Length wtd. (ft)	35.05	Shear (lb/sq ft)	0.01	0.00
Min ch El (ft)	817.50	Stream Power (lb/ft s)	279.00	0.00
Alpha	1.16	Cum volume (acre-ft)	3.09	44.14
0.00		Cum SA (acres)	0.93	0.44
Frctn Loss (ft)	0.00			
6.04				
C & E Loss (ft)	0.01			
0.03				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 6

INPUT

Description:

Station Elevation Data			num= 18							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	822	0	822	3	822	13.01	821	163.18	818	
173.35	817	176.36	816	180	815.4	184	815.4	188.73	816	
191.74	817	197.74	817.17	209.76	817.5	221.77	817.5	258.07	818	
267.08	821	269.08	821	279	821					

Manning's n Values			num= 9							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	0	.0129	173.35	.017	180	.0066	184	.017	
191.74	.0129	197.74	.0066	221.77	.0129	279	.0129			

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	221.77	267.08		97.41	97.41	.1	.3

Blocked Obstructions			num= 2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	269.08	279	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.75	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.	0.010	0.013
w.s. Elev (ft)	819.73	Reach Len. (ft)	97.41	97.41
97.41		Flow Area (sq ft)	239.22	76.28
Crit w.s. (ft)		Area (sq ft)	239.22	76.28
E.G. Slope (ft/ft)	0.000027	Flow (cfs)	302.38	68.62
Q Total (cfs)	371.00	Top width (ft)	145.08	41.49
Top width (ft)	186.57	Avg. vel. (ft/s)	1.26	0.90
Vel Total (ft/s)	1.18	Hydr. Depth (ft)	1.65	1.84
Max Chl Dpth (ft)	4.33	Conv. (cfs)	57845.5	13127.2
Conv. Total (cfs)	70972.7	wetted Per. (ft)	145.57	41.77
Length wtd. (ft)	97.41	Shear (lb/sq ft)	0.00	0.00
Min ch El (ft)	817.50	Stream Power (lb/ft s)	279.00	0.00
Alpha	1.05	Cum Volume (acre-ft)	2.94	44.08
0.00		Cum SA (acres)	0.85	0.41
Frctn Loss (ft)	0.00			
6.04				
C & E Loss (ft)	0.00			
0.03				

CROSS SECTION

RIVER: Unit 3 Southeast

CPNPPLocalPMP

REACH: Unit 3 Southeast RS: 5

INPUT

Description:

Station Elevation Data		num= 20		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	3.01	822	13.06	821	163.7	818		
172.99	817	179.42	815	180.58	814.62	184.6	814.62	185.31	815		
192.36	817	198.38	817.17	210.44	817.5	222.49	817.15	227.51	817		
263.91	817	267.92	818	269.92	819	269.98	819	280	819		

Manning's n Values		num= 9		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	172.99	.017	180.58	.0066	184.6	.017		
192.36	.0129	198.38	.0066	222.49	.0129	280	.0129				

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	227.51	263.91		9.32	9.32		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	269.98	280	825		

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)		Element	Left OB	Channel
	819.75				
Vel Head (ft)	0.02		wt. n-val.	0.010	0.013
0.013					
W.S. Elev (ft)	819.73		Reach Len. (ft)	9.32	9.32
9.32					
Crit w.s. (ft)			Flow Area (sq ft)	263.10	99.40
11.45					
E.G. slope (ft/ft)	0.000017		Area (sq ft)	263.10	99.40
11.45					
Q Total (cfs)	371.00		Flow (cfs)	272.63	91.03
7.34					
Top width (ft)	193.18		Top width (ft)	150.71	36.40
6.07					
Vel Total (ft/s)	0.99		Avg. vel. (ft/s)	1.04	0.92
0.64					
Max Chl Dpth (ft)	5.11		Hydr. Depth (ft)	1.75	2.73
1.89					
Conv. Total (cfs)	91165.6		Conv. (cfs)	66993.5	22368.3
1803.8					
Length wtd. (ft)	9.32		wetted Per. (ft)	151.54	36.40
7.16					
Min Ch El (ft)	817.00		Shear (lb/sq ft)	0.00	0.00
0.00					
Alpha	1.02		Stream Power (lb/ft s)	280.00	0.00
0.00					
Frctn Loss (ft)	0.00		Cum volume (acre-ft)	2.37	43.88
6.02					
C & E Loss (ft)	0.00		Cum SA (acres)	0.52	0.32
0.02					

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 4.66666*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 31	
Sta	Elev	Sta	Elev
-10	822	0	822
13.05	821	163.63	818
178.76	815.12	179.35	814.94
185.56	815.06	192.28	817
227.42	817	232.1	814.67
267.19	818	274.37	818.77
296	819.67		

Manning's n Values		num= 14	
Sta	n Val	Sta	n Val
-10	.0129	0	.0129
180.51	.0066	184.52	.017
227.42	.0143	240.44	.0108

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	227.42	267.19		9.32	9.32		.1	.3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Sta L
-10	0	825	286.01

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.74	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.	0.010	0.013
0.014				
W.S. Elev (ft)	819.73	Reach Len. (ft)	9.32	9.32
9.32				
Crit w.s. (ft)		Flow Area (sq ft)	264.51	185.68
13.37				
E.G. slope (ft/ft)	0.000009	Area (sq ft)	264.51	185.68
13.37				
Q Total (cfs)	371.00	Flow (cfs)	199.36	168.41
3.23				
Top width (ft)	209.42	Top width (ft)	150.83	39.77
18.82				
Vel Total (ft/s)	0.80	Avg. vel. (ft/s)	0.75	0.91
0.24				
Max Chl Dpth (ft)	5.18	Hydr. Depth (ft)	1.75	4.67
0.71				
Conv. Total (cfs)	126021.4	Conv. (cfs)	67718.6	57206.4
1096.4				
Length wtd. (ft)	9.32	wetted Per. (ft)	151.69	41.11
19.06				
Min Ch El (ft)	814.64	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.06	Stream Power (lb/ft s)	296.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	2.32	43.85
6.02				
C & E Loss (ft)	0.00	Cum SA (acres)	0.49	0.31
0.02				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 4.33333*

INPUT

Description:

Station Elevation Data num= 31

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	-.01	822	0	822	3	822	3.02	822
13.04	821	163.56	818	163.58	818	172.38	817.02	172.85	816.9
178.68	815.06	179.27	814.87	180.43	814.49	184.45	814.49	185.16	814.88
185.49	815.03	192.2	817	198.22	817.17	210.27	817.5	222.31	817.15
227.32	817	236.69	812.33	237.48	812.29	256.28	812.29	257.13	812.33
270.46	819	280.82	819.54	285.98	819.97	286.13	819.97	304.4	820.33
312	820.33								

Manning's n Values num= 14

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.01	.0129	0	.0129	172.38	.017	172.85	.0166
180.43	.0066	184.45	.017	192.2	.0129	198.22	.0066	222.31	.0129
227.32	.0156	241.45	.0087	250.73	.0156	312	.0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 227.32 270.46 9.32 9.32 9.32 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	302.04	312	825

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	Element	Left OB	Channel
0.016	819.74	wt. n-val.	0.010	0.014
9.32	819.74	Reach Len. (ft)	9.32	9.32
5.05		Flow Area (sq ft)	265.54	253.93
5.05	0.000006	Area (sq ft)	265.54	253.93
0.64	371.00	Flow (cfs)	167.95	202.41
12.71	206.70	Top width (ft)	150.85	43.14
0.13	0.71	Avg. vel. (ft/s)	0.63	0.80
0.40	7.45	Hydr. Depth (ft)	1.76	5.89
260.1	150988.0	Conv. (cfs)	68351.5	82376.4
12.73	9.32	wetted Per. (ft)	151.74	45.82
0.00	812.29	Shear (lb/sq ft)	0.00	0.00
0.00	1.05	Stream Power (lb/ft s)	312.00	0.00
6.02	0.00	Cum volume (acre-ft)	2.26	43.80
0.02	0.00	Cum SA (acres)	0.46	0.30

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 4

INPUT

Description:

Station Elevation Data		num= 22		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	3.01	822	13.04	821	163.51	818		
172.31	817	178.61	815	180.36	814.42	184.37	814.42	185.41	815		
192.12	817	198.14	817.17	210.18	817.5	222.22	817.15	227.23	817		
241.28	810	242.46	809.93	252.47	809.93	253.74	810	273.74	820		
318.07	821	328	821								

Manning's n Values		num= 13		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	172.31	.017	180.36	.0066	184.37	.017		
192.12	.0129	198.14	.0066	222.22	.0129	227.23	.017	242.46	.0066		
252.47	.017	273.74	.0129	328	.0129						

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	227.23	273.74		59.51	59.51	59.51		.1	.3

Blocked Obstructions			num= 2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	318.07	328	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.74	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.	0.010	0.015
W.S. Elev (ft)	819.71	Reach Len. (ft)	59.51	59.51
59.51				
Crit W.S. (ft)		Flow Area (sq ft)	263.21	303.52
E.G. Slope (ft/ft)	0.000020	Area (sq ft)	263.21	303.52
Q Total (cfs)	737.00	Flow (cfs)	299.86	437.14
Top width (ft)	195.66	Top width (ft)	149.72	45.94
Vel Total (ft/s)	1.30	Avg. Vel. (ft/s)	1.14	1.44
Max Chl Dpth (ft)	9.78	Hydr. Depth (ft)	1.76	6.61
Conv. Total (cfs)	166410.2	Conv. (cfs)	67707.5	98702.7
Length Wtd. (ft)	59.51	wetted Per. (ft)	150.65	49.88
Min Ch El (ft)	809.93	Shear (lb/sq ft)	0.00	0.01
Alpha	1.04	Stream Power (lb/ft s)	328.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	2.20	43.74
6.02				
C & E Loss (ft)	0.00	Cum SA (acres)	0.42	0.29

CPNPPLocalPMP

0.02

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 3

INPUT

Description:

Station Elevation Data		num= 22		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	1.52	822	11.53	821	49.94	820		
95.46	819	116.87	818	124.7	817	133.72	814	137.74	814		
145.49	817	151.51	817.17	163.55	817.5	175.58	817.15	180.6	817		
194.64	810	197.59	809.75	207.6	809.75	210.8	810	230.8	820		
232.8	821	243	821								

Manning's n Values		num= 12		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	124.7	.017	133.72	.0066	137.74	.017		
145.49	.0129	151.51	.0066	175.58	.0129	180.6	.017	197.59	.0066		
207.6	.017	243	.017								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	180.6	230.8		49.34	49.34		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	225.71	243	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.74	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.	0.010	0.015
W.S. Elev (ft)	819.71	Reach Len. (ft)	49.34	49.34
49.34				
Crit W.S. (ft)		Flow Area (sq ft)	235.05	336.76
E.G. slope (ft/ft)	0.000016	Area (sq ft)	235.05	336.76
Q Total (cfs)	737.00	Flow (cfs)	271.01	465.99
Top width (ft)	162.76	Top width (ft)	117.65	45.11
Vel Total (ft/s)	1.29	Avg. vel. (ft/s)	1.15	1.38
Max Chl Dpth (ft)	9.96	Hydr. Depth (ft)	2.00	7.47
Conv. Total (cfs)	183003.7	Conv. (cfs)	67295.4	115708.3
Length wtd. (ft)	49.34	wetted Per. (ft)	118.80	50.80
Min Ch El (ft)	809.75	Shear (lb/sq ft)	0.00	0.01
Alpha	1.02	Stream Power (lb/ft s)	243.00	0.00
0.00				

Frctn Loss (ft)	0.00	CPNPPLocalPMP Cum Volume (acre-ft)	1.86	43.30
6.02				
C & E Loss (ft)	0.00	Cum SA (acres)	0.24	0.23
0.02				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 2

INPUT

Description:

Station Elevation Data		num= 26		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	822	0	822	3.01	822	32.53	819	54.27	818		
65.76	817	68.76	816	71.11	815.39	75.11	815.39	78.03	816		
82.86	817	88.87	817.17	100.89	817.5	115.49	817	119.88	816.71		
130.46	816	143.87	810	144.76	809.6	150.98	809.6	151.87	810		
167.11	817	171.89	818	177.31	820	203.84	821	213.05	821		
223	821										

Manning's n Values		num= 12		Sta n val		Sta n val		Sta n val		Sta n val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	65.76	.0188	71.11	.0066	75.11	.017		
88.87	.0066	119.88	.0129	130.46	.017	144.76	.0066	150.98	.017		
167.11	.0129	223	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	130.46	167.11		95.65	95.65		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	213.05	223	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.74	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.	0.010	0.016
0.013				
w.s. Elev (ft)	819.71	Reach Len. (ft)	95.65	95.65
95.65				
Crit w.s. (ft)	814.25	Flow Area (sq ft)	245.74	265.05
14.50				
E.G. slope (ft/ft)	0.000021	Area (sq ft)	245.74	265.05
14.50				
Q Total (cfs)	737.00	Flow (cfs)	319.43	407.70
9.87				
Top width (ft)	150.95	Top width (ft)	104.89	36.65
9.41				
Vel Total (ft/s)	1.40	Avg. vel. (ft/s)	1.30	1.54
0.68				
Max Chl Dpth (ft)	10.11	Hydr. Depth (ft)	2.34	7.23
1.54				
Conv. Total (cfs)	161748.3	Conv. (cfs)	70104.0	89477.7
2166.6				
Length wtd. (ft)	95.65	wetted Per. (ft)	105.45	39.63
9.82				

		CPNPPLocalPMP		
Min Ch El (ft)	809.60	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.04	Stream Power (lb/ft s)	223.00	0.00
0.00				
Frctn Loss (ft)		Cum Volume (acre-ft)	1.59	42.96
6.01				
C & E Loss (ft)		Cum SA (acres)	0.12	0.19
0.01				

INLINE STRUCTURE

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 1.5

INPUT

Description:

Distance from Upstream XS = 27.56

Deck/Roadway width = 21.92

Weir Coefficient = 2.6

Weir Embankment Coordinates num = 5

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	100.89	825	100.89	817.5	112.89	817.2	234.13	817.2

Upstream Embankment side slope = 2 horiz. to 1.0 vertical

Downstream Embankment side slope = 2 horiz. to 1.0 vertical

Maximum allowable submergence for weir flow = .98

Elevation at which weir flow begins =

Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Unit 3 Southeast
 REACH: Unit 3 Southeast RS: 1

INPUT

Description:

Station Elevation Data num= 7

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	4.37	816	27.47	810	54.3	806	63.25	806
98.67	810	155.8	817						

Manning's n Values num= 1

Sta	n Val
0	.0129

Bank Sta: Left Right Coeff Contr. Expan.
 0 155.8 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-Val.		0.013
w.s. Elev (ft)	815.10	Reach Len. (ft)		
Crit w.s. (ft)	809.02	Flow Area (sq ft)		679.63
		Page 713		

CPNPPLocalPMP

E.G. Slope (ft/ft)	0.000010	Area (sq ft)	679.63
Q Total (cfs)	737.00	Flow (cfs)	737.00
Top width (ft)	132.46	Top width (ft)	132.46
Vel Total (ft/s)	1.08	Avg. Vel. (ft/s)	1.08
Max Chl Dpth (ft)	9.10	Hydr. Depth (ft)	5.13
Conv. Total (cfs)	231158.1	Conv. (cfs)	231158.1
Length Wtd. (ft)		wetted Per. (ft)	133.94
Min ch El (ft)	806.00	Shear (lb/sq ft)	0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	155.80
Frctn Loss (ft)		Cum Volume (acre-ft)	0.00
C & E Loss (ft)		Cum SA (acres)	

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 109

INPUT

Description:

Station Elevation Data num= 6

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	13.72	819	43.72	819	58.25	819
68	819								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

0	58.25	1	1	1	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.78	Element	Left OB	Channel
Right OB Vel Head (ft)	0.26	wt. n-val.		0.013
w.s. Elev (ft)	819.52	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	819.52	Flow Area (sq ft)		30.40
E.G. Slope (ft/ft)	0.003106	Area (sq ft)		30.40
Q Total (cfs)	125.00	Flow (cfs)		125.00

CPNPPLocalPMP

Top Width (ft)	58.25	Top Width (ft)	58.25
Vel Total (ft/s)	4.11	Avg. Vel. (ft/s)	4.11
Max Chl Dpth (ft)	0.52	Hydr. Depth (ft)	0.52
Conv. Total (cfs)	2242.9	Conv. (cfs)	2242.9
Length wtd. (ft)	1.00	wetted Per. (ft)	59.29
Min Ch El (ft)	819.00	Shear (lb/sq ft)	0.10
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00		Cum Volume (acre-ft)	0.10
Frctn Loss (ft)		Cum SA (acres)	0.00
0.01			0.11
C & E Loss (ft)			
0.00			

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.988*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -2.47 819 .04 819 .1 818.98 13.77 818.98									
43.67 818.98 58.14 818.98 58.21 819 60.81 819 68 819									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-10 .0129 -2.47 .0129 .04 .0129 68 .0129					

Bank Sta: Left Right Lengths: Left Channel Right								
.04 58.21 1 1 1								
Coeff Contr. Expan.								
.1 .3								

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.77	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	819.45	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.50	Flow Area (sq ft)	0.02	27.31
0.02				
E.G. Slope (ft/ft)	0.004326	Area (sq ft)	0.02	27.31
0.02				
Q Total (cfs)	125.00	Flow (cfs)	0.02	124.97
0.02				
Top width (ft)	58.25	Top width (ft)	0.04	58.17
0.04				
Vel Total (ft/s)	4.57	Avg. Vel. (ft/s)	0.84	4.58
		Page 715		

CPNPPLocalPMP

0.84					
Max Chl Dpth (ft)	0.47	Hydr. Depth (ft)	0.45	0.47	
0.45					
Conv. Total (cfs)	1900.4	Conv. (cfs)	0.2	1899.9	
0.2					
Length wtd. (ft)	1.00	wetted Per. (ft)	0.49	58.18	
0.49					
Min Ch El (ft)	818.98	Shear (lb/sq ft)	0.01	0.13	
0.01					
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00	
0.00					
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59	
0.01					
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.11	
0.00					

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.977*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 819 -2.44 819	.07 819	.21 818.96	13.83 818.96						
43.61 818.96 58.04 818.96	58.17 819	60.78 819	68 819						

Manning's n Values	num=	4					
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -2.44 .0129	.07 .0129	68 .0129					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
.07 58.17	1 1 1	.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev
-10 0 825	58.25 68 825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.75	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.27	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	819.47	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.48	Flow Area (sq ft)	0.03	29.79
0.04				
E.G. Slope (ft/ft)	0.003232	Area (sq ft)	0.03	29.79
0.04				
Q Total (cfs)	125.00	Flow (cfs)	0.03	124.93
0.04				
Top width (ft)	58.25	Top width (ft)	0.07	58.10
0.08				
Vel Total (ft/s)	4.19	Avg. vel. (ft/s)	1.01	4.19
1.10				
Max Chl Dpth (ft)	0.51	Hydr. Depth (ft)	0.47	0.51
0.47				
Conv. Total (cfs)	2198.7	Conv. (cfs)	0.6	2197.4

CPNPPLocalPMP

0.7 Length wtd. (ft)	1.00	wetted Per. (ft)	0.54	58.11
0.55 Min Ch El (ft)	818.96	Shear (lb/sq ft)	0.01	0.10
0.01 Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59
0.01 C & E Loss (ft)	0.02	Cum SA (acres)	0.00	0.11
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.966*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-2.41	819	.11	819	.31	818.93	13.88	818.93
43.56	818.93	57.93	818.93	58.13	819	60.76	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.41	.0129	.11	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

.11	58.13	1	1	1	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.74	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.37	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.45	Flow Area (sq ft)	0.04	25.76
0.04				
E.G. slope (ft/ft)	0.005233	Area (sq ft)	0.04	25.76
0.04				
Q Total (cfs)	125.00	Flow (cfs)	0.07	124.86
0.08				
Top width (ft)	58.25	Top width (ft)	0.11	58.02
0.12				
Vel Total (ft/s)	4.84	Avg. vel. (ft/s)	1.61	4.85
1.68				
Max Chl Dpth (ft)	0.44	Hydr. Depth (ft)	0.37	0.44
0.37				
Conv. Total (cfs)	1727.9	Conv. (cfs)	0.9	1725.9
1.0				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.48	58.04
0.49				
Min Ch El (ft)	818.93	Shear (lb/sq ft)	0.03	0.14

CPNPPLocalPMP

0.03 Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59
0.01 C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.11
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.955*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-2.39	819	.15	819	.42	818.91	13.94	818.91
43.5	818.91	57.82	818.91	58.09	819	60.73	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.39	.0129	.15	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 .15 58.09 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.70	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.27	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	819.43	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.43	Flow Area (sq ft)	0.06	30.11
0.07				
E.G. Slope (ft/ft)	0.003101	Area (sq ft)	0.06	30.11
0.07				
Q Total (cfs)	125.00	Flow (cfs)	0.10	124.80
0.11				
Top width (ft)	58.25	Top width (ft)	0.15	57.94
0.16				
Vel Total (ft/s)	4.13	Avg. vel. (ft/s)	1.48	4.14
1.53				
Max Chl Dpth (ft)	0.52	Hydr. Depth (ft)	0.43	0.52
0.43				
Conv. Total (cfs)	2244.6	Conv. (cfs)	1.7	2241.0
1.9				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.58	57.97
0.59				
Min Ch El (ft)	818.91	Shear (lb/sq ft)	0.02	0.10
0.02				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59

CPNPPLocalPMP
 0.01
 C & E Loss (ft) 0.03 Cum SA (acres) 0.00 0.10
 0.00

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.944*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-2.36	819	.19	819	.52	818.89	13.99	818.89
43.45	818.89	57.72	818.89	58.05	819	60.7	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.36	.0129	.19	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 .19 58.05 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.69	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.36	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.41	Flow Area (sq ft)	0.07	27.20
0.07				
E.G. Slope (ft/ft)	0.004342	Area (sq ft)	0.07	27.20
0.07				
Q Total (cfs)	125.00	Flow (cfs)	0.13	124.73
0.14				
Top Width (ft)	58.25	Top width (ft)	0.19	57.86
0.20				
Vel Total (ft/s)	4.57	Avg. vel. (ft/s)	1.89	4.59
1.93				
Max Chl Dpth (ft)	0.47	Hydr. Depth (ft)	0.36	0.47
0.36				
Conv. Total (cfs)	1897.0	Conv. (cfs)	2.0	1892.9
2.1				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.55	57.90
0.56				
Min Ch El (ft)	818.89	Shear (lb/sq ft)	0.03	0.13
0.03				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.10
0.00				

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.933*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-2.33	819	.22	819	.62	818.87	14.05	818.87
43.4	818.87	57.61	818.87	58.01	819	60.67	819	68	819

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.33	.0129	.22	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	.22	58.01		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	819.66	Element	Left OB	Channel
0.013	vel Head (ft)	0.27	wt. n-val.	0.013	0.013
1.00	W.S. Elev (ft)	819.38	Reach Len. (ft)	1.00	1.00
0.09	Crit w.s. (ft)	819.39	Flow Area (sq ft)	0.08	29.63
0.09	E.G. slope (ft/ft)	0.003254	Area (sq ft)	0.08	29.63
0.17	Q Total (cfs)	125.00	Flow (cfs)	0.15	124.68
0.24	Top width (ft)	58.25	Top width (ft)	0.22	57.79
1.84	vel Total (ft/s)	4.19	Avg. vel. (ft/s)	1.77	4.21
0.38	Max Chl Dpth (ft)	0.51	Hydr. Depth (ft)	0.38	0.51
3.0	Conv. Total (cfs)	2191.3	Conv. (cfs)	2.6	2185.7
0.62	Length wtd. (ft)	1.00	wetted Per. (ft)	0.60	57.83
0.03	Min Ch El (ft)	818.87	Shear (lb/sq ft)	0.03	0.10
0.00	Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.01	Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.59
0.00	C & E Loss (ft)	0.02	Cum SA (acres)	0.00	0.10

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.922*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-2.3	819	.26	819	.73	818.84	14.1	818.84	68	819
43.34	818.84	57.5	818.84	57.98	819	60.64	819				

Manning's n Values		num= 4		Sta	n Val	Sta	n Val
-10	.0129	-2.3	.0129	.26	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	.26	57.98		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L	Sta R	Elev
-10	0	825	58.25	68	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.65	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	819.29	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.36	Flow Area (sq ft)	0.07	25.70
0.08				
E.G. Slope (ft/ft)	0.005221	Area (sq ft)	0.07	25.70
0.08				
Q Total (cfs)	125.00	Flow (cfs)	0.16	124.66
0.17				
Top width (ft)	58.25	Top width (ft)	0.26	57.72
0.27				
Vel Total (ft/s)	4.83	Avg. vel. (ft/s)	2.20	4.85
2.23				
Max Chl Dpth (ft)	0.45	Hydr. Depth (ft)	0.29	0.45
0.29				
Conv. Total (cfs)	1729.9	Conv. (cfs)	2.3	1725.3
2.4				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.55	57.77
0.56				
Min Ch El (ft)	818.84	Shear (lb/sq ft)	0.04	0.15
0.05				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.10
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.911*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-2.28	819	.3	819	.83	818.82	14.16	818.82		
43.29	818.82	57.4	818.82	57.94	819	60.61	819	68	819		

Manning's n Values

num= 4		Sta	n Val	Sta	n Val	Sta	n Val
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.28	.0129	.3	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	.3	57.94		1	1	1		.1	.3

Blocked Obstructions

num= 2		Sta L	Sta R	Elev	Sta L	Sta R	Elev
Sta L	Sta R	Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.27	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.34	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.34	Flow Area (sq ft)	0.10	29.97
0.11				
E.G. Slope (ft/ft)	0.003122	Area (sq ft)	0.10	29.97
0.11				
Q Total (cfs)	125.00	Flow (cfs)	0.19	124.60
0.20				
Top width (ft)	58.25	Top width (ft)	0.30	57.64
0.31				
Vel Total (ft/s)	4.14	Avg. vel. (ft/s)	1.89	4.16
1.92				
Max Chl Dpth (ft)	0.52	Hydr. Depth (ft)	0.34	0.52
0.34				
Conv. Total (cfs)	2237.2	Conv. (cfs)	3.5	2230.1
3.6				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.64	57.70
0.65				
Min Ch El (ft)	818.82	Shear (lb/sq ft)	0.03	0.10
0.03				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.03	Cum SA (acres)	0.00	0.10
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.9*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev

	-10	819	-2.25	819	CPNPPLocalPMP	.33	819	.94	818.8	14.21	818.8
	43.23	818.8	57.29	818.8		57.9	819	60.58	819	68	819
Manning's n Values	num=		4								
	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val			
	-10	.0129	-2.25	.0129	.33	.0129	68	.0129			
Bank Sta: Left	Right	Lengths:		Left Channel	Right	Coeff		Contr.	Expan.		
	.33	57.9		1	1	1		.1	.3		
Blocked Obstructions	num=		2								
	Sta L	Sta R	Elev	Sta L	Sta R	Elev					
	-10	0	825	58.25	68	825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.60	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.27	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.33	Flow Area (sq ft)	0.09	27.15
0.10				
E.G. slope (ft/ft)	0.004331	Area (sq ft)	0.09	27.15
0.10				
Q Total (cfs)	125.00	Flow (cfs)	0.19	124.60
0.21				
Top width (ft)	58.25	Top width (ft)	0.33	57.57
0.35				
Vel Total (ft/s)	4.57	Avg. vel. (ft/s)	2.14	4.59
2.17				
Max Chl Dpth (ft)	0.47	Hydr. Depth (ft)	0.27	0.47
0.27				
Conv. Total (cfs)	1899.3	Conv. (cfs)	2.9	1893.2
3.2				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.60	57.63
0.62				
Min Ch El (ft)	818.80	Shear (lb/sq ft)	0.04	0.13
0.04				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.10
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.888*

INPUT

Description:

Station Elevation Data	num=		10							
	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
	-10	819	-2.22	819	.37	819	1.04	818.78	14.27	818.78
	43.18	818.78	57.19	818.78	57.86	819	60.55	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val
-10	.0129	-2.22	.0129	.37	.0129	68	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	.37	57.86		1	1	1	.1	.3
Blocked Obstructions			num=	2				
Sta L	Sta R	Elev	Sta L	Sta R	Elev			
-10	0	825	58.25	68	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)		Element	Left OB	Channel
Right OB	819.57			
Vel Head (ft)	0.28	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.30	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.31	Flow Area (sq ft)	0.11	29.51
0.12				
E.G. Slope (ft/ft)	0.003271	Area (sq ft)	0.11	29.51
0.12				
Q Total (cfs)	125.00	Flow (cfs)	0.22	124.55
0.23				
Top width (ft)	58.25	Top width (ft)	0.37	57.49
0.39				
Vel Total (ft/s)	4.20	Avg. Vel. (ft/s)	1.98	4.22
2.01				
Max Chl Dpth (ft)	0.52	Hydr. Depth (ft)	0.30	0.51
0.30				
Conv. Total (cfs)	2185.7	Conv. (cfs)	3.8	2177.8
4.1				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.67	57.56
0.69				
Min Ch El (ft)	818.78	Shear (lb/sq ft)	0.03	0.10
0.03				
Alpha	1.01	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)	0.00	0.10
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.877*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-2.19	819	.41	819	1.15	818.76	14.32	818.76	
43.13	818.76	57.08	818.76	57.82	819	60.52	819	68	819	

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.19	.0129	.41	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.

	.41	57.82		CPNPPLocalPMP					
Blocked Obstructions			num=	1	1	1		.1	.3
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825	58.25	68	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.56	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.24	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.29	Flow Area (sq ft)	0.10	27.11
0.10				
E.G. slope (ft/ft)	0.004336	Area (sq ft)	0.10	27.11
0.10				
Q Total (cfs)	125.00	Flow (cfs)	0.21	124.58
0.22				
Top width (ft)	58.25	Top width (ft)	0.41	57.41
0.43				
Vel Total (ft/s)	4.58	Avg. vel. (ft/s)	2.14	4.60
2.16				
Max Chl Dpth (ft)	0.48	Hydr. Depth (ft)	0.24	0.47
0.24				
Conv. Total (cfs)	1898.2	Conv. (cfs)	3.1	1891.8
3.3				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.65	57.49
0.67				
Min Ch El (ft)	818.76	shear (lb/sq ft)	0.04	0.13
0.04				
Alpha	1.01	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.09
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.866*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -2.17 819 .44 819 1.25 818.73 14.37 818.73									
43.07 818.73 56.97 818.73 57.78 819 60.5 819 68 819									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-10 .0129 -2.17 .0129 .44 .0129 68 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
.44 57.78	1 1 1	.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.55	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.18	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.26	Flow Area (sq ft)	0.08	25.74
0.09				
E.G. slope (ft/ft)	0.005151	Area (sq ft)	0.08	25.74
0.09				
Q Total (cfs)	125.00	Flow (cfs)	0.17	124.65
0.18				
Top width (ft)	58.25	Top width (ft)	0.44	57.34
0.47				
Vel Total (ft/s)	4.82	Avg. vel. (ft/s)	2.11	4.84
2.14				
Max Chl Dpth (ft)	0.45	Hydr. Depth (ft)	0.18	0.45
0.18				
Conv. Total (cfs)	1741.7	Conv. (cfs)	2.4	1736.8
2.6				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.62	57.43
0.65				
Min Ch El (ft)	818.73	Shear (lb/sq ft)	0.04	0.14
0.04				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.09
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.855*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -2.14 819 .48 819 1.35 818.71 14.43 818.71									
43.02 818.71 56.87 818.71 57.74 819 60.47 819 68 819									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-10 .0129 -2.14 .0129 .48 .0129 68 .0129						

Bank Sta: Left Right Lengths: Left Channel Right								
.48 57.74 1 1 1								
Coeff Contr. Expan.								
.1 .3								

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	819.51	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.27	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.24	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.24	Flow Area (sq ft)	0.11	29.81
0.12				
E.G. Slope (ft/ft)	0.003149	Area (sq ft)	0.11	29.81
0.12				
Q Total (cfs)	125.00	Flow (cfs)	0.21	124.56
0.23				
Top width (ft)	58.25	Top width (ft)	0.48	57.26
0.51				
Vel Total (ft/s)	4.16	Avg. Vel. (ft/s)	1.89	4.18
1.91				
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)	0.24	0.52
0.24				
Conv. Total (cfs)	2227.7	Conv. (cfs)	3.8	2219.8
4.1				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.72	57.35
0.75				
Min Ch El (ft)	818.71	Shear (lb/sq ft)	0.03	0.10
0.03				
Alpha	1.01	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.03	Cum SA (acres)	0.00	0.09
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.844*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-2.11	819	.52	819	1.46	818.69	14.48	818.69		
42.97	818.69	56.76	818.69	57.7	819	60.44	819	68	819		

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2.11	.0129	.52	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 .52 57.7 1 1 1 .1 .3

Blocked Obstructions

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	819.50			
Right OB				
Vel Head (ft)	0.33	wt. n-Val.	0.013	0.013
0.013				

		CPNPPLocalPMP		
W.S. Elev (ft)	819.17	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.22	Flow Area (sq ft)	0.09	27.10
0.09				
E.G. slope (ft/ft)	0.004324	Area (sq ft)	0.09	27.10
0.09				
Q Total (cfs)	125.00	Flow (cfs)	0.17	124.65
0.18				
Top width (ft)	58.25	Top width (ft)	0.52	57.18
0.55				
Vel Total (ft/s)	4.58	Avg. Vel. (ft/s)	1.92	4.60
1.94				
Max Chl Dpth (ft)	0.48	Hydr. Depth (ft)	0.17	0.47
0.17				
Conv. Total (cfs)	1900.8	Conv. (cfs)	2.6	1895.5
2.7				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.69	57.28
0.72				
Min Ch El (ft)	818.69	Shear (lb/sq ft)	0.03	0.13
0.03				
Alpha	1.01	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.09
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.833*

INPUT

Description:

Station Elevation Data		num=	10		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	819	-2.08	819	.56	819	1.56	818.67	14.54	818.67			
42.91	818.67	56.65	818.67	57.66	819	60.41	819	68	819			

Manning's n Values		num=	4		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-2.08	.0129	.56	.0129	68	.0129					

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.			
	.56	57.66		1	1	1		.1	.3			
Blocked Obstructions		num=	2		Sta		Elev		Sta		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta	Elev	Sta	Elev			
-10	0	825	58.25	68	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.47	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.28	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.19	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.20	Flow Area (sq ft)	0.11	29.41
0.11				

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.003283	Area (sq ft)	0.11 29.41
Q Total (cfs)	125.00	Flow (cfs)	0.19 124.60
Top width (ft)	58.25	Top width (ft)	0.56 57.10
Vel Total (ft/s)	4.22	Avg. vel. (ft/s)	1.80 4.24
Max Chl Dpth (ft)	0.52	Hydr. Depth (ft)	0.19 0.52
Conv. Total (cfs)	2181.4	Conv. (cfs)	3.4 2174.5
Length wtd. (ft)	1.00	wetted Per. (ft)	0.75 57.21
Min Ch El (ft)	818.67	Shear (lb/sq ft)	0.03 0.11
Alpha	1.01	Stream Power (lb/ft s)	68.00 0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10 0.59
C & E Loss (ft)	0.01	Cum SA (acres)	0.00 0.09

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.822*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
-10	819	-2.05	819
42.86	818.64	56.55	818.64
		57.62	819
		60.38	819
		68	819

Manning's n Values		num= 4	
Sta	n Val	Sta	n Val
-10	.0129	-2.05	.0129
		.59	.0129
		68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	.59	57.62		1	1	1		.1	.3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Sta L
-10	0	825	58.25
			68
			825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.46	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.	0.013	0.013
W.S. Elev (ft)	819.10	Reach Len. (ft)	1.00	1.00
Crit w.s. (ft)	819.18	Flow Area (sq ft)	0.06	26.02
E.G. Slope (ft/ft)	0.004948	Area (sq ft)	0.06	26.02
Q Total (cfs)	125.00	Flow (cfs)	0.10	124.80

		CPNPPLocalPMP		
Top width (ft)	58.25	Top width (ft)	0.59	57.03
0.63				
Vel Total (ft/s)	4.78	Avg. vel. (ft/s)	1.60	4.80
1.61				
Max Chl Dpth (ft)	0.46	Hydr. Depth (ft)	0.10	0.46
0.10				
Conv. Total (cfs)	1777.0	Conv. (cfs)	1.4	1774.1
1.5				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.69	57.15
0.73				
Min Ch El (ft)	818.64	Shear (lb/sq ft)	0.03	0.14
0.03				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.59
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.09
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.811*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -2.03 819 .63 819 1.77 818.62 14.65 818.62									
42.8 818.62 56.44 818.62 57.58 819 60.35 819 68 819									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-10 .0129 -2.03 .0129 .63 .0129 68 .0129						

Bank Sta: Left Right Lengths: Left Channel Right								
.63 57.58 1 1 1								
Coeff Contr. Expan.								
.1 .3								

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.42	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.28	wt. n-Val.	0.013	0.013
0.013				
w.s. Elev (ft)	819.15	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.16	Flow Area (sq ft)	0.09	29.48
0.10				
E.G. slope (ft/ft)	0.003252	Area (sq ft)	0.09	29.48
0.10				
Q Total (cfs)	125.00	Flow (cfs)	0.14	124.70
0.16				
Top width (ft)	58.25	Top width (ft)	0.63	56.95
0.67				
Vel Total (ft/s)	4.21	Avg. vel. (ft/s)	1.58	4.23
1.59				

		CPNPPLocalPMP		
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)	0.15	0.52
0.15				
Conv. Total (cfs)	2191.9	Conv. (cfs)	2.5	2186.6
2.7				
Length Wtd. (ft)	1.00	wetted Per. (ft)	0.78	57.07
0.82				
Min Ch El (ft)	818.62	Shear (lb/sq ft)	0.02	0.10
0.02				
Alpha	1.01	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)	0.00	0.09
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.8*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-2	819	.67	819	1.87	818.6	14.7	818.6		
42.75	818.6	56.33	818.6	57.54	819	60.32	819	68	819		

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-2	.0129	.67	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 .67 57.54 1 1 1 .1 .3

Blocked Obstructions

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.41	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.09	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.14	Flow Area (sq ft)	0.06	27.11
0.06				
E.G. slope (ft/ft)	0.004305	Area (sq ft)	0.06	27.11
0.06				
Q Total (cfs)	125.00	Flow (cfs)	0.08	124.84
0.08				
Top width (ft)	58.25	Top width (ft)	0.67	56.87
0.71				
Vel Total (ft/s)	4.59	Avg. Vel. (ft/s)	1.35	4.61
1.36				
Max Chl Dpth (ft)	0.49	Hydr. Depth (ft)	0.09	0.48
0.09				
Conv. Total (cfs)	1905.1	Conv. (cfs)	1.2	1902.7
1.2				

		CPNPPLocalPMP		
Length wtd. (ft)	1.00	Wetted Per. (ft)	0.76	57.00
0.80				
Min Ch El (ft)	818.60	Shear (lb/sq ft)	0.02	0.13
0.02				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.09
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.788*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.97	819	.7	819	1.98	818.58	14.76	818.58
42.7	818.58	56.23	818.58	57.5	819	60.29	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.97	.0129	.7	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

.7	57.5	1	1	1	.1	.3
----	------	---	---	---	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.39	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.28	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	819.11	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.12	Flow Area (sq ft)	0.07	29.37
0.08				
E.G. Slope (ft/ft)	0.003288	Area (sq ft)	0.07	29.37
0.08				
Q Total (cfs)	125.00	Flow (cfs)	0.10	124.79
0.11				
Top width (ft)	58.25	Top width (ft)	0.70	56.80
0.75				
Vel Total (ft/s)	4.23	Avg. vel. (ft/s)	1.35	4.25
1.36				
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)	0.11	0.52
0.11				
Conv. Total (cfs)	2180.0	Conv. (cfs)	1.8	2176.3
1.9				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.81	56.93
0.86				
Min Ch El (ft)	818.58	Shear (lb/sq ft)	0.02	0.11
0.02				

	Alpha	Frctn Loss (ft)	C & E Loss (ft)	CPNPPLocalPMP	Stream Power (lb/ft s)	Cum Volume (acre-ft)	Cum SA (acres)
	0.00	0.01	0.00	1.01	68.00	0.10	0.08

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.777*

INPUT

Description:

Station	Elev	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.94			.74	819	2.08	818.56	14.81	818.56
42.64	818.56	56.12			57.47	819	60.27	819	68	819

Manning's n	Values	num=	4	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129			-1.94	.0129	.74	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	.74	57.47		1	1	1		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.37	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.32	wt. n-Val.	0.013	0.013
0.013				
w.s. Elev (ft)	819.06	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.10	Flow Area (sq ft)	0.04	27.69
0.05				
E.G. slope (ft/ft)	0.004002	Area (sq ft)	0.04	27.69
0.05				
Q Total (cfs)	125.00	Flow (cfs)	0.05	124.91
0.05				
Top width (ft)	58.25	Top width (ft)	0.74	56.73
0.78				
Vel Total (ft/s)	4.50	Avg. vel. (ft/s)	1.04	4.51
1.05				
Max Chl Dpth (ft)	0.50	Hydr. Depth (ft)	0.06	0.49
0.06				
Conv. Total (cfs)	1975.9	Conv. (cfs)	0.7	1974.5
0.8				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.80	56.87
0.84				
Min Ch El (ft)	818.56	Shear (lb/sq ft)	0.01	0.12
0.01				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.58
0.01				

C & E Loss (ft) 0.00 CPNPPLocalPMP Cum SA (acres) 0.00 0.08

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.766*

INPUT

Description:

Station Elevation Data num= 10
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 819 -1.92 819 .78 819 2.19 818.53 14.86 818.53
 42.59 818.53 56.01 818.53 57.43 819 60.24 819 68 819

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val
 -10 .0129 -1.92 .0129 .78 .0129 68 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 .78 57.43 1 1 1 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 58.25 68 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.36	Element	Left OB	Channel
Right OB				
vel Head (ft)	0.36	wt. n-val.	0.000	0.013
0.000				
W.S. Elev (ft)	819.00	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.07	Flow Area (sq ft)	0.00	26.12
0.00				
E.G. slope (ft/ft)	0.004864	Area (sq ft)	0.00	26.12
0.00				
Q Total (cfs)	125.00	Flow (cfs)	0.00	125.00
0.00				
Top width (ft)	58.25	Top width (ft)	0.78	56.65
0.82				
vel Total (ft/s)	4.79	Avg. vel. (ft/s)	0.16	4.79
0.16				
Max Chl Dpth (ft)	0.47	Hydr. Depth (ft)	0.00	0.46
0.00				
Conv. Total (cfs)	1792.2	Conv. (cfs)	0.0	1792.2
0.0				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.78	56.80
0.82				
Min Ch El (ft)	818.53	Shear (lb/sq ft)		0.14
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.08
0.00				

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.755*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.89	819	.81	819	2.29	818.51	14.92	818.51		
42.53	818.51	55.91	818.51	57.39	819	60.21	819	68	819		

Manning's n Values		num= 4		Sta	n Val	Sta	n Val
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.89	.0129	.81	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	.81	57.39		1	1	1		.1	.3

Blocked Obstructions		num= 2		Sta L	Sta R	Elev
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825	58.25	68	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.32	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.28	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	819.04	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.06	Flow Area (sq ft)	0.03	29.43
0.04				
E.G. Slope (ft/ft)	0.003258	Area (sq ft)	0.03	29.43
0.04				
Q Total (cfs)	125.00	Flow (cfs)	0.03	124.94
0.03				
Top Width (ft)	58.25	Top Width (ft)	0.81	56.58
0.86				
Vel Total (ft/s)	4.24	Avg. Vel. (ft/s)	0.78	4.25
0.78				
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)	0.04	0.52
0.04				
Conv. Total (cfs)	2189.8	Conv. (cfs)	0.5	2188.8
0.5				
Length wtd. (ft)	1.00	wetted Per. (ft)	0.85	56.74
0.90				
Min Ch El (ft)	818.51	Shear (lb/sq ft)	0.01	0.11
0.01				
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)	0.00	0.08
0.00				

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.744*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.86	819	.85	819	2.39	818.49	14.97	818.49
42.48	818.49	55.8	818.49	57.35	819	60.18	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.86	.0129	.85	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

Sta	Sta	Length	Length	Coeff	Contr.	Expan.
.85	57.35	1	1	1	.1	.3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.31	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.		0.013
w.s. Elev (ft)	818.98	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	819.04	Flow Area (sq ft)		27.08
E.G. Slope (ft/ft)	0.004287	Area (sq ft)		27.08
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	56.40	Top width (ft)		56.40
Vel Total (ft/s)	4.62	Avg. vel. (ft/s)		4.62
Max Chl Dpth (ft)	0.49	Hydr. Depth (ft)		0.48
Conv. Total (cfs)	1909.1	Conv. (cfs)		1909.1
Length wtd. (ft)	1.00	wetted Per. (ft)		56.56
Min Ch El (ft)	818.49	Shear (lb/sq ft)		0.13
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)	0.00	0.08
0.00				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.733*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.83	819	.89	819	2.5	818.47	15.03	818.47		
42.43	818.47	55.7	818.47	57.31	819	60.15	819	68	819		

Manning's n Values

num= 4		Sta	n Val	Sta	n Val	Sta	n Val
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.83	.0129	.89	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	.89	57.31		1	1		.1	.3

Blocked Obstructions

num= 2		Sta L	Sta R	Elev	Sta L	Sta R	Elev
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)		Element	Left OB	Channel
Right OB	819.29				
Vel Head (ft)	0.28	wt. n-val.		0.013	0.013
0.013					
W.S. Elev (ft)	819.00	Reach Len. (ft)		1.00	1.00
1.00					
Crit w.s. (ft)	819.02	Flow Area (sq ft)		0.00	29.29
0.00					
E.G. slope (ft/ft)	0.003305	Area (sq ft)		0.00	29.29
0.00					
Q Total (cfs)	125.00	Flow (cfs)		0.00	125.00
0.00					
Top width (ft)	58.25	Top width (ft)		0.89	56.42
0.94					
Vel Total (ft/s)	4.27	Avg. vel. (ft/s)		0.17	4.27
0.17					
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)		0.00	0.52
0.00					
Conv. Total (cfs)	2174.3	Conv. (cfs)		0.0	2174.3
0.0					
Length wtd. (ft)	1.00	wetted Per. (ft)		0.89	56.59
0.94					
Min Ch El (ft)	818.47	Shear (lb/sq ft)		0.00	0.11
0.00					
Alpha	1.00	Stream Power (lb/ft s)		68.00	0.00
0.00					
Frctn Loss (ft)	0.00	Cum volume (acre-ft)		0.10	0.58
0.01					
C & E Loss (ft)	0.01	Cum SA (acres)		0.00	0.08
0.00					

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.722*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.8	819	.92	819	2.6	818.44	15.08	818.44		

42.37	818.44	55.59	818.44	57.27	819	60.12	819	68	819	
Manning's n Values				num=	4					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	-1.8	.0129	.92	.0129	68	.0129			
Bank Sta:	Left	Right	Lengths:		Left	Channel	Right	Coeff	Contr.	Expan.
	.92	57.27	1	1	1			.1	.3	
Blocked Obstructions				num=	2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev					
-10	0	825	58.25	68	825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.28	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-Val.		0.013
w.s. Elev (ft)	818.92	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.99	Flow Area (sq ft)		25.86
E.G. Slope (ft/ft)	0.004936	Area (sq ft)		25.86
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	55.84	Top width (ft)		55.84
Vel Total (ft/s)	4.83	Avg. Vel. (ft/s)		4.83
Max Chl Dpth (ft)	0.48	Hydr. Depth (ft)		0.46
Conv. Total (cfs)	1779.3	Conv. (cfs)		1779.3
Length wtd. (ft)	1.00	wetted Per. (ft)		56.00
Min Ch El (ft)	818.44	Shear (lb/sq ft)		0.14
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.08

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.711*

INPUT

Description:

Station Elevation Data		num=	10						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.78	819	.96	819	2.71	818.42	15.14	818.42
42.32	818.42	55.48	818.42	57.23	819	60.09	819	68	819

Manning's n Values		num=	4						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val

	-10	.0129	-1.78	.0129	CPNPPLocalPMP	.96	.0129	68	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.		
	.96	57.23		1	1	.1	.3			
Blocked Obstructions			num=	2						
	Sta L	Sta R	Elev	Sta L	Sta R	Elev				
	-10	0	825	58.25	68	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.29	Wt. n-Val.		0.013
W.S. Elev (ft)	818.96	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.97	Flow Area (sq ft)		29.17
E.G. Slope (ft/ft)	0.003317	Area (sq ft)		29.17
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	56.01	Top width (ft)		56.01
Vel Total (ft/s)	4.29	Avg. vel. (ft/s)		4.29
Max chl Dpth (ft)	0.54	Hydr. Depth (ft)		0.52
Conv. Total (cfs)	2170.5	Conv. (cfs)		2170.5
Length wtd. (ft)	1.00	wetted Per. (ft)		56.18
Min ch El (ft)	818.42	Shear (lb/sq ft)		0.11
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.02	Cum SA (acres)		0.08

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.7*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -1.75 819 1 819 2.81 818.4 15.19 818.4									
42.26 818.4 55.38 818.4 57.19 819 60.06 819 68 819									

Manning's n Values	num=	4							
Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -1.75 .0129 1 .0129 68 .0129									

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	1	57.19		1	1	.1	.3	

Blocked Obstructions num= CPNPPLocalPMP
 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 58.25 68 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.23	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-val.		0.013
W.S. Elev (ft)	818.90	Reach Len. (ft)	1.00	1.00
1.00				
Crit W.S. (ft)	818.95	Flow Area (sq ft)		26.85
E.G. slope (ft/ft)	0.004327	Area (sq ft)		26.85
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	55.57	Top width (ft)		55.57
vel Total (ft/s)	4.66	Avg. vel. (ft/s)		4.66
Max Chl Dpth (ft)	0.50	Hydr. Depth (ft)		0.48
Conv. Total (cfs)	1900.3	Conv. (cfs)		1900.3
Length wtd. (ft)	1.00	wetted Per. (ft)		55.73
Min Ch El (ft)	818.40	Shear (lb/sq ft)		0.13
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.07

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.688*

INPUT

Description:

Station Elevation Data num= 10
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 819 -1.72 819 1.04 819 2.92 818.38 15.25 818.38
 42.21 818.38 55.27 818.38 57.15 819 60.04 819 68 819

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -1.72 .0129 1.04 .0129 68 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1.04 57.15 1 1 1 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 58.25 68 825

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.21	Element	Left OB	Channel
Right OB Vel Head (ft)	0.29	wt. n-Val.		0.013
w.s. Elev (ft)	818.92	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	818.93	Flow Area (sq ft)		29.02
E.G. Slope (ft/ft)	0.003341	Area (sq ft)		29.02
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	55.61	Top width (ft)		55.61
Vel Total (ft/s)	4.31	Avg. Vel. (ft/s)		4.31
Max Chl Dpth (ft)	0.54	Hydr. Depth (ft)		0.52
Conv. Total (cfs)	2162.6	Conv. (cfs)		2162.6
Length wtd. (ft)	1.00	wetted Per. (ft)		55.78
Min Ch El (ft)	818.38	Shear (lb/sq ft)		0.11
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.58
0.01 C & E Loss (ft)	0.01	Cum SA (acres)		0.07

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.677*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.69	819	1.07	819	3.02	818.36	15.3	818.36
42.16	818.36	55.16	818.36	57.11	819	60.01	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.69	.0129	1.07	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1.07 57.11 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.19	Element Page 741	Left OB	Channel
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		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.32	wt. n-val.		0.013
w.s. Elev (ft)	818.87	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.91	Flow Area (sq ft)		27.33
E.G. slope (ft/ft)	0.004047	Area (sq ft)		27.33
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	55.24	Top width (ft)		55.24
Vel Total (ft/s)	4.57	Avg. Vel. (ft/s)		4.57
Max chl Dpth (ft)	0.51	Hydr. Depth (ft)		0.49
Conv. Total (cfs)	1965.0	Conv. (cfs)		1965.0
Length wtd. (ft)	1.00	wetted Per. (ft)		55.40
Min ch El (ft)	818.36	Shear (lb/sq ft)		0.12
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.07

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.666*

INPUT

Description:

Station Elevation Data		num= 10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.67	819	1.11	819	3.12	818.33	15.36	818.33
42.1	818.33	55.06	818.33	57.07	819	59.98	819	68	819

Manning's n Values		num= 4					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.67	.0129	1.11	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	1.11	57.07		1	1		.1	.3

Blocked Obstructions		num= 2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.39	wt. n-val.		0.013
w.s. Elev (ft)	818.80	Reach Len. (ft)	1.00	1.00

CPNPPLocalPMP

1.00				
Crit w.s. (ft)	818.89	Flow Area (sq ft)		25.01
E.G. Slope (ft/ft)	0.005372	Area (sq ft)		25.01
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top Width (ft)	54.75	Top Width (ft)		54.75
Vel Total (ft/s)	5.00	Avg. Vel. (ft/s)		5.00
Max Chl Dpth (ft)	0.47	Hydr. Depth (ft)		0.46
Conv. Total (cfs)	1705.4	Conv. (cfs)		1705.4
Length wtd. (ft)	1.00	wetted Per. (ft)		54.91
Min Ch El (ft)	818.33	Shear (lb/sq ft)		0.15
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.58
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.07

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.655*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -1.64 819 1.15 819 3.23 818.31 15.41 818.31									
42.05 818.31 54.95 818.31 57.03 819 59.95 819 68 819									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-10 .0129 -1.64 .0129 1.15 .0129 68 .0129					

Bank Sta: Left Right Lengths: Left Channel Right								
1.15 57.03 1 1 1								
Coeff Contr. Expan.								
.1 .3								

Blocked Obstructions	num=	2		
Sta L Sta R Elev Sta L Sta R Elev				
-10 0 825 58.25 68 825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.28	wt. n-val.		0.013
w.s. Elev (ft)	818.86	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.87	Flow Area (sq ft)		29.49
E.G. slope (ft/ft)	0.003127	Area (sq ft)		29.49

CPNPPLocalPMP

Q Total (cfs)	125.00	Flow (cfs)	125.00
Top width (ft)	55.05	Top width (ft)	55.05
Vel Total (ft/s)	4.24	Avg. Vel. (ft/s)	4.24
Max Chl Dpth (ft)	0.55	Hydr. Depth (ft)	0.54
Conv. Total (cfs)	2235.5	Conv. (cfs)	2235.5
Length wtd. (ft)	1.00	wetted Per. (ft)	55.23
Min ch El (ft)	818.31	Shear (lb/sq ft)	0.10
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00		Cum Volume (acre-ft)	0.10
Frctn Loss (ft)	0.00	Cum SA (acres)	0.07
0.01			
C & E Loss (ft)	0.03		

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.644*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -1.61 819 1.18 819 3.33 818.29 15.46 818.29									
41.99 818.29 54.84 818.29 56.99 819 59.92 819 68 819									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-10 .0129 -1.61 .0129 1.18 .0129 68 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
1.18 56.99	1 1 1	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825 58.25 68 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.13	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-Val.		0.013
w.s. Elev (ft)	818.79	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.85	Flow Area (sq ft)		26.73
E.G. Slope (ft/ft)	0.004284	Area (sq ft)		26.73
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	54.56	Top width (ft)		54.56

CPNPPLocalPMP

Vel Total (ft/s)	4.68	Avg. Vel. (ft/s)	4.68
Max Chl Dpth (ft)	0.50	Hydr. Depth (ft)	0.49
Conv. Total (cfs)	1909.8	Conv. (cfs)	1909.8
Length Wtd. (ft)	1.00	wetted Per. (ft)	54.72
Min Ch El (ft)	818.29	Shear (lb/sq ft)	0.13
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10
0.01			
C & E Loss (ft)	0.01	Cum SA (acres)	0.07

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.633*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.58	819	1.22	819	3.44	818.27	15.52	818.27
41.94	818.27	54.74	818.27	56.96	819	59.89	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.58	.0129	1.22	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

1.22	56.96	1	1	1	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.29	wt. n-val.		0.013
W.S. Elev (ft)	818.82	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.83	Flow Area (sq ft)		28.86
E.G. slope (ft/ft)	0.003322	Area (sq ft)		28.86
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	54.62	Top width (ft)		54.62
Vel Total (ft/s)	4.33	Avg. Vel. (ft/s)		4.33
Max Chl Dpth (ft)	0.55	Hydr. Depth (ft)		0.53

CPNPPLocalPMP

Conv. Total (cfs)	2168.7	Conv. (cfs)	2168.7
Length wtd. (ft)	1.00	wetted Per. (ft)	54.79
Min Ch El (ft)	818.27	Shear (lb/sq ft)	0.11
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00		Cum Volume (acre-ft)	0.10
Frctn Loss (ft)	0.00	Cum SA (acres)	0.07
0.01			
C & E Loss (ft)	0.01		

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.622*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.55	819	1.26	819	3.54	818.24	15.57	818.24
41.89	818.24	54.63	818.24	56.92	819	59.86	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.55	.0129	1.26	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	1.26	56.92		1	1	1	.1	.3
--	------	-------	--	---	---	---	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.37	wt. n-val.		0.013
w.s. Elev (ft)	818.73	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.80	Flow Area (sq ft)		25.59
E.G. Slope (ft/ft)	0.004890	Area (sq ft)		25.59
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top Width (ft)	54.02	Top Width (ft)		54.02
Vel Total (ft/s)	4.89	Avg. Vel. (ft/s)		4.89
Max Chl Dpth (ft)	0.49	Hydr. Depth (ft)		0.47
Conv. Total (cfs)	1787.5	Conv. (cfs)		1787.5
Length wtd. (ft)	1.00	wetted Per. (ft)		54.18

CPNPPLocalPMP

Min Ch El (ft)	818.24	Shear (lb/sq ft)		0.14
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.57
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.07

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.611*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 819 -1.53 819	1.29 819	3.64 818.22	15.63 818.22						
41.83 818.22	54.52 818.22	56.88 819	59.83 819	68	819				

Manning's n Values	num=	4					
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -1.53 .0129	1.29 .0129	68 .0129					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
1.29 56.88	1 1 1	.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev
-10 0 825	58.25 68 825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.06	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.29	wt. n-val.		0.013
w.s. Elev (ft)	818.77	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.78	Flow Area (sq ft)		28.80
E.G. Slope (ft/ft)	0.003312	Area (sq ft)		28.80
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	54.19	Top width (ft)		54.19
Vel Total (ft/s)	4.34	Avg. vel. (ft/s)		4.34
Max Chl Dpth (ft)	0.55	Hydr. Depth (ft)		0.53
Conv. Total (cfs)	2172.0	Conv. (cfs)		2172.0
Length wtd. (ft)	1.00	wetted Per. (ft)		54.37
Min Ch El (ft)	818.22	Shear (lb/sq ft)		0.11
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00

			CPNPPLocalPMP		
0.00					
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.57	
0.01					
C & E Loss (ft)	0.02	Cum SA (acres)		0.06	

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.6*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -1.5 819 1.33 819 3.75 818.2 15.68 818.2									
41.78 818.2 54.42 818.2 56.84 819 59.81 819 68 819									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-10 .0129 -1.5 .0129 1.33 .0129 68 .0129					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
1.33 56.84	1 1	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825 58.25 68 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.05	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.		0.013
w.s. Elev (ft)	818.72	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.77	Flow Area (sq ft)		27.10
E.G. slope (ft/ft)	0.004017	Area (sq ft)		27.10
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	53.81	Top width (ft)		53.81
vel Total (ft/s)	4.61	Avg. vel. (ft/s)		4.61
Max chl Dpth (ft)	0.52	Hydr. Depth (ft)		0.50
Conv. Total (cfs)	1972.1	Conv. (cfs)		1972.1
Length wtd. (ft)	1.00	wetted Per. (ft)		53.98
Min ch El (ft)	818.20	Shear (lb/sq ft)		0.13
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.57
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.06

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.588*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.47	819	1.37	819	3.85	818.18	15.74	818.18		
41.72	818.18	54.31	818.18	56.8	819	59.78	819	68	819		

Manning's n Values		num= 4		Sta	n Val	Sta	n Val
-10	.0129	-1.47	.0129	1.37	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	1.37	56.8		1	1	1		.1	.3

Blocked Obstructions		num= 2		Sta L	Sta R	Elev
-10	0	825	58.25	68	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.03	Element	Left OB	Channel
Right OB Vel Head (ft)	0.29	wt. n-val.		0.013
w.s. Elev (ft)	818.73	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	818.75	Flow Area (sq ft)		28.75
E.G. Slope (ft/ft)	0.003298	Area (sq ft)		28.75
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	53.80	Top width (ft)		53.80
Vel Total (ft/s)	4.35	Avg. vel. (ft/s)		4.35
Max Chl Dpth (ft)	0.55	Hydr. Depth (ft)		0.53
Conv. Total (cfs)	2176.5	Conv. (cfs)		2176.5
Length wtd. (ft)	1.00	wetted Per. (ft)		53.98
Min Ch El (ft)	818.18	Shear (lb/sq ft)		0.11
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.57
0.01 C & E Loss (ft)	0.01	Cum SA (acres)		0.06

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.577*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.44	819	1.41	819	3.96	818.16	15.79	818.16		
41.67	818.16	54.21	818.16	56.76	819	59.75	819	68	819		

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.44	.0129	1.41	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	1.41	56.76		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Elev		Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R	Elev
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.01	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.33	wt. n-val.		0.013
w.s. Elev (ft)	818.68	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.73	Flow Area (sq ft)		27.05
E.G. Slope (ft/ft)	0.004006	Area (sq ft)		27.05
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	53.42	Top width (ft)		53.42
Vel Total (ft/s)	4.62	Avg. vel. (ft/s)		4.62
Max Chl Dpth (ft)	0.52	Hydr. Depth (ft)		0.51
Conv. Total (cfs)	1975.0	Conv. (cfs)		1975.0
Length wtd. (ft)	1.00	wetted Per. (ft)		53.59
Min Ch El (ft)	818.16	Shear (lb/sq ft)		0.13
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.57
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.06

CROSS SECTION

RIVER: Unit 3 UHS

REACH: U3 UHS Branch CPNPPLocalPMP
 RS: 108.566*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.42	819	1.44	819	4.06	818.13	15.85	818.13		
41.62	818.13	54.1	818.13	56.72	819	59.72	819	68	819		

Manning's n Values		num= 4		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.42	.0129	1.44	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	1.44	56.72		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.01	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.40	wt. n-val.		0.013
w.s. Elev (ft)	818.61	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.70	Flow Area (sq ft)		24.69
E.G. slope (ft/ft)	0.005361	Area (sq ft)		24.69
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	52.93	Top width (ft)		52.93
vel Total (ft/s)	5.06	Avg. vel. (ft/s)		5.06
Max chl Dpth (ft)	0.48	Hydr. Depth (ft)		0.47
Conv. Total (cfs)	1707.2	Conv. (cfs)		1707.2
Length wtd. (ft)	1.00	wetted Per. (ft)		53.08
Min Ch El (ft)	818.13	Shear (lb/sq ft)		0.16
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.57
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.06

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.555*

INPUT

Description:

Station Elevation Data				num=	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.39	819		1.48	819	4.16	818.11	15.9	818.11
41.56	818.11	53.99	818.11		56.68	819	59.69	819	68	819

Manning's n Values				num=				
Sta	n Val	Sta	n Val	4	Sta	n Val	Sta	n Val
-10	.0129	-1.39	.0129		1.48	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	1.48	56.68		1	1		.1	.3

Blocked Obstructions				num=			
Sta L	Sta R	Elev	Sta L	Sta R	Elev		
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)		Element	Left OB	Channel
	818.96				
	Vel Head (ft)	0.29	wt. n-Val.		0.013
	w.s. Elev (ft)	818.67	Reach Len. (ft)	1.00	1.00
1.00	Crit w.s. (ft)	818.68	Flow Area (sq ft)		29.08
	E.G. Slope (ft/ft)	0.003132	Area (sq ft)		29.08
	Q Total (cfs)	125.00	Flow (cfs)		125.00
	Top width (ft)	53.23	Top width (ft)		53.23
	Vel Total (ft/s)	4.30	Avg. Vel. (ft/s)		4.30
	Max Chl Dpth (ft)	0.56	Hydr. Depth (ft)		0.55
	Conv. Total (cfs)	2233.5	Conv. (cfs)		2233.5
	Length wtd. (ft)	1.00	wetted Per. (ft)		53.42
	Min Ch El (ft)	818.11	Shear (lb/sq ft)		0.11
	Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00	Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.57
0.01	C & E Loss (ft)	0.03	Cum SA (acres)		0.06

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.544*

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.36	819		1.52	819	4.27	818.09	15.96	818.09
41.51	818.09	53.89	818.09		56.64	819	59.66	819	68	819

CPNPPLocalPMP

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -1.36 .0129 1.52 .0129 68 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 1.52 56.64 1 1 1 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 58.25 68 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.95	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.35	wt. n-val.		0.013
w.s. Elev (ft)	818.61	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.66	Flow Area (sq ft)		26.41
E.G. Slope (ft/ft)	0.004261	Area (sq ft)		26.41
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	52.74	Top width (ft)		52.74
Vel Total (ft/s)	4.73	Avg. vel. (ft/s)		4.73
Max chl Dpth (ft)	0.52	Hydr. Depth (ft)		0.50
Conv. Total (cfs)	1914.9	Conv. (cfs)		1914.9
Length wtd. (ft)	1.00	wetted Per. (ft)		52.91
Min ch El (ft)	818.09	shear (lb/sq ft)		0.13
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.57
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.06

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.533*

INPUT

Description:

Station Elevation Data num= 10
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 819 -1.33 819 1.55 819 4.37 818.07 16.01 818.07
 41.46 818.07 53.78 818.07 56.6 819 59.63 819 68 819

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -1.33 .0129 1.55 .0129 68 .0129

CPNPPLocalPMP

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	1.55	56.6		1	1	1		.1	.3
Blocked Obstructions	num=			2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825	58.25	68	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.93	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.30	wt. n-val.		0.013
w.s. Elev (ft)	818.63	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.64	Flow Area (sq ft)		28.48
E.G. slope (ft/ft)	0.003321	Area (sq ft)		28.48
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	52.79	Top width (ft)		52.79
vel Total (ft/s)	4.39	Avg. vel. (ft/s)		4.39
Max chl Dpth (ft)	0.56	Hydr. Depth (ft)		0.54
Conv. Total (cfs)	2169.0	Conv. (cfs)		2169.0
Length wtd. (ft)	1.00	wetted Per. (ft)		52.97
Min ch El (ft)	818.07	Shear (lb/sq ft)		0.11
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.57
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.06

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.522*

INPUT

Description:

Station Elevation Data	num=		10						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.3	819	1.59	819	4.48	818.04	16.06	818.04
41.4	818.04	53.67	818.04	56.56	819	59.6	819	68	819

Manning's n Values

num=		4							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val		
-10	.0129	-1.3	.0129	1.59	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	1.59	56.56		1	1	1		.1	.3
Blocked Obstructions	num=			2					

Sta L	Sta R	Elev	Sta L	CPNPPLocalPMP	Sta R	Elev
-10	0	825	58.25	68	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.91	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.35	wt. n-Val.		0.013
W.S. Elev (ft)	818.56	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.62	Flow Area (sq ft)		26.31
E.G. slope (ft/ft)	0.004273	Area (sq ft)		26.31
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	52.31	Top width (ft)		52.31
Vel Total (ft/s)	4.75	Avg. Vel. (ft/s)		4.75
Max Chl Dpth (ft)	0.52	Hydr. Depth (ft)		0.50
Conv. Total (cfs)	1912.3	Conv. (cfs)		1912.3
Length wtd. (ft)	1.00	wetted Per. (ft)		52.48
Min Ch El (ft)	818.04	Shear (lb/sq ft)		0.13
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)	0.10	0.57
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.05

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.511*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev	Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 819 -1.28 819 41.35 818.02 53.57 818.02	1.63 819 4.58 818.02 56.52 819 59.57 819 16.12 818.02 68 819								

Manning's n Values

Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -1.28 .0129	1.63 .0129	68 .0129	

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr. Expan.
1.63 56.52	1 1 1	.1 .3

Blocked Obstructions

num=	2				
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	818.88	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.30	wt. n-val.		0.013
w.s. Elev (ft)	818.58	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.60	Flow Area (sq ft)		28.35
E.G. slope (ft/ft)	0.003337	Area (sq ft)		28.35
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	52.36	Top width (ft)		52.36
Vel Total (ft/s)	4.41	Avg. vel. (ft/s)		4.41
Max chl Dpth (ft)	0.56	Hydr. Depth (ft)		0.54
Conv. Total (cfs)	2163.9	Conv. (cfs)		2163.9
Length wtd. (ft)	1.00	wetted Per. (ft)		52.54
Min ch El (ft)	818.02	Shear (lb/sq ft)		0.11
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.57
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.05

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.5*

INPUT

Description:

Station Elevation Data		num=	10						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.25	819	1.66	819	4.68	818	16.17	818
41.29	818	53.46	818	56.49	819	59.55	819	68	819

Manning's n Values		num=	4				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.25	.0129	1.66	.0129	68	.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
1.66	56.49	1	1	1	.1	.3	

Blocked Obstructions		num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.87	Element	Left OB	Channel
Right OB				

Vel Head (ft)	0.34	CPNPPLocalPMP wt. n-Val.		0.013
W.S. Elev (ft)	818.53	Reach Len. (ft)	1.00	1.00
1.00 Crit W.S. (ft)	818.58	Flow Area (sq ft)		26.81
E.G. Slope (ft/ft)	0.003979	Area (sq ft)		26.81
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top Width (ft)	52.00	Top Width (ft)		52.00
Vel Total (ft/s)	4.66	Avg. Vel. (ft/s)		4.66
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)		0.52
Conv. Total (cfs)	1981.6	Conv. (cfs)		1981.6
Length wtd. (ft)	1.00	wetted Per. (ft)		52.17
Min Ch El (ft)	818.00	Shear (lb/sq ft)		0.13
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.57
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.05

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.488*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.22	819	1.7	819	4.79	817.98	16.23	817.98
41.24	817.98	53.35	817.98	56.45	819	59.52	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.22	.0129	1.7	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	1.7	56.45	1	1	1	.1	.3
--	-----	-------	---	---	---	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.85	Element	Left OB	Channel
Right OB Vel Head (ft)	0.30	wt. n-Val.		0.013
W.S. Elev (ft)	818.54	Reach Len. (ft)	1.00	1.00
1.00				

		CPNPPLocalPMP	
Crit w.s. (ft)	818.56	Flow Area (sq ft)	28.39
E.G. Slope (ft/ft)	0.003289	Area (sq ft)	28.39
Q Total (cfs)	125.00	Flow (cfs)	125.00
Top width (ft)	51.99	Top width (ft)	51.99
Vel Total (ft/s)	4.40	Avg. Vel. (ft/s)	4.40
Max Chl Dpth (ft)	0.56	Hydr. Depth (ft)	0.55
Conv. Total (cfs)	2179.7	Conv. (cfs)	2179.7
Length wtd. (ft)	1.00	wetted Per. (ft)	52.17
Min Ch El (ft)	817.98	Shear (lb/sq ft)	0.11
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10
0.01			
C & E Loss (ft)	0.01	Cum SA (acres)	0.05

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.477*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.19	819	1.74	819	4.89	817.96	16.28	817.96
41.19	817.96	53.25	817.96	56.41	819	59.49	819	68	819

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.19	.0129	1.74	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	1.74	56.41		1	1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.83	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.34	wt. n-Val.		0.013
w.s. Elev (ft)	818.49	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.54	Flow Area (sq ft)		26.71
E.G. Slope (ft/ft)	0.003990	Area (sq ft)		26.71

		CPNPPLocalPMP		
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	51.60	Top width (ft)		51.60
Vel Total (ft/s)	4.68	Avg. Vel. (ft/s)		4.68
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)		0.52
Conv. Total (cfs)	1978.8	Conv. (cfs)		1978.8
Length Wtd. (ft)	1.00	wetted Per. (ft)		51.77
Min ch El (ft)	817.96	Shear (lb/sq ft)		0.13
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.57
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.05

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.466*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.17	819	1.78	819	5	817.93	16.34	817.93		
41.13	817.93	53.14	817.93	56.37	819	59.46	819	68	819		

Manning's n	Values	num=	4						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val		
-10	.0129	-1.17	.0129	1.78	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	1.78	56.37		1	1	1		.1	.3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.83	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.41	wt. n-val.		0.013
w.s. Elev (ft)	818.42	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.51	Flow Area (sq ft)		24.38
E.G. slope (ft/ft)	0.005334	Area (sq ft)		24.38
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	51.10	Top width (ft)		51.10

		CPNPPLocalPMP		
Vel Total (ft/s)	5.13	Avg. Vel. (ft/s)		5.13
Max Chl Dpth (ft)	0.49	Hydr. Depth (ft)		0.48
Conv. Total (cfs)	1711.5	Conv. (cfs)		1711.5
Length wtd. (ft)	1.00	wetted Per. (ft)		51.26
Min Ch El (ft)	817.93	Shear (lb/sq ft)		0.16
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.56
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.05

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.455*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -1.14 819 1.81 819 5.1 817.91 16.39 817.91									
41.08 817.91 53.03 817.91 56.33 819 59.43 819 68 819									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-10 .0129 -1.14 .0129 1.81 .0129 68 .0129					

Bank Sta: Left Right Lengths: Left Channel Right							
1.81 56.33 1 1 1							
Coeff Contr. Expan.							
.1 .3							

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.78	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.30	wt. n-val.		0.013
w.s. Elev (ft)	818.49	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.50	Flow Area (sq ft)		28.66
E.G. Slope (ft/ft)	0.003140	Area (sq ft)		28.66
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	51.42	Top width (ft)		51.42
Vel Total (ft/s)	4.36	Avg. vel. (ft/s)		4.36
Max Chl Dpth (ft)	0.58	Hydr. Depth (ft)		0.56

		CPNPPLocalPMP		
Conv. Total (cfs)	2230.6	Conv. (cfs)		2230.6
Length wtd. (ft)	1.00	wetted Per. (ft)		51.60
Min Ch El (ft)	817.91	Shear (lb/sq ft)		0.11
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.56
0.01				
C & E Loss (ft)	0.03	Cum SA (acres)		0.05

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.444*

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.11	819	1.85	819	5.21	817.89	16.45	817.89		
41.02	817.89	52.93	817.89	56.29	819	59.4	819	68	819		

Manning's n	Values	num=	4						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.11	.0129	1.85	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	1.85	56.29		1	1	1		.1	.3

Blocked Obstructions	num=	2				
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825	58.25	68	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.78	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-Val.		0.013
w.s. Elev (ft)	818.42	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.48	Flow Area (sq ft)		26.07
E.G. Slope (ft/ft)	0.004248	Area (sq ft)		26.07
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.92	Top width (ft)		50.92
Vel Total (ft/s)	4.79	Avg. Vel. (ft/s)		4.79
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)		0.51
Conv. Total (cfs)	1917.8	Conv. (cfs)		1917.8
Length wtd. (ft)	1.00	wetted Per. (ft)		51.09

Min Ch El (ft)	817.89	CPNPPLocalPMP Shear (lb/sq ft)		0.14
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	0.10	0.56
C & E Loss (ft)	0.01	Cum SA (acres)		0.05

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.433*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -1.08 819 1.89 819 5.31 817.87 16.5 817.87									
40.97 817.87 52.82 817.87 56.25 819 59.37 819 68 819									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-10 .0129 -1.08 .0129 1.89 .0129 68 .0129					

Bank Sta: Left Right Lengths: Left Channel Right								
1.89 56.25 1 1 1								
Coeff Contr. Expan.								
.1 .3								

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.75	Element	Left OB	Channel
Right OB Vel Head (ft)	0.31	wt. n-val.		0.013
w.s. Elev (ft)	818.44	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	818.46	Flow Area (sq ft)		28.05
E.G. slope (ft/ft)	0.003333	Area (sq ft)		28.05
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.96	Top width (ft)		50.96
vel Total (ft/s)	4.46	Avg. vel. (ft/s)		4.46
Max Chl Dpth (ft)	0.57	Hydr. Depth (ft)		0.55
Conv. Total (cfs)	2165.2	Conv. (cfs)		2165.2
Length wtd. (ft)	1.00	wetted Per. (ft)		51.15
Min Ch El (ft)	817.87	Shear (lb/sq ft)		0.11
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00	0.00

Frctn Loss (ft)	0.00	CPNPPLocalPMP		
0.01		Cum Volume (acre-ft)	0.10	0.56
C & E Loss (ft)	0.01	Cum SA (acres)		0.04

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.422*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -1.05 819 1.92 819 5.41 817.84 16.55 817.84									
40.92 817.84 52.71 817.84 56.21 819 59.34 819 68 819									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-10 .0129 -1.05 .0129 1.92 .0129 68 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
1.92 56.21	1 1 1	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825 58.25 68 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.73	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.36	wt. n-val.		0.013
w.s. Elev (ft)	818.37	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.43	Flow Area (sq ft)		25.99
E.G. Slope (ft/ft)	0.004246	Area (sq ft)		25.99
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.50	Top width (ft)		50.50
Vel Total (ft/s)	4.81	Avg. vel. (ft/s)		4.81
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)		0.51
Conv. Total (cfs)	1918.3	Conv. (cfs)		1918.3
Length wtd. (ft)	1.00	wetted Per. (ft)		50.67
Min Ch El (ft)	817.84	Shear (lb/sq ft)		0.14
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.56
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.04

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.411*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1.03	819	1.96	819	5.52	817.82	16.61	817.82	
40.86	817.82	52.61	817.82	56.17	819	59.32	819	68	819	819

Manning's n	Values	num=	4	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.03	.0129	1.96	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	1.96	56.17		1	1	1		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.70	Element	Left OB	Channel
Right OB Vel Head (ft)	0.26	wt. n-val.		0.013
w.s. Elev (ft)	818.45	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)	818.41	Flow Area (sq ft)		30.76
E.G. Slope (ft/ft)	0.002447	Area (sq ft)		30.76
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.88	Top width (ft)		50.88
Vel Total (ft/s)	4.06	Avg. vel. (ft/s)		4.06
Max Chl Dpth (ft)	0.63	Hydr. Depth (ft)		0.60
Conv. Total (cfs)	2526.9	Conv. (cfs)		2526.9
Length wtd. (ft)	1.00	wetted Per. (ft)		51.08
Min Ch El (ft)	817.82	Shear (lb/sq ft)		0.09
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.56
0.01 C & E Loss (ft)	0.01	Cum SA (acres)		0.04

Note: Hydraulic jump has occurred between this cross section and the previous Page 764

CPNPPLocalPMP

upstream section.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.4*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-1	819	2	819	5.62	817.8	16.66	817.8
40.81	817.8	52.5	817.8	56.13	819	59.29	819	68	819

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1	.0129	2	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	2	56.13		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.69	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.23	wt. n-val.		0.013
w.s. Elev (ft)	818.46	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)	818.40	Flow Area (sq ft)		32.13
E.G. slope (ft/ft)	0.002115	Area (sq ft)		32.13
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.85	Top width (ft)		50.85
Vel Total (ft/s)	3.89	Avg. vel. (ft/s)		3.89
Max Chl Dpth (ft)	0.66	Hydr. Depth (ft)		0.63
Conv. Total (cfs)	2718.1	Conv. (cfs)		2718.1
Length wtd. (ft)	1.00	wetted Per. (ft)		51.06
Min Ch El (ft)	817.80	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.56
0.01				
C & E Loss (ft)	0.01	Cum SA (acres)		0.04

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.388*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.97	819	2.03	819	5.73	817.78	16.72	817.78	
40.75	817.78	52.4	817.78	56.09	819	59.26	819	68	819	

Manning's n	Values	num=	4	Sta	n Val	Sta	n Val
-10	.0129	-.97	.0129	2.03	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	2.03	56.09		1	1	1		.1	.3

Blocked	Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
				-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.68	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.22	wt. n-Val.		0.013
w.s. Elev (ft)	818.47	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		33.43
E.G. Slope (ft/ft)	0.001853	Area (sq ft)		33.43
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.82	Top width (ft)		50.82
Vel Total (ft/s)	3.74	Avg. Vel. (ft/s)		3.74
Max Chl Dpth (ft)	0.69	Hydr. Depth (ft)		0.66
Conv. Total (cfs)	2903.6	Conv. (cfs)		2903.6
Length wtd. (ft)	1.00	wetted Per. (ft)		51.04
Min Ch El (ft)	817.78	Shear (lb/sq ft)		0.08
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.56
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.04

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.377*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	2.07	819	5.83	817.76	16.77	817.76		
-10	819	-.94	819	56.05	819	59.23	819	68	819		
40.7	817.76	52.29	817.76								

Manning's n Values

num= 4		Sta	n Val	Sta	n Val	Sta	n Val
Sta	n Val	2.07	.0129	68	.0129		
-10	.0129	-.94	.0129				

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	2.07	56.05		1	1		.1	.3

Blocked Obstructions

num= 2		Sta L	Sta R	Elev	Sta L	Sta R	Elev
Sta L	Sta R	-10	0	825	68	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.67	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.20	wt. n-Val.		0.013
w.s. Elev (ft)	818.47	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		34.66
Crit w.s. (ft)		Area (sq ft)		34.66
E.G. Slope (ft/ft)	0.001641	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		50.78
Top width (ft)	50.78	Avg. vel. (ft/s)		3.61
Vel Total (ft/s)	3.61	Hydr. Depth (ft)		0.68
Max chl Dpth (ft)	0.71	conv. (cfs)		3085.9
Conv. Total (cfs)	3085.9	wetted Per. (ft)		51.01
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.07
Min Ch El (ft)	817.76	Stream Power (lb/ft s)	68.00	0.00
Alpha	1.00	Cum Volume (acre-ft)	0.10	0.56
0.00		Cum SA (acres)		0.04
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.01			

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.366*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev						

	-10	819	-.92	819	2.11	819	5.93	817.73	16.83	817.73
	40.65	817.73	52.18	817.73	56.01	819	59.2	819	68	819
Manning's n Values	num= 4									
	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val		
	-10	.0129	-.92	.0129	2.11	.0129	68	.0129		
Bank Sta:	Left	Right	Lengths:		Left	Channel	Right	Coeff		Contr.
	2.11	56.01	1	1	1	1	.1		.3	
Blocked Obstructions	num= 2									
	Sta L	Sta R	Elev	Sta L	Sta R	Elev				
	-10	0	825	58.25	68	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.67	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
w.s. Elev (ft)	818.49	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		36.74
Crit w.s. (ft)		Area (sq ft)		36.74
E.G. slope (ft/ft)	0.001353	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		50.81
Top width (ft)	50.81	Avg. vel. (ft/s)		3.40
vel Total (ft/s)	3.40	Hydr. Depth (ft)		0.72
Max chl Dpth (ft)	0.76	Conv. (cfs)		3398.2
Conv. Total (cfs)	3398.2	wetted Per. (ft)		51.05
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.06
Min ch El (ft)	817.73	Stream Power (lb/ft s)	68.00	0.00
Alpha	1.00	Cum volume (acre-ft)	0.10	0.56
0.00		Cum SA (acres)		0.04
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.355*

INPUT

Description:

Station Elevation Data	num= 10									
	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
	-10	819	-.89	819	2.15	819	6.04	817.71	16.88	817.71
	40.59	817.71	52.08	817.71	55.98	819	59.17	819	68	819

Manning's n Values num= 4
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Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	Sta	n Val
-10	.0129	-.89	.0129	2.15	.0129	68	.0129	
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	2.15	55.98		1	1	1	.1	.3
Blocked Obstructions			num=	2				
Sta L	Sta R	Elev	Sta L	Sta R	Elev			
-10	0	825	58.25	68	825			

CROSS SECTION OUTPUT Profile #PF 1

Parameter	Value	Element	Left OB	Channel
E.G. Elev (ft)	818.66			
Right OB Vel Head (ft)	0.17	wt. n-Val.		0.013
w.s. Elev (ft)	818.49	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		37.85
E.G. Slope (ft/ft)	0.001224	Area (sq ft)		37.85
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.76	Top width (ft)		50.76
Vel Total (ft/s)	3.30	Avg. Vel. (ft/s)		3.30
Max Chl Dpth (ft)	0.78	Hydr. Depth (ft)		0.75
Conv. Total (cfs)	3573.0	Conv. (cfs)		3573.0
Length wtd. (ft)	1.00	wetted Per. (ft)		51.01
Min Ch El (ft)	817.71	Shear (lb/sq ft)		0.06
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00 Frctn Loss (ft)	0.00	cum volume (acre-ft)	0.10	0.56
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.04

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.344*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.86	819	2.18	819	6.14	817.69	16.94	817.69	
40.54	817.69	51.97	817.69	55.94	819	59.14	819	68	819	

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.86	.0129	2.18	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
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	2.18	55.94		CPNPPLocalPMP					
Blocked Obstructions			num=	1	1	1		.1	.3
	Sta L	Sta R	Elev	Sta L	Sta R	Elev			
	-10	0	825	58.25	68	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.66	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-Val.		0.013
w.s. Elev (ft)	818.50	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		38.93
E.G. Slope (ft/ft)	0.001113	Area (sq ft)		38.93
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.71	Top width (ft)		50.71
Vel Total (ft/s)	3.21	Avg. Vel. (ft/s)		3.21
Max chl Dpth (ft)	0.81	Hydr. Depth (ft)		0.77
Conv. Total (cfs)	3747.0	Conv. (cfs)		3747.0
Length wtd. (ft)	1.00	wetted Per. (ft)		50.97
Min ch El (ft)	817.69	shear (lb/sq ft)		0.05
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.56
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.04

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.333*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -.83 819 2.22 819 6.25 817.67 16.99 817.67									
40.48 817.67 51.86 817.67 55.9 819 59.11 819 68 819									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-10 .0129 -.83 .0129 2.22 .0129 68 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
2.22 55.9	1 1 1	.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.65	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.15	wt. n-val.		0.013
w.s. Elev (ft)	818.50	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		39.98
E.G. slope (ft/ft)	0.001017	Area (sq ft)		39.98
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.65	Top width (ft)		50.65
Vel Total (ft/s)	3.13	Avg. vel. (ft/s)		3.13
Max Chl Dpth (ft)	0.83	Hydr. Depth (ft)		0.79
Conv. Total (cfs)	3919.2	Conv. (cfs)		3919.2
Length wtd. (ft)	1.00	wetted Per. (ft)		50.92
Min Ch El (ft)	817.67	Shear (lb/sq ft)		0.05
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.56
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.03

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.322*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.8	819	2.26	819	6.35	817.64	17.05	817.64
40.43	817.64	51.76	817.64	55.86	819	59.09	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.8	.0129	2.26	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

2.26	55.86	1	1	1	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	818.65	Element	Left OB	Channel
Right OB Vel Head (ft)	0.14	wt. n-Val.		0.013
W.S. Elev (ft)	818.51	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		41.70
E.G. Slope (ft/ft)	0.000884	Area (sq ft)		41.70
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.64	Top width (ft)		50.64
Vel Total (ft/s)	3.00	Avg. Vel. (ft/s)		3.00
Max Chl Dpth (ft)	0.87	Hydr. Depth (ft)		0.82
Conv. Total (cfs)	4204.3	Conv. (cfs)		4204.3
Length wtd. (ft)	1.00	wetted Per. (ft)		50.92
Min Ch El (ft)	817.64	Shear (lb/sq ft)		0.05
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.56
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.03

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.311*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.78	819	2.29	819	6.45	817.62	17.1	817.62		
40.38	817.62	51.65	817.62	55.82	819	59.06	819	68	819		

Manning's n Values

num= 4		Sta	n Val	Sta	n Val	Sta	n Val
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.78	.0129	2.29	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	2.29	55.82		1	1	1		.1	.3

Blocked Obstructions

num= 2		Sta L	Sta R	Elev	Sta L	Sta R	Elev
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	818.64			
Right OB Vel Head (ft)	0.13	wt. n-Val.		0.013

W.S. Elev (ft)	818.51	CPNPPLocalPMP		
1.00		Reach Len. (ft)	1.00	1.00
Crit w.s. (ft)		Flow Area (sq ft)		42.70
E.G. Slope (ft/ft)	0.000816	Area (sq ft)		42.70
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.58	Top width (ft)		50.58
Vel Total (ft/s)	2.93	Avg. Vel. (ft/s)		2.93
Max chl Dpth (ft)	0.89	Hydr. Depth (ft)		0.84
Conv. Total (cfs)	4376.6	Conv. (cfs)		4376.6
Length wtd. (ft)	1.00	wetted Per. (ft)		50.87
Min ch El (ft)	817.62	Shear (lb/sq ft)		0.04
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00		Cum Volume (acre-ft)	0.10	0.55
Frctn Loss (ft)	0.00	Cum SA (acres)		0.03
0.01				
C & E Loss (ft)	0.00			

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.3*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -.75 819 2.33 819 6.56 817.6 17.15 817.6									
40.32 817.6 51.54 817.6 55.78 819 59.03 819 68 819									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-10 .0129 -.75 .0129 2.33 .0129 68 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
2.33 55.78	1 1 1	.1	.3
Blocked Obstructions	num=	2	
Sta L Sta R Elev Sta L Sta R Elev			
-10 0 825 58.25 68 825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.64	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.13	wt. n-val.		0.013
W.S. Elev (ft)	818.51	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		43.66
Crit w.s. (ft)				

		CPNPPLocalPMP	
E.G. Slope (ft/ft)	0.000756	Area (sq ft)	43.66
Q Total (cfs)	125.00	Flow (cfs)	125.00
Top Width (ft)	50.51	Top Width (ft)	50.51
Vel Total (ft/s)	2.86	Avg. Vel. (ft/s)	2.86
Max Chl Dpth (ft)	0.91	Hydr. Depth (ft)	0.86
Conv. Total (cfs)	4546.3	Conv. (cfs)	4546.3
Length wtd. (ft)	1.00	wetted Per. (ft)	50.81
Min Ch El (ft)	817.60	Shear (lb/sq ft)	0.04
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00			
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.03

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.288*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.72	819	2.37	819	6.66	817.58	17.21	817.58
40.27	817.58	51.44	817.58	55.74	819	59	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.72	.0129	2.37	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

2.37	55.74	1	1	1	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.64	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.12	wt. n-val.		0.013
w.s. Elev (ft)	818.52	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		44.62
E.G. Slope (ft/ft)	0.000702	Area (sq ft)		44.62
Q Total (cfs)	125.00	Flow (cfs)		125.00

		CPNPPLocalPMP	
Top width (ft)	50.45	Top width (ft)	50.45
Vel Total (ft/s)	2.80	Avg. Vel. (ft/s)	2.80
Max Chl Dpth (ft)	0.94	Hydr. Depth (ft)	0.88
Conv. Total (cfs)	4717.7	Conv. (cfs)	4717.7
Length wtd. (ft)	1.00	wetted Per. (ft)	50.75
Min ch El (ft)	817.58	Shear (lb/sq ft)	0.04
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00		Cum Volume (acre-ft)	0.10
Frctn Loss (ft)	0.00	Cum SA (acres)	0.03
0.01			
C & E Loss (ft)	0.00		

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.277*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
-10	819	2.4	819
40.22	817.56	55.7	819
		6.77	817.56
		17.26	817.56
		51.33	817.56
		58.97	819
		68	819

Manning's n Values		num= 4	
Sta	n Val	Sta	n Val
-10	.0129	2.4	.0129
		68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	2.4	55.7		1	1	1		.1	.3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Sta L
-10	0	825	58.25
			68
			825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.64	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.12	wt. n-Val.		0.013
w.s. Elev (ft)	818.52	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		45.58
E.G. Slope (ft/ft)	0.000653	Area (sq ft)		45.58
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.39	Top width (ft)		50.39
Vel Total (ft/s)	2.74	Avg. Vel. (ft/s)		2.74

Max Chl Dpth (ft)	0.96	CPNPPLocalPMP Hydr. Depth (ft)	0.90
Conv. Total (cfs)	4890.6	Conv. (cfs)	4890.6
Length Wtd. (ft)	1.00	wetted Per. (ft)	50.70
Min Ch El (ft)	817.56	Shear (lb/sq ft)	0.04
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	0.10
C & E Loss (ft)	0.00	Cum SA (acres)	0.03

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.266*

INPUT

Description:

Station Elevation Data	num=	10
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-10 819 -.67 819 2.44 819 6.87 817.53 17.32 817.53		
40.16 817.53 51.22 817.53 55.66 819 58.94 819 68 819		

Manning's n Values	num=	4
Sta n Val Sta n Val Sta n Val Sta n Val		
-10 .0129 -.67 .0129 2.44 .0129 68 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
2.44 55.66	1 1 1	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825 58.25 68 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.63	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.11	wt. n-val.		0.013
w.s. Elev (ft)	818.52	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		47.10
Crit w.s. (ft)		Area (sq ft)		47.10
E.G. slope (ft/ft)	0.000585	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		50.35
Top width (ft)	50.35	Avg. vel. (ft/s)		2.65
Vel Total (ft/s)	2.65	Hydr. Depth (ft)		0.94
Max Chl Dpth (ft)	0.99	Conv. (cfs)		5166.6
Conv. Total (cfs)	5166.6			

Length wtd. (ft)	1.00	CPNPPLocalPMP Wetted Per. (ft)	50.67
Min Ch El (ft)	817.53	Shear (lb/sq ft)	0.03
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10
0.01			
C & E Loss (ft)	0.00	Cum SA (acres)	0.03

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.255*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.64	819	2.48	819	6.98	817.51	17.37	817.51
40.11	817.51	51.12	817.51	55.62	819	58.91	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.64	.0129	2.48	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

2.48	55.62	1	1	1	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.63	Element	Left OB	Channel
Right OB Vel Head (ft)	0.11	wt. n-val.		0.013
w.s. Elev (ft)	818.53	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		48.02
E.G. Slope (ft/ft)	0.000548	Area (sq ft)		48.02
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top Width (ft)	50.28	Top Width (ft)		50.28
Vel Total (ft/s)	2.60	Avg. vel. (ft/s)		2.60
Max Chl Dpth (ft)	1.02	Hydr. Depth (ft)		0.95
Conv. Total (cfs)	5340.0	Conv. (cfs)		5340.0
Length wtd. (ft)	1.00	wetted Per. (ft)		50.61
Min Ch El (ft)	817.51	Shear (lb/sq ft)		0.03

	Alpha	CPNPPLocalPMP		
	0.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.10	0.55
C & E Loss (ft)	0.00	Cum SA (acres)		0.03

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.244*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.61	819	2.52	819	7.08	817.49	17.43	817.49	
40.05	817.49	51.01	817.49	55.58	819	58.88	819	68	819	

Manning's n	Values	num=	4	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.61	.0129	2.52	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	2.52	55.58		1	1	1		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.63	Element	Left OB	Channel
Right OB Vel Head (ft)	0.10	wt. n-Val.		0.013
w.s. Elev (ft)	818.53	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		48.92
E.G. Slope (ft/ft)	0.000514	Area (sq ft)		48.92
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.21	Top width (ft)		50.21
Vel Total (ft/s)	2.56	Avg. vel. (ft/s)		2.56
Max chl Dpth (ft)	1.04	Hydr. Depth (ft)		0.97
Conv. Total (cfs)	5513.1	Conv. (cfs)		5513.1
Length wtd. (ft)	1.00	wetted Per. (ft)		50.55
Min ch El (ft)	817.49	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.10	0.55

C & E Loss (ft) 0.00 CPNPPLocalPMP Cum SA (acres) 0.02

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.233*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.58	819	2.55	819	7.18	817.47	17.48	817.47		
40	817.47	50.91	817.47	55.54	819	58.85	819	68	819		

Manning's n Values		num= 4		Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.58	.0129	2.55	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	2.55	55.54		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.63	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-val.		0.013
w.s. Elev (ft)	818.53	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		49.82
E.G. slope (ft/ft)	0.000483	Area (sq ft)		49.82
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.15	Top width (ft)		50.15
Vel Total (ft/s)	2.51	Avg. vel. (ft/s)		2.51
Max Chl Dpth (ft)	1.06	Hydr. Depth (ft)		0.99
Conv. Total (cfs)	5688.1	Conv. (cfs)		5688.1
Length wtd. (ft)	1.00	wetted Per. (ft)		50.50
Min Ch El (ft)	817.47	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.55
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.02

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.222*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.56	819	2.59	819	7.29	817.44	17.54	817.44
39.95	817.44	50.8	817.44	55.5	819	58.83	819	68	819

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.56	.0129	2.59	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	2.59	55.5		1	1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.63	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-Val.		0.013
w.s. Elev (ft)	818.53	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		51.24
Crit w.s. (ft)		Area (sq ft)		51.24
E.G. Slope (ft/ft)	0.000439	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		50.11
Top width (ft)	50.11	Avg. vel. (ft/s)		2.44
Vel Total (ft/s)	2.44	Hydr. Depth (ft)		1.02
Max Chl Dpth (ft)	1.09	Conv. (cfs)		5962.7
Conv. Total (cfs)	5962.7	wetted Per. (ft)		50.46
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.03
Min Ch El (ft)	817.44	Stream Power (lb/ft s)	68.00	0.00
Alpha	1.00	Cum volume (acre-ft)	0.10	0.55
0.00		Cum SA (acres)		0.02
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.211*

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.53	819	2.63	819	7.39	817.42	17.59	817.42	819
39.89	817.42	50.69	817.42	55.47	819	58.8	819	68	819	819

Manning's n	Values	num=	4	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.53	.0129	2.63	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	2.63	55.47		1	1		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev	Sta L	Sta R	Elev
			-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.63	Element	Left OB	Channel
Right OB Vel Head (ft)	0.09	wt. n-val.		0.013
w.s. Elev (ft)	818.54	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		52.11
E.G. Slope (ft/ft)	0.000415	Area (sq ft)		52.11
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	50.04	Top width (ft)		50.04
Vel Total (ft/s)	2.40	Avg. vel. (ft/s)		2.40
Max Chl Dpth (ft)	1.12	Hydr. Depth (ft)		1.04
Conv. Total (cfs)	6136.5	Conv. (cfs)		6136.5
Length wtd. (ft)	1.00	wetted Per. (ft)		50.40
Min Ch El (ft)	817.42	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.54
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.02

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.2*

INPUT

CPNPPLocalPMP

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	2.66	819	7.5	817.4	17.65	817.4		
-10	819	-.5	819								
39.84	817.4	50.59	817.4	55.43	819	58.77	819	68	819		

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.5	.0129	2.66	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	2.66	55.43		1	1		.1	.3

Blocked Obstructions

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-val.		0.013
w.s. Elev (ft)	818.54	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		52.96
E.G. slope (ft/ft)	0.000392	Area (sq ft)		52.96
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	49.98	Top width (ft)		49.98
vel Total (ft/s)	2.36	Avg. vel. (ft/s)		2.36
Max Chl Dpth (ft)	1.14	Hydr. Depth (ft)		1.06
Conv. Total (cfs)	6309.5	Conv. (cfs)		6309.5
Length wtd. (ft)	1.00	wetted Per. (ft)		50.34
Min Ch El (ft)	817.40	Shear (lb/sq ft)		0.03
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.54
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.02

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.188*

INPUT

Description:

Station Elevation Data		num= 10		Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	2.7	819	7.6	817.38	17.7	817.38		
-10	819	-.47	819								

39.78	817.38	50.48	817.38	55.39	819	58.74	819	68	819
Manning's n Values		num= 4							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.47	.0129	2.7	.0129	68	.0129		
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	2.7	55.39		1	1	1	.1		.3
Blocked Obstructions		num= 2							
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825	58.25	68	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-Val.		0.013
w.s. Elev (ft)	818.54	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		53.80
Crit w.s. (ft)		Area (sq ft)		53.80
E.G. Slope (ft/ft)	0.000372	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		49.90
Top width (ft)	49.90	Avg. Vel. (ft/s)		2.32
Vel Total (ft/s)	2.32	Hydr. Depth (ft)		1.08
Max Chl Dpth (ft)	1.16	Conv. (cfs)		6482.5
Conv. Total (cfs)	6482.5	wetted Per. (ft)		50.28
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.02
Min Ch El (ft)	817.38	Stream Power (lb/ft s)	68.00	0.00
Alpha	1.00	Cum Volume (acre-ft)	0.10	0.54
0.00		Cum SA (acres)		0.02
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.177*

INPUT

Description:

Station	Elevation	Data	num= 10						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.44	819	2.74	819	7.7	817.36	17.75	817.36
39.73	817.36	50.37	817.36	55.35	819	58.71	819	68	819

Manning's n Values		num= 4							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val

-10 .0129 -.44 .0129 CPNPPLocalPMP
 2.74 .0129 68 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 2.74 55.35 1 1 1 .1 .3
 Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 58.25 68 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.		0.013
W.S. Elev (ft)	818.54	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		54.62
E.G. Slope (ft/ft)	0.000353	Area (sq ft)		54.62
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	49.83	Top width (ft)		49.83
Vel Total (ft/s)	2.29	Avg. vel. (ft/s)		2.29
Max chl Dpth (ft)	1.18	Hydr. Depth (ft)		1.10
Conv. Total (cfs)	6655.8	Conv. (cfs)		6655.8
Length wtd. (ft)	1.00	wetted Per. (ft)		50.21
Min ch El (ft)	817.36	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.54
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.02

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.166*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 819 -.42 819	2.77 819	7.81 817.33	17.81 817.33	39.68 817.33	50.27 817.33	55.31 819	58.68 819	68 819	817.33 819

Manning's n Values	num=	4							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -.42 .0129	2.77 .0129	68 .0129							

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 2.77 55.31 1 1 1 .1 .3

Blocked Obstructions num= CPNPPLocalPMP
 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 58.25 68 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.		0.013
W.S. Elev (ft)	818.54	Reach Len. (ft)	1.00	1.00
1.00				
Crit W.S. (ft)		Flow Area (sq ft)		55.97
E.G. slope (ft/ft)	0.000325	Area (sq ft)		55.97
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	49.78	Top width (ft)		49.78
vel Total (ft/s)	2.23	Avg. vel. (ft/s)		2.23
Max Chl Dpth (ft)	1.21	Hydr. Depth (ft)		1.12
Conv. Total (cfs)	6933.5	Conv. (cfs)		6933.5
Length wtd. (ft)	1.00	wetted Per. (ft)		50.18
Min Ch El (ft)	817.33	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.54
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.02

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.155*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.39	819	2.81	819	7.91	817.31	17.86	817.31
39.62	817.31	50.16	817.31	55.27	819	58.65	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.39	.0129	2.81	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 2.81 55.27 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
Right OB Vel Head (ft)	0.08	wt. n-Val.		0.013
w.s. Elev (ft)	818.54	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		56.77
E.G. Slope (ft/ft)	0.000309	Area (sq ft)		56.77
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	49.71	Top width (ft)		49.71
Vel Total (ft/s)	2.20	Avg. Vel. (ft/s)		2.20
Max Chl Dpth (ft)	1.23	Hydr. Depth (ft)		1.14
Conv. Total (cfs)	7106.1	Conv. (cfs)		7106.1
Length wtd. (ft)	1.00	wetted Per. (ft)		50.11
Min Ch El (ft)	817.31	Shear (lb/sq ft)		0.02
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.54
0.01 C & E Loss (ft)	0.00	Cum SA (acres)		0.02

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.144*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.36	819	2.85	819	8.02	817.29	17.92	817.29
39.57	817.29	50.05	817.29	55.23	819	58.62	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.36	.0129	2.85	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 2.85 55.23 1 1 1 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
----------------	--------	---------	---------	---------

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.07	wt. n-val.		0.013
w.s. Elev (ft)	818.55	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		57.55
E.G. slope (ft/ft)	0.000295	Area (sq ft)		57.55
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	49.63	Top width (ft)		49.63
Vel Total (ft/s)	2.17	Avg. Vel. (ft/s)		2.17
Max chl Dpth (ft)	1.26	Hydr. Depth (ft)		1.16
Conv. Total (cfs)	7278.0	Conv. (cfs)		7278.0
Length wtd. (ft)	1.00	wetted Per. (ft)		50.04
Min ch El (ft)	817.29	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.54
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.01

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.133*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 819 -.33 819	2.89 819	8.12 817.27	17.97 817.27	39.51 817.27	49.95 817.27	55.19 819	58.6 819	68 819	817.27 819

Manning's n Values	num=	4						
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
-10 .0129 -.33 .0129	2.89 .0129	68 .0129						

Bank Sta: Left Right	Lengths: Left Channel	Right	Coeff	Contr.	Expan.
2.89 55.19	1 1	1		.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev	Sta L Sta R Elev
-10 0 825	58.25 68 825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.		0.013
w.s. Elev (ft)	818.55	Reach Len. (ft)	1.00	1.00

		CPNPPLocalPMP	
1.00	Crit w.s. (ft)		Flow Area (sq ft) 58.34
	E.G. Slope (ft/ft)	0.000281	Area (sq ft) 58.34
	Q Total (cfs)	125.00	Flow (cfs) 125.00
	Top Width (ft)	49.56	Top Width (ft) 49.56
	Vel Total (ft/s)	2.14	Avg. Vel. (ft/s) 2.14
	Max Chl Dpth (ft)	1.28	Hydr. Depth (ft) 1.18
	Conv. Total (cfs)	7452.0	Conv. (cfs) 7452.0
	Length wtd. (ft)	1.00	wetted Per. (ft) 49.97
	Min Ch El (ft)	817.27	Shear (lb/sq ft) 0.02
Alpha		1.00	Stream Power (lb/ft s) 68.00 0.00
0.00	Frctn Loss (ft)	0.00	Cum volume (acre-ft) 0.10 0.54
0.01	C & E Loss (ft)	0.00	Cum SA (acres) 0.01

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.122*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
-10	819	-31	819
39.46	817.24	49.84	817.24
		55.15	819
		58.57	819
		68	817.24
		68	819

Manning's n Values		num= 4	
Sta	n Val	Sta	n Val
-10	.0129	-31	.0129
		2.92	.0129
		68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	2.92	55.15		1	1	1		.1	.3

Blocked Obstructions		num= 2	
Sta L	Sta R	Elev	Sta L
-10	0	825	58.25
			68
			825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-val.		0.013
w.s. Elev (ft)	818.55	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		59.63
E.G. slope (ft/ft)	0.000261	Area (sq ft)		59.63

CPNPPLocalPMP

Q Total (cfs)	125.00	Flow (cfs)	125.00
Top width (ft)	49.51	Top width (ft)	49.51
Vel Total (ft/s)	2.10	Avg. Vel. (ft/s)	2.10
Max Chl Dpth (ft)	1.31	Hydr. Depth (ft)	1.20
Conv. Total (cfs)	7732.3	Conv. (cfs)	7732.3
Length wtd. (ft)	1.00	wetted Per. (ft)	49.93
Min ch El (ft)	817.24	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00		Cum Volume (acre-ft)	0.10
Frctn Loss (ft)	0.00	Cum SA (acres)	0.01
0.01			
C & E Loss (ft)	0.00		

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.111*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -.28 819 2.96 819 8.33 817.22 18.08 817.22									
39.41 817.22 49.73 817.22 55.11 819 58.54 819 68 819									

Manning's n Values	num=	4			
Sta n Val Sta n Val Sta n Val Sta n Val					
-10 .0129 -.28 .0129 2.96 .0129 68 .0129					

Bank Sta: Left Right Lengths: Left Channel Right							
2.96 55.11 1 1 1							
Coeff Contr. Expan.							
.1 .3							

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-Val.		0.013
w.s. Elev (ft)	818.55	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		60.39
Crit w.s. (ft)		Area (sq ft)		60.39
E.G. Slope (ft/ft)	0.000250	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		49.43
Top width (ft)	49.43	Page 789		

CPNPPLocalPMP

Vel Total (ft/s)	2.07	Avg. Vel. (ft/s)	2.07
Max Chl Dpth (ft)	1.33	Hydr. Depth (ft)	1.22
Conv. Total (cfs)	7903.9	Conv. (cfs)	7903.9
Length Wtd. (ft)	1.00	wetted Per. (ft)	49.86
Min Ch El (ft)	817.22	Shear (lb/sq ft)	0.02
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00
Frctn Loss (ft) 0.01	0.00	Cum Volume (acre-ft)	0.10
C & E Loss (ft)	0.00	Cum SA (acres)	0.01

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.1*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.25	819	3	819	8.43	817.2	18.14	817.2
39.35	817.2	49.63	817.2	55.07	819	58.51	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.25	.0129	3	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

3	55.07	1	1	1	.1	.3
---	-------	---	---	---	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.62	Element	Left OB	Channel
Right OB Vel Head (ft)	0.06	wt. n-val.		0.013
W.S. Elev (ft)	818.55	Reach Len. (ft)	1.00	1.00
1.00 Crit w.s. (ft)		Flow Area (sq ft)		61.15
E.G. Slope (ft/ft)	0.000239	Area (sq ft)		61.15
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	49.36	Top width (ft)		49.36
Vel Total (ft/s)	2.04	Avg. Vel. (ft/s)		2.04
Max Chl Dpth (ft)	1.35	Hydr. Depth (ft)		1.24

CPNPPLocalPMP

Conv. Total (cfs)	8078.2	Conv. (cfs)	8078.2
Length wtd. (ft)	1.00	wetted Per. (ft)	49.79
Min Ch El (ft)	817.20	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00		Cum Volume (acre-ft)	0.10
Frctn Loss (ft)	0.00	Cum SA (acres)	0.01
0.01			
C & E Loss (ft)	0.00		

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.088*

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.22	819	3.03	819	8.54	817.18	18.19	817.18
39.3	817.18	49.52	817.18	55.03	819	58.48	819	68	819

Manning's n Values num= 4

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.22	.0129	3.03	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	3.03	55.03		1	1	1	.1	.3
--	------	-------	--	---	---	---	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	818.55	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		61.89
E.G. Slope (ft/ft)	0.000230	Area (sq ft)		61.89
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top Width (ft)	49.28	Top Width (ft)		49.28
Vel Total (ft/s)	2.02	Avg. Vel. (ft/s)		2.02
Max Chl Dpth (ft)	1.37	Hydr. Depth (ft)		1.26
Conv. Total (cfs)	8249.6	Conv. (cfs)		8249.6
Length wtd. (ft)	1.00	wetted Per. (ft)		49.72

CPNPPLocalPMP

Min Ch El (ft)	817.18	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.53
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.01

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.077*

INPUT

Description:

Station Elevation Data	num=	10							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 -.19 819 3.07 819 8.64 817.16 18.24 817.16									
39.24 817.16 49.42 817.16 54.99 819 58.45 819 68 819									

Manning's n Values	num=	4				
Sta n Val Sta n Val Sta n Val Sta n Val						
-10 .0129 -.19 .0129 3.07 .0129 68 .0129						

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
3.07 54.99	1 1 1	.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	818.55	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		62.64
E.G. Slope (ft/ft)	0.000220	Area (sq ft)		62.64
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	49.21	Top width (ft)		49.21
Vel Total (ft/s)	2.00	Avg. vel. (ft/s)		2.00
Max Chl Dpth (ft)	1.39	Hydr. Depth (ft)		1.27
Conv. Total (cfs)	8424.8	Conv. (cfs)		8424.8
Length wtd. (ft)	1.00	wetted Per. (ft)		49.66
Min Ch El (ft)	817.16	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00

CPNPPLocalPMP				
0.00	Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10 0.53
0.01	C & E Loss (ft)	0.00	Cum SA (acres)	0.01

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.066*

INPUT

Description:

Station Elevation Data num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.17	819	3.11	819	8.75	817.13	18.3	817.13
39.19	817.13	49.31	817.13	54.96	819	58.42	819	68	819

Manning's n Values num= 4							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.17	.0129	3.11	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	3.11	54.96		1	1	1		.1	.3

Blocked Obstructions num= 2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	818.55	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		63.86
Crit w.s. (ft)		Area (sq ft)		63.86
E.G. slope (ft/ft)	0.000206	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		49.16
Top width (ft)	49.16	Avg. vel. (ft/s)		1.96
vel Total (ft/s)	1.96	Hydr. Depth (ft)		1.30
Max chl Dpth (ft)	1.42	Conv. (cfs)		8704.2
Conv. Total (cfs)	8704.2	wetted Per. (ft)		49.61
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.02
Min Ch El (ft)	817.13	Stream Power (lb/ft s)	68.00	0.00
Alpha	1.00	Cum volume (acre-ft)	0.10	0.53
0.00		Cum SA (acres)		0.01
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.055*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.14	819	3.14	819	8.85	817.11	18.35	817.11		
39.14	817.11	49.2	817.11	54.92	819	58.39	819	68	819		

Manning's n Values		num= 4		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.14	.0129	3.14	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	3.14	54.92		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	818.55	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		64.59
E.G. Slope (ft/ft)	0.000198	Area (sq ft)		64.59
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	49.09	Top width (ft)		49.09
Vel Total (ft/s)	1.94	Avg. vel. (ft/s)		1.94
Max Chl Dpth (ft)	1.44	Hydr. Depth (ft)		1.32
Conv. Total (cfs)	8878.0	Conv. (cfs)		8878.0
Length wtd. (ft)	1.00	wetted Per. (ft)		49.55
Min Ch El (ft)	817.11	Shear (lb/sq ft)		0.02
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.53
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.01

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.044*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.11	819	3.18	819	8.95	817.09	18.41	817.09		
39.08	817.09	49.1	817.09	54.88	819	58.37	819	68	819		

Manning's n Values		num= 4		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.11	.0129	3.18	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	3.18	54.88		1	1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Elev		Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta R	Elev
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	818.56	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		65.31
Crit w.s. (ft)		Area (sq ft)		65.31
E.G. Slope (ft/ft)	0.000191	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		49.01
Top width (ft)	49.01	Avg. vel. (ft/s)		1.91
Vel Total (ft/s)	1.91	Hydr. Depth (ft)		1.33
Max Chl Dpth (ft)	1.47	Conv. (cfs)		9052.1
Conv. Total (cfs)	9052.1	wetted Per. (ft)		49.48
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.02
Min ch El (ft)	817.09	Stream Power (lb/ft s)	68.00	0.00
Alpha	1.00	Cum Volume (acre-ft)	0.10	0.52
0.00		Cum SA (acres)		0.00
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			

CROSS SECTION

RIVER: Unit 3 UHS

CPNPPLocalPMP

REACH: U3 UHS Branch RS: 108.033*

INPUT

Description:

Station Elevation Data		num= 10		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.08	819	3.22	819	9.06	817.07	18.46	817.07		
39.03	817.07	48.99	817.07	54.84	819	58.34	819	68	819		

Manning's n Values		num= 4		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.08	.0129	3.22	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	3.22	54.84		1	1		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.		0.013
w.s. Elev (ft)	818.56	Reach Len. (ft)	1.00	1.00
1.00		Flow Area (sq ft)		66.01
Crit w.s. (ft)		Area (sq ft)		66.01
E.G. slope (ft/ft)	0.000184	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		48.93
Top width (ft)	48.93	Avg. vel. (ft/s)		1.89
vel Total (ft/s)	1.89	Hydr. Depth (ft)		1.35
Max chl Dpth (ft)	1.49	Conv. (cfs)		9223.4
Conv. Total (cfs)	9223.4	wetted Per. (ft)		49.41
Length wtd. (ft)	1.00	Shear (lb/sq ft)		0.02
Min Ch El (ft)	817.07	Stream Power (lb/ft s)	68.00	0.00
Alpha	1.00	Cum volume (acre-ft)	0.10	0.52
0.00		Cum SA (acres)		0.00
Frctn Loss (ft)	0.00			
0.01				
C & E Loss (ft)	0.00			

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.022*

INPUT

Description:

Station Elevation Data				num=	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.06	819		3.26	819	9.16	817.04	18.52	817.04
38.97	817.04	48.88	817.04		54.8	819	58.31	819	68	819

Manning's n Values				num=				
Sta	n Val	Sta	n Val	4	Sta	n Val	Sta	n Val
-10	.0129	-.06	.0129		3.26	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	3.26	54.8		1	1	1		.1	.3

Blocked Obstructions				num=			
Sta L	Sta R	Elev	Sta L	Sta R	Elev		
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	818.61	Element		
Right OB				
Vel Head (ft)	0.05	wt. n-Val.		0.013
w.s. Elev (ft)	818.56	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		67.19
E.G. Slope (ft/ft)	0.000173	Area (sq ft)		67.19
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	48.87	Top width (ft)		48.87
Vel Total (ft/s)	1.86	Avg. Vel. (ft/s)		1.86
Max Chl Dpth (ft)	1.52	Hydr. Depth (ft)		1.37
Conv. Total (cfs)	9506.2	Conv. (cfs)		9506.2
Length wtd. (ft)	1.00	wetted Per. (ft)		49.36
Min Ch El (ft)	817.04	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.10	0.52
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.00

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108.011*

INPUT

Description:

Station Elevation Data				num=						
Sta	Elev	Sta	Elev	10	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.03	819		3.29	819	9.27	817.02	18.57	817.02
38.92	817.02	48.78	817.02		54.76	819	58.28	819	68	819

CPNPPLocalPMP

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 -10 .0129 -.03 .0129 3.29 .0129 68 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 3.29 54.76 1 1 1 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 58.25 68 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.		0.013
w.s. Elev (ft)	818.56	Reach Len. (ft)	1.00	1.00
1.00				
Crit w.s. (ft)		Flow Area (sq ft)		67.88
E.G. Slope (ft/ft)	0.000167	Area (sq ft)		67.88
Q Total (cfs)	125.00	Flow (cfs)		125.00
Top width (ft)	48.80	Top width (ft)		48.80
Vel Total (ft/s)	1.84	Avg. vel. (ft/s)		1.84
Max chl Dpth (ft)	1.54	Hydr. Depth (ft)		1.39
Conv. Total (cfs)	9679.2	Conv. (cfs)		9679.2
Length wtd. (ft)	1.00	wetted Per. (ft)		49.29
Min ch El (ft)	817.02	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.10	0.52
0.01				
C & E Loss (ft)	0.00	Cum SA (acres)		0.00

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Branch RS: 108

INPUT

Description:

Station Elevation Data num= 8
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 819 0 819 3.33 819 9.37 817 48.67 817
 54.72 819 58.25 819 68 819

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -10 .0129 0 .0129 68 .0129

CPNPPLocalPMP

Bank Sta: Left Right Coeff Contr. Expan.
 3.33 54.72 .1 .3
 Blocked Obstructions num=
 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 58.25 68 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.61	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.		0.013
W.S. Elev (ft)	818.56	Reach Len. (ft)	136.09	136.09
136.09		Flow Area (sq ft)		68.57
Crit w.s. (ft)		Area (sq ft)		68.57
E.G. slope (ft/ft)	0.000161	Flow (cfs)		125.00
Q Total (cfs)	125.00	Top width (ft)		48.72
Top width (ft)	48.72	Avg. vel. (ft/s)		1.82
vel Total (ft/s)	1.82	Hydr. Depth (ft)		1.41
Max chl Dpth (ft)	1.56	Conv. (cfs)		9852.4
Conv. Total (cfs)	9852.4	wetted Per. (ft)		49.22
Length wtd. (ft)	136.09	Shear (lb/sq ft)		0.01
Min ch El (ft)	817.00	Stream Power (lb/ft s)	68.00	0.00
Alpha	1.00	Cum volume (acre-ft)	0.10	0.52
0.00		Cum SA (acres)		
Frctn Loss (ft)	0.07			
0.01				
C & E Loss (ft)	0.04			

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 12

INPUT

Description:

Station Elevation Data num= 11

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	822.9	12	822.9	105.14	821	148.52	821	160.89	820
168.02	818	217.39	817	244.97	817	282.61	819	288.61	819
298	819								

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.0066	12	.0129	298	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 217.39 244.97 9.17 9.17 9.17 .1 .3

Blocked Obstructions			num=	CPNPPLocalPMP		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
0	148.52	825	288.61	298	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)		Element	Left OB	Channel
Right OB	820.35			
Vel Head (ft)	0.87	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	819.47	Reach Len. (ft)	9.17	9.17
9.17				
Crit w.s. (ft)	819.47	Flow Area (sq ft)	101.23	68.18
58.25				
E.G. slope (ft/ft)	0.001708	Area (sq ft)	101.23	68.18
58.25				
Q Total (cfs)	1652.00	Flow (cfs)	725.18	593.39
333.43				
Top width (ft)	125.84	Top width (ft)	54.62	27.58
43.64				
vel Total (ft/s)	7.26	Avg. vel. (ft/s)	7.16	8.70
5.72				
Max Chl Dpth (ft)	2.47	Hydr. Depth (ft)	1.85	2.47
1.33				
Conv. Total (cfs)	39975.7	Conv. (cfs)	17548.1	14359.2
8068.4				
Length wtd. (ft)	9.17	wetted Per. (ft)	54.83	27.58
44.17				
Min Ch El (ft)	817.00	Shear (lb/sq ft)	0.20	0.26
0.14				
Alpha	1.07	Stream Power (lb/ft s)	298.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	0.40	2.08
0.33				
C & E Loss (ft)	0.02	Cum SA (acres)	0.33	0.89
0.36				

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.
 Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 11.875*

INPUT

Description:

Station Elevation Data		num=	18							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-1.25	822.66	9.57	822.66	40.64	822.05	90.73	821.06	93.58	820.98	
132.7	820.67	138.52	820.17	143.86	819.74	150.29	817.97	194.82	817	
204.64	816.93	228.77	816.93	234.56	817	254.62	818.25	264.65	818.75	
269.65	819	275.25	819	284	819					

CPNPPLocalPMP

Manning's n Values		num= 6		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-1.25	.0066	9.57	.0121	40.64	.0121	90.73	.0129	194.82	.0129
284	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	194.82	234.56		9.17	9.17		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

			Left OB	Channel
E.G. Elev (ft)	820.29	Element		
Right OB				
Vel Head (ft)	1.14	wt. n-Val.	0.013	0.013
0.013				
w.s. Elev (ft)	819.15	Reach Len. (ft)	9.17	9.17
9.17				
Crit w.s. (ft)	819.40	Flow Area (sq ft)	76.70	87.70
40.67				
E.G. Slope (ft/ft)	0.002485	Area (sq ft)	76.70	87.70
40.67				
Q Total (cfs)	1652.00	Flow (cfs)	593.90	853.65
204.46				
Top width (ft)	138.00	Top width (ft)	48.82	39.74
49.44				
Vel Total (ft/s)	8.06	Avg. Vel. (ft/s)	7.74	9.73
5.03				
Max Chl Dpth (ft)	2.22	Hydr. Depth (ft)	1.57	2.21
0.82				
Conv. Total (cfs)	33138.2	Conv. (cfs)	11913.2	17123.7
4101.3				
Length wtd. (ft)	9.17	wetted Per. (ft)	48.99	39.74
49.65				
Min Ch El (ft)	816.93	Shear (lb/sq ft)	0.24	0.34
0.13				
Alpha	1.13	Stream Power (lb/ft s)	284.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)	0.38	2.06
0.32				
C & E Loss (ft)	0.03	Cum SA (acres)	0.32	0.88
0.35				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 11.75*

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-2.5	822.43	7.15	822.43	34.83	821.9	79.48	821.05	82.01	820.96
116.89	820.34	122.07	819.86	126.83	819.48	132.56	817.95	172.24	817
191.89	816.85	212.57	816.85	224.15	817	242.76	818.36	252.05	818.79
256.69	819	261.88	819	270	819				

Manning's n Values		num=		CPNPPLocalPMP		num=		num=	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-2.5	.0066	7.15	.0113	34.83	.0113	79.48	.0129	172.24	.0129
270	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	172.24	224.15		9.17	9.17		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.24	Element		Left OB Channel
Right OB				
Vel Head (ft)	1.38	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	818.86	Reach Len. (ft)	9.17	9.17
9.17				
Crit w.s. (ft)	819.29	Flow Area (sq ft)	56.68	102.20
24.78				
E.G. slope (ft/ft)	0.003279	Area (sq ft)	56.68	102.20
24.78				
Q Total (cfs)	1652.00	Flow (cfs)	447.81	1059.00
145.19				
Top width (ft)	124.55	Top width (ft)	43.10	51.91
29.53				
Vel Total (ft/s)	8.99	Avg. vel. (ft/s)	7.90	10.36
5.86				
Max Chl Dpth (ft)	2.01	Hydr. Depth (ft)	1.31	1.97
0.84				
Conv. Total (cfs)	28848.1	Conv. (cfs)	7820.0	18492.8
2535.4				
Length wtd. (ft)	9.17	wetted Per. (ft)	43.23	51.91
29.60				
Min Ch El (ft)	816.85	Shear (lb/sq ft)	0.27	0.40
0.17				
Alpha	1.10	Stream Power (lb/ft s)	270.00	0.00
0.00				
Frctn Loss (ft)	0.03	Cum Volume (acre-ft)	0.37	2.04
0.32				
C & E Loss (ft)	0.02	Cum SA (acres)	0.31	0.87
0.35				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 11.625*

INPUT

Description:

Station Elevation Data		num=		18		num=		num=	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-3.75	822.19	4.72	822.19	29.03	821.75	68.23	821.04	70.45	820.93
101.07	820.01	105.62	819.55	109.8	819.21	114.83	817.92	149.67	817
179.14	816.78	196.38	816.78	213.74	817	230.89	818.46	239.46	818.82
243.73	819	248.52	819	256	819				

Manning's n Values		num=		6		num=		num=	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-3.75	.0066	4.72	.0105	29.03	.0105	68.23	.0129	149.67	.0129
256	.0129								

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 149.67 213.74 9.17 9.17 9.17 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.55	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	818.64	Reach Len. (ft)	9.17	9.17
9.17				
Crit w.s. (ft)	819.17	Flow Area (sq ft)	42.23	114.19
16.05				
E.G. slope (ft/ft)	0.004008	Area (sq ft)	42.23	114.19
16.05				
Q Total (cfs)	1652.00	Flow (cfs)	331.74	1224.13
96.13				
Top width (ft)	123.23	Top width (ft)	37.66	64.07
21.50				
Vel Total (ft/s)	9.58	Avg. vel. (ft/s)	7.86	10.72
5.99				
Max Chl Dpth (ft)	1.86	Hydr. Depth (ft)	1.12	1.78
0.75				
Conv. Total (cfs)	26094.7	Conv. (cfs)	5240.1	19336.1
1518.4				
Length wtd. (ft)	9.17	wetted Per. (ft)	37.76	64.07
21.57				
Min Ch El (ft)	816.78	Shear (lb/sq ft)	0.28	0.45
0.19				
Alpha	1.09	Stream Power (lb/ft s)	256.00	0.00
0.00				
Frctn Loss (ft)	0.03	Cum volume (acre-ft)	0.36	2.02
0.31				
C & E Loss (ft)	0.02	Cum SA (acres)	0.30	0.86
0.34				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 11.5*

INPUT

Description:

Station Elevation Data	num=	18							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-5 821.95 2.29 821.95 23.22 821.6 56.97 821.03 58.89 820.91									
85.25 819.68 89.17 819.24 92.77 818.95 97.1 817.9 127.1 817									
166.39 816.71 180.18 816.71 203.32 817 219.02 818.57 226.86 818.86									
230.78 819 235.15 819 242 819									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-5 .0066 2.29 .0098 23.22 .0098 56.97 .0129 127.1 .0129									
242 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 127.1 203.32 9.17 9.17 9.17 .1 .3

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.14	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.69	wt. n-Val.	0.013	0.013
0.013				
W.S. Elev (ft)	818.44	Reach Len. (ft)	9.17	9.17
9.17				
Crit w.s. (ft)	818.93	Flow Area (sq ft)	30.35	122.92
10.39				
E.G. slope (ft/ft)	0.004825	Area (sq ft)	30.35	122.92
10.39				
Q Total (cfs)	1652.00	Flow (cfs)	232.90	1352.50
66.60				
Top width (ft)	122.87	Top width (ft)	32.23	76.22
14.42				
Vel Total (ft/s)	10.09	Avg. vel. (ft/s)	7.67	11.00
6.41				
Max Chl Dpth (ft)	1.73	Hydr. Depth (ft)	0.94	1.61
0.72				
Conv. Total (cfs)	23783.8	Conv. (cfs)	3353.0	19471.9
958.9				
Length wtd. (ft)	9.17	wetted Per. (ft)	32.31	76.22
14.49				
Min Ch El (ft)	816.71	Shear (lb/sq ft)	0.28	0.49
0.22				
Alpha	1.07	Stream Power (lb/ft s)	242.00	0.00
0.00				
Frctn Loss (ft)	0.04	Cum Volume (acre-ft)	0.35	1.99
0.31				
C & E Loss (ft)	0.01	Cum SA (acres)	0.29	0.84
0.34				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 11.375*

INPUT

Description:

Station Elevation Data num= 18

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-6.25	821.71	-.14	821.71	17.42	821.45	45.72	821.02	47.33	820.89
69.43	819.35	72.72	818.93	75.74	818.69	79.37	817.87	104.53	817
153.64	816.64	163.98	816.64	192.91	817	207.15	818.68	214.27	818.89
217.82	819	221.79	819	228	819				

Manning's n Values num= 6

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-6.25	.0066	-.14	.009	17.42	.009	45.72	.0129	104.53	.0129
228	.0129								

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
104.53	192.91	9.17	9.17	9.17		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.08	Element	Left OB	Channel
----------------	--------	---------	---------	---------

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	1.82	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	818.26	Reach Len. (ft)	9.17	9.17
9.17				
Crit w.s. (ft)	818.81	Flow Area (sq ft)	21.16	129.36
6.76				
E.G. slope (ft/ft)	0.005715	Area (sq ft)	21.16	129.36
6.76				
Q Total (cfs)	1652.00	Flow (cfs)	156.84	1452.06
43.10				
Top width (ft)	125.98	Top width (ft)	26.90	88.38
10.70				
Vel Total (ft/s)	10.50	Avg. Vel. (ft/s)	7.41	11.22
6.38				
Max Chl Dpth (ft)	1.62	Hydr. Depth (ft)	0.79	1.46
0.63				
Conv. Total (cfs)	21853.4	Conv. (cfs)	2074.8	19208.5
570.1				
Length wtd. (ft)	9.17	wetted Per. (ft)	26.96	88.38
10.78				
Min Ch El (ft)	816.64	Shear (lb/sq ft)	0.28	0.52
0.22				
Alpha	1.06	Stream Power (lb/ft s)	228.00	0.00
0.00				
Frctn Loss (ft)	0.05	Cum Volume (acre-ft)	0.34	1.97
0.31				
C & E Loss (ft)	0.01	Cum SA (acres)	0.28	0.83
0.33				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 11.25*

INPUT

Description:

Station Elevation Data		num= 18									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-7.5	821.47	-2.56	821.47	11.61	821.3	34.47	821.02	35.76	820.87		
53.62	819.02	56.27	818.62	58.71	818.43	61.64	817.84	81.96	817		
140.89	816.57	147.79	816.57	182.5	817	195.29	818.79	201.67	818.93		
204.86	819	208.42	819	214	819						

Manning's n Values		num= 6									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-7.5	.0066	-2.56	.0082	11.61	.0082	34.47	.0129	81.96	.0129		
214	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	81.96	182.5		9.17	9.17	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.01	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.91	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	818.11	Reach Len. (ft)	9.17	9.17

CPNPPLocalPMP				
9.17				
Crit w.s. (ft)	818.70	Flow Area (sq ft)	14.11	134.26
4.37				
E.G. slope (ft/ft)	0.006617	Area (sq ft)	14.11	134.26
4.37				
Q Total (cfs)	1652.00	Flow (cfs)	99.23	1525.38
27.38				
Top width (ft)	130.08	Top width (ft)	21.64	100.54
7.90				
Vel Total (ft/s)	10.82	Avg. vel. (ft/s)	7.03	11.36
6.27				
Max Chl Dpth (ft)	1.54	Hydr. Depth (ft)	0.65	1.34
0.55				
Conv. Total (cfs)	20308.8	Conv. (cfs)	1219.9	18752.2
336.6				
Length wtd. (ft)	9.17	wetted Per. (ft)	21.68	100.54
7.98				
Min Ch El (ft)	816.57	Shear (lb/sq ft)	0.27	0.55
0.23				
Alpha	1.05	Stream Power (lb/ft s)	214.00	0.00
0.00				
Frctn Loss (ft)	0.06	Cum volume (acre-ft)	0.34	1.94
0.31				
C & E Loss (ft)	0.01	Cum SA (acres)	0.28	0.81
0.33				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 11.125*

INPUT

Description:

Station Elevation Data num= 18											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-8.75	821.24	-4.99	821.24	5.81	821.15	23.21	821.01	24.2	820.84		
37.8	818.69	39.82	818.31	41.67	818.17	43.91	817.82	59.38	817		
128.14	816.49	131.59	816.49	172.09	817	183.42	818.89	189.08	818.96		
191.9	819	195.06	819	200	819						

Manning's n Values num= 6											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-8.75	.0066	-4.99	.0074	5.81	.0074	23.21	.0129	59.38	.0129		
200	.0129										

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	59.38	172.09		9.17	9.17	9.17		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.94	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.97	wt. n-val.	0.013	0.013
0.013				
w.s. Elev (ft)	817.96	Reach Len. (ft)	9.17	9.17
9.17				
Crit w.s. (ft)	818.55	Flow Area (sq ft)	8.59	137.94
2.77				
E.G. slope (ft/ft)	0.007547	Area (sq ft)	8.59	137.94

CPNPPLocalPMP				
2.77				
Q Total (cfs)	1652.00	Flow (cfs)	55.83	1579.33
16.84				
Top width (ft)	134.84	Top width (ft)	16.37	112.71
5.76				
Vel Total (ft/s)	11.07	Avg. Vel. (ft/s)	6.50	11.45
6.08				
Max Chl Dpth (ft)	1.47	Hydr. Depth (ft)	0.52	1.22
0.48				
Conv. Total (cfs)	19015.9	Conv. (cfs)	642.6	18179.4
193.9				
Length wtd. (ft)	9.17	wetted Per. (ft)	16.41	112.72
5.84				
Min ch El (ft)	816.49	Shear (lb/sq ft)	0.25	0.58
0.22				
Alpha	1.04	Stream Power (lb/ft s)	200.00	0.00
0.00				
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)	0.34	1.91
0.30				
C & E Loss (ft)	0.01	Cum SA (acres)	0.27	0.78
0.33				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 11

INPUT

Description:

Station Elevation Data num= 10									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	821	0	821	11.96	821	23.37	818	36.81	817
115.39	816.42	161.68	817	171.55	819	176.48	819	186	819

Manning's n Values num= 4							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0066	0	.0066	11.96	.0129	186	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	36.81	161.68		24.52	24.52	24.52		.1	.3

Blocked Obstructions num= 2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	176.48	186	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.86	Element	Left OB	Channel
Right OB				
Vel Head (ft)	2.02	wt. n-Val.	0.013	0.013
0.013				
w.s. Elev (ft)	817.83	Reach Len. (ft)	24.52	24.52
24.52				
Crit w.s. (ft)	818.43	Flow Area (sq ft)	4.66	140.23
1.71				
E.G. slope (ft/ft)	0.008557	Area (sq ft)	4.66	140.23
1.71				
Q Total (cfs)	1652.00	Flow (cfs)	27.66	1614.30
10.04				
Top width (ft)	140.18	Top width (ft)	11.20	124.87

CPNPPLocalPMP

4.11									
Vel Total (ft/s)	11.27	Avg. Vel. (ft/s)	5.93	11.51					
5.86									
Max Chl Dpth (ft)	1.41	Hydr. Depth (ft)	0.42	1.12					
0.42									
Conv. Total (cfs)	17858.8	Conv. (cfs)	299.0	17451.3					
108.5									
Length wtd. (ft)	24.52	wetted Per. (ft)	11.23	124.88					
4.19									
Min Ch El (ft)	816.42	Shear (lb/sq ft)	0.22	0.60					
0.22									
Alpha	1.03	Stream Power (lb/ft s)	186.00	0.00					
0.00									
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)	0.34	1.88					
0.30									
C & E Loss (ft)	0.00	Cum SA (acres)	0.27	0.76					
0.33									

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 10.8*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 820.2 -1.98 820.2 -.38 820.2 .66 820.19 13.41 820.13									
25.57 817.67 39.89 816.8 106.99 816.27 108.99 816.27 151.2 816.8									
166.22 818.5 173.72 818.56 180.23 818.6 182.79 819 184.07 819									
188.2 819									

Manning's n Values	num=	8							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0079 -1.98 .0079 .66 .0078 13.41 .0124 39.89 .0116									
81.21 .0116 100.72 .0129 188.2 .0129									

Bank Sta: Left Right Lengths: Left Channel Right									
39.89 151.2 24.52 24.52 24.52									
Coeff Contr. Expan.									
.1 .3									

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 824.4 178.624 188.2 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.62	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.80	wt. n-val.	0.012	0.012
0.013				
W.S. Elev (ft)	817.82	Reach Len. (ft)	24.52	24.52
24.52				
Crit w.s. (ft)	818.39	Flow Area (sq ft)	8.46	143.75
4.61				
E.G. slope (ft/ft)	0.005702	Area (sq ft)	8.46	143.75
4.61				
Q Total (cfs)	1652.00	Flow (cfs)	51.99	1574.49
25.53				
Top width (ft)	135.41	Top width (ft)	15.07	111.31
9.03				

		CPNPPLocalPMP		
Vel Total (ft/s)	10.53	Avg. Vel. (ft/s)	6.15	10.95
5.53				
Max Chl Dpth (ft)	1.55	Hydr. Depth (ft)	0.56	1.29
0.51				
Conv. Total (cfs)	21877.3	Conv. (cfs)	688.5	20850.8
338.0				
Length wtd. (ft)	24.52	wetted Per. (ft)	15.11	111.32
9.08				
Min Ch El (ft)	816.27	Shear (lb/sq ft)	0.20	0.46
0.18				
Alpha	1.05	Stream Power (lb/ft s)	188.20	0.00
0.00				
Frctn Loss (ft)	0.17	cum volume (acre-ft)	0.33	1.80
0.30				
C & E Loss (ft)	0.07	cum SA (acres)	0.26	0.69
0.33				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 10.6*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819.4 -1.49 819.4 .22 819.4 1.32 819.39 14.85 819.26									
27.77 817.34 42.98 816.6 98.6 816.12 102.6 816.12 140.72 816.6									
160.88 818.01 170.95 818.11 179.7 818.2 183.13 819 184.85 819									
190.4 819									

Manning's n Values	num=	8							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0091 -1.49 .0091 1.32 .009 14.85 .012 42.98 .0104									
79.26 .0104 96.39 .0129 190.4 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 42.98 140.72 24.52 24.52 24.52 .1 .3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 823.8 180.768 190.4 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.47	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.67	wt. n-val.	0.012	0.011
0.013				
W.S. Elev (ft)	817.80	Reach Len. (ft)	24.52	24.52
24.52				
Crit w.s. (ft)	818.35	Flow Area (sq ft)	13.34	141.75
10.30				
E.G. slope (ft/ft)	0.004090	Area (sq ft)	13.34	141.75
10.30				
Q Total (cfs)	1652.00	Flow (cfs)	85.42	1512.66
53.91				
Top width (ft)	133.21	Top width (ft)	18.31	97.74
17.16				
Vel Total (ft/s)	9.99	Avg. vel. (ft/s)	6.40	10.67

CPNPPLocalPMP

5.23									
Max Chl Dpth (ft)	1.68	Hydr. Depth (ft)	0.73	1.45					
0.60									
Conv. Total (cfs)	25830.4	Conv. (cfs)	1335.7	23651.8					
843.0									
Length wtd. (ft)	24.52	wetted Per. (ft)	18.36	97.75					
17.21									
Min Ch El (ft)	816.12	Shear (lb/sq ft)	0.19	0.37					
0.15									
Alpha	1.08	Stream Power (lb/ft s)	190.40	0.00					
0.00									
Frctn Loss (ft)	0.12	Cum Volume (acre-ft)	0.33	1.72					
0.30									
C & E Loss (ft)	0.04	Cum SA (acres)	0.25	0.63					
0.32									

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 10.4*

INPUT

Description:

Station Elevation Data	num=	16							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 818.6 - .99 818.6 .81 818.6 1.98 818.58 16.3 818.39									
29.97 817.01 46.06 816.4 90.2 815.98 96.2 815.98 130.25 816.4									
155.55 817.51 168.19 817.67 179.17 817.8 183.48 819 185.63 819									
192.6 819									

Manning's n Values	num=	8							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0104 - .99 .0104 1.98 .0101 16.3 .0115 46.06 .0091									
77.31 .0091 92.06 .0129 192.6 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 46.06 130.25 24.52 24.52 24.52 .1 .3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 823.2 182.912 192.6 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.36	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.59	wt. n-Val.	0.012	0.011
0.013				
w.s. Elev (ft)	817.77	Reach Len. (ft)	24.52	24.52
24.52				
Crit w.s. (ft)	818.24	Flow Area (sq ft)	20.03	134.42
23.39				
E.G. slope (ft/ft)	0.003033	Area (sq ft)	20.03	134.42
23.39				
Q Total (cfs)	1652.00	Flow (cfs)	127.51	1430.70
93.79				
Top width (ft)	154.35	Top width (ft)	23.63	84.19
46.52				
Vel Total (ft/s)	9.29	Avg. vel. (ft/s)	6.36	10.64
4.01				

	CPNPP	Local	PMP	
Max Chl Dpth (ft) 0.50	1.79	Hydr. Depth (ft)	0.85	1.60
Conv. Total (cfs) 1703.0	29997.5	Conv. (cfs)	2315.3	25979.1
Length Wtd. (ft) 46.55	24.52	wetted Per. (ft)	23.68	84.19
Min Ch El (ft) 0.10	815.98	Shear (lb/sq ft)	0.16	0.30
Alpha 0.00	1.18	Stream Power (lb/ft s)	192.60	0.00
Frctn Loss (ft) 0.29	0.09	Cum Volume (acre-ft)	0.32	1.64
C & E Loss (ft) 0.30	0.02	Cum SA (acres)	0.24	0.58

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 10.2*

INPUT

Description:

Station	Elevation	Data	num=	16	Station	Elevation	Station	Elevation	Station	Elevation
-10	817.8	-.5	817.8	1.41	817.8	2.64	817.78	17.75	817.53	
32.16	816.68	49.15	816.2	81.81	815.83	89.81	815.83	119.77	816.2	
150.22	817.01	165.43	817.22	178.64	817.4	183.82	819	186.42	819	
194.8	819									

Manning's n	Values	num=	8	Station	n Val	Station	n Val	Station	n Val
-10	.0116	-.5	.0116	2.64	.0113	17.75	.011	49.15	.0079
75.36	.0079	87.74	.0129	194.8	.0129				

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	49.15	119.77		24.52	24.52	24.52		.1	.3

Blocked Obstructions	num=	2	Sta L	Sta R	Elev
			-10	0	822.6
			185.056	194.8	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.27	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.69	wt. n-val.	0.011	0.010
0.013				
W.S. Elev (ft)	817.59	Reach Len. (ft)	24.52	24.52
24.52				
Crit w.s. (ft)	818.10	Flow Area (sq ft)	26.47	112.37
40.69				
E.G. slope (ft/ft)	0.002909	Area (sq ft)	26.47	112.37
40.69				
Q Total (cfs)	1652.00	Flow (cfs)	171.04	1284.74
196.22				
Top width (ft)	164.83	Top width (ft)	34.74	70.62
59.47				
Vel Total (ft/s)	9.20	Avg. vel. (ft/s)	6.46	11.43
4.82				
Max Chl Dpth (ft)	1.76	Hydr. Depth (ft)	0.76	1.59

CPNPPLocalPMP

0.68				
Conv. Total (cfs)	30630.9	Conv. (cfs)	3171.5	23821.2
3638.2				
Length wtd. (ft)	24.52	wetted Per. (ft)	34.77	70.62
59.51				
Min Ch El (ft)	815.83	Shear (lb/sq ft)	0.14	0.29
0.12				
Alpha	1.28	Stream Power (lb/ft s)	194.80	0.00
0.00				
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)	0.30	1.57
0.27				
C & E Loss (ft)	0.01	Cum SA (acres)	0.23	0.54
0.27				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 10

INPUT

Description:

Station Elevation Data	num=	11							
Sta Elev Sta Elev Sta Elev									
-10 817 0 817 2 817 52.23 816 73.41 815.68									
83.41 815.68 109.29 816 178.11 817 184.17 819 187.2 819									
197 819									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 73.41 .0066 83.41 .0129 197 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
52.23 109.29	185.53 185.53 185.53		.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 822 187.2 197 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	1.93	wt. n-val.	0.013	0.011
0.013				
W.S. Elev (ft)	817.23	Reach Len. (ft)	185.53	185.53
185.53				
Crit w.s. (ft)	817.78	Flow Area (sq ft)	37.17	80.96
50.38				
E.G. slope (ft/ft)	0.005560	Area (sq ft)	37.17	80.96
50.38				
Q Total (cfs)	1652.00	Flow (cfs)	253.74	1049.29
348.97				
Top width (ft)	178.81	Top width (ft)	52.23	57.06
69.52				
Vel Total (ft/s)	9.80	Avg. Vel. (ft/s)	6.83	12.96
6.93				
Max Chl Dpth (ft)	1.55	Hydr. Depth (ft)	0.71	1.42
0.72				
Conv. Total (cfs)	22155.7	Conv. (cfs)	3403.1	14072.5
4680.2				

		CPNPPLocalPMP		
Length wtd. (ft)	185.53	Wetted Per. (ft)	52.47	57.06
69.56 Min Ch El (ft)	815.68	Shear (lb/sq ft)	0.25	0.49
0.25 Alpha	1.29	Stream Power (lb/ft s)	197.00	0.00
0.00 Frctn Loss (ft)	0.10	Cum Volume (acre-ft)	0.29	1.52
0.24 C & E Loss (ft)	0.02	Cum SA (acres)	0.20	0.50
0.23				

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 9

INPUT

Description:

Station Elevation Data num= 11

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	817	0	817	2	817	24.62	816	66.08	815.24
76.08	815.24	121.91	816	144.8	817	150.86	819	153.89	819
164	819								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	66.08	.0066	76.08	.0129	164	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

24.62	121.91	74.27	74.27	74.27	.1	.3
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Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	822	153.89	164	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.57	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.42	wt. n-val.	0.013	0.012
0.013				
W.S. Elev (ft)	818.15	Reach Len. (ft)	74.27	74.27
74.27				
Crit w.s. (ft)	817.55	Flow Area (sq ft)	39.58	249.79
39.73				
E.G. slope (ft/ft)	0.000518	Area (sq ft)	39.58	249.79
39.73				
Q Total (cfs)	1652.00	Flow (cfs)	138.11	1377.68
136.21				
Top width (ft)	148.28	Top width (ft)	24.62	97.29
26.37				
Vel Total (ft/s)	5.02	Avg. vel. (ft/s)	3.49	5.52
3.43				
Max Chl Dpth (ft)	2.91	Hydr. Depth (ft)	1.61	2.57
1.51				
Conv. Total (cfs)	72571.4	Conv. (cfs)	6067.0	60520.9
5983.5				
Length wtd. (ft)	74.27	wetted Per. (ft)	25.79	97.30
26.58				
Min Ch El (ft)	815.24	Shear (lb/sq ft)	0.05	0.08

CPNPPLocalPMP

0.05 Alpha	1.09	Stream Power (lb/ft s)	164.00	0.00
0.00 Frctn Loss (ft)	0.04	Cum Volume (acre-ft)	0.12	0.81
0.05 C & E Loss (ft)	0.00	Cum SA (acres)	0.04	0.17
0.03				

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Upper RS: 8

INPUT

Description:

Station Elevation Data num= 10

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	817	0	817	2	817	20.17	816	63.15	815.02
73.15	815.02	126.97	816	131.47	817	140.56	819	151	819

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	63.15	.0066	73.15	.0129	151	.0129

Bank Sta: Left Right Coeff Contr. Expan.
 20.17 126.97 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	822	140.56	151	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.53	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.43	wt. n-val.	0.013	0.012
0.013				
w.s. Elev (ft)	818.10	Reach Len. (ft)	57.69	57.69
57.69				
Crit w.s. (ft)		Flow Area (sq ft)	31.35	281.90
9.98				
E.G. Slope (ft/ft)	0.000483	Area (sq ft)	31.35	281.90
9.98				
Q Total (cfs)	1652.00	Flow (cfs)	102.71	1523.59
25.70				
Top width (ft)	136.49	Top width (ft)	20.17	106.80
9.52				
Vel Total (ft/s)	5.11	Avg. vel. (ft/s)	3.28	5.40
2.57				
Max Chl Dpth (ft)	3.08	Hydr. Depth (ft)	1.55	2.64
1.05				
Conv. Total (cfs)	75132.1	Conv. (cfs)	4671.2	69292.1
1168.8				
Length wtd. (ft)	57.69	wetted Per. (ft)	21.30	106.82
9.75				
Min Ch El (ft)	815.02	Shear (lb/sq ft)	0.04	0.08
0.03				

	Alpha	CPNPPLocalPMP	Stream Power (lb/ft s)	151.00	0.00
Frctn Loss (ft)	0.03	Cum Volume (acre-ft)	0.06	0.36	
C & E Loss (ft)	0.01	Cum SA (acres)			

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 7

INPUT

Description:

Station	Elevation	Data	num=	10	Sta	Elev	Sta	Elev	Sta	Elev
0	817	42.16	816	84.82	815	86.32	814.85	96.32	814.85	
97.31	815	143.54	816	152.63	819	155.66	819	166	819	819

Manning's n	Values	num=	4	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	86.32	.0066	96.32	.0129	166	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	42.16	143.54		129.73	129.73	129.73		.1	.3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
155.66	166	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.50	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.48	wt. n-val.	0.013	0.011
0.013				
W.S. Elev (ft)	818.02	Reach Len. (ft)	129.73	129.73
129.73				
Crit w.s. (ft)		Flow Area (sq ft)	63.93	263.04
6.16				
E.G. Slope (ft/ft)	0.000560	Area (sq ft)	63.93	263.04
6.16				
Q Total (cfs)	1777.00	Flow (cfs)	226.25	1534.45
16.30				
Top width (ft)	149.65	Top width (ft)	42.16	101.38
6.11				
Vel Total (ft/s)	5.33	Avg. vel. (ft/s)	3.54	5.83
2.65				
Max Chl Dpth (ft)	3.17	Hydr. Depth (ft)	1.52	2.59
1.01				
Conv. Total (cfs)	75121.9	Conv. (cfs)	9564.6	64868.1
689.2				
Length wtd. (ft)	129.73	wetted Per. (ft)	43.19	101.42
6.43				
Min Ch El (ft)	814.85	Shear (lb/sq ft)	0.05	0.09
0.03				
Alpha	1.09	Stream Power (lb/ft s)	166.00	0.00
0.00				
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)	1.59	41.82
6.01				

C & E Loss (ft) 0.24
 CPNPPLocalPMP Cum SA (acres) 0.57 0.82

Warning: The cross-section end points had to be extended vertically for the computed water surface.

LATERAL STRUCTURE

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 6.9

INPUT

Description:
 Lateral structure position = Left overbank
 Distance from Upstream XS =
 Deck/Roadway width = 2
 Weir Coefficient = 2.6
 Weir Flow Reference = Water Surface
 Weir Embankment Coordinates num = 2
 Sta Elev Sta Elev
 0 817 502.24 817

Weir crest shape = Broad Crested

LATERAL STRUCTURE OUTPUT Profile #PF 1 Lat Struct

E.G. US. (ft)	818.50	Weir Sta US (ft)	0.00
W.S. US. (ft)	818.02	Weir Sta DS (ft)	502.24
E.G. DS (ft)	818.19	Min El Weir Flow (ft)	817.00
W.S. DS (ft)	818.13	Wr Top Wdth (ft)	502.24
Q US (cfs)	1777.00	Weir Max Depth (ft)	1.13
Q Leaving Total (cfs)	1317.66	Weir Avg Depth (ft)	1.00
Q DS (cfs)	627.32	Weir Flow Area (sq ft)	504.28
Perc Q Leaving	73.93	Weir Coef (ft ^{1/2})	2.600
Q weir (cfs)	1317.66	Weir Submerg	0.00
Q Gates (cfs)		Q Gate Group (cfs)	
Q Culv (cfs)	0.00	Gate Open Ht (ft)	
Q Lat RC (cfs)		Gate #Open	
		Gate Area (sq ft)	
Q Breach (cfs)		Gate Submerg	
Breach Avg Velocity (ft/s)		Gate Invert (ft)	
Breach Flow Area (sq ft)		Gate Weir Coef	

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 6

INPUT

Description:
 Station Elevation Data num= 10
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 0 817 25.69 816 67.18 815 72.52 814.45 82.52 814.45
 86.02 815 111.52 816 120.61 819 123.64 819 134 819

Manning's n Values num= 4
 Sta n Val Sta n Val Sta n Val Sta n Val
 Page 816

0 .0129 72.52 .0066 CPNPPLocalPMP 82.52 .0129 134 .0129
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 25.69 111.52 130.06 130.06 130.06 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 123.64 134 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.43	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.50	wt. n-val.	0.013	0.011
0.013				
W.S. Elev (ft)	817.93	Reach Len. (ft)	130.06	130.06
130.06				
Crit w.s. (ft)		Flow Area (sq ft)	36.70	225.78
5.63				
E.G. slope (ft/ft)	0.000508	Area (sq ft)	36.70	225.78
5.63				
Q Total (cfs)	1454.50	Flow (cfs)	117.98	1322.72
13.80				
Top width (ft)	117.36	Top width (ft)	25.69	85.83
5.84				
Vel Total (ft/s)	5.42	Avg. vel. (ft/s)	3.22	5.86
2.45				
Max Chl Dpth (ft)	3.48	Hydr. Depth (ft)	1.43	2.63
0.96				
Conv. Total (cfs)	64514.2	Conv. (cfs)	5233.2	58669.1
611.9				
Length wtd. (ft)	130.06	wetted Per. (ft)	26.64	85.93
6.15				
Min Ch El (ft)	814.45	Shear (lb/sq ft)	0.04	0.08
0.03				
Alpha	1.09	Stream Power (lb/ft s)	134.00	0.00
0.00				
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)	1.44	41.10
5.99				
C & E Loss (ft)	0.00	Cum SA (acres)	0.47	0.55
0.22				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 5

INPUT

Description:

Station	Elevation	Data	num=	10						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta
0	817	9.26	816	49.59	815	58.75	814.06	68.75	814.06	
74.76	815	79.59	816	88.68	819	91.71	819	102	819	

Manning's n Values		num=	4				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	58.75	.0066	68.75	.017	102	.017

CPNPPLocalPMP

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 9.26 79.59 26.74 26.74 26.74 .1 .3
 Blocked Obstructions num= 1
 Sta L Sta R Elev
 91.71 102 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.36	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.50	wt. n-val.	0.013	0.011
0.017				
W.S. Elev (ft)	817.87	Reach Len. (ft)	26.74	26.74
26.74				
Crit w.s. (ft)		Flow Area (sq ft)	12.66	195.61
5.28				
E.G. slope (ft/ft)	0.000441	Area (sq ft)	12.66	195.61
5.28				
Q Total (cfs)	1168.16	Flow (cfs)	35.43	1123.78
8.95				
Top width (ft)	85.25	Top width (ft)	9.26	70.33
5.66				
Vel Total (ft/s)	5.47	Avg. vel. (ft/s)	2.80	5.74
1.69				
Max Chl Dpth (ft)	3.81	Hydr. Depth (ft)	1.37	2.78
0.93				
Conv. Total (cfs)	55613.8	Conv. (cfs)	1686.7	53501.0
426.2				
Length wtd. (ft)	26.74	wetted Per. (ft)	10.18	70.57
5.96				
Min Ch El (ft)	814.06	Shear (lb/sq ft)	0.03	0.08
0.02				
Alpha	1.07	Stream Power (lb/ft s)	102.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum volume (acre-ft)	1.37	40.47
5.98				
C & E Loss (ft)	0.06	Cum SA (acres)	0.42	0.31
0.21				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 4

INPUT

Description:

Station	Elevation	Data	num=	12							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	2.01	816	60.57	815	64.58	814	67.58	813.97		
77.68	813.97	80.68	814	92.75	817	97.86	818	101.49	819		
105.13	819	115	819								

Manning's n	Values		num=	6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	60.57	.017	67.58	.0066	77.68	.017	92.75	.0129		

CPNPPLocalPMP

115 .0129

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
60.57	92.75		9.84 9.84	9.84	.1	.3
Blocked Obstructions num=			1			
Sta L	Sta R	Elev				
105.13	115	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.29	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.28	wt. n-val.	0.013	0.014
0.013				
W.S. Elev (ft)	818.01	Reach Len. (ft)	9.84	9.84
9.84				
Crit w.s. (ft)		Flow Area (sq ft)	149.74	109.18
2.58				
E.G. slope (ft/ft)	0.000379	Area (sq ft)	149.74	109.18
2.58				
Q Total (cfs)	1105.39	Flow (cfs)	605.62	496.15
3.62				
Top width (ft)	97.88	Top width (ft)	60.57	32.18
5.13				
Vel Total (ft/s)	4.23	Avg. vel. (ft/s)	4.04	4.54
1.40				
Max chl Dpth (ft)	4.04	Hydr. Depth (ft)	2.47	3.39
0.50				
Conv. Total (cfs)	56781.6	Conv. (cfs)	31109.2	25486.5
185.9				
Length wtd. (ft)	9.84	wetted Per. (ft)	61.82	32.67
5.23				
Min Ch El (ft)	813.97	Shear (lb/sq ft)	0.06	0.08
0.01				
Alpha	1.02	Stream Power (lb/ft s)	115.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.32	40.37
5.97				
C & E Loss (ft)	0.01	Cum SA (acres)	0.40	0.28
0.20				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 3.90909*

INPUT

Description:

Station	Elevation	Data	num=	19						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	817	1.78	816.11	2.04	816	61.36	815	65.22	814.04	
65.39	814	68.4	813.93	78.99	813.93	81.91	813.99	83	814.25	
93.69	816.91	95.88	817.3	100.38	817.95	105.13	818.89	107.19	818.91	
109.9	818.93	118.62	819	119.7	819	122.82	819			

Manning's n Values				num=	7	CPNPPLocalPMP				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
0	.0129	61.36	.017	68.34	.0067	68.4	.0066	78.55	.0167	
83.16	.0159	122.82	.0129							

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
61.36	93.69	9.84	9.84	9.84	.1	.3

Blocked Obstructions	num=	1
Sta L	Sta R	Elev
112.8927	122.82	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.28	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.26	wt. n-val.	0.013	0.014
0.016				
W.S. Elev (ft)	818.02	Reach Len. (ft)	9.84	9.84
9.84				
Crit w.s. (ft)		Flow Area (sq ft)	152.45	111.81
3.78				
E.G. slope (ft/ft)	0.000331	Area (sq ft)	152.45	111.81
3.78				
Q Total (cfs)	1079.45	Flow (cfs)	578.08	497.16
4.21				
Top width (ft)	100.72	Top width (ft)	61.36	32.33
7.03				
Vel Total (ft/s)	4.03	Avg. vel. (ft/s)	3.79	4.45
1.11				
Max Chl Dpth (ft)	4.09	Hydr. Depth (ft)	2.48	3.46
0.54				
Conv. Total (cfs)	59338.9	Conv. (cfs)	31778.1	27329.6
231.2				
Length wtd. (ft)	9.84	wetted Per. (ft)	62.62	32.81
7.12				
Min Ch El (ft)	813.93	Shear (lb/sq ft)	0.05	0.07
0.01				
Alpha	1.04	Stream Power (lb/ft s)	122.82	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.28	40.35
5.97				
C & E Loss (ft)	0.01	Cum SA (acres)	0.39	0.27
0.20				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 3.81818*

INPUT

Description:

Station	Elevation	Data	num=	19						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	817	1.8	816.1	2.06	816	62.16	815	66.03	814.03	
66.2	814	69.22	813.88	80.29	813.88	83.15	813.97	84.2	814.23	

		CPNPPLocalPMP							
94.62	816.82	97.33	817.27	102.9	817.89	108.77	818.79	111.31	818.82
114.66	818.86	125.45	819	126.78	819	130.64	819		
Manning's n Values		num=		7					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	62.16	.017	69.17	.0067	69.23	.0066	79.42	.0164
84.05	.016	130.64	.0129						
Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.	
	62.16	94.62		9.84	9.84		.1	.3	
Blocked Obstructions		num=		1					
Sta L	Sta R	Elev							
120.6555	130.64	825							

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	818.27	Element	Left OB	Channel
	Vel Head (ft)	0.24	wt. n-val.	0.013	0.014
0.016	W.S. Elev (ft)	818.03	Reach Len. (ft)	9.84	9.84
9.84	Crit w.s. (ft)		Flow Area (sq ft)	155.27	114.57
5.24	E.G. Slope (ft/ft)	0.000296	Area (sq ft)	155.27	114.57
5.24	Q Total (cfs)	1053.02	Flow (cfs)	558.68	488.61
5.73	Top width (ft)	103.82	Top width (ft)	62.16	32.46
9.20	Vel Total (ft/s)	3.83	Avg. vel. (ft/s)	3.60	4.26
1.09	Max Chl Dpth (ft)	4.15	Hydr. Depth (ft)	2.50	3.53
0.57	Conv. Total (cfs)	61228.3	Conv. (cfs)	32484.7	28410.7
333.0	Length wtd. (ft)	9.84	wetted Per. (ft)	63.43	32.93
9.28	Min Ch El (ft)	813.88	Shear (lb/sq ft)	0.05	0.06
0.01	Alpha	1.05	Stream Power (lb/ft s)	130.64	0.00
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.25	40.32
5.97	C & E Loss (ft)	0.01	Cum SA (acres)	0.37	0.27
0.20					

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 3.72727*

INPUT

Description:
 Station Elevation Data num= 19

Sta	Elev	Sta	Elev	CPNPPLocal	PMP	Sta	Elev	Sta	Elev
0	817	1.83	816.09	2.09	816	62.95	815	66.84	814.03
67	813.99	70.04	813.84	81.6	813.84	84.38	813.96	85.41	814.2
95.56	816.73	98.79	817.24	105.41	817.84	112.41	818.68	115.44	818.73
119.43	818.79	132.28	819	133.86	819	138.45	819		

Manning's n Values		num=		7	
Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	62.95	.017	69.99	.0067
84.94	.0161	138.45	.0129	70.05	.0066
				80.29	.0161

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	62.95	95.56		9.84	9.84		.1	.3

Blocked Obstructions		num=		1	
Sta L	Sta R	Elev			
128.4182	138.45	825			

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	818.26	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.22		wt. n-Val.	0.013	0.014
0.016					
W.S. Elev (ft)	818.04		Reach Len. (ft)	9.84	9.84
9.84					
Crit w.s. (ft)			Flow Area (sq ft)	158.01	117.26
6.92					
E.G. Slope (ft/ft)	0.000264		Area (sq ft)	158.01	117.26
6.92					
Q Total (cfs)	1026.09		Flow (cfs)	539.42	479.32
7.35					
Top width (ft)	107.10		Top width (ft)	62.95	32.61
11.54					
Vel Total (ft/s)	3.64		Avg. vel. (ft/s)	3.41	4.09
1.06					
Max Chl Dpth (ft)	4.20		Hydr. Depth (ft)	2.51	3.60
0.60					
Conv. Total (cfs)	63095.6		Conv. (cfs)	33169.7	29474.2
451.7					
Length wtd. (ft)	9.84		wetted Per. (ft)	64.23	33.08
11.62					
Min Ch El (ft)	813.84		Shear (lb/sq ft)	0.04	0.06
0.01					
Alpha	1.05		Stream Power (lb/ft s)	138.45	0.00
0.00					
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)	1.21	40.30
5.97					
C & E Loss (ft)	0.01		Cum SA (acres)	0.36	0.26
0.20					

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower

RS: 3.63636*

CPNPPLocalPMP

INPUT

Description:

Station Elevation Data			num=	19						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	817	1.85	816.08	2.12	816	63.74	815	67.65	814.03	
67.81	813.99	70.86	813.8	82.91	813.8	85.61	813.95	86.62	814.18	
96.5	816.64	100.24	817.21	107.93	817.78	116.05	818.57	119.57	818.64	
124.19	818.72	139.1	819	140.95	819	146.27	819			

Manning's n Values				num=	7					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
0	.0129	63.74	.017	70.82	.0067	70.88	.0066	81.16	.0158	
85.83	.0162	146.27	.0129							

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	63.74	96.5		9.84	9.84	9.84	.1	.3

Blocked Obstructions			num=	1	
Sta L	Sta R	Elev			
136.1809	146.27	825			

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	818.25			
Right OB				
Vel Head (ft)	0.20	wt. n-val.	0.013	0.014
0.016				
W.S. Elev (ft)	818.05	Reach Len. (ft)	9.84	9.84
9.84				
Crit w.s. (ft)		Flow Area (sq ft)	160.73	119.87
8.91				
E.G. Slope (ft/ft)	0.000236	Area (sq ft)	160.73	119.87
8.91				
Q Total (cfs)	998.70	Flow (cfs)	520.46	469.08
9.16				
Top width (ft)	110.75	Top width (ft)	63.74	32.76
14.25				
Vel Total (ft/s)	3.45	Avg. vel. (ft/s)	3.24	3.91
1.03				
Max Chl Dpth (ft)	4.25	Hydr. Depth (ft)	2.52	3.66
0.63				
Conv. Total (cfs)	64947.3	Conv. (cfs)	33846.4	30505.5
595.4				
Length wtd. (ft)	9.84	wetted Per. (ft)	65.03	33.22
14.33				
Min Ch El (ft)	813.80	Shear (lb/sq ft)	0.04	0.05
0.01				
Alpha	1.06	Stream Power (lb/ft s)	146.27	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.18	40.27
5.97				
C & E Loss (ft)	0.01	Cum SA (acres)	0.34	0.25
0.19				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

CPNPPLocalPMP

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower

RS: 3.54545*

INPUT

Description:

Station Elevation Data			num= 19							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	817	1.87	816.07	2.14	816	64.54	815	68.45	814.02	
68.62	813.99	71.68	813.75	84.22	813.75	86.85	813.94	87.82	814.15	
97.44	816.55	101.69	817.18	110.45	817.73	119.69	818.46	123.69	818.55	
128.96	818.65	145.93	819	148.03	819	154.09	819			

Manning's n Values			num= 7							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
0	.0129	64.54	.017	71.64	.0066	71.7	.0066	82.03	.0155	
86.72	.0163	154.09	.0129							

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	64.54	97.44		9.84	9.84	.1	.3
Blocked Obstructions			num=	1			
	Sta L	Sta R	Elev				
	143.9436	154.09	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.	0.013	0.014
0.016				
W.S. Elev (ft)	818.06	Reach Len. (ft)	9.84	9.84
9.84				
Crit w.s. (ft)		Flow Area (sq ft)	163.46	122.65
11.15				
E.G. slope (ft/ft)	0.000211	Area (sq ft)	163.46	122.65
11.15				
Q Total (cfs)	970.86	Flow (cfs)	500.89	458.97
11.00				
Top width (ft)	114.69	Top width (ft)	64.54	32.90
17.25				
Vel Total (ft/s)	3.27	Avg. vel. (ft/s)	3.06	3.74
0.99				
Max Chl Dpth (ft)	4.31	Hydr. Depth (ft)	2.53	3.73
0.65				
Conv. Total (cfs)	66914.0	Conv. (cfs)	34522.5	31633.4
758.0				
Length wtd. (ft)	9.84	wetted Per. (ft)	65.84	33.36
17.33				
Min Ch El (ft)	813.75	Shear (lb/sq ft)	0.03	0.05
0.01				
Alpha	1.08	Stream Power (lb/ft s)	154.09	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.14	40.24
5.97				
C & E Loss (ft)	0.01	Cum SA (acres)	0.33	0.24
0.19				

warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 3.45454*

INPUT

Description:

Station Elevation Data			num=	19					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	1.89	816.06	2.17	816	65.33	815	69.26	814.02
69.43	813.99	72.49	813.71	85.52	813.71	88.08	813.92	89.03	814.13
98.37	816.45	103.15	817.15	112.97	817.67	123.33	818.36	127.82	818.45
133.73	818.58	152.76	819	155.11	819	161.91	819		

Manning's n Values			num=	7					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	65.33	.017	72.47	.0066	72.53	.0066	82.9	.0152
87.61	.0164	161.91	.0129						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 65.33 98.37 9.84 9.84 9.84 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 151.7064 161.91 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.	0.013	0.014
0.016				
W.S. Elev (ft)	818.07	Reach Len. (ft)	9.84	9.84
9.84				
Crit w.s. (ft)		Flow Area (sq ft)	166.12	125.27
13.85				
E.G. slope (ft/ft)	0.000188	Area (sq ft)	166.12	125.27
13.85				
Q Total (cfs)	942.62	Flow (cfs)	481.74	447.75
13.13				
Top width (ft)	119.05	Top width (ft)	65.33	33.04
20.68				
Vel Total (ft/s)	3.09	Avg. vel. (ft/s)	2.90	3.57
0.95				
Max Chl Dpth (ft)	4.36	Hydr. Depth (ft)	2.54	3.79
0.67				
Conv. Total (cfs)	68833.7	Conv. (cfs)	35178.6	32696.5
958.5				
Length wtd. (ft)	9.84	wetted Per. (ft)	66.64	33.49
20.76				
Min Ch El (ft)	813.71	Shear (lb/sq ft)	0.03	0.04
0.01				
Alpha	1.09	Stream Power (lb/ft s)	161.91	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.10	40.21
5.96				
C & E Loss (ft)	0.00	Cum SA (acres)	0.31	0.24
0.19				

Warning: The cross-section end points had to be extended vertically for the computed Page 825

CPNPPLocalPMP

water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 3.36363*

INPUT

Description:

Station Elevation Data		num= 19		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	1.92	816.05	2.19	816	66.13	815	70.07	814.01		
70.24	813.98	73.31	813.66	86.83	813.66	89.32	813.91	90.23	814.1		
99.31	816.36	104.6	817.12	115.48	817.62	126.97	818.25	131.95	818.36		
138.49	818.51	159.58	819	162.19	819	169.73	819				

Manning's n Values		num= 7		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	66.13	.017	73.29	.0066	73.35	.0066	83.77	.0149		
88.5	.0165	169.73	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	66.13	99.31		9.84	9.84	.1	.3
Blocked Obstructions			num=	1			
	Sta L	Sta R	Elev				
	159.4691	169.73	825				

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.23	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.15	wt. n-val.	0.013	0.014
0.017				
W.S. Elev (ft)	818.08	Reach Len. (ft)	9.84	9.84
9.84				
Crit w.s. (ft)		Flow Area (sq ft)	168.79	128.04
16.85				
E.G. slope (ft/ft)	0.000166	Area (sq ft)	168.79	128.04
16.85				
Q Total (cfs)	913.99	Flow (cfs)	462.27	436.56
15.16				
Top width (ft)	123.95	Top width (ft)	66.13	33.18
24.64				
Vel Total (ft/s)	2.91	Avg. vel. (ft/s)	2.74	3.41
0.90				
Max Chl Dpth (ft)	4.42	Hydr. Depth (ft)	2.55	3.86
0.68				
Conv. Total (cfs)	70852.7	Conv. (cfs)	35835.5	33842.1
1175.1				
Length wtd. (ft)	9.84	wetted Per. (ft)	67.45	33.63
24.72				
Min Ch El (ft)	813.66	Shear (lb/sq ft)	0.03	0.04
0.01				
Alpha	1.10	Stream Power (lb/ft s)	169.73	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.07	40.19
5.96				
C & E Loss (ft)	0.00	Cum SA (acres)	0.30	0.23
0.18				

CPNPPLocalPMP

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 3.27272*

INPUT

Description:

Station Elevation Data			num= 19							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	817	1.94	816.03	2.22	816	66.92	815	70.88	814.01	
71.05	813.98	74.13	813.62	88.14	813.62	90.55	813.9	91.44	814.08	
100.25	816.27	106.06	817.09	118	817.56	130.61	818.14	136.07	818.27	
143.26	818.44	166.41	819	169.27	819	177.55	819			

Manning's n Values			num= 7							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	
0	.0129	66.92	.017	74.12	.0066	74.18	.0066	84.64	.0146	
89.39	.0167	177.55	.0129							

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	66.92	100.25		9.84	9.84	9.84		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
167.2318	177.55	825

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel
E.G. Elev (ft)	818.22			
Right OB				
Vel Head (ft)	0.13	wt. n-Val.	0.013	0.014
0.017				
w.S. Elev (ft)	818.09	Reach Len. (ft)	9.84	9.84
9.84				
Crit w.S. (ft)		Flow Area (sq ft)	171.41	130.59
20.47				
E.G. slope (ft/ft)	0.000148	Area (sq ft)	171.41	130.59
20.47				
Q Total (cfs)	884.99	Flow (cfs)	444.04	423.55
17.40				
Top width (ft)	129.59	Top width (ft)	66.92	33.33
29.34				
Vel Total (ft/s)	2.74	Avg. vel. (ft/s)	2.59	3.24
0.85				
Max Chl Dpth (ft)	4.47	Hydr. Depth (ft)	2.56	3.92
0.70				
Conv. Total (cfs)	72705.6	Conv. (cfs)	36479.4	34796.5
1429.8				
Length wtd. (ft)	9.84	wetted Per. (ft)	68.25	33.78
29.42				
Min Ch El (ft)	813.62	Shear (lb/sq ft)	0.02	0.04
0.01				
Alpha	1.12	Stream Power (lb/ft s)	177.55	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	1.03	40.16
5.96				

C & E Loss (ft) 0.17
 CPNPPLocalPMP Cum SA (acres) 0.28 0.22

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 3.18181*

INPUT

Description:

Station	Elevation	Data	num=	19
Sta	Elev	Sta	Elev	Sta Elev Sta Elev
0	817	1.96	816.02	2.25 816 67.71 815 71.68 814.01
71.85	813.98	74.95	813.58	89.45 813.58 91.78 813.89 92.65 814.05
101.19	816.18	107.51	817.06	120.52 817.51 134.25 818.03 140.2 818.18
148.02	818.38	173.24	819	176.36 819 185.36 819

Manning's n	Values	num=	7
Sta	n Val	Sta	n Val
0	.0129	67.71	.017
90.28	.0168	185.36	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	67.71	101.19		9.84	9.84	9.84		.1	.3
Blocked Obstructions			num=	1					
Sta L	Sta R	Elev							
174.9946	185.36	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.22	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.12	wt. n-Val.	0.013	0.014
0.017				
w.s. Elev (ft)	818.10	Reach Len. (ft)	9.84	9.84
9.84				
Crit w.s. (ft)		Flow Area (sq ft)	173.98	133.19
24.62				
E.G. slope (ft/ft)	0.000131	Area (sq ft)	173.98	133.19
24.62				
Q Total (cfs)	855.66	Flow (cfs)	425.44	410.83
19.39				
Top width (ft)	137.06	Top width (ft)	67.71	33.48
35.87				
Vel Total (ft/s)	2.58	Avg. vel. (ft/s)	2.45	3.08
0.79				
Max Chl Dpth (ft)	4.52	Hydr. Depth (ft)	2.57	3.98
0.69				
Conv. Total (cfs)	74633.6	Conv. (cfs)	37108.3	35833.7
1691.6				
Length wtd. (ft)	9.84	wetted Per. (ft)	69.05	33.93
35.95				
Min Ch El (ft)	813.58	Shear (lb/sq ft)	0.02	0.03
0.01				
Alpha	1.14	Stream Power (lb/ft s)	185.36	0.00

CPNPPLocalPMP				
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.99	40.13
5.95				
C & E Loss (ft)	0.00	Cum SA (acres)	0.27	0.21
0.17				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 3.09090*

INPUT

Description:

Station Elevation Data num= 19											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	1.99	816.01	2.27	816	68.51	815	72.49	814		
72.66	813.98	75.77	813.53	90.75	813.53	93.02	813.87	93.85	814.03		
102.12	816.09	108.97	817.03	123.04	817.45	137.89	817.93	144.32	818.09		
152.79	818.31	180.06	819	183.44	819	193.18	819				

Manning's n Values num= 7											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	68.51	.017	75.77	.0066	75.83	.0066	86.38	.0141		
91.17	.0169	193.18	.0129								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	68.51	102.12		9.84	9.84	9.84		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
182.7573	193.18	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.21	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-Val.	0.013	0.014
0.017				
w.s. Elev (ft)	818.11	Reach Len. (ft)	9.84	9.84
9.84				
Crit w.s. (ft)		Flow Area (sq ft)	176.56	135.86
29.68				
E.G. slope (ft/ft)	0.000116	Area (sq ft)	176.56	135.86
29.68				
Q Total (cfs)	826.02	Flow (cfs)	406.24	397.83
21.94				
Top width (ft)	145.03	Top width (ft)	68.51	33.61
42.91				
Vel Total (ft/s)	2.41	Avg. vel. (ft/s)	2.30	2.93
0.74				
Max chl Dpth (ft)	4.58	Hydr. Depth (ft)	2.58	4.04
0.69				
Conv. Total (cfs)	76730.5	Conv. (cfs)	37736.6	36955.5
2038.4				
Length wtd. (ft)	9.84	wetted Per. (ft)	69.86	34.06
42.99				

		CPNPPLocalPMP		
Min Ch El (ft)	813.53	Shear (lb/sq ft)	0.02	0.03
0.00				
Alpha	1.16	Stream Power (lb/ft s)	193.18	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.95	40.10
5.95				
C & E Loss (ft)	0.00	Cum SA (acres)	0.25	0.21
0.16				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 3

INPUT

Description:

Station Elevation Data			num=	13							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	2.01	816	69.3	815	73.3	814	76.59	813.49		
92.06	813.49	95.06	814	103.06	816	110.42	817	148.45	818		
186.89	819	190.52	819	201	819						

Manning's n Values			num=	6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	69.3	.017	76.59	.0066	92.06	.017	103.06	.0129		
201	.0129										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	69.3	103.06		107.52	107.52		.1	.3

Blocked Obstructions			num=	1
Sta L	Sta R	Elev		
190.52	201	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.21	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-val.	0.013	0.013
0.013				
W.S. Elev (ft)	818.12	Reach Len. (ft)	107.52	107.52
107.52				
Crit W.S. (ft)		Flow Area (sq ft)	179.23	138.43
35.55				
E.G. slope (ft/ft)	0.000094	Area (sq ft)	179.23	138.43
35.55				
Q Total (cfs)	796.08	Flow (cfs)	371.39	393.10
31.58				
Top width (ft)	152.88	Top width (ft)	69.30	33.76
49.82				
Vel Total (ft/s)	2.25	Avg. Vel. (ft/s)	2.07	2.84
0.89				
Max Chl Dpth (ft)	4.63	Hydr. Depth (ft)	2.59	4.10
0.71				
Conv. Total (cfs)	82310.8	Conv. (cfs)	38400.2	40644.9
3265.6				

		CPNPPLocalPMP		
Length wtd. (ft)	107.52	Wetted Per. (ft)	70.66	34.21
49.91		Shear (lb/sq ft)	0.01	0.02
Min Ch El (ft)	813.49	Stream Power (lb/ft s)	201.00	0.00
0.00		Cum Volume (acre-ft)	0.91	40.07
Alpha	1.18	Cum SA (acres)	0.24	0.20
0.00				
Frctn Loss (ft)	0.01			
5.94				
C & E Loss (ft)	0.01			
0.15				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 2

INPUT

Description:

Station	Elevation	Data	num=	12							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	0	816.5	52.44	816	81.49	815	85.59	814		
95.23	813	105.23	813	113.5	814	121.62	816	132.2	817		
163.63	818	184.57	818.64								

Manning's n Values	num=	6							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	81.49	.017	95.23	.0066	105.23	.017	121.62	.0129
184.57	.0066								

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	81.49	121.62		55.08	55.08	55.08		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.013	0.011
0.013				
w.S. Elev (ft)	818.13	Reach Len. (ft)	55.08	55.08
55.08				
Crit w.S. (ft)	815.83	Flow Area (sq ft)	175.33	174.69
37.52				
E.G. Slope (ft/ft)	0.000040	Area (sq ft)	175.33	174.69
37.52				
Q Total (cfs)	627.32	Flow (cfs)	211.05	392.45
23.81				
Top width (ft)	168.02	Top width (ft)	81.49	40.13
46.40				
Vel Total (ft/s)	1.62	Avg. vel. (ft/s)	1.20	2.25
0.63				
Max Chl Dpth (ft)	5.13	Hydr. Depth (ft)	2.15	4.35
0.81				
Conv. Total (cfs)	98714.6	Conv. (cfs)	33211.5	61755.8
3747.3				
Length wtd. (ft)	55.08	wetted Per. (ft)	83.14	40.60

			CPNPPLocalPMP		
46.47					
Min Ch El (ft)	813.00	Shear (lb/sq ft)	0.01	0.01	
0.00					
Alpha	1.40	Stream Power (lb/ft s)	184.57	0.00	
0.00					
Frctn Loss (ft)		Cum Volume (acre-ft)	0.47	39.68	
5.85					
C & E Loss (ft)		Cum SA (acres)	0.05	0.11	
0.03					

INLINE STRUCTURE

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 1.5

INPUT

Description:

Distance from Upstream XS = 13

Deck/Roadway width = 8.6

Weir Coefficient = 2.6

Weir Embankment Coordinates num = 5

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	0	816.5	136.43	817	147.01	818	189.28	818.64

Upstream Embankment side slope = 2 horiz. to 1.0 vertical

Downstream Embankment side slope = 2 horiz. to 1.0 vertical

Maximum allowable submergence for weir flow = .98

Elevation at which weir flow begins =

Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Unit 3 UHS
 REACH: U3 UHS Lower RS: 1

INPUT

Description:

Station Elevation Data num= 4

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	815	32.06	805	99.26	805	140.73	818

Manning's n Values num= 1

Sta	n Val
0	.017

Bank Sta: Left Right Coeff Contr. Expan.
 0 140.73 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	815.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-Val.		0.017
w.s. Elev (ft)	815.10	Reach Len. (ft)		
Crit w.s. (ft)	806.36	Flow Area (sq ft)		1004.93

CPNPPLocalPMP

E.G. Slope (ft/ft)	0.000003	Area (sq ft)	1004.93
Q Total (cfs)	627.32	Flow (cfs)	627.32
Top width (ft)	131.48	Top width (ft)	131.48
Vel Total (ft/s)	0.62	Avg. Vel. (ft/s)	0.62
Max Chl Dpth (ft)	10.10	Hydr. Depth (ft)	7.64
Conv. Total (cfs)	335457.7	Conv. (cfs)	335457.7
Length Wtd. (ft)		wetted Per. (ft)	134.65
Min ch El (ft)	805.00	Shear (lb/sq ft)	0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	140.73
Frctn Loss (ft)		Cum Volume (acre-ft)	0.00
C & E Loss (ft)		Cum SA (acres)	

CROSS SECTION

RIVER: Unit 4 North
 REACH: Unit 4 North RS: 6

INPUT

Description:

Station Elevation Data num= 11

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	2.05	819	8.26	818.8	32.26	818.02
32.94	818	43.7	818	97.95	818	109.95	822	112.95	822
122	822								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	8.26	.0066	32.26	.0129	122	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 32.94 109.95 43.08 43.08 43.08 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	112.95	122	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.11	Element	Left OB	Channel
Right OB Vel Head (ft)	0.01	wt. n-Val.	0.007	0.013
w.s. Elev (ft)	820.10	Reach Len. (ft)	43.08	43.08
43.08 Crit w.s. (ft)	818.49	Flow Area (sq ft)	51.63	143.01
E.G. Slope (ft/ft)	0.000011	Area (sq ft)	51.63	143.01

		CPNPPLocalPMP		
Q Total (cfs)	135.00	Flow (cfs)	47.85	87.15
Top width (ft)	104.24	Top width (ft)	32.94	71.30
Vel Total (ft/s)	0.69	Avg. Vel. (ft/s)	0.93	0.61
Max Chl Dpth (ft)	2.10	Hydr. Depth (ft)	1.57	2.01
Conv. Total (cfs)	40454.9	Conv. (cfs)	14339.2	26115.8
Length Wtd. (ft)	43.08	wetted Per. (ft)	34.05	71.65
Min ch El (ft)	818.00	Shear (lb/sq ft)	0.00	0.00
Alpha	1.13	Stream Power (lb/ft s)	122.00	0.00
0.00		Cum Volume (acre-ft)	0.47	38.93
Frctn Loss (ft)	0.00	Cum SA (acres)	0.37	0.43
5.85				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: Unit 4 North
 REACH: Unit 4 North RS: 5

INPUT

Description:

Station	Elevation	Data	num=	14							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819.12	0	819.12	4.24	819.12	8.24	819.05	10.94	819		
32.24	818.24	38.9	818	48.51	817	49.07	816.95	94.37	816.95		
94.51	817	109.95	822	112.95	822	122	822				

Manning's n	Values	num=	5						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	8.24	.0066	32.24	.0129	122	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	38.9	109.95		58.25	58.25	58.25		.1	.3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	112.95	122	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.	0.008	0.013
w.s. Elev (ft)	820.10	Reach Len. (ft)	58.25	58.25
58.25				
Crit w.s. (ft)		Flow Area (sq ft)	55.84	184.73
E.G. Slope (ft/ft)	0.000006	Area (sq ft)	55.84	184.73
Q Total (cfs)	135.00	Flow (cfs)	31.94	103.06
Top width (ft)	104.08	Top width (ft)	38.90	65.18

CPNPPLocalPMP

Vel Total (ft/s)	0.56	Avg. Vel. (ft/s)	0.57	0.56
Max Chl Dpth (ft)	3.15	Hydr. Depth (ft)	1.44	2.83
Conv. Total (cfs)	55505.3	Conv. (cfs)	13130.7	42374.6
Length Wtd. (ft)	58.25	wetted Per. (ft)	39.90	65.74
Min Ch El (ft)	816.95	Shear (lb/sq ft)	0.00	0.00
Alpha	1.00	Stream Power (lb/ft s)	122.00	0.00
0.00		Cum Volume (acre-ft)	0.42	38.76
Frctn Loss (ft)	0.00	Cum SA (acres)	0.33	0.37
5.85				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: Unit 4 North
 REACH: Unit 4 North RS: 4

INPUT

Description:

Station Elevation Data	num=	14							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819.3 0 819.3 4.23 819.3 8.23 819.23 20.37 819									
32.23 818.36 38.89 818 48.52 817 55.6 816.41 92.74 816.41									
94.52 817 109.95 822 112.95 822 122 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 8.23 .0066 32.23 .0129 122 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
38.89 109.95	100 100 100		.1	.3

Blocked Obstructions	num=	2				
Sta L Sta R Elev Sta L Sta R Elev						
-10 0 825 112.95 122 825						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.	0.008	0.013
w.s. Elev (ft)	820.10	Reach Len. (ft)	100.00	100.00
100.00				
Crit w.s. (ft)		Flow Area (sq ft)	48.33	207.02
E.G. Slope (ft/ft)	0.000005	Area (sq ft)	48.33	207.02
Q Total (cfs)	135.00	Flow (cfs)	22.50	112.50
Top width (ft)	104.09	Top width (ft)	38.89	65.20
Vel Total (ft/s)	0.53	Avg. Vel. (ft/s)	0.47	0.54

Max Chl Dpth (ft)	3.69	CPNPPLocalPMP Hydr. Depth (ft)	1.24	3.18
Conv. Total (cfs)	61402.5	Conv. (cfs)	10232.6	51169.9
Length Wtd. (ft)	100.00	wetted Per. (ft)	39.72	65.86
Min Ch El (ft)	816.41	Shear (lb/sq ft)	0.00	0.00
Alpha 0.00	1.01	Stream Power (lb/ft s)	122.00	0.00
Frctn Loss (ft) 5.85	0.00	Cum Volume (acre-ft)	0.35	38.50
C & E Loss (ft) 0.02	0.00	Cum SA (acres)	0.28	0.28

CROSS SECTION

RIVER: Unit 4 North
 REACH: Unit 4 North RS: 3

INPUT

Description:

Station Elevation Data	num=	14							
Sta Elev Sta Elev Sta Elev									
-10 819.3 0 819.3 4.2 819.3									
32.2 818.36 38.86 818 60.52 816									
91.88 816 109.95 822 112.95 822									
8.2 819.23 20.36 819									
66.8 815.52 89.94 815.52									
122 822									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 8.2 .0066									
32.2 .0129 122 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
38.86 109.95	70.85 70.85 70.85	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825 112.95 122 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.	0.008	0.013
w.s. Elev (ft)	820.10	Reach Len. (ft)	70.85	70.85
70.85				
Crit w.s. (ft)		Flow Area (sq ft)	48.30	234.15
E.G. Slope (ft/ft)	0.000003	Area (sq ft)	48.30	234.15
Q Total (cfs)	135.00	Flow (cfs)	18.96	116.04
Top width (ft)	104.23	Top width (ft)	38.86	65.37
Vel Total (ft/s)	0.48	Avg. vel. (ft/s)	0.39	0.50
Max Chl Dpth (ft)	4.58	Hydr. Depth (ft)	1.24	3.58
Conv. Total (cfs)	72841.2	Conv. (cfs)	10229.0	62612.2

CPNPPLocalPMP

Length wtd. (ft)	70.85	wetted Per. (ft)	39.69	66.20
Min Ch El (ft)	815.52	Shear (lb/sq ft)	0.00	0.00
Alpha	1.02	Stream Power (lb/ft s)	122.00	0.00
0.00		Cum Volume (acre-ft)	0.24	38.00
Frctn Loss (ft)	0.00	Cum SA (acres)	0.19	0.13
5.85				
C & E Loss (ft)	0.00			
0.02				

CROSS SECTION

RIVER: Unit 4 North
 REACH: Unit 4 North RS: 2

INPUT

Description:

Station Elevation Data	num=	15								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-10 819.3 0 819.3 4.17 819.3 8.17 819.23 20.36 819										
51.59 818.32 66.3 818 80.13 816 83.07 815 93.08 815										
96.13 816 109.51 820 115.61 821 117.66 821.04 130.37 821.36										

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 8.17 .0066 51.59 .0129 117.66 .0066									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff	Contr.	Expan.
66.3 115.61	58 58 58		.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
-10 0 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.	0.008	0.013
w.s. Elev (ft)	820.10	Reach Len. (ft)	58.00	58.00
58.00				
Crit w.s. (ft)	816.53	Flow Area (sq ft)	92.12	149.56
E.G. Slope (ft/ft)	0.000005	Area (sq ft)	92.12	149.56
Q Total (cfs)	135.00	Flow (cfs)	47.83	87.17
Top width (ft)	110.11	Top width (ft)	66.30	43.81
Vel Total (ft/s)	0.56	Avg. Vel. (ft/s)	0.52	0.58
Max Chl Dpth (ft)	5.10	Hydr. Depth (ft)	1.39	3.41
Conv. Total (cfs)	59526.0	Conv. (cfs)	21089.3	38436.7
Length wtd. (ft)	58.00	wetted Per. (ft)	67.11	44.88

	815.00	CPNPPLocalPMP		
Min Ch El (ft)	815.00	Shear (lb/sq ft)	0.00	0.00
Alpha	1.01	Stream Power (lb/ft s)	130.37	0.00
0.00		Cum Volume (acre-ft)	0.12	37.68
Frctn Loss (ft)		Cum SA (acres)	0.10	0.04
5.85				
C & E Loss (ft)				
0.02				

INLINE STRUCTURE

RIVER: Unit 4 North
 REACH: Unit 4 North RS: 1.5

INPUT

Description:

Distance from Upstream XS = 14.88

Deck/Roadway width = 24.57

Weir Coefficient = 2.6

Weir Embankment Coordinates num = 6

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	819.3	4.16	819.3	20.36	819	50.13	819	102.73	820
129.23	820.5								

Upstream Embankment side slope = 2 horiz. to 1.0 vertical

Downstream Embankment side slope = 2 horiz. to 1.0 vertical

Maximum allowable submergence for weir flow = .98

Elevation at which weir flow begins =

Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Unit 4 North
 REACH: Unit 4 North RS: 1

INPUT

Description:

Station Elevation Data num= 18

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819.3	0	819.3	4.15	819.3	8.15	819.23	20.36	819
42.03	818.39	55.62	818	90.79	817	95.12	815	96.64	814.3
103.88	814.3	105.29	815	109.33	817	128.83	818	135.87	820
141.87	820.17	153.87	820.5	248.64	822.9				

Manning's n Values num= 9

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	8.15	.0066	42.03	.0129	90.79	.017
96.64	.0129	103.88	.017	109.33	.0129	141.87	.0066		

Bank Sta: Left Right Coeff Contr. Expan.

90.79 109.33 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
-10	0	825

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	820.07	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.	0.011	0.016
0.013				
W.S. Elev (ft)	820.07	Reach Len. (ft)		
Crit w.s. (ft)	816.13	Flow Area (sq ft)	163.74	91.72
57.73				
E.G. slope (ft/ft)	0.000004	Area (sq ft)	163.74	91.72
57.73				
Q Total (cfs)	135.00	Flow (cfs)	67.71	47.10
20.20				
Top width (ft)	138.34	Top width (ft)	90.79	18.54
29.01				
Vel Total (ft/s)	0.43	Avg. Vel. (ft/s)	0.41	0.51
0.35				
Max Chl Dpth (ft)	5.77	Hydr. Depth (ft)	1.80	4.95
1.99				
Conv. Total (cfs)	69843.9	Conv. (cfs)	35029.3	24366.0
10448.6				
Length wtd. (ft)		wetted Per. (ft)	91.59	19.77
29.32				
Min Ch El (ft)	814.30	Shear (lb/sq ft)	0.00	0.00
0.00				
Alpha	1.06	Stream Power (lb/ft s)	248.64	0.00
0.00				
Frctn Loss (ft)		Cum Volume (acre-ft)		
C & E Loss (ft)		Cum SA (acres)		

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 10

INPUT

Description:

Station Elevation Data		num= 11									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	.51	819	27.51	810	28.06	809.83		
48.06	809.83	48.57	810	81.57	821	92.06	822	131.54	822.9		
143.54	822.9										

Manning's n Values		num= 6									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.017	0	.017	28.06	.0066	48.06	.017	81.57	.0129		
131.54	.0066										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 .51 81.57 54.68 54.68 54.68 .1 .3

Blocked Obstructions		num= 2							
Sta L	Sta R	Elev	Sta L	Sta R	Elev				
-10	0	825	92.06	143.54	825				

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	819.13	Element	Left OB	Channel
Right OB Vel Head (ft)	0.22	wt. n-Val.		0.015
W.S. Elev (ft)	818.92	Reach Len. (ft)	54.68	54.68
54.68 Crit w.s. (ft)	814.44	Flow Area (sq ft)		429.75
E.G. Slope (ft/ft)	0.000140	Area (sq ft)		429.75
Q Total (cfs)	1607.00	Flow (cfs)		1607.00
Top width (ft)	74.56	Top width (ft)		74.56
Vel Total (ft/s)	3.74	Avg. Vel. (ft/s)		3.74
Max Chl Dpth (ft)	9.09	Hydr. Depth (ft)		5.76
Conv. Total (cfs)	136057.9	Conv. (cfs)		136057.9
Length wtd. (ft)	54.68	wetted Per. (ft)		77.50
Min Ch El (ft)	809.83	Shear (lb/sq ft)		0.05
Alpha 0.00	1.00	Stream Power (lb/ft s)	143.54	0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.08	4.67
2.23 C & E Loss (ft)	0.00	Cum SA (acres)	0.14	0.59
0.64				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
REACH: U4 UHS Upper RS: 9

INPUT

Description:

Station	Elevation	Data	num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	818	0	818	3.12	818	27.12	810	28.08	809.69		
48.08	809.69	48.98	810	81.98	821	92.06	821	103	821		

Station	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	3.12	.017	28.08	.0066	48.08	.017
81.98	.0129	103	.0129						

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
3.12 81.98 9.23 9.23 9.23 .1 .3

Blocked Obstructions	num=	2			
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	92.06	103	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.12	Element	Left OB	Channel
----------------	--------	---------	---------	---------

		CPNPPLocalPMP		
Right OB				
Vel Head (ft)	0.21	wt. n-val.	0.013	0.015
W.S. Elev (ft)	818.92	Reach Len. (ft)	9.23	9.23
9.23				
Crit w.s. (ft)		Flow Area (sq ft)	2.86	438.60
E.G. slope (ft/ft)	0.000124	Area (sq ft)	2.86	438.60
Q Total (cfs)	1607.00	Flow (cfs)	2.91	1604.09
Top width (ft)	75.73	Top width (ft)	3.12	72.61
Vel Total (ft/s)	3.64	Avg. Vel. (ft/s)	1.02	3.66
Max chl Dpth (ft)	9.23	Hydr. Depth (ft)	0.92	6.04
Conv. Total (cfs)	144192.7	Conv. (cfs)	261.4	143931.3
Length wtd. (ft)	9.23	wetted Per. (ft)	4.04	75.45
Min ch El (ft)	809.69	Shear (lb/sq ft)	0.01	0.05
Alpha	1.01	Stream Power (lb/ft s)	103.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.07	4.12
2.23				
C & E Loss (ft)	0.00	Cum SA (acres)	0.13	0.50
0.64				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 8.875*

INPUT

Description:

Station		Elevation Data		num= 17		Sta		Elev		Sta		Elev	
-10	818.12	-5.16	818.12	-3.71	818.12	1.8	818.05	5.48	818				
29.11	810.12	29.53	809.98	30.49	809.67	50.49	809.67	51.34	809.96				
53.38	810.64	82.22	820.25	98.42	820.34	105.34	820.38	112.67	820.5				
113.23	820.5	116	820.5										

Manning's n Values		num= 10		Sta		n Val		Sta		n Val	
-10	.0129	-5.16	.0129	1.8	.0132	5.48	.017	29.77	.0069		
36.97	.01	49.23	.0163	61.77	.0156	82.22	.0129	116	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	5.48	82.22		9.23	9.23		.1	.3

Blocked Obstructions		num= 2		Sta		Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev		
-10	0	825105.1662	116	824.625			

CROSS SECTION OUTPUT Profile #PF 1

		CPNPPLocalPMP		
E.G. Elev (ft)	819.12	Element	Left OB	Channel
Right OB Vel Head (ft)	0.20	wt. n-Val.	0.013	0.015
W.S. Elev (ft)	818.92	Reach Len. (ft)	9.23	9.23
9.23 Crit w.s. (ft)		Flow Area (sq ft)	4.82	440.22
E.G. Slope (ft/ft)	0.000123	Area (sq ft)	4.82	440.22
Q Total (cfs)	1607.00	Flow (cfs)	5.17	1601.84
Top width (ft)	78.22	Top width (ft)	5.48	72.74
Vel Total (ft/s)	3.61	Avg. Vel. (ft/s)	1.07	3.64
Max Chl Dpth (ft)	9.25	Hydr. Depth (ft)	0.88	6.05
Conv. Total (cfs)	144801.2	Conv. (cfs)	465.4	144335.7
Length wtd. (ft)	9.23	wetted Per. (ft)	6.32	75.59
Min Ch El (ft)	809.67	Shear (lb/sq ft)	0.01	0.04
Alpha 0.00	1.01	Stream Power (lb/ft s)	116.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.07	4.03
2.23 C & E Loss (ft)	0.00	Cum SA (acres)	0.13	0.49
0.64				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 8.75*

INPUT

Description:

Station	Elevation	Data	num=	17							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	818.25	-4.42	818.25	-2.75	818.25	3.59	818.1	7.84	818		
31.52	810.11	31.94	809.96	32.91	809.65	52.91	809.65	53.69	809.92		
55.59	810.55	82.46	819.5	104.78	819.68	114.31	819.75	124.42	820		
125.19	820	129	820								

Manning's n Values		num=	10						
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-4.42	.0129	3.59	.0136	7.84	.017	31.45	.0072
38.46	.0095	50.38	.0157	62.57	.0158	82.46	.0129	129	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 7.84 82.46 9.23 9.23 9.23 .1 .3

Blocked Obstructions		num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825118.2725	129	824.25	

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	819.12	Element	Left OB	Channel
Right OB Vel Head (ft)	0.20	wt. n-val.	0.013	0.015
W.S. Elev (ft)	818.92	Reach Len. (ft)	9.23	9.23
9.23 Crit W.S. (ft)		Flow Area (sq ft)	6.46	441.71
E.G. Slope (ft/ft)	0.000121	Area (sq ft)	6.46	441.71
Q Total (cfs)	1607.00	Flow (cfs)	6.63	1600.37
Top Width (ft)	80.71	Top Width (ft)	7.84	72.87
Vel Total (ft/s)	3.59	Avg. Vel. (ft/s)	1.03	3.62
Max Chl Dpth (ft)	9.27	Hydr. Depth (ft)	0.82	6.06
Conv. Total (cfs)	146333.7	Conv. (cfs)	604.0	145729.7
Length wtd. (ft)	9.23	wetted Per. (ft)	8.57	75.73
Min Ch El (ft)	809.65	Shear (lb/sq ft)	0.01	0.04
Alpha 0.00	1.02	Stream Power (lb/ft s)	129.00	0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.07	3.94
2.23 C & E Loss (ft)	0.00	Cum SA (acres)	0.13	0.47
0.64				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 8.625*

INPUT

Description:

Station Elevation Data num= 17

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	818.38	-3.69	818.38	-1.79	818.38	5.39	818.15	10.19	818
33.93	810.09	34.35	809.95	35.32	809.63	55.32	809.63	56.05	809.88
57.81	810.45	82.7	818.75	111.13	819.01	123.29	819.12	136.16	819.5
137.14	819.5	142	819.5						

Manning's n Values num= 10

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-3.69	.0129	5.39	.0139	10.19	.017	33.14	.0075
39.95	.009	51.53	.015	63.37	.016	82.7	.0129	142	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 10.19 82.7 9.23 9.23 9.23 .1 .3

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825131.3788	142	823.875	

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	819.12	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.20	wt. n-val.	0.013	0.015
0.013				
W.S. Elev (ft)	818.92	Reach Len. (ft)	9.23	9.23
9.23				
Crit w.s. (ft)		Flow Area (sq ft)	7.71	443.52
1.52				
E.G. slope (ft/ft)	0.000117	Area (sq ft)	7.71	443.52
1.52				
Q Total (cfs)	1607.00	Flow (cfs)	7.45	1599.19
0.36				
Top width (ft)	100.94	Top width (ft)	10.19	72.51
18.24				
Vel Total (ft/s)	3.55	Avg. vel. (ft/s)	0.97	3.61
0.24				
Max chl Dpth (ft)	9.29	Hydr. Depth (ft)	0.76	6.12
0.08				
Conv. Total (cfs)	148722.3	Conv. (cfs)	689.7	147999.2
33.4				
Length wtd. (ft)	9.23	wetted Per. (ft)	10.79	75.35
18.24				
Min ch El (ft)	809.63	Shear (lb/sq ft)	0.01	0.04
0.00				
Alpha	1.03	Stream Power (lb/ft s)	142.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.07	3.84
2.23				
C & E Loss (ft)	0.00	Cum SA (acres)	0.13	0.46
0.64				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 8.5*

INPUT

Description:

Station Elevation Data	num=	17							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 818.5 -2.95 818.5 -.83 818.5 7.19 818.2 12.55 818									
36.34 810.07 36.77 809.93 37.74 809.61 57.74 809.61 58.4 809.83									
60.03 810.36 82.93 818 117.49 818.35 132.26 818.5 147.91 819									
149.09 819 155 819									

Manning's n Values	num=	10							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -2.95 .0129 7.19 .0142 12.55 .017 34.83 .0078									
41.44 .0085 52.68 .0144 64.18 .0162 82.93 .0129 155 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.								
12.55 82.93 9.23 9.23 9.23 .1 .3								

Blocked Obstructions	num=	2		
Sta L Sta R Elev Sta L Sta R Elev				
-10 0 825 144.485 155 823.5				

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.19	wt. n-Val.	0.014	0.014
0.013				
W.S. Elev (ft)	818.92	Reach Len. (ft)	9.23	9.23
9.23				
Crit w.s. (ft)		Flow Area (sq ft)	8.65	444.40
36.04				
E.G. Slope (ft/ft)	0.000106	Area (sq ft)	8.65	444.40
36.04				
Q Total (cfs)	1607.00	Flow (cfs)	7.57	1569.52
29.91				
Top Width (ft)	144.49	Top width (ft)	12.55	70.38
61.56				
Vel Total (ft/s)	3.29	Avg. Vel. (ft/s)	0.87	3.53
0.83				
Max Chl Dpth (ft)	9.31	Hydr. Depth (ft)	0.69	6.31
0.59				
Conv. Total (cfs)	156040.5	Conv. (cfs)	735.1	152401.1
2904.3				
Length wtd. (ft)	9.23	wetted Per. (ft)	13.01	73.10
61.60				
Min Ch El (ft)	809.61	Shear (lb/sq ft)	0.00	0.04
0.00				
Alpha	1.13	Stream Power (lb/ft s)	155.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.07	3.75
2.22				
C & E Loss (ft)	0.01	Cum SA (acres)	0.13	0.44
0.63				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 8.375*

INPUT

Description:

Station Elevation Data	num=	17							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 818.62 -2.21 818.62 .13 818.62 8.98 818.25 14.91 818									
38.75 810.05 39.18 809.91 40.15 809.59 60.15 809.59 60.76 809.79									
62.24 810.27 83.17 817.25 123.85 817.69 141.23 817.88 159.65 818.5									
161.05 818.5 168 818.5									

Manning's n Values	num=	10							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 -2.21 .0129 8.98 .0146 14.91 .017 36.51 .0081									
42.93 .008 53.83 .0137 64.98 .0164 83.17 .0129 168 .0129									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.								
14.91 83.17 9.23 9.23 9.23 .1 .3								

Blocked Obstructions	num=	2		
Sta L Sta R Elev Sta L Sta R Elev				
-10 0 825157.5912 168 823.125				

CPNPPLocalPMP

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.10	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-val.	0.014	0.014
0.013				
W.S. Elev (ft)	818.94	Reach Len. (ft)	9.23	9.23
9.23				
Crit w.s. (ft)		Flow Area (sq ft)	9.38	444.37
92.91				
E.G. slope (ft/ft)	0.000090	Area (sq ft)	9.38	444.37
92.91				
Q Total (cfs)	1607.00	Flow (cfs)	7.14	1482.92
116.94				
Top width (ft)	157.59	Top width (ft)	14.91	68.26
74.42				
Vel Total (ft/s)	2.94	Avg. vel. (ft/s)	0.76	3.34
1.26				
Max Chl Dpth (ft)	9.35	Hydr. Depth (ft)	0.63	6.51
1.25				
Conv. Total (cfs)	169712.8	Conv. (cfs)	754.5	156608.7
12349.5				
Length wtd. (ft)	9.23	wetted Per. (ft)	15.25	70.87
74.95				
Min Ch El (ft)	809.59	Shear (lb/sq ft)	0.00	0.04
0.01				
Alpha	1.20	Stream Power (lb/ft s)	168.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.07	3.65
2.21				
C & E Loss (ft)	0.01	Cum SA (acres)	0.12	0.43
0.62				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 8.25*

INPUT

Description:

Station Elevation Data				num=	17				
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	818.75	-1.47	818.75	1.08	818.75	10.78	818.3	17.26	818
41.16	810.04	41.59	809.89	42.56	809.57	62.56	809.57	63.12	809.75
64.46	810.18	83.41	816.5	130.21	817.03	150.2	817.25	171.39	818
173	818	181	818						

Manning's n Values				num=	10				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-1.47	.0129	10.78	.0149	17.26	.017	38.2	.0084
44.41	.0076	54.98	.0131	65.78	.0166	83.41	.0129	181	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	17.26	83.41		9.23	9.23	9.23	.1	.3	

Blocked Obstructions			num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	

-10 0 825170.6975 CPNPPLocalPMP
181 822.75

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.09	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.13	wt. n-Val.	0.014	0.014
0.013				
W.S. Elev (ft)	818.97	Reach Len. (ft)	9.23	9.23
9.23				
Crit w.s. (ft)		Flow Area (sq ft)	9.80	442.84
167.25				
E.G. slope (ft/ft)	0.000072	Area (sq ft)	9.80	442.84
167.25				
Q Total (cfs)	1607.00	Flow (cfs)	6.32	1351.22
249.46				
Top width (ft)	170.70	Top width (ft)	17.26	66.15
87.29				
Vel Total (ft/s)	2.59	Avg. vel. (ft/s)	0.64	3.05
1.49				
Max Chl Dpth (ft)	9.40	Hydr. Depth (ft)	0.57	6.69
1.92				
Conv. Total (cfs)	189984.8	Conv. (cfs)	746.9	159745.6
29492.4				
Length wtd. (ft)	9.23	wetted Per. (ft)	17.49	68.64
88.30				
Min Ch El (ft)	809.57	Shear (lb/sq ft)	0.00	0.03
0.01				
Alpha	1.22	Stream Power (lb/ft s)	181.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.06	3.56
2.18				
C & E Loss (ft)	0.01	Cum SA (acres)	0.12	0.41
0.60				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
REACH: U4 UHS Upper RS: 8.125*

INPUT

Description:

Station	Elevation	Data	num=	17						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	818.88	-.74	818.88	2.04	818.88	12.58	818.35	19.62	818	
43.57	810.02	44	809.87	44.98	809.55	64.98	809.55	65.47	809.71	
66.67	810.09	83.65	815.75	136.57	816.36	159.18	816.62	183.14	817.5	
184.96	817.5	194	817.5							

Manning's n Values	num=	10							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.74	.0129	12.58	.0152	19.62	.017	39.89	.0087
45.9	.0071	56.13	.0124	66.59	.0168	83.65	.0129	194	.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
19.62	83.65	9.23	9.23	9.23	.1	.3	
Blocked Obstructions		num=	2				

Sta L	Sta R	Elev	Sta L	CPNPPLocalPMP
-10	0	825183.8038	194	822.375

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.08	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-Val.	0.014	0.014
0.013				
W.S. Elev (ft)	818.99	Reach Len. (ft)	9.23	9.23
9.23				
Crit w.s. (ft)		Flow Area (sq ft)	9.87	439.49
258.88				
E.G. Slope (ft/ft)	0.000054	Area (sq ft)	9.87	439.49
258.88				
Q Total (cfs)	1607.00	Flow (cfs)	5.25	1192.80
408.95				
Top width (ft)	183.80	Top width (ft)	19.62	64.03
100.15				
Vel Total (ft/s)	2.27	Avg. Vel. (ft/s)	0.53	2.71
1.58				
Max Chl Dpth (ft)	9.44	Hydr. Depth (ft)	0.50	6.86
2.58				
Conv. Total (cfs)	218505.5	Conv. (cfs)	713.9	162186.6
55605.0				
Length wtd. (ft)	9.23	wetted Per. (ft)	19.75	66.40
101.66				
Min Ch El (ft)	809.55	Shear (lb/sq ft)	0.00	0.02
0.01				
Alpha	1.19	Stream Power (lb/ft s)	194.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.06	3.47
2.14				
C & E Loss (ft)	0.01	Cum SA (acres)	0.12	0.40
0.58				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 8

INPUT

Description:

Station Elevation Data	num=	13								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-10 819 0 819 3 819 21.98 818 45.98 810										
47.39 809.53 67.39 809.53 68.89 810 83.89 815 168.15 816										
194.88 817 196.91 817 207 817										

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 21.98 .017 47.39 .0066 67.39 .017									
83.89 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
21.98 83.89	186.33 186.33 186.33	.1	.3
Blocked Obstructions	num=	2	

Sta L	Sta R	Elev	Sta L	CPNPPLocalPMP	Sta R	Elev
-10	0	825	196.91	207	822	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.07	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.07	wt. n-Val.	0.013	0.014
0.013				
W.S. Elev (ft)	819.01	Reach Len. (ft)	186.33	186.33
186.33				
Crit w.s. (ft)		Flow Area (sq ft)	9.61	434.11
366.41				
E.G. Slope (ft/ft)	0.000040	Area (sq ft)	9.61	434.11
366.41				
Q Total (cfs)	1607.00	Flow (cfs)	4.02	1025.97
577.01				
Top width (ft)	196.91	Top width (ft)	21.98	61.91
113.02				
Vel Total (ft/s)	1.98	Avg. Vel. (ft/s)	0.42	2.36
1.57				
Max Chl Dpth (ft)	9.48	Hydr. Depth (ft)	0.44	7.01
3.24				
Conv. Total (cfs)	254444.9	Conv. (cfs)	637.0	162447.6
91360.3				
Length wtd. (ft)	186.33	wetted Per. (ft)	22.01	64.17
115.05				
Min Ch El (ft)	809.53	Shear (lb/sq ft)	0.00	0.02
0.01				
Alpha	1.13	Stream Power (lb/ft s)	207.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.06	3.37
2.07				
C & E Loss (ft)	0.00	Cum SA (acres)	0.11	0.38
0.56				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 7

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 0 819 3 819 19.8 818 43.8 810									
46.67 809.06 66.67 809.06 69.54 810 84.54 815 152.65 816									
160.21 817 162.25 817 172 817									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 19.8 .017 46.67 .0066 66.67 .017									
84.54 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
19.8 84.54	76 76 76	.1	.3
Blocked Obstructions	num=	2	

Sta L	Sta R	Elev	Sta L	CPNPPLocalPMP	Sta R	Elev
-10	0	825	162.25		172	822

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.07	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.	0.013	0.014
0.013				
w.s. Elev (ft)	818.98	Reach Len. (ft)	76.00	76.00
76.00				
Crit w.s. (ft)		Flow Area (sq ft)	8.13	469.61
260.11				
E.G. Slope (ft/ft)	0.000043	Area (sq ft)	8.13	469.61
260.11				
Q Total (cfs)	1607.00	Flow (cfs)	3.83	1170.15
433.02				
Top width (ft)	158.98	Top width (ft)	16.53	64.74
77.71				
Vel Total (ft/s)	2.18	Avg. vel. (ft/s)	0.47	2.49
1.66				
Max Chl Dpth (ft)	9.92	Hydr. Depth (ft)	0.49	7.25
3.35				
Conv. Total (cfs)	244503.4	Conv. (cfs)	582.9	178036.5
65884.0				
Length wtd. (ft)	76.00	wetted Per. (ft)	16.56	67.15
79.77				
Min Ch El (ft)	809.06	Shear (lb/sq ft)	0.00	0.02
0.01				
Alpha	1.11	Stream Power (lb/ft s)	172.00	0.00
0.00				
Frctn Loss (ft)	0.00	cum volume (acre-ft)	0.02	1.44
0.73				
C & E Loss (ft)	0.02	Cum SA (acres)	0.03	0.11
0.15				

Note: Manning's n values were composited to a single value in the main channel.

LATERAL STRUCTURE

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 6.9

INPUT

Description:
 Lateral structure position = Right overbank
 Distance from Upstream XS =
 Deck/Roadway width = 2
 Weir Coefficient = 2.6
 Weir Flow Reference = Water Surface
 Weir Embankment Coordinates num = 2

Sta	Elev	Sta	Elev
0	817	76	817

Weir crest shape = Broad Crested

LATERAL STRUCTURE OUTPUT Profile #PF 1 Lat Struct

		CPNPPLocalPMP	
E.G. US. (ft)	819.07	Weir Sta US (ft)	0.00
W.S. US. (ft)	818.98	Weir Sta DS (ft)	76.00
E.G. DS (ft)	819.05	Min El Weir Flow (ft)	817.00
W.S. DS (ft)	819.02	Wr Top wdth (ft)	76.00
Q US (cfs)	1607.00	Weir Max Depth (ft)	2.02
Q Leaving Total (cfs)	559.66	Weir Avg Depth (ft)	2.00
Q DS (cfs)	1040.75	Weir Flow Area (sq ft)	152.14
Perc Q Leaving	35.24	Weir Coef (ft ^{1/2})	2.600
Q Weir (cfs)	559.66	Weir Submerg	0.00
Q Gates (cfs)		Q Gate Group (cfs)	
Q Culv (cfs)	0.00	Gate Open Ht (ft)	
Q Lat RC (cfs)		Gate #Open	
		Gate Area (sq ft)	
Q Breach (cfs)		Gate Submerg	
Breach Avg Velocity (ft/s)		Gate Invert (ft)	
Breach Flow Area (sq ft)		Gate Weir Coef	

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Upper RS: 6

INPUT

Description:

Station Elevation Data	num=	10								
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev										
-10 819 0 819 18.91 818 45.91 809 46.38 808.87										
66.38 808.87 66.79 809 84.8 815 175.7 816 177.73 816										

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
-10 .0129 0 .0129 18.91 .017 46.38 .0066 66.38 .017									
84.8 .0129									

Bank Sta: Left Right Coeff Contr. Expan.
 18.91 84.8 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 -10 0 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.05	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.	0.013	0.014
0.013				
W.S. Elev (ft)	819.02	Reach Len. (ft)	58.25	58.25
58.25				
Crit w.s. (ft)		Flow Area (sq ft)	9.83	487.33
326.08				
E.G. slope (ft/ft)	0.000015	Area (sq ft)	9.83	487.33
326.08				
Q Total (cfs)	1040.75	Flow (cfs)	2.79	713.25
324.71				
Top width (ft)	177.73	Top width (ft)	18.91	65.89
92.93				
Vel Total (ft/s)	1.26	Avg. vel. (ft/s)	0.28	1.46
1.00				
Max Chl Dpth (ft)	10.15	Hydr. Depth (ft)	0.52	7.40
3.51				

		CPNPPLocalPMP		
Conv. Total (cfs)	272114.5	Conv. (cfs)	730.7	186486.3
84897.5				
Length wtd. (ft)	58.25	wetted Per. (ft)	18.96	68.36
95.96				
Min Ch El (ft)	808.87	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.11	Stream Power (lb/ft s)	177.73	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.01	0.61
0.22				
C & E Loss (ft)	0.01	Cum SA (acres)		

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 107

INPUT

Description:

Station Elevation Data		num=								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	819	0	819	13.72	819	43.72	819	58.25	819	
68	819									

Manning's n Values		num=				
Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	0	.0129	68	.0129	

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	0	58.25		9.92	9.92	.1	.3

Blocked Obstructions		num=				
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825	58.25	68	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.83	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.28	wt. n-val.		0.013
w.s. Elev (ft)	819.55	Reach Len. (ft)	9.92	9.92
9.92				
Crit w.s. (ft)	819.55	Flow Area (sq ft)		31.94
E.G. Slope (ft/ft)	0.003077	Area (sq ft)		31.94
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	58.25	Top width (ft)		58.25
Vel Total (ft/s)	4.23	Avg. vel. (ft/s)		4.23
Max Chl Dpth (ft)	0.55	Hydr. Depth (ft)		0.55

		CPNPPLocalPMP	
Conv. Total (cfs)	2433.9	Conv. (cfs)	2433.9
Length Wtd. (ft)	9.92	wetted Per. (ft)	59.35
Min Ch El (ft)	819.00	Shear (lb/sq ft)	0.10
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00			0.00
Frctn Loss (ft)	0.03	Cum Volume (acre-ft)	0.53
C & E Loss (ft)	0.00	Cum SA (acres)	0.15

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.
 Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.916*

INPUT

Description:

Station Elevation Data		num=	8								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	.79	818.92	14.13	818.92	43.31	818.92		
57.44	818.92	58.25	819	68	819						

Manning's n Values		num=	3		
Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	68	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	0	58.25		9.92	9.92	9.92		.1	.3

Blocked Obstructions		num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.77	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.38	wt. n-Val.		0.013
w.s. Elev (ft)	819.39	Reach Len. (ft)	9.92	9.92
9.92				
Crit w.s. (ft)	819.47	Flow Area (sq ft)		27.19
E.G. Slope (ft/ft)	0.005221	Area (sq ft)		27.19
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	58.25	Top width (ft)		58.25

CPNPPLocalPMP

Vel Total (ft/s)	4.96	Avg. Vel. (ft/s)	4.96
Max Chl Dpth (ft)	0.47	Hydr. Depth (ft)	0.47
Conv. Total (cfs)	1868.4	Conv. (cfs)	1868.4
Length Wtd. (ft)	9.92	wetted Per. (ft)	59.03
Min Ch El (ft)	818.92	Shear (lb/sq ft)	0.15
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00
Frctn Loss (ft)	0.04	Cum Volume (acre-ft)	0.52
C & E Loss (ft)	0.01	Cum SA (acres)	0.14

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.833*

INPUT

Description:

Station Elevation Data num= 8

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	1.58	818.84	14.55	818.84	42.9	818.84
56.63	818.84	58.25	819	68	819				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

0	58.25	9.92	9.92	9.92	.1	.3
---	-------	------	------	------	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.71	Element	Left OB	Channel
Right OB Vel Head (ft)	0.41	wt. n-val.		0.013
w.s. Elev (ft)	819.30	Reach Len. (ft)	9.92	9.92
9.92 Crit w.s. (ft)	819.39	Flow Area (sq ft)		26.31
E.G. Slope (ft/ft)	0.005809	Area (sq ft)		26.31
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	58.25	Top width (ft)		58.25
Vel Total (ft/s)	5.13	Avg. Vel. (ft/s)		5.13
Max Chl Dpth (ft)	0.46	Hydr. Depth (ft)		0.45

CPNPPLocalPMP

Conv. Total (cfs)	1771.3	Conv. (cfs)	1771.3
Length wtd. (ft)	9.92	wetted Per. (ft)	58.86
Min Ch El (ft)	818.84	Shear (lb/sq ft)	0.16
Alpha	1.00	Stream Power (lb/ft s)	68.00
0.00			
Frctn Loss (ft)	0.05	Cum Volume (acre-ft)	0.51
C & E Loss (ft)	0.00	Cum SA (acres)	0.13

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.75*

INPUT

Description:

Station Elevation Data num= 8

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	2.37	818.76	14.96	818.76	42.49	818.76
55.83	818.76	58.25	819	68	819				

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	68	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	0	58.25	9.92	9.92	9.92	.1	.3
--	---	-------	------	------	------	----	----

Blocked Obstructions num= 2

Sta L	Sta R	Elev	Sta L	Sta R	Elev
-10	0	825	58.25	68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.64	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.44	wt. n-val.		0.013
w.s. Elev (ft)	819.21	Reach Len. (ft)	9.92	9.92
9.92				
Crit w.s. (ft)	819.32	Flow Area (sq ft)		25.44
E.G. Slope (ft/ft)	0.006467	Area (sq ft)		25.44
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top Width (ft)	58.25	Top Width (ft)		58.25
Vel Total (ft/s)	5.31	Avg. Vel. (ft/s)		5.31
Max Chl Dpth (ft)	0.45	Hydr. Depth (ft)		0.44
Conv. Total (cfs)	1678.8	Conv. (cfs)		1678.8
Length wtd. (ft)	9.92	wetted Per. (ft)		58.69

CPNPPLocalPMP

Min Ch El (ft)	818.76	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)		0.51
C & E Loss (ft)	0.00	Cum SA (acres)		0.11

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.666*

INPUT

Description:

Station Elevation Data	num=	8							
Sta Elev Sta Elev Sta Elev									
-10 819 0 819 3.16 818.67 15.37 818.67 42.08 818.67									
55.02 818.67 58.25 819 68 819									

Manning's n Values	num=	3			
Sta n Val Sta n Val Sta n Val					
-10 .0129 0 .0129 68 .0129					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
0 58.25	9.92 9.92 9.92	.1	.3

Blocked Obstructions	num=	2			
Sta L Sta R Elev Sta L Sta R Elev					
-10 0 825 58.25 68 825					

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.57	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.46	wt. n-Val.		0.013
w.s. Elev (ft)	819.11	Reach Len. (ft)	9.92	9.92
9.92				
Crit w.s. (ft)	819.24	Flow Area (sq ft)		24.79
E.G. Slope (ft/ft)	0.007022	Area (sq ft)		24.79
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	58.25	Top width (ft)		58.25
Vel Total (ft/s)	5.45	Avg. vel. (ft/s)		5.45
Max Chl Dpth (ft)	0.44	Hydr. Depth (ft)		0.43
Conv. Total (cfs)	1611.1	Conv. (cfs)		1611.1
Length wtd. (ft)	9.92	wetted Per. (ft)		58.51
Min Ch El (ft)	818.67	Shear (lb/sq ft)		0.19
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00

CPNPPLocalPMP

0.00			
Frctn Loss (ft)	0.07	Cum volume (acre-ft)	0.50
C & E Loss (ft)	0.00	Cum SA (acres)	0.10

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.583*

INPUT

Description:

Station Elevation Data	num=	8							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 0 819 3.95 818.59 15.79 818.59 41.67 818.59									
54.21 818.59 58.25 819 68 819									

Manning's n Values	num=	3
Sta n Val Sta n Val Sta n Val		
-10 .0129 0 .0129 68 .0129		

Bank Sta: Left Right Lengths: Left Channel Right	Coeff Contr.	Expan.
0 58.25 9.92 9.92 9.92	.1	.3

Blocked Obstructions	num=	2
Sta L Sta R Elev Sta L Sta R Elev		
-10 0 825 58.25 68 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.50	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.45	wt. n-val.		0.013
w.s. Elev (ft)	819.05	Reach Len. (ft)	9.92	9.92
9.92				
Crit w.s. (ft)	819.17	Flow Area (sq ft)		24.97
E.G. slope (ft/ft)	0.006834	Area (sq ft)		24.97
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	58.25	Top width (ft)		58.25
vel Total (ft/s)	5.41	Avg. vel. (ft/s)		5.41
Max chl Dpth (ft)	0.46	Hydr. Depth (ft)		0.43
Conv. Total (cfs)	1633.1	Conv. (cfs)		1633.1
Length wtd. (ft)	9.92	wetted Per. (ft)		58.39
Min Ch El (ft)	818.59	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.07	Cum volume (acre-ft)		0.50
C & E Loss (ft)	0.00	Cum SA (acres)		0.09

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.5*

INPUT

Description:

Station Elevation Data				num=	8					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
-10	819	0	819	4.74	818.51	16.2	818.51	41.26	818.51	
53.4	818.51	58.25	819	68	819					

Manning's n Values				num=	3	
Sta	n Val	Sta	n Val	Sta	n Val	
-10	.0129	0	.0129	68	.0129	

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	0	58.25		9.92	9.92	9.92		.1	.3

Blocked Obstructions				num=	2	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825	58.25	68	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.43	Element	Left OB	Channel
Right OB Vel Head (ft)	0.46	wt. n-val.		0.013
w.s. Elev (ft)	818.98	Reach Len. (ft)	9.92	9.92
9.92 Crit w.s. (ft)	819.10	Flow Area (sq ft)		24.92
E.G. Slope (ft/ft)	0.006798	Area (sq ft)		24.92
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	57.82	Top width (ft)		57.82
Vel Total (ft/s)	5.42	Avg. vel. (ft/s)		5.42
Max Chl Dpth (ft)	0.47	Hydr. Depth (ft)		0.43
Conv. Total (cfs)	1637.3	Conv. (cfs)		1637.3
Length wtd. (ft)	9.92	wetted Per. (ft)		57.87
Min Ch El (ft)	818.51	Shear (lb/sq ft)		0.18
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)		0.49
C & E Loss (ft)	0.00	Cum SA (acres)		0.07

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.416*

INPUT

Description:

Station Elevation Data				num=				
Sta	Elev	Sta	Elev		Sta	Elev	Sta	Elev
-10	819	0	819	8	5.53	818.43	16.61	818.43
52.59	818.43	58.25	819		68	819	40.85	818.43

Manning's n Values				num=		
Sta	n Val	Sta	n Val		Sta	n Val
-10	.0129	0	.0129	3	68	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	58.25		9.92	9.92		.1	.3
Blocked Obstructions				num=				
Sta L	Sta R	Elev	Sta L	Sta R	Elev			
-10	0	825	58.25	68	825			

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.37	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.46	wt. n-val.		0.013
w.s. Elev (ft)	818.91	Reach Len. (ft)	9.92	9.92
9.92				
Crit w.s. (ft)	819.03	Flow Area (sq ft)		24.88
E.G. Slope (ft/ft)	0.006630	Area (sq ft)		24.88
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	56.49	Top width (ft)		56.49
Vel Total (ft/s)	5.43	Avg. vel. (ft/s)		5.43
Max Chl Dpth (ft)	0.48	Hydr. Depth (ft)		0.44
Conv. Total (cfs)	1658.0	Conv. (cfs)		1658.0
Length wtd. (ft)	9.92	wetted Per. (ft)		56.54
Min Ch El (ft)	818.43	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.07	Cum Volume (acre-ft)		0.48
C & E Loss (ft)	0.00	Cum SA (acres)		0.06

CROSS SECTION

RIVER: Unit 4 UHS

CPNPPLocalPMP

REACH: U4 UHS Branch RS: 106.333*

INPUT

Description:

Station Elevation Data		num= 8		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	6.32	818.35	17.03	818.35	40.44	818.35
51.78	818.35	58.25	819	68	819				

Manning's n Values		num= 3		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	0	.0129	68	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	58.25		9.92	9.92	9.92	.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
-10	0	825	58.25	68	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.30	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.46	wt. n-val.		0.013
w.s. Elev (ft)	818.84	Reach Len. (ft)	9.92	9.92
9.92				
Crit w.s. (ft)	818.97	Flow Area (sq ft)		24.86
E.G. slope (ft/ft)	0.006447	Area (sq ft)		24.86
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	55.18	Top width (ft)		55.18
vel Total (ft/s)	5.43	Avg. vel. (ft/s)		5.43
Max chl Dpth (ft)	0.49	Hydr. Depth (ft)		0.45
Conv. Total (cfs)	1681.4	Conv. (cfs)		1681.4
Length wtd. (ft)	9.92	wetted Per. (ft)		55.23
Min Ch El (ft)	818.35	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.06	Cum volume (acre-ft)		0.48
C & E Loss (ft)	0.00	Cum SA (acres)		0.05

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.25*

INPUT

Description:

Station Elevation Data				num=	8	CPNPPLocalPMP					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	7.11	818.27	17.44	818.27	40.03	818.27		
50.97	818.27	58.25	819	68	819						
Manning's n Values				num=	3						
Sta	n Val	Sta	n Val	Sta	n Val						
-10	.0129	0	.0129	68	.0129						
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.		
	0	58.25		9.92	9.92	9.92		.1	.3		
Blocked Obstructions				num=	2						
Sta L	Sta R	Elev	Sta L	Sta R	Elev						
-10	0	825	58.25	68	825						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.46	wt. n-Val.		0.013
W.S. Elev (ft)	818.78	Reach Len. (ft)	9.92	9.92
9.92				
Crit w.s. (ft)	818.90	Flow Area (sq ft)		24.88
E.G. Slope (ft/ft)	0.006225	Area (sq ft)		24.88
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	53.90	Top width (ft)		53.90
Vel Total (ft/s)	5.43	Avg. Vel. (ft/s)		5.43
Max Chl Dpth (ft)	0.51	Hydr. Depth (ft)		0.46
Conv. Total (cfs)	1711.1	Conv. (cfs)		1711.1
Length wtd. (ft)	9.92	wetted Per. (ft)		53.95
Min Ch El (ft)	818.27	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)		0.47
C & E Loss (ft)	0.00	Cum SA (acres)		0.04

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.166*

INPUT

Description:

Station Elevation Data				num=	8						
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	0	819	7.9	818.18	17.86	818.18	39.62	818.18		
50.17	818.18	58.25	819	68	819						

CPNPPLocalPMP

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -10 .0129 0 .0129 68 .0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 0 58.25 9.92 9.92 9.92 .1 .3

Blocked Obstructions num= 2
 Sta L Sta R Elev Sta L Sta R Elev
 -10 0 825 58.25 68 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.17	Element	Left OB	Channel
Right OB Vel Head (ft)	0.48	wt. n-val.		0.013
w.s. Elev (ft)	818.70	Reach Len. (ft)	9.92	9.92
9.92 Crit w.s. (ft)	818.83	Flow Area (sq ft)		24.35
E.G. Slope (ft/ft)	0.006426	Area (sq ft)		24.35
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	52.31	Top width (ft)		52.31
Vel Total (ft/s)	5.54	Avg. vel. (ft/s)		5.54
Max chl Dpth (ft)	0.52	Hydr. Depth (ft)		0.47
Conv. Total (cfs)	1684.1	Conv. (cfs)		1684.1
Length wtd. (ft)	9.92	wetted Per. (ft)		52.36
Min ch El (ft)	818.18	Shear (lb/sq ft)		0.19
Alpha 0.00	1.00	Stream Power (lb/ft s)	68.00	0.00
Frctn Loss (ft)	0.06	Cum Volume (acre-ft)		0.47
C & E Loss (ft)	0.00	Cum SA (acres)		0.02

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106.083*

INPUT

Description:

Station Elevation Data num= 8
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 -10 819 0 819 8.69 818.1 18.27 818.1 39.21 818.1
 49.36 818.1 58.25 819 68 819

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 -10 .0129 0 .0129 68 .0129

CPNPPLocalPMP

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
0	58.25		9.92 9.92	9.92	.1	.3
Blocked Obstructions			num=	2		
Sta L	Sta R	Elev	Sta L	Sta R	Elev	
-10	0	825	58.25	68	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.11	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.47	wt. n-val.		0.013
w.s. Elev (ft)	818.63	Reach Len. (ft)	9.92	9.92
9.92				
Crit w.s. (ft)	818.76	Flow Area (sq ft)		24.42
E.G. slope (ft/ft)	0.006172	Area (sq ft)		24.42
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	51.07	Top width (ft)		51.07
vel Total (ft/s)	5.53	Avg. vel. (ft/s)		5.53
Max Chl Dpth (ft)	0.53	Hydr. Depth (ft)		0.48
Conv. Total (cfs)	1718.3	Conv. (cfs)		1718.3
Length wtd. (ft)	9.92	wetted Per. (ft)		51.12
Min ch El (ft)	818.10	Shear (lb/sq ft)		0.18
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.06	Cum volume (acre-ft)		0.46
C & E Loss (ft)	0.00	Cum SA (acres)		0.01

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Branch RS: 106

INPUT

Description:

Station Elevation Data	num=	6							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 0 819 9.48 818.02 48.55 818.02 58.25 819									
68 819									

Manning's n Values	num=	3			
Sta n Val Sta n Val Sta n Val					
-10 .0129 0 .0129 68 .0129					

Bank Sta: Left	Right	Coeff Contr.	Expan.
0	58.25	.1	.3
Blocked Obstructions		num=	2

Sta L	Sta R	Elev	Sta L	CPNPPLocalPMP	Sta R	Elev
-10	0	825	58.25		68	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.06	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.16	wt. n-Val.		0.013
W.S. Elev (ft)	818.91	Reach Len. (ft)	85.65	85.65
85.65				
Crit w.s. (ft)	818.70	Flow Area (sq ft)		42.31
E.G. Slope (ft/ft)	0.001128	Area (sq ft)		42.31
Q Total (cfs)	135.00	Flow (cfs)		135.00
Top width (ft)	56.42	Top width (ft)		56.42
Vel Total (ft/s)	3.19	Avg. Vel. (ft/s)		3.19
Max Chl Dpth (ft)	0.89	Hydr. Depth (ft)		0.75
Conv. Total (cfs)	4019.3	Conv. (cfs)		4019.3
Length wtd. (ft)	85.65	wetted Per. (ft)		56.51
Min Ch El (ft)	818.02	Shear (lb/sq ft)		0.05
Alpha	1.00	Stream Power (lb/ft s)	68.00	0.00
0.00				
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)		0.45
C & E Loss (ft)	0.01	Cum SA (acres)		

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 5

INPUT

Description:

Station Elevation Data	num=	7							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
-10 819 0 819	18.23	818	28.23	817	40.45	816			
164.86 816 166.9 816									

Manning's n Values	num=	2
Sta n Val Sta n Val		
-10 .0129 0 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
0 166.9	42.62 42.62 42.62	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		

CPNPPLocalPMP

-10 0 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.04	Element	Left OB	Channel
Right OB Vel Head (ft)	0.12	wt. n-val.		0.013
W.S. Elev (ft)	818.91	Reach Len. (ft)	42.62	42.62
42.62 Crit w.s. (ft)		Flow Area (sq ft)		419.72
E.G. slope (ft/ft)	0.000175	Area (sq ft)		419.72
Q Total (cfs)	1175.75	Flow (cfs)		1175.75
Top width (ft)	165.33	Top width (ft)		165.33
Vel Total (ft/s)	2.80	Avg. vel. (ft/s)		2.80
Max chl Dpth (ft)	2.91	Hydr. Depth (ft)		2.54
Conv. Total (cfs)	88887.9	Conv. (cfs)		88887.9
Length wtd. (ft)	42.62	wetted Per. (ft)		168.36
Min ch El (ft)	816.00	Shear (lb/sq ft)		0.03
Alpha 0.00	1.00	Stream Power (lb/ft s)	166.90	0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.12	37.50
5.85 C & E Loss (ft)	0.01	Cum SA (acres)	0.01	2.27

Warning: The cross-section end points had to be extended vertically for the computed water surface.

LATERAL STRUCTURE

RIVER: Unit 4 UHS
REACH: U4 UHS Lower RS: 4.9

INPUT

Description:
Lateral structure position = Right overbank
Distance from Upstream XS =
Deck/Roadway width = 2
Weir Coefficient = 2.4
Weir Flow Reference = Water Surface
Weir Embankment Coordinates num = 2
Sta Elev Sta Elev
0 817 170.5 817

Weir crest shape = Broad Crested

LATERAL STRUCTURE OUTPUT Profile #PF 1 Lat Struct

CPNPPLocalPMP			
E.G. US. (ft)	819.04	Weir Sta US (ft)	0.00
W.S. US. (ft)	818.91	Weir Sta DS (ft)	170.50
E.G. DS (ft)	818.98	Min El Weir Flow (ft)	817.00
W.S. DS (ft)	818.98	Wr Top wdth (ft)	170.50
Q US (cfs)	1175.75	Weir Max Depth (ft)	1.98
Q Leaving Total (cfs)	1113.08	Weir Avg Depth (ft)	1.95
Q DS (cfs)	69.81	Weir Flow Area (sq ft)	332.23
Perc Q Leaving	94.06	Weir Coef (ft ^{1/2})	2.400
Q Weir (cfs)	1113.08	Weir Submerg	0.00
Q Gates (cfs)		Q Gate Group (cfs)	
Q Culv (cfs)	0.00	Gate Open Ht (ft)	
Q Lat RC (cfs)		Gate #Open	
		Gate Area (sq ft)	
Q Breach (cfs)		Gate Submerg	
Breach Avg Velocity (ft/s)		Gate Invert (ft)	
Breach Flow Area (sq ft)		Gate Weir Coef	

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 4.75*

INPUT

Description:

Station Elevation Data		num= 10	
Sta	Elev	Sta	Elev
-10	819	-1.73	819
29.32	817.67	44.98	816.84
		64.13	816
		7.09	818.58
		11.89	818.21
		158.97	816

Manning's n Values		num= 4	
Sta	n Val	Sta	n Val
-10	.0129	-1.73	.0129
		.75	.0129
		158.97	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	.75	158.97		42.62	42.62	42.62		.1	.3

Blocked Obstructions		num= 1	
Sta L	Sta R	Elev	
-10	0	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.02	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-Val.		0.013
W.S. Elev (ft)	818.93	Reach Len. (ft)	42.62	42.62
42.62				
Crit w.s. (ft)		Flow Area (sq ft)		372.59
E.G. Slope (ft/ft)	0.000144	Area (sq ft)		372.59
Q Total (cfs)	905.17	Flow (cfs)		905.17
Top width (ft)	157.13	Top width (ft)		157.13
Vel Total (ft/s)	2.43	Avg. vel. (ft/s)		2.43
Max chl Dpth (ft)	2.93	Hydr. Depth (ft)		2.37
Conv. Total (cfs)	75358.9	Conv. (cfs)		75358.9

CPNPPLocalPMP

Length Wtd. (ft)	42.62	Wetted Per. (ft)	160.13
Min Ch El (ft)	816.00	Shear (lb/sq ft)	0.02
Alpha	1.00	Stream Power (lb/ft s)	158.97
0.00			0.00
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.12
5.85			37.11
C & E Loss (ft)	0.01	Cum SA (acres)	0.01
			2.12

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
REACH: U4 UHS Lower RS: 4.5*

INPUT

Description:

Station	Elevation	Data	num=	10
Sta	Elev	Sta	Elev	Sta
-10	819	-1.15	819	1.5
40.4	817.33	61.74	816.68	87.81
				816
				10.14
				818.39
				16.67
				817.81
				816
				151.04

Manning's n Values	num=	4
Sta	n Val	Sta
-10	.0129	-1.15
		1.5
		.0129
		151.04
		.0129

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
	1.5	151.04	42.62	42.62		.1	.3

Blocked Obstructions	num=	1
Sta L	Sta R	Elev
-10	0	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	819.00	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.		0.013
W.S. Elev (ft)	818.95	Reach Len. (ft)	42.62	42.62
42.62				
Crit W.S. (ft)		Flow Area (sq ft)		336.35
E.G. Slope (ft/ft)	0.000092	Area (sq ft)		336.35
Q Total (cfs)	630.92	Flow (cfs)		630.92
Top width (ft)	148.81	Top width (ft)		148.81
Vel Total (ft/s)	1.88	Avg. Vel. (ft/s)		1.88
Max Chl Dpth (ft)	2.95	Hydr. Depth (ft)		2.26
Conv. Total (cfs)	65841.4	Conv. (cfs)		65841.4

		CPNPPLocalPMP		
Length wtd. (ft)	42.62	Wetted Per. (ft)		151.83
Min Ch El (ft)	816.00	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	151.04	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.12	36.76
5.85				
C & E Loss (ft)	0.01	Cum SA (acres)	0.01	1.97

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 4.25*

INPUT

Description:

Station Elevation Data			num=	10							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-10	819	-.58	819	2.25	819	13.18	818.19	21.45	817.4		
51.49	817	78.49	816.52	111.5	816	142.6	816	143.11	816		

Manning's n Values			num=	4							
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-10	.0129	-.58	.0129	2.25	.0129	143.11	.0129				

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	2.25	143.11		42.62	42.62	42.62		.1	.3

Blocked Obstructions			num=	1
Sta L	Sta R	Elev		
-10	0	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.99	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
W.S. Elev (ft)	818.97	Reach Len. (ft)	42.62	42.62
42.62				
Crit W.S. (ft)		Flow Area (sq ft)		309.97
E.G. Slope (ft/ft)	0.000035	Area (sq ft)		309.97
Q Total (cfs)	352.22	Flow (cfs)		352.22
Top Width (ft)	140.45	Top Width (ft)		140.45
Vel Total (ft/s)	1.14	Avg. Vel. (ft/s)		1.14
Max Chl Dpth (ft)	2.97	Hydr. Depth (ft)		2.21
Conv. Total (cfs)	59663.1	Conv. (cfs)		59663.1
Length wtd. (ft)	42.62	wetted Per. (ft)		143.50

CPNPPLocalPMP

Min Ch El (ft)	816.00	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	143.11	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.12	36.45
5.85				
C & E Loss (ft)	0.01	Cum SA (acres)	0.01	1.83

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
REACH: U4 UHS Lower RS: 4

INPUT

Description:

Station Elevation Data	num=	6							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-10 819 0 819 3 819 16.23 818 26.23 817									
135.18 816									

Manning's n Values	num=	2
Sta n Val Sta n Val		
-10 .0129 0 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
3 135.18	91.85 91.85 91.85	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
-10 0 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.		0.013
W.S. Elev (ft)	818.98	Reach Len. (ft)	91.85	91.85
91.85				
Crit W.S. (ft)		Flow Area (sq ft)		291.68
E.G. Slope (ft/ft)	0.000002	Area (sq ft)		291.68
Q Total (cfs)	69.81	Flow (cfs)		69.81
Top width (ft)	131.95	Top width (ft)		131.95
Vel Total (ft/s)	0.24	Avg. Vel. (ft/s)		0.24
Max Chl Dpth (ft)	2.98	Hydr. Depth (ft)		2.21
Conv. Total (cfs)	56146.5	Conv. (cfs)		56146.5
Length wtd. (ft)	91.85	wetted Per. (ft)		135.02

		CPNPPLocalPMP		
Min Ch El (ft)	816.00	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	135.18	0.00
0.00		Cum Volume (acre-ft)	0.12	36.15
Frctn Loss (ft)	0.00	Cum SA (acres)	0.01	1.69
5.85				
C & E Loss (ft)	0.00			

Warning: The cross-section end points had to be extended vertically for the computed water surface.

LATERAL STRUCTURE

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 3.9

INPUT

Description:
 Lateral structure position = Right overbank
 Distance from Upstream XS =
 Deck/Roadway width = 2
 Weir Coefficient = .04
 Weir Flow Reference = Water Surface
 Weir Embankment Coordinates num = 2

Sta	Elev	Sta	Elev
0	817	91.85	817

Weir crest shape = Broad Crested

LATERAL STRUCTURE OUTPUT Profile #PF 1 Lat Struct

E.G. US. (ft)	818.98	Weir Sta US (ft)	0.00
W.S. US. (ft)	818.98	Weir Sta DS (ft)	91.85
E.G. DS (ft)	818.98	Min El Weir Flow (ft)	817.00
W.S. DS (ft)	818.98	Wr Top Wdth (ft)	91.85
Q US (cfs)	69.81	Weir Max Depth (ft)	1.98
Q Leaving Total (cfs)	10.26	Weir Avg Depth (ft)	1.98
Q DS (cfs)	59.62	Weir Flow Area (sq ft)	182.11
Perc Q Leaving	14.60	Weir Coef (ft ^{1/2})	0.040
Q Weir (cfs)	10.26	Weir Submerg	0.00
Q Gates (cfs)		Q Gate Group (cfs)	
Q Culv (cfs)	0.00	Gate Open Ht (ft)	
Q Lat RC (cfs)		Gate #Open	
		Gate Area (sq ft)	
Q Breach (cfs)		Gate Submerg	
Breach Avg Velocity (ft/s)		Gate Invert (ft)	
Breach Flow Area (sq ft)		Gate Weir Coef	

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 3

INPUT

Description:
 Station Elevation Data num= 8

	Sta	Elev	Sta	Elev	CPNPPLocalPMP	Sta	Elev	Sta	Elev
	-10	819	0	819	Sta Elev	1.58	819	8.52	818
	32.21	816	116.06	816	Sta Elev	118.1	816	12.49	817

Manning's n Values num= 2

Sta	n Val	Sta	n Val
-10	.0129	0	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

	0	118.1	9.6	9.6	9.6	.1	.3
--	---	-------	-----	-----	-----	----	----

Blocked Obstructions num= 1

Sta L	Sta R	Elev
-10	0	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-val.		0.013
w.s. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60 Crit w.s. (ft)		Flow Area (sq ft)		314.38
E.G. Slope (ft/ft)	0.000001	Area (sq ft)		314.38
Q Total (cfs)	59.62	Flow (cfs)		59.62
Top width (ft)	116.40	Top width (ft)		116.40
Vel Total (ft/s)	0.19	Avg. vel. (ft/s)		0.19
Max chl Dpth (ft)	2.98	Hydr. Depth (ft)		2.70
Conv. Total (cfs)	68972.8	Conv. (cfs)		68972.8
Length wtd. (ft)	9.60	wetted Per. (ft)		119.60
Min Ch El (ft)	816.00	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	118.10	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.12	35.51
5.85 C & E Loss (ft)	0.00	Cum SA (acres)	0.01	1.43

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.92857*

INPUT

Description:

Station	Elevation	Data	num=	9	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev		Sta	Elev	Sta	Elev	Sta	Elev

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				CPNPP	Local	PMP				
-9.29	818.79	0	818.79	1.98	818.78	10.7	817.82	15.69	816.87	
40.45	815.86	118.32	815.86	120.21	815.86	131.38	816			
Manning's n Values				num=	3					
Sta	n Val	Sta	n Val	Sta	n Val					
-9.29	.0129	0	.0129	131.38	.0129					
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.	
	0	131.38		9.6	9.6	9.6		.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60				
Crit w.s. (ft)		Flow Area (sq ft)	1.79	362.51
E.G. slope (ft/ft)	0.000001	Area (sq ft)	1.79	362.51
Q Total (cfs)	59.62	Flow (cfs)	0.05	59.57
Top width (ft)	140.67	Top width (ft)	9.29	131.38
vel Total (ft/s)	0.16	Avg. vel. (ft/s)	0.03	0.16
Max Chl Dpth (ft)	3.12	Hydr. Depth (ft)	0.19	2.76
Conv. Total (cfs)	80927.5	Conv. (cfs)	67.9	80859.6
Length wtd. (ft)	9.60	wetted Per. (ft)	9.48	134.53
Min Ch El (ft)	815.86	Shear (lb/sq ft)	0.00	0.00
Alpha	1.01	Stream Power (lb/ft s)	131.38	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.12	35.44
5.85				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	1.40

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.85714*

INPUT

Description:

Station	Elevation	Data	num=	9					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-8.57	818.57	0	818.57	2.39	818.56	12.88	817.64	18.88	816.75
48.7	815.71	120.57	815.71	122.32	815.71	144.67	816		

Manning's n Values num= 3
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Sta	n Val	Sta	n Val	CPNPPLocalPMP	Sta	n Val	
-8.57	.0129	0	.0129	144.67	.0129		
Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
0	144.67		9.6	9.6		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

Right OB	E.G. Elev (ft)	818.98	Element	Left OB	Channel
Vel Head (ft)	0.00	wt. n-Val.	0.013	0.013	
w.s. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60	
9.60		Flow Area (sq ft)	3.54	413.93	
Crit w.s. (ft)		Area (sq ft)	3.54	413.93	
E.G. Slope (ft/ft)	0.000000	Flow (cfs)	0.14	59.48	
Q Total (cfs)	59.62	Top width (ft)	8.57	144.67	
Top width (ft)	153.24	Avg. Vel. (ft/s)	0.04	0.14	
Vel Total (ft/s)	0.14	Hydr. Depth (ft)	0.41	2.86	
Max Chl Dpth (ft)	3.27	Conv. (cfs)	219.0	94741.6	
Conv. Total (cfs)	94960.6	wetted Per. (ft)	8.98	147.78	
Length wtd. (ft)	9.60	Shear (lb/sq ft)	0.00	0.00	
Min Ch El (ft)	815.71	Stream Power (lb/ft s)	144.67	0.00	
Alpha	1.01	Cum Volume (acre-ft)	0.12	35.35	
0.00		Cum SA (acres)	0.01	1.37	
Frctn Loss (ft)	0.00				
5.85					
C & E Loss (ft)	0.00				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.78571*

INPUT

Description:

Station	Elevation	Data	num=	9	Sta	Elev	Sta	Elev	Sta	Elev
-7.86	818.36	0	818.36	2.79	818.34	15.06	817.46	22.08	816.62	
56.94	815.57	122.83	815.57	124.43	815.57	157.96	816			

Manning's n	Values	num=	3	Sta	n Val	Sta	n Val
-7.86	.0129	0	.0129	157.96	.0129		

Bank Sta: Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.

0 157.96 CPNPPLocalPMP
 9.6 9.6 9.6 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-Val.	0.013	0.013
W.S. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60 Crit w.s. (ft)		Flow Area (sq ft)	4.90	466.93
E.G. slope (ft/ft)	0.000000	Area (sq ft)	4.90	466.93
Q Total (cfs)	59.62	Flow (cfs)	0.21	59.41
Top width (ft)	165.82	Top width (ft)	7.86	157.96
Vel Total (ft/s)	0.13	Avg. vel. (ft/s)	0.04	0.13
Max chl Dpth (ft)	3.41	Hydr. Depth (ft)	0.62	2.96
Conv. Total (cfs)	109751.1	Conv. (cfs)	391.0	109360.1
Length wtd. (ft)	9.60	wetted Per. (ft)	8.48	161.04
Min ch El (ft)	815.57	Shear (lb/sq ft)	0.00	0.00
Alpha 0.00	1.01	Stream Power (lb/ft s)	157.96	0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.12	35.26
5.85 C & E Loss (ft)	0.00	Cum SA (acres)	0.01	1.34

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.71428*

INPUT

Description:

Station Elevation Data	num=	9
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-7.14 818.14 0 818.14 3.2 818.11 17.24 817.28 25.28 816.49		
65.19 815.43 125.08 815.43 126.54 815.43 171.24 816		

Manning's n Values	num=	3
Sta n Val Sta n Val Sta n Val		
-7.14 .0129 0 .0129 171.24 .0129		

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 0 171.24 9.6 9.6 9.6 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

CPNPPLocalPMP

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-val.	0.013	0.013
W.S. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60 Crit W.S. (ft)		Flow Area (sq ft)	6.02	522.40
E.G. Slope (ft/ft)	0.000000	Area (sq ft)	6.02	522.40
Q Total (cfs)	59.62	Flow (cfs)	0.27	59.35
Top Width (ft)	178.38	Top Width (ft)	7.14	171.24
Vel Total (ft/s)	0.11	Avg. Vel. (ft/s)	0.05	0.11
Max Chl Dpth (ft)	3.55	Hydr. Depth (ft)	0.84	3.05
Conv. Total (cfs)	125658.2	Conv. (cfs)	574.3	125083.9
Length wtd. (ft)	9.60	wetted Per. (ft)	7.98	174.30
Min Ch El (ft)	815.43	Shear (lb/sq ft)	0.00	0.00
Alpha 0.00	1.01	Stream Power (lb/ft s)	171.24	0.00
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.12	35.15
5.85 C & E Loss (ft)	0.00	Cum SA (acres)	0.01	1.30

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
REACH: U4 UHS Lower RS: 2.64285*

INPUT

Description:

Station Elevation Data	num=	9
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev		
-6.43 817.93 0 817.93 3.6 817.89 19.42 817.1 28.48 816.37		
73.44 815.29 127.34 815.29 128.65 815.29 184.53 816		

Manning's n Values	num=	3
Sta n Val Sta n Val Sta n Val		
-6.43 .0129 0 .0129 184.53 .0129		

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
0 184.53	9.6 9.6 9.6	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-val.	0.013	0.013

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W.S. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60 Crit w.s. (ft)		Flow Area (sq ft)	6.77	579.94
E.G. Slope (ft/ft)	0.000000	Area (sq ft)	6.77	579.94
Q Total (cfs)	59.62	Flow (cfs)	0.31	59.31
Top width (ft)	190.96	Top width (ft)	6.43	184.53
Vel Total (ft/s)	0.10	Avg. Vel. (ft/s)	0.05	0.10
Max Chl Dpth (ft)	3.69	Hydr. Depth (ft)	1.05	3.14
Conv. Total (cfs)	142501.9	Conv. (cfs)	729.6	141772.3
Length wtd. (ft)	9.60	wetted Per. (ft)	7.48	187.58
Min Ch El (ft)	815.29	Shear (lb/sq ft)	0.00	0.00
Alpha	1.01	Stream Power (lb/ft s)	184.53	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.12	35.02
5.85 C & E Loss (ft)	0.00	Cum SA (acres)	0.01	1.26

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.57142*

INPUT

Description:

Station Elevation Data		num=	9								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-5.71	817.71	0	817.71	4.01	817.67	21.61	816.92	31.67	816.24		
81.68	815.14	129.59	815.14	130.76	815.14	197.81	816				

Manning's n Values		num=	3				
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
-5.71	.0129	0	.0129	197.81	.0129		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	0	197.81		9.6	9.6	9.6		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-Val.	0.013	0.013
W.S. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60 Crit w.s. (ft)		Flow Area (sq ft)	7.27	641.21

CPNPPLocalPMP

E.G. Slope (ft/ft)	0.000000	Area (sq ft)	7.27	641.21
Q Total (cfs)	59.62	Flow (cfs)	0.32	59.30
Top width (ft)	203.52	Top width (ft)	5.71	197.81
Vel Total (ft/s)	0.09	Avg. Vel. (ft/s)	0.04	0.09
Max Chl Dpth (ft)	3.84	Hydr. Depth (ft)	1.27	3.24
Conv. Total (cfs)	160998.0	Conv. (cfs)	860.0	160138.0
Length Wtd. (ft)	9.60	wetted Per. (ft)	6.98	200.85
Min ch El (ft)	815.14	Shear (lb/sq ft)	0.00	0.00
Alpha	1.01	Stream Power (lb/ft s)	197.81	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.12	34.89
5.85				
C & E Loss (ft)	0.00	Cum SA (acres)	0.01	1.22

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.5*

INPUT

Description:

Station Elevation Data		num= 9									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-5	817.5	0	817.5	4.41	817.45	23.79	816.74	34.87	816.11		
89.93	815	131.85	815	132.87	815	211.1	816				

Manning's n Values		num= 3			
Sta	n Val	Sta	n Val	Sta	n Val
-5	.0129	0	.0129	211.1	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	211.1		9.6	9.6		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60				
Crit w.s. (ft)		Flow Area (sq ft)	7.42	703.84
E.G. Slope (ft/ft)	0.000000	Area (sq ft)	7.42	703.84
Q Total (cfs)	59.62	Flow (cfs)	0.31	59.31
		Page 877		

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Top width (ft)	216.10	Top width (ft)	5.00	211.10
Vel Total (ft/s)	0.08	Avg. vel. (ft/s)	0.04	0.08
Max Chl Dpth (ft)	3.98	Hydr. Depth (ft)	1.48	3.33
Conv. Total (cfs)	180163.2	Conv. (cfs)	934.2	179229.0
Length wtd. (ft)	9.60	wetted Per. (ft)	6.48	214.13
Min Ch El (ft)	815.00	Shear (lb/sq ft)	0.00	0.00
Alpha	1.01	Stream Power (lb/ft s)	211.10	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.12	34.74
5.85				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	1.18

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.42857*

INPUT

Description:

Station Elevation Data num= 9

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-4.29	817.29	0	817.29	4.82	817.23	25.97	816.55	38.07	815.99
98.17	814.86	134.11	814.86	134.98	814.86	224.38	816		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-4.29	.0129	0	.0129	224.38	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

0	224.38	9.6	9.6	9.6	.1	.3
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CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.013	0.013
W.S. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60				
Crit W.S. (ft)		Flow Area (sq ft)	7.26	768.65
E.G. Slope (ft/ft)	0.000000	Area (sq ft)	7.26	768.65
Q Total (cfs)	59.62	Flow (cfs)	0.28	59.34
Top width (ft)	228.67	Top width (ft)	4.29	224.38
Vel Total (ft/s)	0.08	Avg. vel. (ft/s)	0.04	0.08
		Page 878		

CPNPPLocalPMP

Max Chl Dpth (ft)	4.12	Hydr. Depth (ft)	1.69	3.43
Conv. Total (cfs)	200365.0	Conv. (cfs)	952.1	199413.0
Length wtd. (ft)	9.60	wetted Per. (ft)	5.98	227.41
Min Ch El (ft)	814.86	Shear (lb/sq ft)	0.00	0.00
Alpha	1.01	Stream Power (lb/ft s)	224.38	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.12	34.58
5.85				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	1.13

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.35714*

INPUT

Description:

Station Elevation Data	num=	9							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
-3.57 817.07 0 817.07 5.22 817.01 28.15 816.37 41.26 815.86									
106.42 814.71 136.36 814.71 137.09 814.71 237.67 816									

Manning's n Values	num=	3			
Sta n Val Sta n Val Sta n Val					
-3.57 .0129 0 .0129 237.67 .0129					

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
0 237.67	9.6 9.6 9.6	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-Val.	0.013	0.013
w.s. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60				
Crit w.s. (ft)		Flow Area (sq ft)	6.83	837.26
E.G. Slope (ft/ft)	0.000000	Area (sq ft)	6.83	837.26
Q Total (cfs)	59.62	Flow (cfs)	0.24	59.37
Top width (ft)	241.24	Top width (ft)	3.57	237.67
Vel Total (ft/s)	0.07	Avg. vel. (ft/s)	0.04	0.07
Max Chl Dpth (ft)	4.27	Hydr. Depth (ft)	1.91	3.52
Conv. Total (cfs)	222321.8	Conv. (cfs)	910.7	221411.0

CPNPPLocalPMP

Length Wtd. (ft)	9.60	wetted Per. (ft)	5.48	240.69
Min Ch El (ft)	814.71	Shear (lb/sq ft)	0.00	0.00
Alpha	1.00	Stream Power (lb/ft s)	237.67	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11	34.40
5.85				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	1.08

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.28571*

INPUT

Description:

Station	Elevation	Data	num=	9							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-2.86	816.86	0	816.86	5.62	816.79	30.33	816.19	44.46	815.73		
114.66	814.57	138.62	814.57	139.2	814.57	250.95	816				

Manning's n	Values	num=	3		
Sta	n Val	Sta	n Val	Sta	n Val
-2.86	.0129	0	.0129	250.95	.0129

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	0	250.95		9.6	9.6	9.6		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.013	0.013
W.S. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60				
Crit w.s. (ft)		Flow Area (sq ft)	6.07	907.09
E.G. slope (ft/ft)	0.000000	Area (sq ft)	6.07	907.09
Q Total (cfs)	59.62	Flow (cfs)	0.19	59.42
Top width (ft)	253.81	Top width (ft)	2.86	250.95
Vel Total (ft/s)	0.07	Avg. vel. (ft/s)	0.03	0.07
Max Chl Dpth (ft)	4.41	Hydr. Depth (ft)	2.12	3.61
Conv. Total (cfs)	244938.1	Conv. (cfs)	797.9	244140.2
Length Wtd. (ft)	9.60	wetted Per. (ft)	4.98	253.97
Min Ch El (ft)	814.57	Shear (lb/sq ft)	0.00	0.00

CPNPPLocalPMP

Alpha 0.00	1.00	Stream Power (lb/ft s)	250.95	0.00
Frctn Loss (ft) 5.85	0.00	Cum Volume (acre-ft)	0.11	34.21
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	1.02

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.21428*

INPUT

Description:

Station Elevation Data num= 9

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-2.14	816.64	0	816.64	6.03	816.57	32.51	816.01	47.66	815.6
122.91	814.43	140.87	814.43	141.31	814.43	264.24	816		

Manning's n Values num= 3

Sta	n Val	Sta	n Val	Sta	n Val
-2.14	.0129	0	.0129	264.24	.0129

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.

0	264.24	9.6	9.6	9.6	.1	.3
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CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB Vel Head (ft)	0.00	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60 Crit w.s. (ft)		Flow Area (sq ft)	5.01	979.39
E.G. Slope (ft/ft)	0.000000	Area (sq ft)	5.01	979.39
Q Total (cfs)	59.62	Flow (cfs)	0.14	59.48
Top width (ft)	266.38	Top width (ft)	2.14	264.24
Vel Total (ft/s)	0.06	Avg. Vel. (ft/s)	0.03	0.06
Max Chl Dpth (ft)	4.55	Hydr. Depth (ft)	2.34	3.71
Conv. Total (cfs)	268775.0	Conv. (cfs)	622.3	268152.7
Length wtd. (ft)	9.60	wetted Per. (ft)	4.48	267.25
Min Ch El (ft)	814.43	Shear (lb/sq ft)	0.00	0.00
Alpha 0.00	1.00	Stream Power (lb/ft s)	264.24	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11	34.00

CPNPPLocalPMP				
5.85				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.97

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.14285*

INPUT

Description:

Station Elevation Data		num= 9		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-1.43	816.43	0	816.43	6.43	816.34	34.69	815.83	50.86	815.48
131.15	814.29	143.13	814.29	143.42	814.29	277.52	816		

Manning's n Values		num= 3		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val
-1.43	.0129	0	.0129	277.52	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	277.52		9.6	9.6		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.	0.013	0.013
w.s. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60
9.60				
Crit w.s. (ft)		Flow Area (sq ft)	3.65	1053.73
E.G. Slope (ft/ft)	0.000000	Area (sq ft)	3.65	1053.73
Q Total (cfs)	59.62	Flow (cfs)	0.08	59.54
Top width (ft)	278.95	Top width (ft)	1.43	277.52
Vel Total (ft/s)	0.06	Avg. vel. (ft/s)	0.02	0.06
Max chl Dpth (ft)	4.69	Hydr. Depth (ft)	2.55	3.80
Conv. Total (cfs)	293689.5	Conv. (cfs)	396.8	293292.7
Length wtd. (ft)	9.60	wetted Per. (ft)	3.98	280.53
Min ch El (ft)	814.29	Shear (lb/sq ft)	0.00	0.00
Alpha	1.00	Stream Power (lb/ft s)	277.52	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11	33.78
5.85				
C & E Loss (ft)	0.00	Cum SA (acres)	0.00	0.91

CPNPPLocalPMP

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 2.07142*

INPUT

Description:

Station	Elevation	Data	num=	9	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
-0.71	816.21	0	816.21	6.84	816.12	36.87	815.65	54.05	815.35			
139.4	814.14	145.38	814.14	145.53	814.14	290.81	816					

Manning's n	Values	num=	3	Sta	n Val	Sta	n Val
-0.71	.0129	0	.0129	290.81	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	290.81		9.6	9.6		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

	E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB					
Vel Head (ft)	0.00	wt. n-val.	0.013	0.013	
w.s. Elev (ft)	818.98	Reach Len. (ft)	9.60	9.60	
9.60		Flow Area (sq ft)	1.97	1132.05	
Crit w.s. (ft)		Area (sq ft)	1.97	1132.05	
E.G. slope (ft/ft)	0.000000	Flow (cfs)	0.03	59.59	
Q Total (cfs)	59.62	Top width (ft)	0.71	290.81	
Top width (ft)	291.52	Avg. vel. (ft/s)	0.01	0.05	
vel Total (ft/s)	0.05	Hydr. Depth (ft)	2.77	3.89	
Max Chl Dpth (ft)	4.84	Conv. (cfs)	155.0	320476.1	
Conv. Total (cfs)	320631.2	wetted Per. (ft)	3.48	293.82	
Length Wtd. (ft)	9.60	Shear (lb/sq ft)	0.00	0.00	
Min Ch El (ft)	814.14	Stream Power (lb/ft s)	290.81	0.00	
Alpha	1.00	Cum volume (acre-ft)	0.11	33.54	
0.00		Cum SA (acres)	0.00	0.84	
Frctn Loss (ft)	0.00				
5.85					
C & E Loss (ft)	0.01				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

CPNPPLocalPMP

CROSS SECTION

RIVER: Unit 4 UHS
REACH: U4 UHS Lower RS: 2

INPUT

Description:

Station	Elevation	Data	num=	3
Sta	Elev	Sta	Elev	Sta Elev
0	816	147.64	814	304.09 816

Manning's n	Values	num=	1
Sta	n Val		
0	.0129		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff Contr.	Expan.
	0	304.09		112	112	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	818.98	Element	Left OB	Channel
Right OB Vel Head (ft)	0.05	wt. n-val.		0.013
w.s. Elev (ft)	818.93	Reach Len. (ft)	112.00	112.00
112.00 Crit w.s. (ft)	816.16	Flow Area (sq ft)		1193.61
E.G. Slope (ft/ft)	0.000042	Area (sq ft)		1193.61
Q Total (cfs)	2196.62	Flow (cfs)		2196.62
Top width (ft)	304.09	Top width (ft)		304.09
Vel Total (ft/s)	1.84	Avg. vel. (ft/s)		1.84
Max Chl Dpth (ft)	4.93	Hydr. Depth (ft)		3.93
Conv. Total (cfs)	337776.9	Conv. (cfs)		337776.9
Length wtd. (ft)	112.00	wetted Per. (ft)		309.97
Min Ch El (ft)	814.00	Shear (lb/sq ft)		0.01
Alpha	1.00	Stream Power (lb/ft s)	304.09	0.00
0.00 Frctn Loss (ft)		Cum Volume (acre-ft)	0.11	33.28
5.85 C & E Loss (ft)		Cum SA (acres)		0.78

INLINE STRUCTURE

RIVER: Unit 4 UHS
REACH: U4 UHS Lower RS: 1.5

INPUT

CPNPPLocalPMP

Description:

Distance from Upstream XS = 49
 Deck/Roadway width = 15
 Weir Coefficient = 2.6
 Weir Embankment Coordinates num = 2
 Sta Elev Sta Elev
 0 817 341.29 817

Upstream Embankment side slope = 0 horiz. to 1.0 vertical
 Downstream Embankment side slope = 0 horiz. to 1.0 vertical
 Maximum allowable submergence for weir flow = .98
 Elevation at which weir flow begins =
 Weir crest shape = Broad Crested

CROSS SECTION

RIVER: Unit 4 UHS
 REACH: U4 UHS Lower RS: 1

INPUT

Description:

Station Elevation Data num= 6
 Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev
 0 817 20.03 817 20.03 800 76.24 800 290.38 800
 321.74 810

Manning's n Values num= 1
 Sta n Val
 0 .0129

Bank Sta: Left Right Coeff Contr. Expan.
 0 321.74 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	816.00	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.00	wt. n-val.		0.013
w.s. Elev (ft)	816.00	Reach Len. (ft)		
Crit w.s. (ft)	801.26	Flow Area (sq ft)		4670.56
E.G. Slope (ft/ft)	0.000000	Area (sq ft)		4670.56
Q Total (cfs)	2196.62	Flow (cfs)		2196.62
Top width (ft)	301.71	Top width (ft)		301.71
Vel Total (ft/s)	0.47	Avg. vel. (ft/s)		0.47
Max Chl Dpth (ft)	16.00	Hydr. Depth (ft)		15.48
Conv. Total (cfs)	3178299.0	Conv. (cfs)		3178299.0
Length wtd. (ft)		wetted Per. (ft)		325.27
Min ch El (ft)	800.00	Shear (lb/sq ft)		0.00
Alpha	1.00	Stream Power (lb/ft s)	321.74	0.00

0.00
Frctn Loss (ft) Cum volume (acre-ft)
C & E Loss (ft) Cum SA (acres)

CPNPPLocalPMP

CROSS SECTION

RIVER: West Channel
REACH: West Channel RS: 24

INPUT

Description:

Station Elevation Data		num= 14		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	4.49	824	12.49	820	28.49	812	29.45	811.81		
64.91	811.81	67.74	812	79.74	818	85.74	818.32	98.66	819		
122.41	820	144.81	822	150.26	822	160	822				

Manning's n Values		num= 6		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	29.45	.0066	64.91	.017	79.74	.0129	85.74	.0066		
160	.0066										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	79.74		66.39	66.39		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
150.26	160	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.36	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.012
0.008				
w.s. Elev (ft)	820.34	Reach Len. (ft)	66.39	66.39
66.39				
Crit w.s. (ft)	813.49	Flow Area (sq ft)		468.37
55.58				
E.G. Slope (ft/ft)	0.000006	Area (sq ft)		468.37
55.58				
Q Total (cfs)	497.00	Flow (cfs)		467.53
29.47				
Top width (ft)	114.46	Top width (ft)		67.94
46.53				
Vel Total (ft/s)	0.95	Avg. vel. (ft/s)		1.00
0.53				
Max Chl Dpth (ft)	8.53	Hydr. Depth (ft)		6.89
1.19				
Conv. Total (cfs)	209110.4	Conv. (cfs)		196712.4
12398.0				
Length wtd. (ft)	66.39	wetted Per. (ft)		71.35
46.59				
Min Ch El (ft)	811.81	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.06	Stream Power (lb/ft s)	160.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.11	28.65

CPNPPLocalPMP				
5.85				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	3.84
4.52				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 23

INPUT

Description:

Station Elevation Data num= 13									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	26	812	27.16	811.94	61.84	811.94
64.48	812	76.48	818	82.48	818.2	106.48	819	137.89	820
199.55	822	227.55	822.9	237	822.9				

Manning's n Values num= 6									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	27.16	.0066	61.84	.017	76.48	.0129	82.48	.0066
237	.0066								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	76.48		24.9	24.9		.1	.3

Blocked Obstructions num= 1			
Sta L	Sta R	Elev	
227.55	237	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.36	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.012
0.007				
w.s. Elev (ft)	820.34	Reach Len. (ft)	24.90	24.90
24.90				
Crit w.s. (ft)		Flow Area (sq ft)		457.05
83.68				
E.G. Slope (ft/ft)	0.000006	Area (sq ft)		457.05
83.68				
Q Total (cfs)	497.00	Flow (cfs)		451.43
45.57				
Top width (ft)	139.20	Top width (ft)		67.17
72.03				
Vel Total (ft/s)	0.92	Avg. vel. (ft/s)		0.99
0.54				
Max Chl Dpth (ft)	8.40	Hydr. Depth (ft)		6.80
1.16				
Conv. Total (cfs)	208547.3	Conv. (cfs)		189424.4
19122.9				
Length wtd. (ft)	24.90	wetted Per. (ft)		70.56
72.07				
Min Ch El (ft)	811.94	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.08	Stream Power (lb/ft s)	237.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.11	27.95
		Page 887		

CPNPPLocalPMP				
5.74				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	3.73
4.43				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 22

INPUT

Description:

Station Elevation Data num= 17											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	26	812	27.23	811.98	61.63	811.98		
64.2	812	76.2	818	82.2	818.2	106.2	819	109.32	819.26		
118.27	820	121.27	821	184.17	821	211.98	822	221.77	822		
227.27	822	237	822								

Manning's n Values num= 7											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	27.23	.0066	61.63	.017	76.2	.0129	82.2	.0066		
109.32	.0129	237	.0129								

Bank Sta: Left Right Lengths: Left Channel Right										Coeff	Contr.	Expan.
0	76.2	149.29	149.29	149.29				.1	.3			

Blocked Obstructions num= 2					
Sta L	Sta R	Elev	Sta L	Sta R	Elev
122.42	211.98	825	227.27	237	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.36	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.01	wt. n-val.		0.012
0.008				
W.S. Elev (ft)	820.34	Reach Len. (ft)	149.29	149.29
149.29				
Crit w.s. (ft)		Flow Area (sq ft)		453.19
65.66				
E.G. slope (ft/ft)	0.000006	Area (sq ft)		453.19
65.66				
Q Total (cfs)	497.00	Flow (cfs)		453.91
43.09				
Top width (ft)	109.99	Top width (ft)		66.89
43.10				
Vel Total (ft/s)	0.96	Avg. vel. (ft/s)		1.00
0.66				
Max Chl Dpth (ft)	8.36	Hydr. Depth (ft)		6.78
1.52				
Conv. Total (cfs)	204716.1	Conv. (cfs)		186966.4
17749.7				
Length wtd. (ft)	149.29	wetted Per. (ft)		70.27
43.21				
Min Ch El (ft)	811.98	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.04	Stream Power (lb/ft s)	237.00	0.00
0.00				

Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11	27.69
5.70				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	3.70
4.40				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 21

INPUT

Description:

Station	Elevation	Data	num=	13
Sta	Elev	Sta	Elev	Sta
0	825	10	820	27.68
74.48	818	80.48	818.2	104.48
120.7	822	225.55	822	235

Manning's n	Values	num=	7
Sta	n Val	Sta	n Val
0	.017	27.68	.0066
104.48	.0129	235	.0129

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	74.48		201.74	201.74		.1	.3

Blocked Obstructions	num=	2
Sta L	Sta R	Elev
120.7	210.26	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.36	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.008				
W.S. Elev (ft)	820.34	Reach Len. (ft)	201.74	201.74
201.74				
Crit w.s. (ft)		Flow Area (sq ft)		417.89
65.52				
E.G. slope (ft/ft)	0.000007	Area (sq ft)		417.89
65.52				
Q Total (cfs)	497.00	Flow (cfs)		450.07
46.93				
Top width (ft)	108.25	Top width (ft)		65.16
43.09				
Vel Total (ft/s)	1.03	Avg. vel. (ft/s)		1.08
0.72				
Max Chl Dpth (ft)	8.06	Hydr. Depth (ft)		6.41
1.52				
Conv. Total (cfs)	182719.5	Conv. (cfs)		165464.3
17255.2				
Length wtd. (ft)	201.74	wetted Per. (ft)		68.09
43.20				
Min Ch El (ft)	812.28	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.04	Stream Power (lb/ft s)	235.00	0.00
0.00				

Frctn Loss (ft)	0.00	CPNPPLocalPMP Cum Volume (acre-ft)	0.11	26.19
5.47				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	3.47
4.25				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 20

INPUT

Description:

Station	Elevation	Data	num=	15
Sta	Elev	Sta	Elev	Sta Elev Sta Elev Sta Elev
0	825	10	820	28.29 812.69 58.57 812.69 62.16 813
72.16	818	78.16	818.2	102.16 819 107.16 819.24 123.15 820
203.23	820	222.19	820	225.2 821 230.23 821.22 240.23 821.46

Manning's n Values	num=	7
Sta n Val Sta n Val	Sta n Val	Sta n Val
0 .017 28.29 .0066	58.57 .017	72.16 .0129 78.16 .0066
107.16 .0129 230.23 .0066		

Bank Sta: Left	Right	Lengths: Left Channel	Right	Coeff	Contr.	Expan.
0	72.16	166.53	166.53 166.53	.1	.3	

Blocked Obstructions	num=	1
Sta L Sta R Elev		
123.04 203.07 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.36	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.008				
W.S. Elev (ft)	820.34	Reach Len. (ft)	166.53	166.53
166.53				
Crit w.s. (ft)		Flow Area (sq ft)		379.88
79.17				
E.G. slope (ft/ft)	0.000009	Area (sq ft)		379.88
79.17				
Q Total (cfs)	497.00	Flow (cfs)		438.62
58.38				
Top width (ft)	133.84	Top width (ft)		62.83
71.01				
Vel Total (ft/s)	1.08	Avg. vel. (ft/s)		1.15
0.74				
Max Chl Dpth (ft)	7.65	Hydr. Depth (ft)		6.05
1.11				
Conv. Total (cfs)	161900.9	Conv. (cfs)		142883.6
19017.3				
Length wtd. (ft)	166.53	wetted Per. (ft)		65.51
71.78				
Min Ch El (ft)	812.69	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.06	Stream Power (lb/ft s)	240.23	0.00
0.00				

	Frctn Loss (ft)	0.00	CPNPPLocalPMP Cum Volume (acre-ft)	0.11	24.35
	5.14				
	C & E Loss (ft)	0.00	Cum SA (acres)	0.15	3.17
	3.98				

Warning: Divided flow computed for this cross-section.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 19

INPUT

Description:

Station Elevation Data		num= 8		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	28.74	812.98	57.28	812.98	60.44	813
70.44	818	76.44	818.2	100.44	819				

Manning's n Values		num= 5		Sta n val		Sta n val		Sta n val	
Sta	n val	Sta	n val	Sta	n val	Sta	n val	Sta	n val
0	.017	28.74	.0066	57.28	.017	70.44	.0129	76.44	.0066

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	70.44		230.48	230.48		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.35	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.		0.013
0.008				
W.S. Elev (ft)	820.33	Reach Len. (ft)	230.48	230.48
230.48				
Crit w.s. (ft)		Flow Area (sq ft)		353.32
54.89				
E.G. Slope (ft/ft)	0.000012	Area (sq ft)		353.32
54.89				
Q Total (cfs)	497.00	Flow (cfs)		442.86
54.14				
Top width (ft)	91.10	Top width (ft)		61.10
30.00				
Vel Total (ft/s)	1.22	Avg. vel. (ft/s)		1.25
0.99				
Max Chl Dpth (ft)	7.35	Hydr. Depth (ft)		5.78
1.83				
Conv. Total (cfs)	143368.3	Conv. (cfs)		127751.9
15616.4				
Length wtd. (ft)	230.48	wetted Per. (ft)		63.63
31.35				
Min Ch El (ft)	812.98	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.02	Stream Power (lb/ft s)	100.44	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11	22.95
4.88				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	2.94
3.79				

CPNPPLocalPMP

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 18

INPUT

Description:

Station Elevation Data		num= 9		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	20	815	28.94	813.5	56.8	813.5
63.8	815	69.8	818	75.8	818.2	99.8	819		

Manning's n Values		num= 5		Sta n val		Sta n val		Sta n val	
Sta	n val	Sta	n val	Sta	n val	Sta	n val	Sta	n val
0	.017	28.94	.0066	56.8	.017	69.8	.0129	75.8	.0066

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	69.8		32.96	32.96		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.35	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.03	wt. n-val.		0.013
0.008				
w.s. Elev (ft)	820.32	Reach Len. (ft)	32.96	32.96
32.96				
Crit w.s. (ft)		Flow Area (sq ft)		338.27
54.74				
E.G. Slope (ft/ft)	0.000014	Area (sq ft)		338.27
54.74				
Q Total (cfs)	497.00	Flow (cfs)		439.83
57.17				
Top width (ft)	90.45	Top width (ft)		60.45
30.00				
Vel Total (ft/s)	1.26	Avg. vel. (ft/s)		1.30
1.04				
Max Chl Dpth (ft)	6.82	Hydr. Depth (ft)		5.60
1.82				
Conv. Total (cfs)	135150.6	Conv. (cfs)		119604.1
15546.5				
Length wtd. (ft)	32.96	wetted Per. (ft)		62.70
31.34				
Min Ch El (ft)	813.50	Shear (lb/sq ft)		0.00
0.00				
Alpha	1.01	Stream Power (lb/ft s)	99.80	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11	21.12
4.59				
C & E Loss (ft)	0.01	Cum SA (acres)	0.15	2.61
3.63				

CPNPPLocalPMP

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
REACH: West Channel RS: 17

INPUT

Description:

Station	Elevation	Data	num=	9	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	20	815	26.8	814	56.8	814	
63.8	815	69.8	818	75.8	818.2	99.8	819			

Manning's n	Values	num=	5	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	26.8	.0066	56.8	.017	69.8	.0129	75.8	.0066

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
0	69.8	142.47	142.47	142.47		.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.34	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.09	wt. n-Val.		0.013
0.008				
W.S. Elev (ft)	820.25	Reach Len. (ft)	142.47	142.47
142.47				
Crit w.s. (ft)		Flow Area (sq ft)		316.82
52.45				
E.G. Slope (ft/ft)	0.000052	Area (sq ft)		316.82
52.45				
Q Total (cfs)	900.00	Flow (cfs)		795.87
104.14				
Top Width (ft)	90.30	Top Width (ft)		60.30
30.00				
Vel Total (ft/s)	2.44	Avg. Vel. (ft/s)		2.51
1.99				
Max Chl Dpth (ft)	6.25	Hydr. Depth (ft)		5.25
1.75				
Conv. Total (cfs)	125170.4	Conv. (cfs)		110687.5
14482.9				
Length wtd. (ft)	142.47	wetted Per. (ft)		62.39
31.27				
Min Ch El (ft)	814.00	Shear (lb/sq ft)		0.02
0.01				
Alpha	1.02	Stream Power (lb/ft s)	99.80	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.11	20.87
4.55				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	2.57
3.61				

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CPNPPLocalPMP

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 16

INPUT

Description:

Station Elevation Data		num= 15		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	20	815	24.96	814	26.8	813.04		
56.8	813.04	58.64	814	63.8	815	69.8	818	75.8	818.2		
99.8	819	112.47	820	134.87	822	139.13	822	149	822		

Manning's n Values		num= 6		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	26.8	.0066	56.8	.017	69.8	.0129	75.8	.0066		
149	.0066										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	69.8		66.4	66.4		.1	.3

Blocked Obstructions		num= 1		Sta L	Sta R	Elev
				139.13	149	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.33	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.		0.013
0.008				
W.S. Elev (ft)	820.25	Reach Len. (ft)	66.40	66.40
66.40				
Crit w.s. (ft)		Flow Area (sq ft)		349.54
62.52				
E.G. slope (ft/ft)	0.000039	Area (sq ft)		349.54
62.52				
Q Total (cfs)	900.00	Flow (cfs)		803.84
96.16				
Top width (ft)	105.82	Top width (ft)		60.31
45.51				
Vel Total (ft/s)	2.18	Avg. vel. (ft/s)		2.30
1.54				
Max Chl Dpth (ft)	7.21	Hydr. Depth (ft)		5.80
1.37				
Conv. Total (cfs)	144690.8	Conv. (cfs)		129230.8
15460.0				
Length wtd. (ft)	66.40	wetted Per. (ft)		62.92
45.58				
Min Ch El (ft)	813.04	Shear (lb/sq ft)		0.01
0.00				
Alpha	1.04	Stream Power (lb/ft s)	149.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11	19.78
4.36				
C & E Loss (ft)	0.01	Cum SA (acres)	0.15	2.37
3.49				

Note: Manning's n values were composited to a single value in the main channel.
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CPNPPLocalPMP

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 15

INPUT

Description:

Station Elevation Data		num= 15		Sta		Elev		Sta		Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	20	815	26.48	813	26.8	812.84		
56.8	812.84	57.12	813	63.8	815	69.8	818	75.8	818.2		
99.8	819	130.87	820	192.87	822	220.87	822.9	230	822.9		

Manning's n Values		num= 6		Sta		n Val		Sta		n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	26.8	.0066	56.8	.017	69.8	.0129	75.8	.0066		
230	.0066										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	69.8		24.9	24.9	24.9	.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
220.87	230	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.32	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.15	wt. n-val.		0.013
0.008				
W.S. Elev (ft)	820.17	Reach Len. (ft)	24.90	24.90
24.90				
Crit w.s. (ft)		Flow Area (sq ft)		354.62
71.51				
E.G. Slope (ft/ft)	0.000073	Area (sq ft)		354.62
71.51				
Q Total (cfs)	1267.00	Flow (cfs)		1135.11
131.89				
Top width (ft)	126.55	Top width (ft)		60.14
66.41				
Vel Total (ft/s)	2.97	Avg. vel. (ft/s)		3.20
1.84				
Max Chl Dpth (ft)	7.33	Hydr. Depth (ft)		5.90
1.08				
Conv. Total (cfs)	148196.1	Conv. (cfs)		132769.6
15426.5				
Length wtd. (ft)	24.90	wetted Per. (ft)		62.74
66.44				
Min Ch El (ft)	812.84	Shear (lb/sq ft)		0.03
0.00				
Alpha	1.08	Stream Power (lb/ft s)	230.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11	19.24
4.26				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	2.28
3.40				

Note: Manning's n values were composited to a single value in the main channel.
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CPNPPLocalPMP

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 14

INPUT

Description:

Station Elevation Data		num= 19		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	20	815	26.33	813	26.8	812.76		
56.8	812.76	57.27	813	63.8	815	69.8	818	75.8	818.2		
99.8	819	102.92	819.26	111.87	820	114.87	821	177.44	821		
205.58	822	215.37	822	220.87	822	231	822				

Manning's n Values		num= 7		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	26.8	.0066	56.8	.017	69.8	.0129	75.8	.0066		
102.92	.0129	231	.0129								

Bank Sta:	Left	Right	Lengths: Left Channel Right			Coeff	Contr.	Expan.
	0	69.8	149.29	149.29	149.29		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
116.02	205.58	825	220.87	231	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.32	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.15	wt. n-val.		0.013
0.008				
w.s. Elev (ft)	820.17	Reach Len. (ft)	149.29	149.29
149.29				
Crit w.s. (ft)		Flow Area (sq ft)		357.13
58.14				
E.G. Slope (ft/ft)	0.000072	Area (sq ft)		357.13
58.14				
Q Total (cfs)	1267.00	Flow (cfs)		1141.45
125.55				
Top width (ft)	102.71	Top width (ft)		60.14
42.57				
Vel Total (ft/s)	3.05	Avg. vel. (ft/s)		3.20
2.16				
Max Chl Dpth (ft)	7.41	Hydr. Depth (ft)		5.94
1.37				
Conv. Total (cfs)	149010.7	Conv. (cfs)		134244.9
14765.8				
Length wtd. (ft)	149.29	wetted Per. (ft)		62.79
42.66				
Min Ch El (ft)	812.76	Shear (lb/sq ft)		0.03
0.01				
Alpha	1.04	Stream Power (lb/ft s)	231.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.11	19.04
4.23				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	2.25
3.37				

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 13

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	20	815	25.43	813	26.8	812.31		
56.8	812.31	58.17	813	63.8	815	69.8	818	75.8	818.2		
99.8	819	111.87	820	114.87	821	116.02	822	205.58	822		
215.37	822.5	220.87	822.5	230	822.5						

Manning's n Values		num= 7		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	26.8	.0066	56.8	.017	69.8	.0129	75.8	.0066		
99.8	.0129	230	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	69.8		201.75	201.75		.1	.3

Blocked Obstructions		num= 2		Sta L Sta R Elev		Sta L Sta R Elev	
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R
116.02	205.58	825	220.87	230	825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.31	Element	Left OB	Channel
Right OB				
vel Head (ft)	0.14	wt. n-val.		0.013
0.008				
W.S. Elev (ft)	820.17	Reach Len. (ft)	201.75	201.75
201.75				
Crit w.s. (ft)		Flow Area (sq ft)		373.08
58.02				
E.G. slope (ft/ft)	0.000064	Area (sq ft)		373.08
58.02				
Q Total (cfs)	1267.00	Flow (cfs)		1151.60
115.40				
Top width (ft)	102.70	Top width (ft)		60.13
42.57				
vel Total (ft/s)	2.94	Avg. vel. (ft/s)		3.09
1.99				
Max Chl Dpth (ft)	7.86	Hydr. Depth (ft)		6.20
1.36				
Conv. Total (cfs)	158068.2	Conv. (cfs)		143670.6
14397.5				
Length wtd. (ft)	201.75	wetted Per. (ft)		63.09
42.65				
Min Ch El (ft)	812.31	Shear (lb/sq ft)		0.02
0.01				
Alpha	1.04	Stream Power (lb/ft s)	230.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.11	17.79
4.03				
C & E Loss (ft)	0.01	Cum SA (acres)	0.15	2.04
3.22				

CPNPPLocalPMP

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 12

INPUT

Description:

Station	Elevation	Data	num=	16	Station	Elev	Station	Elev	Station	Elev
0	825	10	820	20	815	26.22	812	26.8	811.71	
56.8	811.71	57.38	812	63.8	815	69.8	818	75.8	818.2	
99.8	819	104.8	819.24	120.8	820	200.87	820	227.87	819.73	
237.87	819.93									

Manning's n	Values	num=	7	Station	n Val	Station	n Val	Station	n Val
0	.017	26.8	.0066	56.8	.017	69.8	.0129	75.8	.0066
104.8	.0129	227.87	.0066						

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	69.8		246.39	246.39		.1	.3
Blocked Obstructions			num=	1				
Sta L	Sta R	Elev						
120.68	200.71	825						

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.29	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.12	wt. n-val.		0.013
0.008				
W.S. Elev (ft)	820.17	Reach Len. (ft)	246.39	246.39
246.39				
Crit w.s. (ft)		Flow Area (sq ft)		396.27
75.45				
E.G. slope (ft/ft)	0.000053	Area (sq ft)		396.27
75.45				
Q Total (cfs)	1267.00	Flow (cfs)		1148.56
118.44				
Top width (ft)	148.17	Top width (ft)		60.13
88.04				
Vel Total (ft/s)	2.69	Avg. vel. (ft/s)		2.90
1.57				
Max chl Dpth (ft)	8.46	Hydr. Depth (ft)		6.59
0.86				
Conv. Total (cfs)	173915.2	Conv. (cfs)		157657.8
16257.5				
Length wtd. (ft)	246.39	wetted Per. (ft)		63.55
88.66				
Min Ch El (ft)	811.71	Shear (lb/sq ft)		0.02
0.00				
Alpha	1.09	Stream Power (lb/ft s)	237.87	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.11	16.01
3.72				
C & E Loss (ft)	0.01	Cum SA (acres)	0.15	1.76
2.92				

CPNPPLocalPMP

Warning: Divided flow computed for this cross-section.
 Warning: The cross-section end points had to be extended vertically for the computed water surface.
 Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 11

INPUT

Description:

Station Elevation Data		num= 18		Sta Elev		Sta Elev		Sta Elev		Sta Elev	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	20	815	28	811	58	811		
72	818	78.59	818.35	90.74	819	102.59	818.37	109.59	818		
114.48	816	118.59	816	121.59	816	130.59	819	196.48	819		
207.15	819	218.44	819.44	231.35	819.76						

Manning's n Values		num= 11		Sta n Val		Sta n Val		Sta n Val		Sta n Val	
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	28	.0066	58	.017	72	.0129	78.59	.0066		
102.59	.0129	109.59	.017	114.48	.0066	118.59	.017	130.59	.0129		
218.44	.0066										

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	72		63.04	63.04		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.27	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.08	wt. n-val.		0.013
0.011				
W.S. Elev (ft)	820.18	Reach Len. (ft)	63.04	63.04
63.04				
Crit w.s. (ft)		Flow Area (sq ft)		439.40
241.76				
E.G. slope (ft/ft)	0.000038	Area (sq ft)		439.40
241.76				
Q Total (cfs)	1402.00	Flow (cfs)		1101.13
300.87				
Top width (ft)	221.72	Top width (ft)		62.37
159.35				
Vel Total (ft/s)	2.06	Avg. vel. (ft/s)		2.51
1.24				
Max Chl Dpth (ft)	9.18	Hydr. Depth (ft)		7.05
1.52				
Conv. Total (cfs)	228700.3	Conv. (cfs)		179620.3
49080.0				
Length wtd. (ft)	63.04	wetted Per. (ft)		66.19
160.72				
Min Ch El (ft)	811.00	Shear (lb/sq ft)		0.02
0.00				
Alpha	1.24	Stream Power (lb/ft s)	231.35	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.11	13.64
2.82				
C & E Loss (ft)	0.01	Cum SA (acres)	0.15	1.41

CPNPPLocalPMP

2.22

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 10

INPUT

Description:

Station Elevation Data		num= 14	
Sta	Elev	Sta	Elev
0	825	10	820
58.4	810.81	58.8	811
150.92	819	355.01	822
		416.23	822.9
		20	815
		72.8	818
		79.39	818.35
		426	822.9
		28	811
		28.4	810.81
		91.39	819

Manning's n Values		num= 6	
Sta	n Val	Sta	n Val
0	.017	28.4	.0066
426	.0066	58.4	.017
		72.8	.0129
		79.39	.0066

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	72.8		36.14	36.14		.1	.3

Blocked Obstructions		num= 1	
Sta L	Sta R	Elev	
416.23	426	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.25	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.19	wt. n-val.		0.013
0.007				
w.s. Elev (ft)	820.06	Reach Len. (ft)	36.14	36.14
36.14				
Crit w.s. (ft)		Flow Area (sq ft)		444.87
130.66				
E.G. Slope (ft/ft)	0.000081	Area (sq ft)		444.87
130.66				
Q Total (cfs)	1860.00	Flow (cfs)		1630.70
229.30				
Top width (ft)	213.29	Top width (ft)		62.92
150.36				
Vel Total (ft/s)	3.23	Avg. vel. (ft/s)		3.67
1.75				
Max Chl Dpth (ft)	9.25	Hydr. Depth (ft)		7.07
0.87				
Conv. Total (cfs)	207199.4	Conv. (cfs)		181656.0
25543.4				
Length wtd. (ft)	36.14	wetted Per. (ft)		66.80
150.40				
Min Ch El (ft)	810.81	Shear (lb/sq ft)		0.03
0.00				
Alpha	1.16	Stream Power (lb/ft s)	426.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	0.11	13.00

CPNPPLocalPMP				
2.55				
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	1.32
2.00				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 9

INPUT

Description:

Station Elevation Data num= 22									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	20	815	28	811	28.63	810.7
58.63	810.7	59.26	811	73.26	818	79.86	818.35	91.86	819
103.86	818.33	109.86	818	120.01	818	122.66	819	124.66	820
178.55	821	226.72	822	304.09	822	363.68	822	372.58	822
416.7	822	427	822						

Manning's n Values num= 7									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	28.63	.0066	58.63	.017	73.26	.0129	79.86	.0066
103.86	.0129	427	.0129						

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	73.26		55	55		.1	.3

Blocked Obstructions num= 4									
Sta L	Sta R	Elev	Sta L	Sta R	Elev	Sta L	Sta R	Elev	
226.72	318.72	825	335.85	363.85	825	373.78	413.77	825	
416.7	427	825							

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.25	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.21	wt. n-val.		0.013
0.010				
w.s. Elev (ft)	820.04	Reach Len. (ft)	55.00	55.00
55.00				
Crit w.s. (ft)		Flow Area (sq ft)		450.97
82.27				
E.G. Slope (ft/ft)	0.000085	Area (sq ft)		450.97
82.27				
Q Total (cfs)	1860.00	Flow (cfs)		1702.42
157.58				
Top Width (ft)	116.82	Top Width (ft)		63.34
53.48				
Vel Total (ft/s)	3.49	Avg. vel. (ft/s)		3.78
1.92				
Max Chl Dpth (ft)	9.34	Hydr. Depth (ft)		7.12
1.54				
Conv. Total (cfs)	201633.6	Conv. (cfs)		184550.6
17083.0				
Length wtd. (ft)	55.00	wetted Per. (ft)		67.26
53.95				
Min Ch El (ft)	810.70	Shear (lb/sq ft)		0.04
0.01				

	Alpha	CPNPPLocalPMP	Stream Power (lb/ft s)	427.00	0.00
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11	12.63	
C & E Loss (ft)	0.00	Cum SA (acres)	0.15	1.27	

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 8

INPUT

Description:

Station	Elevation	Data	num=	20	Station	Elevation	Station	Elevation	Station	Elevation
0	825	10	820	20	815	28	811	28.98	810.54	
58.98	810.54	59.96	811	73.96	818	80.56	818.35	92.56	819	
104.56	818.33	110.56	818	120.72	818	124.72	820	179.25	821	
227.43	822	364.48	822	414.4	822	417.4	822	427	822	

Manning's n	Values	num=	7	Station	n Val	Station	n Val	Station	n Val	Station	n Val
0	.017	28.98	.0066	58.98	.017	73.96	.0129	80.56	.0066		
104.56	.0129	427	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
0	73.96	60.26	60.26	60.26		.1	.3	

Blocked Obstructions	num=	3	Sta L	Sta R	Elev	Sta L	Sta R	Elev
227.43	319.43	825	336.55	364.55	825	417.4	427	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.24	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.20	wt. n-val.		0.013
0.010				
W.S. Elev (ft)	820.04	Reach Len. (ft)	60.26	60.26
60.26				
Crit w.s. (ft)		Flow Area (sq ft)		462.45
81.37				
E.G. slope (ft/ft)	0.000081	Area (sq ft)		462.45
81.37				
Q Total (cfs)	1860.00	Flow (cfs)		1707.98
152.03				
Top width (ft)	116.98	Top width (ft)		64.04
52.94				
Vel Total (ft/s)	3.42	Avg. vel. (ft/s)		3.69
1.87				
Max Chl Dpth (ft)	9.50	Hydr. Depth (ft)		7.22
1.54				
Conv. Total (cfs)	207185.2	Conv. (cfs)		190251.1
16934.1				
Length wtd. (ft)	60.26	wetted Per. (ft)		68.03
53.47				
Min Ch El (ft)	810.54	Shear (lb/sq ft)		0.03

CPNPPLocalPMP				
0.01	Alpha	1.10	Stream Power (lb/ft s)	427.00 0.00
0.00	Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11 12.05
2.36	C & E Loss (ft)	0.01	Cum SA (acres)	0.15 1.19
1.85				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 7

INPUT

Description:

Station Elevation Data num= 21											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10	820	20	815	28	811	29.36	810.36		
59.36	810.36	60.72	811	74.72	818	81.33	818.36	93.33	819		
105.33	818.33	111.33	818	113.33	817	121.37	817	123.84	818		
134.49	819	159.37	820	305.33	821	336.33	822	339.33	822		
349	822										

Manning's n Values num= 7											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	29.36	.0066	59.36	.017	74.72	.0129	81.33	.0066		
105.33	.0129	349	.0129								

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	0	74.72		98.26	98.26		.1	.3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
339.33	349	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.23	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.18	wt. n-val.		0.013
0.010				
w.S. Elev (ft)	820.05	Reach Len. (ft)	98.26	98.26
98.26				
Crit w.S. (ft)		Flow Area (sq ft)		475.85
123.11				
E.G. Slope (ft/ft)	0.000072	Area (sq ft)		475.85
123.11				
Q Total (cfs)	1860.00	Flow (cfs)		1674.90
185.10				
Top width (ft)	156.90	Top width (ft)		64.82
92.08				
Vel Total (ft/s)	3.11	Avg. vel. (ft/s)		3.52
1.50				
Max Chl Dpth (ft)	9.69	Hydr. Depth (ft)		7.34
1.34				
Conv. Total (cfs)	218797.6	Conv. (cfs)		197024.1
21773.5				
Length wtd. (ft)	98.26	wetted Per. (ft)		68.90

CPNPPLocalPMP				
92.63				
Min Ch El (ft)	810.36	Shear (lb/sq ft)		0.03
0.01				
Alpha	1.18	Stream Power (lb/ft s)	349.00	0.00
0.00				
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.11	11.40
2.22				
C & E Loss (ft)	0.02	Cum SA (acres)	0.15	1.10
1.75				

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 6

INPUT

Description:

Station Elevation Data num= 22											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825	10.03	820	20.05	815	26.07	813	32.08	811		
34.19	810.06	64.19	810.06	66.18	811	80.18	818	86.79	818.36		
98.79	819	110.79	818.33	116.79	818	120.79	816	123.79	815		
128.39	815	131.39	816	140.72	818	183.47	820	253.79	822		
256.79	822	267	822								

Manning's n Values num= 7											
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.017	34.19	.0066	64.19	.017	80.18	.0129	86.79	.0066		
110.79	.0129	267	.0129								

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 0 80.18 175.56 175.56 175.56 .1 .3

Blocked Obstructions num= 1		
Sta L	Sta R	Elev
256.79	267	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.21	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.12	wt. n-Val.		0.013
0.011				
W.S. Elev (ft)	820.08	Reach Len. (ft)	175.56	175.56
175.56				
Crit w.s. (ft)		Flow Area (sq ft)		529.11
196.34				
E.G. Slope (ft/ft)	0.000052	Area (sq ft)		529.11
196.34				
Q Total (cfs)	1860.00	Flow (cfs)		1579.65
280.35				
Top width (ft)	176.53	Top width (ft)		70.32
106.21				
Vel Total (ft/s)	2.56	Avg. vel. (ft/s)		2.99
1.43				
Max Chl Dpth (ft)	10.02	Hydr. Depth (ft)		7.52
1.85				
Conv. Total (cfs)	257414.5	Conv. (cfs)		218615.3

CPNPPLocalPMP

38799.2					
Length wtd. (ft)	175.56	wetted Per. (ft)		74.23	
107.32					
Min Ch El (ft)	810.06	Shear (lb/sq ft)		0.02	
0.01					
Alpha	1.20	Stream Power (lb/ft s)	267.00	0.00	
0.00					
Frctn Loss (ft)	0.01	Cum Volume (acre-ft)	0.11	10.27	
1.86					
C & E Loss (ft)	0.01	Cum SA (acres)	0.15	0.95	
1.52					

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 5

INPUT

Description:

Station Elevation Data	num=	19							
Sta Elev Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev	Sta Elev
0 825 10 820	20.01 815	35.01 810	36.35 809.53	76.51 809.53	77.5 810	91.61 817	100.23 817.65	112.23 818.24	124.23 817.63
132.23 817	135.66 816	140.08 816	150.41 818	180.41 821	205.41 822	208.41 822	218 822		

Manning's n Values	num=	7							
Sta n Val Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val	Sta n Val
0 .017 36.35 .0066	76.51 .017	91.61 .0129	100.23 .0066	124.23 .0129	218 .0129				

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
0 91.61	164.09 164.09 164.09	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
208.41 218 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.19	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.10	wt. n-val.		0.013
0.010				
w.s. Elev (ft)	820.10	Reach Len. (ft)	164.09	164.09
164.09				
Crit w.s. (ft)		Flow Area (sq ft)		681.33
182.19				
E.G. Slope (ft/ft)	0.000031	Area (sq ft)		681.33
182.19				
Q Total (cfs)	2023.00	Flow (cfs)		1768.16
254.84				
Top width (ft)	161.55	Top width (ft)		81.80
79.75				
Vel Total (ft/s)	2.34	Avg. vel. (ft/s)		2.60
1.40				
Max Chl Dpth (ft)	10.57	Hydr. Depth (ft)		8.33
2.28				

Conv. Total (cfs)	363929.2	CPNPPLocalPMP Conv. (cfs)	318085.2
45844.0 Length wtd. (ft)	164.09	wetted Per. (ft)	85.64
80.27 Min Ch El (ft)	809.53	Shear (lb/sq ft)	0.02
0.00 Alpha	1.12	Stream Power (lb/ft s)	218.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.11
1.09 C & E Loss (ft)	0.01	Cum SA (acres)	0.15
1.15			0.64

Note: Manning's n values were composited to a single value in the main channel.

CROSS SECTION

RIVER: West Channel
REACH: West Channel RS: 4

INPUT

Description:

Station Elevation Data	num=	17							
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev									
0 829.19 0 824.19 53.3 820 63.31 815 81.33 809									
131.45 809 147.58 817 156.21 817.21 168.21 817.5 181.39 817.21									
193.85 816 208.57 816 219.48 818 243.88 819 261.38 822									
264.38 822 274 822									

Manning's n Values	num=	6							
Sta n Val Sta n Val Sta n Val Sta n Val Sta n Val									
0 .0129 53.3 .017 147.58 .0129 156.21 .0066 181.39 .0129									
274 .0129									

Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.
63.31 147.58	29.39 29.39 29.39	.1	.3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
264.38 274 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.017	0.017
0.010				
W.S. Elev (ft)	820.12	Reach Len. (ft)	29.39	29.39
29.39				
Crit w.s. (ft)		Flow Area (sq ft)	26.31	818.44
277.24				
E.G. slope (ft/ft)	0.000026	Area (sq ft)	26.31	818.44
277.24				
Q Total (cfs)	2023.00	Flow (cfs)	20.49	1613.27
389.24				
Top width (ft)	198.63	Top width (ft)	11.53	84.27
102.83				
Vel Total (ft/s)	1.80	Avg. vel. (ft/s)	0.78	1.97
1.40				
Max Chl Dpth (ft)	11.12	Hydr. Depth (ft)	2.28	9.71

CPNPPLocalPMP

2.70				
Conv. Total (cfs)	399401.3	Conv. (cfs)	4044.6	318508.3
76848.5				
Length wtd. (ft)	29.39	wetted Per. (ft)	12.71	87.12
103.19				
Min Ch El (ft)	809.00	Shear (lb/sq ft)	0.00	0.02
0.00				
Alpha	1.07	Stream Power (lb/ft s)	274.00	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.06	5.01
0.23				
C & E Loss (ft)	0.00	Cum SA (acres)	0.13	0.33
0.80				

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 3

INPUT

Description:

Station Elevation Data	num=	13							
Sta Elev Sta Elev Sta Elev									
0 826.25 0 821.25 21.9 820									
131.45 809 147.57 817 156.21 817.21 168.21 817.5 204.78 818									
302.38 822 324.38 822.9 334 822.9									

Manning's n Values	num=	5							
Sta n Val Sta n Val Sta n Val									
0 .0129 21.9 .017 147.57 .0129 156.21 .0066 334 .0066									

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 61.04 147.57 1.53 1.53 1.53 .1 .3

Blocked Obstructions	num=	1
Sta L Sta R Elev		
324.38 334 825		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.017	0.017
0.007				
W.S. Elev (ft)	820.11	Reach Len. (ft)	1.53	1.53
1.53				
Crit w.s. (ft)		Flow Area (sq ft)	102.39	843.05
199.99				
E.G. slope (ft/ft)	0.000027	Area (sq ft)	102.39	843.05
199.99				
Q Total (cfs)	2137.00	Flow (cfs)	88.22	1720.19
328.59				
Top width (ft)	236.42	Top width (ft)	41.12	86.53
108.77				
Vel Total (ft/s)	1.87	Avg. vel. (ft/s)	0.86	2.04
1.64				
Max Chl Dpth (ft)	11.11	Hydr. Depth (ft)	2.49	9.74
1.84				
Conv. Total (cfs)	408674.9	Conv. (cfs)	16871.3	328964.6
62839.0				

		CPNPPLocalPMP		
Length wtd. (ft)	1.53	Wetted Per. (ft)	41.44	89.38
108.82		Shear (lb/sq ft)	0.00	0.02
Min Ch El (ft)	809.00	Stream Power (lb/ft s)	334.00	0.00
0.00		Cum Volume (acre-ft)	0.02	4.45
Alpha	1.09	Cum SA (acres)	0.11	0.27
0.00				
Frctn Loss (ft)	0.00			
0.07				
C & E Loss (ft)	0.00			
0.73				

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 2.75*

INPUT

Description:

Station Elevation Data		num= 26									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	826.1	0	821.1	11.56	820.44	21.86	819.74	60.92	815		
78.95	809	131.45	809	147.57	817	155.19	817.19	156.62	817.22		
166.99	817.46	169.18	817.49	185.2	817.56	191.4	817.59	199.13	816.92		
207.47	817	229.7	817.65	289.55	819.91	307.75	820.69	309.65	820.88		
311.41	821.05	330.37	822.36	332.68	822.64	333.02	822.68	333.9	822.68		
342.75	822.68										

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	11.56	.0156	21.86	.0168	60.92	.0129	342.75	.0066		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	60.92	147.57		1.53	1.53		.1	.3

Blocked Obstructions		num= 1	
Sta L	Sta R	Elev	
333.025	342.75	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.06	wt. n-val.	0.017	0.013
0.013				
W.S. Elev (ft)	820.11	Reach Len. (ft)	1.53	1.53
1.53				
Crit w.s. (ft)		Flow Area (sq ft)	108.00	844.06
308.98				
E.G. slope (ft/ft)	0.000017	Area (sq ft)	108.00	844.06
308.98				
Q Total (cfs)	2137.00	Flow (cfs)	77.25	1815.19
244.56				
Top width (ft)	277.78	Top width (ft)	44.50	86.65
146.63				
Vel Total (ft/s)	1.69	Avg. Vel. (ft/s)	0.72	2.15
0.79				
Max Chl Dpth (ft)	11.11	Hydr. Depth (ft)	2.43	9.74
2.11				
Conv. Total (cfs)	510935.1	Conv. (cfs)	18469.3	433993.2
58472.6				

		CPNPPLocalPMP		
Length wtd. (ft)	1.53	Wetted Per. (ft)	44.79	89.50
146.72				
Min Ch El (ft)	809.00	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.40	Stream Power (lb/ft s)	342.75	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.01	4.42
0.06				
C & E Loss (ft)	0.00	Cum SA (acres)	0.11	0.27
0.73				

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 2.5*

INPUT

Description:

Station Elevation Data		num= 26									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825.95	0	820.95	11.53	820.29	21.82	819.48	60.81	815		
78.83	809	131.45	809	147.57	817	155.53	817.19	157.02	817.23		
167.86	817.47	170.15	817.48	186.89	817.42	193.37	817.4	201.45	815.95		
210.15	816	233.39	816.44	295.92	818.61	314.93	819.46	316.91	819.76		
318.76	820.03	338.57	821.91	340.98	822.39	341.33	822.45	342.25	822.45		
351.5	822.45										

Manning's n Values		num= 5									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	11.53	.016	21.82	.0166	60.81	.0129	351.5	.0066		

Bank Sta:	Left	Right	Lengths:	Left Channel	Right	Coeff	Contr.	Expan.
	60.81	147.57		1.53	1.53		.1	.3

Blocked Obstructions			num= 1
Sta L	Sta R	Elev	
341.67	351.5	825	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.17	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.05	wt. n-val.	0.017	0.013
0.013				
W.S. Elev (ft)	820.12	Reach Len. (ft)	1.53	1.53
1.53				
Crit w.s. (ft)		Flow Area (sq ft)	114.83	846.11
465.42				
E.G. slope (ft/ft)	0.000015	Area (sq ft)	114.83	846.11
465.42				
Q Total (cfs)	2137.00	Flow (cfs)	77.71	1662.38
396.90				
Top width (ft)	305.99	Top width (ft)	47.10	86.76
172.12				
Vel Total (ft/s)	1.50	Avg. Vel. (ft/s)	0.68	1.96
0.85				
Max Chl Dpth (ft)	11.12	Hydr. Depth (ft)	2.44	9.75
2.70				
Conv. Total (cfs)	559707.5	Conv. (cfs)	20354.5	435398.9
103954.1				

		CPNPPLocalPMP		
Length wtd. (ft)	1.53	Wetted Per. (ft)	47.39	89.61
172.37 Min Ch El (ft)	809.00	Shear (lb/sq ft)	0.00	0.01
0.00 Alpha	1.41	Stream Power (lb/ft s)	351.50	0.00
0.00 Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.01	4.39
0.05 C & E Loss (ft)	0.00	Cum SA (acres)	0.11	0.27
0.72				

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 2.25*

INPUT

Description:

Station Elevation Data num= 26

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825.79	0	820.79	11.51	820.15	21.77	819.22	60.69	815
78.71	809	131.45	809	147.57	817	155.87	817.2	157.43	817.24
168.73	817.49	171.12	817.47	188.57	817.27	195.33	817.2	203.76	814.97
212.84	815	237.07	815.22	302.28	817.3	322.11	818.23	324.18	818.64
326.1	819.02	346.76	821.45	349.28	822.13	349.65	822.22	350.61	822.22
360.25	822.22								

Manning's n Values num= 5

Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	11.51	.0165	21.77	.0164	60.69	.0129	360.25	.0066

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 60.69 147.57 1.53 1.53 1.53 .1 .3

Blocked Obstructions num= 1
 Sta L Sta R Elev
 350.315 360.25 825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.04	wt. n-val.	0.016	0.013
0.013				
W.S. Elev (ft)	820.13	Reach Len. (ft)	1.53	1.53
1.53				
Crit w.s. (ft)		Flow Area (sq ft)	121.98	848.20
647.45				
E.G. slope (ft/ft)	0.000012	Area (sq ft)	121.98	848.20
647.45				
Q Total (cfs)	2137.00	Flow (cfs)	76.01	1484.05
576.94				
Top width (ft)	323.75	Top width (ft)	48.93	86.88
187.94				
Vel Total (ft/s)	1.32	Avg. Vel. (ft/s)	0.62	1.75
0.89				
Max Chl Dpth (ft)	11.13	Hydr. Depth (ft)	2.49	9.76
3.44				
Conv. Total (cfs)	628984.4	Conv. (cfs)	22372.0	436800.7
169811.8				

		CPNPPLocalPMP		
Length wtd. (ft)	1.53	Wetted Per. (ft)	49.20	89.73
188.44				
Min Ch El (ft)	809.00	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.35	Stream Power (lb/ft s)	360.25	0.00
0.00				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	0.00	4.36
0.03				
C & E Loss (ft)	0.00	Cum SA (acres)	0.11	0.26
0.72				

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 2

INPUT

Description:

Station Elevation Data		num= 20									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	825.64	0	820.64	11.49	820	60.57	815	78.59	809		
131.45	809	147.57	817	156.21	817.21	169.6	817.5	190.26	817.13		
197.3	817	206.07	814	240.75	814	308.65	816	329.29	817		
333.45	818	354.96	821	357.96	822	358.96	822	369	822		

Manning's n Values		num= 6									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.0129	11.49	.017	147.57	.0129	156.21	.0066	190.26	.0129		
369	.0066										

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 60.57 147.57 175.41 175.41 175.41 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
358.96	369	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	820.16	Element	Left OB	Channel
Right OB				
Vel Head (ft)	0.02	wt. n-val.	0.017	0.017
0.012				
W.S. Elev (ft)	820.14	Reach Len. (ft)	175.41	175.41
175.41				
Crit w.s. (ft)	812.48	Flow Area (sq ft)	129.58	850.37
848.05				
E.G. Slope (ft/ft)	0.000011	Area (sq ft)	129.58	850.37
848.05				
Q Total (cfs)	2137.00	Flow (cfs)	72.63	1122.38
941.99				
Top width (ft)	339.74	Top width (ft)	51.54	87.00
201.20				
Vel Total (ft/s)	1.17	Avg. vel. (ft/s)	0.56	1.32
1.11				
Max Chl Dpth (ft)	11.14	Hydr. Depth (ft)	2.51	9.77
4.21				
Conv. Total (cfs)	633205.6	Conv. (cfs)	21519.3	332568.5
279117.8				
Length wtd. (ft)	175.41	wetted Per. (ft)	51.79	89.85

CPNPPLocalPMP				
202.03				
Min Ch El (ft)	809.00	Shear (lb/sq ft)	0.00	0.01
0.00				
Alpha	1.08	Stream Power (lb/ft s)	369.00	0.00
0.00				
Frctn Loss (ft)		Cum Volume (acre-ft)		4.33
C & E Loss (ft)		Cum SA (acres)	0.10	0.26
0.71				

INLINE STRUCTURE

RIVER: West Channel
 REACH: West Channel RS: 1.5

INPUT

Description:

Distance from Upstream XS = 109.58
 Deck/Roadway width = 24
 Weir Coefficient = 2.6

Weir Embankment Coordinates num = 6

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817.5	133.94	817.5	170.3	817.5	220.3	817.8	220.3	825
369	825								

Upstream Embankment side slope = 2 horiz. to 1.0 vertical
 Downstream Embankment side slope = 2 horiz. to 1.0 vertical
 Maximum allowable submergence for weir flow = .98
 Elevation at which weir flow begins =
 Weir crest shape = Broad Crested

CROSS SECTION

RIVER: West Channel
 REACH: West Channel RS: 1

INPUT

Description:

Station Elevation Data num= 7

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	817	0	816	42.14	816	136.64	817	187.77	818
192.77	818	203	818						

Manning's n Values num= 2

Sta	n Val	Sta	n Val
0	.0129	203	.0129

Bank Sta: Left Right Coeff Contr. Expan.
 0 42.14 .1 .3

Blocked Obstructions num= 1

Sta L	Sta R	Elev
192.77	203	825

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft) 819.32 Element Left OB Channel
 Right OB

		CPNPPLocalPMP		
Vel Head (ft)	0.39	wt. n-Val.		0.013
0.013				
W.S. Elev (ft)	818.93	Reach Len. (ft)		
Crit W.S. (ft)	818.31	Flow Area (sq ft)		123.47
307.40		Area (sq ft)		123.47
E.G. Slope (ft/ft)	0.000638	Flow (cfs)		703.56
307.40		Top Width (ft)		42.14
Q Total (cfs)	2137.00	Avg. Vel. (ft/s)		5.70
1433.44		Hydr. Depth (ft)		2.93
Top Width (ft)	192.77	Conv. (cfs)		27845.1
150.63		wetted Per. (ft)		45.07
Vel Total (ft/s)	4.96	Shear (lb/sq ft)		0.11
4.66		Stream Power (lb/ft s)	203.00	0.00
Max Chl Dpth (ft)	2.93	Cum Volume (acre-ft)		
2.04		Cum SA (acres)		
Conv. Total (cfs)	84576.9			
56731.8				
Length wtd. (ft)				
151.58				
Min Ch El (ft)	816.00			
0.08				
Alpha	1.03			
0.00				
Frctn Loss (ft)				
C & E Loss (ft)				

SUMMARY OF MANNING'S N VALUES

River:Center North

Reach	River Sta.	n1	n2	n3	n4	n5
n6	n8	n9	n10	n11		
Center N Upper	13		.0066	.0129		
Center N Upper	12.9821*		.0066	.0129	.0129	.0129
.0129						
Center N Upper	12.9642*		.0066	.0128	.0129	.0129
.0129						
Center N Upper	12.9464*		.0066	.0128	.0129	.0129
.0129						
Center N Upper	12.9285*		.0066	.0127	.0129	.0129
.0129						
Center N Upper	12.9107*		.0066	.0127	.0129	.0129
.0129						
Center N Upper	12.8928*		.0066	.0126	.0129	.0129
.0129						
Center N Upper	12.875*		.0066	.0126	.0129	.0129
.0129						
Center N Upper	12.8571*		.0066	.0126	.0129	.0129
.0129						
Center N Upper	12.8392*		.0066	.0125	.0129	.0129
.0129						
Center N Upper	12.8214*		.0066	.0125	.0129	.0129

		CPNPPLocalPMP					
.0129	Center N Upper	12.8035*	.0066	.0124	.0129	.0129	.0129
.0129	Center N Upper	12.7857*	.0066	.0124	.0129	.0129	.0129
.0129	Center N Upper	12.7678*	.0066	.0123	.0129	.0129	.0129
.0129	Center N Upper	12.75*	.0066	.0123	.0129	.0129	.0129
.0129	Center N Upper	12.7321*	.0066	.0123	.0129	.0129	.0129
.0129	Center N Upper	12.7142*	.0066	.0122	.0129	.0129	.0129
.0129	Center N Upper	12.6964*	.0066	.0122	.0129	.0129	.0129
.0129	Center N Upper	12.6785*	.0066	.0121	.0129	.0129	.0129
.0129	Center N Upper	12.6607*	.0066	.0121	.0129	.0129	.0129
.0129	Center N Upper	12.6428*	.0066	.012	.0129	.0129	.0129
.0129	Center N Upper	12.625*	.0066	.012	.0129	.0129	.0129
.0129	Center N Upper	12.6071*	.0066	.012	.0129	.0129	.0129
.0129	Center N Upper	12.5892*	.0066	.0119	.0129	.0129	.0129
.0129	Center N Upper	12.5714*	.0066	.0119	.0129	.0129	.0129
.0129	Center N Upper	12.5535*	.0066	.0118	.0129	.0129	.0129
.0129	Center N Upper	12.5357*	.0066	.0118	.0129	.0129	.0129
.0129	Center N Upper	12.5178*	.0066	.0117	.0129	.0129	.0129
.0129	Center N Upper	12.5*	.0066	.0117	.0129	.0129	.0129
.0129	Center N Upper	12.4821*	.0066	.0117	.0129	.0129	.0129
.0129	Center N Upper	12.4642*	.0066	.0116	.0129	.0129	.0129
.0129	Center N Upper	12.4464*	.0066	.0116	.0129	.0129	.0129
.0129	Center N Upper	12.4285*	.0066	.0115	.0129	.0129	.0129
.0129	Center N Upper	12.4107*	.0066	.0115	.0129	.0129	.0129
.0129	Center N Upper	12.3928*	.0066	.0114	.0129	.0129	.0129
.0129	Center N Upper	12.375*	.0066	.0114	.0129	.0129	.0129
.0129	Center N Upper	12.3571*	.0066	.0114	.0129	.0129	.0129
.0129	Center N Upper	12.3392*	.0066	.0113	.0129	.0129	.0129
.0129	Center N Upper	12.3214*	.0066	.0113	.0129	.0129	.0129
.0129	Center N Upper	12.3035*	.0066	.0112	.0129	.0129	.0129
.0129	Center N Upper	12.2857*	.0066	.0112	.0129	.0129	.0129
.0129	Center N Upper	12.2678*	.0066	.0112	.0129	.0129	.0129

				CPNPP	Local	PMP		
Center N	Upper	12.25*	.0129	.0066	.0111	.0129	.0129	.0129
Center N	Upper	12.2321*	.0129	.0066	.0111	.0129	.0129	.0129
Center N	Upper	12.2142*	.0129	.0066	.011	.0129	.0129	.0129
Center N	Upper	12.1964*	.0129	.0066	.011	.0129	.0129	.0129
Center N	Upper	12.1785*	.0129	.0066	.0109	.0129	.0129	.0129
Center N	Upper	12.1607*	.0129	.0066	.0109	.0129	.0129	.0129
Center N	Upper	12.1428*	.0129	.0066	.0109	.0129	.0129	.0129
Center N	Upper	12.125*	.0129	.0066	.0108	.0129	.0129	.0129
Center N	Upper	12.1071*	.0129	.0066	.0108	.0129	.0129	.0129
Center N	Upper	12.0892*	.0129	.0066	.0107	.0129	.0129	.0129
Center N	Upper	12.0714*	.0129	.0066	.0107	.0129	.0129	.0129
Center N	Upper	12.0535*	.0129	.0066	.0106	.0129	.0129	.0129
Center N	Upper	12.0357*	.0129	.0066	.0106	.0129	.0129	.0129
Center N	Upper	12.0178*	.0129	.0066	.0106	.0129	.0129	.0129
Center N	Upper	12	.0129	.0066	.0129			
Center N	Upper	11.75*	.0129	.0066	.0129	.0129	.0129	.0129
Center N	Upper	11.5*	.0129	.0066	.0129	.0129	.0129	.0129
Center N	Upper	11.25*	.0129	.0066	.0129	.0129	.0129	.0129
Center N	Upper	11	.0129	.0066	.0129	.0129		
Center N	Upper	10.8*	.0116	.0066	.0086	.0123	.0132	.0137
Center N	Upper	10.6*	.0104	.0066	.0081	.0124	.0135	.0145
Center N	Upper	10.4*	.0091	.0066	.0076	.0126	.0139	.0154
Center N	Upper	10.2*	.0079	.0066	.0071	.0127	.0142	.0162
Center N	Upper	10	.017	.0066	.0066	.0129	.017	.0066
Center N	Upper	9.9875*	.0066	.0067	.0067	.013	.0136	.0169
Center N	Upper	9.975*	.0066	.0069	.0069	.013	.0136	.0168
Center N	Upper	9.9625*	.0066	.007	.007	.0131	.0137	.0168
Center N	Upper	9.95*	.0066	.0071	.0071	.0131	.0137	.0167
Center N	Upper	9.9375*	.0066	.0072	.0072	.0132	.0137	.0166
Center N	Upper	9.925*	.0066	.0074	.0074	.0132	.0138	.0165
Center N	Upper	9.9125*	.0066	.0075	.0075	.0133	.0138	.0164
Center N	Upper	9.9*	.0066	.0076	.0076	.0133	.0139	.0164

		CPNPPLocalPMP						
.0066	.0066	.013	.0161	.0145	.0129			
Center N	Upper	9.8875*	.0078	.0078	.0078	.0134	.0139	.0163
.0066	.0066	.0129	.016	.0145	.0129			
Center N	Upper	9.875*	.0079	.0079	.0079	.0134	.014	.0162
.0066	.0066	.0128	.0159	.0146	.0129			
Center N	Upper	9.8625*	.008	.008	.008	.0135	.014	.0161
.0066	.0066	.0127	.0158	.0146	.0129			
Center N	Upper	9.85*	.0082	.0082	.0082	.0135	.014	.016
.0066	.0066	.0126	.0157	.0146	.0129			
Center N	Upper	9.8375*	.0083	.0083	.0083	.0136	.0141	.016
.0066	.0066	.0126	.0156	.0147	.0129			
Center N	Upper	9.825*	.0084	.0084	.0084	.0136	.0141	.0159
.0066	.0066	.0125	.0155	.0147	.0129			
Center N	Upper	9.8125*	.0086	.0086	.0086	.0137	.0142	.0158
.0066	.0066	.0124	.0154	.0147	.0129			
Center N	Upper	9.8*	.0087	.0087	.0087	.0137	.0142	.0157
.0066	.0066	.0123	.0153	.0148	.0129			
Center N	Upper	9.7875*	.0088	.0088	.0088	.0138	.0143	.0156
.0066	.0066	.0122	.0152	.0148	.0129			
Center N	Upper	9.775*	.0089	.0089	.0089	.0138	.0143	.0156
.0066	.0066	.0121	.0151	.0148	.0129			
Center N	Upper	9.7625*	.0091	.0091	.0091	.0139	.0143	.0155
.0066	.0066	.012	.015	.0149	.0129			
Center N	Upper	9.75*	.0092	.0092	.0092	.0139	.0144	.0154
.0066	.0066	.0119	.0149	.0149	.0129			
Center N	Upper	9.7375*	.0093	.0093	.0093	.014	.0144	.0153
.0066	.0066	.0118	.0148	.015	.0129			
Center N	Upper	9.725*	.0095	.0095	.0095	.014	.0145	.0152
.0066	.0066	.0118	.0147	.015	.0129			
Center N	Upper	9.7125*	.0096	.0096	.0096	.0141	.0145	.0152
.0066	.0066	.0117	.0145	.015	.0129			
Center N	Upper	9.7*	.0097	.0097	.0097	.0141	.0146	.0151
.0066	.0066	.0116	.0144	.0151	.0129			
Center N	Upper	9.6875*	.0099	.0099	.0099	.0142	.0146	.015
.0066	.0066	.0115	.0143	.0151	.0129			
Center N	Upper	9.675*	.01	.01	.01	.0142	.0147	.0149
.0066	.0066	.0114	.0142	.0151	.0129			
Center N	Upper	9.6625*	.0101	.0101	.0101	.0143	.0147	.0148
.0066	.0066	.0113	.0141	.0152	.0129			
Center N	Upper	9.65*	.0102	.0102	.0102	.0143	.0147	.0148
.0066	.0066	.0112	.014	.0152	.0129			
Center N	Upper	9.6375*	.0104	.0104	.0104	.0144	.0148	.0147
.0066	.0066	.0111	.0139	.0152	.0129			
Center N	Upper	9.625*	.0105	.0105	.0105	.0144	.0148	.0146
.0066	.0066	.011	.0138	.0153	.0129			
Center N	Upper	9.6125*	.0106	.0106	.0106	.0145	.0149	.0145
.0066	.0066	.011	.0137	.0153	.0129			
Center N	Upper	9.6*	.0108	.0108	.0108	.0145	.0149	.0144
.0066	.0066	.0109	.0136	.0153	.0129			
Center N	Upper	9.5875*	.0109	.0109	.0109	.0146	.015	.0144
.0066	.0066	.0108	.0135	.0154	.0129			
Center N	Upper	9.575*	.011	.011	.011	.0146	.015	.0143
.0066	.0066	.0107	.0134	.0154	.0129			
Center N	Upper	9.5625*	.0112	.0112	.0112	.0147	.015	.0142
.0066	.0066	.0106	.0133	.0154	.0129			
Center N	Upper	9.55*	.0113	.0113	.0113	.0147	.0151	.0141
.0066	.0066	.0105	.0132	.0155	.0129			
Center N	Upper	9.5375*	.0114	.0114	.0114	.0148	.0151	.014
.0066	.0066	.0104	.0131	.0155	.0129			
Center N	Upper	9.525*	.0115	.0115	.0115	.0148	.0152	.014
.0066	.0066	.0103	.0129	.0155	.0129			
Center N	Upper	9.5125*	.0117	.0117	.0117	.0149	.0152	.0139
.0066	.0066	.0102	.0128	.0156	.0129			

		CPNPPLocalPMP						
Center N Upper	9.5*	.0118	.0118	.015	.0153	.0138		
.0066	.0102	.0127	.0156	.0129				
Center N Upper	9.4875*	.0119	.0119	.015	.0153	.0137		
.0066	.0101	.0126	.0156	.0129				
Center N Upper	9.475*	.0121	.0121	.0151	.0153	.0136		
.0066	.01	.0125	.0157	.0129				
Center N Upper	9.4625*	.0122	.0122	.0151	.0154	.0136		
.0066	.0099	.0124	.0157	.0129				
Center N Upper	9.45*	.0123	.0123	.0152	.0154	.0135		
.0066	.0098	.0123	.0157	.0129				
Center N Upper	9.4375*	.0125	.0125	.0152	.0155	.0134		
.0066	.0097	.0122	.0158	.0129				
Center N Upper	9.425*	.0126	.0126	.0153	.0155	.0133		
.0066	.0096	.0121	.0158	.0129				
Center N Upper	9.4125*	.0127	.0127	.0153	.0156	.0132		
.0066	.0095	.012	.0159	.0129				
Center N Upper	9.4*	.0128	.0128	.0154	.0156	.0132		
.0066	.0094	.0119	.0159	.0129				
Center N Upper	9.3875*	.013	.013	.0154	.0157	.0131		
.0066	.0094	.0118	.0159	.0129				
Center N Upper	9.375*	.0131	.0131	.0155	.0157	.013		
.0066	.0093	.0117	.016	.0129				
Center N Upper	9.3625*	.0132	.0132	.0155	.0157	.0129		
.0066	.0092	.0116	.016	.0129				
Center N Upper	9.35*	.0134	.0134	.0156	.0158	.0128		
.0066	.0091	.0115	.016	.0129				
Center N Upper	9.3375*	.0135	.0135	.0156	.0158	.0128		
.0066	.009	.0113	.0161	.0129				
Center N Upper	9.325*	.0136	.0136	.0157	.0159	.0127		
.0066	.0089	.0112	.0161	.0129				
Center N Upper	9.3125*	.0138	.0138	.0157	.0159	.0126		
.0066	.0088	.0111	.0161	.0129				
Center N Upper	9.3*	.0139	.0139	.0158	.016	.0125		
.0066	.0087	.011	.0162	.0129				
Center N Upper	9.2875*	.014	.014	.0158	.016	.0124		
.0066	.0086	.0109	.0162	.0129				
Center N Upper	9.275*	.0141	.0141	.0159	.016	.0124		
.0066	.0086	.0108	.0162	.0129				
Center N Upper	9.2625*	.0143	.0143	.0159	.0161	.0123		
.0066	.0085	.0107	.0163	.0129				
Center N Upper	9.25*	.0144	.0144	.016	.0161	.0122		
.0066	.0084	.0106	.0163	.0129				
Center N Upper	9.2375*	.0145	.0145	.016	.0162	.0121		
.0066	.0083	.0105	.0163	.0129				
Center N Upper	9.225*	.0147	.0147	.0161	.0162	.012		
.0066	.0082	.0104	.0164	.0129				
Center N Upper	9.2125*	.0148	.0148	.0161	.0163	.012		
.0066	.0081	.0103	.0164	.0129				
Center N Upper	9.2*	.0149	.0149	.0162	.0163	.0119		
.0066	.008	.0102	.0164	.0129				
Center N Upper	9.1875*	.0151	.0151	.0162	.0163	.0118		
.0066	.0079	.0101	.0165	.0129				
Center N Upper	9.175*	.0152	.0152	.0163	.0164	.0117		
.0066	.0078	.01	.0165	.0129				
Center N Upper	9.1625*	.0153	.0153	.0163	.0164	.0116		
.0066	.0078	.0099	.0165	.0129				
Center N Upper	9.15*	.0154	.0154	.0164	.0165	.0116		
.0066	.0077	.0097	.0166	.0129				
Center N Upper	9.1375*	.0156	.0156	.0164	.0165	.0115		
.0066	.0076	.0096	.0166	.0129				
Center N Upper	9.125*	.0157	.0157	.0165	.0166	.0114		
.0066	.0075	.0095	.0167	.0129				
Center N Upper	9.1125*	.0158	.0158	.0165	.0166	.0113		

		CPNPPLocalPMP							
.0066	.0066	.0074	.0094	.0167	.0129				
Center N	Upper	9.1*	.016	.016	.0166	.0167	.0112		
.0066	.0066	.0073	.0093	.0167	.0129				
Center N	Upper	9.0875*	.0161	.0161	.0166	.0167	.0112		
.0066	.0066	.0072	.0092	.0168	.0129				
Center N	Upper	9.075*	.0162	.0162	.0167	.0167	.0111		
.0066	.0066	.0071	.0091	.0168	.0129				
Center N	Upper	9.0625*	.0164	.0164	.0167	.0168	.011		
.0066	.0066	.007	.009	.0168	.0129				
Center N	Upper	9.05*	.0165	.0165	.0168	.0168	.0109		
.0066	.0066	.007	.0089	.0169	.0129				
Center N	Upper	9.0375*	.0166	.0166	.0168	.0169	.0108		
.0066	.0066	.0069	.0088	.0169	.0129				
Center N	Upper	9.025*	.0167	.0167	.0169	.0169	.0108		
.0066	.0066	.0068	.0087	.0169	.0129				
Center N	Upper	9.0125*	.0169	.0169	.0169	.017	.0107		
.0066	.0066	.0067	.0086	.017	.0129				
Center N	Upper	9	.017	.017	.0066	.017	.0129		
.0129									
Center N	Upper	8	.017	.017	.0066	.017	.0129		
.0129									
Center N	Upper	7	.017	.017	.0066	.017	.0129		
.0129									
Center N	Upper	6	.017	.017	.0066	.017	.0129		
.0066	.0129	.0129							
Center N	Upper	5.83333*	.017	.017	.0066	.0066	.0066		
.0169	.017	.0129							
Center N	Upper	5.66666*	.017	.017	.0066	.0066	.0066		
.0169	.017	.0129							
Center N	Upper	5.5*	.017	.017	.0066	.0066	.0066		
.0169	.0169	.0129							
Center N	Upper	5.33333*	.017	.017	.0066	.0066	.0066		
.0169	.0169	.0129							
Center N	Upper	5.16666*	.017	.017	.0066	.0066	.0067		
.017	.0169	.0129							
Center N	Upper	5	.017	.017	.0066	.017	.0129		
.0066	.0129	.0129							
Center N	Branch	108	.0129	.0129	.0066	.017			
Center N	Branch	107.833*	.0129	.0129	.012	.0086	.0066		
.0067	.0168	.017	.017	.017					
Center N	Branch	107.666*	.0129	.0129	.0121	.0107	.0066		
.0068	.0168	.017	.017	.017					
Center N	Branch	107.5*	.0129	.0129	.0123	.0127	.0066		
.0069	.0169	.017	.017	.017					
Center N	Branch	107.333*	.0129	.0129	.0125	.0147	.0066		
.007	.0169	.017	.017	.017					
Center N	Branch	107.166*	.0129	.0129	.0127	.0168	.0066		
.0071	.017	.017	.017	.017					
Center N	Branch	107	.0129	.0129	.0188	.0066	.017		
.017									
Center N	Branch	106	.0129	.0129	.017	.0066	.017		
.017									
Center N	Branch	105.5*	.0129	.0129	.0132	.017	.0079		
.0073	.0166	.017	.017	.017					
Center N	Branch	105	.0129	.0129	.017	.0066	.017		
.017									
Center N	Lower	4	.0129	.0129	.0066	.0129	.017		
.0066	.017	.0129	.0066	.0129	.0129				
Center N	Lower	3.5*	.0098	.0103	.011	.0103	.0138		
.017	.0097	.0107	.0142	.016	.0129				
Center N	Lower	3	.0066	.0129	.017	.0066	.017		
.0129	.0066	.0129	.0129						

			CPNPPLocalPMP			
			Inl Struct			
Center N Lower	2.5					
Center N Lower	2	.0129	.017	.017	.0066	.017
.0066		.0129				.0129
Center N Lower	1	.0129	.017	.017	.0066	.017
.0066		.0129				.0129

River:Center South

Reach	River Sta.	n1	n2	n3	n4	n5
n6	n7					
Center South	8	.0066	.0129	.0129		
Center South	7.91666*	.0066	.0109	.0129	.0129	.0129
Center South	7.83333*	.0066	.0111	.0129	.0129	.0129
Center South	7.75*	.0066	.0113	.0129	.0129	.0129
Center South	7.66666*	.0066	.0114	.0129	.0129	.0129
Center South	7.58333*	.0066	.0116	.0129	.0129	.0129
Center South	7.5*	.0066	.0118	.0129	.0129	.0129
Center South	7.41666*	.0066	.012	.0129	.0129	.0129
Center South	7.33333*	.0066	.0122	.0129	.0129	.0129
Center South	7.25*	.0066	.0124	.0129	.0129	.0129
Center South	7.16666*	.0066	.0125	.0129	.0129	.0129
Center South	7.08333*	.0066	.0127	.0129	.0129	.0129
Center South	7	.0066	.0129	.0129		
Center South	6	.0066	.0129	.0129		
Center South	5	.0066	.0129	.0129		
Center South	4.8*	.0066	.0127	.0129	.0116	.0116
.0116	.0116					
Center South	4.6*	.0066	.0125	.0129	.0104	.0104
.0104	.0104					
Center South	4.4*	.0066	.0122	.0129	.0091	.0091
.0091	.0091					
Center South	4.2*	.0066	.012	.0129	.0079	.0079
.0079	.0079					
Center South	4	.0066	.0129	.0066		
Center South	3	.0066	.0129	.0066		
Center South	2	.0066	.0129	.0066	.0129	.0066
Center South	1.5		Inl Struct			
Center South	1		.017			

CPNPPLocalPMP

River:East Channel

Reach	River Sta.	n1	n2	n3	n4	n5
East Channel	7	.0129	.0129	.0129		
East Channel	6.98684*	.0129	.0129	.0129	.0129	.0129
East Channel	6.97368*	.0129	.0129	.0129	.0129	.0129
East Channel	6.96052*	.0129	.0129	.0129	.0129	.0129
East Channel	6.94736*	.0129	.0129	.0129	.0129	.0129
East Channel	6.93421*	.0129	.0129	.0129	.0129	.0129
East Channel	6.92105*	.0129	.0129	.0129	.0129	.0129
East Channel	6.90789*	.0129	.0129	.0129	.0129	.0129
East Channel	6.89473*	.0129	.0129	.0129	.0129	.0129
East Channel	6.88157*	.0129	.0129	.0129	.0129	.0129
East Channel	6.86842*	.0129	.0129	.0129	.0129	.0129
East Channel	6.85526*	.0129	.0129	.0129	.0129	.0129
East Channel	6.84210*	.0129	.0129	.0129	.0129	.0129
East Channel	6.82894*	.0129	.0129	.0129	.0129	.0129
East Channel	6.81579*	.0129	.0129	.0129	.0129	.0129
East Channel	6.80263*	.0129	.0129	.0129	.0129	.0129
East Channel	6.78947*	.0129	.0129	.0129	.0129	.0129
East Channel	6.77631*	.0129	.0129	.0129	.0129	.0129
East Channel	6.76315*	.0129	.0129	.0129	.0129	.0129
East Channel	6.75*	.0129	.0129	.0129	.0129	.0129
East Channel	6.73684*	.0129	.0129	.0129	.0129	.0129
East Channel	6.72368*	.0129	.0129	.0129	.0129	.0129
East Channel	6.71052*	.0129	.0129	.0129	.0129	.0129
East Channel	6.69736*	.0129	.0129	.0129	.0129	.0129
East Channel	6.68421*	.0129	.0129	.0129	.0129	.0129
East Channel	6.67105*	.0129	.0129	.0129	.0129	.0129

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		CPNP	Local	PMP		
East Channel	6.65789*	.0129	.0129	.0129	.0129	.0129
East Channel	6.64473*	.0129	.0129	.0129	.0129	.0129
East Channel	6.63157*	.0129	.0129	.0129	.0129	.0129
East Channel	6.61842*	.0129	.0129	.0129	.0129	.0129
East Channel	6.60526*	.0129	.0129	.0129	.0129	.0129
East Channel	6.59210*	.0129	.0129	.0129	.0129	.0129
East Channel	6.57894*	.0129	.0129	.0129	.0129	.0129
East Channel	6.56579*	.0129	.0129	.0129	.0129	.0129
East Channel	6.55263*	.0129	.0129	.0129	.0129	.0129
East Channel	6.53947*	.0129	.0129	.0129	.0129	.0129
East Channel	6.52631*	.0129	.0129	.0129	.0129	.0129
East Channel	6.51315*	.0129	.0129	.0129	.0129	.0129
East Channel	6.5*	.0129	.0129	.0129	.0129	.0129
East Channel	6.48684*	.0129	.0129	.0129	.0129	.0129
East Channel	6.47368*	.0129	.0129	.0129	.0129	.0129
East Channel	6.46052*	.0129	.0129	.0129	.0129	.0129
East Channel	6.44736*	.0129	.0129	.0129	.0129	.0129
East Channel	6.43421*	.0129	.0129	.0129	.0129	.0129
East Channel	6.42105*	.0129	.0129	.0129	.0129	.0129
East Channel	6.40789*	.0129	.0129	.0129	.0129	.0129
East Channel	6.39473*	.0129	.0129	.0129	.0129	.0129
East Channel	6.38157*	.0129	.0129	.0129	.0129	.0129
East Channel	6.36842*	.0129	.0129	.0129	.0129	.0129
East Channel	6.35526*	.0129	.0129	.0129	.0129	.0129
East Channel	6.34210*	.0129	.0129	.0129	.0129	.0129
East Channel	6.32894*	.0129	.0129	.0129	.0129	.0129
East Channel	6.31579*	.0129	.0129	.0129	.0129	.0129
East Channel	6.30263*	.0129	.0129	.0129	.0129	.0129
East Channel	6.28947*	.0129	.0129	.0129	.0129	.0129
East Channel	6.27631*	.0129	.0129	.0129	.0129	.0129
East Channel	6.26315*	.0129	.0129	.0129	.0129	.0129
East Channel	6.25*	.0129	.0129	.0129	.0129	.0129

		CPNPPLocalPMP				
East Channel	6.23684*	.0129	.0129	.0129	.0129	.0129
East Channel	6.22368*	.0129	.0129	.0129	.0129	.0129
East Channel	6.21052*	.0129	.0129	.0129	.0129	.0129
East Channel	6.19736*	.0129	.0129	.0129	.0129	.0129
East Channel	6.18421*	.0129	.0129	.0129	.0129	.0129
East Channel	6.17105*	.0129	.0129	.0129	.0129	.0129
East Channel	6.15789*	.0129	.0129	.0129	.0129	.0129
East Channel	6.14473*	.0129	.0129	.0129	.0129	.0129
East Channel	6.13157*	.0129	.0129	.0129	.0129	.0129
East Channel	6.11842*	.0129	.0129	.0129	.0129	.0129
East Channel	6.10526*	.0129	.0129	.0129	.0129	.0129
East Channel	6.09210*	.0129	.0129	.0129	.0129	.0129
East Channel	6.07894*	.0129	.0129	.0129	.0129	.0129
East Channel	6.06579*	.0129	.0129	.0129	.0129	.0129
East Channel	6.05263*	.0129	.0129	.0129	.0129	.0129
East Channel	6.03947*	.0129	.0129	.0129	.0129	.0129
East Channel	6.02631*	.0129	.0129	.0129	.0129	.0129
East Channel	6.01315*	.0129	.0129	.0129	.0129	.0129
East Channel	6	.0129	.0129	.0129		
East Channel	5.8*	.0129	.0129	.0129	.0129	
East Channel	5.6*	.0129	.0129	.0129	.0129	
East Channel	5.4*	.0129	.0129	.0129	.0129	
East Channel	5.2*	.0129	.0129	.0129	.0129	
East Channel	5	.0129	.0129	.0129		
East Channel	4.94444*	.0129	.0129	.0129	.0129	.0129
East Channel	4.88888*	.0129	.0129	.0129	.0129	.0129
East Channel	4.83333*	.0129	.0129	.0129	.0129	.0129
East Channel	4.77777*	.0129	.0129	.0129	.0129	.0129
East Channel	4.72222*	.0129	.0129	.0129	.0129	.0129
East Channel	4.66666*	.0129	.0129	.0129	.0129	.0129
East Channel	4.61111*	.0129	.0129	.0129	.0129	.0129

		CPNP	Local	PMP		
East Channel	4.55555*	.0129	.0129	.0129	.0129	.0129
East Channel	4.5*	.0129	.0129	.0129	.0129	.0129
East Channel	4.44444*	.0129	.0129	.0129	.0129	.0129
East Channel	4.38888*	.0129	.0129	.0129	.0129	.0129
East Channel	4.33333*	.0129	.0129	.0129	.0129	.0129
East Channel	4.27777*	.0129	.0129	.0129	.0129	.0129
East Channel	4.22222*	.0129	.0129	.0129	.0129	.0129
East Channel	4.16666*	.0129	.0129	.0129	.0129	.0129
East Channel	4.11111*	.0129	.0129	.0129	.0129	.0129
East Channel	4.05555*	.0129	.0129	.0129	.0129	.0129
East Channel	4	.0129	.0129	.0129		
East Channel	3.95652*	.0129	.0129	.0129	.0129	.0129
East Channel	3.91304*	.0129	.0129	.0129	.0129	.0129
East Channel	3.86956*	.0129	.0129	.0129	.0129	.0129
East Channel	3.82608*	.0129	.0129	.0129	.0129	.0129
East Channel	3.78260*	.0129	.0129	.0129	.0129	.0129
East Channel	3.73913*	.0129	.0129	.0129	.0129	.0129
East Channel	3.69565*	.0129	.0129	.0129	.0129	.0129
East Channel	3.65217*	.0129	.0129	.0129	.0129	.0129
East Channel	3.60869*	.0129	.0129	.0129	.0129	.0129
East Channel	3.56521*	.0129	.0129	.0129	.0129	.0129
East Channel	3.52173*	.0129	.0129	.0129	.0129	.0129
East Channel	3.47826*	.0129	.0129	.0129	.0129	.0129
East Channel	3.43478*	.0129	.0129	.0129	.0129	.0129
East Channel	3.39130*	.0129	.0129	.0129	.0129	.0129
East Channel	3.34782*	.0129	.0129	.0129	.0129	.0129
East Channel	3.30434*	.0129	.0129	.0129	.0129	.0129
East Channel	3.26087*	.0129	.0129	.0129	.0129	.0129
East Channel	3.21739*	.0129	.0129	.0129	.0129	.0129
East Channel	3.17391*	.0129	.0129	.0129	.0129	.0129
East Channel	3.13043*	.0129	.0129	.0129	.0129	.0129
East Channel	3.08695*	.0129	.0129	.0129	.0129	.0129

		CPNPPLocalPMP				
East Channel	3.04347*	.0129	.0129	.0129	.0129	.0129
East Channel	3	.0129	.0129	.0129		
East Channel	2.98666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.97333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.96*	.0129	.0129	.0129	.0129	.0129
East Channel	2.94666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.93333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.92*	.0129	.0129	.0129	.0129	.0129
East Channel	2.90666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.89333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.88*	.0129	.0129	.0129	.0129	.0129
East Channel	2.86666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.85333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.84*	.0129	.0129	.0129	.0129	.0129
East Channel	2.82666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.81333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.8*	.0129	.0129	.0129	.0129	.0129
East Channel	2.78666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.77333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.76*	.0129	.0129	.0129	.0129	.0129
East Channel	2.74666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.73333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.72*	.0129	.0129	.0129	.0129	.0129
East Channel	2.70666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.69333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.68*	.0129	.0129	.0129	.0129	.0129
East Channel	2.66666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.65333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.64*	.0129	.0129	.0129	.0129	.0129
East Channel	2.62666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.61333*	.0129	.0129	.0129	.0129	.0129

		CPNP	Local	PMP		
East Channel	2.6*	.0129	.0129	.0129	.0129	.0129
East Channel	2.58666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.57333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.56*	.0129	.0129	.0129	.0129	.0129
East Channel	2.54666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.53333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.52*	.0129	.0129	.0129	.0129	.0129
East Channel	2.50666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.49333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.48*	.0129	.0129	.0129	.0129	.0129
East Channel	2.46666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.45333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.44*	.0129	.0129	.0129	.0129	.0129
East Channel	2.42666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.41333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.4*	.0129	.0129	.0129	.0129	.0129
East Channel	2.38666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.37333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.36*	.0129	.0129	.0129	.0129	.0129
East Channel	2.34666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.33333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.32*	.0129	.0129	.0129	.0129	.0129
East Channel	2.30666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.29333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.28*	.0129	.0129	.0129	.0129	.0129
East Channel	2.26666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.25333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.24*	.0129	.0129	.0129	.0129	.0129
East Channel	2.22666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.21333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.2*	.0129	.0129	.0129	.0129	.0129
East Channel	2.18666*	.0129	.0129	.0129	.0129	.0129

		CPNPPLocalPMP				
East Channel	2.17333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.16*	.0129	.0129	.0129	.0129	.0129
East Channel	2.14666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.13333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.12*	.0129	.0129	.0129	.0129	.0129
East Channel	2.10666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.09333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.08*	.0129	.0129	.0129	.0129	.0129
East Channel	2.06666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.05333*	.0129	.0129	.0129	.0129	.0129
East Channel	2.04*	.0129	.0129	.0129	.0129	.0129
East Channel	2.02666*	.0129	.0129	.0129	.0129	.0129
East Channel	2.01333*	.0129	.0129	.0129	.0129	.0129
East Channel	2	.0129	.0129	.0129		
East Channel	1.98630*	.0129	.0129	.0129	.0129	
East Channel	1.97260*	.0129	.0129	.0129	.0129	
East Channel	1.95890*	.0129	.0129	.0129	.0129	
East Channel	1.94520*	.0129	.0129	.0129	.0129	
East Channel	1.93150*	.0129	.0129	.0129	.0129	
East Channel	1.91780*	.0129	.0129	.0129	.0129	
East Channel	1.90411*	.0129	.0129	.0129	.0129	
East Channel	1.89041*	.0129	.0129	.0129	.0129	
East Channel	1.87671*	.0129	.0129	.0129	.0129	
East Channel	1.86301*	.0129	.0129	.0129	.0129	
East Channel	1.84931*	.0129	.0129	.0129	.0129	
East Channel	1.83561*	.0129	.0129	.0129	.0129	
East Channel	1.82191*	.0129	.0129	.0129	.0129	
East Channel	1.80821*	.0129	.0129	.0129	.0129	
East Channel	1.79452*	.0129	.0129	.0129	.0129	
East Channel	1.78082*	.0129	.0129	.0129	.0129	
East Channel	1.76712*	.0129	.0129	.0129	.0129	

		CPNP	Local	PMP		
East Channel	1.75342*	.0129	.0129	.0129	.0129	.0129
East Channel	1.73972*	.0129	.0129	.0129	.0129	.0129
East Channel	1.72602*	.0129	.0129	.0129	.0129	.0129
East Channel	1.71232*	.0129	.0129	.0129	.0129	.0129
East Channel	1.69863*	.0129	.0129	.0129	.0129	.0129
East Channel	1.68493*	.0129	.0129	.0129	.0129	.0129
East Channel	1.67123*	.0129	.0129	.0129	.0129	.0129
East Channel	1.65753*	.0129	.0129	.0129	.0129	.0129
East Channel	1.64383*	.0129	.0129	.0129	.0129	.0129
East Channel	1.63013*	.0129	.0129	.0129	.0129	.0129
East Channel	1.61643*	.0129	.0129	.0129	.0129	.0129
East Channel	1.60274*	.0129	.0129	.0129	.0129	.0129
East Channel	1.58904*	.0129	.0129	.0129	.0129	.0129
East Channel	1.57534*	.0129	.0129	.0129	.0129	.0129
East Channel	1.56164*	.0129	.0129	.0129	.0129	.0129
East Channel	1.54794*	.0129	.0129	.0129	.0129	.0129
East Channel	1.53424*	.0129	.0129	.0129	.0129	.0129
East Channel	1.52054*	.0129	.0129	.0129	.0129	.0129
East Channel	1.50685*	.0129	.0129	.0129	.0129	.0129
East Channel	1.49315*	.0129	.0129	.0129	.0129	.0129
East Channel	1.47945*	.0129	.0129	.0129	.0129	.0129
East Channel	1.46575*	.0129	.0129	.0129	.0129	.0129
East Channel	1.45205*	.0129	.0129	.0129	.0129	.0129
East Channel	1.43835*	.0129	.0129	.0129	.0129	.0129
East Channel	1.42465*	.0129	.0129	.0129	.0129	.0129
East Channel	1.41095*	.0129	.0129	.0129	.0129	.0129
East Channel	1.39726*	.0129	.0129	.0129	.0129	.0129
East Channel	1.38356*	.0129	.0129	.0129	.0129	.0129
East Channel	1.36986*	.0129	.0129	.0129	.0129	.0129
East Channel	1.35616*	.0129	.0129	.0129	.0129	.0129
East Channel	1.34246*	.0129	.0129	.0129	.0129	.0129
East Channel	1.32876*	.0129	.0129	.0129	.0129	.0129

CPNPPLocalPMP

East Channel	1.31506*	.0129	.0129	.0129	.0129
East Channel	1.30137*	.0129	.0129	.0129	.0129
East Channel	1.28767*	.0129	.0129	.0129	.0129
East Channel	1.27397*	.0129	.0129	.0129	.0129
East Channel	1.26027*	.0129	.0129	.0129	.0129
East Channel	1.24657*	.0129	.0129	.0129	.0129
East Channel	1.23287*	.0129	.0129	.0129	.0129
East Channel	1.21917*	.0129	.0129	.0129	.0129
East Channel	1.20548*	.0129	.0129	.0129	.0129
East Channel	1.19178*	.0129	.0129	.0129	.0129
East Channel	1.17808*	.0129	.0129	.0129	.0129
East Channel	1.16438*	.0129	.0129	.0129	.0129
East Channel	1.15068*	.0129	.0129	.0129	.0129
East Channel	1.13698*	.0129	.0129	.0129	.0129
East Channel	1.12328*	.0129	.0129	.0129	.0129
East Channel	1.10959*	.0129	.0129	.0129	.0129
East Channel	1.09589*	.0129	.0129	.0129	.0129
East Channel	1.08219*	.0129	.0129	.0129	.0129
East Channel	1.06849*	.0129	.0129	.0129	.0129
East Channel	1.05479*	.0129	.0129	.0129	.0129
East Channel	1.04109*	.0129	.0129	.0129	.0129
East Channel	1.02739*	.0129	.0129	.0129	.0129
East Channel	1.01369*	.0129	.0129	.0129	.0129
East Channel	1	.0129	.0129		

River:Offsite

Reach n6 n14	n7 n15	River Sta. n8 n16	n9	n1 n10	n2 n11	n3 n12	n4 n13	n5
offsite		6		.0129	.0129	.0066	.0129	.017

			CPNPPLocalPMP					
.0066	.017	.0129	.0066					
offsite		5.94117*	.0129	.0129	.0129	.0069	.0066	
.0128	.013	.017	.0094	.0067	.0136	.0168	.0129	
.0067	.0066	.0066						
Offsite		5.88235*	.0129	.0129	.0129	.0069	.0066	
.0128	.013	.017	.0092	.0068	.0138	.0167	.0129	
.0068	.0066	.0066						
Offsite		5.82352*	.0129	.0129	.0129	.0069	.0066	
.0128	.0131	.017	.009	.0069	.014	.0165	.0129	
.0068	.0066	.0066						
Offsite		5.76470*	.0129	.0129	.0128	.0069	.0066	
.0128	.0131	.017	.0089	.007	.0142	.0164	.0129	
.0069	.0066	.0066						
Offsite		5.70588*	.0129	.0129	.0128	.0068	.0066	
.0128	.0132	.017	.0087	.0071	.0144	.0162	.0129	
.007	.0066	.0066						
Offsite		5.64705*	.0129	.0129	.0128	.0068	.0066	
.0128	.0133	.017	.0085	.0071	.0146	.0161	.0129	
.0071	.0066	.0066						
Offsite		5.58823*	.0129	.0129	.0128	.0068	.0066	
.0128	.0133	.017	.0083	.0072	.0149	.0159	.0129	
.0071	.0066	.0066						
Offsite		5.52941*	.0129	.0129	.0128	.0068	.0066	
.0128	.0134	.017	.0082	.0073	.0151	.0158	.0129	
.0072	.0066	.0066						
Offsite		5.47058*	.0129	.0129	.0128	.0068	.0066	
.0128	.0134	.017	.008	.0074	.0153	.0156	.0129	
.0073	.0066	.0066						
Offsite		5.41176*	.0129	.0129	.0128	.0067	.0066	
.0129	.0135	.017	.0078	.0075	.0155	.0155	.0129	
.0074	.0066	.0066						
Offsite		5.35294*	.0129	.0129	.0127	.0067	.0066	
.0129	.0136	.017	.0076	.0076	.0157	.0153	.0129	
.0074	.0066	.0066						
Offsite		5.29411*	.0129	.0129	.0127	.0067	.0066	
.0129	.0136	.017	.0075	.0077	.0159	.0152	.0129	
.0075	.0066	.0066						
Offsite		5.23529*	.0129	.0129	.0127	.0067	.0066	
.0129	.0137	.017	.0073	.0078	.0161	.015	.0129	
.0076	.0066	.0066						
Offsite		5.17647*	.0129	.0129	.0127	.0067	.0066	
.0129	.0138	.017	.0071	.0079	.0164	.0149	.0129	
.0077	.0066	.0066						
Offsite		5.11764*	.0129	.0129	.0127	.0066	.0066	
.0129	.0138	.017	.0069	.008	.0166	.0147	.0129	
.0078	.0066	.0066						
Offsite		5.05882*	.0129	.0129	.0127	.0066	.0066	
.0129	.0139	.017	.0068	.0081	.0168	.0146	.0129	
.0078	.0066	.0066						
Offsite		5	.0129	.0129	.0066	.0129	.017	
.0066	.017	.0129	.0066					
offsite		4.5*	.0129	.0129	.0128	.0092	.0071	
.0123	.0144	.017	.0067	.0067	.0166	.0167	.0129	
.0071	.0066	.0066						
Offsite		4	.0129	.0129	.0066	.0129	.017	
.0066	.017	.0129	.0066					
offsite		3.5*	.0129	.0129	.0127	.0101	.0145	
.017	.0078	.0071	.0164	.0166	.0129	.0066	.0066	
offsite		3	.0129	.0129	.017	.0066	.017	

		CPNPPLocalPMP						
.0129	.0066							
offsite .0067	.0166	2.91666* .0149	.0129	.0129	.0129	.0142	.017	.0147
offsite .0068	.0162	2.83333* .0147	.0129	.0129	.0129	.0141	.017	.014
offsite .007	.0158	2.75* .0145	.0129	.0129	.0129	.014	.017	.0132
offsite .0071	.0153	2.66666* .0144	.0129	.0129	.0129	.0139	.017	.0125
offsite .0072	.0149	2.58333* .0142	.0129	.0129	.0129	.0137	.017	.0117
offsite .0073	.0145	2.5* .014	.0129	.0129	.0129	.0136	.017	.011
offsite .0074	.0141	2.41666* .0138	.0129	.0129	.0129	.0135	.017	.0103
offsite .0075	.0137	2.33333* .0136	.0129	.0129	.0129	.0134	.017	.0095
offsite .0077	.0133	2.25* .0134	.0129	.0129	.0129	.0133	.017	.0088
offsite .0078	.0129	2.16666* .0133	.0129	.0129	.0129	.0131	.017	.0081
offsite .0079	.0125	2.08333* .0131	.0129	.0129	.0129	.013	.017	.0073
offsite .0129	.0066	2	.0129	.0129	.017	.0066	.0129	
offsite		1.5	Inl struct					
offsite		1	.0129	.0066				

River:Unit 3 East

Reach	River Sta.	n1	n2	n3	n4	n5
Unit 3 East	5	.0066	.0129	.0129		
Unit 3 East	4.98795*	.0066	.0109	.0129	.0129	.0129
Unit 3 East	4.97590*	.0066	.0109	.0129	.0129	.0129
Unit 3 East	4.96385*	.0066	.0109	.0129	.0129	.0129

		CPNPPLocalPMP				
Unit 3 East	4.95180*	.0066	.011	.0129	.0129	.0129
Unit 3 East	4.93975*	.0066	.011	.0129	.0129	.0129
Unit 3 East	4.92771*	.0066	.011	.0129	.0129	.0129
Unit 3 East	4.91566*	.0066	.011	.0129	.0129	.0129
Unit 3 East	4.90361*	.0066	.0111	.0129	.0129	.0129
Unit 3 East	4.89156*	.0066	.0111	.0129	.0129	.0129
Unit 3 East	4.87951*	.0066	.0111	.0129	.0129	.0129
Unit 3 East	4.86747*	.0066	.0111	.0129	.0129	.0129
Unit 3 East	4.85542*	.0066	.0112	.0129	.0129	.0129
Unit 3 East	4.84337*	.0066	.0112	.0129	.0129	.0129
Unit 3 East	4.83132*	.0066	.0112	.0129	.0129	.0129
Unit 3 East	4.81927*	.0066	.0112	.0129	.0129	.0129
Unit 3 East	4.80722*	.0066	.0113	.0129	.0129	.0129
Unit 3 East	4.79518*	.0066	.0113	.0129	.0129	.0129
Unit 3 East	4.78313*	.0066	.0113	.0129	.0129	.0129
Unit 3 East	4.77108*	.0066	.0113	.0129	.0129	.0129
Unit 3 East	4.75903*	.0066	.0114	.0129	.0129	.0129
Unit 3 East	4.74698*	.0066	.0114	.0129	.0129	.0129
Unit 3 East	4.73494*	.0066	.0114	.0129	.0129	.0129
Unit 3 East	4.72289*	.0066	.0114	.0129	.0129	.0129
Unit 3 East	4.71084*	.0066	.0115	.0129	.0129	.0129
Unit 3 East	4.69879*	.0066	.0115	.0129	.0129	.0129
Unit 3 East	4.68674*	.0066	.0115	.0129	.0129	.0129
Unit 3 East	4.67469*	.0066	.0115	.0129	.0129	.0129
Unit 3 East	4.66265*	.0066	.0116	.0129	.0129	.0129
Unit 3 East	4.65060*	.0066	.0116	.0129	.0129	.0129
Unit 3 East	4.63855*	.0066	.0116	.0129	.0129	.0129
Unit 3 East	4.62650*	.0066	.0116	.0129	.0129	.0129
Unit 3 East	4.61445*	.0066	.0117	.0129	.0129	.0129
Unit 3 East	4.60240*	.0066	.0117	.0129	.0129	.0129
Unit 3 East	4.59036*	.0066	.0117	.0129	.0129	.0129
Unit 3 East	4.57831*	.0066	.0117	.0129	.0129	.0129

CPNPPLocalPMP

Unit 3 East	4.56626*	.0066	.0117	.0129	.0129	.0129
Unit 3 East	4.55421*	.0066	.0118	.0129	.0129	.0129
Unit 3 East	4.54216*	.0066	.0118	.0129	.0129	.0129
Unit 3 East	4.53012*	.0066	.0118	.0129	.0129	.0129
Unit 3 East	4.51807*	.0066	.0118	.0129	.0129	.0129
Unit 3 East	4.50602*	.0066	.0119	.0129	.0129	.0129
Unit 3 East	4.49397*	.0066	.0119	.0129	.0129	.0129
Unit 3 East	4.48192*	.0066	.0119	.0129	.0129	.0129
Unit 3 East	4.46988*	.0066	.0119	.0129	.0129	.0129
Unit 3 East	4.45783*	.0066	.012	.0129	.0129	.0129
Unit 3 East	4.44578*	.0066	.012	.0129	.0129	.0129
Unit 3 East	4.43373*	.0066	.012	.0129	.0129	.0129
Unit 3 East	4.42168*	.0066	.012	.0129	.0129	.0129
Unit 3 East	4.40963*	.0066	.0121	.0129	.0129	.0129
Unit 3 East	4.39759*	.0066	.0121	.0129	.0129	.0129
Unit 3 East	4.38554*	.0066	.0121	.0129	.0129	.0129
Unit 3 East	4.37349*	.0066	.0121	.0129	.0129	.0129
Unit 3 East	4.36144*	.0066	.0122	.0129	.0129	.0129
Unit 3 East	4.34939*	.0066	.0122	.0129	.0129	.0129
Unit 3 East	4.33735*	.0066	.0122	.0129	.0129	.0129
Unit 3 East	4.32530*	.0066	.0122	.0129	.0129	.0129
Unit 3 East	4.31325*	.0066	.0123	.0129	.0129	.0129
Unit 3 East	4.30120*	.0066	.0123	.0129	.0129	.0129
Unit 3 East	4.28915*	.0066	.0123	.0129	.0129	.0129
Unit 3 East	4.27710*	.0066	.0123	.0129	.0129	.0129
Unit 3 East	4.26506*	.0066	.0124	.0129	.0129	.0129
Unit 3 East	4.25301*	.0066	.0124	.0129	.0129	.0129
Unit 3 East	4.24096*	.0066	.0124	.0129	.0129	.0129
Unit 3 East	4.22891*	.0066	.0124	.0129	.0129	.0129
Unit 3 East	4.21686*	.0066	.0125	.0129	.0129	.0129
Unit 3 East	4.20482*	.0066	.0125	.0129	.0129	.0129

		CPNP	Local	PMP		
Unit 3 East	4.19277*	.0066	.0125	.0129	.0129	.0129
Unit 3 East	4.18072*	.0066	.0125	.0129	.0129	.0129
Unit 3 East	4.16867*	.0066	.0126	.0129	.0129	.0129
Unit 3 East	4.15662*	.0066	.0126	.0129	.0129	.0129
Unit 3 East	4.14457*	.0066	.0126	.0129	.0129	.0129
Unit 3 East	4.13253*	.0066	.0126	.0129	.0129	.0129
Unit 3 East	4.12048*	.0066	.0127	.0129	.0129	.0129
Unit 3 East	4.10843*	.0066	.0127	.0129	.0129	.0129
Unit 3 East	4.09638*	.0066	.0127	.0129	.0129	.0129
Unit 3 East	4.08433*	.0066	.0127	.0129	.0129	.0129
Unit 3 East	4.07228*	.0066	.0128	.0129	.0129	.0129
Unit 3 East	4.06024*	.0066	.0128	.0129	.0129	.0129
Unit 3 East	4.04819*	.0066	.0128	.0129	.0129	.0129
Unit 3 East	4.03614*	.0066	.0128	.0129	.0129	.0129
Unit 3 East	4.02409*	.0066	.0129	.0129	.0129	.0129
Unit 3 East	4.01204*	.0066	.0129	.0129	.0129	.0129
Unit 3 East	4	.0066	.0129	.0129		
Unit 3 East	3.98305*	.0066	.0129	.0129	.0129	.0129
Unit 3 East	3.96610*	.0066	.0128	.0129	.0129	.0129
Unit 3 East	3.94915*	.0066	.0128	.0129	.0129	.0129
Unit 3 East	3.93220*	.0066	.0128	.0129	.0129	.0129
Unit 3 East	3.91525*	.0066	.0127	.0129	.0129	.0129
Unit 3 East	3.89830*	.0066	.0127	.0129	.0129	.0129
Unit 3 East	3.88135*	.0066	.0127	.0129	.0129	.0129
Unit 3 East	3.86440*	.0066	.0126	.0129	.0129	.0129
Unit 3 East	3.84745*	.0066	.0126	.0129	.0129	.0129
Unit 3 East	3.83050*	.0066	.0126	.0129	.0129	.0129
Unit 3 East	3.81355*	.0066	.0125	.0129	.0129	.0129
Unit 3 East	3.79661*	.0066	.0125	.0129	.0129	.0129
Unit 3 East	3.77966*	.0066	.0125	.0129	.0129	.0129
Unit 3 East	3.76271*	.0066	.0124	.0129	.0129	.0129
Unit 3 East	3.74576*	.0066	.0124	.0129	.0129	.0129

CPNPPLocalPMP

Unit 3 East	3.72881*	.0066	.0123	.0129	.0129	.0129
Unit 3 East	3.71186*	.0066	.0123	.0129	.0129	.0129
Unit 3 East	3.69491*	.0066	.0123	.0129	.0129	.0129
Unit 3 East	3.67796*	.0066	.0122	.0129	.0129	.0129
Unit 3 East	3.66101*	.0066	.0122	.0129	.0129	.0129
Unit 3 East	3.64406*	.0066	.0122	.0129	.0129	.0129
Unit 3 East	3.62711*	.0066	.0121	.0129	.0129	.0129
Unit 3 East	3.61016*	.0066	.0121	.0129	.0129	.0129
Unit 3 East	3.59322*	.0066	.0121	.0129	.0129	.0129
Unit 3 East	3.57627*	.0066	.012	.0129	.0129	.0129
Unit 3 East	3.55932*	.0066	.012	.0129	.0129	.0129
Unit 3 East	3.54237*	.0066	.012	.0129	.0129	.0129
Unit 3 East	3.52542*	.0066	.0119	.0129	.0129	.0129
Unit 3 East	3.50847*	.0066	.0119	.0129	.0129	.0129
Unit 3 East	3.49152*	.0066	.0119	.0129	.0129	.0129
Unit 3 East	3.47457*	.0066	.0118	.0129	.0129	.0129
Unit 3 East	3.45762*	.0066	.0118	.0129	.0129	.0129
Unit 3 East	3.44067*	.0066	.0118	.0129	.0129	.0129
Unit 3 East	3.42372*	.0066	.0117	.0129	.0129	.0129
Unit 3 East	3.40678*	.0066	.0117	.0129	.0129	.0129
Unit 3 East	3.38983*	.0066	.0117	.0129	.0129	.0129
Unit 3 East	3.37288*	.0066	.0116	.0129	.0129	.0129
Unit 3 East	3.35593*	.0066	.0116	.0129	.0129	.0129
Unit 3 East	3.33898*	.0066	.0116	.0129	.0129	.0129
Unit 3 East	3.32203*	.0066	.0115	.0129	.0129	.0129
Unit 3 East	3.30508*	.0066	.0115	.0129	.0129	.0129
Unit 3 East	3.28813*	.0066	.0115	.0129	.0129	.0129
Unit 3 East	3.27118*	.0066	.0114	.0129	.0129	.0129
Unit 3 East	3.25423*	.0066	.0114	.0129	.0129	.0129
Unit 3 East	3.23728*	.0066	.0113	.0129	.0129	.0129
Unit 3 East	3.22033*	.0066	.0113	.0129	.0129	.0129

		CPNPP	Local	PMP			
Unit 3 East	3.20339*	.0066	.0113	.0129	.0129	.0129	
Unit 3 East	3.18644*	.0066	.0112	.0129	.0129	.0129	
Unit 3 East	3.16949*	.0066	.0112	.0129	.0129	.0129	
Unit 3 East	3.15254*	.0066	.0112	.0129	.0129	.0129	
Unit 3 East	3.13559*	.0066	.0111	.0129	.0129	.0129	
Unit 3 East	3.11864*	.0066	.0111	.0129	.0129	.0129	
Unit 3 East	3.10169*	.0066	.0111	.0129	.0129	.0129	
Unit 3 East	3.08474*	.0066	.011	.0129	.0129	.0129	
Unit 3 East	3.06779*	.0066	.011	.0129	.0129	.0129	
Unit 3 East	3.05084*	.0066	.011	.0129	.0129	.0129	
Unit 3 East	3.03389*	.0066	.0109	.0129	.0129	.0129	
Unit 3 East	3.01695*	.0066	.0109	.0129	.0129	.0129	
Unit 3 East	3	.0066	.0129				
Unit 3 East	2.97368*	.0066	.011	.0129	.013	.013	
Unit 3 East	2.94736*	.0066	.011	.013	.0131	.0131	
Unit 3 East	2.92105*	.0066	.0111	.013	.0132	.0132	
Unit 3 East	2.89473*	.0066	.0111	.0131	.0133	.0133	
Unit 3 East	2.86842*	.0066	.0112	.0131	.0134	.0134	
Unit 3 East	2.84210*	.0066	.0112	.0131	.0135	.0135	
Unit 3 East	2.81578*	.0066	.0113	.0132	.0137	.0137	
Unit 3 East	2.78947*	.0066	.0113	.0132	.0138	.0138	
Unit 3 East	2.76315*	.0066	.0114	.0132	.0139	.0139	
Unit 3 East	2.73684*	.0066	.0114	.0133	.014	.014	
Unit 3 East	2.71052*	.0066	.0115	.0133	.0141	.0141	
Unit 3 East	2.68421*	.0066	.0115	.0134	.0142	.0142	
Unit 3 East	2.65789*	.0066	.0116	.0134	.0143	.0143	
Unit 3 East	2.63157*	.0066	.0116	.0134	.0144	.0144	
Unit 3 East	2.60526*	.0066	.0117	.0135	.0145	.0145	
Unit 3 East	2.57894*	.0066	.0117	.0135	.0146	.0146	
Unit 3 East	2.55263*	.0066	.0118	.0136	.0147	.0147	
Unit 3 East	2.52631*	.0066	.0118	.0136	.0148	.0148	
Unit 3 East	2.5*	.0066	.0119	.0136	.0149	.0149	

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Unit 3 East	2.47368*	.0066	.012	.0137	.0151	.0151
Unit 3 East	2.44736*	.0066	.012	.0137	.0152	.0152
Unit 3 East	2.42105*	.0066	.0121	.0137	.0153	.0153
Unit 3 East	2.39473*	.0066	.0121	.0138	.0154	.0154
Unit 3 East	2.36842*	.0066	.0122	.0138	.0155	.0155
Unit 3 East	2.34210*	.0066	.0122	.0139	.0156	.0156
Unit 3 East	2.31579*	.0066	.0123	.0139	.0157	.0157
Unit 3 East	2.28947*	.0066	.0123	.0139	.0158	.0158
Unit 3 East	2.26315*	.0066	.0124	.014	.0159	.0159
Unit 3 East	2.23684*	.0066	.0124	.014	.016	.016
Unit 3 East	2.21052*	.0066	.0125	.0141	.0161	.0161
Unit 3 East	2.18421*	.0066	.0125	.0141	.0162	.0162
Unit 3 East	2.15789*	.0066	.0126	.0141	.0164	.0164
Unit 3 East	2.13157*	.0066	.0126	.0142	.0165	.0165
Unit 3 East	2.10526*	.0066	.0127	.0142	.0166	.0166
Unit 3 East	2.07894*	.0066	.0127	.0142	.0167	.0167
Unit 3 East	2.05263*	.0066	.0128	.0143	.0168	.0168
Unit 3 East	2.02631*	.0066	.0128	.0143	.0169	.0169
Unit 3 East	2	.0066	.0129	.017		
Unit 3 East	1.5	Inl Struct				
Unit 3 East	1	.0129				

River:Unit 3 North

Reach n6 n14	Reach n7 n15	River Sta. n8 n16	Sta. n9	n1 n10	n2 n11	n3 n12	n4 n13	n5
Unit 3 North		8		.0129	.0129	.0066	.0129	.0129
Unit 3 North		7		.0129	.0129	.0066	.0129	.0129
Unit 3 North		6		.0129	.0129	.0066	.0129	.0129

			CPNPPLocalPMP				
Unit 3 North		5	.0129	.0129	.0066	.0129	.0066
Unit 3 North		4.5	Inl Struct				
Unit 3 North		4	.0129	.0129	.0066	.0129	.017
.0066	.017	.0129	.0066				
Unit 3 North		3.5*	.0129	.0129	.0125	.0072	.0068
.012	.0136	.017	.007	.0074	.0162	.0168	.0129
.0067	.0066	.0066					
Unit 3 North		3	.0129	.0129	.0066	.0129	.017
.0066	.017	.0129	.0066				
Unit 3 North		2	.0129	.0129	.0066	.0129	.017
.0066	.017	.0129	.0066				
Unit 3 North		1.5	Inl Struct				
Unit 3 North		1	.0066	.017			

River:Unit 3 Southeast

Reach	River Sta.	n1	n2	n3	n4	n5
n6	n7	n9	n10	n11	n12	n13
Unit 3 Southeast	11	.0129	.0129	.0129		
Unit 3 Southeast	10.9090*	.0129	.0129	.0129	.0129	.0129
Unit 3 Southeast	10.8181*	.0129	.0129	.0129	.0129	.0129
Unit 3 Southeast	10.7272*	.0129	.0129	.0129	.0129	.0129
Unit 3 Southeast	10.6363*	.0129	.0129	.0129	.0129	.0129
Unit 3 Southeast	10.5454*	.0129	.0129	.0129	.0129	.0129
Unit 3 Southeast	10.4545*	.0129	.0129	.0129	.0129	.0129
Unit 3 Southeast	10.3636*	.0129	.0129	.0129	.0129	.0129

		CPNP	Local	PMP		
Unit 3 Southeast	10.2727*	.0129	.0129	.0129	.0129	.0129
Unit 3 Southeast	10.1818*	.0129	.0129	.0129	.0129	.0129
Unit 3 Southeast	10.0909*	.0129	.0129	.0129	.0129	.0129
Unit 3 Southeast	10	.0129	.0129	.0129		
Unit 3 Southeast .0129	9.92857*	.0129	.0129	.0129	.0125	.0129
Unit 3 Southeast .0129	9.85714*	.0129	.0129	.0128	.012	.0129
Unit 3 Southeast .0129	9.78571*	.0129	.0129	.0128	.0115	.0129
Unit 3 Southeast .0129	9.71428*	.0129	.0129	.0128	.0111	.0129
Unit 3 Southeast .0129	9.64285*	.0129	.0129	.0127	.0107	.0129
Unit 3 Southeast .0129	9.57142*	.0129	.0129	.0127	.0102	.0129
Unit 3 Southeast .0129	9.5*	.0129	.0129	.0127	.0098	.0129
Unit 3 Southeast .0129	9.42857*	.0129	.0129	.0126	.0093	.0129
Unit 3 Southeast .0129	9.35714*	.0129	.0129	.0126	.0088	.0129
Unit 3 Southeast .0129	9.28571*	.0129	.0129	.0126	.0084	.0129
Unit 3 Southeast .0129	9.21428*	.0129	.0129	.0125	.0079	.0129
Unit 3 Southeast .0129	9.14285*	.0129	.0129	.0125	.0075	.0129
Unit 3 Southeast .0129	9.07142*	.0129	.0129	.0125	.007	.0129
Unit 3 Southeast	9	.0129	.0129	.0066	.0129	.0129
Unit 3 Southeast .0089 .0079	8.83333* .0066	.0129	.0129	.0129	.0098	.0074
Unit 3 Southeast .0106 .0089	8.66666* .0066	.0129	.0129	.0129	.0112	.0072
Unit 3 Southeast .0122 .0099	8.5* .0066	.0129	.0129	.0129	.0127	.0071

			CPNPPLocalPMP						
Unit 3 Southeast	8.33333*		.0129	.0129	.0129	.0129	.0141	.0069	
.0138 .0109	.0066		.0129	.0129					
Unit 3 Southeast	8.16666*		.0129	.0129	.0129	.0129	.0156	.0068	
.0154 .0119	.0066		.0129	.0129					
Unit 3 Southeast	8		.0129	.0129	.0129	.017	.0066	.017	
.0129 .0066	.0129		.0129						
Unit 3 Southeast	7		.0129	.0129	.0129	.017	.0066	.017	
.0129 .0066	.0129		.0129						
Unit 3 Southeast	6		.0129	.0129	.0129	.017	.0066	.017	
.0129 .0066	.0129		.0129						
Unit 3 Southeast	5		.0129	.0129	.0129	.017	.0066	.017	
.0129 .0066	.0129		.0129						
Unit 3 Southeast	4.66666*		.0129	.0129	.0129	.0129	.017	.0168	
.0066 .017	.0129		.0066	.0129	.0143	.0108	.0143		
.0129									
Unit 3 Southeast	4.33333*		.0129	.0129	.0129	.0129	.017	.0166	
.0066 .017	.0129		.0066	.0129	.0156	.0087	.0156		
.0129									
Unit 3 Southeast	4		.0129	.0129	.0129	.017	.0066	.017	
.0129 .0066	.0129		.017	.0066	.017	.0129	.0129		
Unit 3 Southeast	3		.0129	.0129	.0129	.017	.0066	.017	
.0129 .0066	.0129		.017	.0066	.017	.017			
Unit 3 Southeast	2		.0129	.0129	.0129	.0188	.0066	.017	
.0066 .0129	.017		.0066	.017	.0129	.0129			
Unit 3 Southeast	1.5		Inl Struct						
Unit 3 Southeast	1		.0129						

River:Unit 3 UHS

Reach	River Sta.	n1	n2	n3	n4	n5
n6	n7	n8				
U3 UHS Branch	109	.0129	.0129	.0129		
U3 UHS Branch	108.988*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.977*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.966*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.955*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.944*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.933*	.0129	.0129	.0129	.0129	

		CPNPPLocalPMP			
U3 UHS Branch	108.922*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.911*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.9*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.888*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.877*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.866*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.855*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.844*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.833*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.822*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.811*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.8*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.788*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.777*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.766*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.755*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.744*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.733*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.722*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.711*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.7*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.688*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.677*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.666*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.655*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.644*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.633*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.622*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.611*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.6*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.588*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.577*	.0129	.0129	.0129	.0129

CPNPPLocalPMP

U3 UHS Branch	108.566*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.555*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.544*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.533*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.522*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.511*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.5*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.488*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.477*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.466*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.455*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.444*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.433*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.422*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.411*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.4*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.388*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.377*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.366*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.355*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.344*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.333*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.322*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.311*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.3*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.288*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.277*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.266*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.255*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.244*	.0129	.0129	.0129	.0129
U3 UHS Branch	108.233*	.0129	.0129	.0129	.0129

		CPNPP	Local	PMP		
U3 UHS Branch	108.222*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.211*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.2*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.188*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.177*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.166*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.155*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.144*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.133*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.122*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.111*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.1*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.088*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.077*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.066*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.055*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.044*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.033*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.022*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108.011*	.0129	.0129	.0129	.0129	
U3 UHS Branch	108	.0129	.0129	.0129		
U3 UHS Upper	12	.0066	.0129	.0129		
U3 UHS Upper	11.875*	.0066	.0121	.0121	.0129	.0129
U3 UHS Upper	11.75*	.0066	.0113	.0113	.0129	.0129
U3 UHS Upper	11.625*	.0066	.0105	.0105	.0129	.0129
U3 UHS Upper	11.5*	.0066	.0098	.0098	.0129	.0129
U3 UHS Upper	11.375*	.0066	.009	.009	.0129	.0129
U3 UHS Upper	11.25*	.0066	.0082	.0082	.0129	.0129
U3 UHS Upper	11.125*	.0066	.0074	.0074	.0129	.0129
U3 UHS Upper	11	.0066	.0066	.0129	.0129	
U3 UHS Upper	10.8*	.0079	.0079	.0078	.0124	.0116
U3 UHS Upper	10.6*	.0091	.0091	.009	.012	.0104

			CPNPPLocalPMP					
.0104	.0129	.0129						
U3 UHS Upper	.0091	10.4*	.0104	.0104	.0101	.0115	.0091	
U3 UHS Upper	.0079	10.2*	.0116	.0116	.0113	.011	.0079	
U3 UHS Upper	.0129	10	.0129	.0129	.0066	.0129	.0129	
U3 UHS Upper		9	.0129	.0129	.0066	.0129	.0129	
U3 UHS Upper		8	.0129	.0129	.0066	.0129	.0129	
U3 UHS Lower		7	.0129	.0066	.0129	.0129		
U3 UHS Lower		6.9						
			Lat Struct					
U3 UHS Lower		6	.0129	.0066	.0129	.0129		
U3 UHS Lower		5	.0129	.0066	.017	.017		
U3 UHS Lower		4	.0129	.017	.0066	.017	.0129	
U3 UHS Lower	.0129	3.90909*	.0129	.017	.0067	.0066	.0167	
U3 UHS Lower	.0159	3.81818*	.0129	.017	.0067	.0066	.0164	
U3 UHS Lower	.016	3.72727*	.0129	.017	.0067	.0066	.0161	
U3 UHS Lower	.0161	3.63636*	.0129	.017	.0067	.0066	.0158	
U3 UHS Lower	.0162	3.54545*	.0129	.017	.0066	.0066	.0155	
U3 UHS Lower	.0163	3.45454*	.0129	.017	.0066	.0066	.0152	
U3 UHS Lower	.0164	3.36363*	.0129	.017	.0066	.0066	.0149	
U3 UHS Lower	.0165	3.27272*	.0129	.017	.0066	.0066	.0146	
U3 UHS Lower	.0167	3.18181*	.0129	.017	.0066	.0066	.0144	
U3 UHS Lower	.0168	3.09090*	.0129	.017	.0066	.0066	.0141	
U3 UHS Lower	.0169	3	.0129	.017	.0066	.017	.0129	
U3 UHS Lower	.0129	2	.0129	.017	.0066	.017	.0129	
U3 UHS Lower	.0066	1.5						
			Inl Struct					
U3 UHS Lower		1		.017				

River:Unit 4 North

Reach	River Sta.	n1	n2	n3	n4	n5
n6	n7	n8	n9			
Unit 4 North	6	.0129	.0129	.0066	.0129	.0129
Unit 4 North	5	.0129	.0129	.0066	.0129	.0129

				CPNPPLocalPMP			
Unit 4 North	4			.0129	.0129	.0066	.0129 .0129
Unit 4 North	3			.0129	.0129	.0066	.0129 .0129
Unit 4 North	2			.0129	.0129	.0066	.0129 .0066
Unit 4 North	1.5			Inl Struct			
Unit 4 North	1			.0129	.0129	.0066	.0129 .017
.0129	.017	.0129		.0066			

River:Unit 4 UHS

Reach	River Sta.	n1	n2	n3	n4	n5
n6	n8	n9	n10			
U4 UHS Upper .0066	10		.017 .017	.0066	.017	.0129
U4 UHS Upper .0129	9		.0129 .0129	.017	.0066	.017
U4 UHS Upper .01	8.875*		.0129 .0129	.0132	.017	.0069
U4 UHS Upper .0095	8.75*	.0129	.0129 .0129	.0136	.017	.0072
U4 UHS Upper .009	8.625*	.0129	.0129 .0129	.0139	.017	.0075
U4 UHS Upper .0085	8.5*	.0129	.0129 .0129	.0142	.017	.0078
U4 UHS Upper .008	8.375*	.0129	.0129 .0129	.0146	.017	.0081
U4 UHS Upper .0076	8.25*	.0129	.0129 .0129	.0149	.017	.0084
U4 UHS Upper .0071	8.125*	.0129	.0129 .0129	.0152	.017	.0087
U4 UHS Upper .0129	8		.0129 .0129	.017	.0066	.017
U4 UHS Upper .0129	7		.0129 .0129	.017	.0066	.017
U4 UHS Upper	6.9		Lat Struct			
U4 UHS Upper .0129	6		.0129 .0129	.017	.0066	.017
U4 UHS Branch	107		.0129 .0129	.0129		
U4 UHS Branch	106.916*		.0129 .0129	.0129		
U4 UHS Branch	106.833*		.0129 .0129	.0129		
U4 UHS Branch	106.75*		.0129 .0129	.0129		
U4 UHS Branch	106.666*		.0129 .0129	.0129		
U4 UHS Branch	106.583*		.0129 .0129	.0129		
U4 UHS Branch	106.5*		.0129 .0129	.0129		
U4 UHS Branch	106.416*		.0129 .0129	.0129		
U4 UHS Branch	106.333*		.0129 .0129	.0129		

		CPNPPLocalPMP			
U4 UHS Branch	106.25*	.0129	.0129	.0129	
U4 UHS Branch	106.166*	.0129	.0129	.0129	
U4 UHS Branch	106.083*	.0129	.0129	.0129	
U4 UHS Branch	106	.0129	.0129	.0129	
U4 UHS Lower	5	.0129	.0129		
U4 UHS Lower	4.9	Lat Struct			
U4 UHS Lower	4.75*	.0129	.0129	.0129	.0129
U4 UHS Lower	4.5*	.0129	.0129	.0129	.0129
U4 UHS Lower	4.25*	.0129	.0129	.0129	.0129
U4 UHS Lower	4	.0129	.0129		
U4 UHS Lower	3.9	Lat Struct			
U4 UHS Lower	3	.0129	.0129		
U4 UHS Lower	2.92857*	.0129	.0129	.0129	
U4 UHS Lower	2.85714*	.0129	.0129	.0129	
U4 UHS Lower	2.78571*	.0129	.0129	.0129	
U4 UHS Lower	2.71428*	.0129	.0129	.0129	
U4 UHS Lower	2.64285*	.0129	.0129	.0129	
U4 UHS Lower	2.57142*	.0129	.0129	.0129	
U4 UHS Lower	2.5*	.0129	.0129	.0129	
U4 UHS Lower	2.42857*	.0129	.0129	.0129	
U4 UHS Lower	2.35714*	.0129	.0129	.0129	
U4 UHS Lower	2.28571*	.0129	.0129	.0129	
U4 UHS Lower	2.21428*	.0129	.0129	.0129	
U4 UHS Lower	2.14285*	.0129	.0129	.0129	
U4 UHS Lower	2.07142*	.0129	.0129	.0129	
U4 UHS Lower	2	.0129			
U4 UHS Lower	1.5	Inl Struct			
U4 UHS Lower	1	.0129			

River:West Channel

Reach n6	River Sta. n7	River Sta. n8	CPNPPLocalPMP					n3	n4	n5
			n9	n1	n10	n2	n11			
West Channel .0066		24			.017	.0066	.017	.0129	.0066	
West Channel .0066		23			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0129	22			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0129	21			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0066	20			.017	.0066	.017	.0129	.0066	
West Channel		19			.017	.0066	.017	.0129	.0066	
West Channel		18			.017	.0066	.017	.0129	.0066	
West Channel		17			.017	.0066	.017	.0129	.0066	
West Channel .0066		16			.017	.0066	.017	.0129	.0066	
West Channel .0066		15			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0129	14			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0129	13			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0066	12			.017	.0066	.017	.0129	.0066	
West Channel .0129	.017	11	.0066	.017	.017	.0066	.017	.0129	.0066	
West Channel .0066		10		.017	.017	.0066	.017	.0129	.0066	
West Channel .0129	.0129	9			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0129	8			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0129	7			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0129	6			.017	.0066	.017	.0129	.0066	
West Channel .0129	.0129	5			.017	.0066	.017	.0129	.0066	
West Channel .0129		4			.0129	.017	.0129	.0066	.0129	
West Channel		3			.0129	.017	.0129	.0066	.0066	
West Channel		2.75*			.0129	.0156	.0168	.0129	.0066	
West Channel		2.5*			.0129	.016	.0166	.0129	.0066	
West Channel		2.25*			.0129	.0165	.0164	.0129	.0066	
West Channel .0066		2			.0129	.017	.0129	.0066	.0129	
West Channel		1.5		Inl Struct						
West Channel		1			.0129	.0129				

CPNPPLocalPMP

SUMMARY OF REACH LENGTHS

River: Center North

Reach	River Sta.	Left	Channel	Right
Center N Upper	13	.98	.98	.98
Center N Upper	12.9821*	.98	.98	.98
Center N Upper	12.9642*	.98	.98	.98
Center N Upper	12.9464*	.98	.98	.98
Center N Upper	12.9285*	.98	.98	.98
Center N Upper	12.9107*	.98	.98	.98
Center N Upper	12.8928*	.98	.98	.98
Center N Upper	12.875*	.98	.98	.98
Center N Upper	12.8571*	.98	.98	.98
Center N Upper	12.8392*	.98	.98	.98
Center N Upper	12.8214*	.98	.98	.98
Center N Upper	12.8035*	.98	.98	.98
Center N Upper	12.7857*	.98	.98	.98
Center N Upper	12.7678*	.98	.98	.98
Center N Upper	12.75*	.98	.98	.98
Center N Upper	12.7321*	.98	.98	.98
Center N Upper	12.7142*	.98	.98	.98
Center N Upper	12.6964*	.98	.98	.98
Center N Upper	12.6785*	.98	.98	.98
Center N Upper	12.6607*	.98	.98	.98
Center N Upper	12.6428*	.98	.98	.98
Center N Upper	12.625*	.98	.98	.98
Center N Upper	12.6071*	.98	.98	.98
Center N Upper	12.5892*	.98	.98	.98
Center N Upper	12.5714*	.98	.98	.98
Center N Upper	12.5535*	.98	.98	.98
Center N Upper	12.5357*	.98	.98	.98
Center N Upper	12.5178*	.98	.98	.98
Center N Upper	12.5*	.98	.98	.98
Center N Upper	12.4821*	.98	.98	.98
Center N Upper	12.4642*	.98	.98	.98
Center N Upper	12.4464*	.98	.98	.98
Center N Upper	12.4285*	.98	.98	.98
Center N Upper	12.4107*	.98	.98	.98
Center N Upper	12.3928*	.98	.98	.98
Center N Upper	12.375*	.98	.98	.98
Center N Upper	12.3571*	.98	.98	.98
Center N Upper	12.3392*	.98	.98	.98
Center N Upper	12.3214*	.98	.98	.98
Center N Upper	12.3035*	.98	.98	.98
Center N Upper	12.2857*	.98	.98	.98
Center N Upper	12.2678*	.98	.98	.98
Center N Upper	12.25*	.98	.98	.98
Center N Upper	12.2321*	.98	.98	.98
Center N Upper	12.2142*	.98	.98	.98
Center N Upper	12.1964*	.98	.98	.98
Center N Upper	12.1785*	.98	.98	.98
Center N Upper	12.1607*	.98	.98	.98
Center N Upper	12.1428*	.98	.98	.98
Center N Upper	12.125*	.98	.98	.98
Center N Upper	12.1071*	.98	.98	.98
Center N Upper	12.0892*	.98	.98	.98
Center N Upper	12.0714*	.98	.98	.98
Center N Upper	12.0535*	.98	.98	.98
Center N Upper	12.0357*	.98	.98	.98

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			CPNPPLocalPMP			
Center	N	Upper	12.0178*	.98	.98	.98
Center	N	Upper	12	19.19	19.19	19.19
Center	N	Upper	11.75*	19.19	19.19	19.19
Center	N	Upper	11.5*	19.19	19.19	19.19
Center	N	Upper	11.25*	19.19	19.19	19.19
Center	N	Upper	11	8.89	8.89	8.89
Center	N	Upper	10.8*	8.89	8.89	8.89
Center	N	Upper	10.6*	8.89	8.89	8.89
Center	N	Upper	10.4*	8.89	8.89	8.89
Center	N	Upper	10.2*	8.89	8.89	8.89
Center	N	Upper	10	.5	.5	.5
Center	N	Upper	9.9875*	.5	.5	.5
Center	N	Upper	9.975*	.5	.5	.5
Center	N	Upper	9.9625*	.5	.5	.5
Center	N	Upper	9.95*	.5	.5	.5
Center	N	Upper	9.9375*	.5	.5	.5
Center	N	Upper	9.925*	.5	.5	.5
Center	N	Upper	9.9125*	.5	.5	.5
Center	N	Upper	9.9*	.5	.5	.5
Center	N	Upper	9.8875*	.5	.5	.5
Center	N	Upper	9.875*	.5	.5	.5
Center	N	Upper	9.8625*	.5	.5	.5
Center	N	Upper	9.85*	.5	.5	.5
Center	N	Upper	9.8375*	.5	.5	.5
Center	N	Upper	9.825*	.5	.5	.5
Center	N	Upper	9.8125*	.5	.5	.5
Center	N	Upper	9.8*	.5	.5	.5
Center	N	Upper	9.7875*	.5	.5	.5
Center	N	Upper	9.775*	.5	.5	.5
Center	N	Upper	9.7625*	.5	.5	.5
Center	N	Upper	9.75*	.5	.5	.5
Center	N	Upper	9.7375*	.5	.5	.5
Center	N	Upper	9.725*	.5	.5	.5
Center	N	Upper	9.7125*	.5	.5	.5
Center	N	Upper	9.7*	.5	.5	.5
Center	N	Upper	9.6875*	.5	.5	.5
Center	N	Upper	9.675*	.5	.5	.5
Center	N	Upper	9.6625*	.5	.5	.5
Center	N	Upper	9.65*	.5	.5	.5
Center	N	Upper	9.6375*	.5	.5	.5
Center	N	Upper	9.625*	.5	.5	.5
Center	N	Upper	9.6125*	.5	.5	.5
Center	N	Upper	9.6*	.5	.5	.5
Center	N	Upper	9.5875*	.5	.5	.5
Center	N	Upper	9.575*	.5	.5	.5
Center	N	Upper	9.5625*	.5	.5	.5
Center	N	Upper	9.55*	.5	.5	.5
Center	N	Upper	9.5375*	.5	.5	.5
Center	N	Upper	9.525*	.5	.5	.5
Center	N	Upper	9.5125*	.5	.5	.5
Center	N	Upper	9.5*	.5	.5	.5
Center	N	Upper	9.4875*	.5	.5	.5
Center	N	Upper	9.475*	.5	.5	.5
Center	N	Upper	9.4625*	.5	.5	.5
Center	N	Upper	9.45*	.5	.5	.5
Center	N	Upper	9.4375*	.5	.5	.5
Center	N	Upper	9.425*	.5	.5	.5
Center	N	Upper	9.4125*	.5	.5	.5
Center	N	Upper	9.4*	.5	.5	.5
Center	N	Upper	9.3875*	.5	.5	.5
Center	N	Upper	9.375*	.5	.5	.5
Center	N	Upper	9.3625*	.5	.5	.5
Center	N	Upper	9.35*	.5	.5	.5

		CPNPP	Local	PMP	
Center N Upper	9.3375*	.5	.5	.5	.5
Center N Upper	9.325*	.5	.5	.5	.5
Center N Upper	9.3125*	.5	.5	.5	.5
Center N Upper	9.3*	.5	.5	.5	.5
Center N Upper	9.2875*	.5	.5	.5	.5
Center N Upper	9.275*	.5	.5	.5	.5
Center N Upper	9.2625*	.5	.5	.5	.5
Center N Upper	9.25*	.5	.5	.5	.5
Center N Upper	9.2375*	.5	.5	.5	.5
Center N Upper	9.225*	.5	.5	.5	.5
Center N Upper	9.2125*	.5	.5	.5	.5
Center N Upper	9.2*	.5	.5	.5	.5
Center N Upper	9.1875*	.5	.5	.5	.5
Center N Upper	9.175*	.5	.5	.5	.5
Center N Upper	9.1625*	.5	.5	.5	.5
Center N Upper	9.15*	.5	.5	.5	.5
Center N Upper	9.1375*	.5	.5	.5	.5
Center N Upper	9.125*	.5	.5	.5	.5
Center N Upper	9.1125*	.5	.5	.5	.5
Center N Upper	9.1*	.5	.5	.5	.5
Center N Upper	9.0875*	.5	.5	.5	.5
Center N Upper	9.075*	.5	.5	.5	.5
Center N Upper	9.0625*	.5	.5	.5	.5
Center N Upper	9.05*	.5	.5	.5	.5
Center N Upper	9.0375*	.5	.5	.5	.5
Center N Upper	9.025*	.5	.5	.5	.5
Center N Upper	9.0125*	.5	.5	.5	.5
Center N Upper	9	176.29	176.29	176.29	176.29
Center N Upper	8	63.59	63.59	63.59	63.59
Center N Upper	7	63.02	63.02	63.02	63.02
Center N Upper	6	47.67	47.67	47.67	47.67
Center N Upper	5.83333*	47.67	47.67	47.67	47.67
Center N Upper	5.66666*	47.67	47.67	47.67	47.67
Center N Upper	5.5*	47.67	47.67	47.67	47.67
Center N Upper	5.33333*	47.67	47.67	47.67	47.67
Center N Upper	5.16666*	47.67	47.67	47.67	47.67
Center N Upper	5				
Center N Branch	108	9.44	9.44	9.44	9.44
Center N Branch	107.833*	9.44	9.44	9.44	9.44
Center N Branch	107.666*	9.44	9.44	9.44	9.44
Center N Branch	107.5*	9.44	9.44	9.44	9.44
Center N Branch	107.333*	9.44	9.44	9.44	9.44
Center N Branch	107.166*	9.44	9.44	9.44	9.44
Center N Branch	107	176.5	176.5	176.5	176.5
Center N Branch	106	31.83	31.83	31.83	31.83
Center N Branch	105.5*	31.83	31.83	31.83	31.83
Center N Branch	105				
Center N Lower	4	43.55	43.55	43.55	43.55
Center N Lower	3.5*	43.55	43.55	43.55	43.55
Center N Lower	3	119.07	119.07	119.07	119.07
Center N Lower	2.5	Inl Struct			
Center N Lower	2	69.2	69.2	69.2	69.2
Center N Lower	1				

River: Center South

Reach	River Sta.	Left	Channel	Right
Center South	8	4.77	4.77	4.77
Center South	7.91666*	4.77	4.77	4.77
Center South	7.83333*	4.77	4.77	4.77
Center South	7.75*	4.77	4.77	4.77

		CPNPPLocal	PMP	
Center South	7.66666*	4.77	4.77	4.77
Center South	7.58333*	4.77	4.77	4.77
Center South	7.5*	4.77	4.77	4.77
Center South	7.41666*	4.77	4.77	4.77
Center South	7.33333*	4.77	4.77	4.77
Center South	7.25*	4.77	4.77	4.77
Center South	7.16666*	4.77	4.77	4.77
Center South	7.08333*	4.77	4.77	4.77
Center South	7	57	57	57
Center South	6	39.1	39.1	39.1
Center South	5	8.43	8.43	8.43
Center South	4.8*	8.43	8.43	8.43
Center South	4.6*	8.43	8.43	8.43
Center South	4.4*	8.43	8.43	8.43
Center South	4.2*	8.43	8.43	8.43
Center South	4	39.61	39.61	39.61
Center South	3	21.35	21.35	21.35
Center South	2	60.83	60.83	60.83
Center South	1.5	Inl	Struct	
Center South	1			

River: East Channel

Reach	River Sta.	Left	Channel	Right
East Channel	7	2	2	2
East Channel	6.98684*	2	2	2
East Channel	6.97368*	2	2	2
East Channel	6.96052*	2	2	2
East Channel	6.94736*	2	2	2
East Channel	6.93421*	2	2	2
East Channel	6.92105*	2	2	2
East Channel	6.90789*	2	2	2
East Channel	6.89473*	2	2	2
East Channel	6.88157*	2	2	2
East Channel	6.86842*	2	2	2
East Channel	6.85526*	2	2	2
East Channel	6.84210*	2	2	2
East Channel	6.82894*	2	2	2
East Channel	6.81579*	2	2	2
East Channel	6.80263*	2	2	2
East Channel	6.78947*	2	2	2
East Channel	6.77631*	2	2	2
East Channel	6.76315*	2	2	2
East Channel	6.75*	2	2	2
East Channel	6.73684*	2	2	2
East Channel	6.72368*	2	2	2
East Channel	6.71052*	2	2	2
East Channel	6.69736*	2	2	2
East Channel	6.68421*	2	2	2
East Channel	6.67105*	2	2	2
East Channel	6.65789*	2	2	2
East Channel	6.64473*	2	2	2
East Channel	6.63157*	2	2	2
East Channel	6.61842*	2	2	2
East Channel	6.60526*	2	2	2
East Channel	6.59210*	2	2	2
East Channel	6.57894*	2	2	2
East Channel	6.56579*	2	2	2
East Channel	6.55263*	2	2	2
East Channel	6.53947*	2	2	2
East Channel	6.52631*	2	2	2

		CPNPP	Local	PMP
East Channel	6.51315*	2	2	2
East Channel	6.5*	2	2	2
East Channel	6.48684*	2	2	2
East Channel	6.47368*	2	2	2
East Channel	6.46052*	2	2	2
East Channel	6.44736*	2	2	2
East Channel	6.43421*	2	2	2
East Channel	6.42105*	2	2	2
East Channel	6.40789*	2	2	2
East Channel	6.39473*	2	2	2
East Channel	6.38157*	2	2	2
East Channel	6.36842*	2	2	2
East Channel	6.35526*	2	2	2
East Channel	6.34210*	2	2	2
East Channel	6.32894*	2	2	2
East Channel	6.31579*	2	2	2
East Channel	6.30263*	2	2	2
East Channel	6.28947*	2	2	2
East Channel	6.27631*	2	2	2
East Channel	6.26315*	2	2	2
East Channel	6.25*	2	2	2
East Channel	6.23684*	2	2	2
East Channel	6.22368*	2	2	2
East Channel	6.21052*	2	2	2
East Channel	6.19736*	2	2	2
East Channel	6.18421*	2	2	2
East Channel	6.17105*	2	2	2
East Channel	6.15789*	2	2	2
East Channel	6.14473*	2	2	2
East Channel	6.13157*	2	2	2
East Channel	6.11842*	2	2	2
East Channel	6.10526*	2	2	2
East Channel	6.09210*	2	2	2
East Channel	6.07894*	2	2	2
East Channel	6.06579*	2	2	2
East Channel	6.05263*	2	2	2
East Channel	6.03947*	2	2	2
East Channel	6.02631*	2	2	2
East Channel	6.01315*	2	2	2
East Channel	6	9.7	9.7	9.7
East Channel	5.8*	9.7	9.7	9.7
East Channel	5.6*	9.7	9.7	9.7
East Channel	5.4*	9.7	9.7	9.7
East Channel	5.2*	9.7	9.7	9.7
East Channel	5	1.91	1.91	1.91
East Channel	4.94444*	1.91	1.91	1.91
East Channel	4.88888*	1.91	1.91	1.91
East Channel	4.83333*	1.91	1.91	1.91
East Channel	4.77777*	1.91	1.91	1.91
East Channel	4.72222*	1.91	1.91	1.91
East Channel	4.66666*	1.91	1.91	1.91
East Channel	4.61111*	1.91	1.91	1.91
East Channel	4.55555*	1.91	1.91	1.91
East Channel	4.5*	1.91	1.91	1.91
East Channel	4.44444*	1.91	1.91	1.91
East Channel	4.38888*	1.91	1.91	1.91
East Channel	4.33333*	1.91	1.91	1.91
East Channel	4.27777*	1.91	1.91	1.91
East Channel	4.22222*	1.91	1.91	1.91
East Channel	4.16666*	1.91	1.91	1.91
East Channel	4.11111*	1.91	1.91	1.91
East Channel	4.05555*	1.91	1.91	1.91
East Channel	4	1.94	1.94	1.94

		CPNPP	Local	PMP	
East Channel	3.95652*	1.94	1.94	1.94	1.94
East Channel	3.91304*	1.94	1.94	1.94	1.94
East Channel	3.86956*	1.94	1.94	1.94	1.94
East Channel	3.82608*	1.94	1.94	1.94	1.94
East Channel	3.78260*	1.94	1.94	1.94	1.94
East Channel	3.73913*	1.94	1.94	1.94	1.94
East Channel	3.69565*	1.94	1.94	1.94	1.94
East Channel	3.65217*	1.94	1.94	1.94	1.94
East Channel	3.60869*	1.94	1.94	1.94	1.94
East Channel	3.56521*	1.94	1.94	1.94	1.94
East Channel	3.52173*	1.94	1.94	1.94	1.94
East Channel	3.47826*	1.94	1.94	1.94	1.94
East Channel	3.43478*	1.94	1.94	1.94	1.94
East Channel	3.39130*	1.94	1.94	1.94	1.94
East Channel	3.34782*	1.94	1.94	1.94	1.94
East Channel	3.30434*	1.94	1.94	1.94	1.94
East Channel	3.26087*	1.94	1.94	1.94	1.94
East Channel	3.21739*	1.94	1.94	1.94	1.94
East Channel	3.17391*	1.94	1.94	1.94	1.94
East Channel	3.13043*	1.94	1.94	1.94	1.94
East Channel	3.08695*	1.94	1.94	1.94	1.94
East Channel	3.04347*	1.94	1.94	1.94	1.94
East Channel	3	1	1	1	1
East Channel	2.98666*	1	1	1	1
East Channel	2.97333*	1	1	1	1
East Channel	2.96*	1	1	1	1
East Channel	2.94666*	1	1	1	1
East Channel	2.93333*	1	1	1	1
East Channel	2.92*	1	1	1	1
East Channel	2.90666*	1	1	1	1
East Channel	2.89333*	1	1	1	1
East Channel	2.88*	1	1	1	1
East Channel	2.86666*	1	1	1	1
East Channel	2.85333*	1	1	1	1
East Channel	2.84*	1	1	1	1
East Channel	2.82666*	1	1	1	1
East Channel	2.81333*	1	1	1	1
East Channel	2.8*	1	1	1	1
East Channel	2.78666*	1	1	1	1
East Channel	2.77333*	1	1	1	1
East Channel	2.76*	1	1	1	1
East Channel	2.74666*	1	1	1	1
East Channel	2.73333*	1	1	1	1
East Channel	2.72*	1	1	1	1
East Channel	2.70666*	1	1	1	1
East Channel	2.69333*	1	1	1	1
East Channel	2.68*	1	1	1	1
East Channel	2.66666*	1	1	1	1
East Channel	2.65333*	1	1	1	1
East Channel	2.64*	1	1	1	1
East Channel	2.62666*	1	1	1	1
East Channel	2.61333*	1	1	1	1
East Channel	2.6*	1	1	1	1
East Channel	2.58666*	1	1	1	1
East Channel	2.57333*	1	1	1	1
East Channel	2.56*	1	1	1	1
East Channel	2.54666*	1	1	1	1
East Channel	2.53333*	1	1	1	1
East Channel	2.52*	1	1	1	1
East Channel	2.50666*	1	1	1	1
East Channel	2.49333*	1	1	1	1
East Channel	2.48*	1	1	1	1
East Channel	2.46666*	1	1	1	1

		CPNPP	Local	PMP
East Channel	2.45333*	1	1	1
East Channel	2.44*	1	1	1
East Channel	2.42666*	1	1	1
East Channel	2.41333*	1	1	1
East Channel	2.4*	1	1	1
East Channel	2.38666*	1	1	1
East Channel	2.37333*	1	1	1
East Channel	2.36*	1	1	1
East Channel	2.34666*	1	1	1
East Channel	2.33333*	1	1	1
East Channel	2.32*	1	1	1
East Channel	2.30666*	1	1	1
East Channel	2.29333*	1	1	1
East Channel	2.28*	1	1	1
East Channel	2.26666*	1	1	1
East Channel	2.25333*	1	1	1
East Channel	2.24*	1	1	1
East Channel	2.22666*	1	1	1
East Channel	2.21333*	1	1	1
East Channel	2.2*	1	1	1
East Channel	2.18666*	1	1	1
East Channel	2.17333*	1	1	1
East Channel	2.16*	1	1	1
East Channel	2.14666*	1	1	1
East Channel	2.13333*	1	1	1
East Channel	2.12*	1	1	1
East Channel	2.10666*	1	1	1
East Channel	2.09333*	1	1	1
East Channel	2.08*	1	1	1
East Channel	2.06666*	1	1	1
East Channel	2.05333*	1	1	1
East Channel	2.04*	1	1	1
East Channel	2.02666*	1	1	1
East Channel	2.01333*	1	1	1
East Channel	2	.99	.99	.99
East Channel	1.98630*	.99	.99	.99
East Channel	1.97260*	.99	.99	.99
East Channel	1.95890*	.99	.99	.99
East Channel	1.94520*	.99	.99	.99
East Channel	1.93150*	.99	.99	.99
East Channel	1.91780*	.99	.99	.99
East Channel	1.90411*	.99	.99	.99
East Channel	1.89041*	.99	.99	.99
East Channel	1.87671*	.99	.99	.99
East Channel	1.86301*	.99	.99	.99
East Channel	1.84931*	.99	.99	.99
East Channel	1.83561*	.99	.99	.99
East Channel	1.82191*	.99	.99	.99
East Channel	1.80821*	.99	.99	.99
East Channel	1.79452*	.99	.99	.99
East Channel	1.78082*	.99	.99	.99
East Channel	1.76712*	.99	.99	.99
East Channel	1.75342*	.99	.99	.99
East Channel	1.73972*	.99	.99	.99
East Channel	1.72602*	.99	.99	.99
East Channel	1.71232*	.99	.99	.99
East Channel	1.69863*	.99	.99	.99
East Channel	1.68493*	.99	.99	.99
East Channel	1.67123*	.99	.99	.99
East Channel	1.65753*	.99	.99	.99
East Channel	1.64383*	.99	.99	.99
East Channel	1.63013*	.99	.99	.99
East Channel	1.61643*	.99	.99	.99

	CPNPP	Loca	1	PMP
East Channel	1.60274*	.99	.99	.99
East Channel	1.58904*	.99	.99	.99
East Channel	1.57534*	.99	.99	.99
East Channel	1.56164*	.99	.99	.99
East Channel	1.54794*	.99	.99	.99
East Channel	1.53424*	.99	.99	.99
East Channel	1.52054*	.99	.99	.99
East Channel	1.50685*	.99	.99	.99
East Channel	1.49315*	.99	.99	.99
East Channel	1.47945*	.99	.99	.99
East Channel	1.46575*	.99	.99	.99
East Channel	1.45205*	.99	.99	.99
East Channel	1.43835*	.99	.99	.99
East Channel	1.42465*	.99	.99	.99
East Channel	1.41095*	.99	.99	.99
East Channel	1.39726*	.99	.99	.99
East Channel	1.38356*	.99	.99	.99
East Channel	1.36986*	.99	.99	.99
East Channel	1.35616*	.99	.99	.99
East Channel	1.34246*	.99	.99	.99
East Channel	1.32876*	.99	.99	.99
East Channel	1.31506*	.99	.99	.99
East Channel	1.30137*	.99	.99	.99
East Channel	1.28767*	.99	.99	.99
East Channel	1.27397*	.99	.99	.99
East Channel	1.26027*	.99	.99	.99
East Channel	1.24657*	.99	.99	.99
East Channel	1.23287*	.99	.99	.99
East Channel	1.21917*	.99	.99	.99
East Channel	1.20548*	.99	.99	.99
East Channel	1.19178*	.99	.99	.99
East Channel	1.17808*	.99	.99	.99
East Channel	1.16438*	.99	.99	.99
East Channel	1.15068*	.99	.99	.99
East Channel	1.13698*	.99	.99	.99
East Channel	1.12328*	.99	.99	.99
East Channel	1.10959*	.99	.99	.99
East Channel	1.09589*	.99	.99	.99
East Channel	1.08219*	.99	.99	.99
East Channel	1.06849*	.99	.99	.99
East Channel	1.05479*	.99	.99	.99
East Channel	1.04109*	.99	.99	.99
East Channel	1.02739*	.99	.99	.99
East Channel	1.01369*	.99	.99	.99
East Channel	1			

River: Offsite

Reach	River Sta.	Left	Channel	Right
Offsite	6	4.88	4.88	4.88
Offsite	5.94117*	4.88	4.88	4.88
Offsite	5.88235*	4.88	4.88	4.88
Offsite	5.82352*	4.88	4.88	4.88
Offsite	5.76470*	4.88	4.88	4.88
Offsite	5.70588*	4.88	4.88	4.88
Offsite	5.64705*	4.88	4.88	4.88
Offsite	5.58823*	4.88	4.88	4.88
Offsite	5.52941*	4.88	4.88	4.88
Offsite	5.47058*	4.88	4.88	4.88
Offsite	5.41176*	4.88	4.88	4.88
Offsite	5.35294*	4.88	4.88	4.88

		CPNPP	Local	PMP
Offsite	5.29411*	4.88	4.88	4.88
Offsite	5.23529*	4.88	4.88	4.88
Offsite	5.17647*	4.88	4.88	4.88
Offsite	5.11764*	4.88	4.88	4.88
Offsite	5.05882*	4.88	4.88	4.88
Offsite	5	27.64	27.64	27.64
Offsite	4.5*	27.64	27.64	27.64
Offsite	4	10.99	10.99	10.99
Offsite	3.5*	10.99	10.99	10.99
Offsite	3	1.98	1.98	1.98
Offsite	2.91666*	1.98	1.98	1.98
Offsite	2.83333*	1.98	1.98	1.98
Offsite	2.75*	1.98	1.98	1.98
Offsite	2.66666*	1.98	1.98	1.98
Offsite	2.58333*	1.98	1.98	1.98
Offsite	2.5*	1.98	1.98	1.98
Offsite	2.41666*	1.98	1.98	1.98
Offsite	2.33333*	1.98	1.98	1.98
Offsite	2.25*	1.98	1.98	1.98
Offsite	2.16666*	1.98	1.98	1.98
Offsite	2.08333*	1.98	1.98	1.98
Offsite	2	127.7	127.7	127.7
Offsite	1.5	Inl Struct		
Offsite	1			

River: Unit 3 East

Reach	River Sta.	Left	Channel	Right
Unit 3 East	5	.5	.5	.5
Unit 3 East	4.98795*	.5	.5	.5
Unit 3 East	4.97590*	.5	.5	.5
Unit 3 East	4.96385*	.5	.5	.5
Unit 3 East	4.95180*	.5	.5	.5
Unit 3 East	4.93975*	.5	.5	.5
Unit 3 East	4.92771*	.5	.5	.5
Unit 3 East	4.91566*	.5	.5	.5
Unit 3 East	4.90361*	.5	.5	.5
Unit 3 East	4.89156*	.5	.5	.5
Unit 3 East	4.87951*	.5	.5	.5
Unit 3 East	4.86747*	.5	.5	.5
Unit 3 East	4.85542*	.5	.5	.5
Unit 3 East	4.84337*	.5	.5	.5
Unit 3 East	4.83132*	.5	.5	.5
Unit 3 East	4.81927*	.5	.5	.5
Unit 3 East	4.80722*	.5	.5	.5
Unit 3 East	4.79518*	.5	.5	.5
Unit 3 East	4.78313*	.5	.5	.5
Unit 3 East	4.77108*	.5	.5	.5
Unit 3 East	4.75903*	.5	.5	.5
Unit 3 East	4.74698*	.5	.5	.5
Unit 3 East	4.73494*	.5	.5	.5
Unit 3 East	4.72289*	.5	.5	.5
Unit 3 East	4.71084*	.5	.5	.5
Unit 3 East	4.69879*	.5	.5	.5
Unit 3 East	4.68674*	.5	.5	.5
Unit 3 East	4.67469*	.5	.5	.5
Unit 3 East	4.66265*	.5	.5	.5
Unit 3 East	4.65060*	.5	.5	.5
Unit 3 East	4.63855*	.5	.5	.5
Unit 3 East	4.62650*	.5	.5	.5
Unit 3 East	4.61445*	.5	.5	.5

			CPNPP	Local	PMP
Unit 3 East	4.60240*	.5	.5	.5	
Unit 3 East	4.59036*	.5	.5	.5	
Unit 3 East	4.57831*	.5	.5	.5	
Unit 3 East	4.56626*	.5	.5	.5	
Unit 3 East	4.55421*	.5	.5	.5	
Unit 3 East	4.54216*	.5	.5	.5	
Unit 3 East	4.53012*	.5	.5	.5	
Unit 3 East	4.51807*	.5	.5	.5	
Unit 3 East	4.50602*	.5	.5	.5	
Unit 3 East	4.49397*	.5	.5	.5	
Unit 3 East	4.48192*	.5	.5	.5	
Unit 3 East	4.46988*	.5	.5	.5	
Unit 3 East	4.45783*	.5	.5	.5	
Unit 3 East	4.44578*	.5	.5	.5	
Unit 3 East	4.43373*	.5	.5	.5	
Unit 3 East	4.42168*	.5	.5	.5	
Unit 3 East	4.40963*	.5	.5	.5	
Unit 3 East	4.39759*	.5	.5	.5	
Unit 3 East	4.38554*	.5	.5	.5	
Unit 3 East	4.37349*	.5	.5	.5	
Unit 3 East	4.36144*	.5	.5	.5	
Unit 3 East	4.34939*	.5	.5	.5	
Unit 3 East	4.33735*	.5	.5	.5	
Unit 3 East	4.32530*	.5	.5	.5	
Unit 3 East	4.31325*	.5	.5	.5	
Unit 3 East	4.30120*	.5	.5	.5	
Unit 3 East	4.28915*	.5	.5	.5	
Unit 3 East	4.27710*	.5	.5	.5	
Unit 3 East	4.26506*	.5	.5	.5	
Unit 3 East	4.25301*	.5	.5	.5	
Unit 3 East	4.24096*	.5	.5	.5	
Unit 3 East	4.22891*	.5	.5	.5	
Unit 3 East	4.21686*	.5	.5	.5	
Unit 3 East	4.20482*	.5	.5	.5	
Unit 3 East	4.19277*	.5	.5	.5	
Unit 3 East	4.18072*	.5	.5	.5	
Unit 3 East	4.16867*	.5	.5	.5	
Unit 3 East	4.15662*	.5	.5	.5	
Unit 3 East	4.14457*	.5	.5	.5	
Unit 3 East	4.13253*	.5	.5	.5	
Unit 3 East	4.12048*	.5	.5	.5	
Unit 3 East	4.10843*	.5	.5	.5	
Unit 3 East	4.09638*	.5	.5	.5	
Unit 3 East	4.08433*	.5	.5	.5	
Unit 3 East	4.07228*	.5	.5	.5	
Unit 3 East	4.06024*	.5	.5	.5	
Unit 3 East	4.04819*	.5	.5	.5	
Unit 3 East	4.03614*	.5	.5	.5	
Unit 3 East	4.02409*	.5	.5	.5	
Unit 3 East	4.01204*	.5	.5	.5	
Unit 3 East	4	1	1	1	
Unit 3 East	3.98305*	1	1	1	
Unit 3 East	3.96610*	1	1	1	
Unit 3 East	3.94915*	1	1	1	
Unit 3 East	3.93220*	1	1	1	
Unit 3 East	3.91525*	1	1	1	
Unit 3 East	3.89830*	1	1	1	
Unit 3 East	3.88135*	1	1	1	
Unit 3 East	3.86440*	1	1	1	
Unit 3 East	3.84745*	1	1	1	
Unit 3 East	3.83050*	1	1	1	
Unit 3 East	3.81355*	1	1	1	
Unit 3 East	3.79661*	1	1	1	

		CPNPP	Local	PMP
Unit 3 East	3.77966*	1	1	1
Unit 3 East	3.76271*	1	1	1
Unit 3 East	3.74576*	1	1	1
Unit 3 East	3.72881*	1	1	1
Unit 3 East	3.71186*	1	1	1
Unit 3 East	3.69491*	1	1	1
Unit 3 East	3.67796*	1	1	1
Unit 3 East	3.66101*	1	1	1
Unit 3 East	3.64406*	1	1	1
Unit 3 East	3.62711*	1	1	1
Unit 3 East	3.61016*	1	1	1
Unit 3 East	3.59322*	1	1	1
Unit 3 East	3.57627*	1	1	1
Unit 3 East	3.55932*	1	1	1
Unit 3 East	3.54237*	1	1	1
Unit 3 East	3.52542*	1	1	1
Unit 3 East	3.50847*	1	1	1
Unit 3 East	3.49152*	1	1	1
Unit 3 East	3.47457*	1	1	1
Unit 3 East	3.45762*	1	1	1
Unit 3 East	3.44067*	1	1	1
Unit 3 East	3.42372*	1	1	1
Unit 3 East	3.40678*	1	1	1
Unit 3 East	3.38983*	1	1	1
Unit 3 East	3.37288*	1	1	1
Unit 3 East	3.35593*	1	1	1
Unit 3 East	3.33898*	1	1	1
Unit 3 East	3.32203*	1	1	1
Unit 3 East	3.30508*	1	1	1
Unit 3 East	3.28813*	1	1	1
Unit 3 East	3.27118*	1	1	1
Unit 3 East	3.25423*	1	1	1
Unit 3 East	3.23728*	1	1	1
Unit 3 East	3.22033*	1	1	1
Unit 3 East	3.20339*	1	1	1
Unit 3 East	3.18644*	1	1	1
Unit 3 East	3.16949*	1	1	1
Unit 3 East	3.15254*	1	1	1
Unit 3 East	3.13559*	1	1	1
Unit 3 East	3.11864*	1	1	1
Unit 3 East	3.10169*	1	1	1
Unit 3 East	3.08474*	1	1	1
Unit 3 East	3.06779*	1	1	1
Unit 3 East	3.05084*	1	1	1
Unit 3 East	3.03389*	1	1	1
Unit 3 East	3.01695*	1	1	1
Unit 3 East	3	.49	.49	.49
Unit 3 East	2.97368*	.49	.49	.49
Unit 3 East	2.94736*	.49	.49	.49
Unit 3 East	2.92105*	.49	.49	.49
Unit 3 East	2.89473*	.49	.49	.49
Unit 3 East	2.86842*	.49	.49	.49
Unit 3 East	2.84210*	.49	.49	.49
Unit 3 East	2.81578*	.49	.49	.49
Unit 3 East	2.78947*	.49	.49	.49
Unit 3 East	2.76315*	.49	.49	.49
Unit 3 East	2.73684*	.49	.49	.49
Unit 3 East	2.71052*	.49	.49	.49
Unit 3 East	2.68421*	.49	.49	.49
Unit 3 East	2.65789*	.49	.49	.49
Unit 3 East	2.63157*	.49	.49	.49
Unit 3 East	2.60526*	.49	.49	.49
Unit 3 East	2.57894*	.49	.49	.49

			CPNPPLoca	lPMP	
Unit 3 East	2.55263*	.49	.49	.49	
Unit 3 East	2.52631*	.49	.49	.49	
Unit 3 East	2.5*	.49	.49	.49	
Unit 3 East	2.47368*	.49	.49	.49	
Unit 3 East	2.44736*	.49	.49	.49	
Unit 3 East	2.42105*	.49	.49	.49	
Unit 3 East	2.39473*	.49	.49	.49	
Unit 3 East	2.36842*	.49	.49	.49	
Unit 3 East	2.34210*	.49	.49	.49	
Unit 3 East	2.31579*	.49	.49	.49	
Unit 3 East	2.28947*	.49	.49	.49	
Unit 3 East	2.26315*	.49	.49	.49	
Unit 3 East	2.23684*	.49	.49	.49	
Unit 3 East	2.21052*	.49	.49	.49	
Unit 3 East	2.18421*	.49	.49	.49	
Unit 3 East	2.15789*	.49	.49	.49	
Unit 3 East	2.13157*	.49	.49	.49	
Unit 3 East	2.10526*	.49	.49	.49	
Unit 3 East	2.07894*	.49	.49	.49	
Unit 3 East	2.05263*	.49	.49	.49	
Unit 3 East	2.02631*	.49	.49	.49	
Unit 3 East	2	70.85	70.85	70.85	
Unit 3 East	1.5	Inl Struct			
Unit 3 East	1				

River: Unit 3 North

Reach	River Sta.	Left	Channel	Right
Unit 3 North	8	38.08	38.08	38.08
Unit 3 North	7	58.25	58.25	58.25
Unit 3 North	6	134.06	134.06	134.06
Unit 3 North	5	58	58	58
Unit 3 North	4.5	Inl Struct		
Unit 3 North	4	35.13	35.13	35.13
Unit 3 North	3.5*	35.13	35.13	35.13
Unit 3 North	3	18.2	18.2	18.2
Unit 3 North	2	137.8	137.8	137.8
Unit 3 North	1.5	Inl Struct		
Unit 3 North	1			

River: Unit 3 Southeast

Reach	River Sta.	Left	Channel	Right
Unit 3 Southeast	11	4.92	4.92	4.92
Unit 3 Southeast	10.9090*	4.92	4.92	4.92
Unit 3 Southeast	10.8181*	4.92	4.92	4.92
Unit 3 Southeast	10.7272*	4.92	4.92	4.92
Unit 3 Southeast	10.6363*	4.92	4.92	4.92
Unit 3 Southeast	10.5454*	4.92	4.92	4.92
Unit 3 Southeast	10.4545*	4.92	4.92	4.92
Unit 3 Southeast	10.3636*	4.92	4.92	4.92
Unit 3 Southeast	10.2727*	4.92	4.92	4.92
Unit 3 Southeast	10.1818*	4.92	4.92	4.92
Unit 3 Southeast	10.0909*	4.92	4.92	4.92
Unit 3 Southeast	10	4.77	4.77	4.77
Unit 3 Southeast	9.92857*	4.77	4.77	4.77
Unit 3 Southeast	9.85714*	4.77	4.77	4.77
Unit 3 Southeast	9.78571*	4.77	4.77	4.77
Unit 3 Southeast	9.71428*	4.77	4.77	4.77

		CPNP	Local	PMP
Unit 3 Southeast	9.64285*	4.77	4.77	4.77
Unit 3 Southeast	9.57142*	4.77	4.77	4.77
Unit 3 Southeast	9.5*	4.77	4.77	4.77
Unit 3 Southeast	9.42857*	4.77	4.77	4.77
Unit 3 Southeast	9.35714*	4.77	4.77	4.77
Unit 3 Southeast	9.28571*	4.77	4.77	4.77
Unit 3 Southeast	9.21428*	4.77	4.77	4.77
Unit 3 Southeast	9.14285*	4.77	4.77	4.77
Unit 3 Southeast	9.07142*	4.77	4.77	4.77
Unit 3 Southeast	9	10	10	10
Unit 3 Southeast	8.83333*	10	10	10
Unit 3 Southeast	8.66666*	10	10	10
Unit 3 Southeast	8.5*	10	10	10
Unit 3 Southeast	8.33333*	10	10	10
Unit 3 Southeast	8.16666*	10	10	10
Unit 3 Southeast	8	12.19	12.19	12.19
Unit 3 Southeast	7	35.05	35.05	35.05
Unit 3 Southeast	6	97.41	97.41	97.41
Unit 3 Southeast	5	9.32	9.32	9.32
Unit 3 Southeast	4.66666*	9.32	9.32	9.32
Unit 3 Southeast	4.33333*	9.32	9.32	9.32
Unit 3 Southeast	4	59.51	59.51	59.51
Unit 3 Southeast	3	49.34	49.34	49.34
Unit 3 Southeast	2	95.65	95.65	95.65
Unit 3 Southeast	1.5	Inl	Struct	
Unit 3 Southeast	1			

River: Unit 3 UHS

Reach	River Sta.	Left	Channel	Right
U3 UHS Branch	109	1	1	1
U3 UHS Branch	108.988*	1	1	1
U3 UHS Branch	108.977*	1	1	1
U3 UHS Branch	108.966*	1	1	1
U3 UHS Branch	108.955*	1	1	1
U3 UHS Branch	108.944*	1	1	1
U3 UHS Branch	108.933*	1	1	1
U3 UHS Branch	108.922*	1	1	1
U3 UHS Branch	108.911*	1	1	1
U3 UHS Branch	108.9*	1	1	1
U3 UHS Branch	108.888*	1	1	1
U3 UHS Branch	108.877*	1	1	1
U3 UHS Branch	108.866*	1	1	1
U3 UHS Branch	108.855*	1	1	1
U3 UHS Branch	108.844*	1	1	1
U3 UHS Branch	108.833*	1	1	1
U3 UHS Branch	108.822*	1	1	1
U3 UHS Branch	108.811*	1	1	1
U3 UHS Branch	108.8*	1	1	1
U3 UHS Branch	108.788*	1	1	1
U3 UHS Branch	108.777*	1	1	1
U3 UHS Branch	108.766*	1	1	1
U3 UHS Branch	108.755*	1	1	1
U3 UHS Branch	108.744*	1	1	1
U3 UHS Branch	108.733*	1	1	1
U3 UHS Branch	108.722*	1	1	1
U3 UHS Branch	108.711*	1	1	1
U3 UHS Branch	108.7*	1	1	1
U3 UHS Branch	108.688*	1	1	1
U3 UHS Branch	108.677*	1	1	1
U3 UHS Branch	108.666*	1	1	1

			CPNPP	Local	PMP	
U3 UHS Branch	108.655*	1	1	1		
U3 UHS Branch	108.644*	1	1	1		
U3 UHS Branch	108.633*	1	1	1		
U3 UHS Branch	108.622*	1	1	1		
U3 UHS Branch	108.611*	1	1	1		
U3 UHS Branch	108.6*	1	1	1		
U3 UHS Branch	108.588*	1	1	1		
U3 UHS Branch	108.577*	1	1	1		
U3 UHS Branch	108.566*	1	1	1		
U3 UHS Branch	108.555*	1	1	1		
U3 UHS Branch	108.544*	1	1	1		
U3 UHS Branch	108.533*	1	1	1		
U3 UHS Branch	108.522*	1	1	1		
U3 UHS Branch	108.511*	1	1	1		
U3 UHS Branch	108.5*	1	1	1		
U3 UHS Branch	108.488*	1	1	1		
U3 UHS Branch	108.477*	1	1	1		
U3 UHS Branch	108.466*	1	1	1		
U3 UHS Branch	108.455*	1	1	1		
U3 UHS Branch	108.444*	1	1	1		
U3 UHS Branch	108.433*	1	1	1		
U3 UHS Branch	108.422*	1	1	1		
U3 UHS Branch	108.411*	1	1	1		
U3 UHS Branch	108.4*	1	1	1		
U3 UHS Branch	108.388*	1	1	1		
U3 UHS Branch	108.377*	1	1	1		
U3 UHS Branch	108.366*	1	1	1		
U3 UHS Branch	108.355*	1	1	1		
U3 UHS Branch	108.344*	1	1	1		
U3 UHS Branch	108.333*	1	1	1		
U3 UHS Branch	108.322*	1	1	1		
U3 UHS Branch	108.311*	1	1	1		
U3 UHS Branch	108.3*	1	1	1		
U3 UHS Branch	108.288*	1	1	1		
U3 UHS Branch	108.277*	1	1	1		
U3 UHS Branch	108.266*	1	1	1		
U3 UHS Branch	108.255*	1	1	1		
U3 UHS Branch	108.244*	1	1	1		
U3 UHS Branch	108.233*	1	1	1		
U3 UHS Branch	108.222*	1	1	1		
U3 UHS Branch	108.211*	1	1	1		
U3 UHS Branch	108.2*	1	1	1		
U3 UHS Branch	108.188*	1	1	1		
U3 UHS Branch	108.177*	1	1	1		
U3 UHS Branch	108.166*	1	1	1		
U3 UHS Branch	108.155*	1	1	1		
U3 UHS Branch	108.144*	1	1	1		
U3 UHS Branch	108.133*	1	1	1		
U3 UHS Branch	108.122*	1	1	1		
U3 UHS Branch	108.111*	1	1	1		
U3 UHS Branch	108.1*	1	1	1		
U3 UHS Branch	108.088*	1	1	1		
U3 UHS Branch	108.077*	1	1	1		
U3 UHS Branch	108.066*	1	1	1		
U3 UHS Branch	108.055*	1	1	1		
U3 UHS Branch	108.044*	1	1	1		
U3 UHS Branch	108.033*	1	1	1		
U3 UHS Branch	108.022*	1	1	1		
U3 UHS Branch	108.011*	1	1	1		
U3 UHS Branch	108					
U3 UHS Upper	12	9.17	9.17	9.17		
U3 UHS Upper	11.875*	9.17	9.17	9.17		
U3 UHS Upper	11.75*	9.17	9.17	9.17		

			CPNPP	Local	PMP
U3 UHS Upper	11.625*		9.17	9.17	9.17
U3 UHS Upper	11.5*		9.17	9.17	9.17
U3 UHS Upper	11.375*		9.17	9.17	9.17
U3 UHS Upper	11.25*		9.17	9.17	9.17
U3 UHS Upper	11.125*		9.17	9.17	9.17
U3 UHS Upper	11		24.52	24.52	24.52
U3 UHS Upper	10.8*		24.52	24.52	24.52
U3 UHS Upper	10.6*		24.52	24.52	24.52
U3 UHS Upper	10.4*		24.52	24.52	24.52
U3 UHS Upper	10.2*		24.52	24.52	24.52
U3 UHS Upper	10		185.53	185.53	185.53
U3 UHS Upper	9		74.27	74.27	74.27
U3 UHS Upper	8				
U3 UHS Lower	7		129.73	129.73	129.73
U3 UHS Lower	6.9		Lat Struct		
U3 UHS Lower	6		130.06	130.06	130.06
U3 UHS Lower	5		26.74	26.74	26.74
U3 UHS Lower	4		9.84	9.84	9.84
U3 UHS Lower	3.90909*		9.84	9.84	9.84
U3 UHS Lower	3.81818*		9.84	9.84	9.84
U3 UHS Lower	3.72727*		9.84	9.84	9.84
U3 UHS Lower	3.63636*		9.84	9.84	9.84
U3 UHS Lower	3.54545*		9.84	9.84	9.84
U3 UHS Lower	3.45454*		9.84	9.84	9.84
U3 UHS Lower	3.36363*		9.84	9.84	9.84
U3 UHS Lower	3.27272*		9.84	9.84	9.84
U3 UHS Lower	3.18181*		9.84	9.84	9.84
U3 UHS Lower	3.09090*		9.84	9.84	9.84
U3 UHS Lower	3		107.52	107.52	107.52
U3 UHS Lower	2		55.08	55.08	55.08
U3 UHS Lower	1.5		Inl Struct		
U3 UHS Lower	1				

River: Unit 4 North

Reach	River Sta.	Left	Channel	Right
Unit 4 North	6	43.08	43.08	43.08
Unit 4 North	5	58.25	58.25	58.25
Unit 4 North	4	100	100	100
Unit 4 North	3	70.85	70.85	70.85
Unit 4 North	2	58	58	58
Unit 4 North	1.5	Inl Struct		
Unit 4 North	1			

River: Unit 4 UHS

Reach	River Sta.	Left	Channel	Right
U4 UHS Upper	10	54.68	54.68	54.68
U4 UHS Upper	9	9.23	9.23	9.23
U4 UHS Upper	8.875*	9.23	9.23	9.23
U4 UHS Upper	8.75*	9.23	9.23	9.23
U4 UHS Upper	8.625*	9.23	9.23	9.23
U4 UHS Upper	8.5*	9.23	9.23	9.23
U4 UHS Upper	8.375*	9.23	9.23	9.23
U4 UHS Upper	8.25*	9.23	9.23	9.23
U4 UHS Upper	8.125*	9.23	9.23	9.23
U4 UHS Upper	8	186.33	186.33	186.33
U4 UHS Upper	7	76	76	76
U4 UHS Upper	6.9	Lat Struct		

		CPNPPLocalPMP			
U4 UHS Upper	6				
U4 UHS Branch	107	9.92	9.92	9.92	9.92
U4 UHS Branch	106.916*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.833*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.75*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.666*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.583*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.5*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.416*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.333*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.25*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.166*	9.92	9.92	9.92	9.92
U4 UHS Branch	106.083*	9.92	9.92	9.92	9.92
U4 UHS Branch	106				
U4 UHS Lower	5	42.62	42.62	42.62	42.62
U4 UHS Lower	4.9	Lat Struct			
U4 UHS Lower	4.75*	42.62	42.62	42.62	42.62
U4 UHS Lower	4.5*	42.62	42.62	42.62	42.62
U4 UHS Lower	4.25*	42.62	42.62	42.62	42.62
U4 UHS Lower	4	91.85	91.85	91.85	91.85
U4 UHS Lower	3.9	Lat Struct			
U4 UHS Lower	3	9.6	9.6	9.6	9.6
U4 UHS Lower	2.92857*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.85714*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.78571*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.71428*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.64285*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.57142*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.5*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.42857*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.35714*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.28571*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.21428*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.14285*	9.6	9.6	9.6	9.6
U4 UHS Lower	2.07142*	9.6	9.6	9.6	9.6
U4 UHS Lower	2	112	112	112	112
U4 UHS Lower	1.5	Inl Struct			
U4 UHS Lower	1				

River: West Channel

Reach	River Sta.	Left	Channel	Right
West Channel	24	66.39	66.39	66.39
West Channel	23	24.9	24.9	24.9
West Channel	22	149.29	149.29	149.29
West Channel	21	201.74	201.74	201.74
West Channel	20	166.53	166.53	166.53
West Channel	19	230.48	230.48	230.48
West Channel	18	32.96	32.96	32.96
West Channel	17	142.47	142.47	142.47
West Channel	16	66.4	66.4	66.4
West Channel	15	24.9	24.9	24.9
West Channel	14	149.29	149.29	149.29
West Channel	13	201.75	201.75	201.75
West Channel	12	246.39	246.39	246.39
West Channel	11	63.04	63.04	63.04
West Channel	10	36.14	36.14	36.14
West Channel	9	55	55	55
West Channel	8	60.26	60.26	60.26
West Channel	7	98.26	98.26	98.26
West Channel	6	175.56	175.56	175.56

		CPNPP	Local	PMP
West Channel	5	164.09	164.09	164.09
West Channel	4	29.39	29.39	29.39
West Channel	3	1.53	1.53	1.53
West Channel	2.75*	1.53	1.53	1.53
West Channel	2.5*	1.53	1.53	1.53
West Channel	2.25*	1.53	1.53	1.53
West Channel	2	175.41	175.41	175.41
West Channel	1.5	Inl	Struct	
West Channel	1			

SUMMARY OF CONTRACTION AND EXPANSION COEFFICIENTS
River: Center North

Reach	River Sta.	Contr.	Expan.
Center N Upper	13	.1	.3
Center N Upper	12.9821*	.1	.3
Center N Upper	12.9642*	.1	.3
Center N Upper	12.9464*	.1	.3
Center N Upper	12.9285*	.1	.3
Center N Upper	12.9107*	.1	.3
Center N Upper	12.8928*	.1	.3
Center N Upper	12.875*	.1	.3
Center N Upper	12.8571*	.1	.3
Center N Upper	12.8392*	.1	.3
Center N Upper	12.8214*	.1	.3
Center N Upper	12.8035*	.1	.3
Center N Upper	12.7857*	.1	.3
Center N Upper	12.7678*	.1	.3
Center N Upper	12.75*	.1	.3
Center N Upper	12.7321*	.1	.3
Center N Upper	12.7142*	.1	.3
Center N Upper	12.6964*	.1	.3
Center N Upper	12.6785*	.1	.3
Center N Upper	12.6607*	.1	.3
Center N Upper	12.6428*	.1	.3
Center N Upper	12.625*	.1	.3
Center N Upper	12.6071*	.1	.3
Center N Upper	12.5892*	.1	.3
Center N Upper	12.5714*	.1	.3
Center N Upper	12.5535*	.1	.3
Center N Upper	12.5357*	.1	.3
Center N Upper	12.5178*	.1	.3
Center N Upper	12.5*	.1	.3
Center N Upper	12.4821*	.1	.3
Center N Upper	12.4642*	.1	.3
Center N Upper	12.4464*	.1	.3
Center N Upper	12.4285*	.1	.3
Center N Upper	12.4107*	.1	.3
Center N Upper	12.3928*	.1	.3
Center N Upper	12.375*	.1	.3
Center N Upper	12.3571*	.1	.3
Center N Upper	12.3392*	.1	.3
Center N Upper	12.3214*	.1	.3
Center N Upper	12.3035*	.1	.3
Center N Upper	12.2857*	.1	.3
Center N Upper	12.2678*	.1	.3
Center N Upper	12.25*	.1	.3
Center N Upper	12.2321*	.1	.3

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			CPNPPLoca1PMP	
Center N Upper	12.2142*	.1	.3	
Center N Upper	12.1964*	.1	.3	
Center N Upper	12.1785*	.1	.3	
Center N Upper	12.1607*	.1	.3	
Center N Upper	12.1428*	.1	.3	
Center N Upper	12.125*	.1	.3	
Center N Upper	12.1071*	.1	.3	
Center N Upper	12.0892*	.1	.3	
Center N Upper	12.0714*	.1	.3	
Center N Upper	12.0535*	.1	.3	
Center N Upper	12.0357*	.1	.3	
Center N Upper	12.0178*	.1	.3	
Center N Upper	12	.1	.3	
Center N Upper	11.75*	.1	.3	
Center N Upper	11.5*	.1	.3	
Center N Upper	11.25*	.1	.3	
Center N Upper	11	.1	.3	
Center N Upper	10.8*	.1	.3	
Center N Upper	10.6*	.1	.3	
Center N Upper	10.4*	.1	.3	
Center N Upper	10.2*	.1	.3	
Center N Upper	10	.1	.3	
Center N Upper	9.9875*	.1	.3	
Center N Upper	9.975*	.1	.3	
Center N Upper	9.9625*	.1	.3	
Center N Upper	9.95*	.1	.3	
Center N Upper	9.9375*	.1	.3	
Center N Upper	9.925*	.1	.3	
Center N Upper	9.9125*	.1	.3	
Center N Upper	9.9*	.1	.3	
Center N Upper	9.8875*	.1	.3	
Center N Upper	9.875*	.1	.3	
Center N Upper	9.8625*	.1	.3	
Center N Upper	9.85*	.1	.3	
Center N Upper	9.8375*	.1	.3	
Center N Upper	9.825*	.1	.3	
Center N Upper	9.8125*	.1	.3	
Center N Upper	9.8*	.1	.3	
Center N Upper	9.7875*	.1	.3	
Center N Upper	9.775*	.1	.3	
Center N Upper	9.7625*	.1	.3	
Center N Upper	9.75*	.1	.3	
Center N Upper	9.7375*	.1	.3	
Center N Upper	9.725*	.1	.3	
Center N Upper	9.7125*	.1	.3	
Center N Upper	9.7*	.1	.3	
Center N Upper	9.6875*	.1	.3	
Center N Upper	9.675*	.1	.3	
Center N Upper	9.6625*	.1	.3	
Center N Upper	9.65*	.1	.3	
Center N Upper	9.6375*	.1	.3	
Center N Upper	9.625*	.1	.3	
Center N Upper	9.6125*	.1	.3	
Center N Upper	9.6*	.1	.3	
Center N Upper	9.5875*	.1	.3	
Center N Upper	9.575*	.1	.3	
Center N Upper	9.5625*	.1	.3	
Center N Upper	9.55*	.1	.3	
Center N Upper	9.5375*	.1	.3	
Center N Upper	9.525*	.1	.3	
Center N Upper	9.5125*	.1	.3	
Center N Upper	9.5*	.1	.3	
Center N Upper	9.4875*	.1	.3	

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			CPNPPLocalPMP		
Center	N	Upper	9.475*	.1	.3
Center	N	Upper	9.4625*	.1	.3
Center	N	Upper	9.45*	.1	.3
Center	N	Upper	9.4375*	.1	.3
Center	N	Upper	9.425*	.1	.3
Center	N	Upper	9.4125*	.1	.3
Center	N	Upper	9.4*	.1	.3
Center	N	Upper	9.3875*	.1	.3
Center	N	Upper	9.375*	.1	.3
Center	N	Upper	9.3625*	.1	.3
Center	N	Upper	9.35*	.1	.3
Center	N	Upper	9.3375*	.1	.3
Center	N	Upper	9.325*	.1	.3
Center	N	Upper	9.3125*	.1	.3
Center	N	Upper	9.3*	.1	.3
Center	N	Upper	9.2875*	.1	.3
Center	N	Upper	9.275*	.1	.3
Center	N	Upper	9.2625*	.1	.3
Center	N	Upper	9.25*	.1	.3
Center	N	Upper	9.2375*	.1	.3
Center	N	Upper	9.225*	.1	.3
Center	N	Upper	9.2125*	.1	.3
Center	N	Upper	9.2*	.1	.3
Center	N	Upper	9.1875*	.1	.3
Center	N	Upper	9.175*	.1	.3
Center	N	Upper	9.1625*	.1	.3
Center	N	Upper	9.15*	.1	.3
Center	N	Upper	9.1375*	.1	.3
Center	N	Upper	9.125*	.1	.3
Center	N	Upper	9.1125*	.1	.3
Center	N	Upper	9.1*	.1	.3
Center	N	Upper	9.0875*	.1	.3
Center	N	Upper	9.075*	.1	.3
Center	N	Upper	9.0625*	.1	.3
Center	N	Upper	9.05*	.1	.3
Center	N	Upper	9.0375*	.1	.3
Center	N	Upper	9.025*	.1	.3
Center	N	Upper	9.0125*	.1	.3
Center	N	Upper	9	.1	.3
Center	N	Upper	8	.1	.3
Center	N	Upper	7	.1	.3
Center	N	Upper	6	.1	.3
Center	N	Upper	5.83333*	.1	.3
Center	N	Upper	5.66666*	.1	.3
Center	N	Upper	5.5*	.1	.3
Center	N	Upper	5.33333*	.1	.3
Center	N	Upper	5.16666*	.1	.3
Center	N	Upper	5	.1	.3
Center	N	Branch	108	.1	.3
Center	N	Branch	107.833*	.1	.3
Center	N	Branch	107.666*	.1	.3
Center	N	Branch	107.5*	.1	.3
Center	N	Branch	107.333*	.1	.3
Center	N	Branch	107.166*	.1	.3
Center	N	Branch	107	.1	.3
Center	N	Branch	106	.1	.3
Center	N	Branch	105.5*	.1	.3
Center	N	Branch	105	.1	.3
Center	N	Lower	4	.1	.3
Center	N	Lower	3.5*	.1	.3
Center	N	Lower	3	.1	.3
Center	N	Lower	2.5	Inl struct	
Center	N	Lower	2	.1	.3

Center N Lower 1 CPNPPLocalPMP
 .1 .3
 River: Center South

Reach	River Sta.	Contr.	Expan.
Center South	8	.1	.3
Center South	7.91666*	.1	.3
Center South	7.83333*	.1	.3
Center South	7.75*	.1	.3
Center South	7.66666*	.1	.3
Center South	7.58333*	.1	.3
Center South	7.5*	.1	.3
Center South	7.41666*	.1	.3
Center South	7.33333*	.1	.3
Center South	7.25*	.1	.3
Center South	7.16666*	.1	.3
Center South	7.08333*	.1	.3
Center South	7	.1	.3
Center South	6	.1	.3
Center South	5	.1	.3
Center South	4.8*	.1	.3
Center South	4.6*	.1	.3
Center South	4.4*	.1	.3
Center South	4.2*	.1	.3
Center South	4	.1	.3
Center South	3	.1	.3
Center South	2	.1	.3
Center South	1.5	Inl struct	
Center South	1	.1	.3

River: East Channel

Reach	River Sta.	Contr.	Expan.
East Channel	7	.1	.3
East Channel	6.98684*	.1	.3
East Channel	6.97368*	.1	.3
East Channel	6.96052*	.1	.3
East Channel	6.94736*	.1	.3
East Channel	6.93421*	.1	.3
East Channel	6.92105*	.1	.3
East Channel	6.90789*	.1	.3
East Channel	6.89473*	.1	.3
East Channel	6.88157*	.1	.3
East Channel	6.86842*	.1	.3
East Channel	6.85526*	.1	.3
East Channel	6.84210*	.1	.3
East Channel	6.82894*	.1	.3
East Channel	6.81579*	.1	.3
East Channel	6.80263*	.1	.3
East Channel	6.78947*	.1	.3
East Channel	6.77631*	.1	.3
East Channel	6.76315*	.1	.3
East Channel	6.75*	.1	.3
East Channel	6.73684*	.1	.3
East Channel	6.72368*	.1	.3
East Channel	6.71052*	.1	.3
East Channel	6.69736*	.1	.3
East Channel	6.68421*	.1	.3
East Channel	6.67105*	.1	.3

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		CPNPP	Local	PMP
East Channel	6.65789*	.1		.3
East Channel	6.64473*	.1		.3
East Channel	6.63157*	.1		.3
East Channel	6.61842*	.1		.3
East Channel	6.60526*	.1		.3
East Channel	6.59210*	.1		.3
East Channel	6.57894*	.1		.3
East Channel	6.56579*	.1		.3
East Channel	6.55263*	.1		.3
East Channel	6.53947*	.1		.3
East Channel	6.52631*	.1		.3
East Channel	6.51315*	.1		.3
East Channel	6.5*	.1		.3
East Channel	6.48684*	.1		.3
East Channel	6.47368*	.1		.3
East Channel	6.46052*	.1		.3
East Channel	6.44736*	.1		.3
East Channel	6.43421*	.1		.3
East Channel	6.42105*	.1		.3
East Channel	6.40789*	.1		.3
East Channel	6.39473*	.1		.3
East Channel	6.38157*	.1		.3
East Channel	6.36842*	.1		.3
East Channel	6.35526*	.1		.3
East Channel	6.34210*	.1		.3
East Channel	6.32894*	.1		.3
East Channel	6.31579*	.1		.3
East Channel	6.30263*	.1		.3
East Channel	6.28947*	.1		.3
East Channel	6.27631*	.1		.3
East Channel	6.26315*	.1		.3
East Channel	6.25*	.1		.3
East Channel	6.23684*	.1		.3
East Channel	6.22368*	.1		.3
East Channel	6.21052*	.1		.3
East Channel	6.19736*	.1		.3
East Channel	6.18421*	.1		.3
East Channel	6.17105*	.1		.3
East Channel	6.15789*	.1		.3
East Channel	6.14473*	.1		.3
East Channel	6.13157*	.1		.3
East Channel	6.11842*	.1		.3
East Channel	6.10526*	.1		.3
East Channel	6.09210*	.1		.3
East Channel	6.07894*	.1		.3
East Channel	6.06579*	.1		.3
East Channel	6.05263*	.1		.3
East Channel	6.03947*	.1		.3
East Channel	6.02631*	.1		.3
East Channel	6.01315*	.1		.3
East Channel	6	.1		.3
East Channel	5.8*	.1		.3
East Channel	5.6*	.1		.3
East Channel	5.4*	.1		.3
East Channel	5.2*	.1		.3
East Channel	5	.1		.3
East Channel	4.94444*	.1		.3
East Channel	4.88888*	.1		.3
East Channel	4.83333*	.1		.3
East Channel	4.77777*	.1		.3
East Channel	4.72222*	.1		.3
East Channel	4.66666*	.1		.3
East Channel	4.61111*	.1		.3

		CPNPP	Local	PMP
East Channel	4.55555*	.1		.3
East Channel	4.5*	.1		.3
East Channel	4.44444*	.1		.3
East Channel	4.38888*	.1		.3
East Channel	4.33333*	.1		.3
East Channel	4.27777*	.1		.3
East Channel	4.22222*	.1		.3
East Channel	4.16666*	.1		.3
East Channel	4.11111*	.1		.3
East Channel	4.05555*	.1		.3
East Channel	4	.1		.3
East Channel	3.95652*	.1		.3
East Channel	3.91304*	.1		.3
East Channel	3.86956*	.1		.3
East Channel	3.82608*	.1		.3
East Channel	3.78260*	.1		.3
East Channel	3.73913*	.1		.3
East Channel	3.69565*	.1		.3
East Channel	3.65217*	.1		.3
East Channel	3.60869*	.1		.3
East Channel	3.56521*	.1		.3
East Channel	3.52173*	.1		.3
East Channel	3.47826*	.1		.3
East Channel	3.43478*	.1		.3
East Channel	3.39130*	.1		.3
East Channel	3.34782*	.1		.3
East Channel	3.30434*	.1		.3
East Channel	3.26087*	.1		.3
East Channel	3.21739*	.1		.3
East Channel	3.17391*	.1		.3
East Channel	3.13043*	.1		.3
East Channel	3.08695*	.1		.3
East Channel	3.04347*	.1		.3
East Channel	3	.1		.3
East Channel	2.98666*	.1		.3
East Channel	2.97333*	.1		.3
East Channel	2.96*	.1		.3
East Channel	2.94666*	.1		.3
East Channel	2.93333*	.1		.3
East Channel	2.92*	.1		.3
East Channel	2.90666*	.1		.3
East Channel	2.89333*	.1		.3
East Channel	2.88*	.1		.3
East Channel	2.86666*	.1		.3
East Channel	2.85333*	.1		.3
East Channel	2.84*	.1		.3
East Channel	2.82666*	.1		.3
East Channel	2.81333*	.1		.3
East Channel	2.8*	.1		.3
East Channel	2.78666*	.1		.3
East Channel	2.77333*	.1		.3
East Channel	2.76*	.1		.3
East Channel	2.74666*	.1		.3
East Channel	2.73333*	.1		.3
East Channel	2.72*	.1		.3
East Channel	2.70666*	.1		.3
East Channel	2.69333*	.1		.3
East Channel	2.68*	.1		.3
East Channel	2.66666*	.1		.3
East Channel	2.65333*	.1		.3
East Channel	2.64*	.1		.3
East Channel	2.62666*	.1		.3
East Channel	2.61333*	.1		.3

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		CPNPP	Local	PMP
East Channel	2.6*	.1		.3
East Channel	2.58666*	.1		.3
East Channel	2.57333*	.1		.3
East Channel	2.56*	.1		.3
East Channel	2.54666*	.1		.3
East Channel	2.53333*	.1		.3
East Channel	2.52*	.1		.3
East Channel	2.50666*	.1		.3
East Channel	2.49333*	.1		.3
East Channel	2.48*	.1		.3
East Channel	2.46666*	.1		.3
East Channel	2.45333*	.1		.3
East Channel	2.44*	.1		.3
East Channel	2.42666*	.1		.3
East Channel	2.41333*	.1		.3
East Channel	2.4*	.1		.3
East Channel	2.38666*	.1		.3
East Channel	2.37333*	.1		.3
East Channel	2.36*	.1		.3
East Channel	2.34666*	.1		.3
East Channel	2.33333*	.1		.3
East Channel	2.32*	.1		.3
East Channel	2.30666*	.1		.3
East Channel	2.29333*	.1		.3
East Channel	2.28*	.1		.3
East Channel	2.26666*	.1		.3
East Channel	2.25333*	.1		.3
East Channel	2.24*	.1		.3
East Channel	2.22666*	.1		.3
East Channel	2.21333*	.1		.3
East Channel	2.2*	.1		.3
East Channel	2.18666*	.1		.3
East Channel	2.17333*	.1		.3
East Channel	2.16*	.1		.3
East Channel	2.14666*	.1		.3
East Channel	2.13333*	.1		.3
East Channel	2.12*	.1		.3
East Channel	2.10666*	.1		.3
East Channel	2.09333*	.1		.3
East Channel	2.08*	.1		.3
East Channel	2.06666*	.1		.3
East Channel	2.05333*	.1		.3
East Channel	2.04*	.1		.3
East Channel	2.02666*	.1		.3
East Channel	2.01333*	.1		.3
East Channel	2	.1		.3
East Channel	1.98630*	.1		.3
East Channel	1.97260*	.1		.3
East Channel	1.95890*	.1		.3
East Channel	1.94520*	.1		.3
East Channel	1.93150*	.1		.3
East Channel	1.91780*	.1		.3
East Channel	1.90411*	.1		.3
East Channel	1.89041*	.1		.3
East Channel	1.87671*	.1		.3
East Channel	1.86301*	.1		.3
East Channel	1.84931*	.1		.3
East Channel	1.83561*	.1		.3
East Channel	1.82191*	.1		.3
East Channel	1.80821*	.1		.3
East Channel	1.79452*	.1		.3
East Channel	1.78082*	.1		.3
East Channel	1.76712*	.1		.3

		CPNPP	Local	PMP
East Channel	1.75342*	.1		.3
East Channel	1.73972*	.1		.3
East Channel	1.72602*	.1		.3
East Channel	1.71232*	.1		.3
East Channel	1.69863*	.1		.3
East Channel	1.68493*	.1		.3
East Channel	1.67123*	.1		.3
East Channel	1.65753*	.1		.3
East Channel	1.64383*	.1		.3
East Channel	1.63013*	.1		.3
East Channel	1.61643*	.1		.3
East Channel	1.60274*	.1		.3
East Channel	1.58904*	.1		.3
East Channel	1.57534*	.1		.3
East Channel	1.56164*	.1		.3
East Channel	1.54794*	.1		.3
East Channel	1.53424*	.1		.3
East Channel	1.52054*	.1		.3
East Channel	1.50685*	.1		.3
East Channel	1.49315*	.1		.3
East Channel	1.47945*	.1		.3
East Channel	1.46575*	.1		.3
East Channel	1.45205*	.1		.3
East Channel	1.43835*	.1		.3
East Channel	1.42465*	.1		.3
East Channel	1.41095*	.1		.3
East Channel	1.39726*	.1		.3
East Channel	1.38356*	.1		.3
East Channel	1.36986*	.1		.3
East Channel	1.35616*	.1		.3
East Channel	1.34246*	.1		.3
East Channel	1.32876*	.1		.3
East Channel	1.31506*	.1		.3
East Channel	1.30137*	.1		.3
East Channel	1.28767*	.1		.3
East Channel	1.27397*	.1		.3
East Channel	1.26027*	.1		.3
East Channel	1.24657*	.1		.3
East Channel	1.23287*	.1		.3
East Channel	1.21917*	.1		.3
East Channel	1.20548*	.1		.3
East Channel	1.19178*	.1		.3
East Channel	1.17808*	.1		.3
East Channel	1.16438*	.1		.3
East Channel	1.15068*	.1		.3
East Channel	1.13698*	.1		.3
East Channel	1.12328*	.1		.3
East Channel	1.10959*	.1		.3
East Channel	1.09589*	.1		.3
East Channel	1.08219*	.1		.3
East Channel	1.06849*	.1		.3
East Channel	1.05479*	.1		.3
East Channel	1.04109*	.1		.3
East Channel	1.02739*	.1		.3
East Channel	1.01369*	.1		.3
East Channel	1	.1		.3

River: Offsite

Reach	River Sta.	Contr.	Expan.
Offsite	6	.1	.3

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		CPNPP	Local	PMP
Offsite	5.94117*	.1		.3
Offsite	5.88235*	.1		.3
Offsite	5.82352*	.1		.3
Offsite	5.76470*	.1		.3
Offsite	5.70588*	.1		.3
Offsite	5.64705*	.1		.3
Offsite	5.58823*	.1		.3
Offsite	5.52941*	.1		.3
Offsite	5.47058*	.1		.3
Offsite	5.41176*	.1		.3
Offsite	5.35294*	.1		.3
Offsite	5.29411*	.1		.3
Offsite	5.23529*	.1		.3
Offsite	5.17647*	.1		.3
Offsite	5.11764*	.1		.3
Offsite	5.05882*	.1		.3
Offsite	5	.1		.3
Offsite	4.5*	.1		.3
Offsite	4	.1		.3
Offsite	3.5*	.1		.3
Offsite	3	.1		.3
Offsite	2.91666*	.1		.3
Offsite	2.83333*	.1		.3
Offsite	2.75*	.1		.3
Offsite	2.66666*	.1		.3
Offsite	2.58333*	.1		.3
Offsite	2.5*	.1		.3
Offsite	2.41666*	.1		.3
Offsite	2.33333*	.1		.3
Offsite	2.25*	.1		.3
Offsite	2.16666*	.1		.3
Offsite	2.08333*	.1		.3
Offsite	2	.1		.3
Offsite	1.5	Inl	Struct	
Offsite	1	.1		.3

River: Unit 3 East

Reach	River Sta.	Contr.	Expan.
Unit 3 East	5	.1	.3
Unit 3 East	4.98795*	.1	.3
Unit 3 East	4.97590*	.1	.3
Unit 3 East	4.96385*	.1	.3
Unit 3 East	4.95180*	.1	.3
Unit 3 East	4.93975*	.1	.3
Unit 3 East	4.92771*	.1	.3
Unit 3 East	4.91566*	.1	.3
Unit 3 East	4.90361*	.1	.3
Unit 3 East	4.89156*	.1	.3
Unit 3 East	4.87951*	.1	.3
Unit 3 East	4.86747*	.1	.3
Unit 3 East	4.85542*	.1	.3
Unit 3 East	4.84337*	.1	.3
Unit 3 East	4.83132*	.1	.3
Unit 3 East	4.81927*	.1	.3
Unit 3 East	4.80722*	.1	.3
Unit 3 East	4.79518*	.1	.3
Unit 3 East	4.78313*	.1	.3
Unit 3 East	4.77108*	.1	.3
Unit 3 East	4.75903*	.1	.3
Unit 3 East	4.74698*	.1	.3

		CPNPP	Local	PMP
Unit 3 East	4.73494*	.1		.3
Unit 3 East	4.72289*	.1		.3
Unit 3 East	4.71084*	.1		.3
Unit 3 East	4.69879*	.1		.3
Unit 3 East	4.68674*	.1		.3
Unit 3 East	4.67469*	.1		.3
Unit 3 East	4.66265*	.1		.3
Unit 3 East	4.65060*	.1		.3
Unit 3 East	4.63855*	.1		.3
Unit 3 East	4.62650*	.1		.3
Unit 3 East	4.61445*	.1		.3
Unit 3 East	4.60240*	.1		.3
Unit 3 East	4.59036*	.1		.3
Unit 3 East	4.57831*	.1		.3
Unit 3 East	4.56626*	.1		.3
Unit 3 East	4.55421*	.1		.3
Unit 3 East	4.54216*	.1		.3
Unit 3 East	4.53012*	.1		.3
Unit 3 East	4.51807*	.1		.3
Unit 3 East	4.50602*	.1		.3
Unit 3 East	4.49397*	.1		.3
Unit 3 East	4.48192*	.1		.3
Unit 3 East	4.46988*	.1		.3
Unit 3 East	4.45783*	.1		.3
Unit 3 East	4.44578*	.1		.3
Unit 3 East	4.43373*	.1		.3
Unit 3 East	4.42168*	.1		.3
Unit 3 East	4.40963*	.1		.3
Unit 3 East	4.39759*	.1		.3
Unit 3 East	4.38554*	.1		.3
Unit 3 East	4.37349*	.1		.3
Unit 3 East	4.36144*	.1		.3
Unit 3 East	4.34939*	.1		.3
Unit 3 East	4.33735*	.1		.3
Unit 3 East	4.32530*	.1		.3
Unit 3 East	4.31325*	.1		.3
Unit 3 East	4.30120*	.1		.3
Unit 3 East	4.28915*	.1		.3
Unit 3 East	4.27710*	.1		.3
Unit 3 East	4.26506*	.1		.3
Unit 3 East	4.25301*	.1		.3
Unit 3 East	4.24096*	.1		.3
Unit 3 East	4.22891*	.1		.3
Unit 3 East	4.21686*	.1		.3
Unit 3 East	4.20482*	.1		.3
Unit 3 East	4.19277*	.1		.3
Unit 3 East	4.18072*	.1		.3
Unit 3 East	4.16867*	.1		.3
Unit 3 East	4.15662*	.1		.3
Unit 3 East	4.14457*	.1		.3
Unit 3 East	4.13253*	.1		.3
Unit 3 East	4.12048*	.1		.3
Unit 3 East	4.10843*	.1		.3
Unit 3 East	4.09638*	.1		.3
Unit 3 East	4.08433*	.1		.3
Unit 3 East	4.07228*	.1		.3
Unit 3 East	4.06024*	.1		.3
Unit 3 East	4.04819*	.1		.3
Unit 3 East	4.03614*	.1		.3
Unit 3 East	4.02409*	.1		.3
Unit 3 East	4.01204*	.1		.3
Unit 3 East	4	.1		.3
Unit 3 East	3.98305*	.1		.3

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		CPNPP	Local	PMP
Unit 3 East	3.96610*	.1	.3	
Unit 3 East	3.94915*	.1	.3	
Unit 3 East	3.93220*	.1	.3	
Unit 3 East	3.91525*	.1	.3	
Unit 3 East	3.89830*	.1	.3	
Unit 3 East	3.88135*	.1	.3	
Unit 3 East	3.86440*	.1	.3	
Unit 3 East	3.84745*	.1	.3	
Unit 3 East	3.83050*	.1	.3	
Unit 3 East	3.81355*	.1	.3	
Unit 3 East	3.79661*	.1	.3	
Unit 3 East	3.77966*	.1	.3	
Unit 3 East	3.76271*	.1	.3	
Unit 3 East	3.74576*	.1	.3	
Unit 3 East	3.72881*	.1	.3	
Unit 3 East	3.71186*	.1	.3	
Unit 3 East	3.69491*	.1	.3	
Unit 3 East	3.67796*	.1	.3	
Unit 3 East	3.66101*	.1	.3	
Unit 3 East	3.64406*	.1	.3	
Unit 3 East	3.62711*	.1	.3	
Unit 3 East	3.61016*	.1	.3	
Unit 3 East	3.59322*	.1	.3	
Unit 3 East	3.57627*	.1	.3	
Unit 3 East	3.55932*	.1	.3	
Unit 3 East	3.54237*	.1	.3	
Unit 3 East	3.52542*	.1	.3	
Unit 3 East	3.50847*	.1	.3	
Unit 3 East	3.49152*	.1	.3	
Unit 3 East	3.47457*	.1	.3	
Unit 3 East	3.45762*	.1	.3	
Unit 3 East	3.44067*	.1	.3	
Unit 3 East	3.42372*	.1	.3	
Unit 3 East	3.40678*	.1	.3	
Unit 3 East	3.38983*	.1	.3	
Unit 3 East	3.37288*	.1	.3	
Unit 3 East	3.35593*	.1	.3	
Unit 3 East	3.33898*	.1	.3	
Unit 3 East	3.32203*	.1	.3	
Unit 3 East	3.30508*	.1	.3	
Unit 3 East	3.28813*	.1	.3	
Unit 3 East	3.27118*	.1	.3	
Unit 3 East	3.25423*	.1	.3	
Unit 3 East	3.23728*	.1	.3	
Unit 3 East	3.22033*	.1	.3	
Unit 3 East	3.20339*	.1	.3	
Unit 3 East	3.18644*	.1	.3	
Unit 3 East	3.16949*	.1	.3	
Unit 3 East	3.15254*	.1	.3	
Unit 3 East	3.13559*	.1	.3	
Unit 3 East	3.11864*	.1	.3	
Unit 3 East	3.10169*	.1	.3	
Unit 3 East	3.08474*	.1	.3	
Unit 3 East	3.06779*	.1	.3	
Unit 3 East	3.05084*	.1	.3	
Unit 3 East	3.03389*	.1	.3	
Unit 3 East	3.01695*	.1	.3	
Unit 3 East	3	.1	.3	
Unit 3 East	2.97368*	.1	.3	
Unit 3 East	2.94736*	.1	.3	
Unit 3 East	2.92105*	.1	.3	
Unit 3 East	2.89473*	.1	.3	
Unit 3 East	2.86842*	.1	.3	

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		CPNPPLocalPMP		
Unit 3 East	2.84210*	.1	.3	
Unit 3 East	2.81578*	.1	.3	
Unit 3 East	2.78947*	.1	.3	
Unit 3 East	2.76315*	.1	.3	
Unit 3 East	2.73684*	.1	.3	
Unit 3 East	2.71052*	.1	.3	
Unit 3 East	2.68421*	.1	.3	
Unit 3 East	2.65789*	.1	.3	
Unit 3 East	2.63157*	.1	.3	
Unit 3 East	2.60526*	.1	.3	
Unit 3 East	2.57894*	.1	.3	
Unit 3 East	2.55263*	.1	.3	
Unit 3 East	2.52631*	.1	.3	
Unit 3 East	2.5*	.1	.3	
Unit 3 East	2.47368*	.1	.3	
Unit 3 East	2.44736*	.1	.3	
Unit 3 East	2.42105*	.1	.3	
Unit 3 East	2.39473*	.1	.3	
Unit 3 East	2.36842*	.1	.3	
Unit 3 East	2.34210*	.1	.3	
Unit 3 East	2.31579*	.1	.3	
Unit 3 East	2.28947*	.1	.3	
Unit 3 East	2.26315*	.1	.3	
Unit 3 East	2.23684*	.1	.3	
Unit 3 East	2.21052*	.1	.3	
Unit 3 East	2.18421*	.1	.3	
Unit 3 East	2.15789*	.1	.3	
Unit 3 East	2.13157*	.1	.3	
Unit 3 East	2.10526*	.1	.3	
Unit 3 East	2.07894*	.1	.3	
Unit 3 East	2.05263*	.1	.3	
Unit 3 East	2.02631*	.1	.3	
Unit 3 East	2	.1	.3	
Unit 3 East	1.5	Inl Struct	.3	
Unit 3 East	1	.1	.3	

River: Unit 3 North

Reach	River Sta.	Contr.	Expan.
Unit 3 North	8	.1	.3
Unit 3 North	7	.1	.3
Unit 3 North	6	.1	.3
Unit 3 North	5	.1	.3
Unit 3 North	4.5	Inl Struct	.3
Unit 3 North	4	.1	.3
Unit 3 North	3.5*	.1	.3
Unit 3 North	3	.1	.3
Unit 3 North	2	.1	.3
Unit 3 North	1.5	Inl Struct	.3
Unit 3 North	1	.1	.3

River: Unit 3 Southeast

Reach	River Sta.	Contr.	Expan.
Unit 3 Southeast	11	.1	.3
Unit 3 Southeast	10.9090*	.1	.3
Unit 3 Southeast	10.8181*	.1	.3
Unit 3 Southeast	10.7272*	.1	.3
Unit 3 Southeast	10.6363*	.1	.3

			CPNPP	Local	PMP
Unit 3 Southeast	10.5454*		.1		.3
Unit 3 Southeast	10.4545*		.1		.3
Unit 3 Southeast	10.3636*		.1		.3
Unit 3 Southeast	10.2727*		.1		.3
Unit 3 Southeast	10.1818*		.1		.3
Unit 3 Southeast	10.0909*		.1		.3
Unit 3 Southeast	10		.1		.3
Unit 3 Southeast	9.92857*		.1		.3
Unit 3 Southeast	9.85714*		.1		.3
Unit 3 Southeast	9.78571*		.1		.3
Unit 3 Southeast	9.71428*		.1		.3
Unit 3 Southeast	9.64285*		.1		.3
Unit 3 Southeast	9.57142*		.1		.3
Unit 3 Southeast	9.5*		.1		.3
Unit 3 Southeast	9.42857*		.1		.3
Unit 3 Southeast	9.35714*		.1		.3
Unit 3 Southeast	9.28571*		.1		.3
Unit 3 Southeast	9.21428*		.1		.3
Unit 3 Southeast	9.14285*		.1		.3
Unit 3 Southeast	9.07142*		.1		.3
Unit 3 Southeast	9		.1		.3
Unit 3 Southeast	8.83333*		.1		.3
Unit 3 Southeast	8.66666*		.1		.3
Unit 3 Southeast	8.5*		.1		.3
Unit 3 Southeast	8.33333*		.1		.3
Unit 3 Southeast	8.16666*		.1		.3
Unit 3 Southeast	8		.1		.3
Unit 3 Southeast	7		.1		.3
Unit 3 Southeast	6		.1		.3
Unit 3 Southeast	5		.1		.3
Unit 3 Southeast	4.66666*		.1		.3
Unit 3 Southeast	4.33333*		.1		.3
Unit 3 Southeast	4		.1		.3
Unit 3 Southeast	3		.1		.3
Unit 3 Southeast	2		.1		.3
Unit 3 Southeast	1.5	Inl struct			
Unit 3 Southeast	1		.1		.3

River: Unit 3 UHS

Reach	River Sta.	Contr.	Expan.
U3 UHS Branch	109	.1	.3
U3 UHS Branch	108.988*	.1	.3
U3 UHS Branch	108.977*	.1	.3
U3 UHS Branch	108.966*	.1	.3
U3 UHS Branch	108.955*	.1	.3
U3 UHS Branch	108.944*	.1	.3
U3 UHS Branch	108.933*	.1	.3
U3 UHS Branch	108.922*	.1	.3
U3 UHS Branch	108.911*	.1	.3
U3 UHS Branch	108.9*	.1	.3
U3 UHS Branch	108.888*	.1	.3
U3 UHS Branch	108.877*	.1	.3
U3 UHS Branch	108.866*	.1	.3
U3 UHS Branch	108.855*	.1	.3
U3 UHS Branch	108.844*	.1	.3
U3 UHS Branch	108.833*	.1	.3
U3 UHS Branch	108.822*	.1	.3
U3 UHS Branch	108.811*	.1	.3
U3 UHS Branch	108.8*	.1	.3
U3 UHS Branch	108.788*	.1	.3

			CPNPP	Local	PMP
U3	UHS	Branch	108.777*	.1	.3
U3	UHS	Branch	108.766*	.1	.3
U3	UHS	Branch	108.755*	.1	.3
U3	UHS	Branch	108.744*	.1	.3
U3	UHS	Branch	108.733*	.1	.3
U3	UHS	Branch	108.722*	.1	.3
U3	UHS	Branch	108.711*	.1	.3
U3	UHS	Branch	108.7*	.1	.3
U3	UHS	Branch	108.688*	.1	.3
U3	UHS	Branch	108.677*	.1	.3
U3	UHS	Branch	108.666*	.1	.3
U3	UHS	Branch	108.655*	.1	.3
U3	UHS	Branch	108.644*	.1	.3
U3	UHS	Branch	108.633*	.1	.3
U3	UHS	Branch	108.622*	.1	.3
U3	UHS	Branch	108.611*	.1	.3
U3	UHS	Branch	108.6*	.1	.3
U3	UHS	Branch	108.588*	.1	.3
U3	UHS	Branch	108.577*	.1	.3
U3	UHS	Branch	108.566*	.1	.3
U3	UHS	Branch	108.555*	.1	.3
U3	UHS	Branch	108.544*	.1	.3
U3	UHS	Branch	108.533*	.1	.3
U3	UHS	Branch	108.522*	.1	.3
U3	UHS	Branch	108.511*	.1	.3
U3	UHS	Branch	108.5*	.1	.3
U3	UHS	Branch	108.488*	.1	.3
U3	UHS	Branch	108.477*	.1	.3
U3	UHS	Branch	108.466*	.1	.3
U3	UHS	Branch	108.455*	.1	.3
U3	UHS	Branch	108.444*	.1	.3
U3	UHS	Branch	108.433*	.1	.3
U3	UHS	Branch	108.422*	.1	.3
U3	UHS	Branch	108.411*	.1	.3
U3	UHS	Branch	108.4*	.1	.3
U3	UHS	Branch	108.388*	.1	.3
U3	UHS	Branch	108.377*	.1	.3
U3	UHS	Branch	108.366*	.1	.3
U3	UHS	Branch	108.355*	.1	.3
U3	UHS	Branch	108.344*	.1	.3
U3	UHS	Branch	108.333*	.1	.3
U3	UHS	Branch	108.322*	.1	.3
U3	UHS	Branch	108.311*	.1	.3
U3	UHS	Branch	108.3*	.1	.3
U3	UHS	Branch	108.288*	.1	.3
U3	UHS	Branch	108.277*	.1	.3
U3	UHS	Branch	108.266*	.1	.3
U3	UHS	Branch	108.255*	.1	.3
U3	UHS	Branch	108.244*	.1	.3
U3	UHS	Branch	108.233*	.1	.3
U3	UHS	Branch	108.222*	.1	.3
U3	UHS	Branch	108.211*	.1	.3
U3	UHS	Branch	108.2*	.1	.3
U3	UHS	Branch	108.188*	.1	.3
U3	UHS	Branch	108.177*	.1	.3
U3	UHS	Branch	108.166*	.1	.3
U3	UHS	Branch	108.155*	.1	.3
U3	UHS	Branch	108.144*	.1	.3
U3	UHS	Branch	108.133*	.1	.3
U3	UHS	Branch	108.122*	.1	.3
U3	UHS	Branch	108.111*	.1	.3
U3	UHS	Branch	108.1*	.1	.3
U3	UHS	Branch	108.088*	.1	.3

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			CPNPP	Local	PMP
U3	UHS	Branch	108.077*	.1	.3
U3	UHS	Branch	108.066*	.1	.3
U3	UHS	Branch	108.055*	.1	.3
U3	UHS	Branch	108.044*	.1	.3
U3	UHS	Branch	108.033*	.1	.3
U3	UHS	Branch	108.022*	.1	.3
U3	UHS	Branch	108.011*	.1	.3
U3	UHS	Branch	108	.1	.3
U3	UHS	Upper	12	.1	.3
U3	UHS	Upper	11.875*	.1	.3
U3	UHS	Upper	11.75*	.1	.3
U3	UHS	Upper	11.625*	.1	.3
U3	UHS	Upper	11.5*	.1	.3
U3	UHS	Upper	11.375*	.1	.3
U3	UHS	Upper	11.25*	.1	.3
U3	UHS	Upper	11.125*	.1	.3
U3	UHS	Upper	11	.1	.3
U3	UHS	Upper	10.8*	.1	.3
U3	UHS	Upper	10.6*	.1	.3
U3	UHS	Upper	10.4*	.1	.3
U3	UHS	Upper	10.2*	.1	.3
U3	UHS	Upper	10	.1	.3
U3	UHS	Upper	9	.1	.3
U3	UHS	Upper	8	.1	.3
U3	UHS	Lower	7	.1	.3
U3	UHS	Lower	6.9	Lat Struct	
U3	UHS	Lower	6	.1	.3
U3	UHS	Lower	5	.1	.3
U3	UHS	Lower	4	.1	.3
U3	UHS	Lower	3.90909*	.1	.3
U3	UHS	Lower	3.81818*	.1	.3
U3	UHS	Lower	3.72727*	.1	.3
U3	UHS	Lower	3.63636*	.1	.3
U3	UHS	Lower	3.54545*	.1	.3
U3	UHS	Lower	3.45454*	.1	.3
U3	UHS	Lower	3.36363*	.1	.3
U3	UHS	Lower	3.27272*	.1	.3
U3	UHS	Lower	3.18181*	.1	.3
U3	UHS	Lower	3.09090*	.1	.3
U3	UHS	Lower	3	.1	.3
U3	UHS	Lower	2	.1	.3
U3	UHS	Lower	1.5	Inl Struct	
U3	UHS	Lower	1	.1	.3

River: Unit 4 North

Reach	River Sta.	Contr.	Expan.
Unit 4 North	6	.1	.3
Unit 4 North	5	.1	.3
Unit 4 North	4	.1	.3
Unit 4 North	3	.1	.3
Unit 4 North	2	.1	.3
Unit 4 North	1.5	Inl Struct	
Unit 4 North	1	.1	.3

River: Unit 4 UHS

Reach	River Sta.	Contr.	Expan.
U4 UHS Upper	10	.1	.3

		CPNPPLocalPMP		
U4 UHS Upper	9	.1	.3	
U4 UHS Upper	8.875*	.1	.3	
U4 UHS Upper	8.75*	.1	.3	
U4 UHS Upper	8.625*	.1	.3	
U4 UHS Upper	8.5*	.1	.3	
U4 UHS Upper	8.375*	.1	.3	
U4 UHS Upper	8.25*	.1	.3	
U4 UHS Upper	8.125*	.1	.3	
U4 UHS Upper	8	.1	.3	
U4 UHS Upper	7	.1	.3	
U4 UHS Upper	6.9	Lat Struct		
U4 UHS Upper	6	.1	.3	
U4 UHS Branch	107	.1	.3	
U4 UHS Branch	106.916*	.1	.3	
U4 UHS Branch	106.833*	.1	.3	
U4 UHS Branch	106.75*	.1	.3	
U4 UHS Branch	106.666*	.1	.3	
U4 UHS Branch	106.583*	.1	.3	
U4 UHS Branch	106.5*	.1	.3	
U4 UHS Branch	106.416*	.1	.3	
U4 UHS Branch	106.333*	.1	.3	
U4 UHS Branch	106.25*	.1	.3	
U4 UHS Branch	106.166*	.1	.3	
U4 UHS Branch	106.083*	.1	.3	
U4 UHS Branch	106	.1	.3	
U4 UHS Lower	5	.1	.3	
U4 UHS Lower	4.9	Lat Struct		
U4 UHS Lower	4.75*	.1	.3	
U4 UHS Lower	4.5*	.1	.3	
U4 UHS Lower	4.25*	.1	.3	
U4 UHS Lower	4	.1	.3	
U4 UHS Lower	3.9	Lat Struct		
U4 UHS Lower	3	.1	.3	
U4 UHS Lower	2.92857*	.1	.3	
U4 UHS Lower	2.85714*	.1	.3	
U4 UHS Lower	2.78571*	.1	.3	
U4 UHS Lower	2.71428*	.1	.3	
U4 UHS Lower	2.64285*	.1	.3	
U4 UHS Lower	2.57142*	.1	.3	
U4 UHS Lower	2.5*	.1	.3	
U4 UHS Lower	2.42857*	.1	.3	
U4 UHS Lower	2.35714*	.1	.3	
U4 UHS Lower	2.28571*	.1	.3	
U4 UHS Lower	2.21428*	.1	.3	
U4 UHS Lower	2.14285*	.1	.3	
U4 UHS Lower	2.07142*	.1	.3	
U4 UHS Lower	2	.1	.3	
U4 UHS Lower	1.5	Inl Struct		
U4 UHS Lower	1	.1	.3	

River: West Channel

Reach	River Sta.	Contr.	Expan.
west Channel	24	.1	.3
west Channel	23	.1	.3
west Channel	22	.1	.3
west Channel	21	.1	.3
west Channel	20	.1	.3
west Channel	19	.1	.3
west Channel	18	.1	.3
west Channel	17	.1	.3

		CPNPPLocal	PMP
West Channel	16	.1	.3
West Channel	15	.1	.3
West Channel	14	.1	.3
West Channel	13	.1	.3
West Channel	12	.1	.3
West Channel	11	.1	.3
West Channel	10	.1	.3
West Channel	9	.1	.3
West Channel	8	.1	.3
West Channel	7	.1	.3
West Channel	6	.1	.3
West Channel	5	.1	.3
West Channel	4	.1	.3
West Channel	3	.1	.3
West Channel	2.75*	.1	.3
West Channel	2.5*	.1	.3
West Channel	2.25*	.1	.3
West Channel	2	.1	.3
West Channel	1.5	Inl Struct	
West Channel	1	.1	.3

Profile Output Table - Standard Table 1

River El	W.S. Elev	Reach Crit W.S.	E.G. Elev	River Sta E.G.	Profile Slope	Q Total Flow Area	Min Ch Top
(ft)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(cfs)	(sq ft)
West Channel	811.81	West Channel	813.49	24	PF 1	497.00	
114.46	820.34	0.07	820.36	0.000006	1.00	523.95	
West Channel	811.94	West Channel		23	PF 1	497.00	
139.20	820.34	0.07	820.36	0.000006	0.99	540.73	
West Channel	811.98	West Channel		22	PF 1	497.00	
109.99	820.34	0.07	820.36	0.000006	1.00	518.85	
West Channel	812.28	West Channel		21	PF 1	497.00	
108.25	820.34	0.07	820.36	0.000007	1.08	483.41	
West Channel	812.69	West Channel		20	PF 1	497.00	
133.84	820.34	0.08	820.36	0.000009	1.15	459.05	
West Channel	812.98	West Channel		19	PF 1	497.00	
91.10	820.33	0.09	820.35	0.000012	1.25	408.21	
West Channel	813.50	West Channel		18	PF 1	497.00	
90.45	820.32	0.10	820.35	0.000014	1.30	393.01	
West Channel	814.00	West Channel		17	PF 1	900.00	
90.30	820.25	0.19	820.34	0.000052	2.51	369.27	
West Channel	813.04	West Channel		16	PF 1	900.00	
105.82	820.25	0.17	820.33	0.000039	2.30	412.05	
West Channel		West Channel		15	PF 1	1267.00	

			CPNP	Local	PMP		
812.84	820.17		820.32	0.000073	3.20	426.13	
126.55	0.23						
west Channel		west Channel	14	PF 1		1267.00	
812.76	820.17		820.32	0.000072	3.20	415.27	
102.71	0.23						
west Channel		west Channel	13	PF 1		1267.00	
812.31	820.17		820.31	0.000064	3.09	431.10	
102.70	0.22						
west Channel		west Channel	12	PF 1		1267.00	
811.71	820.17		820.29	0.000053	2.90	471.72	
148.17	0.20						
west Channel		west Channel	11	PF 1		1402.00	
811.00	820.18		820.27	0.000038	2.51	681.16	
221.72	0.17						
west Channel		west Channel	10	PF 1		1860.00	
810.81	820.06		820.25	0.000081	3.67	575.53	
213.29	0.24						
west Channel		west Channel	9	PF 1		1860.00	
810.70	820.04		820.25	0.000085	3.78	533.24	
116.82	0.25						
west Channel		west Channel	8	PF 1		1860.00	
810.54	820.04		820.24	0.000081	3.69	543.82	
116.98	0.24						
west Channel		west Channel	7	PF 1		1860.00	
810.36	820.05		820.23	0.000072	3.52	598.96	
156.90	0.23						
west Channel		west Channel	6	PF 1		1860.00	
810.06	820.08		820.21	0.000052	2.99	725.44	
176.53	0.19						
west Channel		west Channel	5	PF 1		2023.00	
809.53	820.10		820.19	0.000031	2.60	863.52	
161.55	0.16						
west Channel		west Channel	4	PF 1		2023.00	
809.00	820.12		820.17	0.000026	1.97	1121.98	
198.63	0.11						
west Channel		west Channel	3	PF 1		2137.00	
809.00	820.11		820.17	0.000027	2.04	1145.43	
236.42	0.12						
west Channel		west Channel	2.75*	PF 1		2137.00	
809.00	820.11		820.17	0.000017	2.15	1261.04	
277.78	0.12						
west Channel		west Channel	2.5*	PF 1		2137.00	
809.00	820.12		820.17	0.000015	1.96	1426.36	
305.99	0.11						
west Channel		west Channel	2.25*	PF 1		2137.00	
809.00	820.13		820.16	0.000012	1.75	1617.63	
323.75	0.10						
west Channel		west Channel	2	PF 1		2137.00	
809.00	820.14	812.48	820.16	0.000011	1.32	1828.00	
339.74	0.07						
west Channel		west Channel	1.5			Inl Struct	
west Channel		west Channel	1	PF 1		2137.00	
816.00	818.93	818.31	819.32	0.000638	5.70	430.87	
192.77	0.59						
Unit 4 UHS		U4 UHS Upper	10	PF 1		1607.00	
809.83	818.92	814.44	819.13	0.000140	3.74	429.75	
74.56	0.27						
Unit 4 UHS		U4 UHS Upper	9	PF 1		1607.00	
809.69	818.92		819.12	0.000124	3.66	441.45	
75.73	0.26						
Unit 4 UHS		U4 UHS Upper	8.875*	PF 1		1607.00	

				CPNPPLocalPMP			
809.67	818.92			819.12	0.000123	3.64	445.04
78.22	0.26						
Unit 4 UHS		U4 UHS	Upper	8.75*	PF 1		1607.00
809.65	818.92			819.12	0.000121	3.62	448.17
80.71	0.26						
Unit 4 UHS		U4 UHS	Upper	8.625*	PF 1		1607.00
809.63	818.92			819.12	0.000117	3.61	452.75
100.94	0.26						
Unit 4 UHS		U4 UHS	Upper	8.5*	PF 1		1607.00
809.61	818.92			819.11	0.000106	3.53	489.09
144.49	0.25						
Unit 4 UHS		U4 UHS	Upper	8.375*	PF 1		1607.00
809.59	818.94			819.10	0.000090	3.34	546.66
157.59	0.23						
Unit 4 UHS		U4 UHS	Upper	8.25*	PF 1		1607.00
809.57	818.97			819.09	0.000072	3.05	619.89
170.70	0.21						
Unit 4 UHS		U4 UHS	Upper	8.125*	PF 1		1607.00
809.55	818.99			819.08	0.000054	2.71	708.24
183.80	0.18						
Unit 4 UHS		U4 UHS	Upper	8	PF 1		1607.00
809.53	819.01			819.07	0.000040	2.36	810.13
196.91	0.16						
Unit 4 UHS		U4 UHS	Upper	7	PF 1		1607.00
809.06	818.98			819.07	0.000043	2.49	737.85
158.98	0.16						
Unit 4 UHS		U4 UHS	Upper	6.9			Lat Struct
Unit 4 UHS		U4 UHS	Upper	6	PF 1		1040.75
808.87	819.02			819.05	0.000015	1.46	823.24
177.73	0.09						
Unit 4 UHS		U4 UHS	Branch	107	PF 1		135.00
819.00	819.55		819.55	819.83	0.003077	4.23	31.94
58.25	1.01						
Unit 4 UHS		U4 UHS	Branch	106.916*	PF 1		135.00
818.92	819.39		819.47	819.77	0.005221	4.96	27.19
58.25	1.28						
Unit 4 UHS		U4 UHS	Branch	106.833*	PF 1		135.00
818.84	819.30		819.39	819.71	0.005809	5.13	26.31
58.25	1.35						
Unit 4 UHS		U4 UHS	Branch	106.75*	PF 1		135.00
818.76	819.21		819.32	819.64	0.006467	5.31	25.44
58.25	1.41						
Unit 4 UHS		U4 UHS	Branch	106.666*	PF 1		135.00
818.67	819.11		819.24	819.57	0.007022	5.45	24.79
58.25	1.47						
Unit 4 UHS		U4 UHS	Branch	106.583*	PF 1		135.00
818.59	819.05		819.17	819.50	0.006834	5.41	24.97
58.25	1.45						
Unit 4 UHS		U4 UHS	Branch	106.5*	PF 1		135.00
818.51	818.98		819.10	819.43	0.006798	5.42	24.92
57.82	1.45						
Unit 4 UHS		U4 UHS	Branch	106.416*	PF 1		135.00
818.43	818.91		819.03	819.37	0.006630	5.43	24.88
56.49	1.44						
Unit 4 UHS		U4 UHS	Branch	106.333*	PF 1		135.00
818.35	818.84		818.97	819.30	0.006447	5.43	24.86
55.18	1.43						
Unit 4 UHS		U4 UHS	Branch	106.25*	PF 1		135.00
818.27	818.78		818.90	819.24	0.006225	5.43	24.88
53.90	1.41						
Unit 4 UHS		U4 UHS	Branch	106.166*	PF 1		135.00

				CPNPPLocalPMP				
818.18	818.70	818.83		819.17	0.006426	5.54	24.35	
52.31	1.43							
Unit 4 UHS		U4 UHS Branch		106.083*	PF 1		135.00	
818.10	818.63	818.76		819.11	0.006172	5.53	24.42	
51.07	1.41							
Unit 4 UHS		U4 UHS Branch		106	PF 1		135.00	
818.02	818.91	818.70		819.06	0.001128	3.19	42.31	
56.42	0.65							
Unit 4 UHS		U4 UHS Lower		5	PF 1		1175.75	
816.00	818.91			819.04	0.000175	2.80	419.72	
165.33	0.31							
Unit 4 UHS		U4 UHS Lower		4.9			Lat Struct	
Unit 4 UHS		U4 UHS Lower		4.75*	PF 1		905.17	
816.00	818.93			819.02	0.000144	2.43	372.59	
157.13	0.28							
Unit 4 UHS		U4 UHS Lower		4.5*	PF 1		630.92	
816.00	818.95			819.00	0.000092	1.88	336.35	
148.81	0.22							
Unit 4 UHS		U4 UHS Lower		4.25*	PF 1		352.22	
816.00	818.97			818.99	0.000035	1.14	309.97	
140.45	0.13							
Unit 4 UHS		U4 UHS Lower		4	PF 1		69.81	
816.00	818.98			818.98	0.000002	0.24	291.68	
131.95	0.03							
Unit 4 UHS		U4 UHS Lower		3.9			Lat Struct	
Unit 4 UHS		U4 UHS Lower		3	PF 1		59.62	
816.00	818.98			818.98	0.000001	0.19	314.38	
116.40	0.02							
Unit 4 UHS		U4 UHS Lower		2.92857*	PF 1		59.62	
815.86	818.98			818.98	0.000001	0.16	364.30	
140.67	0.02							
Unit 4 UHS		U4 UHS Lower		2.85714*	PF 1		59.62	
815.71	818.98			818.98	0.000000	0.14	417.47	
153.24	0.01							
Unit 4 UHS		U4 UHS Lower		2.78571*	PF 1		59.62	
815.57	818.98			818.98	0.000000	0.13	471.82	
165.82	0.01							
Unit 4 UHS		U4 UHS Lower		2.71428*	PF 1		59.62	
815.43	818.98			818.98	0.000000	0.11	528.42	
178.38	0.01							
Unit 4 UHS		U4 UHS Lower		2.64285*	PF 1		59.62	
815.29	818.98			818.98	0.000000	0.10	586.71	
190.96	0.01							
Unit 4 UHS		U4 UHS Lower		2.57142*	PF 1		59.62	
815.14	818.98			818.98	0.000000	0.09	648.48	
203.52	0.01							
Unit 4 UHS		U4 UHS Lower		2.5*	PF 1		59.62	
815.00	818.98			818.98	0.000000	0.08	711.26	
216.10	0.01							
Unit 4 UHS		U4 UHS Lower		2.42857*	PF 1		59.62	
814.86	818.98			818.98	0.000000	0.08	775.91	
228.67	0.01							
Unit 4 UHS		U4 UHS Lower		2.35714*	PF 1		59.62	
814.71	818.98			818.98	0.000000	0.07	844.09	
241.24	0.01							
Unit 4 UHS		U4 UHS Lower		2.28571*	PF 1		59.62	
814.57	818.98			818.98	0.000000	0.07	913.16	
253.81	0.01							
Unit 4 UHS		U4 UHS Lower		2.21428*	PF 1		59.62	

			CPNPPLocalPMP			
814.43	818.98		818.98	0.000000	0.06	984.40
266.38	0.01					
Unit 4 UHS		U4 UHS Lower	2.14285*	PF 1		59.62
814.29	818.98		818.98	0.000000	0.06	1057.38
278.95	0.01					
Unit 4 UHS		U4 UHS Lower	2.07142*	PF 1		59.62
814.14	818.98		818.98	0.000000	0.05	1134.02
291.52	0.00					
Unit 4 UHS		U4 UHS Lower	2	PF 1		2196.62
814.00	818.93	816.16	818.98	0.000042	1.84	1193.61
304.09	0.16					
Unit 4 UHS		U4 UHS Lower	1.5			Inl Struct
Unit 4 UHS		U4 UHS Lower	1	PF 1		2196.62
800.00	816.00	801.26	816.00	0.000000	0.47	4670.56
301.71	0.02					
Unit 4 North		Unit 4 North	6	PF 1		135.00
818.00	820.10	818.49	820.11	0.000011	0.61	194.64
104.24	0.08					
Unit 4 North		Unit 4 North	5	PF 1		135.00
816.95	820.10		820.11	0.000006	0.56	240.58
104.08	0.06					
Unit 4 North		Unit 4 North	4	PF 1		135.00
816.41	820.10		820.10	0.000005	0.54	255.35
104.09	0.05					
Unit 4 North		Unit 4 North	3	PF 1		135.00
815.52	820.10		820.10	0.000003	0.50	282.45
104.23	0.05					
Unit 4 North		Unit 4 North	2	PF 1		135.00
815.00	820.10	816.53	820.10	0.000005	0.58	241.67
110.11	0.06					
Unit 4 North		Unit 4 North	1.5			Inl Struct
Unit 4 North		Unit 4 North	1	PF 1		135.00
814.30	820.07	816.13	820.07	0.000004	0.51	313.20
138.34	0.04					
Unit 3 UHS		U3 UHS Branch	109	PF 1		125.00
819.00	819.52	819.52	819.78	0.003106	4.11	30.40
58.25	1.00					
Unit 3 UHS		U3 UHS Branch	108.988*	PF 1		125.00
818.98	819.45	819.50	819.77	0.004326	4.58	27.34
58.25	1.18					
Unit 3 UHS		U3 UHS Branch	108.977*	PF 1		125.00
818.96	819.47	819.48	819.75	0.003232	4.19	29.86
58.25	1.03					
Unit 3 UHS		U3 UHS Branch	108.966*	PF 1		125.00
818.93	819.37	819.45	819.74	0.005233	4.85	25.84
58.25	1.28					
Unit 3 UHS		U3 UHS Branch	108.955*	PF 1		125.00
818.91	819.43	819.43	819.70	0.003101	4.14	30.24
58.25	1.01					
Unit 3 UHS		U3 UHS Branch	108.944*	PF 1		125.00
818.89	819.36	819.41	819.69	0.004342	4.59	27.34
58.25	1.18					
Unit 3 UHS		U3 UHS Branch	108.933*	PF 1		125.00
818.87	819.38	819.39	819.66	0.003254	4.21	29.81
58.25	1.04					
Unit 3 UHS		U3 UHS Branch	108.922*	PF 1		125.00
818.84	819.29	819.36	819.65	0.005221	4.85	25.85
58.25	1.28					
Unit 3 UHS		U3 UHS Branch	108.911*	PF 1		125.00

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818.82	819.34	819.34	819.61	0.003122	4.16	30.17		
58.25	1.02							
Unit 3 UHS		U3 UHS Branch	108.9*	PF 1		125.00		
818.80	819.27	819.33	819.60	0.004331	4.59	27.33		
58.25	1.18							
Unit 3 UHS		U3 UHS Branch	108.888*	PF 1		125.00		
818.78	819.30	819.31	819.57	0.003271	4.22	29.74		
58.25	1.04							
Unit 3 UHS		U3 UHS Branch	108.877*	PF 1		125.00		
818.76	819.24	819.29	819.56	0.004336	4.60	27.31		
58.25	1.18							
Unit 3 UHS		U3 UHS Branch	108.866*	PF 1		125.00		
818.73	819.18	819.26	819.55	0.005151	4.84	25.91		
58.25	1.27							
Unit 3 UHS		U3 UHS Branch	108.855*	PF 1		125.00		
818.71	819.24	819.24	819.51	0.003149	4.18	30.04		
58.25	1.02							
Unit 3 UHS		U3 UHS Branch	108.844*	PF 1		125.00		
818.69	819.17	819.22	819.50	0.004324	4.60	27.28		
58.25	1.18							
Unit 3 UHS		U3 UHS Branch	108.833*	PF 1		125.00		
818.67	819.19	819.20	819.47	0.003283	4.24	29.63		
58.25	1.04							
Unit 3 UHS		U3 UHS Branch	108.822*	PF 1		125.00		
818.64	819.10	819.18	819.46	0.004948	4.80	26.15		
58.25	1.25							
Unit 3 UHS		U3 UHS Branch	108.811*	PF 1		125.00		
818.62	819.15	819.16	819.42	0.003252	4.23	29.67		
58.25	1.04							
Unit 3 UHS		U3 UHS Branch	108.8*	PF 1		125.00		
818.60	819.09	819.14	819.41	0.004305	4.61	27.23		
58.25	1.18							
Unit 3 UHS		U3 UHS Branch	108.788*	PF 1		125.00		
818.58	819.11	819.12	819.39	0.003288	4.25	29.53		
58.25	1.04							
Unit 3 UHS		U3 UHS Branch	108.777*	PF 1		125.00		
818.56	819.06	819.10	819.37	0.004002	4.51	27.78		
58.25	1.14							
Unit 3 UHS		U3 UHS Branch	108.766*	PF 1		125.00		
818.53	819.00	819.07	819.36	0.004864	4.79	26.12		
58.25	1.24							
Unit 3 UHS		U3 UHS Branch	108.755*	PF 1		125.00		
818.51	819.04	819.06	819.32	0.003258	4.25	29.50		
58.25	1.04							
Unit 3 UHS		U3 UHS Branch	108.744*	PF 1		125.00		
818.49	818.98	819.04	819.31	0.004287	4.62	27.08		
56.40	1.17							
Unit 3 UHS		U3 UHS Branch	108.733*	PF 1		125.00		
818.47	819.00	819.02	819.29	0.003305	4.27	29.29		
58.25	1.04							
Unit 3 UHS		U3 UHS Branch	108.722*	PF 1		125.00		
818.44	818.92	818.99	819.28	0.004936	4.83	25.86		
55.84	1.25							
Unit 3 UHS		U3 UHS Branch	108.711*	PF 1		125.00		
818.42	818.96	818.97	819.24	0.003317	4.29	29.17		
56.01	1.05							
Unit 3 UHS		U3 UHS Branch	108.7*	PF 1		125.00		
818.40	818.90	818.95	819.23	0.004327	4.66	26.85		
55.57	1.18							
Unit 3 UHS		U3 UHS Branch	108.688*	PF 1		125.00		
818.38	818.92	818.93	819.21	0.003341	4.31	29.02		
55.61	1.05							
Unit 3 UHS		U3 UHS Branch	108.677*	PF 1		125.00		

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818.36	818.87	818.91	819.19	0.004047	4.57	27.33
55.24	1.15					
Unit 3 UHS		U3 UHS Branch	108.666*	PF 1		125.00
818.33	818.80	818.89	819.19	0.005372	5.00	25.01
54.75	1.30					
Unit 3 UHS		U3 UHS Branch	108.655*	PF 1		125.00
818.31	818.86	818.87	819.14	0.003127	4.24	29.49
55.05	1.02					
Unit 3 UHS		U3 UHS Branch	108.644*	PF 1		125.00
818.29	818.79	818.85	819.13	0.004284	4.68	26.73
54.56	1.18					
Unit 3 UHS		U3 UHS Branch	108.633*	PF 1		125.00
818.27	818.82	818.83	819.11	0.003322	4.33	28.86
54.62	1.05					
Unit 3 UHS		U3 UHS Branch	108.622*	PF 1		125.00
818.24	818.73	818.80	819.10	0.004890	4.89	25.59
54.02	1.25					
Unit 3 UHS		U3 UHS Branch	108.611*	PF 1		125.00
818.22	818.77	818.78	819.06	0.003312	4.34	28.80
54.19	1.05					
Unit 3 UHS		U3 UHS Branch	108.6*	PF 1		125.00
818.20	818.72	818.77	819.05	0.004017	4.61	27.10
53.81	1.15					
Unit 3 UHS		U3 UHS Branch	108.588*	PF 1		125.00
818.18	818.73	818.75	819.03	0.003298	4.35	28.75
53.80	1.05					
Unit 3 UHS		U3 UHS Branch	108.577*	PF 1		125.00
818.16	818.68	818.73	819.01	0.004006	4.62	27.05
53.42	1.14					
Unit 3 UHS		U3 UHS Branch	108.566*	PF 1		125.00
818.13	818.61	818.70	819.01	0.005361	5.06	24.69
52.93	1.31					
Unit 3 UHS		U3 UHS Branch	108.555*	PF 1		125.00
818.11	818.67	818.68	818.96	0.003132	4.30	29.08
53.23	1.02					
Unit 3 UHS		U3 UHS Branch	108.544*	PF 1		125.00
818.09	818.61	818.66	818.95	0.004261	4.73	26.41
52.74	1.18					
Unit 3 UHS		U3 UHS Branch	108.533*	PF 1		125.00
818.07	818.63	818.64	818.93	0.003321	4.39	28.48
52.79	1.05					
Unit 3 UHS		U3 UHS Branch	108.522*	PF 1		125.00
818.04	818.56	818.62	818.91	0.004273	4.75	26.31
52.31	1.18					
Unit 3 UHS		U3 UHS Branch	108.511*	PF 1		125.00
818.02	818.58	818.60	818.88	0.003337	4.41	28.35
52.36	1.06					
Unit 3 UHS		U3 UHS Branch	108.5*	PF 1		125.00
818.00	818.53	818.58	818.87	0.003979	4.66	26.81
52.00	1.14					
Unit 3 UHS		U3 UHS Branch	108.488*	PF 1		125.00
817.98	818.54	818.56	818.85	0.003289	4.40	28.39
51.99	1.05					
Unit 3 UHS		U3 UHS Branch	108.477*	PF 1		125.00
817.96	818.49	818.54	818.83	0.003990	4.68	26.71
51.60	1.15					
Unit 3 UHS		U3 UHS Branch	108.466*	PF 1		125.00
817.93	818.42	818.51	818.83	0.005334	5.13	24.38
51.10	1.31					
Unit 3 UHS		U3 UHS Branch	108.455*	PF 1		125.00
817.91	818.49	818.50	818.78	0.003140	4.36	28.66
51.42	1.03					
Unit 3 UHS		U3 UHS Branch	108.444*	PF 1		125.00

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817.89	818.42	818.48	818.78	0.004248	4.79	26.07	
50.92	1.18						
Unit 3 UHS		U3 UHS Branch	108.433*	PF 1		125.00	
817.87	818.44	818.46	818.75	0.003333	4.46	28.05	
50.96	1.06						
Unit 3 UHS		U3 UHS Branch	108.422*	PF 1		125.00	
817.84	818.37	818.43	818.73	0.004246	4.81	25.99	
50.50	1.18						
Unit 3 UHS		U3 UHS Branch	108.411*	PF 1		125.00	
817.82	818.45	818.41	818.70	0.002447	4.06	30.76	
50.88	0.92						
Unit 3 UHS		U3 UHS Branch	108.4*	PF 1		125.00	
817.80	818.46	818.40	818.69	0.002115	3.89	32.13	
50.85	0.86						
Unit 3 UHS		U3 UHS Branch	108.388*	PF 1		125.00	
817.78	818.47		818.68	0.001853	3.74	33.43	
50.82	0.81						
Unit 3 UHS		U3 UHS Branch	108.377*	PF 1		125.00	
817.76	818.47		818.67	0.001641	3.61	34.66	
50.78	0.77						
Unit 3 UHS		U3 UHS Branch	108.366*	PF 1		125.00	
817.73	818.49		818.67	0.001353	3.40	36.74	
50.81	0.71						
Unit 3 UHS		U3 UHS Branch	108.355*	PF 1		125.00	
817.71	818.49		818.66	0.001224	3.30	37.85	
50.76	0.67						
Unit 3 UHS		U3 UHS Branch	108.344*	PF 1		125.00	
817.69	818.50		818.66	0.001113	3.21	38.93	
50.71	0.65						
Unit 3 UHS		U3 UHS Branch	108.333*	PF 1		125.00	
817.67	818.50		818.65	0.001017	3.13	39.98	
50.65	0.62						
Unit 3 UHS		U3 UHS Branch	108.322*	PF 1		125.00	
817.64	818.51		818.65	0.000884	3.00	41.70	
50.64	0.58						
Unit 3 UHS		U3 UHS Branch	108.311*	PF 1		125.00	
817.62	818.51		818.64	0.000816	2.93	42.70	
50.58	0.56						
Unit 3 UHS		U3 UHS Branch	108.3*	PF 1		125.00	
817.60	818.51		818.64	0.000756	2.86	43.66	
50.51	0.54						
Unit 3 UHS		U3 UHS Branch	108.288*	PF 1		125.00	
817.58	818.52		818.64	0.000702	2.80	44.62	
50.45	0.52						
Unit 3 UHS		U3 UHS Branch	108.277*	PF 1		125.00	
817.56	818.52		818.64	0.000653	2.74	45.58	
50.39	0.51						
Unit 3 UHS		U3 UHS Branch	108.266*	PF 1		125.00	
817.53	818.52		818.63	0.000585	2.65	47.10	
50.35	0.48						
Unit 3 UHS		U3 UHS Branch	108.255*	PF 1		125.00	
817.51	818.53		818.63	0.000548	2.60	48.02	
50.28	0.47						
Unit 3 UHS		U3 UHS Branch	108.244*	PF 1		125.00	
817.49	818.53		818.63	0.000514	2.56	48.92	
50.21	0.46						
Unit 3 UHS		U3 UHS Branch	108.233*	PF 1		125.00	
817.47	818.53		818.63	0.000483	2.51	49.82	
50.15	0.44						
Unit 3 UHS		U3 UHS Branch	108.222*	PF 1		125.00	
817.44	818.53		818.63	0.000439	2.44	51.24	
50.11	0.43						
Unit 3 UHS		U3 UHS Branch	108.211*	PF 1		125.00	

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817.42	818.54			818.63	0.000415	2.40	52.11	
50.04	0.41							
Unit 3 UHS		U3 UHS Branch		108.2*	PF 1		125.00	
817.40	818.54			818.62	0.000392	2.36	52.96	
49.98	0.40							
Unit 3 UHS		U3 UHS Branch		108.188*	PF 1		125.00	
817.38	818.54			818.62	0.000372	2.32	53.80	
49.90	0.39							
Unit 3 UHS		U3 UHS Branch		108.177*	PF 1		125.00	
817.36	818.54			818.62	0.000353	2.29	54.62	
49.83	0.39							
Unit 3 UHS		U3 UHS Branch		108.166*	PF 1		125.00	
817.33	818.54			818.62	0.000325	2.23	55.97	
49.78	0.37							
Unit 3 UHS		U3 UHS Branch		108.155*	PF 1		125.00	
817.31	818.54			818.62	0.000309	2.20	56.77	
49.71	0.36							
Unit 3 UHS		U3 UHS Branch		108.144*	PF 1		125.00	
817.29	818.55			818.62	0.000295	2.17	57.55	
49.63	0.36							
Unit 3 UHS		U3 UHS Branch		108.133*	PF 1		125.00	
817.27	818.55			818.62	0.000281	2.14	58.34	
49.56	0.35							
Unit 3 UHS		U3 UHS Branch		108.122*	PF 1		125.00	
817.24	818.55			818.62	0.000261	2.10	59.63	
49.51	0.34							
Unit 3 UHS		U3 UHS Branch		108.111*	PF 1		125.00	
817.22	818.55			818.62	0.000250	2.07	60.39	
49.43	0.33							
Unit 3 UHS		U3 UHS Branch		108.1*	PF 1		125.00	
817.20	818.55			818.62	0.000239	2.04	61.15	
49.36	0.32							
Unit 3 UHS		U3 UHS Branch		108.088*	PF 1		125.00	
817.18	818.55			818.61	0.000230	2.02	61.89	
49.28	0.32							
Unit 3 UHS		U3 UHS Branch		108.077*	PF 1		125.00	
817.16	818.55			818.61	0.000220	2.00	62.64	
49.21	0.31							
Unit 3 UHS		U3 UHS Branch		108.066*	PF 1		125.00	
817.13	818.55			818.61	0.000206	1.96	63.86	
49.16	0.30							
Unit 3 UHS		U3 UHS Branch		108.055*	PF 1		125.00	
817.11	818.55			818.61	0.000198	1.94	64.59	
49.09	0.30							
Unit 3 UHS		U3 UHS Branch		108.044*	PF 1		125.00	
817.09	818.56			818.61	0.000191	1.91	65.31	
49.01	0.29							
Unit 3 UHS		U3 UHS Branch		108.033*	PF 1		125.00	
817.07	818.56			818.61	0.000184	1.89	66.01	
48.93	0.29							
Unit 3 UHS		U3 UHS Branch		108.022*	PF 1		125.00	
817.04	818.56			818.61	0.000173	1.86	67.19	
48.87	0.28							
Unit 3 UHS		U3 UHS Branch		108.011*	PF 1		125.00	
817.02	818.56			818.61	0.000167	1.84	67.88	
48.80	0.28							
Unit 3 UHS		U3 UHS Branch		108	PF 1		125.00	
817.00	818.56			818.61	0.000161	1.82	68.57	
48.72	0.27							
Unit 3 UHS		U3 UHS Upper		12	PF 1		1652.00	
817.00	819.47		819.47	820.35	0.001708	8.70	227.66	
125.84	0.98							
Unit 3 UHS		U3 UHS Upper		11.875*	PF 1		1652.00	

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816.93	819.15	819.40	820.29	0.002485	9.73	205.08
138.00	1.15					
Unit 3 UHS		U3 UHS Upper	11.75*	PF 1		1652.00
816.85	818.86	819.29	820.24	0.003279	10.36	183.66
124.55	1.30					
Unit 3 UHS		U3 UHS Upper	11.625*	PF 1		1652.00
816.78	818.64	819.17	820.19	0.004008	10.72	172.47
123.23	1.42					
Unit 3 UHS		U3 UHS Upper	11.5*	PF 1		1652.00
816.71	818.44	818.93	820.14	0.004825	11.00	163.66
122.87	1.53					
Unit 3 UHS		U3 UHS Upper	11.375*	PF 1		1652.00
816.64	818.26	818.81	820.08	0.005715	11.22	157.28
125.98	1.64					
Unit 3 UHS		U3 UHS Upper	11.25*	PF 1		1652.00
816.57	818.11	818.70	820.01	0.006617	11.36	152.73
130.08	1.73					
Unit 3 UHS		U3 UHS Upper	11.125*	PF 1		1652.00
816.49	817.96	818.55	819.94	0.007547	11.45	149.30
134.84	1.82					
Unit 3 UHS		U3 UHS Upper	11	PF 1		1652.00
816.42	817.83	818.43	819.86	0.008557	11.51	146.61
140.18	1.91					
Unit 3 UHS		U3 UHS Upper	10.8*	PF 1		1652.00
816.27	817.82	818.39	819.62	0.005702	10.95	156.82
135.41	1.70					
Unit 3 UHS		U3 UHS Upper	10.6*	PF 1		1652.00
816.12	817.80	818.35	819.47	0.004090	10.67	165.39
133.21	1.56					
Unit 3 UHS		U3 UHS Upper	10.4*	PF 1		1652.00
815.98	817.77	818.24	819.36	0.003033	10.64	177.84
154.35	1.48					
Unit 3 UHS		U3 UHS Upper	10.2*	PF 1		1652.00
815.83	817.59	818.10	819.27	0.002909	11.43	179.54
164.83	1.60					
Unit 3 UHS		U3 UHS Upper	10	PF 1		1652.00
815.68	817.23	817.78	819.16	0.005560	12.96	168.52
178.81	1.92					
Unit 3 UHS		U3 UHS Upper	9	PF 1		1652.00
815.24	818.15	817.55	818.57	0.000518	5.52	329.11
148.28	0.61					
Unit 3 UHS		U3 UHS Upper	8	PF 1		1652.00
815.02	818.10		818.53	0.000483	5.40	323.23
136.49	0.59					
Unit 3 UHS		U3 UHS Lower	7	PF 1		1777.00
814.85	818.02		818.50	0.000560	5.83	333.13
149.65	0.64					
Unit 3 UHS		U3 UHS Lower	6.9			Lat Struct
Unit 3 UHS		U3 UHS Lower	6	PF 1		1454.50
814.45	817.93		818.43	0.000508	5.86	268.11
117.36	0.64					
Unit 3 UHS		U3 UHS Lower	5	PF 1		1168.16
814.06	817.87		818.36	0.000441	5.74	213.56
85.25	0.61					
Unit 3 UHS		U3 UHS Lower	4	PF 1		1105.39
813.97	818.01		818.29	0.000379	4.54	261.50
97.88	0.43					
Unit 3 UHS		U3 UHS Lower	3.90909*	PF 1		1079.45
813.93	818.02		818.28	0.000331	4.45	268.04
100.72	0.42					
Unit 3 UHS		U3 UHS Lower	3.81818*	PF 1		1053.02

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813.88	818.03			818.27	0.000296	4.26	275.08	
103.82	0.40							
Unit 3 UHS		U3 UHS Lower		3.72727*	PF 1		1026.09	
813.84	818.04			818.26	0.000264	4.09	282.19	
107.10	0.38							
Unit 3 UHS		U3 UHS Lower		3.63636*	PF 1		998.70	
813.80	818.05			818.25	0.000236	3.91	289.52	
110.75	0.36							
Unit 3 UHS		U3 UHS Lower		3.54545*	PF 1		970.86	
813.75	818.06			818.24	0.000211	3.74	297.27	
114.69	0.34							
Unit 3 UHS		U3 UHS Lower		3.45454*	PF 1		942.62	
813.71	818.07			818.24	0.000188	3.57	305.24	
119.05	0.32							
Unit 3 UHS		U3 UHS Lower		3.36363*	PF 1		913.99	
813.66	818.08			818.23	0.000166	3.41	313.67	
123.95	0.31							
Unit 3 UHS		U3 UHS Lower		3.27272*	PF 1		884.99	
813.62	818.09			818.22	0.000148	3.24	322.47	
129.59	0.29							
Unit 3 UHS		U3 UHS Lower		3.18181*	PF 1		855.66	
813.58	818.10			818.22	0.000131	3.08	331.79	
137.06	0.27							
Unit 3 UHS		U3 UHS Lower		3.09090*	PF 1		826.02	
813.53	818.11			818.21	0.000116	2.93	342.10	
145.03	0.26							
Unit 3 UHS		U3 UHS Lower		3	PF 1		796.08	
813.49	818.12			818.21	0.000094	2.84	353.21	
152.88	0.25							
Unit 3 UHS		U3 UHS Lower		2	PF 1		627.32	
813.00	818.13		815.83	818.19	0.000040	2.25	387.54	
168.02	0.19							
Unit 3 UHS		U3 UHS Lower		1.5			Inl struct	
Unit 3 UHS		U3 UHS Lower		1	PF 1		627.32	
805.00	815.10		806.36	815.11	0.000003	0.62	1004.93	
131.48	0.04							
Unit 3 Southeast		Unit 3 Southeast		11	PF 1		371.00	
819.69	822.48		821.52	822.59	0.000227	3.31	144.06	
80.48	0.36							
Unit 3 Southeast		Unit 3 Southeast		10.9090*	PF 1		371.00	
819.66	822.46			822.59	0.000275	3.63	135.59	
82.35	0.39							
Unit 3 Southeast		Unit 3 Southeast		10.8181*	PF 1		371.00	
819.62	822.43			822.58	0.000328	3.96	126.19	
79.81	0.43							
Unit 3 Southeast		Unit 3 Southeast		10.7272*	PF 1		371.00	
819.59	822.40			822.58	0.000381	4.25	117.76	
76.23	0.46							
Unit 3 Southeast		Unit 3 Southeast		10.6363*	PF 1		371.00	
819.55	822.36			822.57	0.000443	4.56	109.71	
72.61	0.50							
Unit 3 Southeast		Unit 3 Southeast		10.5454*	PF 1		371.00	
819.52	822.32			822.57	0.000516	4.89	102.01	
68.92	0.54							
Unit 3 Southeast		Unit 3 Southeast		10.4545*	PF 1		371.00	
819.48	822.28			822.56	0.000593	5.20	95.09	
64.97	0.58							
Unit 3 Southeast		Unit 3 Southeast		10.3636*	PF 1		371.00	
819.45	822.24			822.56	0.000660	5.45	89.47	
60.48	0.61							
Unit 3 Southeast		Unit 3 Southeast		10.2727*	PF 1		371.00	

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819.41	822.19	822.55	0.000734	5.71	84.64		
57.50	0.64						
Unit 3 Southeast	Unit 3 Southeast	10.1818*	PF 1		371.00		
819.38	822.14	822.55	0.000829	6.01	79.76		
54.94	0.68						
Unit 3 Southeast	Unit 3 Southeast	10.0909*	PF 1		371.00		
819.34	822.09	821.85	822.54	0.000924	6.29	75.58	
52.68	0.71						
Unit 3 Southeast	Unit 3 Southeast	10	PF 1		371.00		
819.31	821.86	821.86	822.52	0.001461	7.43	62.87	
47.76	0.88						
Unit 3 Southeast	Unit 3 Southeast	9.92857*	PF 1		371.00		
819.23	821.43	821.72	822.47	0.002789	9.05	49.93	
45.92	1.18						
Unit 3 Southeast	Unit 3 Southeast	9.85714*	PF 1		371.00		
819.15	821.19	821.57	822.44	0.003633	9.67	45.82	
47.15	1.33						
Unit 3 Southeast	Unit 3 Southeast	9.78571*	PF 1		371.00		
819.07	820.98	821.43	822.41	0.004549	10.14	42.41	
47.90	1.46						
Unit 3 Southeast	Unit 3 Southeast	9.71428*	PF 1		371.00		
818.99	820.77	821.29	822.37	0.005619	10.54	39.44	
47.13	1.60						
Unit 3 Southeast	Unit 3 Southeast	9.64285*	PF 1		371.00		
818.91	820.57	821.13	822.32	0.006989	10.95	36.81	
45.32	1.75						
Unit 3 Southeast	Unit 3 Southeast	9.57142*	PF 1		371.00		
818.83	820.38	820.95	822.26	0.008529	11.32	35.04	
44.00	1.90						
Unit 3 Southeast	Unit 3 Southeast	9.5*	PF 1		371.00		
818.75	820.20	820.78	822.21	0.009952	11.69	33.86	
46.23	2.03						
Unit 3 Southeast	Unit 3 Southeast	9.42857*	PF 1		371.00		
818.67	820.02	820.60	822.15	0.011436	11.99	32.89	
48.88	2.15						
Unit 3 Southeast	Unit 3 Southeast	9.35714*	PF 1		371.00		
818.59	819.86	820.43	822.09	0.013138	12.26	32.10	
53.16	2.28						
Unit 3 Southeast	Unit 3 Southeast	9.28571*	PF 1		371.00		
818.51	819.71	820.25	822.02	0.015034	12.51	31.42	
57.72	2.41						
Unit 3 Southeast	Unit 3 Southeast	9.21428*	PF 1		371.00		
818.43	819.56	820.07	821.93	0.017156	12.71	31.01	
65.24	2.54						
Unit 3 Southeast	Unit 3 Southeast	9.14285*	PF 1		371.00		
818.35	819.41	819.89	821.84	0.019839	12.93	30.81	
75.55	2.70						
Unit 3 Southeast	Unit 3 Southeast	9.07142*	PF 1		371.00		
818.27	819.26	819.72	821.73	0.023206	13.16	30.96	
90.90	2.87						
Unit 3 Southeast	Unit 3 Southeast	9	PF 1		371.00		
818.19	819.10	819.55	821.60	0.028402	13.46	30.98	
94.81	3.12						
Unit 3 Southeast	Unit 3 Southeast	8.83333*	PF 1		371.00		
818.08	818.85	819.33	821.31	0.029858	12.17	29.53	
88.42	3.10						
Unit 3 Southeast	Unit 3 Southeast	8.66666*	PF 1		371.00		
817.96	818.61	819.11	821.05	0.020777	9.12	31.34	
84.33	2.52						
Unit 3 Southeast	Unit 3 Southeast	8.5*	PF 1		371.00		
817.84	819.67	818.88	819.78	0.000144	1.72	151.26	
97.99	0.26						
Unit 3 Southeast	Unit 3 Southeast	8.33333*	PF 1		371.00		

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817.73	819.69	819.77	0.000089	1.44	175.92	
98.03	0.20					
Unit 3 Southeast	Unit 3 Southeast	8.16666*	PF 1		371.00	
817.61	819.70	819.76	0.000059	1.25	200.23	
98.02	0.17					
Unit 3 Southeast	Unit 3 Southeast	8	PF 1		371.00	
817.50	819.71	819.76	0.000041	1.10	224.72	
97.98	0.14					
Unit 3 Southeast	Unit 3 Southeast	7	PF 1		371.00	
817.50	819.71	819.76	0.000040	1.08	227.79	
104.41	0.14					
Unit 3 Southeast	Unit 3 Southeast	6	PF 1		371.00	
817.50	819.73	819.75	0.000027	0.90	315.50	
186.57	0.12					
Unit 3 Southeast	Unit 3 Southeast	5	PF 1		371.00	
817.00	819.73	819.75	0.000017	0.92	373.95	
193.18	0.10					
Unit 3 Southeast	Unit 3 Southeast	4.66666*	PF 1		371.00	
814.64	819.73	819.74	0.000009	0.91	463.56	
209.42	0.07					
Unit 3 Southeast	Unit 3 Southeast	4.33333*	PF 1		371.00	
812.29	819.74	819.74	0.000006	0.80	524.53	
206.70	0.06					
Unit 3 Southeast	Unit 3 Southeast	4	PF 1		737.00	
809.93	819.71	819.74	0.000020	1.44	566.73	
195.66	0.10					
Unit 3 Southeast	Unit 3 Southeast	3	PF 1		737.00	
809.75	819.71	819.74	0.000016	1.38	571.81	
162.76	0.09					
Unit 3 Southeast	Unit 3 Southeast	2	PF 1		737.00	
809.60	819.71	814.25	819.74	0.000021	1.54	525.28
150.95	0.10					
Unit 3 Southeast	Unit 3 Southeast	1.5			Inl Struct	
Unit 3 Southeast	Unit 3 Southeast	1	PF 1		737.00	
806.00	815.10	809.02	815.12	0.000010	1.08	679.63
132.46	0.08					
Unit 3 North	Unit 3 North	8	PF 1		164.00	
817.00	820.12	817.71	820.13	0.000010	0.71	233.36
104.15	0.07					
Unit 3 North	Unit 3 North	7	PF 1		164.00	
816.64	820.12	820.13	0.000008	0.67	249.02	
104.16	0.07					
Unit 3 North	Unit 3 North	6	PF 1		164.00	
816.10	820.12	820.13	0.000006	0.63	268.81	
104.16	0.06					
Unit 3 North	Unit 3 North	5	PF 1		164.00	
815.00	820.12	816.52	820.13	0.000007	0.70	244.36
98.74	0.07					
Unit 3 North	Unit 3 North	4.5			Inl Struct	
Unit 3 North	Unit 3 North	4	PF 1		164.00	
814.50	819.66	819.68	0.000023	1.11	177.20	
105.54	0.10					
Unit 3 North	Unit 3 North	3.5*	PF 1		164.00	
814.28	819.67	819.68	0.000015	0.93	207.89	
112.19	0.08					
Unit 3 North	Unit 3 North	3	PF 1		164.00	
814.05	819.67	819.68	0.000009	0.76	247.21	
128.73	0.06					
Unit 3 North	Unit 3 North	2	PF 1		164.00	

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813.50	819.67	815.49	819.68	0.000010	0.79	239.40
134.84	0.07					
Unit 3 North		Unit 3 North	1.5		Inl Struct	
Unit 3 North		Unit 3 North	1	PF 1		164.00
813.00	818.12	813.64	818.12	0.000000	0.15	1079.02
234.88	0.01					
Unit 3 East		Unit 3 East	5	PF 1		196.00
820.00	820.41	820.39	820.57	0.002842	3.22	60.83
160.04	0.92					
Unit 3 East		Unit 3 East	4.98795*	PF 1		196.00
819.99	820.38	820.38	820.56	0.003288	3.38	58.06
158.90	0.98					
Unit 3 East		Unit 3 East	4.97590*	PF 1		196.00
819.98	820.39	820.37	820.55	0.002865	3.23	60.63
159.69	0.92					
Unit 3 East		Unit 3 East	4.96385*	PF 1		196.00
819.97	820.37	820.36	820.54	0.003257	3.37	58.23
158.87	0.98					
Unit 3 East		Unit 3 East	4.95180*	PF 1		196.00
819.96	820.37	820.35	820.53	0.002838	3.22	60.82
159.74	0.92					
Unit 3 East		Unit 3 East	4.93975*	PF 1		196.00
819.95	820.35	820.34	820.52	0.003265	3.37	58.14
158.57	0.98					
Unit 3 East		Unit 3 East	4.92771*	PF 1		196.00
819.94	820.35	820.33	820.51	0.002845	3.23	60.72
159.43	0.92					
Unit 3 East		Unit 3 East	4.91566*	PF 1		196.00
819.93	820.33	820.32	820.50	0.003277	3.38	58.04
158.31	0.98					
Unit 3 East		Unit 3 East	4.90361*	PF 1		196.00
819.92	820.33	820.31	820.50	0.002845	3.23	60.71
159.34	0.92					
Unit 3 East		Unit 3 East	4.89156*	PF 1		196.00
819.91	820.31	820.30	820.48	0.003253	3.37	58.16
158.26	0.98					
Unit 3 East		Unit 3 East	4.87951*	PF 1		196.00
819.90	820.31	820.29	820.48	0.002838	3.23	60.72
159.13	0.92					
Unit 3 East		Unit 3 East	4.86747*	PF 1		196.00
819.89	820.29	820.28	820.46	0.003285	3.38	57.94
157.97	0.98					
Unit 3 East		Unit 3 East	4.85542*	PF 1		196.00
819.88	820.29	820.27	820.46	0.002865	3.24	60.49
158.76	0.92					
Unit 3 East		Unit 3 East	4.84337*	PF 1		196.00
819.87	820.27	820.26	820.44	0.003255	3.37	58.10
157.94	0.98					
Unit 3 East		Unit 3 East	4.83132*	PF 1		196.00
819.86	820.27	820.25	820.44	0.002837	3.23	60.68
158.81	0.92					
Unit 3 East		Unit 3 East	4.81927*	PF 1		196.00
819.85	820.25	820.24	820.43	0.003249	3.37	58.09
157.66	0.98					
Unit 3 East		Unit 3 East	4.80722*	PF 1		196.00
819.84	820.26	820.23	820.42	0.002836	3.23	60.64
158.52	0.92					
Unit 3 East		Unit 3 East	4.79518*	PF 1		196.00
819.83	820.23	820.22	820.41	0.003264	3.38	57.97
157.40	0.98					
Unit 3 East		Unit 3 East	4.78313*	PF 1		196.00

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819.82	820.24	820.21	820.40	0.002836	3.23	60.63
158.43	0.92					
Unit 3 East		Unit 3 East	4.77108*	PF 1		196.00
819.81	820.21	820.20	820.39	0.003255	3.38	58.01
157.33	0.98					
Unit 3 East		Unit 3 East	4.75903*	PF 1		196.00
819.80	820.22	820.19	820.38	0.002839	3.24	60.57
158.19	0.92					
Unit 3 East		Unit 3 East	4.74698*	PF 1		196.00
819.79	820.19	820.18	820.37	0.003263	3.38	57.93
157.08	0.98					
Unit 3 East		Unit 3 East	4.73494*	PF 1		196.00
819.78	820.20	820.17	820.36	0.002840	3.24	60.55
158.11	0.92					
Unit 3 East		Unit 3 East	4.72289*	PF 1		196.00
819.77	820.17	820.16	820.35	0.003238	3.38	58.06
157.05	0.98					
Unit 3 East		Unit 3 East	4.71084*	PF 1		196.00
819.76	820.18	820.15	820.34	0.002826	3.23	60.61
157.91	0.92					
Unit 3 East		Unit 3 East	4.69879*	PF 1		196.00
819.75	820.15	820.14	820.33	0.003274	3.39	57.81
156.68	0.98					
Unit 3 East		Unit 3 East	4.68674*	PF 1		196.00
819.74	820.16	820.14	820.32	0.002853	3.25	60.38
157.55	0.92					
Unit 3 East		Unit 3 East	4.67469*	PF 1		196.00
819.73	820.13	820.13	820.31	0.003243	3.38	57.98
156.72	0.98					
Unit 3 East		Unit 3 East	4.66265*	PF 1		196.00
819.72	820.14	820.12	820.30	0.002832	3.24	60.51
157.52	0.92					
Unit 3 East		Unit 3 East	4.65060*	PF 1		196.00
819.71	820.11	820.11	820.29	0.003248	3.38	57.91
156.42	0.98					
Unit 3 East		Unit 3 East	4.63855*	PF 1		196.00
819.70	820.12	820.10	820.28	0.002835	3.24	60.46
157.28	0.92					
Unit 3 East		Unit 3 East	4.62650*	PF 1		196.00
819.69	820.09	820.09	820.27	0.003258	3.39	57.82
156.16	0.98					
Unit 3 East		Unit 3 East	4.61445*	PF 1		196.00
819.68	820.10	820.08	820.26	0.002835	3.24	60.44
157.20	0.92					
Unit 3 East		Unit 3 East	4.60240*	PF 1		196.00
819.67	820.07	820.07	820.25	0.003223	3.38	58.01
156.15	0.98					
Unit 3 East		Unit 3 East	4.59036*	PF 1		196.00
819.66	820.08	820.06	820.24	0.002816	3.24	60.54
157.01	0.92					
Unit 3 East		Unit 3 East	4.57831*	PF 1		196.00
819.65	820.05	820.05	820.23	0.003284	3.40	57.62
155.73	0.99					
Unit 3 East		Unit 3 East	4.56626*	PF 1		196.00
819.64	820.06	820.04	820.22	0.002862	3.26	60.18
156.60	0.93					
Unit 3 East		Unit 3 East	4.55421*	PF 1		196.00
819.63	820.03	820.03	820.21	0.003188	3.37	58.16
155.91	0.97					
Unit 3 East		Unit 3 East	4.54216*	PF 1		196.00
819.62	820.04	820.02	820.20	0.002789	3.23	60.67
156.71	0.92					
Unit 3 East		Unit 3 East	4.53012*	PF 1		196.00

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819.61	820.01	820.01	820.19	0.003417	3.45	56.85
155.13	1.00					
Unit 3 East		Unit 3 East	4.51807*	PF 1		196.00
819.60	819.96	820.00	820.19	0.004862	3.86	50.82
152.68	1.18					
Unit 3 East		Unit 3 East	4.50602*	PF 1		196.00
819.59	819.96	819.99	820.18	0.004323	3.72	52.73
153.32	1.12					
Unit 3 East		Unit 3 East	4.49397*	PF 1		196.00
819.59	819.96	819.99	820.17	0.004325	3.71	52.76
153.60	1.12					
Unit 3 East		Unit 3 East	4.48192*	PF 1		196.00
819.58	819.96	819.98	820.16	0.003873	3.59	54.62
154.22	1.06					
Unit 3 East		Unit 3 East	4.46988*	PF 1		196.00
819.57	819.99	819.97	820.15	0.002822	3.25	60.40
156.35	0.92					
Unit 3 East		Unit 3 East	4.45783*	PF 1		196.00
819.56	819.96	819.96	820.14	0.003270	3.40	57.60
155.10	0.98					
Unit 3 East		Unit 3 East	4.44578*	PF 1		196.00
819.55	819.97	819.95	820.13	0.002854	3.26	60.14
155.97	0.93					
Unit 3 East		Unit 3 East	4.43373*	PF 1		196.00
819.54	819.94	819.94	820.12	0.003234	3.39	57.80
155.16	0.98					
Unit 3 East		Unit 3 East	4.42168*	PF 1		196.00
819.53	819.95	819.93	820.11	0.002830	3.25	60.29
155.96	0.92					
Unit 3 East		Unit 3 East	4.40963*	PF 1		196.00
819.52	819.93	819.92	820.10	0.003230	3.39	57.78
154.88	0.98					
Unit 3 East		Unit 3 East	4.39759*	PF 1		196.00
819.51	819.93	819.91	820.10	0.002825	3.25	60.28
155.73	0.92					
Unit 3 East		Unit 3 East	4.38554*	PF 1		196.00
819.50	819.90	819.90	820.08	0.003250	3.40	57.63
154.59	0.98					
Unit 3 East		Unit 3 East	4.37349*	PF 1		196.00
819.49	819.91	819.89	820.08	0.002830	3.25	60.24
155.65	0.92					
Unit 3 East		Unit 3 East	4.36144*	PF 1		196.00
819.48	819.89	819.88	820.06	0.003217	3.39	57.81
154.59	0.98					
Unit 3 East		Unit 3 East	4.34939*	PF 1		196.00
819.47	819.89	819.87	820.06	0.002813	3.25	60.31
155.45	0.92					
Unit 3 East		Unit 3 East	4.33735*	PF 1		196.00
819.46	819.87	819.86	820.05	0.003259	3.41	57.52
154.20	0.98					
Unit 3 East		Unit 3 East	4.32530*	PF 1		196.00
819.45	819.87	819.85	820.04	0.002846	3.26	60.04
155.06	0.92					
Unit 3 East		Unit 3 East	4.31325*	PF 1		196.00
819.44	819.85	819.84	820.03	0.003222	3.40	57.73
154.26	0.98					
Unit 3 East		Unit 3 East	4.30120*	PF 1		196.00
819.43	819.85	819.83	820.02	0.002820	3.26	60.21
155.06	0.92					
Unit 3 East		Unit 3 East	4.28915*	PF 1		196.00
819.42	819.83	819.82	820.01	0.003226	3.40	57.66
153.95	0.98					
Unit 3 East		Unit 3 East	4.27710*	PF 1		196.00

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819.41	819.83	819.81	820.00	0.002819	3.26	60.17
154.81	0.92					
Unit 3 East		Unit 3 East	4.26506*	PF 1	196.00	
819.40	819.81	819.80	819.99	0.003240	3.41	57.55
153.68	0.98					
Unit 3 East		Unit 3 East	4.25301*	PF 1	196.00	
819.39	819.81	819.79	819.98	0.002821	3.26	60.15
154.75	0.92					
Unit 3 East		Unit 3 East	4.24096*	PF 1	196.00	
819.38	819.79	819.78	819.97	0.003215	3.40	57.68
153.67	0.98					
Unit 3 East		Unit 3 East	4.22891*	PF 1	196.00	
819.37	819.79	819.77	819.96	0.002813	3.26	60.17
154.52	0.92					
Unit 3 East		Unit 3 East	4.21686*	PF 1	196.00	
819.36	819.77	819.76	819.95	0.003239	3.41	57.50
153.31	0.98					
Unit 3 East		Unit 3 East	4.20482*	PF 1	196.00	
819.35	819.77	819.75	819.94	0.002819	3.26	60.12
154.44	0.92					
Unit 3 East		Unit 3 East	4.19277*	PF 1	196.00	
819.34	819.75	819.74	819.93	0.003222	3.40	57.59
153.34	0.98					
Unit 3 East		Unit 3 East	4.18072*	PF 1	196.00	
819.33	819.75	819.73	819.92	0.002820	3.26	60.06
154.14	0.92					
Unit 3 East		Unit 3 East	4.16867*	PF 1	196.00	
819.32	819.73	819.72	819.91	0.003197	3.40	57.69
153.09	0.98					
Unit 3 East		Unit 3 East	4.15662*	PF 1	196.00	
819.31	819.74	819.71	819.90	0.002799	3.26	60.17
153.94	0.92					
Unit 3 East		Unit 3 East	4.14457*	PF 1	196.00	
819.30	819.70	819.70	819.89	0.003415	3.47	56.49
152.61	1.01					
Unit 3 East		Unit 3 East	4.13253*	PF 1	196.00	
819.29	819.65	819.69	819.89	0.004875	3.89	50.42
150.03	1.18					
Unit 3 East		Unit 3 East	4.12048*	PF 1	196.00	
819.28	819.66	819.68	819.87	0.004341	3.75	52.30
150.66	1.12					
Unit 3 East		Unit 3 East	4.10843*	PF 1	196.00	
819.27	819.66	819.67	819.86	0.003897	3.62	54.10
151.27	1.07					
Unit 3 East		Unit 3 East	4.09638*	PF 1	196.00	
819.26	819.67	819.66	819.85	0.003170	3.39	57.75
152.54	0.97					
Unit 3 East		Unit 3 East	4.08433*	PF 1	196.00	
819.25	819.68	819.65	819.84	0.002768	3.25	60.33
153.66	0.91					
Unit 3 East		Unit 3 East	4.07228*	PF 1	196.00	
819.24	819.64	819.64	819.83	0.003413	3.47	56.41
152.00	1.01					
Unit 3 East		Unit 3 East	4.06024*	PF 1	196.00	
819.23	819.59	819.63	819.83	0.004890	3.90	50.29
149.40	1.18					
Unit 3 East		Unit 3 East	4.04819*	PF 1	196.00	
819.22	819.60	819.62	819.82	0.004350	3.76	52.18
150.04	1.12					
Unit 3 East		Unit 3 East	4.03614*	PF 1	196.00	
819.21	819.60	819.61	819.80	0.003910	3.63	53.96
150.63	1.07					
Unit 3 East		Unit 3 East	4.02409*	PF 1	196.00	

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819.20	819.61	819.60	819.79	0.003151	3.39	57.81
152.27	0.97					
Unit 3 East		Unit 3 East	4.01204*	PF 1		196.00
819.19	819.62	819.59	819.78	0.002765	3.25	60.25
153.06	0.91					
Unit 3 East		Unit 3 East	4	PF 1		196.00
819.18	819.58	819.58	819.77	0.003416	3.48	56.30
151.38	1.01					
Unit 3 East		Unit 3 East	3.98305*	PF 1		196.00
819.16	819.49	819.56	819.77	0.006435	4.22	46.39
150.03	1.34					
Unit 3 East		Unit 3 East	3.96610*	PF 1		196.00
819.14	819.44	819.53	819.76	0.008247	4.54	43.21
151.30	1.50					
Unit 3 East		Unit 3 East	3.94915*	PF 1		196.00
819.12	819.41	819.51	819.75	0.009689	4.74	41.39
153.30	1.61					
Unit 3 East		Unit 3 East	3.93220*	PF 1		196.00
819.10	819.37	819.48	819.74	0.010607	4.84	40.53
155.75	1.67					
Unit 3 East		Unit 3 East	3.91525*	PF 1		196.00
819.08	819.35	819.46	819.72	0.011335	4.90	39.98
158.14	1.72					
Unit 3 East		Unit 3 East	3.89830*	PF 1		196.00
819.06	819.32	819.43	819.70	0.012181	4.98	39.37
160.69	1.77					
Unit 3 East		Unit 3 East	3.88135*	PF 1		196.00
819.04	819.29	819.41	819.68	0.012925	5.03	38.94
163.36	1.82					
Unit 3 East		Unit 3 East	3.86440*	PF 1		196.00
819.02	819.26	819.38	819.67	0.013873	5.11	38.36
165.96	1.87					
Unit 3 East		Unit 3 East	3.84745*	PF 1		196.00
819.00	819.24	819.36	819.64	0.014260	5.12	38.29
168.66	1.89					
Unit 3 East		Unit 3 East	3.83050*	PF 1		196.00
818.98	819.21	819.33	819.62	0.014869	5.15	38.06
171.41	1.93					
Unit 3 East		Unit 3 East	3.81355*	PF 1		196.00
818.96	819.18	819.31	819.61	0.015978	5.23	37.48
174.06	1.99					
Unit 3 East		Unit 3 East	3.79661*	PF 1		196.00
818.94	819.16	819.29	819.59	0.016498	5.25	37.35
176.80	2.01					
Unit 3 East		Unit 3 East	3.77966*	PF 1		196.00
818.92	819.14	819.26	819.56	0.016715	5.23	37.45
179.69	2.02					
Unit 3 East		Unit 3 East	3.76271*	PF 1		196.00
818.90	819.11	819.24	819.54	0.017700	5.29	37.03
182.43	2.07					
Unit 3 East		Unit 3 East	3.74576*	PF 1		196.00
818.88	819.09	819.21	819.52	0.017926	5.28	37.12
185.27	2.08					
Unit 3 East		Unit 3 East	3.72881*	PF 1		196.00
818.86	819.06	819.19	819.49	0.017923	5.25	37.36
188.23	2.08					
Unit 3 East		Unit 3 East	3.71186*	PF 1		196.00
818.84	819.04	819.17	819.46	0.017954	5.22	37.57
191.22	2.07					
Unit 3 East		Unit 3 East	3.69491*	PF 1		196.00
818.82	819.02	819.14	819.44	0.018004	5.19	37.77
194.17	2.07					
Unit 3 East		Unit 3 East	3.67796*	PF 1		196.00

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818.80	819.00	819.12	819.41	0.018110	5.17	37.93
197.03	2.08					
Unit 3 East		Unit 3 East	3.66101*	PF 1		196.00
818.78	818.98	819.10	819.39	0.018099	5.14	38.17
200.04	2.07					
Unit 3 East		Unit 3 East	3.64406*	PF 1		196.00
818.76	818.95	819.07	819.36	0.018277	5.12	38.28
202.98	2.08					
Unit 3 East		Unit 3 East	3.62711*	PF 1		196.00
818.74	818.93	819.05	819.34	0.018798	5.14	38.17
205.82	2.10					
Unit 3 East		Unit 3 East	3.61016*	PF 1		196.00
818.72	818.91	819.03	819.32	0.019128	5.13	38.18
208.76	2.12					
Unit 3 East		Unit 3 East	3.59322*	PF 1		196.00
818.70	818.89	819.00	819.29	0.019296	5.12	38.30
211.73	2.12					
Unit 3 East		Unit 3 East	3.57627*	PF 1		196.00
818.68	818.86	818.98	819.27	0.019442	5.10	38.42
214.65	2.12					
Unit 3 East		Unit 3 East	3.55932*	PF 1		196.00
818.66	818.84	818.96	819.24	0.019514	5.08	38.59
217.64	2.13					
Unit 3 East		Unit 3 East	3.54237*	PF 1		196.00
818.64	818.82	818.94	819.22	0.019514	5.05	38.81
220.67	2.12					
Unit 3 East		Unit 3 East	3.52542*	PF 1		196.00
818.62	818.80	818.91	819.19	0.019508	5.02	39.02
223.59	2.12					
Unit 3 East		Unit 3 East	3.50847*	PF 1		196.00
818.60	818.78	818.89	819.16	0.019512	5.00	39.22
226.59	2.12					
Unit 3 East		Unit 3 East	3.49152*	PF 1		196.00
818.58	818.76	818.87	819.14	0.019504	4.97	39.44
229.64	2.11					
Unit 3 East		Unit 3 East	3.47457*	PF 1		196.00
818.56	818.73	818.84	819.11	0.019511	4.94	39.64
232.64	2.11					
Unit 3 East		Unit 3 East	3.45762*	PF 1		196.00
818.54	818.71	818.82	819.09	0.019508	4.92	39.84
235.57	2.11					
Unit 3 East		Unit 3 East	3.44067*	PF 1		196.00
818.52	818.69	818.80	819.06	0.019513	4.89	40.04
238.62	2.11					
Unit 3 East		Unit 3 East	3.42372*	PF 1		196.00
818.50	818.67	818.78	819.04	0.019529	4.87	40.23
241.64	2.10					
Unit 3 East		Unit 3 East	3.40678*	PF 1		196.00
818.48	818.65	818.75	819.01	0.019535	4.85	40.43
244.62	2.10					
Unit 3 East		Unit 3 East	3.38983*	PF 1		196.00
818.46	818.63	818.73	818.99	0.019527	4.82	40.63
247.64	2.10					
Unit 3 East		Unit 3 East	3.37288*	PF 1		196.00
818.44	818.61	818.71	818.96	0.019553	4.80	40.81
250.66	2.10					
Unit 3 East		Unit 3 East	3.35593*	PF 1		196.00
818.42	818.58	818.69	818.94	0.019542	4.78	41.01
253.66	2.09					
Unit 3 East		Unit 3 East	3.33898*	PF 1		196.00
818.40	818.56	818.67	818.91	0.019516	4.75	41.22
256.68	2.09					
Unit 3 East		Unit 3 East	3.32203*	PF 1		196.00

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818.38	818.54	818.64	818.89	0.019522	4.73	41.42
259.75	2.09					
Unit 3 East		Unit 3 East	3.30508*	PF 1		196.00
818.36	818.52	818.62	818.87	0.019490	4.71	41.63
262.72	2.08					
Unit 3 East		Unit 3 East	3.28813*	PF 1		196.00
818.34	818.50	818.60	818.84	0.019492	4.69	41.82
265.73	2.08					
Unit 3 East		Unit 3 East	3.27118*	PF 1		196.00
818.32	818.48	818.58	818.82	0.019526	4.67	41.99
268.81	2.08					
Unit 3 East		Unit 3 East	3.25423*	PF 1		196.00
818.30	818.46	818.55	818.79	0.019521	4.65	42.18
271.83	2.08					
Unit 3 East		Unit 3 East	3.23728*	PF 1		196.00
818.28	818.44	818.53	818.77	0.019497	4.62	42.38
274.88	2.08					
Unit 3 East		Unit 3 East	3.22033*	PF 1		196.00
818.26	818.42	818.51	818.74	0.019509	4.61	42.56
277.89	2.07					
Unit 3 East		Unit 3 East	3.20339*	PF 1		196.00
818.24	818.39	818.49	818.72	0.019451	4.58	42.78
280.91	2.07					
Unit 3 East		Unit 3 East	3.18644*	PF 1		196.00
818.22	818.37	818.47	818.70	0.019476	4.56	42.95
283.96	2.07					
Unit 3 East		Unit 3 East	3.16949*	PF 1		196.00
818.20	818.35	818.45	818.67	0.019460	4.54	43.14
286.98	2.06					
Unit 3 East		Unit 3 East	3.15254*	PF 1		196.00
818.18	818.33	818.42	818.65	0.019451	4.52	43.33
290.00	2.06					
Unit 3 East		Unit 3 East	3.13559*	PF 1		196.00
818.16	818.31	818.40	818.63	0.019447	4.50	43.52
293.06	2.06					
Unit 3 East		Unit 3 East	3.11864*	PF 1		196.00
818.14	818.29	818.38	818.60	0.019427	4.48	43.71
296.10	2.06					
Unit 3 East		Unit 3 East	3.10169*	PF 1		196.00
818.12	818.27	818.36	818.58	0.019432	4.47	43.89
299.19	2.05					
Unit 3 East		Unit 3 East	3.08474*	PF 1		196.00
818.10	818.25	818.34	818.55	0.019454	4.45	44.05
302.22	2.05					
Unit 3 East		Unit 3 East	3.06779*	PF 1		196.00
818.08	818.23	818.32	818.53	0.019405	4.43	44.26
305.24	2.05					
Unit 3 East		Unit 3 East	3.05084*	PF 1		196.00
818.06	818.21	818.29	818.51	0.019426	4.41	44.42
308.93	2.05					
Unit 3 East		Unit 3 East	3.03389*	PF 1		196.00
818.04	818.18	818.27	818.48	0.019389	4.39	44.61
311.31	2.04					
Unit 3 East		Unit 3 East	3.01695*	PF 1		196.00
818.02	818.16	818.25	818.46	0.019356	4.38	44.78
313.64	2.04					
Unit 3 East		Unit 3 East	3	PF 1		196.00
818.00	818.14	818.23	818.44	0.019363	4.36	44.91
316.02	2.04					
Unit 3 East		Unit 3 East	2.97368*	PF 1		196.00
817.88	818.01	818.11	818.41	0.032235	5.09	38.49
311.37	2.55					
Unit 3 East		Unit 3 East	2.94736*	PF 1		196.00

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817.76	817.88	818.00	818.38	0.046154	5.69	34.47
305.73	2.98					
Unit 3 East		Unit 3 East	2.92105*	PF 1		196.00
817.64	817.75	817.88	818.34	0.058775	6.17	31.75
295.23	3.32					
Unit 3 East		Unit 3 East	2.89473*	PF 1		196.00
817.53	817.64	817.78	818.30	0.069391	6.53	29.99
286.68	3.56					
Unit 3 East		Unit 3 East	2.86842*	PF 1		196.00
817.41	817.51	817.66	818.25	0.080669	6.90	28.41
277.07	3.80					
Unit 3 East		Unit 3 East	2.84210*	PF 1		196.00
817.29	817.90	817.54	817.92	0.000220	1.11	175.85
312.02	0.26					
Unit 3 East		Unit 3 East	2.81578*	PF 1		196.00
817.17	817.90		817.92	0.000127	0.93	210.06
314.62	0.20					
Unit 3 East		Unit 3 East	2.78947*	PF 1		196.00
817.05	817.90		817.91	0.000080	0.81	242.90
317.08	0.16					
Unit 3 East		Unit 3 East	2.76315*	PF 1		196.00
816.93	817.91		817.91	0.000054	0.71	275.27
319.87	0.14					
Unit 3 East		Unit 3 East	2.73684*	PF 1		196.00
816.82	817.91		817.91	0.000040	0.64	304.71
322.97	0.12					
Unit 3 East		Unit 3 East	2.71052*	PF 1		196.00
816.70	817.91		817.91	0.000030	0.58	335.83
325.98	0.10					
Unit 3 East		Unit 3 East	2.68421*	PF 1		196.00
816.58	817.91		817.91	0.000023	0.53	366.66
329.61	0.09					
Unit 3 East		Unit 3 East	2.65789*	PF 1		196.00
816.46	817.91		817.91	0.000018	0.49	397.05
333.51	0.08					
Unit 3 East		Unit 3 East	2.63157*	PF 1		196.00
816.34	817.91		817.91	0.000014	0.46	427.19
334.38	0.07					
Unit 3 East		Unit 3 East	2.60526*	PF 1		196.00
816.22	817.91		817.91	0.000012	0.43	456.22
334.09	0.06					
Unit 3 East		Unit 3 East	2.57894*	PF 1		196.00
816.11	817.91		817.91	0.000010	0.41	483.22
333.80	0.06					
Unit 3 East		Unit 3 East	2.55263*	PF 1		196.00
815.99	817.91		817.91	0.000008	0.38	511.53
333.51	0.05					
Unit 3 East		Unit 3 East	2.52631*	PF 1		196.00
815.87	817.91		817.91	0.000007	0.36	538.92
333.19	0.05					
Unit 3 East		Unit 3 East	2.5*	PF 1		196.00
815.75	817.91		817.91	0.000006	0.35	565.69
332.87	0.05					
Unit 3 East		Unit 3 East	2.47368*	PF 1		196.00
815.63	817.91		817.91	0.000005	0.33	592.04
332.54	0.04					
Unit 3 East		Unit 3 East	2.44736*	PF 1		196.00
815.51	817.91		817.91	0.000005	0.32	617.52
332.45	0.04					
Unit 3 East		Unit 3 East	2.42105*	PF 1		196.00
815.39	817.91		817.91	0.000004	0.31	642.34
332.38	0.04					
Unit 3 East		Unit 3 East	2.39473*	PF 1		196.00

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815.28	817.91		817.91	0.000004	0.29	665.27
332.30	0.04					
Unit 3 East		Unit 3 East	2.36842*	PF 1		196.00
815.16	817.91		817.91	0.000003	0.28	688.43
332.19	0.03					
Unit 3 East		Unit 3 East	2.34210*	PF 1		196.00
815.04	817.91		817.91	0.000003	0.28	712.27
332.11	0.03					
Unit 3 East		Unit 3 East	2.31579*	PF 1		196.00
814.92	817.91		817.91	0.000003	0.27	734.62
331.99	0.03					
Unit 3 East		Unit 3 East	2.28947*	PF 1		196.00
814.80	817.91		817.91	0.000003	0.26	756.10
331.90	0.03					
Unit 3 East		Unit 3 East	2.26315*	PF 1		196.00
814.68	817.91		817.91	0.000002	0.25	777.53
331.84	0.03					
Unit 3 East		Unit 3 East	2.23684*	PF 1		196.00
814.57	817.91		817.91	0.000002	0.25	796.84
331.70	0.03					
Unit 3 East		Unit 3 East	2.21052*	PF 1		196.00
814.45	817.91		817.91	0.000002	0.24	817.06
331.60	0.03					
Unit 3 East		Unit 3 East	2.18421*	PF 1		196.00
814.33	817.91		817.91	0.000002	0.23	836.35
331.50	0.03					
Unit 3 East		Unit 3 East	2.15789*	PF 1		196.00
814.21	817.91		817.91	0.000002	0.23	854.98
331.35	0.03					
Unit 3 East		Unit 3 East	2.13157*	PF 1		196.00
814.09	817.91		817.91	0.000002	0.22	872.94
331.24	0.02					
Unit 3 East		Unit 3 East	2.10526*	PF 1		196.00
813.97	817.91		817.91	0.000002	0.22	890.67
331.08	0.02					
Unit 3 East		Unit 3 East	2.07894*	PF 1		196.00
813.86	817.91		817.91	0.000002	0.22	906.75
330.99	0.02					
Unit 3 East		Unit 3 East	2.05263*	PF 1		196.00
813.74	817.91		817.91	0.000001	0.21	923.28
330.88	0.02					
Unit 3 East		Unit 3 East	2.02631*	PF 1		196.00
813.62	817.91		817.91	0.000001	0.21	938.39
330.70	0.02					
Unit 3 East		Unit 3 East	2	PF 1		196.00
813.50	817.91	814.69	817.91	0.000001	0.21	953.67
330.60	0.02					
Unit 3 East		Unit 3 East	1.5			Inl Struct
Unit 3 East		Unit 3 East	1	PF 1		196.00
810.00	815.10	810.23	815.10	0.000000	0.11	1709.50
362.23	0.01					
Offsite		Offsite	6	PF 1		2421.00
815.00	819.65	819.65	821.46	0.001043	10.78	224.49
62.31	1.00					
Offsite		Offsite	5.94117*	PF 1		2421.00
814.94	819.21	819.57	821.42	0.001623	11.94	202.76
60.43	1.15					
Offsite		Offsite	5.88235*	PF 1		2421.00
814.88	818.98	819.47	821.39	0.001826	12.46	194.36
59.84	1.22					
Offsite		Offsite	5.82352*	PF 1		2421.00

			CPNPPLocalPMP			
814.82	818.76	819.38	821.37	0.002050	12.94	187.05
59.37	1.29					
Offsite		Offsite	5.76470*	PF 1		2421.00
814.76	818.58	819.30	821.35	0.002258	13.34	181.46
59.09	1.34					
Offsite		Offsite	5.70588*	PF 1		2421.00
814.71	818.44	819.22	821.32	0.002423	13.62	177.71
58.99	1.38					
Offsite		Offsite	5.64705*	PF 1		2421.00
814.65	818.29	819.15	821.29	0.002582	13.91	174.05
58.90	1.43					
Offsite		Offsite	5.58823*	PF 1		2421.00
814.59	820.13	819.05	821.14	0.000617	8.08	303.89
88.60	0.69					
Offsite		Offsite	5.52941*	PF 1		2421.00
814.53	820.17		821.11	0.000569	7.82	315.24
93.37	0.66					
Offsite		Offsite	5.47058*	PF 1		2421.00
814.47	820.21		821.09	0.000527	7.58	326.28
98.99	0.63					
Offsite		Offsite	5.41176*	PF 1		2421.00
814.41	820.24		821.08	0.000489	7.35	337.73
105.41	0.61					
Offsite		Offsite	5.35294*	PF 1		2421.00
814.35	820.28		821.06	0.000455	7.13	349.37
111.76	0.58					
Offsite		Offsite	5.29411*	PF 1		2421.00
814.29	820.31		821.04	0.000426	6.93	360.77
117.82	0.56					
Offsite		Offsite	5.23529*	PF 1		2421.00
814.24	820.33		821.03	0.000401	6.75	371.66
124.03	0.54					
Offsite		Offsite	5.17647*	PF 1		2421.00
814.18	820.36		821.02	0.000378	6.57	383.17
129.97	0.52					
Offsite		Offsite	5.11764*	PF 1		2421.00
814.12	820.38		821.00	0.000355	6.40	395.23
136.53	0.51					
Offsite		Offsite	5.05882*	PF 1		2421.00
814.06	820.40		820.99	0.000335	6.23	407.22
143.94	0.49					
Offsite		Offsite	5	PF 1		2421.00
814.00	820.42		820.98	0.000295	6.07	419.68
151.03	0.47					
Offsite		Offsite	4.5*	PF 1		2421.00
813.78	820.52		820.93	0.000197	5.19	510.20
188.26	0.39					
Offsite		Offsite	4	PF 1		2421.00
813.56	820.60		820.89	0.000128	4.46	603.87
208.55	0.33					
Offsite		Offsite	3.5*	PF 1		2421.00
813.47	820.67		820.86	0.000084	3.65	760.52
235.24	0.27					
Offsite		Offsite	3	PF 1		2421.00
813.39	820.70		820.84	0.000056	3.08	907.36
239.97	0.22					
Offsite		Offsite	2.91666*	PF 1		2421.00
813.27	820.70		820.84	0.000051	3.08	900.34
240.33	0.23					
Offsite		Offsite	2.83333*	PF 1		2421.00
813.16	820.71		820.84	0.000048	2.99	907.97
242.05	0.22					
Offsite		Offsite	2.75*	PF 1		2421.00

			CPNPPLocalPMP			
813.04	820.71		820.83	0.000043	2.86	931.21
243.10	0.21					
Offsite		Offsite	2.66666*	PF 1		2421.00
812.93	820.72		820.83	0.000037	2.70	968.34
244.12	0.20					
Offsite		Offsite	2.58333*	PF 1		2421.00
812.81	820.73		820.83	0.000030	2.52	1019.81
244.01	0.19					
Offsite		Offsite	2.5*	PF 1		2421.00
812.70	820.74		820.82	0.000024	2.33	1085.43
243.00	0.17					
Offsite		Offsite	2.41666*	PF 1		2421.00
812.58	820.75		820.82	0.000019	2.14	1165.68
228.68	0.15					
Offsite		Offsite	2.33333*	PF 1		2421.00
812.46	820.76		820.82	0.000015	1.96	1262.57
230.10	0.14					
Offsite		Offsite	2.25*	PF 1		2421.00
812.35	820.76		820.81	0.000011	1.80	1371.92
232.82	0.12					
Offsite		Offsite	2.16666*	PF 1		2421.00
812.23	820.77		820.81	0.000009	1.64	1494.74
236.48	0.11					
Offsite		Offsite	2.08333*	PF 1		2421.00
812.12	820.77		820.81	0.000007	1.50	1628.85
240.75	0.10					
Offsite		Offsite	2	PF 1		2421.00
812.00	820.78	814.34	820.81	0.000004	1.37	1775.73
245.55	0.09					
Offsite		Offsite	1.5			Inl struct
Offsite		Offsite	1	PF 1		2421.00
817.00	818.69	818.69	819.47	0.002123	7.10	340.79
219.88	1.01					
East Channel		East Channel	7	PF 1		213.00
821.00	821.72	821.72	822.05	0.002920	4.59	46.53
72.56	1.01					
East Channel		East Channel	6.98684*	PF 1		213.00
820.97	821.62	821.69	822.04	0.004298	5.15	41.29
72.56	1.21					
East Channel		East Channel	6.97368*	PF 1		213.00
820.95	821.64	821.67	822.00	0.003509	4.85	43.92
72.56	1.10					
East Channel		East Channel	6.96052*	PF 1		213.00
820.92	821.56	821.64	821.99	0.004687	5.29	40.26
72.56	1.25					
East Channel		East Channel	6.94736*	PF 1		213.00
820.89	821.51	821.61	821.98	0.005371	5.51	38.65
72.56	1.33					
East Channel		East Channel	6.93421*	PF 1		213.00
820.87	821.58	821.59	821.92	0.003140	4.69	45.44
72.56	1.05					
East Channel		East Channel	6.92105*	PF 1		213.00
820.84	821.49	821.57	821.91	0.004309	5.16	41.31
72.56	1.21					
East Channel		East Channel	6.90789*	PF 1		213.00
820.82	821.51	821.55	821.87	0.003522	4.86	43.91
72.56	1.10					
East Channel		East Channel	6.89473*	PF 1		213.00
820.79	821.43	821.52	821.86	0.004644	5.30	40.29
72.55	1.25					
East Channel		East Channel	6.88157*	PF 1		213.00

			CPNP	Local	PMP		
820.76	821.38	821.49	821.85	0.005311	5.51	38.69	
72.55	1.33						
East Channel		East Channel	6.86842*	PF 1	213.00		
820.74	821.45	821.47	821.79	0.003100	4.69	45.49	
72.55	1.05						
East Channel		East Channel	6.85526*	PF 1	213.00		
820.71	821.36	821.44	821.78	0.004255	5.17	41.35	
72.55	1.21						
East Channel		East Channel	6.84210*	PF 1	213.00		
820.68	821.32	821.41	821.76	0.004788	5.35	39.91	
72.55	1.27						
East Channel		East Channel	6.82894*	PF 1	213.00		
820.66	821.36	821.39	821.72	0.003396	4.83	44.25	
72.55	1.09						
East Channel		East Channel	6.81579*	PF 1	213.00		
820.63	821.30	821.36	821.69	0.004008	5.08	42.08	
72.55	1.17						
East Channel		East Channel	6.80263*	PF 1	213.00		
820.61	821.30	821.34	821.67	0.003438	4.85	44.07	
72.55	1.10						
East Channel		East Channel	6.78947*	PF 1	213.00		
820.58	821.22	821.31	821.66	0.004632	5.30	40.38	
72.55	1.25						
East Channel		East Channel	6.77631*	PF 1	213.00		
820.55	821.17	821.28	821.65	0.005492	5.58	38.35	
72.55	1.35						
East Channel		East Channel	6.76315*	PF 1	213.00		
820.53	821.25	821.26	821.59	0.003028	4.67	45.89	
72.55	1.03						
East Channel		East Channel	6.75*	PF 1	213.00		
820.50	821.16	821.23	821.57	0.004312	5.20	41.23	
72.55	1.21						
East Channel		East Channel	6.73684*	PF 1	213.00		
820.47	821.11	821.20	821.55	0.004786	5.37	39.93	
72.55	1.27						
East Channel		East Channel	6.72368*	PF 1	213.00		
820.45	821.15	821.18	821.51	0.003435	4.86	44.13	
72.55	1.09						
East Channel		East Channel	6.71052*	PF 1	213.00		
820.42	821.09	821.16	821.49	0.004043	5.11	41.99	
72.55	1.18						
East Channel		East Channel	6.69736*	PF 1	213.00		
820.39	821.03	821.13	821.48	0.004888	5.44	39.51	
72.54	1.29						
East Channel		East Channel	6.68421*	PF 1	213.00		
820.37	821.08	821.11	821.44	0.003302	4.83	44.47	
72.54	1.08						
East Channel		East Channel	6.67105*	PF 1	213.00		
820.34	821.02	821.08	821.42	0.003954	5.11	42.08	
72.54	1.17						
East Channel		East Channel	6.65789*	PF 1	213.00		
820.32	821.02	821.06	821.39	0.003555	4.95	43.44	
72.54	1.12						
East Channel		East Channel	6.64473*	PF 1	213.00		
820.29	820.94	821.03	821.38	0.004633	5.37	40.05	
72.54	1.26						
East Channel		East Channel	6.63157*	PF 1	213.00		
820.26	820.89	821.01	821.38	0.005489	5.66	38.01	
72.54	1.36						
East Channel		East Channel	6.61842*	PF 1	213.00		
820.24	820.86	820.99	821.37	0.005794	5.76	37.35	
72.54	1.39						
East Channel		East Channel	6.60526*	PF 1	213.00		

			CPNP	Local	PMP		
820.21	820.81	820.96	821.35	0.006348	5.93	36.27	
72.14	1.45						
East Channel		East Channel	6.59210*	PF 1	213.00		
820.18	820.77	820.93	821.34	0.007006	6.10	35.23	
71.73	1.51						
East Channel		East Channel	6.57894*	PF 1	213.00		
820.16	820.76	820.91	821.32	0.006740	6.04	35.61	
71.56	1.48						
East Channel		East Channel	6.56579*	PF 1	213.00		
820.13	820.72	820.88	821.31	0.007316	6.20	34.68	
71.20	1.54						
East Channel		East Channel	6.55263*	PF 1	213.00		
820.11	820.70	820.86	821.28	0.007056	6.13	35.04	
71.08	1.52						
East Channel		East Channel	6.53947*	PF 1	213.00		
820.08	820.66	820.83	821.27	0.007589	6.28	34.21	
70.70	1.57						
East Channel		East Channel	6.52631*	PF 1	213.00		
820.05	820.63	820.81	821.24	0.007668	6.30	34.06	
70.45	1.58						
East Channel		East Channel	6.51315*	PF 1	213.00		
820.03	820.62	820.79	821.22	0.007456	6.26	34.33	
70.33	1.56						
East Channel		East Channel	6.5*	PF 1	213.00		
820.00	820.58	820.76	821.19	0.007616	6.30	34.06	
70.03	1.57						
East Channel		East Channel	6.48684*	PF 1	213.00		
819.97	820.55	820.73	821.17	0.007632	6.33	33.92	
69.80	1.58						
East Channel		East Channel	6.47368*	PF 1	213.00		
819.95	820.54	820.71	821.14	0.007419	6.28	34.19	
69.69	1.56						
East Channel		East Channel	6.46052*	PF 1	213.00		
819.92	820.51	820.68	821.12	0.007562	6.33	33.94	
69.41	1.57						
East Channel		East Channel	6.44736*	PF 1	213.00		
819.89	820.47	820.65	821.10	0.007903	6.42	33.45	
69.15	1.61						
East Channel		East Channel	6.43421*	PF 1	213.00		
819.87	820.46	820.63	821.08	0.007690	6.37	33.71	
69.05	1.59						
East Channel		East Channel	6.42105*	PF 1	213.00		
819.84	820.42	820.61	821.06	0.007915	6.43	33.37	
68.76	1.61						
East Channel		East Channel	6.40789*	PF 1	213.00		
819.82	820.41	820.59	821.03	0.007711	6.39	33.61	
68.66	1.59						
East Channel		East Channel	6.39473*	PF 1	213.00		
819.79	820.37	820.56	821.01	0.008002	6.45	33.29	
68.44	1.61						
East Channel		East Channel	6.38157*	PF 1	213.00		
819.76	820.34	820.53	820.99	0.008211	6.51	32.99	
68.17	1.63						
East Channel		East Channel	6.36842*	PF 1	213.00		
819.74	820.32	820.51	820.97	0.008032	6.47	33.19	
68.07	1.61						
East Channel		East Channel	6.35526*	PF 1	213.00		
819.71	820.29	820.48	820.95	0.008256	6.53	32.88	
67.86	1.63						
East Channel		East Channel	6.34210*	PF 1	213.00		
819.68	820.26	820.45	820.93	0.008462	6.59	32.59	
67.60	1.65						
East Channel		East Channel	6.32894*	PF 1	213.00		

			CPNPPLocalPMP			
819.66	820.24	820.43	820.90	0.008307	6.56	32.76
67.50	1.64					
East Channel		East Channel	6.31579*	PF 1	213.00	
819.63	820.21	820.40	820.88	0.008529	6.61	32.47
67.30	1.66					
East Channel		East Channel	6.30263*	PF 1	213.00	
819.61	820.19	820.39	820.86	0.008391	6.59	32.60
67.14	1.65					
East Channel		East Channel	6.28947*	PF 1	213.00	
819.58	820.16	820.36	820.84	0.008543	6.65	32.31
66.94	1.67					
East Channel		East Channel	6.27631*	PF 1	213.00	
819.55	820.13	820.33	820.82	0.008757	6.71	32.04
66.75	1.69					
East Channel		East Channel	6.26315*	PF 1	213.00	
819.53	820.11	820.31	820.79	0.008640	6.68	32.14
66.59	1.68					
East Channel		East Channel	6.25*	PF 1	213.00	
819.50	820.08	820.28	820.77	0.008856	6.74	31.88
66.40	1.70					
East Channel		East Channel	6.23684*	PF 1	213.00	
819.47	820.04	820.25	820.75	0.009065	6.80	31.63
66.22	1.71					
East Channel		East Channel	6.22368*	PF 1	213.00	
819.45	820.02	820.23	820.73	0.008984	6.78	31.68
66.06	1.71					
East Channel		East Channel	6.21052*	PF 1	213.00	
819.42	819.99	820.20	820.71	0.009205	6.84	31.42
65.87	1.73					
East Channel		East Channel	6.19736*	PF 1	213.00	
819.39	819.96	820.17	820.69	0.009489	6.89	31.18
65.69	1.74					
East Channel		East Channel	6.18421*	PF 1	213.00	
819.37	819.94	820.16	820.67	0.009445	6.89	31.20
65.54	1.74					
East Channel		East Channel	6.17105*	PF 1	213.00	
819.34	819.91	820.13	820.65	0.009646	6.94	30.97
65.36	1.76					
East Channel		East Channel	6.15789*	PF 1	213.00	
819.32	819.89	820.11	820.63	0.009624	6.94	30.97
65.25	1.76					
East Channel		East Channel	6.14473*	PF 1	213.00	
819.29	819.86	820.08	820.61	0.009812	6.99	30.75
65.03	1.77					
East Channel		East Channel	6.13157*	PF 1	213.00	
819.26	819.83	820.05	820.59	0.009999	7.03	30.54
64.85	1.79					
East Channel		East Channel	6.11842*	PF 1	213.00	
819.24	819.81	820.03	820.57	0.010025	7.04	30.50
64.74	1.79					
East Channel		East Channel	6.10526*	PF 1	213.00	
819.21	819.78	820.00	820.54	0.009941	7.03	30.54
64.55	1.78					
East Channel		East Channel	6.09210*	PF 1	213.00	
819.18	819.75	819.97	820.52	0.010038	7.08	30.34
64.38	1.80					
East Channel		East Channel	6.07894*	PF 1	213.00	
819.16	819.73	819.96	820.50	0.010075	7.09	30.29
64.26	1.80					
East Channel		East Channel	6.06579*	PF 1	213.00	
819.13	819.70	819.93	820.47	0.009992	7.08	30.33
64.07	1.80					
East Channel		East Channel	6.05263*	PF 1	213.00	

			CPNP	Local	PMP		
819.11	819.68	819.91	820.45	0.010034		7.10	30.27
63.96	1.80						
East Channel		East Channel	6.03947*	PF 1		213.00	
819.08	819.65	819.88	820.42	0.009950		7.09	30.32
63.81	1.79						
East Channel		East Channel	6.02631*	PF 1		213.00	
819.05	819.62	819.85	820.39	0.009860		7.07	30.36
63.62	1.79						
East Channel		East Channel	6.01315*	PF 1		213.00	
819.03	819.60	819.83	820.37	0.009891		7.09	30.31
63.51	1.79						
East Channel		East Channel	6	PF 1		213.00	
819.00	819.57	819.80	820.35	0.010159		7.13	30.12
63.34	1.81						
East Channel		East Channel	5.8*	PF 1		213.00	
818.90	819.45	819.69	820.25	0.010268		7.18	29.88
62.74	1.82						
East Channel		East Channel	5.6*	PF 1		213.00	
818.81	819.37	819.60	820.15	0.009922		7.12	30.10
62.33	1.79						
East Channel		East Channel	5.4*	PF 1		213.00	
818.71	819.33	819.54	820.05	0.008513		6.82	31.37
62.11	1.68						
East Channel		East Channel	5.2*	PF 1		213.00	
818.62	819.33	819.50	819.95	0.006493		6.29	34.02
62.14	1.48						
East Channel		East Channel	5	PF 1		213.00	
818.52	819.44	819.48	819.85	0.003450		5.17	41.47
62.67	1.11						
East Channel		East Channel	4.94444*	PF 1		213.00	
818.48	819.28	819.42	819.83	0.005698		5.94	36.05
64.44	1.38						
East Channel		East Channel	4.88888*	PF 1		213.00	
818.44	819.18	819.36	819.81	0.007337		6.33	33.81
66.43	1.55						
East Channel		East Channel	4.83333*	PF 1		213.00	
818.41	819.10	819.30	819.79	0.009224		6.70	31.93
68.43	1.71						
East Channel		East Channel	4.77777*	PF 1		213.00	
818.37	819.02	819.24	819.77	0.010699		6.93	30.88
70.41	1.82						
East Channel		East Channel	4.72222*	PF 1		213.00	
818.33	818.95	819.18	819.74	0.012094		7.13	30.00
72.42	1.93						
East Channel		East Channel	4.66666*	PF 1		213.00	
818.29	818.88	819.12	819.71	0.013647		7.29	29.34
74.42	2.03						
East Channel		East Channel	4.61111*	PF 1		213.00	
818.25	818.81	819.06	819.67	0.014992		7.44	28.74
76.41	2.12						
East Channel		East Channel	4.55555*	PF 1		213.00	
818.21	818.75	819.00	819.63	0.016288		7.53	28.41
78.44	2.18						
East Channel		East Channel	4.5*	PF 1		213.00	
818.18	818.70	818.95	819.59	0.017336		7.61	28.10
80.50	2.25						
East Channel		East Channel	4.44444*	PF 1		213.00	
818.14	818.63	818.89	819.55	0.018657		7.68	27.84
82.55	2.31						
East Channel		East Channel	4.38888*	PF 1		213.00	
818.10	818.58	818.83	819.51	0.019855		7.75	27.59
84.57	2.37						
East Channel		East Channel	4.33333*	PF 1		213.00	

			CPNP	Local	PMP		
818.06	818.52	818.77	819.46	0.021101		7.82	27.34
86.60	2.43						
East Channel		East Channel	4.27777*	PF 1		213.00	
818.02	818.46	818.72	819.43	0.022519		7.90	27.06
88.61	2.50						
East Channel		East Channel	4.22222*	PF 1		213.00	
817.98	818.40	818.66	819.38	0.023697		7.95	26.90
90.67	2.55						
East Channel		East Channel	4.16666*	PF 1		213.00	
817.95	818.36	818.61	819.32	0.023819		7.89	27.10
92.79	2.55						
East Channel		East Channel	4.11111*	PF 1		213.00	
817.91	818.30	818.55	819.28	0.025381		7.97	26.83
94.84	2.62						
East Channel		East Channel	4.05555*	PF 1		213.00	
817.87	818.25	818.50	819.23	0.025906		7.96	26.89
96.87	2.64						
East Channel		East Channel	4	PF 1		213.00	
817.83	818.19	818.44	819.18	0.027170		8.00	26.74
98.94	2.69						
East Channel		East Channel	3.95652*	PF 1		213.00	
817.49	817.99	818.26	819.11	0.032018		8.52	25.08
94.81	2.91						
East Channel		East Channel	3.91304*	PF 1		213.00	
817.15	817.76	818.07	819.04	0.028907		9.07	23.49
74.51	2.85						
East Channel		East Channel	3.86956*	PF 1		213.00	
816.81	817.50	817.87	818.96	0.028860		9.69	21.97
62.92	2.89						
East Channel		East Channel	3.82608*	PF 1		213.00	
816.47	817.23	817.63	818.89	0.028892		10.34	20.60
53.61	2.94						
East Channel		East Channel	3.78260*	PF 1		213.00	
816.13	816.95	817.40	818.82	0.029329		10.96	19.44
46.89	3.00						
East Channel		East Channel	3.73913*	PF 1		213.00	
815.79	816.66	817.16	818.74	0.030035		11.56	18.43
41.74	3.06						
East Channel		East Channel	3.69565*	PF 1		213.00	
815.45	816.37	816.90	818.66	0.030759		12.14	17.55
37.58	3.13						
East Channel		East Channel	3.65217*	PF 1		213.00	
815.11	816.07	816.64	818.58	0.031718		12.71	16.76
34.28	3.20						
East Channel		East Channel	3.60869*	PF 1		213.00	
814.77	815.77	816.38	818.50	0.032743		13.26	16.06
31.54	3.27						
East Channel		East Channel	3.56521*	PF 1		213.00	
814.43	815.46	816.11	818.42	0.033757		13.80	15.44
29.20	3.34						
East Channel		East Channel	3.52173*	PF 1		213.00	
814.09	815.15	815.83	818.34	0.034785		14.32	14.87
27.18	3.41						
East Channel		East Channel	3.47826*	PF 1		213.00	
813.74	814.83	815.55	818.25	0.035813		14.85	14.35
25.38	3.48						
East Channel		East Channel	3.43478*	PF 1		213.00	
813.40	814.52	815.27	818.16	0.036641		15.32	13.91
23.86	3.54						
East Channel		East Channel	3.39130*	PF 1		213.00	
813.06	814.21	815.00	818.07	0.037358		15.77	13.50
22.49	3.59						
East Channel		East Channel	3.34782*	PF 1		213.00	

			CPNP	Local	PMP		
812.72	813.89	814.71	817.98	0.038250	16.23	13.12	
21.28	3.64						
East Channel		East Channel	3.30434*	PF 1		213.00	
812.38	813.57	814.43	817.89	0.038993	16.67	12.78	
20.20	3.69						
East Channel		East Channel	3.26087*	PF 1		213.00	
812.04	813.25	814.15	817.79	0.039674	17.09	12.47	
19.21	3.74						
East Channel		East Channel	3.21739*	PF 1		213.00	
811.70	812.94	813.86	817.69	0.040396	17.50	12.17	
18.31	3.78						
East Channel		East Channel	3.17391*	PF 1		213.00	
811.36	815.17	813.57	815.24	0.000147	2.17	98.14	
50.10	0.27						
East Channel		East Channel	3.13043*	PF 1		213.00	
811.02	815.18		815.24	0.000106	1.95	109.34	
51.07	0.23						
East Channel		East Channel	3.08695*	PF 1		213.00	
810.68	815.18		815.23	0.000078	1.77	120.34	
51.83	0.20						
East Channel		East Channel	3.04347*	PF 1		213.00	
810.34	815.19		815.23	0.000059	1.62	131.23	
52.19	0.18						
East Channel		East Channel	3	PF 1		545.00	
810.00	814.92		815.21	0.000404	4.27	127.77	
50.14	0.47						
East Channel		East Channel	2.98666*	PF 1		545.00	
809.99	814.93		815.20	0.000388	4.20	129.77	
50.59	0.46						
East Channel		East Channel	2.97333*	PF 1		545.00	
809.98	814.93		815.20	0.000370	4.12	132.13	
51.09	0.45						
East Channel		East Channel	2.96*	PF 1		545.00	
809.97	814.94		815.19	0.000355	4.06	134.33	
51.54	0.44						
East Channel		East Channel	2.94666*	PF 1		545.00	
809.96	814.94		815.19	0.000339	3.99	136.46	
51.88	0.43						
East Channel		East Channel	2.93333*	PF 1		545.00	
809.96	814.95		815.19	0.000326	3.94	138.48	
52.26	0.43						
East Channel		East Channel	2.92*	PF 1		545.00	
809.95	814.95		815.19	0.000311	3.87	140.79	
52.60	0.42						
East Channel		East Channel	2.90666*	PF 1		545.00	
809.94	814.96		815.18	0.000298	3.81	143.01	
52.97	0.41						
East Channel		East Channel	2.89333*	PF 1		545.00	
809.93	814.96		815.18	0.000286	3.75	145.28	
53.34	0.40						
East Channel		East Channel	2.88*	PF 1		545.00	
809.92	814.97		815.18	0.000274	3.70	147.48	
53.68	0.39						
East Channel		East Channel	2.86666*	PF 1		545.00	
809.91	814.97		815.18	0.000262	3.64	149.85	
54.02	0.38						
East Channel		East Channel	2.85333*	PF 1		545.00	
809.90	814.97		815.17	0.000252	3.59	152.00	
54.42	0.38						
East Channel		East Channel	2.84*	PF 1		545.00	
809.89	814.98		815.17	0.000242	3.53	154.35	
54.76	0.37						
East Channel		East Channel	2.82666*	PF 1		545.00	

		CPNPPLocalPMP			
809.88	814.98	815.17	0.000232	3.48	156.70
55.12	0.36				
East Channel	East Channel	2.81333*	PF 1		545.00
809.87	814.99	815.17	0.000223	3.43	158.94
55.47	0.36				
East Channel	East Channel	2.8*	PF 1		545.00
809.87	814.99	815.17	0.000215	3.39	160.96
55.80	0.35				
East Channel	East Channel	2.78666*	PF 1		545.00
809.86	814.99	815.16	0.000206	3.33	163.50
56.19	0.34				
East Channel	East Channel	2.77333*	PF 1		545.00
809.85	814.99	815.16	0.000199	3.29	165.63
56.52	0.34				
East Channel	East Channel	2.76*	PF 1		545.00
809.84	815.00	815.16	0.000191	3.24	168.10
56.87	0.33				
East Channel	East Channel	2.74666*	PF 1		545.00
809.83	815.00	815.16	0.000184	3.20	170.45
57.22	0.33				
East Channel	East Channel	2.73333*	PF 1		545.00
809.82	815.00	815.16	0.000177	3.15	172.82
57.59	0.32				
East Channel	East Channel	2.72*	PF 1		545.00
809.81	815.01	815.16	0.000171	3.11	175.16
57.92	0.32				
East Channel	East Channel	2.70666*	PF 1		545.00
809.80	815.01	815.15	0.000164	3.07	177.70
58.28	0.31				
East Channel	East Channel	2.69333*	PF 1		545.00
809.79	815.01	815.15	0.000159	3.03	179.92
58.63	0.30				
East Channel	East Channel	2.68*	PF 1		545.00
809.79	815.01	815.15	0.000153	2.99	182.32
58.98	0.30				
East Channel	East Channel	2.66666*	PF 1		545.00
809.78	815.02	815.15	0.000148	2.95	184.73
59.33	0.29				
East Channel	East Channel	2.65333*	PF 1		545.00
809.77	815.02	815.15	0.000142	2.91	187.26
59.67	0.29				
East Channel	East Channel	2.64*	PF 1		545.00
809.76	815.02	815.15	0.000138	2.88	189.53
60.01	0.29				
East Channel	East Channel	2.62666*	PF 1		545.00
809.75	815.02	815.15	0.000133	2.84	192.15
60.36	0.28				
East Channel	East Channel	2.61333*	PF 1		545.00
809.74	815.02	815.15	0.000128	2.80	194.65
60.72	0.28				
East Channel	East Channel	2.6*	PF 1		545.00
809.73	815.03	815.14	0.000124	2.77	197.07
61.05	0.27				
East Channel	East Channel	2.58666*	PF 1		545.00
809.72	815.03	815.14	0.000119	2.73	199.59
61.40	0.27				
East Channel	East Channel	2.57333*	PF 1		545.00
809.71	815.03	815.14	0.000115	2.70	202.22
61.75	0.26				
East Channel	East Channel	2.56*	PF 1		545.00
809.71	815.03	815.14	0.000112	2.67	204.47
62.12	0.26				
East Channel	East Channel	2.54666*	PF 1		545.00

		CPNPPLocalPMP			
809.70	815.03	815.14	0.000108	2.63	207.14
62.45	0.25				
East Channel	East Channel	2.53333*	PF 1		545.00
809.69	815.04	815.14	0.000105	2.60	209.63
62.79	0.25				
East Channel	East Channel	2.52*	PF 1		545.00
809.68	815.04	815.14	0.000101	2.57	212.21
63.14	0.25				
East Channel	East Channel	2.50666*	PF 1		545.00
809.67	815.04	815.14	0.000098	2.54	214.81
63.49	0.24				
East Channel	East Channel	2.49333*	PF 1		545.00
809.66	815.04	815.14	0.000094	2.51	217.52
63.83	0.24				
East Channel	East Channel	2.48*	PF 1		545.00
809.65	815.04	815.14	0.000092	2.48	219.97
64.17	0.24				
East Channel	East Channel	2.46666*	PF 1		545.00
809.64	815.04	815.14	0.000089	2.45	222.71
64.51	0.23				
East Channel	East Channel	2.45333*	PF 1		545.00
809.63	815.04	815.14	0.000086	2.42	225.28
64.85	0.23				
East Channel	East Channel	2.44*	PF 1		545.00
809.62	815.05	815.13	0.000083	2.39	228.04
65.22	0.23				
East Channel	East Channel	2.42666*	PF 1		545.00
809.62	815.05	815.13	0.000081	2.37	230.43
65.54	0.22				
East Channel	East Channel	2.41333*	PF 1		545.00
809.61	815.05	815.13	0.000078	2.34	233.23
65.89	0.22				
East Channel	East Channel	2.4*	PF 1		545.00
809.60	815.05	815.13	0.000076	2.31	235.97
66.24	0.22				
East Channel	East Channel	2.38666*	PF 1		545.00
809.59	815.05	815.13	0.000073	2.28	238.66
66.58	0.21				
East Channel	East Channel	2.37333*	PF 1		545.00
809.58	815.05	815.13	0.000071	2.26	241.33
66.93	0.21				
East Channel	East Channel	2.36*	PF 1		545.00
809.57	815.05	815.13	0.000069	2.23	244.25
67.27	0.21				
East Channel	East Channel	2.34666*	PF 1		545.00
809.56	815.05	815.13	0.000067	2.21	246.80
67.60	0.20				
East Channel	East Channel	2.33333*	PF 1		545.00
809.55	815.06	815.13	0.000065	2.18	249.75
67.96	0.20				
East Channel	East Channel	2.32*	PF 1		545.00
809.54	815.06	815.13	0.000063	2.16	252.52
68.30	0.20				
East Channel	East Channel	2.30666*	PF 1		545.00
809.54	815.06	815.13	0.000061	2.14	255.03
68.62	0.20				
East Channel	East Channel	2.29333*	PF 1		545.00
809.53	815.06	815.13	0.000059	2.11	257.91
68.99	0.19				
East Channel	East Channel	2.28*	PF 1		545.00
809.52	815.06	815.13	0.000058	2.09	260.81
69.31	0.19				
East Channel	East Channel	2.26666*	PF 1		545.00

		CPNPPLocalPMP			
809.51	815.06	815.13	0.000056	2.07	263.50
69.66	0.19				
East Channel	East Channel	2.25333*	PF 1		545.00
809.50	815.06	815.13	0.000054	2.04	266.57
70.02	0.18				
East Channel	East Channel	2.24*	PF 1		545.00
809.49	815.06	815.13	0.000053	2.02	269.36
70.35	0.18				
East Channel	East Channel	2.22666*	PF 1		545.00
809.48	815.06	815.13	0.000051	2.00	272.22
70.68	0.18				
East Channel	East Channel	2.21333*	PF 1		545.00
809.47	815.06	815.12	0.000050	1.98	275.20
71.05	0.18				
East Channel	East Channel	2.2*	PF 1		545.00
809.46	815.06	815.12	0.000048	1.96	278.21
71.38	0.17				
East Channel	East Channel	2.18666*	PF 1		545.00
809.46	815.07	815.12	0.000047	1.94	280.69
71.71	0.17				
East Channel	East Channel	2.17333*	PF 1		545.00
809.45	815.07	815.12	0.000046	1.92	283.83
72.07	0.17				
East Channel	East Channel	2.16*	PF 1		545.00
809.44	815.07	815.12	0.000045	1.90	286.81
72.41	0.17				
East Channel	East Channel	2.14666*	PF 1		545.00
809.43	815.07	815.12	0.000043	1.88	289.72
72.73	0.17				
East Channel	East Channel	2.13333*	PF 1		545.00
809.42	815.07	815.12	0.000042	1.86	292.71
73.10	0.16				
East Channel	East Channel	2.12*	PF 1		545.00
809.41	815.07	815.12	0.000041	1.84	295.84
73.43	0.16				
East Channel	East Channel	2.10666*	PF 1		545.00
809.40	815.07	815.12	0.000040	1.82	298.80
73.75	0.16				
East Channel	East Channel	2.09333*	PF 1		545.00
809.39	815.07	815.12	0.000039	1.81	301.92
74.13	0.16				
East Channel	East Channel	2.08*	PF 1		545.00
809.38	815.07	815.12	0.000038	1.79	304.93
74.46	0.16				
East Channel	East Channel	2.06666*	PF 1		545.00
809.37	815.07	815.12	0.000037	1.77	308.07
74.78	0.15				
East Channel	East Channel	2.05333*	PF 1		545.00
809.37	815.07	815.12	0.000036	1.75	310.80
75.14	0.15				
East Channel	East Channel	2.04*	PF 1		545.00
809.36	815.07	815.12	0.000035	1.74	314.08
75.48	0.15				
East Channel	East Channel	2.02666*	PF 1		545.00
809.35	815.07	815.12	0.000034	1.72	317.12
75.81	0.15				
East Channel	East Channel	2.01333*	PF 1		545.00
809.34	815.07	815.12	0.000033	1.70	320.28
76.17	0.15				
East Channel	East Channel	2	PF 1		545.00
809.33	815.07	815.12	0.000032	1.69	323.38
76.50	0.14				
East Channel	East Channel	1.98630*	PF 1		545.00

		CPNPPLocalPMP			
809.31	815.08	815.12	0.000031	1.66	328.62
77.43	0.14				
East Channel	East Channel	1.97260*	PF 1		545.00
809.30	815.08	815.12	0.000030	1.63	333.40
78.33	0.14				
East Channel	East Channel	1.95890*	PF 1		545.00
809.28	815.08	815.12	0.000029	1.61	338.68
79.26	0.14				
East Channel	East Channel	1.94520*	PF 1		545.00
809.26	815.08	815.12	0.000028	1.58	343.95
80.19	0.13				
East Channel	East Channel	1.93150*	PF 1		545.00
809.25	815.08	815.12	0.000027	1.56	348.93
81.12	0.13				
East Channel	East Channel	1.91780*	PF 1		545.00
809.23	815.08	815.12	0.000026	1.54	354.27
82.01	0.13				
East Channel	East Channel	1.90411*	PF 1		545.00
809.21	815.08	815.12	0.000025	1.52	359.66
82.95	0.13				
East Channel	East Channel	1.89041*	PF 1		545.00
809.19	815.08	815.12	0.000024	1.49	365.08
83.88	0.13				
East Channel	East Channel	1.87671*	PF 1		545.00
809.18	815.08	815.12	0.000023	1.47	370.27
84.81	0.12				
East Channel	East Channel	1.86301*	PF 1		545.00
809.16	815.08	815.12	0.000023	1.45	375.72
85.72	0.12				
East Channel	East Channel	1.84931*	PF 1		545.00
809.14	815.08	815.12	0.000022	1.43	381.22
86.65	0.12				
East Channel	East Channel	1.83561*	PF 1		545.00
809.13	815.08	815.11	0.000021	1.41	386.33
87.58	0.12				
East Channel	East Channel	1.82191*	PF 1		545.00
809.11	815.08	815.11	0.000020	1.39	392.11
88.51	0.12				
East Channel	East Channel	1.80821*	PF 1		545.00
809.09	815.09	815.11	0.000020	1.37	397.73
89.42	0.11				
East Channel	East Channel	1.79452*	PF 1		545.00
809.08	815.09	815.11	0.000019	1.35	403.04
90.35	0.11				
East Channel	East Channel	1.78082*	PF 1		545.00
809.06	815.09	815.11	0.000019	1.33	408.83
91.29	0.11				
East Channel	East Channel	1.76712*	PF 1		545.00
809.04	815.09	815.11	0.000018	1.32	414.30
92.21	0.11				
East Channel	East Channel	1.75342*	PF 1		545.00
809.02	815.09	815.11	0.000017	1.30	420.21
93.13	0.11				
East Channel	East Channel	1.73972*	PF 1		545.00
809.01	815.09	815.11	0.000017	1.28	425.99
94.08	0.11				
East Channel	East Channel	1.72602*	PF 1		545.00
808.99	815.09	815.11	0.000016	1.26	431.44
95.00	0.10				
East Channel	East Channel	1.71232*	PF 1		545.00
808.97	815.09	815.11	0.000016	1.25	437.55
95.94	0.10				
East Channel	East Channel	1.69863*	PF 1		545.00

		CPNP	Local	PMP		
808.96	815.09	815.11	0.000015	1.23	443.17	
96.86	0.10					
East Channel	East Channel	1.68493*	PF 1		545.00	
808.94	815.09	815.11	0.000015	1.21	449.01	
97.79	0.10					
East Channel	East Channel	1.67123*	PF 1		545.00	
808.92	815.09	815.11	0.000014	1.20	455.11	
98.73	0.10					
East Channel	East Channel	1.65753*	PF 1		545.00	
808.91	815.09	815.11	0.000014	1.18	460.90	
99.65	0.10					
East Channel	East Channel	1.64383*	PF 1		545.00	
808.89	815.09	815.11	0.000014	1.17	467.04	
100.58	0.10					
East Channel	East Channel	1.63013*	PF 1		545.00	
808.87	815.09	815.11	0.000013	1.15	473.18	
101.53	0.09					
East Channel	East Channel	1.61643*	PF 1		545.00	
808.85	815.09	815.11	0.000013	1.14	479.25	
102.47	0.09					
East Channel	East Channel	1.60274*	PF 1		545.00	
808.84	815.09	815.11	0.000012	1.12	485.18	
103.37	0.09					
East Channel	East Channel	1.58904*	PF 1		545.00	
808.82	815.09	815.11	0.000012	1.11	491.25	
104.32	0.09					
East Channel	East Channel	1.57534*	PF 1		545.00	
808.80	815.09	815.11	0.000012	1.09	497.76	
105.27	0.09					
East Channel	East Channel	1.56164*	PF 1		545.00	
808.79	815.09	815.11	0.000011	1.08	503.71	
106.19	0.09					
East Channel	East Channel	1.54794*	PF 1		545.00	
808.77	815.09	815.11	0.000011	1.07	509.86	
107.12	0.09					
East Channel	East Channel	1.53424*	PF 1		545.00	
808.75	815.09	815.11	0.000011	1.06	516.50	
109.46	0.09					
East Channel	East Channel	1.52054*	PF 1		545.00	
808.74	815.09	815.11	0.000010	1.04	522.52	
112.14	0.08					
East Channel	East Channel	1.50685*	PF 1		545.00	
808.72	815.09	815.11	0.000010	1.03	529.08	
114.80	0.08					
East Channel	East Channel	1.49315*	PF 1		545.00	
808.70	815.09	815.11	0.000010	1.02	535.88	
116.90	0.08					
East Channel	East Channel	1.47945*	PF 1		545.00	
808.68	815.09	815.11	0.000009	1.01	542.49	
119.48	0.08					
East Channel	East Channel	1.46575*	PF 1		545.00	
808.67	815.09	815.11	0.000009	0.99	549.01	
122.00	0.08					
East Channel	East Channel	1.45205*	PF 1		545.00	
808.65	815.09	815.11	0.000009	0.98	555.89	
124.31	0.08					
East Channel	East Channel	1.43835*	PF 1		545.00	
808.63	815.10	815.11	0.000009	0.97	562.73	
126.35	0.08					
East Channel	East Channel	1.42465*	PF 1		545.00	
808.62	815.10	815.11	0.000008	0.96	569.50	
128.75	0.08					
East Channel	East Channel	1.41095*	PF 1		545.00	

		CPNPPLocalPMP			
808.60	815.10	815.11	0.000008	0.95	576.48
131.10	0.08				
East Channel	East Channel	1.39726*	PF 1		545.00
808.58	815.10	815.11	0.000008	0.94	583.85
133.44	0.07				
East Channel	East Channel	1.38356*	PF 1		545.00
808.57	815.10	815.11	0.000008	0.93	590.62
135.43	0.07				
East Channel	East Channel	1.36986*	PF 1		545.00
808.55	815.10	815.11	0.000007	0.92	597.74
137.42	0.07				
East Channel	East Channel	1.35616*	PF 1		545.00
808.53	815.10	815.11	0.000007	0.91	605.40
139.65	0.07				
East Channel	East Channel	1.34246*	PF 1		545.00
808.51	815.10	815.11	0.000007	0.90	612.63
141.85	0.07				
East Channel	East Channel	1.32876*	PF 1		545.00
808.50	815.10	815.11	0.000007	0.89	619.70
143.79	0.07				
East Channel	East Channel	1.31506*	PF 1		545.00
808.48	815.10	815.11	0.000007	0.88	627.54
145.93	0.07				
East Channel	East Channel	1.30137*	PF 1		545.00
808.46	815.10	815.11	0.000006	0.87	635.02
148.05	0.07				
East Channel	East Channel	1.28767*	PF 1		545.00
808.45	815.10	815.11	0.000006	0.86	642.08
149.63	0.07				
East Channel	East Channel	1.27397*	PF 1		545.00
808.43	815.10	815.11	0.000006	0.85	649.89
151.69	0.07				
East Channel	East Channel	1.26027*	PF 1		545.00
808.41	815.10	815.11	0.000006	0.84	657.81
153.73	0.06				
East Channel	East Channel	1.24657*	PF 1		545.00
808.40	815.10	815.11	0.000006	0.83	665.48
155.74	0.06				
East Channel	East Channel	1.23287*	PF 1		545.00
808.38	815.10	815.11	0.000006	0.82	673.14
157.61	0.06				
East Channel	East Channel	1.21917*	PF 1		545.00
808.36	815.10	815.11	0.000006	0.81	681.21
159.59	0.06				
East Channel	East Channel	1.20548*	PF 1		545.00
808.34	815.10	815.11	0.000005	0.80	689.27
161.15	0.06				
East Channel	East Channel	1.19178*	PF 1		545.00
808.33	815.10	815.11	0.000005	0.79	697.14
163.07	0.06				
East Channel	East Channel	1.17808*	PF 1		545.00
808.31	815.10	815.11	0.000005	0.78	705.03
164.91	0.06				
East Channel	East Channel	1.16438*	PF 1		545.00
808.29	815.10	815.11	0.000005	0.78	713.13
166.79	0.06				
East Channel	East Channel	1.15068*	PF 1		545.00
808.28	815.10	815.11	0.000005	0.77	721.39
168.67	0.06				
East Channel	East Channel	1.13698*	PF 1		545.00
808.26	815.10	815.11	0.000005	0.76	729.63
170.50	0.06				
East Channel	East Channel	1.12328*	PF 1		545.00

			CPNP	Local	PMP		
808.24	815.10		815.11	0.000005	0.75	737.54	
171.88	0.06						
East Channel	East Channel		1.10959*	PF 1		545.00	
808.23	815.10		815.11	0.000004	0.74	745.99	
173.71	0.06						
East Channel	East Channel		1.09589*	PF 1		545.00	
808.21	815.10		815.11	0.000004	0.74	754.11	
175.49	0.06						
East Channel	East Channel		1.08219*	PF 1		545.00	
808.19	815.10		815.11	0.000004	0.73	763.02	
177.22	0.05						
East Channel	East Channel		1.06849*	PF 1		545.00	
808.17	815.10		815.11	0.000004	0.72	771.58	
178.47	0.05						
East Channel	East Channel		1.05479*	PF 1		545.00	
808.16	815.10		815.11	0.000004	0.71	779.49	
179.38	0.05						
East Channel	East Channel		1.04109*	PF 1		545.00	
808.14	815.10		815.11	0.000004	0.71	788.32	
180.30	0.05						
East Channel	East Channel		1.02739*	PF 1		545.00	
808.12	815.10		815.11	0.000004	0.70	797.41	
181.22	0.05						
East Channel	East Channel		1.01369*	PF 1		545.00	
808.11	815.10		815.11	0.000004	0.69	805.24	
182.12	0.05						
East Channel	East Channel		1	PF 1		545.00	
808.09	815.10	809.52	815.11	0.000004	0.69	814.13	
183.04	0.05						
Center South	Center South		8	PF 1		324.00	
820.00	820.96	820.38	820.98	0.000119	1.22	294.23	
388.21	0.22						
Center South	Center South		7.91666*	PF 1		324.00	
819.71	820.96		820.98	0.000063	1.06	340.41	
374.82	0.17						
Center South	Center South		7.83333*	PF 1		324.00	
819.42	820.97		820.98	0.000038	0.95	380.78	
359.50	0.13						
Center South	Center South		7.75*	PF 1		324.00	
819.13	820.97		820.98	0.000025	0.86	414.06	
338.02	0.11						
Center South	Center South		7.66666*	PF 1		324.00	
818.84	820.97		820.98	0.000018	0.80	442.13	
310.19	0.10						
Center South	Center South		7.58333*	PF 1		324.00	
818.55	820.97		820.98	0.000014	0.75	466.98	
273.71	0.09						
Center South	Center South		7.5*	PF 1		324.00	
818.26	820.97		820.98	0.000011	0.72	488.02	
256.38	0.08						
Center South	Center South		7.41666*	PF 1		324.00	
817.97	820.97		820.98	0.000009	0.71	502.62	
248.66	0.07						
Center South	Center South		7.33333*	PF 1		324.00	
817.68	820.97		820.98	0.000008	0.70	510.96	
241.04	0.07						
Center South	Center South		7.25*	PF 1		324.00	
817.39	820.97		820.98	0.000008	0.71	512.22	
233.85	0.07						
Center South	Center South		7.16666*	PF 1		324.00	
817.10	820.97		820.98	0.000007	0.72	506.71	
226.80	0.07						
Center South	Center South		7.08333*	PF 1		324.00	

			CPNP	Local	PMP		
816.81	820.97		820.98	0.000008	0.75	495.24	
219.99	0.07						
Center South	Center South		7	PF 1		324.00	
816.52	820.97		820.98	0.000008	0.79	476.23	
213.17	0.07						
Center South	Center South		6	PF 1		324.00	
814.80	820.97		820.97	0.000005	0.68	560.45	
248.54	0.06						
Center South	Center South		5	PF 1		324.00	
814.58	820.97		820.97	0.000003	0.63	662.58	
302.02	0.05						
Center South	Center South		4.8*	PF 1		324.00	
814.53	820.97		820.97	0.000002	0.61	689.79	
304.05	0.05						
Center South	Center South		4.6*	PF 1		324.00	
814.48	820.97		820.97	0.000002	0.57	724.63	
306.62	0.04						
Center South	Center South		4.4*	PF 1		324.00	
814.44	820.97		820.97	0.000001	0.53	767.39	
303.80	0.04						
Center South	Center South		4.2*	PF 1		324.00	
814.39	820.97		820.97	0.000001	0.49	822.74	
303.55	0.04						
Center South	Center South		4	PF 1		324.00	
814.34	820.97		820.97	0.000001	0.42	886.75	
302.59	0.03						
Center South	Center South		3	PF 1		324.00	
814.11	820.97		820.97	0.000001	0.34	1211.04	
409.55	0.02						
Center South	Center South		2	PF 1		821.00	
814.00	820.97	815.87	820.97	0.000004	0.78	1374.84	
490.41	0.06						
Center South	Center South		1.5			Inl struct	
Center South	Center South		1	PF 1		821.00	
812.84	820.86	813.87	820.86	0.000000	0.23	3629.37	
490.41	0.01						
Center North	Center N Upper		13	PF 1		52.00	
819.56	820.08	820.08	820.32	0.002853	3.87	13.69	
33.92	0.96						
Center North	Center N Upper		12.9821*	PF 1		52.00	
819.54	820.01	820.06	820.31	0.004304	4.38	11.89	
27.30	1.16						
Center North	Center N Upper		12.9642*	PF 1		52.00	
819.51	819.96	820.03	820.29	0.005193	4.64	11.20	
26.57	1.26						
Center North	Center N Upper		12.9464*	PF 1		52.00	
819.49	820.04	820.01	820.25	0.002635	3.76	13.88	
29.20	0.93						
Center North	Center N Upper		12.9285*	PF 1		52.00	
819.47	820.05	819.99	820.24	0.002192	3.55	14.72	
30.00	0.85						
Center North	Center N Upper		12.9107*	PF 1		52.00	
819.45	820.05		820.23	0.001868	3.37	15.50	
30.66	0.79						
Center North	Center N Upper		12.8928*	PF 1		52.00	
819.42	820.07		820.22	0.001471	3.13	16.74	
31.76	0.71						
Center North	Center N Upper		12.875*	PF 1		52.00	
819.40	820.08		820.22	0.001299	3.01	17.44	
32.28	0.67						
Center North	Center N Upper		12.8571*	PF 1		52.00	

		CPNPPLocalPMP			
819.38	820.08	820.21	0.001159	2.90	18.09
32.68	0.64				
Center North		Center N Upper	12.8392*	PF 1	52.00
819.35	820.09	820.21	0.000977	2.75	19.12
33.32	0.59				
Center North		Center N Upper	12.8214*	PF 1	52.00
819.33	820.09	820.20	0.000884	2.66	19.75
33.66	0.56				
Center North		Center N Upper	12.8035*	PF 1	52.00
819.31	820.10	820.20	0.000803	2.58	20.38
33.99	0.54				
Center North		Center N Upper	12.7857*	PF 1	52.00
819.29	820.10	820.20	0.000732	2.51	21.00
34.33	0.52				
Center North		Center N Upper	12.7678*	PF 1	52.00
819.26	820.10	820.19	0.000642	2.40	21.91
34.75	0.49				
Center North		Center N Upper	12.75*	PF 1	52.00
819.24	820.11	820.19	0.000593	2.34	22.49
35.02	0.47				
Center North		Center N Upper	12.7321*	PF 1	52.00
819.22	820.11	820.19	0.000547	2.28	23.09
35.29	0.45				
Center North		Center N Upper	12.7142*	PF 1	52.00
819.19	820.11	820.19	0.000488	2.20	23.95
35.63	0.43				
Center North		Center N Upper	12.6964*	PF 1	52.00
819.17	820.12	820.19	0.000454	2.15	24.54
35.90	0.42				
Center North		Center N Upper	12.6785*	PF 1	52.00
819.15	820.12	820.19	0.000423	2.10	25.11
36.14	0.40				
Center North		Center N Upper	12.6607*	PF 1	52.00
819.13	820.12	820.18	0.000396	2.05	25.66
36.35	0.39				
Center North		Center N Upper	12.6428*	PF 1	52.00
819.10	820.12	820.18	0.000359	1.99	26.49
36.62	0.37				
Center North		Center N Upper	12.625*	PF 1	52.00
819.08	820.12	820.18	0.000337	1.95	27.04
36.83	0.36				
Center North		Center N Upper	12.6071*	PF 1	52.00
819.06	820.12	820.18	0.000317	1.91	27.60
37.05	0.35				
Center North		Center N Upper	12.5892*	PF 1	52.00
819.03	820.13	820.18	0.000291	1.86	28.40
37.30	0.34				
Center North		Center N Upper	12.5714*	PF 1	52.00
819.01	820.13	820.18	0.000274	1.82	28.95
37.50	0.33				
Center North		Center N Upper	12.5535*	PF 1	52.00
818.99	820.13	820.18	0.000260	1.79	29.46
37.66	0.32				
Center North		Center N Upper	12.5357*	PF 1	52.00
818.97	820.13	820.18	0.000247	1.76	30.00
37.86	0.31				
Center North		Center N Upper	12.5178*	PF 1	52.00
818.94	820.13	820.18	0.000228	1.71	30.77
38.07	0.30				
Center North		Center N Upper	12.5*	PF 1	52.00
818.92	820.13	820.18	0.000216	1.68	31.31
38.25	0.30				
Center North		Center N Upper	12.4821*	PF 1	52.00

		CPNPPLocalPMP			
818.90	820.13	820.17	0.000206	1.66	31.83
38.42	0.29				
Center North		Center N Upper	12.4642*	PF 1	52.00
818.87	820.13	820.17	0.000191	1.62	32.60
38.63	0.28				
Center North		Center N Upper	12.4464*	PF 1	52.00
818.85	820.13	820.17	0.000183	1.59	33.09
38.79	0.27				
Center North		Center N Upper	12.4285*	PF 1	52.00
818.83	820.13	820.17	0.000175	1.57	33.61
38.95	0.27				
Center North		Center N Upper	12.4107*	PF 1	52.00
818.81	820.14	820.17	0.000167	1.54	34.14
39.12	0.26				
Center North		Center N Upper	12.3928*	PF 1	52.00
818.78	820.14	820.17	0.000156	1.51	34.90
39.31	0.25				
Center North		Center N Upper	12.375*	PF 1	52.00
818.76	820.14	820.17	0.000150	1.49	35.42
39.48	0.25				
Center North		Center N Upper	12.3571*	PF 1	52.00
818.74	820.14	820.17	0.000143	1.46	35.98
39.65	0.24				
Center North		Center N Upper	12.3392*	PF 1	52.00
818.71	820.14	820.17	0.000135	1.44	36.67
39.80	0.24				
Center North		Center N Upper	12.3214*	PF 1	52.00
818.69	820.14	820.17	0.000129	1.42	37.19
39.96	0.23				
Center North		Center N Upper	12.3035*	PF 1	52.00
818.67	820.14	820.17	0.000124	1.40	37.69
40.12	0.23				
Center North		Center N Upper	12.2857*	PF 1	52.00
818.65	820.14	820.17	0.000119	1.38	38.21
40.28	0.22				
Center North		Center N Upper	12.2678*	PF 1	52.00
818.62	820.14	820.17	0.000113	1.35	38.94
40.45	0.22				
Center North		Center N Upper	12.25*	PF 1	52.00
818.60	820.14	820.17	0.000109	1.34	39.40
40.58	0.21				
Center North		Center N Upper	12.2321*	PF 1	52.00
818.58	820.14	820.17	0.000105	1.32	39.90
40.74	0.21				
Center North		Center N Upper	12.2142*	PF 1	52.00
818.55	820.14	820.17	0.000099	1.30	40.62
40.90	0.21				
Center North		Center N Upper	12.1964*	PF 1	52.00
818.53	820.14	820.17	0.000096	1.28	41.12
41.05	0.20				
Center North		Center N Upper	12.1785*	PF 1	52.00
818.51	820.14	820.17	0.000093	1.27	41.62
41.20	0.20				
Center North		Center N Upper	12.1607*	PF 1	52.00
818.49	820.14	820.17	0.000090	1.25	42.11
41.35	0.20				
Center North		Center N Upper	12.1428*	PF 1	52.00
818.46	820.14	820.17	0.000086	1.23	42.78
41.49	0.19				
Center North		Center N Upper	12.125*	PF 1	52.00
818.44	820.14	820.17	0.000083	1.22	43.29
41.64	0.19				
Center North		Center N Upper	12.1071*	PF 1	52.00

		CPNPPLocalPMP			
818.42	820.14	820.17	0.000080	1.20	43.78
41.78	0.19				
Center North		Center N Upper	12.0892*	PF 1	52.00
818.39	820.14	820.17	0.000076	1.18	44.48
41.94	0.18				
Center North		Center N Upper	12.0714*	PF 1	52.00
818.37	820.14	820.17	0.000074	1.17	44.98
42.08	0.18				
Center North		Center N Upper	12.0535*	PF 1	52.00
818.35	820.14	820.17	0.000072	1.16	45.46
42.23	0.18				
Center North		Center N Upper	12.0357*	PF 1	52.00
818.33	820.14	820.17	0.000070	1.15	45.90
42.36	0.17				
Center North		Center N Upper	12.0178*	PF 1	52.00
818.30	820.15	820.17	0.000067	1.13	46.59
42.51	0.17				
Center North		Center N Upper	12	PF 1	52.00
818.28	820.15	820.16	0.000065	1.12	47.08
42.65	0.17				
Center North		Center N Upper	11.75*	PF 1	52.00
817.96	820.15	820.16	0.000034	0.88	60.06
49.34	0.13				
Center North		Center N Upper	11.5*	PF 1	52.00
817.64	820.15	820.16	0.000019	0.70	74.91
56.55	0.10				
Center North		Center N Upper	11.25*	PF 1	52.00
817.32	820.15	820.16	0.000011	0.57	91.83
65.22	0.07				
Center North		Center N Upper	11	PF 1	52.00
817.00	820.15	820.16	0.000007	0.48	111.03
79.89	0.06				
Center North		Center N Upper	10.8*	PF 1	52.00
816.66	820.16	820.16	0.000004	0.38	145.15
106.11	0.04				
Center North		Center N Upper	10.6*	PF 1	52.00
816.32	820.16	820.16	0.000002	0.30	184.92
125.19	0.03				
Center North		Center N Upper	10.4*	PF 1	52.00
815.98	820.16	820.16	0.000001	0.25	229.39
139.69	0.03				
Center North		Center N Upper	10.2*	PF 1	52.00
815.64	820.16	820.16	0.000001	0.21	277.81
150.99	0.02				
Center North		Center N Upper	10	PF 1	442.00
815.30	820.12	820.15	0.000043	1.49	324.17
157.33	0.14				
Center North		Center N Upper	9.9875*	PF 1	442.00
815.30	820.12	820.15	0.000032	1.52	322.12
156.42	0.14				
Center North		Center N Upper	9.975*	PF 1	442.00
815.29	820.12	820.15	0.000032	1.53	320.10
155.11	0.14				
Center North		Center N Upper	9.9625*	PF 1	442.00
815.29	820.12	820.15	0.000032	1.54	318.34
154.28	0.15				
Center North		Center N Upper	9.95*	PF 1	442.00
815.29	820.12	820.15	0.000032	1.55	316.44
153.45	0.15				
Center North		Center N Upper	9.9375*	PF 1	442.00
815.29	820.12	820.15	0.000033	1.56	314.20
152.14	0.15				
Center North		Center N Upper	9.925*	PF 1	442.00

		CPNPPLocalPMP			
815.28	820.12	820.15	0.000033	1.57	312.54
151.34	0.15				
Center North	Center N Upper	9.9125*	PF 1		442.00
815.28	820.12	820.15	0.000033	1.58	310.33
149.97	0.15				
Center North	Center N Upper	9.9*	PF 1		442.00
815.28	820.12	820.15	0.000033	1.59	308.63
149.21	0.15				
Center North	Center N Upper	9.8875*	PF 1		442.00
815.28	820.12	820.15	0.000033	1.60	306.81
148.42	0.15				
Center North	Center N Upper	9.875*	PF 1		442.00
815.27	820.11	820.15	0.000033	1.61	304.81
147.11	0.15				
Center North	Center N Upper	9.8625*	PF 1		442.00
815.27	820.11	820.15	0.000033	1.62	302.93
146.32	0.15				
Center North	Center N Upper	9.85*	PF 1		442.00
815.27	820.11	820.15	0.000034	1.63	301.14
145.54	0.15				
Center North	Center N Upper	9.8375*	PF 1		442.00
815.27	820.11	820.15	0.000034	1.64	298.91
144.22	0.15				
Center North	Center N Upper	9.825*	PF 1		442.00
815.26	820.11	820.15	0.000034	1.65	297.44
143.45	0.16				
Center North	Center N Upper	9.8125*	PF 1		442.00
815.26	820.11	820.15	0.000034	1.66	295.27
142.12	0.16				
Center North	Center N Upper	9.8*	PF 1		442.00
815.26	820.11	820.15	0.000035	1.67	293.38
141.37	0.16				
Center North	Center N Upper	9.7875*	PF 1		442.00
815.26	820.11	820.15	0.000035	1.68	291.66
140.61	0.16				
Center North	Center N Upper	9.775*	PF 1		442.00
815.25	820.11	820.15	0.000035	1.69	289.76
139.29	0.16				
Center North	Center N Upper	9.7625*	PF 1		442.00
815.25	820.11	820.15	0.000035	1.70	288.01
138.55	0.16				
Center North	Center N Upper	9.75*	PF 1		442.00
815.25	820.11	820.15	0.000035	1.71	286.24
137.79	0.16				
Center North	Center N Upper	9.7375*	PF 1		442.00
815.24	820.11	820.15	0.000035	1.72	284.39
136.49	0.16				
Center North	Center N Upper	9.725*	PF 1		442.00
815.24	820.11	820.15	0.000036	1.73	282.51
135.75	0.16				
Center North	Center N Upper	9.7125*	PF 1		442.00
815.24	820.11	820.15	0.000036	1.75	280.74
134.99	0.16				
Center North	Center N Upper	9.7*	PF 1		442.00
815.24	820.11	820.15	0.000036	1.76	278.72
133.71	0.17				
Center North	Center N Upper	9.6875*	PF 1		442.00
815.23	820.11	820.15	0.000036	1.77	277.15
132.98	0.17				
Center North	Center N Upper	9.675*	PF 1		442.00
815.23	820.10	820.15	0.000036	1.78	275.06
131.70	0.17				
Center North	Center N Upper	9.6625*	PF 1		442.00

		CPNPPLocalPMP			
815.23	820.10	820.15	0.000037	1.79	273.33
130.96	0.17				
Center North	Center N Upper	9.65*	PF 1		442.00
815.23	820.10	820.15	0.000037	1.80	271.53
130.21	0.17				
Center North	Center N Upper	9.6375*	PF 1		442.00
815.22	820.10	820.15	0.000037	1.81	269.71
128.93	0.17				
Center North	Center N Upper	9.625*	PF 1		442.00
815.22	820.10	820.15	0.000037	1.83	268.00
128.20	0.17				
Center North	Center N Upper	9.6125*	PF 1		442.00
815.22	820.10	820.15	0.000038	1.84	266.25
127.47	0.17				
Center North	Center N Upper	9.6*	PF 1		442.00
815.22	820.10	820.15	0.000038	1.85	264.21
126.20	0.18				
Center North	Center N Upper	9.5875*	PF 1		442.00
815.21	820.10	820.15	0.000038	1.86	262.64
125.47	0.18				
Center North	Center N Upper	9.575*	PF 1		442.00
815.21	820.10	820.15	0.000038	1.88	260.60
124.20	0.18				
Center North	Center N Upper	9.5625*	PF 1		442.00
815.21	820.10	820.15	0.000039	1.89	258.96
123.48	0.18				
Center North	Center N Upper	9.55*	PF 1		442.00
815.21	820.10	820.15	0.000039	1.90	257.16
122.74	0.18				
Center North	Center N Upper	9.5375*	PF 1		442.00
815.20	820.10	820.15	0.000039	1.91	255.47
121.52	0.18				
Center North	Center N Upper	9.525*	PF 1		442.00
815.20	820.10	820.15	0.000039	1.93	253.69
120.78	0.18				
Center North	Center N Upper	9.5125*	PF 1		442.00
815.20	820.09	820.15	0.000039	1.94	251.94
120.05	0.18				
Center North	Center N Upper	9.5*	PF 1		442.00
815.20	820.09	820.15	0.000040	1.96	250.05
118.83	0.18				
Center North	Center N Upper	9.4875*	PF 1		442.00
815.19	820.09	820.15	0.000040	1.97	248.51
118.10	0.19				
Center North	Center N Upper	9.475*	PF 1		442.00
815.19	820.09	820.15	0.000040	1.98	246.52
116.90	0.19				
Center North	Center N Upper	9.4625*	PF 1		442.00
815.19	820.09	820.15	0.000040	2.00	244.81
116.16	0.19				
Center North	Center N Upper	9.45*	PF 1		442.00
815.18	820.09	820.15	0.000041	2.01	243.28
115.44	0.19				
Center North	Center N Upper	9.4375*	PF 1		442.00
815.18	820.09	820.15	0.000041	2.03	241.30
114.25	0.19				
Center North	Center N Upper	9.425*	PF 1		442.00
815.18	820.09	820.15	0.000041	2.04	239.71
113.53	0.19				
Center North	Center N Upper	9.4125*	PF 1		442.00
815.18	820.09	820.15	0.000042	2.06	237.99
112.79	0.19				
Center North	Center N Upper	9.4*	PF 1		442.00

		CPNPPLocalPMP			
815.17	820.09	820.15	0.000042	2.07	236.29
111.63	0.20				
Center North	Center N Upper	9.3875*	PF 1		442.00
815.17	820.08	820.15	0.000042	2.08	234.56
110.90	0.20				
Center North	Center N Upper	9.375*	PF 1		442.00
815.17	820.08	820.15	0.000043	2.10	232.86
110.17	0.20				
Center North	Center N Upper	9.3625*	PF 1		442.00
815.17	820.08	820.15	0.000043	2.12	230.99
109.02	0.20				
Center North	Center N Upper	9.35*	PF 1		442.00
815.16	820.08	820.15	0.000043	2.13	229.51
108.30	0.20				
Center North	Center N Upper	9.3375*	PF 1		442.00
815.16	820.08	820.15	0.000043	2.15	227.55
107.15	0.20				
Center North	Center N Upper	9.325*	PF 1		442.00
815.16	820.08	820.15	0.000044	2.16	225.89
106.42	0.20				
Center North	Center N Upper	9.3125*	PF 1		442.00
815.16	820.08	820.15	0.000044	2.18	224.17
105.69	0.21				
Center North	Center N Upper	9.3*	PF 1		442.00
815.15	820.08	820.15	0.000044	2.19	222.67
104.58	0.21				
Center North	Center N Upper	9.2875*	PF 1		442.00
815.15	820.07	820.15	0.000045	2.21	220.93
103.86	0.21				
Center North	Center N Upper	9.275*	PF 1		442.00
815.15	820.07	820.15	0.000045	2.23	219.28
103.14	0.21				
Center North	Center N Upper	9.2625*	PF 1		442.00
815.15	820.07	820.15	0.000046	2.25	217.37
102.01	0.21				
Center North	Center N Upper	9.25*	PF 1		442.00
815.14	820.07	820.15	0.000046	2.26	215.93
101.29	0.21				
Center North	Center N Upper	9.2375*	PF 1		442.00
815.14	820.07	820.15	0.000046	2.28	214.07
100.19	0.21				
Center North	Center N Upper	9.225*	PF 1		442.00
815.14	820.07	820.15	0.000047	2.30	212.44
99.47	0.22				
Center North	Center N Upper	9.2125*	PF 1		442.00
815.13	820.07	820.15	0.000047	2.31	211.00
98.76	0.22				
Center North	Center N Upper	9.2*	PF 1		442.00
815.13	820.07	820.15	0.000047	2.33	209.12
97.66	0.22				
Center North	Center N Upper	9.1875*	PF 1		442.00
815.13	820.06	820.15	0.000048	2.35	207.46
96.93	0.22				
Center North	Center N Upper	9.175*	PF 1		442.00
815.13	820.06	820.15	0.000048	2.37	205.86
96.21	0.22				
Center North	Center N Upper	9.1625*	PF 1		442.00
815.12	820.06	820.15	0.000048	2.39	204.31
95.14	0.22				
Center North	Center N Upper	9.15*	PF 1		442.00
815.12	820.06	820.15	0.000049	2.41	202.63
94.42	0.23				
Center North	Center N Upper	9.1375*	PF 1		442.00

		CPNPPLocalPMP			
815.12	820.06	820.15	0.000049	2.43	201.00
93.69	0.23				
Center North	Center N Upper	9.125*	PF 1	442.00	
815.12	820.06	820.15	0.000050	2.45	199.15
92.62	0.23				
Center North	Center N Upper	9.1125*	PF 1	442.00	
815.11	820.05	820.15	0.000050	2.47	197.72
91.90	0.23				
Center North	Center N Upper	9.1*	PF 1	442.00	
815.11	820.05	820.15	0.000051	2.49	195.95
90.85	0.23				
Center North	Center N Upper	9.0875*	PF 1	442.00	
815.11	820.05	820.15	0.000051	2.51	194.30
90.13	0.23				
Center North	Center N Upper	9.075*	PF 1	442.00	
815.11	820.05	820.15	0.000052	2.53	192.66
89.40	0.24				
Center North	Center N Upper	9.0625*	PF 1	442.00	
815.10	820.05	820.15	0.000052	2.55	191.10
88.37	0.24				
Center North	Center N Upper	9.05*	PF 1	442.00	
815.10	820.05	820.15	0.000053	2.57	189.57
87.65	0.24				
Center North	Center N Upper	9.0375*	PF 1	442.00	
815.10	820.04	820.15	0.000054	2.59	187.91
86.91	0.24				
Center North	Center N Upper	9.025*	PF 1	442.00	
815.10	820.04	820.15	0.000054	2.62	186.16
85.89	0.24				
Center North	Center N Upper	9.0125*	PF 1	442.00	
815.09	820.04	820.15	0.000055	2.64	184.74
85.17	0.25				
Center North	Center N Upper	9	PF 1	442.00	
815.09	820.04	820.14	0.000103	2.61	183.41
84.45	0.24				
Center North	Center N Upper	8	PF 1	442.00	
814.34	820.04	820.12	0.000071	2.26	195.18
50.22	0.20				
Center North	Center N Upper	7	PF 1	442.00	
814.11	820.04	820.12	0.000062	2.16	204.48
50.74	0.19				
Center North	Center N Upper	6	PF 1	538.00	
813.88	820.05	820.11	0.000047	2.12	289.54
88.77	0.17				
Center North	Center N Upper	5.833333*	PF 1	538.00	
813.69	820.04	820.11	0.000024	2.17	335.74
117.49	0.17				
Center North	Center N Upper	5.666666*	PF 1	538.00	
813.50	820.05	820.10	0.000020	2.04	395.22
164.43	0.16				
Center North	Center N Upper	5.5*	PF 1	538.00	
813.30	820.06	820.10	0.000016	1.87	496.51
260.00	0.15				
Center North	Center N Upper	5.333333*	PF 1	538.00	
813.11	820.07	820.09	0.000011	1.60	638.00
300.60	0.12				
Center North	Center N Upper	5.166666*	PF 1	538.00	
812.92	820.07	820.09	0.000008	1.34	805.47
340.91	0.10				
Center North	Center N Upper	5	PF 1	538.00	
812.73	820.08	820.09	0.000005	0.79	1000.42
382.31	0.06				
Center North	Center N Branch	108	PF 1	257.00	

		CPNPPLocalPMP					
814.00	820.09	815.43	820.10	0.000003	0.63	525.59	
166.14	0.05						
Center North		Center N Branch	107.833*	PF 1		257.00	
813.96	820.09		820.10	0.000004	0.76	435.16	
148.45	0.06						
Center North		Center N Branch	107.666*	PF 1		257.00	
813.92	820.09		820.10	0.000006	0.88	360.78	
130.16	0.07						
Center North		Center N Branch	107.5*	PF 1		257.00	
813.89	820.08		820.10	0.000009	0.99	303.18	
104.01	0.08						
Center North		Center N Branch	107.333*	PF 1		257.00	
813.85	820.08		820.10	0.000011	1.07	263.58	
83.29	0.09						
Center North		Center N Branch	107.166*	PF 1		257.00	
813.81	820.08		820.09	0.000014	1.14	237.46	
68.27	0.09						
Center North		Center N Branch	107	PF 1		257.00	
813.77	820.07		820.09	0.000017	1.18	221.15	
57.30	0.10						
Center North		Center N Branch	106	PF 1		257.00	
813.08	820.07		820.09	0.000011	1.05	248.64	
57.85	0.08						
Center North		Center N Branch	105.5*	PF 1		257.00	
812.95	820.08		820.09	0.000009	0.98	295.26	
96.62	0.07						
Center North		Center N Branch	105	PF 1		257.00	
812.82	820.08		820.09	0.000005	0.78	442.73	
177.42	0.06						
Center North		Center N Lower	4	PF 1		1033.00	
811.84	820.07		820.08	0.000013	1.46	1159.57	
435.51	0.10						
Center North		Center N Lower	3.5*	PF 1		1033.00	
811.42	820.07		820.08	0.000011	1.27	1355.43	
537.06	0.09						
Center North		Center N Lower	3	PF 1		1168.00	
811.00	820.07	814.73	820.08	0.000007	0.92	1687.05	
563.49	0.06						
Center North		Center N Lower	2.5			Inl struct	
Center North		Center N Lower	2	PF 1		1168.00	
810.00	819.47		819.53	0.000037	2.09	755.25	
366.73	0.15						
Center North		Center N Lower	1	PF 1		1168.00	
809.83	819.47	813.70	819.52	0.000036	1.98	699.26	
202.81	0.14						

Profile Output Table - Standard Table 2

River Elev	Vel Head	Reach Frctn Loss	C & E Loss	River Sta Q Left	Profile Q Channel	E.G. Elev Q Right	W.S. Top width
(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(ft)	(ft)
west channel		west channel		24	PF 1	820.36	

				CPNPPLocalPMP		
820.34	0.01		0.00	0.00	467.53	29.47
114.46						
west Channel		west Channel		23	PF 1	820.36
820.34	0.01		0.00	0.00	451.43	45.57
139.20						
west Channel		west Channel		22	PF 1	820.36
820.34	0.01		0.00	0.00	453.91	43.09
109.99						
west Channel		west Channel		21	PF 1	820.36
820.34	0.02		0.00	0.00	450.07	46.93
108.25						
west Channel		west Channel		20	PF 1	820.36
820.34	0.02		0.00	0.00	438.62	58.38
133.84						
west Channel		west Channel		19	PF 1	820.35
820.33	0.02		0.00	0.00	442.86	54.14
91.10						
west Channel		west Channel		18	PF 1	820.35
820.32	0.03		0.00	0.01	439.83	57.17
90.45						
west Channel		west Channel		17	PF 1	820.34
820.25	0.09		0.01	0.00	795.87	104.14
90.30						
west Channel		west Channel		16	PF 1	820.33
820.25	0.08		0.00	0.01	803.84	96.16
105.82						
west Channel		west Channel		15	PF 1	820.32
820.17	0.15		0.00	0.00	1135.11	131.89
126.55						
west Channel		west Channel		14	PF 1	820.32
820.17	0.15		0.01	0.00	1141.45	125.55
102.71						
west Channel		west Channel		13	PF 1	820.31
820.17	0.14		0.01	0.01	1151.60	115.40
102.70						
west Channel		west Channel		12	PF 1	820.29
820.17	0.12		0.01	0.01	1148.56	118.44
148.17						
west Channel		west Channel		11	PF 1	820.27
820.18	0.08		0.00	0.01	1101.13	300.87
221.72						
west Channel		west Channel		10	PF 1	820.25
820.06	0.19		0.00	0.00	1630.70	229.30
213.29						
west Channel		west Channel		9	PF 1	820.25
820.04	0.21		0.00	0.00	1702.42	157.58
116.82						
west Channel		west Channel		8	PF 1	820.24
820.04	0.20		0.00	0.01	1707.98	152.03
116.98						
west Channel		west Channel		7	PF 1	820.23
820.05	0.18		0.01	0.02	1674.90	185.10
156.90						
west Channel		west Channel		6	PF 1	820.21
820.08	0.12		0.01	0.01	1579.65	280.35
176.53						
west Channel		west Channel		5	PF 1	820.19
820.10	0.10		0.00	0.01	1768.16	254.84
161.55						
west Channel		west Channel		4	PF 1	820.17
820.12	0.05		0.00	0.00	1613.27	389.24
198.63						
west Channel		west Channel		3	PF 1	820.17

				CPNPPLocalPMP			
820.11	0.06		0.00	0.00	88.22	1720.19	328.59
236.42							
west Channel		west Channel		2.75*		PF 1	820.17
820.11	0.06		0.00	0.00	77.25	1815.19	244.56
277.78							
west Channel		west Channel		2.5*		PF 1	820.17
820.12	0.05		0.00	0.00	77.71	1662.38	396.90
305.99							
west Channel		west Channel		2.25*		PF 1	820.16
820.13	0.04		0.00	0.00	76.01	1484.05	576.94
323.75							
west Channel		west Channel		2		PF 1	820.16
820.14	0.02				72.63	1122.38	941.99
339.74							
west Channel		west Channel		1.5			Inl Struct
west Channel		west Channel		1		PF 1	819.32
818.93	0.39					703.56	1433.44
192.77							
Unit 4 UHS		U4 UHS Upper		10		PF 1	819.13
818.92	0.22		0.01	0.00		1607.00	
74.56							
Unit 4 UHS		U4 UHS Upper		9		PF 1	819.12
818.92	0.21		0.00	0.00	2.91	1604.09	
75.73							
Unit 4 UHS		U4 UHS Upper		8.875*		PF 1	819.12
818.92	0.20		0.00	0.00	5.17	1601.84	
78.22							
Unit 4 UHS		U4 UHS Upper		8.75*		PF 1	819.12
818.92	0.20		0.00	0.00	6.63	1600.37	
80.71							
Unit 4 UHS		U4 UHS Upper		8.625*		PF 1	819.12
818.92	0.20		0.00	0.00	7.45	1599.19	0.36
100.94							
Unit 4 UHS		U4 UHS Upper		8.5*		PF 1	819.11
818.92	0.19		0.00	0.01	7.57	1569.52	29.91
144.49							
Unit 4 UHS		U4 UHS Upper		8.375*		PF 1	819.10
818.94	0.16		0.00	0.01	7.14	1482.92	116.94
157.59							
Unit 4 UHS		U4 UHS Upper		8.25*		PF 1	819.09
818.97	0.13		0.00	0.01	6.32	1351.22	249.46
170.70							
Unit 4 UHS		U4 UHS Upper		8.125*		PF 1	819.08
818.99	0.09		0.00	0.01	5.25	1192.80	408.95
183.80							
Unit 4 UHS		U4 UHS Upper		8		PF 1	819.07
819.01	0.07		0.01	0.00	4.02	1025.97	577.01
196.91							
Unit 4 UHS		U4 UHS Upper		7		PF 1	819.07
818.98	0.08		0.00	0.02	3.83	1170.15	433.02
158.98							
Unit 4 UHS		U4 UHS Upper		6.9			Lat Struct
Unit 4 UHS		U4 UHS Upper		6		PF 1	819.05
819.02	0.03		0.00	0.01	2.79	713.25	324.71
177.73							
Unit 4 UHS		U4 UHS Branch		107		PF 1	819.83
819.55	0.28		0.03	0.00		135.00	
58.25							
Unit 4 UHS		U4 UHS Branch		106.916*		PF 1	819.77
819.39	0.38		0.04	0.01		135.00	
58.25							

Unit	UHS	U4 UHS Branch	CPNPPLocalPMP	PF	Lat	Struct
819.30 58.25	0.41	U4 UHS Branch 0.05	106.833* 0.00	PF 1 135.00		819.71
819.21 58.25	0.44	U4 UHS Branch 0.06	106.75* 0.00	PF 1 135.00		819.64
819.11 58.25	0.46	U4 UHS Branch 0.07	106.666* 0.00	PF 1 135.00		819.57
819.05 58.25	0.45	U4 UHS Branch 0.07	106.583* 0.00	PF 1 135.00		819.50
818.98 57.82	0.46	U4 UHS Branch 0.07	106.5* 0.00	PF 1 135.00		819.43
818.91 56.49	0.46	U4 UHS Branch 0.07	106.416* 0.00	PF 1 135.00		819.37
818.84 55.18	0.46	U4 UHS Branch 0.06	106.333* 0.00	PF 1 135.00		819.30
818.78 53.90	0.46	U4 UHS Branch 0.06	106.25* 0.00	PF 1 135.00		819.24
818.70 52.31	0.48	U4 UHS Branch 0.06	106.166* 0.00	PF 1 135.00		819.17
818.63 51.07	0.47	U4 UHS Branch 0.06	106.083* 0.00	PF 1 135.00		819.11
818.91 56.42	0.16	U4 UHS Branch 0.02	106 0.01	PF 1 135.00		819.06
818.91 165.33	0.12	U4 UHS Lower 0.01	5 0.01	PF 1 1175.75		819.04
Unit 4 UHS		U4 UHS Lower	4.9			Lat Struct
818.93 157.13	0.09	U4 UHS Lower 0.01	4.75* 0.01	PF 1 905.17		819.02
818.95 148.81	0.05	U4 UHS Lower 0.00	4.5* 0.01	PF 1 630.92		819.00
818.97 140.45	0.02	U4 UHS Lower 0.00	4.25* 0.01	PF 1 352.22		818.99
818.98 131.95	0.00	U4 UHS Lower 0.00	4 0.00	PF 1 69.81		818.98
Unit 4 UHS		U4 UHS Lower	3.9			Lat Struct
818.98 116.40	0.00	U4 UHS Lower 0.00	3 0.00	PF 1 59.62		818.98
818.98 140.67	0.00	U4 UHS Lower 0.00	2.92857* 0.00	PF 1 59.57	0.05	818.98
818.98 153.24	0.00	U4 UHS Lower 0.00	2.85714* 0.00	PF 1 59.48	0.14	818.98
818.98	0.00	U4 UHS Lower 0.00	2.78571* 0.00	PF 1 59.41	0.21	818.98

				CPNPPLocalPMP					
165.82	Unit	4 UHS	U4 UHS Lower	2.71428*	PF 1				818.98
818.98		0.00	0.00	0.00	0.27	59.35			
178.38	Unit	4 UHS	U4 UHS Lower	2.64285*	PF 1				818.98
818.98		0.00	0.00	0.00	0.31	59.31			
190.96	Unit	4 UHS	U4 UHS Lower	2.57142*	PF 1				818.98
818.98		0.00	0.00	0.00	0.32	59.30			
203.52	Unit	4 UHS	U4 UHS Lower	2.5*	PF 1				818.98
818.98		0.00	0.00	0.00	0.31	59.31			
216.10	Unit	4 UHS	U4 UHS Lower	2.42857*	PF 1				818.98
818.98		0.00	0.00	0.00	0.28	59.34			
228.67	Unit	4 UHS	U4 UHS Lower	2.35714*	PF 1				818.98
818.98		0.00	0.00	0.00	0.24	59.37			
241.24	Unit	4 UHS	U4 UHS Lower	2.28571*	PF 1				818.98
818.98		0.00	0.00	0.00	0.19	59.42			
253.81	Unit	4 UHS	U4 UHS Lower	2.21428*	PF 1				818.98
818.98		0.00	0.00	0.00	0.14	59.48			
266.38	Unit	4 UHS	U4 UHS Lower	2.14285*	PF 1				818.98
818.98		0.00	0.00	0.00	0.08	59.54			
278.95	Unit	4 UHS	U4 UHS Lower	2.07142*	PF 1				818.98
818.98		0.00	0.00	0.01	0.03	59.59			
291.52	Unit	4 UHS	U4 UHS Lower	2	PF 1				818.98
818.93		0.05				2196.62			
304.09	Unit	4 UHS	U4 UHS Lower	1.5				Inl Struct	
	Unit	4 UHS	U4 UHS Lower	1	PF 1				816.00
816.00		0.00				2196.62			
301.71	Unit	4 North	Unit 4 North	6	PF 1				820.11
820.10		0.01	0.00	0.00	47.85	87.15			
104.24	Unit	4 North	Unit 4 North	5	PF 1				820.11
820.10		0.00	0.00	0.00	31.94	103.06			
104.08	Unit	4 North	Unit 4 North	4	PF 1				820.10
820.10		0.00	0.00	0.00	22.50	112.50			
104.09	Unit	4 North	Unit 4 North	3	PF 1				820.10
820.10		0.00	0.00	0.00	18.96	116.04			
104.23	Unit	4 North	Unit 4 North	2	PF 1				820.10
820.10		0.00			47.83	87.17			
110.11	Unit	4 North	Unit 4 North	1.5				Inl Struct	
	Unit	4 North	Unit 4 North	1	PF 1				820.07
820.07		0.00			67.71	47.10		20.20	
138.34	Unit	3 UHS	U3 UHS Branch	109	PF 1				819.78
819.52		0.26				125.00			
58.25	Unit	3 UHS	U3 UHS Branch	108.988*	PF 1				819.77

				CPNPPLocalPMP			
819.45	0.33	0.00	0.01	0.02	124.97	0.02	
58.25							
Unit 3 UHS		U3 UHS Branch	108.977*	PF 1	819.75		
819.47	0.27	0.00	0.02	0.03	124.93	0.04	
58.25							
Unit 3 UHS		U3 UHS Branch	108.966*	PF 1	819.74		
819.37	0.36	0.00	0.01	0.07	124.86	0.08	
58.25							
Unit 3 UHS		U3 UHS Branch	108.955*	PF 1	819.70		
819.43	0.27	0.00	0.03	0.10	124.80	0.11	
58.25							
Unit 3 UHS		U3 UHS Branch	108.944*	PF 1	819.69		
819.36	0.33	0.00	0.01	0.13	124.73	0.14	
58.25							
Unit 3 UHS		U3 UHS Branch	108.933*	PF 1	819.66		
819.38	0.27	0.00	0.02	0.15	124.68	0.17	
58.25							
Unit 3 UHS		U3 UHS Branch	108.922*	PF 1	819.65		
819.29	0.36	0.00	0.01	0.16	124.66	0.17	
58.25							
Unit 3 UHS		U3 UHS Branch	108.911*	PF 1	819.61		
819.34	0.27	0.00	0.03	0.19	124.60	0.20	
58.25							
Unit 3 UHS		U3 UHS Branch	108.9*	PF 1	819.60		
819.27	0.33	0.00	0.01	0.19	124.60	0.21	
58.25							
Unit 3 UHS		U3 UHS Branch	108.888*	PF 1	819.57		
819.30	0.28	0.00	0.02	0.22	124.55	0.23	
58.25							
Unit 3 UHS		U3 UHS Branch	108.877*	PF 1	819.56		
819.24	0.33	0.00	0.01	0.21	124.58	0.22	
58.25							
Unit 3 UHS		U3 UHS Branch	108.866*	PF 1	819.55		
819.18	0.36	0.00	0.00	0.17	124.65	0.18	
58.25							
Unit 3 UHS		U3 UHS Branch	108.855*	PF 1	819.51		
819.24	0.27	0.00	0.03	0.21	124.56	0.23	
58.25							
Unit 3 UHS		U3 UHS Branch	108.844*	PF 1	819.50		
819.17	0.33	0.00	0.01	0.17	124.65	0.18	
58.25							
Unit 3 UHS		U3 UHS Branch	108.833*	PF 1	819.47		
819.19	0.28	0.00	0.01	0.19	124.60	0.20	
58.25							
Unit 3 UHS		U3 UHS Branch	108.822*	PF 1	819.46		
819.10	0.36	0.00	0.01	0.10	124.80	0.10	
58.25							
Unit 3 UHS		U3 UHS Branch	108.811*	PF 1	819.42		
819.15	0.28	0.00	0.02	0.14	124.70	0.16	
58.25							
Unit 3 UHS		U3 UHS Branch	108.8*	PF 1	819.41		
819.09	0.33	0.00	0.01	0.08	124.84	0.08	
58.25							
Unit 3 UHS		U3 UHS Branch	108.788*	PF 1	819.39		
819.11	0.28	0.00	0.01	0.10	124.79	0.11	
58.25							
Unit 3 UHS		U3 UHS Branch	108.777*	PF 1	819.37		
819.06	0.32	0.00	0.00	0.05	124.91	0.05	
58.25							
Unit 3 UHS		U3 UHS Branch	108.766*	PF 1	819.36		
819.00	0.36	0.00	0.00	0.00	125.00	0.00	
58.25							
Unit 3 UHS		U3 UHS Branch	108.755*	PF 1	819.32		

				CPNPP	Local	PMP		
819.04	0.28		0.00	0.02		0.03	124.94	0.03
58.25								
Unit	3 UHS	U3	UHS Branch	108.744*	PF	1		819.31
818.98	0.33		0.00	0.01			125.00	
56.40								
Unit	3 UHS	U3	UHS Branch	108.733*	PF	1		819.29
819.00	0.28		0.00	0.01		0.00	125.00	0.00
58.25								
Unit	3 UHS	U3	UHS Branch	108.722*	PF	1		819.28
818.92	0.36		0.00	0.01			125.00	
55.84								
Unit	3 UHS	U3	UHS Branch	108.711*	PF	1		819.24
818.96	0.29		0.00	0.02			125.00	
56.01								
Unit	3 UHS	U3	UHS Branch	108.7*	PF	1		819.23
818.90	0.34		0.00	0.01			125.00	
55.57								
Unit	3 UHS	U3	UHS Branch	108.688*	PF	1		819.21
818.92	0.29		0.00	0.01			125.00	
55.61								
Unit	3 UHS	U3	UHS Branch	108.677*	PF	1		819.19
818.87	0.32		0.00	0.00			125.00	
55.24								
Unit	3 UHS	U3	UHS Branch	108.666*	PF	1		819.19
818.80	0.39		0.00	0.01			125.00	
54.75								
Unit	3 UHS	U3	UHS Branch	108.655*	PF	1		819.14
818.86	0.28		0.00	0.03			125.00	
55.05								
Unit	3 UHS	U3	UHS Branch	108.644*	PF	1		819.13
818.79	0.34		0.00	0.01			125.00	
54.56								
Unit	3 UHS	U3	UHS Branch	108.633*	PF	1		819.11
818.82	0.29		0.00	0.01			125.00	
54.62								
Unit	3 UHS	U3	UHS Branch	108.622*	PF	1		819.10
818.73	0.37		0.00	0.01			125.00	
54.02								
Unit	3 UHS	U3	UHS Branch	108.611*	PF	1		819.06
818.77	0.29		0.00	0.02			125.00	
54.19								
Unit	3 UHS	U3	UHS Branch	108.6*	PF	1		819.05
818.72	0.33		0.00	0.00			125.00	
53.81								
Unit	3 UHS	U3	UHS Branch	108.588*	PF	1		819.03
818.73	0.29		0.00	0.01			125.00	
53.80								
Unit	3 UHS	U3	UHS Branch	108.577*	PF	1		819.01
818.68	0.33		0.00	0.00			125.00	
53.42								
Unit	3 UHS	U3	UHS Branch	108.566*	PF	1		819.01
818.61	0.40		0.00	0.01			125.00	
52.93								
Unit	3 UHS	U3	UHS Branch	108.555*	PF	1		818.96
818.67	0.29		0.00	0.03			125.00	
53.23								
Unit	3 UHS	U3	UHS Branch	108.544*	PF	1		818.95
818.61	0.35		0.00	0.01			125.00	
52.74								
Unit	3 UHS	U3	UHS Branch	108.533*	PF	1		818.93
818.63	0.30		0.00	0.01			125.00	
52.79								
Unit	3 UHS	U3	UHS Branch	108.522*	PF	1		818.91

				CPNPPLocalPMP		
818.56	0.35	0.00		0.01	125.00	
52.31						
Unit 3 UHS		U3 UHS Branch		108.511*	PF 1	818.88
818.58	0.30	0.00		0.01	125.00	
52.36						
Unit 3 UHS		U3 UHS Branch		108.5*	PF 1	818.87
818.53	0.34	0.00		0.00	125.00	
52.00						
Unit 3 UHS		U3 UHS Branch		108.488*	PF 1	818.85
818.54	0.30	0.00		0.01	125.00	
51.99						
Unit 3 UHS		U3 UHS Branch		108.477*	PF 1	818.83
818.49	0.34	0.00		0.00	125.00	
51.60						
Unit 3 UHS		U3 UHS Branch		108.466*	PF 1	818.83
818.42	0.41	0.00		0.01	125.00	
51.10						
Unit 3 UHS		U3 UHS Branch		108.455*	PF 1	818.78
818.49	0.30	0.00		0.03	125.00	
51.42						
Unit 3 UHS		U3 UHS Branch		108.444*	PF 1	818.78
818.42	0.36	0.00		0.01	125.00	
50.92						
Unit 3 UHS		U3 UHS Branch		108.433*	PF 1	818.75
818.44	0.31	0.00		0.01	125.00	
50.96						
Unit 3 UHS		U3 UHS Branch		108.422*	PF 1	818.73
818.37	0.36	0.00		0.01	125.00	
50.50						
Unit 3 UHS		U3 UHS Branch		108.411*	PF 1	818.70
818.45	0.26	0.00		0.01	125.00	
50.88						
Unit 3 UHS		U3 UHS Branch		108.4*	PF 1	818.69
818.46	0.23	0.00		0.01	125.00	
50.85						
Unit 3 UHS		U3 UHS Branch		108.388*	PF 1	818.68
818.47	0.22	0.00		0.00	125.00	
50.82						
Unit 3 UHS		U3 UHS Branch		108.377*	PF 1	818.67
818.47	0.20	0.00		0.01	125.00	
50.78						
Unit 3 UHS		U3 UHS Branch		108.366*	PF 1	818.67
818.49	0.18	0.00		0.00	125.00	
50.81						
Unit 3 UHS		U3 UHS Branch		108.355*	PF 1	818.66
818.49	0.17	0.00		0.00	125.00	
50.76						
Unit 3 UHS		U3 UHS Branch		108.344*	PF 1	818.66
818.50	0.16	0.00		0.00	125.00	
50.71						
Unit 3 UHS		U3 UHS Branch		108.333*	PF 1	818.65
818.50	0.15	0.00		0.00	125.00	
50.65						
Unit 3 UHS		U3 UHS Branch		108.322*	PF 1	818.65
818.51	0.14	0.00		0.00	125.00	
50.64						
Unit 3 UHS		U3 UHS Branch		108.311*	PF 1	818.64
818.51	0.13	0.00		0.00	125.00	
50.58						
Unit 3 UHS		U3 UHS Branch		108.3*	PF 1	818.64
818.51	0.13	0.00		0.00	125.00	
50.51						
Unit 3 UHS		U3 UHS Branch		108.288*	PF 1	818.64

				CPNPPLocalPMP		
818.52	0.12	0.00		0.00	125.00	
50.45						
Unit 3 UHS		U3 UHS Branch		108.277*	PF 1	818.64
818.52	0.12	0.00		0.00	125.00	
50.39						
Unit 3 UHS		U3 UHS Branch		108.266*	PF 1	818.63
818.52	0.11	0.00		0.00	125.00	
50.35						
Unit 3 UHS		U3 UHS Branch		108.255*	PF 1	818.63
818.53	0.11	0.00		0.00	125.00	
50.28						
Unit 3 UHS		U3 UHS Branch		108.244*	PF 1	818.63
818.53	0.10	0.00		0.00	125.00	
50.21						
Unit 3 UHS		U3 UHS Branch		108.233*	PF 1	818.63
818.53	0.10	0.00		0.00	125.00	
50.15						
Unit 3 UHS		U3 UHS Branch		108.222*	PF 1	818.63
818.53	0.09	0.00		0.00	125.00	
50.11						
Unit 3 UHS		U3 UHS Branch		108.211*	PF 1	818.63
818.54	0.09	0.00		0.00	125.00	
50.04						
Unit 3 UHS		U3 UHS Branch		108.2*	PF 1	818.62
818.54	0.09	0.00		0.00	125.00	
49.98						
Unit 3 UHS		U3 UHS Branch		108.188*	PF 1	818.62
818.54	0.08	0.00		0.00	125.00	
49.90						
Unit 3 UHS		U3 UHS Branch		108.177*	PF 1	818.62
818.54	0.08	0.00		0.00	125.00	
49.83						
Unit 3 UHS		U3 UHS Branch		108.166*	PF 1	818.62
818.54	0.08	0.00		0.00	125.00	
49.78						
Unit 3 UHS		U3 UHS Branch		108.155*	PF 1	818.62
818.54	0.08	0.00		0.00	125.00	
49.71						
Unit 3 UHS		U3 UHS Branch		108.144*	PF 1	818.62
818.55	0.07	0.00		0.00	125.00	
49.63						
Unit 3 UHS		U3 UHS Branch		108.133*	PF 1	818.62
818.55	0.07	0.00		0.00	125.00	
49.56						
Unit 3 UHS		U3 UHS Branch		108.122*	PF 1	818.62
818.55	0.07	0.00		0.00	125.00	
49.51						
Unit 3 UHS		U3 UHS Branch		108.111*	PF 1	818.62
818.55	0.07	0.00		0.00	125.00	
49.43						
Unit 3 UHS		U3 UHS Branch		108.1*	PF 1	818.62
818.55	0.06	0.00		0.00	125.00	
49.36						
Unit 3 UHS		U3 UHS Branch		108.088*	PF 1	818.61
818.55	0.06	0.00		0.00	125.00	
49.28						
Unit 3 UHS		U3 UHS Branch		108.077*	PF 1	818.61
818.55	0.06	0.00		0.00	125.00	
49.21						
Unit 3 UHS		U3 UHS Branch		108.066*	PF 1	818.61
818.55	0.06	0.00		0.00	125.00	
49.16						
Unit 3 UHS		U3 UHS Branch		108.055*	PF 1	818.61

				CPNPPLocalPMP		
818.55	0.06	0.00		0.00		125.00
49.09						
Unit 3 UHS		U3 UHS Branch		108.044*	PF 1	818.61
818.56	0.06	0.00		0.00		125.00
49.01						
Unit 3 UHS		U3 UHS Branch		108.033*	PF 1	818.61
818.56	0.06	0.00		0.00		125.00
48.93						
Unit 3 UHS		U3 UHS Branch		108.022*	PF 1	818.61
818.56	0.05	0.00		0.00		125.00
48.87						
Unit 3 UHS		U3 UHS Branch		108.011*	PF 1	818.61
818.56	0.05	0.00		0.00		125.00
48.80						
Unit 3 UHS		U3 UHS Branch		108	PF 1	818.61
818.56	0.05	0.07		0.04		125.00
48.72						
Unit 3 UHS		U3 UHS Upper		12	PF 1	820.35
819.47	0.87	0.01		0.02 725.18		593.39 333.43
125.84						
Unit 3 UHS		U3 UHS Upper		11.875*	PF 1	820.29
819.15	1.14	0.02		0.03 593.90		853.65 204.46
138.00						
Unit 3 UHS		U3 UHS Upper		11.75*	PF 1	820.24
818.86	1.38	0.03		0.02 447.81		1059.00 145.19
124.55						
Unit 3 UHS		U3 UHS Upper		11.625*	PF 1	820.19
818.64	1.55	0.03		0.02 331.74		1224.13 96.13
123.23						
Unit 3 UHS		U3 UHS Upper		11.5*	PF 1	820.14
818.44	1.69	0.04		0.01 232.90		1352.50 66.60
122.87						
Unit 3 UHS		U3 UHS Upper		11.375*	PF 1	820.08
818.26	1.82	0.05		0.01 156.84		1452.06 43.10
125.98						
Unit 3 UHS		U3 UHS Upper		11.25*	PF 1	820.01
818.11	1.91	0.06		0.01 99.23		1525.38 27.38
130.08						
Unit 3 UHS		U3 UHS Upper		11.125*	PF 1	819.94
817.96	1.97	0.06		0.01 55.83		1579.33 16.84
134.84						
Unit 3 UHS		U3 UHS Upper		11	PF 1	819.86
817.83	2.02	0.07		0.00 27.66		1614.30 10.04
140.18						
Unit 3 UHS		U3 UHS Upper		10.8*	PF 1	819.62
817.82	1.80	0.17		0.07 51.99		1574.49 25.53
135.41						
Unit 3 UHS		U3 UHS Upper		10.6*	PF 1	819.47
817.80	1.67	0.12		0.04 85.42		1512.66 53.91
133.21						
Unit 3 UHS		U3 UHS Upper		10.4*	PF 1	819.36
817.77	1.59	0.09		0.02 127.51		1430.70 93.79
154.35						
Unit 3 UHS		U3 UHS Upper		10.2*	PF 1	819.27
817.59	1.69	0.07		0.01 171.04		1284.74 196.22
164.83						
Unit 3 UHS		U3 UHS Upper		10	PF 1	819.16
817.23	1.93	0.10		0.02 253.74		1049.29 348.97
178.81						
Unit 3 UHS		U3 UHS Upper		9	PF 1	818.57
818.15	0.42	0.04		0.00 138.11		1377.68 136.21
148.28						
Unit 3 UHS		U3 UHS Upper		8	PF 1	818.53

				CPNPP	Local	PMP		
818.10	0.43		0.03	0.01	102.71	1523.59	25.70	
136.49								
Unit	3 UHS	U3	UHS Lower	7		PF 1	818.50	
818.02	0.48		0.07	0.00	226.25	1534.45	16.30	
149.65								
Unit	3 UHS	U3	UHS Lower	6.9				Lat Struct
Unit	3 UHS	U3	UHS Lower	6		PF 1	818.43	
817.93	0.50		0.06	0.00	117.98	1322.72	13.80	
117.36								
Unit	3 UHS	U3	UHS Lower	5		PF 1	818.36	
817.87	0.50		0.01	0.06	35.43	1123.78	8.95	
85.25								
Unit	3 UHS	U3	UHS Lower	4		PF 1	818.29	
818.01	0.28		0.00	0.01	605.62	496.15	3.62	
97.88								
Unit	3 UHS	U3	UHS Lower	3.90909*		PF 1	818.28	
818.02	0.26		0.00	0.01	578.08	497.16	4.21	
100.72								
Unit	3 UHS	U3	UHS Lower	3.81818*		PF 1	818.27	
818.03	0.24		0.00	0.01	558.68	488.61	5.73	
103.82								
Unit	3 UHS	U3	UHS Lower	3.72727*		PF 1	818.26	
818.04	0.22		0.00	0.01	539.42	479.32	7.35	
107.10								
Unit	3 UHS	U3	UHS Lower	3.63636*		PF 1	818.25	
818.05	0.20		0.00	0.01	520.46	469.08	9.16	
110.75								
Unit	3 UHS	U3	UHS Lower	3.54545*		PF 1	818.24	
818.06	0.18		0.00	0.01	500.89	458.97	11.00	
114.69								
Unit	3 UHS	U3	UHS Lower	3.45454*		PF 1	818.24	
818.07	0.16		0.00	0.00	481.74	447.75	13.13	
119.05								
Unit	3 UHS	U3	UHS Lower	3.36363*		PF 1	818.23	
818.08	0.15		0.00	0.00	462.27	436.56	15.16	
123.95								
Unit	3 UHS	U3	UHS Lower	3.27272*		PF 1	818.22	
818.09	0.13		0.00	0.00	444.04	423.55	17.40	
129.59								
Unit	3 UHS	U3	UHS Lower	3.18181*		PF 1	818.22	
818.10	0.12		0.00	0.00	425.44	410.83	19.39	
137.06								
Unit	3 UHS	U3	UHS Lower	3.09090*		PF 1	818.21	
818.11	0.10		0.00	0.00	406.24	397.83	21.94	
145.03								
Unit	3 UHS	U3	UHS Lower	3		PF 1	818.21	
818.12	0.09		0.01	0.01	371.39	393.10	31.58	
152.88								
Unit	3 UHS	U3	UHS Lower	2		PF 1	818.19	
818.13	0.06				211.05	392.45	23.81	
168.02								
Unit	3 UHS	U3	UHS Lower	1.5				Inl Struct
Unit	3 UHS	U3	UHS Lower	1		PF 1	815.11	
815.10	0.01					627.32		
131.48								
Unit	3 Southeast	Unit	3 Southeast	11		PF 1	822.59	
822.48	0.11		0.00	0.00	190.59	102.83	77.58	
80.48								
Unit	3 Southeast	Unit	3 Southeast	10.9090*		PF 1	822.59	
822.46	0.13		0.00	0.00	172.95	115.05	83.00	
82.35								

		CPNPPLocalPMP					
Unit 3 Southeast	Unit 3 Southeast	10.8181*	PF 1	822.58			
822.43	0.15	0.00	156.14	127.41	87.45		
79.81							
Unit 3 Southeast	Unit 3 Southeast	10.7272*	PF 1	822.58			
822.40	0.18	0.00	141.07	138.77	91.16		
76.23							
Unit 3 Southeast	Unit 3 Southeast	10.6363*	PF 1	822.57			
822.36	0.21	0.00	126.04	150.91	94.05		
72.61							
Unit 3 Southeast	Unit 3 Southeast	10.5454*	PF 1	822.57			
822.32	0.25	0.00	111.16	163.19	96.65		
68.92							
Unit 3 Southeast	Unit 3 Southeast	10.4545*	PF 1	822.56			
822.28	0.29	0.00	97.57	175.12	98.31		
64.97							
Unit 3 Southeast	Unit 3 Southeast	10.3636*	PF 1	822.56			
822.24	0.32	0.00	86.92	185.02	99.06		
60.48							
Unit 3 Southeast	Unit 3 Southeast	10.2727*	PF 1	822.55			
822.19	0.36	0.00	76.64	195.53	98.84		
57.50							
Unit 3 Southeast	Unit 3 Southeast	10.1818*	PF 1	822.55			
822.14	0.41	0.00	66.22	206.31	98.47		
54.94							
Unit 3 Southeast	Unit 3 Southeast	10.0909*	PF 1	822.54			
822.09	0.46	0.01	56.75	216.57	97.68		
52.68							
Unit 3 Southeast	Unit 3 Southeast	10	PF 1	822.52			
821.86	0.66	0.01	40.74	237.18	93.08		
47.76							
Unit 3 Southeast	Unit 3 Southeast	9.92857*	PF 1	822.47			
821.43	1.04	0.01	35.35	275.98	59.68		
45.92							
Unit 3 Southeast	Unit 3 Southeast	9.85714*	PF 1	822.44			
821.19	1.25	0.02	34.00	302.02	34.98		
47.15							
Unit 3 Southeast	Unit 3 Southeast	9.78571*	PF 1	822.41			
820.98	1.43	0.02	32.87	321.49	16.64		
47.90							
Unit 3 Southeast	Unit 3 Southeast	9.71428*	PF 1	822.37			
820.77	1.59	0.02	30.85	334.17	5.98		
47.13							
Unit 3 Southeast	Unit 3 Southeast	9.64285*	PF 1	822.32			
820.57	1.75	0.03	28.49	341.78	0.73		
45.32							
Unit 3 Southeast	Unit 3 Southeast	9.57142*	PF 1	822.26			
820.38	1.88	0.04	26.60	344.40			
44.00							
Unit 3 Southeast	Unit 3 Southeast	9.5*	PF 1	822.21			
820.20	2.01	0.04	24.86	346.14			
46.23							
Unit 3 Southeast	Unit 3 Southeast	9.42857*	PF 1	822.15			
820.02	2.13	0.05	23.06	347.94			
48.88							
Unit 3 Southeast	Unit 3 Southeast	9.35714*	PF 1	822.09			
819.86	2.22	0.06	23.58	347.42			
53.16							
Unit 3 Southeast	Unit 3 Southeast	9.28571*	PF 1	822.02			
819.71	2.31	0.07	24.74	346.26			
57.72							
Unit 3 Southeast	Unit 3 Southeast	9.21428*	PF 1	821.93			
819.56	2.37	0.08	28.45	342.55			
65.24							

		CPNPPLocalPMP					
Unit 3 Southeast	Unit 3 Southeast	9.14285*	PF 1	821.84			
819.41	0.09	0.01	35.03	335.97			
75.55							
Unit 3 Southeast	Unit 3 Southeast	9.07142*	PF 1	821.73			
819.26	0.10	0.00	44.19	326.81			
90.90							
Unit 3 Southeast	Unit 3 Southeast	9	PF 1	821.60			
819.10	0.12	0.00	61.26	309.74			
94.81							
Unit 3 Southeast	Unit 3 Southeast	8.83333*	PF 1	821.31			
818.85	0.29	0.01	158.56	212.44			
88.42							
Unit 3 Southeast	Unit 3 Southeast	8.66666*	PF 1	821.05			
818.61	0.25	0.01	247.94	123.06			
84.33							
Unit 3 Southeast	Unit 3 Southeast	8.5*	PF 1	819.78			
819.67	0.00	0.01	271.63	99.37			
97.99							
Unit 3 Southeast	Unit 3 Southeast	8.33333*	PF 1	819.77			
819.69	0.00	0.01	279.80	91.20			
98.03							
Unit 3 Southeast	Unit 3 Southeast	8.16666*	PF 1	819.76			
819.70	0.00	0.00	284.69	86.31			
98.02							
Unit 3 Southeast	Unit 3 Southeast	8	PF 1	819.76			
819.71	0.00	0.00	287.91	83.09			
97.98							
Unit 3 Southeast	Unit 3 Southeast	7	PF 1	819.76			
819.71	0.00	0.01	289.26	81.74			
104.41							
Unit 3 Southeast	Unit 3 Southeast	6	PF 1	819.75			
819.73	0.00	0.00	302.38	68.62			
186.57							
Unit 3 Southeast	Unit 3 Southeast	5	PF 1	819.75			
819.73	0.00	0.00	272.63	91.03			
193.18							7.34
Unit 3 Southeast	Unit 3 Southeast	4.66666*	PF 1	819.74			
819.73	0.00	0.00	199.36	168.41			
209.42							3.23
Unit 3 Southeast	Unit 3 Southeast	4.33333*	PF 1	819.74			
819.74	0.00	0.00	167.95	202.41			
206.70							0.64
Unit 3 Southeast	Unit 3 Southeast	4	PF 1	819.74			
819.71	0.00	0.00	299.86	437.14			
195.66							
Unit 3 Southeast	Unit 3 Southeast	3	PF 1	819.74			
819.71	0.00	0.00	271.01	465.99			
162.76							
Unit 3 Southeast	Unit 3 Southeast	2	PF 1	819.74			
819.71	0.00	319.43	407.70	9.87			
150.95							
Unit 3 Southeast	Unit 3 Southeast	1.5	Inl Struct				
Unit 3 Southeast	Unit 3 Southeast	1	PF 1	815.12			
815.10	0.00		737.00				
132.46							
Unit 3 North	Unit 3 North	8	PF 1	820.13			
820.12	0.00	0.00	32.97	131.03			
104.15							
Unit 3 North	Unit 3 North	7	PF 1	820.13			
820.12	0.00	0.00	29.56	134.44			
104.16							
Unit 3 North	Unit 3 North	6	PF 1	820.13			

				CPNPPLocalPMP		
820.12	0.01	0.00	0.00	25.96	138.04	
104.16						
Unit 3 North		Unit 3 North	5	32.19	131.80	820.13
820.12	0.01					0.00
98.74						
Unit 3 North		Unit 3 North	4.5			Inl Struct
Unit 3 North		Unit 3 North	4			
819.66	0.02	0.00	0.00	40.07	114.80	819.68
105.54						9.14
Unit 3 North		Unit 3 North	3.5*			
819.67	0.01	0.00	0.00	29.81	126.71	819.68
112.19						7.48
Unit 3 North		Unit 3 North	3			
819.67	0.01	0.00	0.00	24.72	131.14	819.68
128.73						8.13
Unit 3 North		Unit 3 North	2			
819.67	0.01			33.33	115.08	819.68
134.84						15.59
Unit 3 North		Unit 3 North	1.5			Inl Struct
Unit 3 North		Unit 3 North	1			
818.12	0.00				164.00	818.12
234.88						
Unit 3 East		Unit 3 East	5			
820.41	0.16	0.00	0.00		196.00	820.57
160.04						
Unit 3 East		Unit 3 East	4.98795*			
820.38	0.18	0.00	0.00		196.00	820.56
158.90						
Unit 3 East		Unit 3 East	4.97590*			
820.39	0.16	0.00	0.00		196.00	820.55
159.69						
Unit 3 East		Unit 3 East	4.96385*			
820.37	0.18	0.00	0.00		196.00	820.54
158.87						
Unit 3 East		Unit 3 East	4.95180*			
820.37	0.16	0.00	0.00		196.00	820.53
159.74						
Unit 3 East		Unit 3 East	4.93975*			
820.35	0.18	0.00	0.00		196.00	820.52
158.57						
Unit 3 East		Unit 3 East	4.92771*			
820.35	0.16	0.00	0.00		196.00	820.51
159.43						
Unit 3 East		Unit 3 East	4.91566*			
820.33	0.18	0.00	0.00		196.00	820.50
158.31						
Unit 3 East		Unit 3 East	4.90361*			
820.33	0.16	0.00	0.00		196.00	820.50
159.34						
Unit 3 East		Unit 3 East	4.89156*			
820.31	0.18	0.00	0.00		196.00	820.48
158.26						
Unit 3 East		Unit 3 East	4.87951*			
820.31	0.16	0.00	0.00		196.00	820.48
159.13						
Unit 3 East		Unit 3 East	4.86747*			
820.29	0.18	0.00	0.00		196.00	820.46
157.97						
Unit 3 East		Unit 3 East	4.85542*			
820.29	0.16	0.00	0.00		196.00	820.46
158.76						

				CPNPPLocalPMP		
Unit 3 East	Unit 3 East	0.18	0.00	4.84337*	PF 1	820.44
820.27				0.00	196.00	
157.94						
Unit 3 East	Unit 3 East	0.16	0.00	4.83132*	PF 1	820.44
820.27				0.00	196.00	
158.81						
Unit 3 East	Unit 3 East	0.18	0.00	4.81927*	PF 1	820.43
820.25				0.00	196.00	
157.66						
Unit 3 East	Unit 3 East	0.16	0.00	4.80722*	PF 1	820.42
820.26				0.00	196.00	
158.52						
Unit 3 East	Unit 3 East	0.18	0.00	4.79518*	PF 1	820.41
820.23				0.00	196.00	
157.40						
Unit 3 East	Unit 3 East	0.16	0.00	4.78313*	PF 1	820.40
820.24				0.00	196.00	
158.43						
Unit 3 East	Unit 3 East	0.18	0.00	4.77108*	PF 1	820.39
820.21				0.00	196.00	
157.33						
Unit 3 East	Unit 3 East	0.16	0.00	4.75903*	PF 1	820.38
820.22				0.00	196.00	
158.19						
Unit 3 East	Unit 3 East	0.18	0.00	4.74698*	PF 1	820.37
820.19				0.00	196.00	
157.08						
Unit 3 East	Unit 3 East	0.16	0.00	4.73494*	PF 1	820.36
820.20				0.00	196.00	
158.11						
Unit 3 East	Unit 3 East	0.18	0.00	4.72289*	PF 1	820.35
820.17				0.00	196.00	
157.05						
Unit 3 East	Unit 3 East	0.16	0.00	4.71084*	PF 1	820.34
820.18				0.00	196.00	
157.91						
Unit 3 East	Unit 3 East	0.18	0.00	4.69879*	PF 1	820.33
820.15				0.00	196.00	
156.68						
Unit 3 East	Unit 3 East	0.16	0.00	4.68674*	PF 1	820.32
820.16				0.00	196.00	
157.55						
Unit 3 East	Unit 3 East	0.18	0.00	4.67469*	PF 1	820.31
820.13				0.00	196.00	
156.72						
Unit 3 East	Unit 3 East	0.16	0.00	4.66265*	PF 1	820.30
820.14				0.00	196.00	
157.52						
Unit 3 East	Unit 3 East	0.18	0.00	4.65060*	PF 1	820.29
820.11				0.00	196.00	
156.42						
Unit 3 East	Unit 3 East	0.16	0.00	4.63855*	PF 1	820.28
820.12				0.00	196.00	
157.28						
Unit 3 East	Unit 3 East	0.18	0.00	4.62650*	PF 1	820.27
820.09				0.00	196.00	
156.16						
Unit 3 East	Unit 3 East	0.16	0.00	4.61445*	PF 1	820.26
820.10				0.00	196.00	
157.20						
Unit 3 East	Unit 3 East	0.18	0.00	4.60240*	PF 1	820.25
820.07				0.00	196.00	
156.15						

				CPNPPLocalPMP		
Unit 3 East	Unit 3 East	4.59036*	PF 1	820.24		
820.08 0.16	0.00	0.00	196.00			
157.01						
Unit 3 East	Unit 3 East	4.57831*	PF 1	820.23		
820.05 0.18	0.00	0.00	196.00			
155.73						
Unit 3 East	Unit 3 East	4.56626*	PF 1	820.22		
820.06 0.16	0.00	0.00	196.00			
156.60						
Unit 3 East	Unit 3 East	4.55421*	PF 1	820.21		
820.03 0.18	0.00	0.00	196.00			
155.91						
Unit 3 East	Unit 3 East	4.54216*	PF 1	820.20		
820.04 0.16	0.00	0.00	196.00			
156.71						
Unit 3 East	Unit 3 East	4.53012*	PF 1	820.19		
820.01 0.18	0.00	0.00	196.00			
155.13						
Unit 3 East	Unit 3 East	4.51807*	PF 1	820.19		
819.96 0.23	0.00	0.00	196.00			
152.68						
Unit 3 East	Unit 3 East	4.50602*	PF 1	820.18		
819.96 0.21	0.00	0.00	196.00			
153.32						
Unit 3 East	Unit 3 East	4.49397*	PF 1	820.17		
819.96 0.21	0.00	0.00	196.00			
153.60						
Unit 3 East	Unit 3 East	4.48192*	PF 1	820.16		
819.96 0.20	0.00	0.00	196.00			
154.22						
Unit 3 East	Unit 3 East	4.46988*	PF 1	820.15		
819.99 0.16	0.00	0.00	196.00			
156.35						
Unit 3 East	Unit 3 East	4.45783*	PF 1	820.14		
819.96 0.18	0.00	0.00	196.00			
155.10						
Unit 3 East	Unit 3 East	4.44578*	PF 1	820.13		
819.97 0.16	0.00	0.00	196.00			
155.97						
Unit 3 East	Unit 3 East	4.43373*	PF 1	820.12		
819.94 0.18	0.00	0.00	196.00			
155.16						
Unit 3 East	Unit 3 East	4.42168*	PF 1	820.11		
819.95 0.16	0.00	0.00	196.00			
155.96						
Unit 3 East	Unit 3 East	4.40963*	PF 1	820.10		
819.93 0.18	0.00	0.00	196.00			
154.88						
Unit 3 East	Unit 3 East	4.39759*	PF 1	820.10		
819.93 0.16	0.00	0.00	196.00			
155.73						
Unit 3 East	Unit 3 East	4.38554*	PF 1	820.08		
819.90 0.18	0.00	0.00	196.00			
154.59						
Unit 3 East	Unit 3 East	4.37349*	PF 1	820.08		
819.91 0.16	0.00	0.00	196.00			
155.65						
Unit 3 East	Unit 3 East	4.36144*	PF 1	820.06		
819.89 0.18	0.00	0.00	196.00			
154.59						
Unit 3 East	Unit 3 East	4.34939*	PF 1	820.06		
819.89 0.16	0.00	0.00	196.00			
155.45						

				CPNPPLocalPMP		
Unit 3 East	Unit 3 East	4.33735*	PF 1	820.05		
819.87 0.18	0.00	0.00	196.00			
154.20						
Unit 3 East	Unit 3 East	4.32530*	PF 1	820.04		
819.87 0.17	0.00	0.00	196.00			
155.06						
Unit 3 East	Unit 3 East	4.31325*	PF 1	820.03		
819.85 0.18	0.00	0.00	196.00			
154.26						
Unit 3 East	Unit 3 East	4.30120*	PF 1	820.02		
819.85 0.16	0.00	0.00	196.00			
155.06						
Unit 3 East	Unit 3 East	4.28915*	PF 1	820.01		
819.83 0.18	0.00	0.00	196.00			
153.95						
Unit 3 East	Unit 3 East	4.27710*	PF 1	820.00		
819.83 0.16	0.00	0.00	196.00			
154.81						
Unit 3 East	Unit 3 East	4.26506*	PF 1	819.99		
819.81 0.18	0.00	0.00	196.00			
153.68						
Unit 3 East	Unit 3 East	4.25301*	PF 1	819.98		
819.81 0.16	0.00	0.00	196.00			
154.75						
Unit 3 East	Unit 3 East	4.24096*	PF 1	819.97		
819.79 0.18	0.00	0.00	196.00			
153.67						
Unit 3 East	Unit 3 East	4.22891*	PF 1	819.96		
819.79 0.16	0.00	0.00	196.00			
154.52						
Unit 3 East	Unit 3 East	4.21686*	PF 1	819.95		
819.77 0.18	0.00	0.00	196.00			
153.31						
Unit 3 East	Unit 3 East	4.20482*	PF 1	819.94		
819.77 0.17	0.00	0.00	196.00			
154.44						
Unit 3 East	Unit 3 East	4.19277*	PF 1	819.93		
819.75 0.18	0.00	0.00	196.00			
153.34						
Unit 3 East	Unit 3 East	4.18072*	PF 1	819.92		
819.75 0.17	0.00	0.00	196.00			
154.14						
Unit 3 East	Unit 3 East	4.16867*	PF 1	819.91		
819.73 0.18	0.00	0.00	196.00			
153.09						
Unit 3 East	Unit 3 East	4.15662*	PF 1	819.90		
819.74 0.16	0.00	0.00	196.00			
153.94						
Unit 3 East	Unit 3 East	4.14457*	PF 1	819.89		
819.70 0.19	0.00	0.00	196.00			
152.61						
Unit 3 East	Unit 3 East	4.13253*	PF 1	819.89		
819.65 0.23	0.00	0.00	196.00			
150.03						
Unit 3 East	Unit 3 East	4.12048*	PF 1	819.87		
819.66 0.22	0.00	0.00	196.00			
150.66						
Unit 3 East	Unit 3 East	4.10843*	PF 1	819.86		
819.66 0.20	0.00	0.00	196.00			
151.27						
Unit 3 East	Unit 3 East	4.09638*	PF 1	819.85		
819.67 0.18	0.00	0.00	196.00			
152.54						

		CPNPPLocalPMP			
Unit 3 East	Unit 3 East	4.08433*	PF 1	819.84	
819.68 0.16	0.00	0.00	196.00		
153.66					
Unit 3 East	Unit 3 East	4.07228*	PF 1	819.83	
819.64 0.19	0.00	0.00	196.00		
152.00					
Unit 3 East	Unit 3 East	4.06024*	PF 1	819.83	
819.59 0.24	0.00	0.00	196.00		
149.40					
Unit 3 East	Unit 3 East	4.04819*	PF 1	819.82	
819.60 0.22	0.00	0.01	196.00		
150.04					
Unit 3 East	Unit 3 East	4.03614*	PF 1	819.80	
819.60 0.20	0.00	0.00	196.00		
150.63					
Unit 3 East	Unit 3 East	4.02409*	PF 1	819.79	
819.61 0.18	0.00	0.00	196.00		
152.27					
Unit 3 East	Unit 3 East	4.01204*	PF 1	819.78	
819.62 0.16	0.00	0.00	196.00		
153.06					
Unit 3 East	Unit 3 East	4	PF 1	819.77	
819.58 0.19	0.00	0.00	196.00		
151.38					
Unit 3 East	Unit 3 East	3.98305*	PF 1	819.77	
819.49 0.28	0.00	0.01	196.00		
150.03					
Unit 3 East	Unit 3 East	3.96610*	PF 1	819.76	
819.44 0.32	0.01	0.00	196.00		
151.30					
Unit 3 East	Unit 3 East	3.94915*	PF 1	819.75	
819.41 0.35	0.01	0.00	196.00		
153.30					
Unit 3 East	Unit 3 East	3.93220*	PF 1	819.74	
819.37 0.36	0.01	0.00	196.00		
155.75					
Unit 3 East	Unit 3 East	3.91525*	PF 1	819.72	
819.35 0.37	0.01	0.00	196.00		
158.14					
Unit 3 East	Unit 3 East	3.89830*	PF 1	819.70	
819.32 0.38	0.01	0.00	196.00		
160.69					
Unit 3 East	Unit 3 East	3.88135*	PF 1	819.68	
819.29 0.39	0.01	0.00	196.00		
163.36					
Unit 3 East	Unit 3 East	3.86440*	PF 1	819.67	
819.26 0.41	0.01	0.00	196.00		
165.96					
Unit 3 East	Unit 3 East	3.84745*	PF 1	819.64	
819.24 0.41	0.01	0.00	196.00		
168.66					
Unit 3 East	Unit 3 East	3.83050*	PF 1	819.62	
819.21 0.41	0.01	0.00	196.00		
171.41					
Unit 3 East	Unit 3 East	3.81355*	PF 1	819.61	
819.18 0.42	0.02	0.00	196.00		
174.06					
Unit 3 East	Unit 3 East	3.79661*	PF 1	819.59	
819.16 0.43	0.02	0.00	196.00		
176.80					
Unit 3 East	Unit 3 East	3.77966*	PF 1	819.56	
819.14 0.43	0.02	0.00	196.00		
179.69					

				CPNPPLocalPMP		
Unit 3 East	Unit 3 East	3.76271*	PF 1	819.54		
819.11 0.43	0.02	0.00	196.00			
182.43						
Unit 3 East	Unit 3 East	3.74576*	PF 1	819.52		
819.09 0.43	0.02	0.00	196.00			
185.27						
Unit 3 East	Unit 3 East	3.72881*	PF 1	819.49		
819.06 0.43	0.02	0.00	196.00			
188.23						
Unit 3 East	Unit 3 East	3.71186*	PF 1	819.46		
819.04 0.42	0.02	0.00	196.00			
191.22						
Unit 3 East	Unit 3 East	3.69491*	PF 1	819.44		
819.02 0.42	0.02	0.00	196.00			
194.17						
Unit 3 East	Unit 3 East	3.67796*	PF 1	819.41		
819.00 0.41	0.02	0.00	196.00			
197.03						
Unit 3 East	Unit 3 East	3.66101*	PF 1	819.39		
818.98 0.41	0.02	0.00	196.00			
200.04						
Unit 3 East	Unit 3 East	3.64406*	PF 1	819.36		
818.95 0.41	0.02	0.00	196.00			
202.98						
Unit 3 East	Unit 3 East	3.62711*	PF 1	819.34		
818.93 0.41	0.02	0.00	196.00			
205.82						
Unit 3 East	Unit 3 East	3.61016*	PF 1	819.32		
818.91 0.41	0.02	0.00	196.00			
208.76						
Unit 3 East	Unit 3 East	3.59322*	PF 1	819.29		
818.89 0.41	0.02	0.00	196.00			
211.73						
Unit 3 East	Unit 3 East	3.57627*	PF 1	819.27		
818.86 0.40	0.02	0.00	196.00			
214.65						
Unit 3 East	Unit 3 East	3.55932*	PF 1	819.24		
818.84 0.40	0.02	0.00	196.00			
217.64						
Unit 3 East	Unit 3 East	3.54237*	PF 1	819.22		
818.82 0.40	0.02	0.00	196.00			
220.67						
Unit 3 East	Unit 3 East	3.52542*	PF 1	819.19		
818.80 0.39	0.02	0.00	196.00			
223.59						
Unit 3 East	Unit 3 East	3.50847*	PF 1	819.16		
818.78 0.39	0.02	0.00	196.00			
226.59						
Unit 3 East	Unit 3 East	3.49152*	PF 1	819.14		
818.76 0.38	0.02	0.00	196.00			
229.64						
Unit 3 East	Unit 3 East	3.47457*	PF 1	819.11		
818.73 0.38	0.02	0.00	196.00			
232.64						
Unit 3 East	Unit 3 East	3.45762*	PF 1	819.09		
818.71 0.38	0.02	0.00	196.00			
235.57						
Unit 3 East	Unit 3 East	3.44067*	PF 1	819.06		
818.69 0.37	0.02	0.00	196.00			
238.62						
Unit 3 East	Unit 3 East	3.42372*	PF 1	819.04		
818.67 0.37	0.02	0.00	196.00			
241.64						

				CPNPPLocalPMP		
Unit 3 East	Unit 3 East	3.40678*	PF 1	819.01		
818.65 0.36	0.02	0.00	196.00			
244.62						
Unit 3 East	Unit 3 East	3.38983*	PF 1	818.99		
818.63 0.36	0.02	0.00	196.00			
247.64						
Unit 3 East	Unit 3 East	3.37288*	PF 1	818.96		
818.61 0.36	0.02	0.00	196.00			
250.66						
Unit 3 East	Unit 3 East	3.35593*	PF 1	818.94		
818.58 0.35	0.02	0.00	196.00			
253.66						
Unit 3 East	Unit 3 East	3.33898*	PF 1	818.91		
818.56 0.35	0.02	0.00	196.00			
256.68						
Unit 3 East	Unit 3 East	3.32203*	PF 1	818.89		
818.54 0.35	0.02	0.00	196.00			
259.75						
Unit 3 East	Unit 3 East	3.30508*	PF 1	818.87		
818.52 0.34	0.02	0.00	196.00			
262.72						
Unit 3 East	Unit 3 East	3.28813*	PF 1	818.84		
818.50 0.34	0.02	0.00	196.00			
265.73						
Unit 3 East	Unit 3 East	3.27118*	PF 1	818.82		
818.48 0.34	0.02	0.00	196.00			
268.81						
Unit 3 East	Unit 3 East	3.25423*	PF 1	818.79		
818.46 0.34	0.02	0.00	196.00			
271.83						
Unit 3 East	Unit 3 East	3.23728*	PF 1	818.77		
818.44 0.33	0.02	0.00	196.00			
274.88						
Unit 3 East	Unit 3 East	3.22033*	PF 1	818.74		
818.42 0.33	0.02	0.00	196.00			
277.89						
Unit 3 East	Unit 3 East	3.20339*	PF 1	818.72		
818.39 0.33	0.02	0.00	196.00			
280.91						
Unit 3 East	Unit 3 East	3.18644*	PF 1	818.70		
818.37 0.32	0.02	0.00	196.00			
283.96						
Unit 3 East	Unit 3 East	3.16949*	PF 1	818.67		
818.35 0.32	0.02	0.00	196.00			
286.98						
Unit 3 East	Unit 3 East	3.15254*	PF 1	818.65		
818.33 0.32	0.02	0.00	196.00			
290.00						
Unit 3 East	Unit 3 East	3.13559*	PF 1	818.63		
818.31 0.32	0.02	0.00	196.00			
293.06						
Unit 3 East	Unit 3 East	3.11864*	PF 1	818.60		
818.29 0.31	0.02	0.00	196.00			
296.10						
Unit 3 East	Unit 3 East	3.10169*	PF 1	818.58		
818.27 0.31	0.02	0.00	196.00			
299.19						
Unit 3 East	Unit 3 East	3.08474*	PF 1	818.55		
818.25 0.31	0.02	0.00	196.00			
302.22						
Unit 3 East	Unit 3 East	3.06779*	PF 1	818.53		
818.23 0.30	0.02	0.00	196.00			
305.24						

				CPNPPLocalPMP		
Unit 3 East	Unit 3 East	3.05084*	PF 1	818.51		
818.21 0.30	0.02	0.00	196.00	0.00		
308.93						
Unit 3 East	Unit 3 East	3.03389*	PF 1	818.48		
818.18 0.30	0.02	0.00	195.96	0.04		
311.31						
Unit 3 East	Unit 3 East	3.01695*	PF 1	818.46		
818.16 0.30	0.02	0.00	195.95	0.05		
313.64						
Unit 3 East	Unit 3 East	3	PF 1	818.44		
818.14 0.30	0.02	0.00	196.00			
316.02						
Unit 3 East	Unit 3 East	2.97368*	PF 1	818.41		
818.01 0.40	0.01	0.01	196.00			
311.37						
Unit 3 East	Unit 3 East	2.94736*	PF 1	818.38		
817.88 0.50	0.02	0.01	196.00			
305.73						
Unit 3 East	Unit 3 East	2.92105*	PF 1	818.34		
817.75 0.59	0.03	0.01	196.00			
295.23						
Unit 3 East	Unit 3 East	2.89473*	PF 1	818.30		
817.64 0.66	0.03	0.01	196.00			
286.68						
Unit 3 East	Unit 3 East	2.86842*	PF 1	818.25		
817.51 0.74	0.04	0.01	196.00			
277.07						
Unit 3 East	Unit 3 East	2.84210*	PF 1	817.92		
817.90 0.02	0.00	0.00	196.00			
312.02						
Unit 3 East	Unit 3 East	2.81578*	PF 1	817.92		
817.90 0.01	0.00	0.00	196.00			
314.62						
Unit 3 East	Unit 3 East	2.78947*	PF 1	817.91		
817.90 0.01	0.00	0.00	196.00			
317.08						
Unit 3 East	Unit 3 East	2.76315*	PF 1	817.91		
817.91 0.01	0.00	0.00	196.00			
319.87						
Unit 3 East	Unit 3 East	2.73684*	PF 1	817.91		
817.91 0.01	0.00	0.00	196.00			
322.97						
Unit 3 East	Unit 3 East	2.71052*	PF 1	817.91		
817.91 0.01	0.00	0.00	196.00			
325.98						
Unit 3 East	Unit 3 East	2.68421*	PF 1	817.91		
817.91 0.00	0.00	0.00	196.00			
329.61						
Unit 3 East	Unit 3 East	2.65789*	PF 1	817.91		
817.91 0.00	0.00	0.00	196.00			
333.51						
Unit 3 East	Unit 3 East	2.63157*	PF 1	817.91		
817.91 0.00	0.00	0.00	196.00			
334.38						
Unit 3 East	Unit 3 East	2.60526*	PF 1	817.91		
817.91 0.00	0.00	0.00	196.00			
334.09						
Unit 3 East	Unit 3 East	2.57894*	PF 1	817.91		
817.91 0.00	0.00	0.00	196.00			
333.80						
Unit 3 East	Unit 3 East	2.55263*	PF 1	817.91		
817.91 0.00	0.00	0.00	196.00			
333.51						

		CPNPPLocalPMP			
Unit 3 East	Unit 3 East	2.52631*	PF 1	817.91	
817.91	0.00	0.00	196.00		
333.19					
Unit 3 East	Unit 3 East	2.5*	PF 1	817.91	
817.91	0.00	0.00	196.00		
332.87					
Unit 3 East	Unit 3 East	2.47368*	PF 1	817.91	
817.91	0.00	0.00	196.00		
332.54					
Unit 3 East	Unit 3 East	2.44736*	PF 1	817.91	
817.91	0.00	0.00	196.00		
332.45					
Unit 3 East	Unit 3 East	2.42105*	PF 1	817.91	
817.91	0.00	0.00	196.00		
332.38					
Unit 3 East	Unit 3 East	2.39473*	PF 1	817.91	
817.91	0.00	0.00	196.00		
332.30					
Unit 3 East	Unit 3 East	2.36842*	PF 1	817.91	
817.91	0.00	0.00	196.00		
332.19					
Unit 3 East	Unit 3 East	2.34210*	PF 1	817.91	
817.91	0.00	0.00	196.00		
332.11					
Unit 3 East	Unit 3 East	2.31579*	PF 1	817.91	
817.91	0.00	0.00	196.00		
331.99					
Unit 3 East	Unit 3 East	2.28947*	PF 1	817.91	
817.91	0.00	0.00	196.00		
331.90					
Unit 3 East	Unit 3 East	2.26315*	PF 1	817.91	
817.91	0.00	0.00	196.00		
331.84					
Unit 3 East	Unit 3 East	2.23684*	PF 1	817.91	
817.91	0.00	0.00	196.00		
331.70					
Unit 3 East	Unit 3 East	2.21052*	PF 1	817.91	
817.91	0.00	0.00	196.00		
331.60					
Unit 3 East	Unit 3 East	2.18421*	PF 1	817.91	
817.91	0.00	0.00	196.00		
331.50					
Unit 3 East	Unit 3 East	2.15789*	PF 1	817.91	
817.91	0.00	0.00	196.00		
331.35					
Unit 3 East	Unit 3 East	2.13157*	PF 1	817.91	
817.91	0.00	0.00	196.00		
331.24					
Unit 3 East	Unit 3 East	2.10526*	PF 1	817.91	
817.91	0.00	0.00	196.00		
331.08					
Unit 3 East	Unit 3 East	2.07894*	PF 1	817.91	
817.91	0.00	0.00	196.00		
330.99					
Unit 3 East	Unit 3 East	2.05263*	PF 1	817.91	
817.91	0.00	0.00	196.00		
330.88					
Unit 3 East	Unit 3 East	2.02631*	PF 1	817.91	
817.91	0.00	0.00	196.00		
330.70					
Unit 3 East	Unit 3 East	2	PF 1	817.91	
817.91	0.00		196.00		
330.60					

Unit 3 East	Unit 3 East	CPNPPLocalPMP 1.5	Infl Struct
Unit 3 East 815.10 362.23 Offsite	Unit 3 East 0.00	1	PF 1 196.00 815.10
819.65 62.31 Offsite	1.81	6	PF 1 2421.00 821.46
819.21 60.43 Offsite	2.21	5.94117* 0.04	PF 1 2421.00 821.42
818.98 59.84 Offsite	2.41	5.88235* 0.02	PF 1 2421.00 821.39
818.76 59.37 Offsite	2.60	5.82352* 0.02	PF 1 2421.00 821.37
818.58 59.09 Offsite	2.76	5.76470* 0.02	PF 1 2421.00 821.35
818.44 58.99 Offsite	2.88	5.70588* 0.01	PF 1 2421.00 821.32
818.29 58.90 Offsite	3.00	5.64705* 0.01	PF 1 2421.00 821.29
820.13 88.60 Offsite	1.01	5.58823* 0.02 8.06	PF 1 2412.95 821.14
820.17 93.37 Offsite	0.94	5.52941* 0.02 11.47	PF 1 2409.53 821.11
820.21 98.99 Offsite	0.89	5.47058* 0.02 15.02	PF 1 2405.98 821.09
820.24 105.41 Offsite	0.83	5.41176* 0.01 19.32	PF 1 2401.68 821.08
820.28 111.76 Offsite	0.78	5.35294* 0.01 23.99	PF 1 2397.01 821.06
820.31 117.82 Offsite	0.74	5.29411* 0.01 28.84	PF 1 2392.17 821.04
820.33 124.03 Offsite	0.70	5.23529* 0.01 33.83	PF 1 2387.17 821.03
820.36 129.97 Offsite	0.66	5.17647* 0.01 38.98	PF 1 2382.03 821.02
820.38 136.53 Offsite	0.62	5.11764* 0.01 45.36	PF 1 2375.64 821.00
820.40 143.94 Offsite	0.59	5.05882* 0.01 51.18	PF 1 2369.82 820.99
820.42 151.03 Offsite	0.56	5 0.05 57.70	PF 1 2363.30 820.98
820.52 188.26 Offsite	0.40	4.5* 0.03 102.49	PF 1 2318.51 820.93
Offsite		4	PF 1 820.89

		CPNPPLocalPMP					
820.60	0.29	0.00	0.03	168.97	2252.03		
208.55							
Offsite		Offsite	3.5*		PF 1		820.86
820.67	0.19	0.00	0.02	210.09	2210.91		
235.24							
Offsite		Offsite	3		PF 1		820.84
820.70	0.14	0.00	0.00	236.29	2184.71		
239.97							
Offsite		Offsite	2.91666*		PF 1		820.84
820.70	0.14	0.00	0.00	170.34	2250.66		
240.33							
Offsite		Offsite	2.83333*		PF 1		820.84
820.71	0.13	0.00	0.00	133.51	2287.49		
242.05							
Offsite		Offsite	2.75*		PF 1		820.83
820.71	0.12	0.00	0.00	100.79	2320.21		
243.10							
Offsite		Offsite	2.66666*		PF 1		820.83
820.72	0.11	0.00	0.00	73.46	2347.55		
244.12							
Offsite		Offsite	2.58333*		PF 1		820.83
820.73	0.10	0.00	0.00	52.07	2368.93		
244.01							
Offsite		Offsite	2.5*		PF 1		820.82
820.74	0.08	0.00	0.00	36.20	2384.80		
243.00							
Offsite		Offsite	2.41666*		PF 1		820.82
820.75	0.07	0.00	0.00	24.88	2396.12		
228.68							
Offsite		Offsite	2.33333*		PF 1		820.82
820.76	0.06	0.00	0.00	17.82	2403.18		
230.10							
Offsite		Offsite	2.25*		PF 1		820.81
820.76	0.05	0.00	0.00	12.69	2408.31		
232.82							
Offsite		Offsite	2.16666*		PF 1		820.81
820.77	0.04	0.00	0.00	8.80	2412.20		
236.48							
Offsite		Offsite	2.08333*		PF 1		820.81
820.77	0.03	0.00	0.00	5.73	2415.27		
240.75							
Offsite		Offsite	2		PF 1		820.81
820.78	0.03			2.99	2418.01		
245.55							
Offsite		Offsite	1.5			Inl Struct	
Offsite		Offsite	1		PF 1		819.47
818.69	0.78				2421.00		
219.88							
East Channel		East Channel	7		PF 1		822.05
821.72	0.33			5.91	207.09		
72.56							
East Channel		East Channel	6.98684*		PF 1		822.04
821.62	0.41	0.01	0.01	7.49	205.51		
72.56							
East Channel		East Channel	6.97368*		PF 1		822.00
821.64	0.37	0.01	0.01	7.58	205.42		
72.56							
East Channel		East Channel	6.96052*		PF 1		821.99
821.56	0.43	0.01	0.01	7.98	205.02		
72.56							
East Channel		East Channel	6.94736*		PF 1		821.98
821.51	0.47	0.01	0.00	8.28	204.72		

				CPNPPLocalPMP			
72.56	East Channel	East Channel	6.93421*	PF 1	821.92		
821.58	0.34	0.01	0.04	8.28	204.72		
72.56	East Channel	East Channel	6.92105*	PF 1	821.91		
821.49	0.41	0.01	0.01	8.65	204.35		
72.56	East Channel	East Channel	6.90789*	PF 1	821.87		
821.51	0.37	0.01	0.01	8.92	204.08		
72.56	East Channel	East Channel	6.89473*	PF 1	821.86		
821.43	0.43	0.01	0.01	9.11	203.89	0.00	
72.55	East Channel	East Channel	6.88157*	PF 1	821.85		
821.38	0.47	0.01	0.00	9.34	203.66	0.00	
72.55	East Channel	East Channel	6.86842*	PF 1	821.79		
821.45	0.34	0.01	0.04	9.49	203.51	0.00	
72.55	East Channel	East Channel	6.85526*	PF 1	821.78		
821.36	0.41	0.01	0.01	9.59	203.41	0.00	
72.55	East Channel	East Channel	6.84210*	PF 1	821.76		
821.32	0.44	0.01	0.00	9.73	203.27	0.00	
72.55	East Channel	East Channel	6.82894*	PF 1	821.72		
821.36	0.36	0.01	0.02	9.99	203.01	0.00	
72.55	East Channel	East Channel	6.81579*	PF 1	821.69		
821.30	0.40	0.01	0.00	9.93	203.07	0.00	
72.55	East Channel	East Channel	6.80263*	PF 1	821.67		
821.30	0.36	0.01	0.01	10.18	202.82		
72.55	East Channel	East Channel	6.78947*	PF 1	821.66		
821.22	0.43	0.01	0.01	10.23	202.77		
72.55	East Channel	East Channel	6.77631*	PF 1	821.65		
821.17	0.48	0.01	0.00	9.97	203.03		
72.55	East Channel	East Channel	6.76315*	PF 1	821.59		
821.25	0.34	0.01	0.04	10.42	202.58		
72.55	East Channel	East Channel	6.75*	PF 1	821.57		
821.16	0.42	0.01	0.01	10.23	202.77		
72.55	East Channel	East Channel	6.73684*	PF 1	821.55		
821.11	0.44	0.01	0.00	9.89	203.11		
72.55	East Channel	East Channel	6.72368*	PF 1	821.51		
821.15	0.36	0.01	0.02	10.26	202.74		
72.55	East Channel	East Channel	6.71052*	PF 1	821.49		
821.09	0.40	0.01	0.00	10.03	202.97		
72.55	East Channel	East Channel	6.69736*	PF 1	821.48		
821.03	0.45	0.01	0.01	9.47	203.53	0.00	
72.54	East Channel	East Channel	6.68421*	PF 1	821.44		
821.08	0.36	0.01	0.03	9.98	203.02	0.00	
72.54	East Channel	East Channel	6.67105*	PF 1	821.42		
821.02	0.40	0.01	0.00	9.60	203.40	0.00	

				CPNPPLocalPMP			
72.54							
821.02	East Channel	East Channel	0.01	6.65789*	9.60	PF 1	821.39
72.54	0.38	0.01		0.01		203.40	0.00
820.94	East Channel	East Channel	0.01	6.64473*	9.00	PF 1	821.38
72.54	0.44	0.01		0.01		204.00	0.00
820.89	East Channel	East Channel	0.01	6.63157*	8.51	PF 1	821.38
72.54	0.49	0.01		0.00		204.49	0.00
820.86	East Channel	East Channel	0.01	6.61842*	8.19	PF 1	821.37
72.54	0.51	0.01		0.00		204.81	0.00
820.81	East Channel	East Channel	0.01	6.60526*	7.87	PF 1	821.35
72.14	0.54	0.01		0.00		205.13	
820.77	East Channel	East Channel	0.01	6.59210*	7.60	PF 1	821.34
71.73	0.57	0.01		0.00		205.40	
820.76	East Channel	East Channel	0.01	6.57894*	7.50	PF 1	821.32
71.56	0.56	0.01		0.00		205.50	
820.72	East Channel	East Channel	0.01	6.56579*	7.26	PF 1	821.31
71.20	0.59	0.01		0.00		205.74	
820.70	East Channel	East Channel	0.01	6.55263*	7.35	PF 1	821.28
71.08	0.58	0.01		0.00		205.65	
820.66	East Channel	East Channel	0.01	6.53947*	6.93	PF 1	821.27
70.70	0.60	0.01		0.00		206.07	
820.63	East Channel	East Channel	0.02	6.52631*	6.78	PF 1	821.24
70.45	0.61	0.02		0.00		206.22	
820.62	East Channel	East Channel	0.02	6.51315*	6.87	PF 1	821.22
70.33	0.60	0.02		0.00		206.13	
820.58	East Channel	East Channel	0.02	6.5*	6.54	PF 1	821.19
70.03	0.61	0.02		0.00		206.46	
820.55	East Channel	East Channel	0.02	6.48684*	6.41	PF 1	821.17
69.80	0.62	0.02		0.00		206.59	0.00
820.54	East Channel	East Channel	0.02	6.47368*	6.49	PF 1	821.14
69.69	0.61	0.02		0.00		206.51	0.00
820.51	East Channel	East Channel	0.01	6.46052*	6.20	PF 1	821.12
69.41	0.61	0.01		0.00		206.80	0.00
820.47	East Channel	East Channel	0.02	6.44736*	6.03	PF 1	821.10
69.15	0.63	0.02		0.00		206.97	0.00
820.46	East Channel	East Channel	0.02	6.43421*	6.12	PF 1	821.08
69.05	0.62	0.02		0.00		206.88	0.00
820.42	East Channel	East Channel	0.02	6.42105*	5.85	PF 1	821.06
68.76	0.64	0.02		0.00		207.15	0.00
820.41	East Channel	East Channel	0.02	6.40789*	5.93	PF 1	821.03
68.66	0.63	0.02		0.00		207.07	0.00
820.37	East Channel	East Channel	0.02	6.39473*	5.82	PF 1	821.01
	0.64	0.02		0.00		207.18	

				CPNPPLocalPMP			
68.44	East Channel	East Channel	6.38157*	PF 1	820.99		
820.34	0.65	0.02	0.00	5.55	207.45		
68.17	East Channel	East Channel	6.36842*	PF 1	820.97		
820.32	0.64	0.02	0.00	5.63	207.37		
68.07	East Channel	East Channel	6.35526*	PF 1	820.95		
820.29	0.66	0.02	0.00	5.52	207.48		
67.86	East Channel	East Channel	6.34210*	PF 1	820.93		
820.26	0.67	0.02	0.00	5.25	207.75		
67.60	East Channel	East Channel	6.32894*	PF 1	820.90		
820.24	0.66	0.02	0.00	5.33	207.67		
67.50	East Channel	East Channel	6.31579*	PF 1	820.88		
820.21	0.67	0.02	0.00	5.20	207.80		
67.30	East Channel	East Channel	6.30263*	PF 1	820.86		
820.19	0.67	0.02	0.00	5.14	207.86		
67.14	East Channel	East Channel	6.28947*	PF 1	820.84		
820.16	0.68	0.02	0.00	5.01	207.99		0.00
66.94	East Channel	East Channel	6.27631*	PF 1	820.82		
820.13	0.69	0.02	0.00	4.89	208.11		0.00
66.75	East Channel	East Channel	6.26315*	PF 1	820.79		
820.11	0.69	0.02	0.00	4.83	208.17		0.00
66.59	East Channel	East Channel	6.25*	PF 1	820.77		
820.08	0.70	0.02	0.00	4.70	208.30		0.00
66.40	East Channel	East Channel	6.23684*	PF 1	820.75		
820.04	0.71	0.02	0.00	4.59	208.41		0.00
66.22	East Channel	East Channel	6.22368*	PF 1	820.73		
820.02	0.71	0.02	0.00	4.53	208.47		0.00
66.06	East Channel	East Channel	6.21052*	PF 1	820.71		
819.99	0.72	0.02	0.00	4.45	208.55		0.00
65.87	East Channel	East Channel	6.19736*	PF 1	820.69		
819.96	0.73	0.02	0.00	4.41	208.59		
65.69	East Channel	East Channel	6.18421*	PF 1	820.67		
819.94	0.73	0.02	0.00	4.38	208.62		
65.54	East Channel	East Channel	6.17105*	PF 1	820.65		
819.91	0.74	0.02	0.00	4.33	208.67		
65.36	East Channel	East Channel	6.15789*	PF 1	820.63		
819.89	0.74	0.02	0.00	4.38	208.62		
65.25	East Channel	East Channel	6.14473*	PF 1	820.61		
819.86	0.75	0.02	0.00	4.27	208.73		
65.03	East Channel	East Channel	6.13157*	PF 1	820.59		
819.83	0.76	0.02	0.00	4.22	208.78		
64.85	East Channel	East Channel	6.11842*	PF 1	820.57		
819.81	0.76	0.02	0.00	4.26	208.74		

				CPNPPLocalPMP			
64.74	East Channel	East Channel	6.10526*	PF 1		820.54	
819.78	0.76	0.02	0.00 4.17	208.83			
64.55	East Channel	East Channel	6.09210*	PF 1		820.52	
819.75	0.77	0.02	0.00 4.13	208.87		0.00	
64.38	East Channel	East Channel	6.07894*	PF 1		820.50	
819.73	0.77	0.02	0.00 4.16	208.84		0.00	
64.26	East Channel	East Channel	6.06579*	PF 1		820.47	
819.70	0.77	0.02	0.00 4.08	208.92		0.00	
64.07	East Channel	East Channel	6.05263*	PF 1		820.45	
819.68	0.77	0.02	0.00 4.11	208.89		0.00	
63.96	East Channel	East Channel	6.03947*	PF 1		820.42	
819.65	0.77	0.02	0.00 4.09	208.91		0.00	
63.81	East Channel	East Channel	6.02631*	PF 1		820.39	
819.62	0.77	0.02	0.00 4.03	208.97		0.00	
63.62	East Channel	East Channel	6.01315*	PF 1		820.37	
819.60	0.77	0.02	0.00 4.06	208.94		0.00	
63.51	East Channel	East Channel	6	PF 1		820.35	
819.57	0.78	0.02	0.00 4.03	208.97			
63.34	East Channel	East Channel	5.8*	PF 1		820.25	
819.45	0.79	0.10	0.00 2.18	210.82			
62.74	East Channel	East Channel	5.6*	PF 1		820.15	
819.37	0.78	0.10	0.00 1.26	211.74			
62.33	East Channel	East Channel	5.4*	PF 1		820.05	
819.33	0.72	0.09	0.02 0.83	212.17		0.00	
62.11	East Channel	East Channel	5.2*	PF 1		819.95	
819.33	0.61	0.07	0.03 0.77	212.23		0.00	
62.14	East Channel	East Channel	5	PF 1		819.85	
819.44	0.41	0.04	0.06 1.17	211.83			
62.67	East Channel	East Channel	4.94444*	PF 1		819.83	
819.28	0.55	0.01	0.01 0.89	212.11			
64.44	East Channel	East Channel	4.88888*	PF 1		819.81	
819.18	0.62	0.01	0.01 0.79	212.21			
66.43	East Channel	East Channel	4.83333*	PF 1		819.79	
819.10	0.70	0.02	0.01 0.75	212.25			
68.43	East Channel	East Channel	4.77777*	PF 1		819.77	
819.02	0.74	0.02	0.00 0.68	212.32			
70.41	East Channel	East Channel	4.72222*	PF 1		819.74	
818.95	0.79	0.02	0.00 0.65	212.35		0.00	
72.42	East Channel	East Channel	4.66666*	PF 1		819.71	
818.88	0.82	0.02	0.00 0.62	212.38			
74.42	East Channel	East Channel	4.61111*	PF 1		819.67	
818.81	0.86	0.03	0.00 0.60	212.40		0.00	

				CPNPPLocalPMP			
76.41	East Channel	East Channel	4.55555*	PF 1	819.63		
818.75	0.88	0.03	0.00	0.58	212.42		
78.44	East Channel	East Channel	4.5*	PF 1	819.59		
818.70	0.90	0.03	0.00	0.63	212.37		0.00
80.50	East Channel	East Channel	4.44444*	PF 1	819.55		
818.63	0.91	0.03	0.00	0.66	212.34		
82.55	East Channel	East Channel	4.38888*	PF 1	819.51		
818.58	0.93	0.04	0.00	0.65	212.35		
84.57	East Channel	East Channel	4.33333*	PF 1	819.46		
818.52	0.95	0.04	0.00	0.67	212.33		
86.60	East Channel	East Channel	4.27777*	PF 1	819.43		
818.46	0.97	0.04	0.00	0.66	212.34		
88.61	East Channel	East Channel	4.22222*	PF 1	819.38		
818.40	0.98	0.04	0.00	0.70	212.30		
90.67	East Channel	East Channel	4.16666*	PF 1	819.32		
818.36	0.96	0.05	0.00	0.78	212.22		
92.79	East Channel	East Channel	4.11111*	PF 1	819.28		
818.30	0.98	0.05	0.00	0.83	212.17		
94.84	East Channel	East Channel	4.05555*	PF 1	819.23		
818.25	0.98	0.05	0.00	0.84	212.16		
96.87	East Channel	East Channel	4	PF 1	819.18		
818.19	0.99	0.05	0.00	0.91	212.09		
98.94	East Channel	East Channel	3.95652*	PF 1	819.11		
817.99	1.12	0.06	0.01		210.90		2.10
94.81	East Channel	East Channel	3.91304*	PF 1	819.04		
817.76	1.28	0.06	0.02		213.00		
74.51	East Channel	East Channel	3.86956*	PF 1	818.96		
817.50	1.46	0.06	0.02		213.00		
62.92	East Channel	East Channel	3.82608*	PF 1	818.89		
817.23	1.66	0.06	0.02		213.00		
53.61	East Channel	East Channel	3.78260*	PF 1	818.82		
816.95	1.86	0.06	0.02		213.00		
46.89	East Channel	East Channel	3.73913*	PF 1	818.74		
816.66	2.07	0.06	0.02		213.00		
41.74	East Channel	East Channel	3.69565*	PF 1	818.66		
816.37	2.29	0.06	0.02		213.00		
37.58	East Channel	East Channel	3.65217*	PF 1	818.58		
816.07	2.51	0.06	0.02		213.00		
34.28	East Channel	East Channel	3.60869*	PF 1	818.50		
815.77	2.73	0.06	0.02		213.00		
31.54	East Channel	East Channel	3.56521*	PF 1	818.42		
815.46	2.96	0.06	0.02		213.00		

				CPNPPLocalPMP		
29.20						
815.15	East Channel	3.19	East Channel	3.52173*	PF 1	818.34
27.18			0.07	0.02	213.00	
814.83	East Channel	3.42	East Channel	3.47826*	PF 1	818.25
25.38			0.07	0.02	213.00	
814.52	East Channel	3.64	East Channel	3.43478*	PF 1	818.16
23.86			0.07	0.02	213.00	
814.21	East Channel	3.86	East Channel	3.39130*	PF 1	818.07
22.49			0.07	0.02	213.00	
813.89	East Channel	4.09	East Channel	3.34782*	PF 1	817.98
21.28			0.07	0.02	213.00	
813.57	East Channel	4.31	East Channel	3.30434*	PF 1	817.89
20.20			0.07	0.02	213.00	
813.25	East Channel	4.53	East Channel	3.26087*	PF 1	817.79
19.21			0.08	0.02	213.00	
812.94	East Channel	4.76	East Channel	3.21739*	PF 1	817.69
18.31			0.08	0.02	213.00	
815.17	East Channel	0.07	East Channel	3.17391*	PF 1	815.24
50.10			0.00	0.00	213.00	
815.18	East Channel	0.06	East Channel	3.13043*	PF 1	815.24
51.07			0.00	0.00	213.00	
815.18	East Channel	0.05	East Channel	3.08695*	PF 1	815.23
51.83			0.00	0.00	213.00	
815.19	East Channel	0.04	East Channel	3.04347*	PF 1	815.23
52.19			0.00	0.02	213.00	
814.92	East Channel	0.28	East Channel	3	PF 1	815.21
50.14			0.00	0.00	545.00	
814.93	East Channel	0.27	East Channel	2.98666*	PF 1	815.20
50.59			0.00	0.00	545.00	
814.93	East Channel	0.26	East Channel	2.97333*	PF 1	815.20
51.09			0.00	0.00	545.00	
814.94	East Channel	0.26	East Channel	2.96*	PF 1	815.19
51.54			0.00	0.00	545.00	
814.94	East Channel	0.25	East Channel	2.94666*	PF 1	815.19
51.88			0.00	0.00	545.00	
814.95	East Channel	0.24	East Channel	2.93333*	PF 1	815.19
52.26			0.00	0.00	545.00	
814.95	East Channel	0.23	East Channel	2.92*	PF 1	815.19
52.60			0.00	0.00	545.00	
814.96	East Channel	0.23	East Channel	2.90666*	PF 1	815.18
52.97			0.00	0.00	545.00	
814.96	East Channel	0.22	East Channel	2.89333*	PF 1	815.18
			0.00	0.00	545.00	

				CPNPPLocalPMP		
53.34	East Channel	East Channel	2.88*	PF 1	815.18	
814.97	0.21	0.00	0.00	545.00		
53.68	East Channel	East Channel	2.86666*	PF 1	815.18	
814.97	0.21	0.00	0.00	545.00		
54.02	East Channel	East Channel	2.85333*	PF 1	815.17	
814.97	0.20	0.00	0.00	545.00		
54.42	East Channel	East Channel	2.84*	PF 1	815.17	
814.98	0.19	0.00	0.00	545.00		
54.76	East Channel	East Channel	2.82666*	PF 1	815.17	
814.98	0.19	0.00	0.00	545.00		
55.12	East Channel	East Channel	2.81333*	PF 1	815.17	
814.99	0.18	0.00	0.00	545.00		
55.47	East Channel	East Channel	2.8*	PF 1	815.17	
814.99	0.18	0.00	0.00	545.00		
55.80	East Channel	East Channel	2.78666*	PF 1	815.16	
814.99	0.17	0.00	0.00	545.00		
56.19	East Channel	East Channel	2.77333*	PF 1	815.16	
814.99	0.17	0.00	0.00	545.00		
56.52	East Channel	East Channel	2.76*	PF 1	815.16	
815.00	0.16	0.00	0.00	545.00		
56.87	East Channel	East Channel	2.74666*	PF 1	815.16	
815.00	0.16	0.00	0.00	545.00		
57.22	East Channel	East Channel	2.73333*	PF 1	815.16	
815.00	0.15	0.00	0.00	545.00		
57.59	East Channel	East Channel	2.72*	PF 1	815.16	
815.01	0.15	0.00	0.00	545.00		
57.92	East Channel	East Channel	2.70666*	PF 1	815.15	
815.01	0.15	0.00	0.00	545.00		
58.28	East Channel	East Channel	2.69333*	PF 1	815.15	
815.01	0.14	0.00	0.00	545.00		
58.63	East Channel	East Channel	2.68*	PF 1	815.15	
815.01	0.14	0.00	0.00	545.00		
58.98	East Channel	East Channel	2.66666*	PF 1	815.15	
815.02	0.14	0.00	0.00	545.00		
59.33	East Channel	East Channel	2.65333*	PF 1	815.15	
815.02	0.13	0.00	0.00	545.00		
59.67	East Channel	East Channel	2.64*	PF 1	815.15	
815.02	0.13	0.00	0.00	545.00		
60.01	East Channel	East Channel	2.62666*	PF 1	815.15	
815.02	0.12	0.00	0.00	545.00		
60.36	East Channel	East Channel	2.61333*	PF 1	815.15	
815.02	0.12	0.00	0.00	545.00		

				CPNPPLocalPMP		
60.72	East Channel	East Channel	2.6*	PF 1	815.14	
815.03	0.12	0.00	0.00	545.00		
61.05	East Channel	East Channel	2.58666*	PF 1	815.14	
815.03	0.12	0.00	0.00	545.00		
61.40	East Channel	East Channel	2.57333*	PF 1	815.14	
815.03	0.11	0.00	0.00	545.00		
61.75	East Channel	East Channel	2.56*	PF 1	815.14	
815.03	0.11	0.00	0.00	545.00		
62.12	East Channel	East Channel	2.54666*	PF 1	815.14	
815.03	0.11	0.00	0.00	545.00		
62.45	East Channel	East Channel	2.53333*	PF 1	815.14	
815.04	0.10	0.00	0.00	545.00		
62.79	East Channel	East Channel	2.52*	PF 1	815.14	
815.04	0.10	0.00	0.00	545.00		
63.14	East Channel	East Channel	2.50666*	PF 1	815.14	
815.04	0.10	0.00	0.00	545.00		
63.49	East Channel	East Channel	2.49333*	PF 1	815.14	
815.04	0.10	0.00	0.00	545.00		
63.83	East Channel	East Channel	2.48*	PF 1	815.14	
815.04	0.10	0.00	0.00	545.00		
64.17	East Channel	East Channel	2.46666*	PF 1	815.14	
815.04	0.09	0.00	0.00	545.00		
64.51	East Channel	East Channel	2.45333*	PF 1	815.14	
815.04	0.09	0.00	0.00	545.00		
64.85	East Channel	East Channel	2.44*	PF 1	815.13	
815.05	0.09	0.00	0.00	545.00		
65.22	East Channel	East Channel	2.42666*	PF 1	815.13	
815.05	0.09	0.00	0.00	545.00		
65.54	East Channel	East Channel	2.41333*	PF 1	815.13	
815.05	0.08	0.00	0.00	545.00		
65.89	East Channel	East Channel	2.4*	PF 1	815.13	
815.05	0.08	0.00	0.00	545.00		
66.24	East Channel	East Channel	2.38666*	PF 1	815.13	
815.05	0.08	0.00	0.00	545.00		
66.58	East Channel	East Channel	2.37333*	PF 1	815.13	
815.05	0.08	0.00	0.00	545.00		
66.93	East Channel	East Channel	2.36*	PF 1	815.13	
815.05	0.08	0.00	0.00	545.00		
67.27	East Channel	East Channel	2.34666*	PF 1	815.13	
815.05	0.08	0.00	0.00	545.00		
67.60	East Channel	East Channel	2.33333*	PF 1	815.13	
815.06	0.07	0.00	0.00	545.00		

				CPNPPLocalPMP		
67.96	East Channel	East Channel	2.32*	PF 1	815.13	
815.06	0.07	0.00	0.00	545.00		
68.30	East Channel	East Channel	2.30666*	PF 1	815.13	
815.06	0.07	0.00	0.00	545.00		
68.62	East Channel	East Channel	2.29333*	PF 1	815.13	
815.06	0.07	0.00	0.00	545.00		
68.99	East Channel	East Channel	2.28*	PF 1	815.13	
815.06	0.07	0.00	0.00	545.00		
69.31	East Channel	East Channel	2.26666*	PF 1	815.13	
815.06	0.07	0.00	0.00	545.00		
69.66	East Channel	East Channel	2.25333*	PF 1	815.13	
815.06	0.06	0.00	0.00	545.00		
70.02	East Channel	East Channel	2.24*	PF 1	815.13	
815.06	0.06	0.00	0.00	545.00		
70.35	East Channel	East Channel	2.22666*	PF 1	815.13	
815.06	0.06	0.00	0.00	545.00		
70.68	East Channel	East Channel	2.21333*	PF 1	815.12	
815.06	0.06	0.00	0.00	545.00		
71.05	East Channel	East Channel	2.2*	PF 1	815.12	
815.06	0.06	0.00	0.00	545.00		
71.38	East Channel	East Channel	2.18666*	PF 1	815.12	
815.07	0.06	0.00	0.00	545.00		
71.71	East Channel	East Channel	2.17333*	PF 1	815.12	
815.07	0.06	0.00	0.00	545.00		
72.07	East Channel	East Channel	2.16*	PF 1	815.12	
815.07	0.06	0.00	0.00	545.00		
72.41	East Channel	East Channel	2.14666*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		
72.73	East Channel	East Channel	2.13333*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		
73.10	East Channel	East Channel	2.12*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		
73.43	East Channel	East Channel	2.10666*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		
73.75	East Channel	East Channel	2.09333*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		
74.13	East Channel	East Channel	2.08*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		
74.46	East Channel	East Channel	2.06666*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		
74.78	East Channel	East Channel	2.05333*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		

				CPNPPLocalPMP		
75.14	East Channel	East Channel	2.04*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		
75.48	East Channel	East Channel	2.02666*	PF 1	815.12	
815.07	0.05	0.00	0.00	545.00		
75.81	East Channel	East Channel	2.01333*	PF 1	815.12	
815.07	0.04	0.00	0.00	545.00		
76.17	East Channel	East Channel	2	PF 1	815.12	
815.07	0.04	0.00	0.00	545.00		
76.50	East Channel	East Channel	1.98630*	PF 1	815.12	
815.08	0.04	0.00	0.00	545.00		
77.43	East Channel	East Channel	1.97260*	PF 1	815.12	
815.08	0.04	0.00	0.00	545.00		
78.33	East Channel	East Channel	1.95890*	PF 1	815.12	
815.08	0.04	0.00	0.00	545.00		
79.26	East Channel	East Channel	1.94520*	PF 1	815.12	
815.08	0.04	0.00	0.00	545.00		
80.19	East Channel	East Channel	1.93150*	PF 1	815.12	
815.08	0.04	0.00	0.00	545.00		
81.12	East Channel	East Channel	1.91780*	PF 1	815.12	
815.08	0.04	0.00	0.00	545.00		
82.01	East Channel	East Channel	1.90411*	PF 1	815.12	
815.08	0.04	0.00	0.00	545.00		
82.95	East Channel	East Channel	1.89041*	PF 1	815.12	
815.08	0.03	0.00	0.00	545.00		
83.88	East Channel	East Channel	1.87671*	PF 1	815.12	
815.08	0.03	0.00	0.00	545.00		
84.81	East Channel	East Channel	1.86301*	PF 1	815.12	
815.08	0.03	0.00	0.00	545.00		
85.72	East Channel	East Channel	1.84931*	PF 1	815.12	
815.08	0.03	0.00	0.00	545.00		
86.65	East Channel	East Channel	1.83561*	PF 1	815.11	
815.08	0.03	0.00	0.00	545.00		
87.58	East Channel	East Channel	1.82191*	PF 1	815.11	
815.08	0.03	0.00	0.00	545.00		
88.51	East Channel	East Channel	1.80821*	PF 1	815.11	
815.09	0.03	0.00	0.00	545.00		
89.42	East Channel	East Channel	1.79452*	PF 1	815.11	
815.09	0.03	0.00	0.00	545.00		
90.35	East Channel	East Channel	1.78082*	PF 1	815.11	
815.09	0.03	0.00	0.00	545.00		
91.29	East Channel	East Channel	1.76712*	PF 1	815.11	
815.09	0.03	0.00	0.00	545.00		

				CPNPPLocalPMP		
92.21	East Channel	East Channel	1.75342*	PF 1	815.11	
815.09	0.03	0.00	0.00	545.00		
93.13	East Channel	East Channel	1.73972*	PF 1	815.11	
815.09	0.03	0.00	0.00	545.00		
94.08	East Channel	East Channel	1.72602*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
95.00	East Channel	East Channel	1.71232*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
95.94	East Channel	East Channel	1.69863*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
96.86	East Channel	East Channel	1.68493*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
97.79	East Channel	East Channel	1.67123*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
98.73	East Channel	East Channel	1.65753*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
99.65	East Channel	East Channel	1.64383*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
100.58	East Channel	East Channel	1.63013*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
101.53	East Channel	East Channel	1.61643*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
102.47	East Channel	East Channel	1.60274*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
103.37	East Channel	East Channel	1.58904*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
104.32	East Channel	East Channel	1.57534*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
105.27	East Channel	East Channel	1.56164*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
106.19	East Channel	East Channel	1.54794*	PF 1	815.11	
815.09	0.02	0.00	0.00	545.00		
107.12	East Channel	East Channel	1.53424*	PF 1	815.11	0.00
815.09	0.02	0.00	0.00	545.00		
109.46	East Channel	East Channel	1.52054*	PF 1	815.11	0.00
815.09	0.02	0.00	0.00	545.00		
112.14	East Channel	East Channel	1.50685*	PF 1	815.11	0.01
815.09	0.02	0.00	0.00	544.99		
114.80	East Channel	East Channel	1.49315*	PF 1	815.11	0.02
815.09	0.02	0.00	0.00	544.98		
116.90	East Channel	East Channel	1.47945*	PF 1	815.11	0.03
815.09	0.02	0.00	0.00	544.97		

				CPNPPLocalPMP		
119.48						
East Channel		East Channel		1.46575*	PF 1	815.11
815.09	0.02	0.00		0.00	544.95	0.05
122.00						
East Channel		East Channel		1.45205*	PF 1	815.11
815.09	0.01	0.00		0.00	544.92	0.08
124.31						
East Channel		East Channel		1.43835*	PF 1	815.11
815.10	0.01	0.00		0.00	544.90	0.10
126.35						
East Channel		East Channel		1.42465*	PF 1	815.11
815.10	0.01	0.00		0.00	544.86	0.14
128.75						
East Channel		East Channel		1.41095*	PF 1	815.11
815.10	0.01	0.00		0.00	544.81	0.19
131.10						
East Channel		East Channel		1.39726*	PF 1	815.11
815.10	0.01	0.00		0.00	544.76	0.24
133.44						
East Channel		East Channel		1.38356*	PF 1	815.11
815.10	0.01	0.00		0.00	544.72	0.28
135.43						
East Channel		East Channel		1.36986*	PF 1	815.11
815.10	0.01	0.00		0.00	544.66	0.34
137.42						
East Channel		East Channel		1.35616*	PF 1	815.11
815.10	0.01	0.00		0.00	544.59	0.41
139.65						
East Channel		East Channel		1.34246*	PF 1	815.11
815.10	0.01	0.00		0.00	544.51	0.49
141.85						
East Channel		East Channel		1.32876*	PF 1	815.11
815.10	0.01	0.00		0.00	544.45	0.55
143.79						
East Channel		East Channel		1.31506*	PF 1	815.11
815.10	0.01	0.00		0.00	544.36	0.64
145.93						
East Channel		East Channel		1.30137*	PF 1	815.11
815.10	0.01	0.00		0.00	544.26	0.74
148.05						
East Channel		East Channel		1.28767*	PF 1	815.11
815.10	0.01	0.00		0.00	544.20	0.80
149.63						
East Channel		East Channel		1.27397*	PF 1	815.11
815.10	0.01	0.00		0.00	544.09	0.91
151.69						
East Channel		East Channel		1.26027*	PF 1	815.11
815.10	0.01	0.00		0.00	543.98	1.02
153.73						
East Channel		East Channel		1.24657*	PF 1	815.11
815.10	0.01	0.00		0.00	543.86	1.14
155.74						
East Channel		East Channel		1.23287*	PF 1	815.11
815.10	0.01	0.00		0.00	543.77	1.23
157.61						
East Channel		East Channel		1.21917*	PF 1	815.11
815.10	0.01	0.00		0.00	543.64	1.36
159.59						
East Channel		East Channel		1.20548*	PF 1	815.11
815.10	0.01	0.00		0.00	543.53	1.47
161.15						
East Channel		East Channel		1.19178*	PF 1	815.11
815.10	0.01	0.00		0.00	543.39	1.61

				CPNPPLocalPMP			
163.07	East Channel	East Channel		1.17808*	PF 1		815.11
815.10	0.01	0.00		0.00		543.29	1.71
164.91	East Channel	East Channel		1.16438*	PF 1		815.11
815.10	0.01	0.00		0.00		543.14	1.86
166.79	East Channel	East Channel		1.15068*	PF 1		815.11
815.10	0.01	0.00		0.00		542.99	2.01
168.67	East Channel	East Channel		1.13698*	PF 1		815.11
815.10	0.01	0.00		0.00		542.83	2.17
170.50	East Channel	East Channel		1.12328*	PF 1		815.11
815.10	0.01	0.00		0.00		542.74	2.26
171.88	East Channel	East Channel		1.10959*	PF 1		815.11
815.10	0.01	0.00		0.00		542.58	2.42
173.71	East Channel	East Channel		1.09589*	PF 1		815.11
815.10	0.01	0.00		0.00		542.41	2.59
175.49	East Channel	East Channel		1.08219*	PF 1		815.11
815.10	0.01	0.00		0.00		542.24	2.76
177.22	East Channel	East Channel		1.06849*	PF 1		815.11
815.10	0.01	0.00		0.00		542.09	2.91
178.47	East Channel	East Channel		1.05479*	PF 1		815.11
815.10	0.01	0.00		0.00		541.87	3.13
179.38	East Channel	East Channel		1.04109*	PF 1		815.11
815.10	0.01	0.00		0.00		541.71	3.29
180.30	East Channel	East Channel		1.02739*	PF 1		815.11
815.10	0.01	0.00		0.00		541.49	3.51
181.22	East Channel	East Channel		1.01369*	PF 1		815.11
815.10	0.01	0.00		0.00		541.32	3.68
182.12	East Channel	East Channel		1	PF 1		815.11
815.10	0.01					541.10	3.90
183.04	Center South	Center South		8	PF 1		820.98
820.96	0.02	0.00		0.00 42.79		263.46	17.75
388.21	Center South	Center South		7.91666*	PF 1		820.98
820.96	0.02	0.00		0.00 23.53		284.28	16.18
374.82	Center South	Center South		7.83333*	PF 1		820.98
820.97	0.01	0.00		0.00 13.43		294.89	15.68
359.50	Center South	Center South		7.75*	PF 1		820.98
820.97	0.01	0.00		0.00 7.79		300.81	15.41
338.02	Center South	Center South		7.66666*	PF 1		820.98
820.97	0.01	0.00		0.00 4.96		303.53	15.51
310.19	Center South	Center South		7.58333*	PF 1		820.98
820.97	0.01	0.00		0.00 4.70		303.18	16.12
273.71	Center South	Center South		7.5*	PF 1		820.98
820.97	0.01	0.00		0.00 5.25		301.94	16.80

				CPNPPLocalPMP			
256.38							
Center South		Center South		7.41666*	PF 1	820.98	
820.97	0.01	0.00	0.00	5.04	301.10	17.87	
248.66							
Center South		Center South		7.33333*	PF 1	820.98	
820.97	0.01	0.00	0.00	5.01	299.55	19.44	
241.04							
Center South		Center South		7.25*	PF 1	820.98	
820.97	0.01	0.00	0.00	5.09	297.60	21.31	
233.85							
Center South		Center South		7.16666*	PF 1	820.98	
820.97	0.01	0.00	0.00	5.31	294.96	23.73	
226.80							
Center South		Center South		7.08333*	PF 1	820.98	
820.97	0.01	0.00	0.00	5.70	291.15	27.15	
219.99							
Center South		Center South		7	PF 1	820.98	
820.97	0.01	0.00	0.00	6.26	286.32	31.41	
213.17							
Center South		Center South		6	PF 1	820.97	
820.97	0.01	0.00	0.00	6.87	293.29	23.84	
248.54							
Center South		Center South		5	PF 1	820.97	
820.97	0.01	0.00	0.00	76.33	243.89	3.78	
302.02							
Center South		Center South		4.8*	PF 1	820.97	
820.97	0.00	0.00	0.00	55.92	264.51	3.57	
304.05							
Center South		Center South		4.6*	PF 1	820.97	
820.97	0.00	0.00	0.00	40.44	280.23	3.33	
306.62							
Center South		Center South		4.4*	PF 1	820.97	
820.97	0.00	0.00	0.00	29.51	291.47	3.02	
303.80							
Center South		Center South		4.2*	PF 1	820.97	
820.97	0.00	0.00	0.00	22.21	299.05	2.74	
303.55							
Center South		Center South		4	PF 1	820.97	
820.97	0.00	0.00	0.00	31.36	290.31	2.33	
302.59							
Center South		Center South		3	PF 1	820.97	
820.97	0.00	0.00	0.00	84.74	234.10	5.16	
409.55							
Center South		Center South		2	PF 1	820.97	
820.97	0.01		213.28		539.77	67.95	
490.41							
Center South		Center South		1.5		Inl Struct	
Center South		Center South		1	PF 1	820.86	
820.86	0.00				821.00		
490.41							
Center North		Center N Upper		13	PF 1	820.32	
820.08	0.23	0.00	0.00	0.07	51.77	0.16	
33.92							
Center North		Center N Upper		12.9821*	PF 1	820.31	
820.01	0.30	0.00	0.01		52.00	0.00	
27.30							
Center North		Center N Upper		12.9642*	PF 1	820.29	
819.96	0.33	0.00	0.00		52.00		
26.57							
Center North		Center N Upper		12.9464*	PF 1	820.25	
820.04	0.22	0.00	0.01		51.99	0.01	
29.20							

			CPNPP	Local	PMP		
Center North	Center N Upper	12.9285*	PF 1		820.24		
820.05 0.20	0.00 0.01		51.97		0.03		
30.00							
Center North	Center N Upper	12.9107*	PF 1		820.23		
820.05 0.18	0.00 0.01		51.96		0.04		
30.66							
Center North	Center N Upper	12.8928*	PF 1		820.22		
820.07 0.15	0.00 0.00		51.93		0.07		
31.76							
Center North	Center N Upper	12.875*	PF 1		820.22		
820.08 0.14	0.00 0.00		51.92		0.08		
32.28							
Center North	Center N Upper	12.8571*	PF 1		820.21		
820.08 0.13	0.00 0.00		51.91		0.09		
32.68							
Center North	Center N Upper	12.8392*	PF 1		820.21		
820.09 0.12	0.00 0.00		51.89		0.11		
33.32							
Center North	Center N Upper	12.8214*	PF 1		820.20		
820.09 0.11	0.00 0.00		51.88		0.12		
33.66							
Center North	Center N Upper	12.8035*	PF 1		820.20		
820.10 0.10	0.00 0.00		51.88		0.12		
33.99							
Center North	Center N Upper	12.7857*	PF 1		820.20		
820.10 0.10	0.00 0.00		51.87		0.13		
34.33							
Center North	Center N Upper	12.7678*	PF 1		820.19		
820.10 0.09	0.00 0.00		51.87		0.13		
34.75							
Center North	Center N Upper	12.75*	PF 1		820.19		
820.11 0.08	0.00 0.00		51.86		0.14		
35.02							
Center North	Center N Upper	12.7321*	PF 1		820.19		
820.11 0.08	0.00 0.00		51.86		0.14		
35.29							
Center North	Center N Upper	12.7142*	PF 1		820.19		
820.11 0.07	0.00 0.00		51.86		0.14		
35.63							
Center North	Center N Upper	12.6964*	PF 1		820.19		
820.12 0.07	0.00 0.00		51.85		0.15		
35.90							
Center North	Center N Upper	12.6785*	PF 1		820.19		
820.12 0.07	0.00 0.00		51.85		0.15		
36.14							
Center North	Center N Upper	12.6607*	PF 1		820.18		
820.12 0.07	0.00 0.00		51.85		0.15		
36.35							
Center North	Center N Upper	12.6428*	PF 1		820.18		
820.12 0.06	0.00 0.00		51.85		0.15		
36.62							
Center North	Center N Upper	12.625*	PF 1		820.18		
820.12 0.06	0.00 0.00		51.85		0.15		
36.83							
Center North	Center N Upper	12.6071*	PF 1		820.18		
820.12 0.06	0.00 0.00		51.85		0.15		
37.05							
Center North	Center N Upper	12.5892*	PF 1		820.18		
820.13 0.05	0.00 0.00		51.85		0.15		
37.30							
Center North	Center N Upper	12.5714*	PF 1		820.18		
820.13 0.05	0.00 0.00		51.85		0.15		
37.50							

			CPNPP	Local	PMP		
Center North	Center N Upper	12.5535*	PF 1		820.18		
820.13 0.05	0.00	0.00	51.85		0.15		
37.66							
Center North	Center N Upper	12.5357*	PF 1		820.18		
820.13 0.05	0.00	0.00	51.86		0.14		
37.86							
Center North	Center N Upper	12.5178*	PF 1		820.18		
820.13 0.05	0.00	0.00	51.86		0.14		
38.07							
Center North	Center N Upper	12.5*	PF 1		820.18		
820.13 0.04	0.00	0.00	51.86		0.14		
38.25							
Center North	Center N Upper	12.4821*	PF 1		820.17		
820.13 0.04	0.00	0.00	51.86		0.14		
38.42							
Center North	Center N Upper	12.4642*	PF 1		820.17		
820.13 0.04	0.00	0.00	51.86		0.14		
38.63							
Center North	Center N Upper	12.4464*	PF 1		820.17		
820.13 0.04	0.00	0.00	51.86		0.14		
38.79							
Center North	Center N Upper	12.4285*	PF 1		820.17		
820.13 0.04	0.00	0.00	51.86		0.14		
38.95							
Center North	Center N Upper	12.4107*	PF 1		820.17		
820.14 0.04	0.00	0.00	51.87		0.13		
39.12							
Center North	Center N Upper	12.3928*	PF 1		820.17		
820.14 0.04	0.00	0.00	51.87		0.13		
39.31							
Center North	Center N Upper	12.375*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.87		0.13		
39.48							
Center North	Center N Upper	12.3571*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.87		0.13		
39.65							
Center North	Center N Upper	12.3392*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.87		0.13		
39.80							
Center North	Center N Upper	12.3214*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.87		0.13		
39.96							
Center North	Center N Upper	12.3035*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.87		0.13		
40.12							
Center North	Center N Upper	12.2857*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.88		0.12		
40.28							
Center North	Center N Upper	12.2678*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.88		0.12		
40.45							
Center North	Center N Upper	12.25*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.88		0.12		
40.58							
Center North	Center N Upper	12.2321*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.88		0.12		
40.74							
Center North	Center N Upper	12.2142*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.88		0.12		
40.90							
Center North	Center N Upper	12.1964*	PF 1		820.17		
820.14 0.03	0.00	0.00	51.88		0.12		
41.05							

		CPNPP	Local	PMP		
Center North	Center N Upper	12.1785*	PF 1	820.17		
820.14 0.02	0.00	0.00	51.88	0.12		
41.20						
Center North	Center N Upper	12.1607*	PF 1	820.17		
820.14 0.02	0.00	0.00	51.89	0.11		
41.35						
Center North	Center N Upper	12.1428*	PF 1	820.17		
820.14 0.02	0.00	0.00	51.89	0.11		
41.49						
Center North	Center N Upper	12.125*	PF 1	820.17		
820.14 0.02	0.00	0.00	51.89	0.11		
41.64						
Center North	Center N Upper	12.1071*	PF 1	820.17		
820.14 0.02	0.00	0.00	51.89	0.11		
41.78						
Center North	Center N Upper	12.0892*	PF 1	820.17		
820.14 0.02	0.00	0.00	51.89	0.11		
41.94						
Center North	Center N Upper	12.0714*	PF 1	820.17		
820.14 0.02	0.00	0.00	51.89	0.11		
42.08						
Center North	Center N Upper	12.0535*	PF 1	820.17		
820.14 0.02	0.00	0.00	51.89	0.11		
42.23						
Center North	Center N Upper	12.0357*	PF 1	820.17		
820.14 0.02	0.00	0.00	51.90	0.10		
42.36						
Center North	Center N Upper	12.0178*	PF 1	820.17		
820.15 0.02	0.00	0.00	51.90	0.10		
42.51						
Center North	Center N Upper	12	PF 1	820.16		
820.15 0.02	0.00	0.00	51.90	0.10		
42.65						
Center North	Center N Upper	11.75*	PF 1	820.16		
820.15 0.01	0.00	0.00	51.91	0.09		
49.34						
Center North	Center N Upper	11.5*	PF 1	820.16		
820.15 0.01	0.00	0.00	51.92	0.08		
56.55						
Center North	Center N Upper	11.25*	PF 1	820.16		
820.15 0.01	0.00	0.00	51.92	0.08		
65.22						
Center North	Center N Upper	11	PF 1	820.16		
820.15 0.00	0.00	0.00	51.89	0.11		
79.89						
Center North	Center N Upper	10.8*	PF 1	820.16		
820.16 0.00	0.00	0.00	51.47	0.53		
106.11						
Center North	Center N Upper	10.6*	PF 1	820.16		
820.16 0.00	0.00	0.00	50.98	1.02		
125.19						
Center North	Center N Upper	10.4*	PF 1	820.16		
820.16 0.00	0.00	0.00	50.60	1.40		
139.69						
Center North	Center N Upper	10.2*	PF 1	820.16		
820.16 0.00	0.00	0.00	50.33	1.67		
150.99						
Center North	Center N Upper	10	PF 1	820.15		
820.12 0.03	0.00	0.00	419.90	22.10		
157.33						
Center North	Center N Upper	9.9875*	PF 1	820.15		
820.12 0.03	0.00	0.00	424.89	17.11		
156.42						

		CPNPPLoca1PMP				
Center North	Center N Upper	9.975*	PF 1	820.15		
820.12	0.00	0.00	0.00	425.13	16.87	
155.11						
Center North	Center N Upper	9.9625*	PF 1	820.15		
820.12	0.00	0.00	0.00	425.18	16.82	
154.28						
Center North	Center N Upper	9.95*	PF 1	820.15		
820.12	0.00	0.00	0.00	425.29	16.71	
153.45						
Center North	Center N Upper	9.9375*	PF 1	820.15		
820.12	0.00	0.00	0.00	425.51	16.49	
152.14						
Center North	Center N Upper	9.925*	PF 1	820.15		
820.12	0.00	0.00	0.00	425.55	16.45	
151.34						
Center North	Center N Upper	9.9125*	PF 1	820.15		
820.12	0.00	0.00	0.00	425.85	16.15	
149.97						
Center North	Center N Upper	9.9*	PF 1	820.15		
820.12	0.00	0.00	0.00	425.95	16.05	
149.21						
Center North	Center N Upper	9.8875*	PF 1	820.15		
820.12	0.00	0.00	0.00	425.99	16.01	
148.42						
Center North	Center N Upper	9.875*	PF 1	820.15		
820.11	0.00	0.00	0.00	426.29	15.70	
147.11						
Center North	Center N Upper	9.8625*	PF 1	820.15		
820.11	0.00	0.00	0.00	426.32	15.67	
146.32						
Center North	Center N Upper	9.85*	PF 1	820.15		
820.11	0.00	0.00	0.00	426.36	15.64	
145.54						
Center North	Center N Upper	9.8375*	PF 1	820.15		
820.11	0.00	0.00	0.00	426.63	15.37	
144.22						
Center North	Center N Upper	9.825*	PF 1	820.15		
820.11	0.00	0.00	0.00	426.70	15.30	
143.45						
Center North	Center N Upper	9.8125*	PF 1	820.15		
820.11	0.00	0.00	0.00	426.88	15.11	
142.12						
Center North	Center N Upper	9.8*	PF 1	820.15		
820.11	0.00	0.00	0.00	427.00	15.00	
141.37						
Center North	Center N Upper	9.7875*	PF 1	820.15		
820.11	0.00	0.00	0.00	427.04	14.96	
140.61						
Center North	Center N Upper	9.775*	PF 1	820.15		
820.11	0.00	0.00	0.00	427.25	14.75	
139.29						
Center North	Center N Upper	9.7625*	PF 1	820.15		
820.11	0.00	0.00	0.00	427.37	14.63	
138.55						
Center North	Center N Upper	9.75*	PF 1	820.15		
820.11	0.00	0.00	0.00	427.41	14.59	
137.79						
Center North	Center N Upper	9.7375*	PF 1	820.15		
820.11	0.00	0.00	0.00	427.68	14.32	
136.49						
Center North	Center N Upper	9.725*	PF 1	820.15		
820.11	0.00	0.00	0.00	427.70	14.30	
135.75						

		CPNPPLocalPMP			
Center North	Center N Upper	9.7125*	PF 1	820.15	
820.11 0.05	0.00	0.00 0.00	427.79	14.20	
134.99					
Center North	Center N Upper	9.7*	PF 1	820.15	
820.11 0.05	0.00	0.00 0.00	428.04	13.95	
133.71					
Center North	Center N Upper	9.6875*	PF 1	820.15	
820.11 0.05	0.00	0.00 0.00	428.10	13.90	
132.98					
Center North	Center N Upper	9.675*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	428.27	13.73	
131.70					
Center North	Center N Upper	9.6625*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	428.38	13.62	
130.96					
Center North	Center N Upper	9.65*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	428.42	13.58	
130.21					
Center North	Center N Upper	9.6375*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	428.60	13.39	
128.93					
Center North	Center N Upper	9.625*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	428.71	13.29	
128.20					
Center North	Center N Upper	9.6125*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	428.75	13.25	
127.47					
Center North	Center N Upper	9.6*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	428.91	13.09	
126.20					
Center North	Center N Upper	9.5875*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	429.02	12.98	
125.47					
Center North	Center N Upper	9.575*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	429.18	12.82	
124.20					
Center North	Center N Upper	9.5625*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	429.23	12.77	
123.48					
Center North	Center N Upper	9.55*	PF 1	820.15	
820.10 0.05	0.00	0.00 0.00	429.33	12.67	
122.74					
Center North	Center N Upper	9.5375*	PF 1	820.15	
820.10 0.06	0.00	0.00 0.00	429.50	12.50	
121.52					
Center North	Center N Upper	9.525*	PF 1	820.15	
820.10 0.06	0.00	0.00 0.00	429.59	12.41	
120.78					
Center North	Center N Upper	9.5125*	PF 1	820.15	
820.09 0.06	0.00	0.00 0.00	429.68	12.32	
120.05					
Center North	Center N Upper	9.5*	PF 1	820.15	
820.09 0.06	0.00	0.00 0.00	429.83	12.17	
118.83					
Center North	Center N Upper	9.4875*	PF 1	820.15	
820.09 0.06	0.00	0.00 0.00	429.89	12.11	
118.10					
Center North	Center N Upper	9.475*	PF 1	820.15	
820.09 0.06	0.00	0.00 0.00	430.09	11.91	
116.90					
Center North	Center N Upper	9.4625*	PF 1	820.15	
820.09 0.06	0.00	0.00 0.00	430.14	11.86	
116.16					

		CPNPPLocalPMP				
Center North	Center N Upper	9.45*	0.00	0.00	PF 1	820.15
820.09	0.06	0.00	0.00	0.00	430.19	11.81
115.44						
Center North	Center N Upper	9.4375*	0.00	0.00	PF 1	820.15
820.09	0.06	0.00	0.00	0.00	430.39	11.61
114.25						
Center North	Center N Upper	9.425*	0.00	0.00	PF 1	820.15
820.09	0.06	0.00	0.00	0.00	430.44	11.56
113.53						
Center North	Center N Upper	9.4125*	0.00	0.00	PF 1	820.15
820.09	0.06	0.00	0.00	0.00	430.53	11.47
112.79						
Center North	Center N Upper	9.4*	0.00	0.00	PF 1	820.15
820.09	0.06	0.00	0.00	0.00	430.69	11.31
111.63						
Center North	Center N Upper	9.3875*	0.00	0.00	PF 1	820.15
820.08	0.07	0.00	0.00	0.00	430.72	11.28
110.90						
Center North	Center N Upper	9.375*	0.00	0.00	PF 1	820.15
820.08	0.07	0.00	0.00	0.00	430.82	11.18
110.17						
Center North	Center N Upper	9.3625*	0.00	0.00	PF 1	820.15
820.08	0.07	0.00	0.00	0.00	430.96	11.04
109.02						
Center North	Center N Upper	9.35*	0.00	0.00	PF 1	820.15
820.08	0.07	0.00	0.00	0.00	431.02	10.98
108.30						
Center North	Center N Upper	9.3375*	0.00	0.00	PF 1	820.15
820.08	0.07	0.00	0.00	0.00	431.23	10.77
107.15						
Center North	Center N Upper	9.325*	0.00	0.00	PF 1	820.15
820.08	0.07	0.00	0.00	0.00	431.28	10.72
106.42						
Center North	Center N Upper	9.3125*	0.00	0.00	PF 1	820.15
820.08	0.07	0.00	0.00	0.00	431.32	10.68
105.69						
Center North	Center N Upper	9.3*	0.00	0.00	PF 1	820.15
820.08	0.07	0.00	0.00	0.00	431.52	10.48
104.58						
Center North	Center N Upper	9.2875*	0.00	0.00	PF 1	820.15
820.07	0.07	0.00	0.00	0.00	431.56	10.44
103.86						
Center North	Center N Upper	9.275*	0.00	0.00	PF 1	820.15
820.07	0.08	0.00	0.00	0.00	431.60	10.40
103.14						
Center North	Center N Upper	9.2625*	0.00	0.00	PF 1	820.15
820.07	0.08	0.00	0.00	0.00	431.77	10.23
102.01						
Center North	Center N Upper	9.25*	0.00	0.00	PF 1	820.15
820.07	0.08	0.00	0.00	0.00	431.83	10.17
101.29						
Center North	Center N Upper	9.2375*	0.00	0.00	PF 1	820.15
820.07	0.08	0.00	0.00	0.00	431.95	10.05
100.19						
Center North	Center N Upper	9.225*	0.00	0.00	PF 1	820.15
820.07	0.08	0.00	0.00	0.00	432.04	9.96
99.47						
Center North	Center N Upper	9.2125*	0.00	0.00	PF 1	820.15
820.07	0.08	0.00	0.00	0.00	432.10	9.90
98.76						
Center North	Center N Upper	9.2*	0.00	0.00	PF 1	820.15
820.07	0.08	0.00	0.00	0.00	432.22	9.78
97.66						

		CPNPPLocalPMP					
Center North	Center N Upper	9.1875*	PF 1	820.15			
820.06 0.08	0.00	0.00 0.00	432.31	9.69			
96.93							
Center North	Center N Upper	9.175*	PF 1	820.15			
820.06 0.09	0.00	0.00 0.00	432.35	9.64			
96.21							
Center North	Center N Upper	9.1625*	PF 1	820.15			
820.06 0.09	0.00	0.00 0.00	432.49	9.51			
95.14							
Center North	Center N Upper	9.15*	PF 1	820.15			
820.06 0.09	0.00	0.00 0.00	432.60	9.40			
94.42							
Center North	Center N Upper	9.1375*	PF 1	820.15			
820.06 0.09	0.00	0.00 0.00	432.65	9.35			
93.69							
Center North	Center N Upper	9.125*	PF 1	820.15			
820.06 0.09	0.00	0.00 0.00	432.80	9.20			
92.62							
Center North	Center N Upper	9.1125*	PF 1	820.15			
820.05 0.09	0.00	0.00 0.00	432.85	9.15			
91.90							
Center North	Center N Upper	9.1*	PF 1	820.15			
820.05 0.09	0.00	0.00 0.00	432.97	9.03			
90.85							
Center North	Center N Upper	9.0875*	PF 1	820.15			
820.05 0.10	0.00	0.00 0.00	433.04	8.95			
90.13							
Center North	Center N Upper	9.075*	PF 1	820.15			
820.05 0.10	0.00	0.00 0.00	433.09	8.91			
89.40							
Center North	Center N Upper	9.0625*	PF 1	820.15			
820.05 0.10	0.00	0.00 0.00	433.21	8.79			
88.37							
Center North	Center N Upper	9.05*	PF 1	820.15			
820.05 0.10	0.00	0.00 0.00	433.28	8.72			
87.65							
Center North	Center N Upper	9.0375*	PF 1	820.15			
820.04 0.10	0.00	0.00 0.00	433.32	8.68			
86.91							
Center North	Center N Upper	9.025*	PF 1	820.15			
820.04 0.10	0.00	0.00 0.00	433.42	8.58			
85.89							
Center North	Center N Upper	9.0125*	PF 1	820.15			
820.04 0.11	0.00	0.00 0.00	433.50	8.50			
85.17							
Center North	Center N Upper	9	PF 1	820.14			
820.04 0.10	0.01	0.01 0.00	426.80	15.20			
84.45							
Center North	Center N Upper	8	PF 1	820.12			
820.04 0.08	0.00	0.00 0.00	442.00	0.00			
50.22							
Center North	Center N Upper	7	PF 1	820.12			
820.04 0.07	0.00	0.00 0.00	442.00	0.00			
50.74							
Center North	Center N Upper	6	PF 1	820.11			
820.05 0.06	0.00	0.00 0.00	439.73	98.27			
88.77							
Center North	Center N Upper	5.833333*	PF 1	820.11			
820.04 0.06	0.00	0.00 0.00	465.28	72.72			
117.49							
Center North	Center N Upper	5.666666*	PF 1	820.10			
820.05 0.05	0.00	0.00 0.00	451.01	86.99			
164.43							

		CPNPPLocalPMP					
Center North	Center N Upper	5.5*		PF 1		820.10	
820.06	0.04	0.00	0.00	429.02		108.98	
260.00							
Center North	Center N Upper	5.333333*		PF 1		820.09	
820.07	0.03	0.00	0.00	378.21		159.79	
300.60							
Center North	Center N Upper	5.166666*		PF 1		820.09	
820.07	0.02	0.00	0.00	328.01		209.99	
340.91							
Center North	Center N Upper	5		PF 1		820.09	
820.08	0.01	0.00	0.00	200.10		337.90	
382.31							
Center North	Center N Branch	108		PF 1		820.10	
820.09	0.00	0.00	107.38	149.62		0.00	
166.14							
Center North	Center N Branch	107.8333*		PF 1		820.10	
820.09	0.01	0.00	79.80	177.20		0.00	
148.45							
Center North	Center N Branch	107.6666*		PF 1		820.10	
820.09	0.01	0.00	53.93	203.07		0.00	
130.16							
Center North	Center N Branch	107.5*		PF 1		820.10	
820.08	0.01	0.00	33.34	223.66		0.00	
104.01							
Center North	Center N Branch	107.3333*		PF 1		820.10	
820.08	0.02	0.00	17.88	239.12		0.00	
83.29							
Center North	Center N Branch	107.1666*		PF 1		820.09	
820.08	0.02	0.00	7.46	249.54		0.00	
68.27							
Center North	Center N Branch	107		PF 1		820.09	
820.07	0.02	0.00	1.76	255.24		0.00	
57.30							
Center North	Center N Branch	106		PF 1		820.09	
820.07	0.02	0.00	1.33	255.67		0.00	
57.85							
Center North	Center N Branch	105.5*		PF 1		820.09	
820.08	0.01	0.00	15.94	241.06		0.00	
96.62							
Center North	Center N Branch	105		PF 1		820.09	
820.08	0.01	0.00	65.24	191.76		0.00	
177.42							
Center North	Center N Lower	4		PF 1		820.08	
820.07	0.02	0.00	116.38	415.29		501.33	
435.51							
Center North	Center N Lower	3.5*		PF 1		820.08	
820.07	0.02	0.00	65.12	545.53		422.36	
537.06							
Center North	Center N Lower	3		PF 1		820.08	
820.07	0.01		22.61	531.11		614.29	
563.49							
Center North	Center N Lower	2.5			Inl Struct		
Center North	Center N Lower	2		PF 1		819.53	
819.47	0.06	0.00	0.12	950.31		217.57	
366.73							
Center North	Center N Lower	1		PF 1		819.52	
819.47	0.05		0.05	935.21		232.74	
202.81							

CPNPPLocalPMP

ERRORS WARNINGS AND NOTES

Errors Warnings and Notes for Plan : Plan 04

River: Center North Reach: Center N Upper RS: 13 Profile: PF 1
 Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.

Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

River: Center North Reach: Center N Upper RS: 12.9464* Profile: PF 1
 Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

River: Center North Reach: Center N Upper RS: 10.8* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 10.6* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 10.4* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 10.2* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 10 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.9875* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.975* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.9625* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.95* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.9375* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.925* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.9125* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.9* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.8875* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.875* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.8625* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

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channel.
River: Center North Reach: Center N Upper RS: 9.85* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.8375* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.825* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.8125* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.8* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.7875* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.775* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.7625* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.75* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.7375* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.725* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.7125* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.7* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.6875* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.675* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.6625* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.65* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.6375* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.625* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.6125* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.6* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

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channel.
River: Center North Reach: Center N Upper RS: 9.5875* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.575* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.5625* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.55* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.5375* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.525* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.5125* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.5* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.4875* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.475* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.4625* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.45* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.4375* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.425* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.4125* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.4* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.3875* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.375* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.3625* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.35* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.3375* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

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channel.
 River: Center North Reach: Center N Upper RS: 9.325* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.3125* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.3* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.2875* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.275* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.2625* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.25* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.2375* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.225* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.2125* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.2* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.1875* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.175* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.1625* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.15* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.1375* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.125* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.1125* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.1* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.0875* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Upper RS: 9.075* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

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channel.
River: Center North Reach: Center N Upper RS: 9.0625* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.05* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.0375* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.025* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9.0125* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 9 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 8 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 7 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 6 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 5.83333* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 5.66666* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 5.5* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 5.33333* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 5.16666* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Upper RS: 5 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Branch RS: 108 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Branch RS: 107.833* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Branch RS: 107.666* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Branch RS: 107.5* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Branch RS: 107.333* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.
River: Center North Reach: Center N Branch RS: 107.166* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

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channel.

River: Center North Reach: Center N Branch RS: 107 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Branch RS: 106 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Branch RS: 105.5* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Branch RS: 105 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Lower RS: 4 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Lower RS: 3.5* Profile: PF 1
 warning:Divided flow computed for this cross-section.
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Lower RS: 2 Profile: PF 1
 warning:Divided flow computed for this cross-section.
 Note: Manning's n values were composited to a single value in the main channel.

River: Center North Reach: Center N Lower RS: 1 Profile: PF 1
 warning:Divided flow computed for this cross-section.
 Note: Manning's n values were composited to a single value in the main channel.

River: Center South Reach: Center South RS: 6 Profile: PF 1
 warning:Divided flow computed for this cross-section.
 warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Center South Reach: Center South RS: 5 Profile: PF 1
 warning:Divided flow computed for this cross-section.
 warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Center South Reach: Center South RS: 4.8* Profile: PF 1
 warning:Divided flow computed for this cross-section.
 warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Center South Reach: Center South RS: 4.6* Profile: PF 1
 warning:Divided flow computed for this cross-section.
 warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Center South Reach: Center South RS: 4.4* Profile: PF 1
 warning:Divided flow computed for this cross-section.
 warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Center South Reach: Center South RS: 4.2* Profile: PF 1
 warning:Divided flow computed for this cross-section.
 warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Center South Reach: Center South RS: 4 Profile: PF 1
 warning:Divided flow computed for this cross-section.
 warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Center South Reach: Center South RS: 3 Profile: PF 1
 warning:Divided flow computed for this cross-section.
 warning:The cross-section end points had to be extended vertically for the computed water surface.

River: East Channel Reach: East Channel RS: 3.17391* Profile: PF 1
 Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

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River: Offsite Reach: Offsite RS: 6 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.94117* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.88235* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.82352* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.76470* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.70588* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.64705* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.58823* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.
 Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

River: Offsite Reach: Offsite RS: 5.52941* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.47058* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.41176* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.35294* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.29411* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.23529* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.17647* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.11764* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5.05882* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 5 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 4.5* Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 4 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 3.5* Profile: PF 1

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Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 3 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.91666* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.83333* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.75* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.66666* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.58333* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.5* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.41666* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.33333* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.25* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.16666* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 2.08333* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Offsite Reach: Offsite RS: 1 Profile: PF 1

Warning:Slope too steep for slope area to converge during supercritical flow calculations (normal depth is below critical depth).

River: Unit 3 East Reach: Unit 3 East RS: 4.53012* Profile: PF 1

Warning:The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.

Warning:During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

River: Unit 3 East Reach: Unit 3 East RS: 4.46988* Profile: PF 1

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

River: Unit 3 East Reach: Unit 3 East RS: 4.14457* Profile: PF 1

Warning:The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.

Warning:During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

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River: Unit 3 East Reach: Unit 3 East RS: 4.09638* Profile: PF 1
 Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

River: Unit 3 East Reach: Unit 3 East RS: 4.07228* Profile: PF 1
 Warning:The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.
 Warning:During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

River: Unit 3 East Reach: Unit 3 East RS: 4.02409* Profile: PF 1
 Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

River: Unit 3 East Reach: Unit 3 East RS: 4 Profile: PF 1
 Warning:The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.
 Warning:During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

River: Unit 3 East Reach: Unit 3 East RS: 3.98305* Profile: PF 1
 Note: Program found supercritical flow starting at this cross section.

River: Unit 3 East Reach: Unit 3 East RS: 3.05084* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 3.03389* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 3.01695* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 3 Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.97368* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.84210* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.
 Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

River: Unit 3 East Reach: Unit 3 East RS: 2.81578* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.78947* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.76315* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.73684* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.71052* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.68421* Profile: PF 1
 Warning:The cross-section end points had to be extended vertically for the

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computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.65789* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.63157* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.60526* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.57894* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.55263* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.52631* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.5* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.47368* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.44736* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.42105* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.39473* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.36842* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.34210* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.31579* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.28947* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.26315* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.23684* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.21052* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.18421* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.15789* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.13157* Profile: PF 1

Warning:The cross-section end points had to be extended vertically for the

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computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.10526* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.07894* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.05263* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 East Reach: Unit 3 East RS: 2.02631* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 North Reach: Unit 3 North RS: 4 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 North Reach: Unit 3 North RS: 3.5* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 North Reach: Unit 3 North RS: 3 Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 North Reach: Unit 3 North RS: 1 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 Southeast Reach: Unit 3 Southeast RS: 10 Profile: PF 1

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.

Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

River: Unit 3 Southeast Reach: Unit 3 Southeast RS: 9.92857* Profile: PF 1

Note: Program found supercritical flow starting at this cross section.

River: Unit 3 Southeast Reach: Unit 3 Southeast RS: 8.5* Profile: PF 1

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

River: Unit 3 Southeast Reach: Unit 3 Southeast RS: 4.33333* Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 Southeast Reach: Unit 3 Southeast RS: 4 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 Southeast Reach: Unit 3 Southeast RS: 3 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Branch RS: 108.411* Profile: PF 1

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

River: Unit 3 UHS Reach: U3 UHS Upper RS: 12 Profile: PF 1

Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth for the water surface and continued on with the calculations.

Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The program defaulted to critical depth.

River: Unit 3 UHS Reach: U3 UHS Upper RS: 11.875* Profile: PF 1

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Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 UHS Reach: U3 UHS Upper RS: 9 Profile: PF 1

Note: Hydraulic jump has occurred between this cross section and the previous upstream section.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 7 Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 6 Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 5 Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 4 Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.90909* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.81818* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.72727* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.63636* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.54545* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.45454* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.36363* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.27272* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.18181* Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main

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channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3.09090* Profile: PF 1
Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 3 UHS Reach: U3 UHS Lower RS: 3 Profile: PF 1
Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 North Reach: Unit 4 North RS: 1 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 10 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 9 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 8.875* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 8.75* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 8.625* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 8.5* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 8.375* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 8.25* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 8.125* Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 8 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 7 Profile: PF 1
Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Upper RS: 6 Profile: PF 1
Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: Unit 4 UHS Reach: U4 UHS Branch RS: 107 Profile: PF 1
Warning: The energy equation could not be balanced within the specified number of iterations. The program used critical depth

for the water surface and continued on with the calculations.

Warning: During the standard step iterations, when the assumed water surface was set equal to critical depth, the calculated

water surface came back below critical depth. This indicates that there is not a valid subcritical answer. The

program defaulted to critical depth.

River: Unit 4 UHS Reach: U4 UHS Branch RS: 106 Profile: PF 1
Note: Hydraulic jump has occurred between this cross section and the previous

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upstream section.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 5 Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 4.75* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 4.5* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 4.25* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 4 Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 3 Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.92857* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.85714* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.78571* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.71428* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.64285* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.57142* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.5* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.42857* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.35714* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.28571* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.21428* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.14285* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: Unit 4 UHS Reach: U4 UHS Lower RS: 2.07142* Profile: PF 1
 Warning: The cross-section end points had to be extended vertically for the computed water surface.

River: West Channel Reach: West Channel RS: 24 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 23 Profile: PF 1
 Note: Manning's n values were composited to a single value in the main

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channel.

River: West Channel Reach: West Channel RS: 22 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 21 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 20 Profile: PF 1

Warning: Divided flow computed for this cross-section.

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 19 Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 18 Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 17 Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 16 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 15 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 14 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 13 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 12 Profile: PF 1

Warning: Divided flow computed for this cross-section.

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 11 Profile: PF 1

Warning: The cross-section end points had to be extended vertically for the computed water surface.

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 10 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 9 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 8 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 7 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.

River: West Channel Reach: West Channel RS: 6 Profile: PF 1

Note: Manning's n values were composited to a single value in the main

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channel.

River: West Channel Reach: West Channel RS: 5 Profile: PF 1

Note: Manning's n values were composited to a single value in the main channel.