

14055.37	72014112.48	713.1414201.54	702.6314481.87	703.2414674.75	722.74
14748.18	73015177.68	730.15716.3	703.6515901.45	663.4515918.54	659.37
16067.06	645.44 16264.4	625.216285.97	623.4616537.11	618.4716975.43	612.46
17088.9	611.2219449.65	611.2219668.91	62020042.34	620200445.81	593.65
20615.86	593.6520709.07	592.4420958.97	591.2221496.03	590.02 21503.4	588.56
21541.09	58021571.28	575.21 21610	570.1421648.71	565.4121869.65	570.93
21910.25	58021989.09	605.1822047.53	617.5222242.85	660.6522302.61	664.61
22580.88	677.9622655.09	682.1723481.25	734.7323758.25	736.6424176.79	730.74
24423.06	732.4424646.87	730.6525152.35	717.8525188.31	714.7725459.16	693.77
25605.25	686.1425651.17	687.3125699.27	687.3125942.43	696.126306.97	708.07
26452.6	713.3426703.97	724.8727192.81	742.5527398.67	748.9527771.71	747.04
28144.51	736.4528200.16	735.1628903.96	722.1228970.05	722.4429986.69	722.44
30345.57	731.2231763.93	704.8732229.97	713.6532963.28	713.6533862.11	712.44
34026.29	712.44 34375.2	713.3734481.73	711.6734847.31	704.8735253.47	704.87
35785.9	70035791.53	699.68 35937.1	649.3236094.81	603.6536118.91	605.23
36229.27	613.11 36694.3	624.7637108.63	692.4937196.74	706.3537622.51	708.89
37766.29	707.3237820.09	707.6438192.05	714.7438664.64	719.8238958.22	721.22
39423.86	721.7139791.84	739.6740011.21	739.9140100.07	737.0840544.99	722.44
41133.36	74041471.96	729.4641787.34	720.8641911.64	716.9841979.52	714.55
42080.62	714.0642419.95	724.2742584.07	73042667.98	730 43659.2	705.9
43751.71	703.143964.01	701.8244187.43	709.2644266.76	708.7844466.19	708.78
44492.73	708.9544660.05	705.8644928.12	699.2345558.27	681.345691.71	680.8
45906.72	691.246020.82	697.1446534.84	727.846825.03	732.0747766.17	739.82
47929.77	742.2748399.02	749.7448527.13	755.8849356.39	800	

Manning's n Values	num=	3			
Sta n Val Sta n Val					
0 .1521541.09		.1521910.25			
Bank Sta: Left Right	Lengths: Left Channel Right		Coeff Contr.	Expan.	
21541.0921910.25	4.99 4.99 4.99		.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.54	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.39	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1545740.00	69850.63	1234697.00
E.G. Slope (ft/ft)	0.000287	Area (sq ft)	1545740.00	69850.63	1234697.00
Q Total (cfs)	7996901.00	Flow (cfs)	4943960.00	384933.80	2668008.00
Top Width (ft)	45607.78	Top Width (ft)	18555.77	369.16	26682.85
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.51	2.16
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.30	189.22	46.27
Conv. Total (cfs)	472024500.0	Conv. (cfs)	291821800.0	22721080.0	157481600.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18578.92	371.23	26724.64
Min Ch El (ft)	565.41	Shear (lb/sq ft)	1.49	3.37	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.77	18.58	1.79
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	66706.22	3227.91	50707.51
C & E Loss (ft)	0.00	Cum SA (acres)	802.78	17.12	1192.88

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 268165.*

INPUT

Description:	Station Elevation Data	num=	174		
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev					
0 800 1235.47	760.61 1407.21	760.1914.27	760 2309.74	768.76	
2391.97 768.76 2529.81	770 2738.07	770 2827.36	769.16 3132.76	750.24	
3661.35 720.73 3918.65	711.11 4523.37	700.34 4626.25	703.85 4757.65	708.52	
5545.58 698.32 5742.82	706.72 5986.85	691.13 6025.15	688.76 6697.9	688.76	
6944.24 686.92 7197.71	666.19 7297.66	658.76 7392.77	658.76 7517.04	669.71	
7790.25 697.85 7851.24	698.76 8033.71	696.28 8089.6	696.28 8128.91	694.27	
8260.81 688.96 8340.9	689.83 8470.06	697.24 8707.07	709.48 9095.8	727.52	
9331.84 727.52 9354.1	727.35 9496.46	721.37 9608.4	717.5210469.31	711.22	
10804.83 705.5211112.92	680.6111141.68	677.3211297.37	666.23 11542.7	651.6	
11607.78 652.3612047.09	687.13 12385.7	710 12893.3	718.7612901.93	719.15	
13084.53 725.86 13312.5	718.9913377.95	717.6113500.02	717.0113685.37	720	
14055.68 72014112.79	713.1614201.86	702.6814482.19	703.314675.08	722.76	
14748.51 73015178.02	73015716.66	703.7215901.81	663.63 15918.9	659.55	
16067.42 645.5816264.77	625.2716286.33	623.5316537.48	618.516975.81	612.48	
17089.29 611.2419450.09	611.2419669.35	62020042.79	620200446.27	593.72	
20616.32 593.7220709.54	592.4820959.45	591.2421496.52	590.0221503.88	588.57	
21541.57 58021571.89	575.221610.77	570.1321649.65	565.4121870.33	570.95	
21910.88 58021989.75	605.3 22048.2	617.6122243.55	660.6622303.33	664.62	
22581.66 677.8922655.88	682.0823482.22	734.6323759.28	736.57 24177.9	730.75	
24424.22 732.4824648.08	730.6725153.66	717.8125189.63	714.7425460.54	693.78	
25606.66 686.2625652.59	687.45 25700.7	687.4525943.91	696.2226308.53	708.13	
26454.19 713.3926705.61	724.9427194.55	742.5727400.45	748.9327773.56	746.98	
28146.44 736.3828202.11	735.0928906.06	722.1628972.16	722.4829989.01	722.48	
30347.96 731.2431766.62	704.9632232.76	713.7232966.22	713.7233865.23	712.48	
34029.45 712.4834378.43	713.4334484.98	711.7534850.64	704.9635256.89	704.96	
35789.43 70035795.06	699.6835940.66	649.2736098.41	603.72 36122.5	605.29	
36232.89 613.1736698.02	624.8537112.44	692.4537200.57	706.2837626.42	708.82	
37770.23 707.1937824.04	707.5138196.07	714.738668.76	719.8138962.41	721.24	
39428.14 721.75 39796.2	739.6640015.62	739.9 40104.5	737.0840549.51	722.48	
41138 74041476.68	729.4941792.12	720.9341916.44	717.0741984.34	714.63	
42085.46 714.1442424.86	724.2942589.01	73042672.92	73043664.36	705.97	
43756.9 703.1643969.24	701.8644192.71	709.2444272.06	708.7644471.53	708.76	
44498.07 708.9344665.43	705.8744933.56	699.2645563.83	681.33 45697.3	680.82	
45912.36 691.1746026.47	697.0946540.61	727.7646830.85	732.06 47772.2	739.82	
47935.83 742.2648405.18	749.7348533.32	755.8649362.74	800		

Manning's n Values	num=	3			
Sta n Val Sta n Val					
0 .1521541.57		.1521910.88			
Bank Sta: Left Right	Lengths: Left Channel Right		Coeff Contr.	Expan.	
21541.5721910.88	4.99 4.99 4.99		.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.53	Element	SS_Rev3.rep		
Vel Head (ft)	0.15	Wt. n-Val.	Left OB	Channel	Right OB
W.S. Elev (ft)	759.39	Reach Len. (ft)	0.150	0.150	0.150
Crit W.S. (ft)		Flow Area (sq ft)	4.99	4.99	4.99
E.G. Slope (ft/ft)	0.000287	Area (sq ft)	1545768.00	69875.45	1234471.00
Q Total (cfs)	7996901.00	Flow (cfs)	1545768.00	69875.45	1234471.00
Top Width (ft)	45614.54	Top Width (ft)	4944635.00	385112.50	2667154.00
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	18556.48	369.31	26688.74
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	3.20	5.51	2.16
Conv. Total (cfs)	471962900.0	Conv. (cfs)	83.30	189.21	46.25
Length wtd. (ft)	4.99	Wetted Per. (ft)	291823600.0	22728660.0	157410700.0
Min Ch El (ft)	565.41	Shear (lb/sq ft)	18579.59	371.37	26730.46
Alpha	1.19	Stream Power (lb/ft s)	1.49	3.37	0.83
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	4.77	18.59	1.79
C & E Loss (ft)	0.00	Cum SA (acres)	66529.15	3219.91	50566.08
			800.65	17.08	1189.82

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 268160.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.49	760.62	1407.24	760.62	1407.24	760.62	1407.24	760.62	1407.24	760.62	1407.24	760.62
2392.02	768.74	2529.87	770	2738.13	770	2738.13	770	2738.13	770	2738.13	770	2738.13	770
3661.43	720.74	3918.74	711.13	4523.47	700.35	4626.35	703.84	4757.75	708.49				
5545.71	698.29	5742.95	706.66	5986.99	691.11	6025.29	688.74	6698.05	688.74				
6944.4	686.87	7197.87	666.15	7297.83	658.74	7392.94	658.74	7517.21	669.66				
7790.42	697.81	7851.41	698.74	8033.89	696.21	8089.78	696.21	8129.09	694.2				
8260.99	688.94	8341.09	689.83	8470.25	697.24	8707.27	709.48	9096	727.47				
9332.05	727.47	9354.31	727.3	9496.67	721.32	9608.62	717.47	10469.54	711.19				
10805.07	705.44	1113.17	680.53	1141.93	677.22	11297.63	666.16	11542.96	651.63				
11608.04	652.41	2047.36	687.19	12385.98	71012893.59		718.74	12902.22	719.13				
13084.82	725.78	13312.79	718.88	13378.25	717.51	13500.33	716.95	13685.68	720				
14056	72014113.11		713.17	14202.17	702.73	14482.51	703.36	14675.41	722.77				
14748.84	73015178.36		7301517.01		703.79	15902.16	663.81	15919.25	659.73				
16067.78	645.73	16265.13	625.33	16286.7	623.59	16537.85	618.53	16976.19	612.5				
17089.67	611.26	19450.52	611.26	19669.79	62020043.24		62020446.73	593.79					
20616.78	593.79	20710	592.53	20959.91	591.26	21497	590.02	21504.37	588.57				
21542.05	580	21572.5	575.18	21611.54	570.12	21650.59	565.41	21871.02	570.97				
21911.53	580	21990.4	605.42	22048.86	617.72	2244.26	660.67	22304.05	664.64				
22582.44	677.81	22656.68	68223483.19		734.53	23760.3	736.51	24179.01	730.77				
24425.38	732.53	24649.29	730.68	25154.97	717.77	25190.96	714.72	25461.92	693.8				
25608.07	686.38	25654.01	687.59	25702.12	687.59	25945.39	696.34	26310.08	708.19				
26455.77	713.43	26707.25	72527196.29		742.59	27402.23	748.91	27775.42	746.92				
28148.38	736.31	28204.06	735.02	28908.15	722.22	28974.27	722.53	29991.33	722.53				
30350.36	731.26	31769.31	705.06	32235.55	713.79	32969.16	713.79	33868.36	712.53				
34032.61	712.53	34381.66	713.53	34488.24	711.82	34853.97	705.06	35260.31	705.06				
35792.96	70035798.59		699.67	35944.22	649.22	36102	603.79	36126.1	605.36				
36236.51	613.23	36701.74	624.94	37116.24	692.42	37204.39	706.21	37630.33	708.74				
37774.17	707.07	37827.99	707.39	38200.11	714.66	38672.89	719.81	38966.6	721.26				
39432.43	721.78	39800.56	739.66	40020.03	739.94	40108.93	737.09	40554.03	722.53				
41142.64	74041481.39		729.51	41796.9	721.01	41921.24	717.16	41989.16	714.72				
42090.3	714.22	42429.77	724.34	2593.96	730	42677.9	73043669.53		706.03				
43762.09	703.22	43974.47	701.89	44197.98	709.23	44277.35	708.74	444476.86	708.74				
44503.41	708.91	444670.81	705.88	44938.99	699.29	45569.39	681.35	45702.89	680.83				
45917.99	691.14	46032.13	697.05	46546.38	727.72	46836.68	732.06	47778.22	739.81				
47941.89	742.26	48411.33	749.73	48539.5	755.84	49369.1	800						

Manning's n Values

Sta	n Val	Sta	n Val
0	.1521542.05	.1521911.53	.15

Bank Sta	Left	Right	Coeff	Contr.	Expan.
21542.05	21542.05	21911.53	4.99	4.99	.1

CROSS SECTION OUTPUT Profile #P 1

E.G. Elev (ft)	759.53	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.39	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1545817.00	69903.95	1234187.00
E.G. Slope (ft/ft)	0.000287	Area (sq ft)	1545817.00	69903.95	1234187.00
Q Total (cfs)	7996901.00	Flow (cfs)	4945462.00	385317.00	2666123.00
Top Width (ft)	45621.37	Top Width (ft)	18557.28	369.48	26694.61
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.51	2.16
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.30	189.20	46.23
Conv. Total (cfs)	471896200.0	Conv. (cfs)	291831100.0	22737510.0	157327600.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18580.33	371.53	26736.25
Min Ch El (ft)	565.41	Shear (lb/sq ft)	1.49	3.37	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.77	18.59	1.79
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	66352.07	3211.90	50424.68
C & E Loss (ft)	0.00	Cum SA (acres)	798.52	17.04	1186.76

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 268155.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.52	760.63	1407.28	760.63	1407.28	760.63	1407.28	760.63	1407.28	760.63	1407.28	760.63
2392.07	768.71	2529.92	770	2738.19	770	2738.19	770	2738.19	770	2738.19	770	2738.19	770
3661.51	720.75	3918.83	711.15	4523.57	700.35	4626.46	703.83	4757.86	708.46				
5545.83	698.26	5743.07	706.6	5987.12	691.08	6025.42	688.71	6698.2	688.71				
6944.55	686.81	7198.03	666.1	7297.99	658.71	7393.11	658.71	7517.37	669.61				
7790.6	697.77	7851.59	698.71	8034.07	696.14	8089.96	696.14	8129.28	694.14				
8261.17	688.92	8341.27	689.83	8470.43	697.25	8707.46	709.48	9096.2	727.42				

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9332.25	727.42	9354.52	727.25	9496.88	721.26	9608.83	717.4210469.78	711.16
10805.31	705.3511113.42	680.4511142.18	677.1211297.88	666.0911543.22	651.66			
11608.3	652.4412047.63	687.2512386.26	71012893.88	718.7112902.51	719.11			
13085.12	725.7113313.09	718.7813378.55	717.4113500.63	716.8913685.99	720			
14056.31	72014113.42	713.1914202.49	702.7814482.84	703.4214675.74	722.79			
14749.17	730 15178.7	73015717.36	703.8615902.52	663.9815919.61	659.91			
16068.14	645.88 16265.5	625.416287.06	623.6616538.22	618.5616976.57	612.52			
17090.05	611.2919450.96	611.2919670.23	62020043.69	62020447.19	593.86			
20617.24	593.8620710.47	592.5820960.38	591.2921497.48	590.0221504.85	588.58			
21542.53	58021573.11	575.1721612.32	570.1121651.52	565.41 21871.7	570.98			
21912.16	58021991.06	605.5422049.53	617.7822244.97	660.6822304.77	664.65			
22583.22	677.7422657.47	681.9123484.15	734.4323761.33	736.4424180.12	730.78			
24426.54	732.58 24650.5	730.6925156.29	717.7325192.28	714.66 25463.3	693.82			
25609.47	686.525655.43	687.7325703.55	687.7325946.87	696.4526311.64	708.25			
26457.36	713.4726708.89	725.0727198.03	742.6127404.01	748.8927777.28	746.87			
28150.32	736.2428206.01	734.9628910.25	722.2428976.38	722.5829993.65	722.58			
30352.76	731.29 31772	705.1532238.34	713.86 32972.1	713.8633871.49	712.58			
34035.77	712.58 34384.9	713.56 34491.5	711.9 34857.3	705.1535263.73	705.15			
35796.49	70035802.12	699.6635947.78	649.1736105.59	603.86 36129.7	605.43			
36240.13	613.2936705.46	625.0337120.04	692.3937208.21	706.1437634.24	708.66			
37778.11	706.9437833.94	707.2638204.13	714.6238677.02	719.8138970.79	721.29			
39436.71	721.8139804.93	739.6540024.44	739.940113.66	737.140558.55	722.58			
41147.29	740 41486.1	729.5441801.68	721.0941926.05	717.2541993.98	714.81			
42095.14	714.342434.68	724.32 42598.9	73042682.86	730 43674.7	706.1			
43767.27	703.28 43979.7	701.9344203.26	709.2244282.64	708.71 44482.2	708.71			
44508.76	708.894676.18	705.944944.42	699.3245574.96	681.3845708.48	680.85			
45923.63	691.1146037.79	69746552.14	727.6846842.51	732.0547784.24	739.81			
47947.94	742.2548417.49	749.7248545.68	755.8349375.45	800				

Manning's n Values num= 3
Sta n Val Sta n Val
0 .1521542.53 .1521912.16 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
21542.5321912.16 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #P 1

E.G. Elev (ft)	759.53	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.39	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)	0.000287	Flow Area (sq ft)	1545853.00	69930.39	1233911.00
E.G. Slope (ft/ft)	7996901.00	Area (sq ft)	1545853.00	69930.39	1233911.00
Q Total (cfs)	45627.94	Flow (cfs)	4946248.00	385513.00	2665140.00
Top width (ft)	2.81	Top width (ft)	18558.00	369.63	26700.31
Vel Total (ft/s)	193.98	Avg. Vel. (ft/s)	3.20	5.51	2.16
Max chl Dpth (ft)	471828400.0	Hydr. Depth (ft)	83.30	189.19	46.21
Conv. Total (cfs)	4.99	Conv. (cfs)	291835600.0	22745810.0	157247000.0
Length Wtd. (ft)	565.41	Wetted Per. (ft)	18580.99	371.68	26741.88
Min Ch El (ft)	1.19	Shear (lb/sq ft)	1.49	3.37	0.83
Alpha	0.00	Stream Power (lb/ft s)	4.77	18.60	1.79
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	66174.98	3203.89	50283.32
C & E Loss (ft)	0.00	Cum SA (acres)	796.40	17.00	1183.70

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS RS: 268150.*

INPUT
Description:

Station Elevation Data	num= 174				
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev					
0 800 1235.55	760.64 1407.31	760 1914.4	760 2309.9	768.69	
2392.13 768.69 2529.98	770 2738.25	770 2827.55	769.11 3132.97	750.16	
3661.59 720.77 3918.91	711.17 4523.67	700.36 4626.56	703.82 4757.97	708.44	
5545.96 698.23 5743.2	706.54 5987.26	691.05 6025.56	688.69 6698.35	688.69	
6944.71 686.75 7198.2	666.06 7298.15	658.69 7393.27	658.69 7517.54	669.55	
7790.77 697.73 7851.77	698.69 8034.25	696.07 8090.15	696.07 8129.46	694.07	
8261.36 688.9 8341.46	689.82 8470.62	697.26 8707.66	709.48 9096.41	727.38	
9332.46 727.38 9354.73	727.2 9497.1	721.2 9609.05	717.3810470.01	711.13	
10805.55 705.2711113.67	680.3611142.43	677.0211298.13	666.0211543.48	651.69	
11608.56 652.49 12047.9	687.3112386.53	71012894.17	718.69 12902.8	719.08	
13085.41 725.6313313.39	718.6813378.85	717.3113500.93	716.8413686.29	720	
14056.63 72014113.74	713.2114202.81	702.8314483.16	703.4814676.07	722.81	
14749.5 73015179.04	73015717.71	703.9315902.88	664.1615919.96	660.09	
16068.5 646.0216265.86	625.4616287.43	623.7316538.59	618.5916976.95	612.54	
17090.43 611.3119451.39	611.3119670.67	62020044.14	62020447.64	593.93	
20617.7 593.9320710.93	592.6220960.85	591.3121497.96	590.0221505.33	588.58	
21543.02 58021573.72	575.1521613.09	570.121652.46	565.4121872.39	571	
21912.8 58021991.71	605.66 22050.2	617.8722245.68	660.7 22305.5	664.67	
22584 677.6622658.27	681.8323485.12	734.3323762.35	736.3824181.23	730.8	
24427.71 732.6224651.71	730.71 25157.6	717.69 25193.6	714.6225464.68	693.83	
25610.88 686.6125656.85	687.8725704.98	687.8725948.35	696.5726313.19	708.31	
26458.94 713.5226710.53	725.1427199.77	742.6327405.79	748.8727779.14	746.81	
28152.26 736.1728207.96	734.8928912.34	722.2928978.49	722.6229995.97	722.62	
30355.15 731.3131774.69	705.2532241.12	713.9332975.04	713.9333874.62	712.62	
34038.93 712.6234388.14	713.6334494.75	711.9734860.64	705.2535267.14	705.25	
35800.02 70035805.65	699.6635951.34	649.1236109.18	603.93 36133.3	605.49	
36243.75 613.3536709.17	625.1237123.85	692.3537212.03	706.0737638.15	708.59	
37782.05 706.8137835.89	707.1338208.16	714.5838681.14	719.838974.98	721.31	
39441 721.8539809.29	739.6540028.85	739.940117.78	737.1140563.07	722.62	
41151.93 74041490.82	729.5741806.45	721.1741930.85	717.34 41998.8	714.9	
42099.97 714.3742439.59	724.3442603.84	73042687.82	73043679.87	706.16	
43772.46 703.3443984.93	701.9644208.54	709.244287.94	708.6944487.54	708.69	
44514.1 708.8744681.56	705.9144949.85	699.3545580.52	681.445714.08	680.86	
45929.26 691.0846043.45	696.9646557.91	727.6346848.33	732.0547790.26	739.81	
47954 742.2548423.64	749.7248551.86	755.81 49381.8	800		

Manning's n Values num= 3
Sta n Val Sta n Val
0 .1521543.02 .15 21912.8 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
Page 617

21543.02	21912.8	4.99	4.99	4.99	SS_Rev3.rep	.1	.3
CROSS SECTION OUTPUT Profile #PF 1							
E.G. Elev (ft)	759.53	Element	Left OB	Channel	Right OB		
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150		
W.S. Elev (ft)	759.38	Reach Len. (ft)	4.99	4.99	4.99		
Crit W.S. (ft)		Flow Area (sq ft)	1545885.00	69955.69	1233644.00		
E.G. Slope (ft/ft)	0.000287	Area (sq ft)	1545885.00	69955.69	1233644.00		
Q Total (cfs)	7996901.00	Flow (cfs)	4947018.00	385701.50	2664182.00		
Top width (ft)	45634.68	Top width (ft)	18558.72	369.78	26706.18		
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.51	2.16		
Max Chl Dpth (ft)	193.97	Hydr. Depth (ft)	83.30	189.18	46.19		
Conv. Total (cfs)	471759900.0	Conv. (cfs)	291838600.0	22753630.0	157167600.0		
Length wtd. (ft)	4.99	Wetted Per. (ft)	18581.66	371.82	26747.68		
Min Ch El (ft)	565.41	Shear (lb/sq ft)	1.49	3.38	0.83		
Alpha	1.19	Stream Power (lb/ft s)	4.78	18.61	1.79		
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	65997.90	3195.88	50141.98		
C & E Loss (ft)	0.00	Cum SA (acres)	794.27	16.95	1180.65		

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 268145.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.58	760.65	1407.34	760	1914.44	760	2309.95	768.67		
2392.18	768.67	2530.04	770	2738.31	770	2827.61	769.09	3133.04	750.13		
3661.67	720.78	3919	711.19	4523.77	700.37	4626.67	703.81	4758.07	708.41		
5546.08	698.2	5743.33	706.47	5987.39	691.02	6025.69	688.67	6698.5	688.67		
6944.86	686.69	7198.36	666.02	7298.32	658.67	7393.44	658.67	7517.71	669.5		
7790.94	697.69	7851.94	698.67	8034.43	696	8090.33	696	8129.64	694.01		
8261.54	688.88	8341.65	689.82	8470.81	697.26	8707.85	709.48	9096.61	727.33		
9332.67	727.33	9354.94	727.15	9497.31	721.14	9609.27	717.33	10470.25	711.1		
10805.79	705.19	11113.92	680.28	11142.68	676.92	11298.39	665.95	11543.73	651.72		
11608.82	652.53	12048.17	687.37	12386.81	710	12894.46	718.67	12903.09	719.06		
13085.7	725.55	13313.69	718.57	13379.15	717.21	13501.23	716.78	13686.6	720		
14056.94	720	14114.06	713.23	14203.13	702.88	14483.49	703.55	14676.4	722.83		
14749.83	730	15179.38	730	15718.06	704	15903.23	664.34	15920.32	660.27		
16068.86	646.17	16266.22	625.53	16287.79	623.79	16538.96	618.62	16977.33	612.56		
17090.81	611.33	19451.83	611.33	19671.11	620	20044.59	620	20448.1	594		
20618.17	594	20711.39	592.67	20961.32	591.33	21498.44	590.02	21505.81	588.58		
21543.5	580	21574.33	575.14	21613.86	570.09	21653.4	565.41	21873.07	571.02		
21913.44	580	21992.37	605.78	22050.87	617.96	22246.39	660.71	22306.22	664.68		
22584.78	677.59	22659.06	681.74	23486.09	734.22	23763.37	736.32	24182.34	730.81		
24428.87	732.67	24652.92	730.72	25158.92	717.64	25194.92	714.58	25466.05	693.85		
25612.29	686.73	25658.26	688.01	25706.41	688.01	25949.83	696.69	26314.75	708.36		
26460.53	713.56	262712.16	725.22	27201.51	742.65	27407.58	748.85	27781	746.75		
28154.19	736.12	28209.91	734.82	28914.44	722.33	28980.6	722.67	29998.29	722.67		
30357.55	731.33	31777.38	705.34	32243.91	714	32977.98	714	33877.75	712.67		
34042.1	712.67	34391.37	713.69	34498.01	712.05	34863.97	705.34	35270.56	705.34		
35803.54	700	35809.18	699.65	35954.9	649.07	36112.78	604	36136.89	605.56		
36247.37	613.41	36712.89	625.22	37127.65	692.32	37215.86	706	37642.06	708.51		
37785.99	706.69	37839.84	707.01	38212.19	714.54	38685.27	719.83	38979.17	721.33		
39445.29	721.88	39813.65	739.64	40033.25	739.94	40122.21	737.11	40567.59	722.67		
41156.57	740	41495.53	729.64	41811.23	721.24	41935.66	717.43	42003.61	714.98		
42104.81	714.45	42444.5	724.35	42608.79	730	42692.78	730	43685.04	706.22		
43777.64	703.39	43990.16	702	44213.82	709.19	44293.23	708.67	44492.87	708.67		
44519.44	708.85	44686.93	705.92	44955.29	699.38	45586.08	681.43	45719.67	680.88		
45934.9	691.05	46049.11	696.91	46563.67	727.59	46854.16	732.04	47796.29	739.8		
47960.05	742.24	48429.8	749.71	48558.04	755.84	49388.16	800				

Manning's n Values	num=	3					
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.15	21543.5	.1521913.44		.15		
Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.	
21543.52	1913.44	4.99	4.99	4.99	.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.53	Element	Left OB	Channel	Right OB		
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150		
W.S. Elev (ft)	759.38	Reach Len. (ft)	4.99	4.99	4.99		
Crit W.S. (ft)		Flow Area (sq ft)	1545935.00	69982.00	1233407.00		
E.G. Slope (ft/ft)	0.000287	Area (sq ft)	1545935.00	69982.00	1233407.00		
Q Total (cfs)	7996901.00	Flow (cfs)	4947743.00	385884.50	2663273.00		
Top width (ft)	45641.34	Top width (ft)	18559.51	369.94	26711.88		
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.51	2.16		
Max Chl Dpth (ft)	193.97	Hydr. Depth (ft)	83.30	189.17	46.17		
Conv. Total (cfs)	471703500.0	Conv. (cfs)	291846500.0	22761700.0	157095300.0		
Length wtd. (ft)	4.99	Wetted Per. (ft)	18582.40	371.98	26753.31		
Min Ch El (ft)	565.41	Shear (lb/sq ft)	1.49	3.38	0.83		
Alpha	1.19	Stream Power (lb/ft s)	4.78	18.61	1.79		
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	65820.80	3187.87	50000.68		
C & E Loss (ft)	0.00	Cum SA (acres)	792.15	16.91	1177.59		

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 268140.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.6	760.66	1407.37	760	1914.49	760	2310	768.64		
2392.23	768.64	2530.09	770	2738.37	770	2827.67	769.08	3133.11	750.1		
3661.76	720.79	3919.09	711.22	4523.88	700.37	4626.77	703.79	4758.18	708.38		

SS_Rev3.rep									
5546.2	698.16	5743.46	706.41	5987.52	690.99	6025.83	688.64	6698.65	688.64
6945.02	686.63	7198.52	665.97	7298.48	658.64	7393.6	658.64	7517.88	669.45
7791.12	697.65	7852.12	698.64	8034.61	695.93	8090.51	695.93	8129.82	693.94
8261.73	688.86	8341.83	689.82	8471	697.27	8708.04	709.48	9096.82	727.28
9332.88	727.28	9355.15	727.1	9497.52	721.09	9609.48	717.2810470.48		711.07
10806.04	705.111114.16		680.211142.93		676.8211298.64		665.8811543.99		651.75
11609.08	652.5812048.44		687.4312387.09		71012894.75		718.6412903.38		719.03
13086	725.4713313.99		718.4713379.45		717.1113501.54		716.72 13686.9		720
14057.26	72014114.37		713.2514203.45		702.9314483.81		703.6114676.73		722.85
14750.16	73015179.71		73015718.42		704.0715903.59		664.5215920.68		660.45
16069.22	646.3116266.59		625.616288.16		623.8616539.33		618.6616977.71		612.58
17091.2	611.3619452.26		611.3619671.55		62020045.04		62020448.56		594.07
20618.63	594.0720711.86		592.7220961.79		591.3621498.92		590.0221506.29		588.59
21543.98	58021574.94		575.1321614.64		570.0821654.33		565.421873.76		571.04
21914.08	58021993.02		605.922051.54		618.04 22247.1		660.7222306.94		664.69
22585.56	677.5122659.86		681.6623487.05		734.12 23764.4		736.2524183.45		730.82
24430.03	732.7224654.13		730.7325160.23		717.625196.24		714.5425467.43		693.87
25613.7	686.8525659.68		688.1525707.84		688.1525951.31		696.81 26316.3		708.42
26462.11	713.61 26713.8		725.2727203.24		742.6727409.36		748.8227782.86		746.7
28156.13	736.0328211.86		734.7628916.54		722.3728982.71		722.7230000.61		722.72
30359.94	731.3631780.07		705.43 32246.7		714.0732980.93		714.0733880.87		712.72
34045.26	712.7234394.61		713.7634501.27		712.12 34867.3		705.4335273.98		705.43
35807.07	70035812.71		699.6535958.46		649.0136116.37		604.0736140.49		605.62
36250.99	613.4736716.61		625.3137131.46		692.2937219.68		705.9337645.97		708.43
37789.93	706.56 37843.8		706.8838216.22		714.5 38689.4		719.838983.36		721.36
39449.57	721.9139818.01		739.6340037.66		739.8940126.63		737.1240572.11		722.72
41161.21	74041500.24		729.6341816.01		721.3241940.46		717.5142008.43		715.07
42109.65	714.5342449.41		724.3742613.73		73042697.74		730 43690.2		706.29
43782.83	703.4543995.39		702.0344219.09		709.1744298.53		708.64 44498.2		708.64
44524.78	708.8344692.31		705.9344960.71		699.4145591.64		681.4545725.26		680.9
45940.54	691.0246054.77		696.8746569.44		727.5546859.98		732.0447802.31		739.8
47966.11	742.2348435.95		749.7148564.22		755.7849394.51		800		

Manning's n values num= 3
 Sta n Val Sta n Val Sta n Val
 0 .1521543.98 .1521914.08 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21543.9821914.08 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.53	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.38	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1545970.00	70009.98	1233129.00
E.G. Slope (ft/ft)	0.000287	Area (sq ft)	1545970.00	70009.98	1233129.00
Q Total (cfs)	7996901.00	Flow (cfs)	4948537.00	886090.60	2662274.00
Top width (ft)	45648.09	Top width (ft)	18560.23	370.10	26717.76
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.51	2.16
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.29	189.17	46.15
Conv. Total (cfs)	471634600.0	Conv. (cfs)	291850700.0	22770530.0	157013400.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18583.06	372.13	26759.11
Min Ch El (ft)	565.40	Shear (lb/sq ft)	1.49	3.38	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.78	18.62	1.79
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	65643.71	3179.85	49859.40
C & E Loss (ft)	0.00	Cum SA (acres)	790.02	16.87	1174.53

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 268135.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.63	760.67	1407.4	760	1914.53	760	2310.05	768.62		
2392.29	768.62	2530.15	770	2738.43	770	2827.74	769.06	3133.18	750.07		
3661.84	720.81	3919.18	711.24	4523.98	700.38	4626.87	703.78	4758.29	708.35		
5546.33	698.13	5743.59	706.35	5987.66	690.96	6025.96	688.62	6698.8	688.62		
6945.18	686.58	7198.68	665.93	7298.64	658.62	7393.77	658.62	7518.05	669.4		
7791.29	697.61	7852.29	698.62	8034.79	695.85	8090.69	695.85	8130.01	693.88		
8261.92	688.84	8342.02	689.81	8471.19	697.28	8708.24	709.48	9097.02	727.24		
9333.09	727.24	9355.36	727.05	9497.73	721.03	9609.7	717.2410470.72		711.04		
10806.28	705.0211114.41		680.1211143.17		676.7211298.89		665.8111544.25		651.78		
11609.34	652.6212048.71		687.4912387.37		71012895.04		718.6212903.67		719.01		
13086.29	725.3913314.28		718.3613379.75		717.0113501.84		716.6713687.21		720		
14057.57	72014114.69		713.2714203.77		702.9814484.14		703.6714677.05		722.87		
14750.49	73015180.06		73015718.77		704.1515903.94		664.6915921.03		660.63		
16069.58	646.4616266.95		625.6616288.52		623.9316539.71		618.6916978.09		612.6		
17091.58	611.38 19452.7		611.3819671.99		62020045.48		62020449.02		594.15		
20619.09	594.1520712.32		592.7620962.26		591.38 21499.4		590.0221506.78		588.59		
21544.46	58021575.55		575.1121615.41		570.0621655.27		565.421874.45		571.06		
21914.72	58021993.68		606.02 22052.2		618.1322247.81		660.7322307.66		664.71		
22586.34	677.4422660.65		681.5723488.02		734.0223765.42		736.1924184.56		730.84		
24431.2	732.7624655.34		730.7425161.55		717.5625197.56		714.525468.81		693.88		
25615.11	686.97 25661.1		688.2925709.27		688.2925952.79		696.9226317.86		708.48		
26463.7	713.6526715.44		725.3427204.98		742.6927411.14		748.827784.72		746.64		
28158.07	735.96 28213.8		734.6928918.63		722.4128984.82		722.7630002.93		722.76		
30362.34	731.3831782.76		705.5332249.49		714.1532983.87		714.15 33884		712.76		
34048.42	712.7634397.84		713.8234504.53		712.234870.64		705.5335277.39		705.53		
35810.6	70035816.24		699.6435962.02		648.9636119.96		604.1536144.09		605.69		
36254.61	613.5336720.32		625.437135.26		692.25 37223.5		705.8537649.88		708.35		
37793.87	706.4437847.75		706.7538220.25		714.4638693.53		719.7938987.55		721.38		
39453.86	721.9539822.38		739.6340042.07		739.8940131.06		737.1340576.63		722.76		
41165.86	74041504.95		729.6541820.79		721.441945.26		717.642013.25		715.16		
42114.49	714.6142454.32		724.3842618.68		730 42702.7		73043695.37		706.35		
43788.02	703.5144000.62		702.0744224.37		709.1644303.82		708.6244503.54		708.62		
44530.12	708.8144697.69		705.9444866.15		699.4445597.21		681.4845730.85		680.91		
45946.17	690.9946060.43		696.82 46575.2		727.5146865.81		732.0347808.33		739.8		
47972.17	742.2348442.11		749.7 48570.4		755.7749400.86		800				

Manning's n Values num= 3

SS_Rev3.rep									
Sta	n Val	Sta	n Val	Sta	n Val				
0	.1521544.46	.1521914.72	.15						
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21544.46	21914.72		4.99	4.99	4.99	.1	.3	
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.53		Element	Left OB	Channel	Right OB			
Vel Head (ft)	0.15		Wt. n-Val.	0.150	0.150	0.150			
W.S. Elev (ft)	759.38		Reach Len. (ft)	4.99	4.99	4.99			
Crit W.S. (ft)			Flow Area (sq ft)	1545998.00	70037.49	1232868.00			
E.G. Slope (ft/ft)	0.000288		Area (sq ft)	1545998.00	70037.49	1232868.00			
Q Total (cfs)	7996901.00		Flow (cfs)	4949265.00	386292.00	2661345.00			
Top Width (ft)	45654.73		Top width (ft)	18561.02	370.26	26723.45			
Vel Total (ft/s)	2.81		Avg. Vel. (ft/s)	3.20	5.52	2.16			
Max Chl Dpth (ft)	193.98		Hydr. Depth (ft)	83.29	189.16	46.13			
Conv. Total (cfs)	471567000.0		Conv. (cfs)	291851800.0	22779150.0	156936100.0			
Length wtd. (ft)	4.99		Wetted Per. (ft)	18583.81	372.29	26764.72			
Min Ch El (ft)	565.40		Shear (lb/sq ft)	1.49	3.38	0.83			
Alpha	1.19		Stream Power (lb/ft s)	4.78	18.63	1.79			
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)	65466.61	3171.83	49718.15			
C & E Loss (ft)	0.00		Cum SA (acres)	787.89	16.83	1171.46			

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268130.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.66	760.69	1407.43	760	1914.57	760	2310.1	768.59		
2392.34	768.59	2530.21	770	2738.5	770	2827.8	769.05	3133.25	750.05		
3661.92	720.82	3919.27	711.26	4524.08	700.39	4626.98	703.77	4758.39	708.32		
5546.45	698.1	5743.72	706.29	5987.79	690.93	6026.1	688.59	6698.95	688.59		
6945.33	686.52	7198.84	665.89	7298.81	658.59	7393.93	658.59	7518.22	669.34		
7791.47	697.57	7852.47	698.59	8034.97	695.78	8090.87	695.78	8130.19	693.81		
8262.1	688.82	8342.21	689.81	8471.38	697.29	8708.44	709.49	9097.22	727.19		
9333.3	727.19	9355.57	727	9497.95	720.97	9609.91	717.19	10470.95	711.01		
10806.52	704.93	1114.66	680.04	11143.42	676.62	11299.14	665.74	11544.51	651.81		
11609.6	652.67	12048.98	687.55	12387.64	71012895.33		718.59	12903.96	718.98		
13086.58	725.31	13314.58	718.26	13380.04	716.91	13502.14	716.61	13687.52	720		
14057.89	720	14115	713.28	14204.08	703.03	14484.46	703.73	14677.38	722.89		
14750.82	730	15180.4	73015719.12		704.22	15904.3	664.87	15921.39	660.81		
16069.94	646.61	6267.32	625.73	16288.88	623.99	16540.08	618.72	16978.47	612.62		
17091.96	611.41	19453.14	611.41	19672.43	62020045.93		62020449.47	594.22			
20619.55	594.22	20712.79	592.81	20962.73	591.41	21499.88	590.02	21507.26	588.59		
21544.95	58021576.16		575.12	12616.18	570.05	21656.21	565.42	1875.13	571.07		
21915.36	58021994.34		606.14	22052.87	618.22	22248.52	660.75	2308.38	664.72		
22587.12	677.36	22661.45	681.48	23488.99	733.92	23766.45	736.12	24185.67	730.85		
24432.36	732.81	24656.55	730.76	25162.86	717.52	25198.89	714.46	25470.19	693.9		
25616.52	687.09	25662.52	688.43	25710.69	688.43	25954.26	697.04	26319.41	708.54		
26465.28	713.72	6717.07	725.41	27206.72	742.71	27412.92	748.78	27786.58	746.58		
28160	735.89	82815.75	734.62	28920.73	722.45	28986.93	722.81	30005.25	722.81		
30364.73	731.41	31785.45	705.62	32252.28	714.22	32986.8	714.22	33887.13	712.81		
34051.58	712.81	34401.07	713.89	34507.78	712.28	34873.97	705.62	35280.81	705.62		
35814.13	70035819.77		699.63	35965.58	648.91	36123.55	604.22	36147.69	605.76		
36258.23	613.59	36724.04	625.49	37139.06	692.22	37227.32	705.78	37653.79	708.28		
37797.81	706.31	37851.7	706.62	38224.28	714.42	38697.66	719.79	38991.73	721.41		
39458.14	721.98	39826.74	739.62	40046.48	739.89	40135.49	737.14	40581.14	722.81		
41170.5	74041509.66		729.68	41825.56	721.48	41950.07	717.69	42018.07	715.25		
42119.33	714.69	42459.23	724.44	2623.62	73042707.67		73043700.54	706.42			
43793.2	703.57	44005.86	702.14	2229.65	709.15	44309.11	708.59	44508.88	708.59		
44535.46	708.79	44703.06	705.95	44971.58	699.46	45602.77	681.54	45736.44	680.93		
45951.8	690.96	46066.09	696.77	46580.97	727.46	46871.64	732.03	47814.35	739.79		
47978.23	742.22	48448.26	749.74	48576.58	755.75	49407.22	800				

Manning's n Values

Sta	n Val	Sta	n Val
0	.1521544.95	.1521915.36	.15

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
21544.95	21915.36	4.99	4.99	4.99	.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.52	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.38	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546031.00	70063.73	1232598.00
E.G. Slope (ft/ft)	0.000288	Area (sq ft)	1546031.00	70063.73	1232598.00
Q Total (cfs)	7996901.00	Flow (cfs)	4950044.00	386487.40	2660370.00
Top Width (ft)	45661.40	Top Width (ft)	18561.66	370.41	26729.33
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.52	2.16
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.29	189.15	46.11
Conv. Total (cfs)	471499600.0	Conv. (cfs)	291856000.0	22787410.0	156856200.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18584.39	372.43	26770.53
Min Ch El (ft)	565.40	Shear (lb/sq ft)	1.49	3.38	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.78	18.64	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	65289.51	3163.80	49576.94
C & E Loss (ft)	0.00	Cum SA (acres)	785.77	16.78	1168.40

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268125.*

INPUT

Description:

Station	Elevation	Data	num=	174
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SS_Rev3.rep											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.69	760.7	1407.47	760	1914.62	760	2310.16	768.57		
2392.39	768.57	2530.26	770	2738.56	770	2827.86	769.03	3133.32	750.02		
3662	720.83	3919.35	711.28	4524.18	700.39	4627.08	703.76	4758.5	708.3		
5546.58	698.07	5743.85	706.23	5987.93	690.9	6026.23	688.57	6699.1	688.57		
6945.49	686.46	7199	665.84	7298.97	658.57	7394.1	658.57	7518.38	669.29		
7791.64	697.53	7852.65	698.57	8035.15	695.71	8091.05	695.71	8130.37	693.75		
8262.29	688.8	8342.39	689.81	8471.57	697.29	8708.63	709.49	9097.43	727.14		
9333.51	727.14	9355.78	726.95	9498.16	720.92	9610.13	717.14	10471.19	710.98		
10806.76	704.85	11114.91	679.96	11143.67	676.52	11299.4	665.67	11544.77	651.84		
11609.86	652.71	12049.25	687.61	12387.92	710.12	12895.61	718.57	12904.25	718.96		
13086.88	725.21	13314.88	718.15	13380.34	716.81	13502.44	716.55	13687.82	720		
14058.2	720.14	1115.32	713.3	14204.4	703.08	14484.78	703.81	14677.71	722.91		
14751.15	73015180.74		73015719.47		704.29	15904.66	665.05	15921.75	660.99		
16070.3	646.75	16267.68	625.79	16289.25	624.06	16540.45	618.75	16978.85	612.64		
17092.35	611.43	19453.57	611.43	19672.87	62020046.38		62020449.93	594.29			
20620.01	594.29	20713.25	592.86	20963.2	591.43	21500.37	590.02	21507.74	588.6		
21545.43	58021576.77		575.08	21616.96	570.04	21657.14	565.42	1875.82	571.09		
21916	58021994.99		606.26	22053.54	618.32	2249.22	660.76	22309.1	664.74		
22587.9	677.29	22662.24	681.42	23489.95	733.82	23767.47	736.06	24186.79	730.87		
24433.52	732.86	24657.76	730.77	25164.18	717.48	25200.21	714.42	25471.57	693.92		
25617.93	687.22	25663.94	688.57	25712.12	688.57	25955.74	697.16	26320.96	708.6		
26466.87	713.74	26718.71	725.47	27208.46	742.73	27414.7	748.76	27788.44	746.52		
28161.94	735.82	28217.7	734.56	28922.82	722.49	28989.03	722.86	30007.57	722.86		
30367.13	731.43	331788.14	705.71	32255.06	714.29	32989.75	714.29	33890.25	712.86		
34054.74	712.86	34404.31	713.95	34511.04	712.35	34877.3	705.71	35284.23	705.71		
35817.66	700	35823.3	699.63	35969.14	648.86	36127.15	604.29	36151.29	605.82		
36261.86	613.65	36727.76	625.58	37142.87	692.19	37231.14	705.71	37657.71	708.2		
37801.75	706.18	37855.65	706.53	38228.31	714.38	38701.79	719.79	38995.92	721.43		
39462.43	722.01	39831.1	739.61	40050.89	739.89	40139.91	737.15	40585.66	722.86		
41175.14	74041514.38		729.71	41830.34	721.55	41954.87	717.78	42022.88	715.33		
42124.17	714.76	42464.14	724.41	42628.56	73042712.63		730	43705.7	706.48		
43798.39	703.63	44011.09	702.14	44234.93	709.13	44314.41	708.57	44514.21	708.57		
44540.8	708.77	44708.44	705.96	44977.01	699.49	45608.34	681.53	45742.03	680.94		
45957.44	690.93	46071.75	696.73	46586.74	727.42	46877.46	732.02	47820.38	739.79		
47984.28	742.22	48454.41	749.69	48582.76	755.73	49413.57	800				
Manning's n values											
Sta	n Val	Sta	num=	3	Sta	n Val					
0	.152	1545.43	.15	21916	.15						
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.		
21545.43	21916		4.99	4.99	4.99		.1	.3			
CROSS SECTION OUTPUT Profile #PF 1											
E.G. Elev (ft)	759.52	Element	Left OB	Channel	Right OB						
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150						
W.S. Elev (ft)	759.38	Reach Len. (ft)	4.99	4.99	4.99						
Crit W.S. (ft)		Flow Area (sq ft)	1546075.00	70090.80	1232336.00						
E.G. Slope (ft/ft)	0.000288	Area (sq ft)	1546075.00	70090.80	1232336.00						
Q Total (cfs)	7996901.00	Flow (cfs)	4950817.00	386681.90	2659402.00						
Top width (ft)	45668.23	Top width (ft)	18562.46	370.57	26735.20						
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.52	2.16						
Max Ch Dpth (ft)	193.98	Hydr. Depth (ft)	83.29	189.14	46.09						
Conv. Total (cfs)	471435700.0	Conv. (cfs)	291862000.0	22795790.0	156777900.0						
Length wtd. (ft)	4.99	Wetted Per. (ft)	18585.14	372.59	26776.35						
Min Ch El (ft)	565.40	Shear (lb/sq ft)	1.49	3.38	0.83						
Alpha	1.19	Stream Power (lb/ft s)	4.79	18.64	1.78						
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	65112.40	3155.77	49435.75						
C & E Loss (ft)	0.00	Cum SA (acres)	783.64	16.74	1165.34						
CROSS SECTION											
RIVER: BRAZOS RIVER											
REACH: LOWER BRAZOS											
RS: 268120.*											
INPUT											
Description:											
Station Elevation Data	num=	174									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev		
0	800	1235.72	760.71	1407.5	760	1914.66	760	2310.21	768.55		
2392.45	768.55	2530.32	770	2738.62	770	2827.93	769.01	3133.39	749.99		
3662.08	720.85	3919.44	711.3	4524.28	700.4	4627.18	703.75	4758.61	708.27		
5546.7	698.04	5743.97	706.16	5988.06	690.87	6026.37	688.55	6699.25	688.55		
6945.64	686.4	7199.16	665.8	7299.13	658.55	7394.27	658.55	7518.55	669.24		
7791.82	697.49	7852.82	698.55	8035.33	695.64	8091.23	695.64	8130.55	693.68		
8262.47	688.78	8342.58	689.8	8471.76	697.3	8708.83	709.49	9097.63	727.1		
9333.72	727.1	9355.99	726.9	9498.37	720.86	9610.34	717.11	10471.42	710.95		
10807	704.76	11115.16	679.87	11143.92	676.42	11299.65	665.61	11545.03	651.87		
11610.12	652.76	12049.52	687.68	12388.2	710	12895.9	718.55	12904.54	718.93		
13087.17	725.16	13315.18	718.05	13380.64	716.71	13502.75	716.51	13688.13	720		
14058.52	720.14	1115.64	713.32	14204.72	703.13	14485.11	703.86	14678.04	722.93		
14751.48	73015181.08		73015719.82		704.36	15905.01	665.23	15922.1	661.17		
16070.66	646.89	16268.05	625.86	16289.61	624.13	16540.82	618.78	16979.23	612.66		
17092.73	611.45	19454.01	611.45	19673.31	62020046.83		62020450.39	594.36			
20620.47	594.36	20713.71	592.92	20963.67	591.45	21500.85	590.02	21508.22	588.6		
21545.91	58021577.33		575.07	21617.73	570.03	21658.08	565.4	21876.5	571.11		
21916.64	58021995.65		606.37	22054.21	618.39	22249.93	660.77	22309.82	664.75		
22588.68	677.21	22663.04	681.31	23490.92	733.72	23768.49	735.99	24187.9	730.88		
24434.68	732.92	24658.96	730.78	25165.49	717.44	25201.53	714.42	25472.95	693.93		
25619.34	687.22	25665.36	688.57	25713.55	688.57	25957.22	697.16	26322.52	708.66		
26468.45	713.74	26720.35	725.54	27210.2	742.75	27416.49	748.74	27790.3	746.47		
28163.88	735.75	28219.65	734.49	28924.92	722.53	28991.14	722.86	30009.89	722.9		
30369.53	731.43	31790.83	705.81	32257.85	714.36	32992.69	714.36	33893.38	712.9		
34057.91	712.93	34407.54	714.02	34514.3	712.43	34880.64	705.81	35287.65	705.81		
35821.19	70035826.82		699.62	35972.7	648.81	36130.74	604.36	36154.88	605.89		
36265.48	613.71	36731.48	625.67	37146.67	692.15	37234.96	705.64	37661.62	708.12		
37805.69	706.06	37859.61	706.37	38232.34	714.34	38705.91	719.78	39000.11	721.45		
39466.71	722.04	39835.46	739.61	40055.29	739.89	40144.34	737.15	40590.18	722.9		
41179.78	74041519.09		729.74	41835.12	721.63	41959.67	717.87	42027.7	715.42		
42129.01	714.84	42469.05	724.43	42633.5	73042717.59		73043710.87	706.55			
43803.58	703.69	44016.32	702.17	44240.2	709.12	44319.7	708.55	44519.55	708.55		
44546.14	708.75	44713.82	705.97	44982.44	699.52	45613.9	681.55	45747.62	680.96		

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45963.07 690.946077.41 696.68 46592.5 727.3846883.29 732.01 47826.4 739.78
 47990.34 742.2148460.57 749.6948588.94 755.7249419.93 800

SS_Rev3.rep

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521545.91 .1521916.64 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21545.9121916.64 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.52	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.38	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546113.00	70117.53	1232099.00
E.G. Slope (ft/ft)	0.000288	Area (sq ft)	1546113.00	70117.53	1232099.00
Q Total (cfs)	7996901.00	Flow (cfs)	4951516.00	386870.30	2658515.00
Top Width (ft)	45674.88	Top Width (ft)	18563.25	370.73	26740.90
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.52	2.16
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.29	189.13	46.08
Conv. Total (cfs)	471375900.0	Conv. (cfs)	291866200.0	22804000.0	156705700.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18585.88	372.74	26781.97
Min Ch El (ft)	565.40	Shear (lb/sq ft)	1.49	3.38	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.79	18.65	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	64935.29	3147.74	49294.60
C & E Loss (ft)	0.00	Cum SA (acres)	781.52	16.70	1162.28

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268115.*

INPUT

Description:

Station	Elevation	Data	num= 174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta
2392.5	768.52	2530.38	760.72	1407.53	760	1914.7	760	2310.26	768.52						
3662.17	720.86	3919.53	770	2738.68	770	2827.99	769	3133.46	749.97						
5546.82	698.01	5744.1	711.32	4524.38	700.41	4627.29	703.74	4758.71	708.24						
6945.8	686.34	7199.32	706.1	5988.19	690.84	6026.5	688.52	6699.4	688.52						
7791.99	697.45	7853	665.76	7299.3	658.52	7394.43	658.52	7518.72	669.18						
8262.66	688.76	8342.77	698.52	8035.51	695.57	8091.41	695.57	8130.73	693.62						
9333.93	727.05	9356.2	689.8	8471.95	697.31	8709.02	709.49	9097.83	727.05						
10807.25	704.68	11115.41	726.85	9498.58	720.8	9610.56	717.05	10471.65	710.92						
11610.38	652.81	2049.79	679.79	11144.17	676.32	11299.9	665.53	11545.29	651.9						
13087.46	725.08	13315.48	687.74	12388.48	71012896.19		718.52	12904.82	718.91						
14058.83	72014115.95		717.95	13380.94	716.61	13503.05	716.44	13688.44	720						
14751.81	73015181.42		713.34	14205.04	703.18	14485.43	703.92	14678.37	722.95						
16071.02	647.04	16268.41	704.43	15905.37	665.41	15922.46	661.35								
17093.11	611.48	19454.44	625.93	16289.98	624.19	16541.19	618.81	16979.61	612.68						
20620.94	594.43	20714.18	611.48	19673.75	62020047.28		62020450.85	594.43							
21546.39	58021577.99		592.95	20964.14	591.48	21501.33	590.02	21508.7	588.61						
21917.28	580	21996.3	575.06	21618.5	570.02	21659.02	565.42	1877.19	571.13						
22589.46	677.14	22663.83	606.49	22054.88	618.48	22250.64	660.78	22310.54	664.77						
24435.85	732.95	24660.17	681.23	23491.88	733.62	23769.52	735.93	24189.01	730.9						
25620.74	687.44	25666.77	730.79	25166.8	717.42	25202.85	714.34	25474.32	693.95						
26470.04	713.83	26721.99	688.85	25714.98	688.85	25958.7	697.39	26324.07	708.72						
28165.82	735.68	28221.6	725.61	27211.94	742.77	27418.27	748.72	27792.16	746.41						
30371.92	731.48	31793.53	734.42	28927.01	722.57	28993.25	722.95	30012.21	722.95						
34061.07	712.95	34410.78	705.93	2260.64	714.43	32995.63	714.43	33896.51	712.95						
35824.71	70035830.36		714.08	34517.55	712.53	34883.97	705.93	35291.07	705.9						
36269.09	613.77	36735.2	699.62	35976.25	648.76	36134.33	604.43	36158.48	605.95						
37809.63	705.93	37863.55	625.76	37150.47	692.12	37238.79	705.57	37665.53	708.05						
39471	722.08	39839.82	706.24	38236.37	714.33	38710.04	719.78	39004.3	721.48						
41184.42	740	41523.8	739.6	40059.7	739.89	40148.77	737.16	40594.7	722.95						
42133.84	714.92	42473.96	729.77	41839.9	721.71	41964.48	717.95	42032.52	715.51						
43808.77	703.75	44021.55	724.44	42638.45	73042722.55		73043716.04	706.61							
44551.48	708.73	44719.19	702.21	44245.48	709.1	44325	708.52	44524.88	708.52						
45968.71	690.87	46083.07	705.98	44987.88	699.55	45619.46	681.58	45753.21	680.97						
47996.39	742.24	48466.72	696.44	46598.27	727.34	46889.12	732.01	47832.42	739.78						
			749.68	48595.12	755.74	49426.28	800								

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521546.39 .1521917.28 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21546.3921917.28 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.52	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15 <td>wt. n-Val.</td> <td>0.150</td> <td>0.150</td> <td>0.150</td>	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.37 <td>Reach Len. (ft)</td> <td>4.99</td> <td>4.99</td> <td>4.99</td>	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546142.00	70143.98	1231810.00
E.G. Slope (ft/ft)	0.000288	Area (sq ft)	1546142.00	70143.98	1231810.00
Q Total (cfs)	7996901.00	Flow (cfs)	4952331.00	387067.80	2657503.00
Top Width (ft)	45681.54	Top Width (ft)	18563.88	370.89	26746.77
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.52	2.16
Max Chl Dpth (ft)	193.97	Hydr. Depth (ft)	83.29	189.12	46.05
Conv. Total (cfs)	471303400.0	Conv. (cfs)	291869300.0	22812130.0	156621900.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18586.46	372.89	26787.78
Min Ch El (ft)	565.40	Shear (lb/sq ft)	1.50	3.38	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.79	18.66	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	64758.17	3139.71	49153.47
C & E Loss (ft)	0.00	Cum SA (acres)	779.39	16.66	1159.21

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268110.*

INPUT
Description:

CROSS SECTION OUTPUT Profile #PF 1

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS RS: 268105.*

INPUT
Description:

Station Elevation Data				num= 174			
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
2392.61	768.48	2530.49	760.74	1407.59	760.194	2130.36	768.48
3662.33	720.89	3919.7	770	2738.8	770	3133.6	749.91
5547.07	697.94	5744.36	711.36	4524.58	700.42	4627.49	703.72
6946.11	686.23	7199.65	705.98	5988.46	690.78	6026.77	688.48
7792.34	697.37	7853.35	665.67	7299.62	658.48	7394.76	658.48
8263.03	688.72	8343.14	698.48	8035.87	695.43	8091.78	695.43
9334.34	726.96	9356.62	689.79	8472.33	697.32	8709.41	709.49
10807.73	704.51	11111.91	726.75	9499.01	720.69	9610.99	716.96
11610.9	652.89	12050.33	679	631114.46	676.121	1300.41	665.39
13088.05	724.92	131316.07	687.86	12389.03	710	12896.77	718.48
14059.46	720.41	1416.58	717.74	134381.54	716.433	1503.65	716.33
14752.47	730.51	1582.09	713.38	14205.67	703.29	14486.08	704.04
16071.74	647.33	16269.91	626.06	16290.71	647.57	15906.08	665.76
17093.88	611.52	19455.31	611.52	19674.63	624.33	16541.93	618.87
20621.86	594.57	20715.1	593.42	20965.08	620	20448.18	620
21547.36	5802159.27	21	575	6321620.05	591.52	221502.29	590.02
22918.56	5802159.62	606	732	2056.21	575	222662.80	565.39
23918.56	676.98	2626.42	676.98	252349.68	612	5702252.06	660.81
24438.17	637.04	244662.59	730	8225169.43	733	412377.57	735
25623.56	687.68	2569.61	689	1325717.83	717.31	25205.5	716.31
26473.21	713.92	26726.75	725	742721.75	689	1325961.66	697
28169.69	735.54	28225.5	732	29	742.81	742.81	742.81
30376.71	731.52	31297.98	717.31	3266.21	742.81	742.81	742.81
34067.39	731.52	34441.25	714	2134524.07	712.65	34890.63	712.65
35831.77	700	35837.41	699.63	35983.38	648.65	36141.52	604.57
36276.34	613.89	36742.63	625.95	373158.08	692.05	373246.43	705.43
37817.51	705.68	37871.46	705.68	398244.43	714	238871.29	719
39479.57	722.14	39848.55	739.99	594068.52	739.88	40157.62	737.18

SS_Rev3.rep
 41193.7 74041533.22 729.8241849.45 721.8741974.08 718.1342042.16 715.68
 42143.52 715.0842483.77 724.4742648.34 73042732.47 73043726.38 706.74
 43819.14 703.8744032.01 702.2844256.04 709.0744335.59 708.4844535.55 708.48
 44562.16 708.6944729.94 706.0144998.74 699.6145630.59 681.6345764.39 681.63
 45979.98 690.8146094.38 696.55 46609.8 727.2546900.77 73247844.46 739.77
 48008.51 742.1948479.03 749.6748607.48 755.6749438.98 800

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 0 .1521547.36 .1521918.56 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21547.3621918.56 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.52	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.37	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546234.00	70199.05	1231306.00
E.G. Slope (ft/ft)	0.000288	Area (sq ft)	1546234.00	70199.05	1231306.00
Q Total (cfs)	7996901.00	Flow (cfs)	4953830.00	387462.20	2655609.00
Top width (ft)	45694.93	Top width (ft)	18565.39	371.20	26758.34
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.52	2.16
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.29	189.11	46.02
Conv. Total (cfs)	471183600.0	Conv. (cfs)	291883500.0	22829570.0	156470500.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18587.87	373.20	26799.21
Min Ch El (ft)	565.39	Shear (lb/sq ft)	1.50	3.38	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.79	18.67	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	64403.93	3123.63	48871.31
C & E Loss (ft)	0.00	Cum SA (acres)	775.14	16.57	1153.08

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 268100.*

INPUT

Description:

Station	Elevation	Data	num= 174	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.83		760.75	1407.62	760	1914.83	760	2310.41	768.45	
2392.66	768.45	2530.55		770	2738.86	770	2828.18	768.95	3133.67	749.88	
3662.41	720.9	3919.79		711.38	4524.69	700.43	4627.6	703.71	4759.03	708.16	
5547.2	697.91	5744.49		705.92	5988.6	690.75	6026.91	688.45	6699.85	688.45	
6946.26	686.17	7199.81		665.63	7299.79	658.45	7394.93	658.45	7519.23	669.03	
7792.51	697.33	7853.52		698.45	8036.05	695.36	8091.96	695.36	8131.28	693.42	
8263.21	688.7	8343.33		689.79	8472.52	697.33	8709.61	709.49	9098.44	726.91	
9334.55	726.91	9356.83		726.7	9499.22	720.63	9611.2	716.9110472.36		710.83	
10807.97	704.4311116.15			679.5511144.92		676.0211300.66		665.3211546.06		651.99	
11611.16	652.93	12050.6		687.9212389.31		71012897.06		718.4512905.69		718.84	
13088.34	724.8513316.37			717.6313381.84		716.313503.95		716.2713689.36		720	
14059.78	720	14116.9		713.3914205.99		703.3414486.41		704.1114679.35		723.01	
14752.8	73015182.43			73015721.23		704.6415906.44		665.9415923.53		661.89	
16072.1	647.48	16269.5		626.1316291.07		624.39	16542.3	618.916980.75		612.74	
17094.26	611.5519455.75			611.5519675.07		62020048.62		63020452.22		594.64	
20622.32	594.6420715.57			593.0920965.55		591.5521502.77		590.0221510.15		588.62	
21547.84	58021579.82			575.0121620.82		569.9921661.83		565.3921879.24		571.18	
21919.2	58021998.27			606.8522056.88		618.7422252.77		660.8222312.71		664.81	
22591.79	676.9222666.21			680.9723494.78		733.3123772.59		735.7324192.34		730.94	
24439.33	733.09	24663.8		730.8325170.75		717.2725206.82		714.2225478.46		694	
25624.97	687.825671.03			689.2725719.26		689.2725963.14		697.7426328.74		708.89	
26474.79	713.96	26726.9		725.8127217.16		742.8327423.61		748.6627797.74		746.24	
28171.63	735.4728227.45			734.22	28933.3	722.6928999.58		723.0930019.18		723.09	
30379.11	731.55	31801.6		706.18	32269	714.6433004.45		714.6433905.89		713.09	
34070.55	713.0934420.48			714.2834527.32		712.7334893.97		706.1835301.32		706.18	
35835.3	70035840.94			699.635986.93		648.636145.11		604.6436169.27		606.15	
36279.96	613.9536746.35			626.0437161.88		692.0237250.25		705.3637677.26		707.82	
37821.45	705.5537875.41			705.8638248.46		714.1938722.42		719.7739016.87		721.55	
39483.86	722.1839852.91			739.5840072.93		739.8840162.05		737.1940608.26		723.09	
41198.34	74041537.93			729.8541854.23		721.9441978.89		718.2242046.97		715.77	
42148.36	715.1642488.68			724.4942653.28		73042737.43		73043731.54		706.8	
43824.32	703.9344037.24			702.3144261.31		709.0644340.88		708.4544540.89		708.45	
44567.51	708.6744735.32			706.0245004.17		699.6445636.15		681.6545769.98		681.02	
45985.62	690.7846100.04			696.546615.57		727.21	46906.6	731.9947850.49		739.77	
48014.56	742.1948485.18			749.6748613.67		755.6649445.34		800			

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 0 .1521547.84 .15 21919.2 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21547.84 21919.2 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.52	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.37	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546259.00	70225.82	1231023.00
E.G. Slope (ft/ft)	0.000288	Area (sq ft)	1546259.00	70225.82	1231023.00
Q Total (cfs)	7996901.00	Flow (cfs)	4954606.00	387663.50	2654632.00
Top width (ft)	45701.59	Top width (ft)	18566.19	371.36	26764.05
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.20	5.52	2.16
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.28	189.10	46.00
Conv. Total (cfs)	471110100.0	Conv. (cfs)	291883600.0	22837870.0	156388600.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18588.62	373.35	26804.86
Min Ch El (ft)	565.39	Shear (lb/sq ft)	1.50	3.38	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.79	18.68	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	64226.80	3115.59	48730.28
C & E Loss (ft)	0.00	Cum SA (acres)	773.01	16.53	1150.02

CROSS SECTION

	Element	Left OB	Channel	Right OB
E.G. Elev (ft)	759.51	0.15	0.150	0.150
Vel Head (ft)	0.15			
W.S. Elev (ft)	759.37	4.99	4.99	4.99
Crit W.S. (ft)		1546382.00	70306.60	1230241.00
E.G. Slope (ft/ft)	0.000288	1546382.00	70306.60	1230241.00
Q Total (cfs)	7996901.00	4958986.00	388248.50	2651757.00
Top Width (ft)	45721.73	18568.40	371.83	26781.49
Vel Total (ft/s)	2.81	3.21	5.52	2.16
Max Chl Dpth (ft)	193.98	83.28	189.08	45.94
Conv. Total (cfs)	470919500.0	291900400.0	22863080.0	156156000.0
Length wtd. (ft)	4.99	18590.69	373.80	26822.11
Min Ch El (ft)	565.39	1.50	3.39	0.83
Alpha	1.19	4.80	18.70	1.78
Frctn Loss (ft)	0.00	36395.38	3091.44	48307.36

C & E Loss (ft) 0.00 Cum SA (acres) SS_Rev3.rep 766.63 16.40 1140.82

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 268080.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.94	760.8	1407.75	760	1915	760	2310.62	768.36				
2392.88	768.36	2530.77	770	2739.11	770	2828.43	768.89	3133.95	749.77				
3662.74	720.96	3920.14	711.47	4525.09	700.45	4628.01	703.67	4759.46	708.04				
5547.69	697.78	5745	705.67	5989.13	690.63	6027.45	688.36	6700.45	688.36				
6946.89	685.94	7200.45	665.45	7300.44	658.36	7395.59	658.36	7519.9	668.82				
7793.21	697.16	7854.23	698.36	8036.77	695.08	8092.68	695.08	8132.01	693.16				
8263.95	688.62	8344.08	689.78	8473.28	697.36	8710.39	709.5	9099.26	726.72				
9335.39	726.72	9357.66	726.5	9500.07	720.4	9612.06	716.72	10473.3	710.71				
10808.94	704.0911117.15		679.2211145.92		675.6211301.67		665.04	11547.1	652.12				
11612.2	653.1112051.68		688.1712390.42		71012898.21		718.3612906.85		718.74				
13089.51	724.5313317.56		717.2213383.04		715.913505.16		716.0513690.58		720				
14061.04	72014118.17		713.4714207.26		703.54	14487.7	704.3614680.67		723.08				
14754.12	73015183.79		73015722.64		704.9215907.86		666.6515924.96		662.61				
16073.54	648.0616270.96		626.3916292.53		624.6616543.78		619.0216982.28		612.82				
17095.79	611.6419457.49		611.6419676.84		62020050.42		62020454.05		594.92				
20624.17	594.9220717.42		593.2820967.42		591.64	21504.7	590.0221512.07		588.63				
21549.77	58021582.26		574.9621623.92		569.9421665.57		565.3921881.99		571.25				
21921.75	58022000.89		607.3322059.55		619.08	22255.6	660.8722315.59		664.87				
22594.91	676.6222669.39		680.6323498.65		732.9123776.69		735.4724196.79		731				
24443.98	733.2824668.64		730.88	25176	717.1125212.11		714.0725483.97		694.07				
25630.61	688.27	25676.7	689.8425724.97		689.8425969.05		698.2126334.96		709.13				
26481.13	714.1426733.45		726.0827224.12		742.9127430.74		748.5827805.18		746.01				
28179.38	735.1828235.24		733.9528941.68		722.8629008.02		723.2830028.46		723.28				
30388.69	731.6431812.36		706.5632280.15		714.9233016.21		714.9233918.41		713.28				
34083.2	713.2834433.42		714.5334540.35		713.03	34907.3	706.5635314.99		706.56				
35849.41	70035855.06		699.5736001.17		648.436159.48		604.9236183.66		606.42				
36294.44	614.1936761.22		626.4	37177.1	691.8937265.54		705.08	37692.9	707.51				
37837.21	705.0537891.22		705.3538264.57		714.0338738.93		719.7539033.62		721.64				
39501	722.3339870.36		739.5640090.56		739.8740179.75		737.2240626.34		723.28				
41216.91	74041556.79		729.9641873.34		722.25	41998.1	718.5742066.24		716.12				
42167.72	715.4742508.32		724.5542673.05		73042757.28		73043752.21		707.06				
43845.07	704.1744058.16		702.4544282.42		70944362.05		708.3644562.23		708.36				
44588.87	708.5944756.82		706.0645025.89		699.75	45658.4	681.7545792.34		681.08				
46008.16	690.6646122.68		696.3246638.63		727.0446929.91		731.9747874.58		739.76				
48038.79	742.16	48509.8	749.6548638.39		755.5949470.75		800						

Manning's n Values

	Sta	n Val	Sta	n Val	Sta	n Val
	0	.1521549.77	.1521921.75	.15		
Bank	Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.
	21549.77	21921.75	4.99	4.99	4.99	.1
						Expan.
						.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.51	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.36	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546425.00	70331.65	1229953.00
E.G. Slope (ft/ft)	0.000288	Area (sq ft)	1546425.00	70331.65	1229953.00
Q Total (cfs)	7996901.00	Flow (cfs)	4957736.00	388435.70	2650730.00
Top Width (ft)	45728.46	Top Width (ft)	18569.12	371.98	26787.37
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.52	2.16
Max Chl Dpth (ft)	193.97	Hydr. Depth (ft)	83.28	189.07	45.92
Conv. Total (cfs)	470850400.0	Conv. (cfs)	291907100.0	22870750.0	156072600.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18591.36	373.95	26827.92
Min Ch El (ft)	565.39	Shear (lb/sq ft)	1.50	3.39	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.80	18.71	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	63518.23	3083.39	48166.44
C & E Loss (ft)	0.00	Cum SA (acres)	764.50	16.36	1137.75

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 268075.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1235.96	760.81	1407.78	760	1915.04	760	2310.67	768.34		
2392.93	768.34	2530.83	770	2739.17	770	2828.5	768.87	3134.02	749.75		
3662.82	720.97	3920.23	711.49	4525.19	700.46	4628.12	703.66	4759.56	708.02		
5547.82	697.75	5745.13	705.61	5989.27	690.6	6027.58	688.34	6700.6	688.34		
6947.04	685.88	7200.61	665.41	7300.6	658.34	7395.75	658.34	7520.07	668.76		
7793.39	697.12	7854.4	698.34	8036.95	695.01	8092.86	695.01	8132.19	693.1		
8264.14	688.6	8344.26	689.77	8473.47	697.37	8710.58	709.5	9099.46	726.67		
9335.6	726.67	9357.87	726.45	9500.29	720.34	9612.28	716.6710473.53		710.68		
10809.18	704	11117.4	679.1411146.17		675.5211301.93		664.9711547.35		652.15		
11612.46	653.1612051.95		688.2312390.69		710	12898.5	718.3412907.14		718.71		
13089.81	724.4613317.86		717.1113383.34		715.813505.47		715.9913690.89		720		
14061.35	72014118.48		713.4914207.58		703.5914488.03		704.42	14681	723.1		
14754.45	73015184.13		73015722.99		704.9915908.22		666.8215925.31		662.79		
16073.9	648.216271.32		626.46	16292.9	624.7316544.15		619.0516982.65		612.84		
17096.17	611.6619457.93		611.6619677.28		62020050.87		62020454.51		594.99		
20624.63	594.9920717.89		593.3320967.89		591.6621505.18		590.0221512.55		588.64		
21550.25	58021582.87		574.9521624.69		569.9321666.51		565.3821882.67		571.27		
21922.39	58022001.55		607.4522060.22		619.1722256.31		660.8822316.31		664.88		
22595.69	676.5422670.19		680.5423499.62		732.8123777.71		735.41	24197.9	731.01		
24445.15	733.3324669.85		730.8925177.32		717.0725213.43		714.0325485.35		694.08		
25632.01	688.3925678.12		689.98	25726.4	689.9825970.53		698.3326336.51		709.18		

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Manning's n Values		num= 3					
Sta	n Val	Sta	n Val	Sta	n Val		
0	.1521550.25		.1521922.39		.15		
Bank	Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
	21550.2521922.39		4.99	4.99	4.99	.1	.3

E.G. Elev (ft)	759.51	Element	Left 08	Channel	Right 08
Vel Head (ft)	0.15	wt. n-val.	0.150	0.150	0.150
W.S. Elev (ft)	759.36	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546469.00	70359.78	1229704.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546469.00	70359.78	1229704.00
Q Total (cfs)	7996901.00	Flow (cfs)	4958472.00	388635.40	2649794.00
Top Width (ft)	45735.03	Top Width (ft)	18569.82	372.14	26793.07
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.52	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.28	189.07	45.90
Conv. Total (cfs)	47079160.0	Conv (cfs)	2649794.00	1879650.00	15598800.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18592.01	374.10	26833.56
Min Ch El (ft)	565.38	Shear (lb/sq ft)	1.50	3.39	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.80	18.71	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	63341.08	3075.33	48025.56
C & E Loss (ft)	0.00	Cum SA (acres)	762.37	16.32	1134.68

Manning's n Values		num= 3					
Sta	n Val	Sta	n Val	Sta	n Val		
0	.1521550.74		.1521923.03		.15		
Bank Sta: Left	Right	Lengths: Left Channel		Right	Coeff Contr.	Expan.	
21550.74	21923.03	4.99 4.99		4.99	.1	.3	

E.G. Elev (ft)	759.51	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.36	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546493.00	70384.92	1229453.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546493.00	70384.92	1229453.00
Q Total (cfs)	7996901.00	Flow (cfs)	4959188.00	388823.20	2648890.00
Top Width (ft)	45741.77	Top Width (ft)	18570.54	372.29	26798.94
Fe Total (ft/s)	2.81	Avg. Vc (ft/s)	3.25	5.52	3.25
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.28	189.06	45.88
Conv. Total (cfs)	470724400.0	Conv. (cfs)	291914400.0	22887440.0	155922500.0

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Length wtd. (ft)	4.99	Wetted Per. (ft)	18592.69	374.25	26839.37
Min Ch El (ft)	565.38	Shear (lb/sq ft)	1.50	3.39	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.81	18.72	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	63163.93	3067.27	47884.70
C & E Loss (ft)	0.00	Cum SA (acres)	760.25	16.27	1131.61

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268065.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.02	760.83	1407.84	760	1915.13	760	2310.78	768.29				
2393.04	768.29	2530.94	770	2739.29	770	2828.62	768.84	3134.16	749.69				
3662.99	721.01	3920.41	711.53	4525.4	700.47	4628.32	703.64	4759.78	707.96				
5548.07	697.69	5745.39	705.48	5989.54	690.54	6027.85	688.29	6700.9	688.29				
6947.35	685.76	7200.94	665.32	7300.93	658.29	7396.09	658.29	7520.4	668.66				
7793.74	697.04	7854.76	698.29	8037.31	694.87	8093.23	694.87	8132.55	692.97				
8264.5	688.56	8344.64	689.77	8473.85	697.38	8710.97	709.5	9099.87	726.58				
9336.02	726.58	9358.29	726.35	9500.71	720.23	9612.71	716.58	10474	710.62				
10809.66	703.83	11117.9	678.97	11146.67	675.32	11302.43	664.83	11547.87	652.21				
11612.98	653.25	12052.49	688.35	12391.25	710	12899.08	718.29	12907.71	718.66				
13090.39	724.31	13318.46	716.91	13383.94	715.61	13506.07	715.88	13691.5	720				
14061.98	720	14119.11	713.52	14208.22	703.69	14488.68	704.54	14681.66	723.14				
14755.11	730	15184.81	730	15723.69	705.13	15908.93	667.18	15926.03	663.15				
16074.62	648	16272.05	626.59	16293.63	624.86	16544.89	619.12	16983.42	612.88				
17096.94	611.71	19458.8	611.71	19678.16	620	20051.77	620	20455.43	595.13				
20625.55	595.13	20718.81	593.42	20968.83	591.72	21506.14	590.02	21513.52	588.65				
21551.22	580	21584.09	574.92	21626.24	569.91	21668.38	565.38	21884.04	571.31				
21923.67	580	22002.86	607.69	22061.55	619.34	22257.73	660.91	22317.75	664.91				
22597.24	676.39	22671.77	680.37	23501.55	732.62	23779.76	735.28	24200.12	731.04				
24447.47	733.42	24672.27	730.92	25179.95	716.98	25216.07	713.95	25488.11	694.12				
25634.83	688.62	25680.96	690.26	25729.26	690.26	25973.49	698.56	26339.62	709.3				
26485.89	714.27	276738.36	726.28	27229.33	742.97	27436.09	748.52	27810.76	745.84				
28185.19	734.97	28241.09	733.75	28947.97	722.98	29014.34	723.42	290035.42	723.42				
30395.88	731.71	31820.43	706.84	32288.52	715.13	33025.04	715.13	33927.79	713.42				
34092.69	713.42	34443.12	714.73	34550.12	713.26	34917.3	706.84	35325.24	706.84				
35860	700	35865.65	699.55	36011.85	648.24	36170.26	605.13	36194.46	606.61				
36305.3	614.37	37672.37	626.68	37188.51	691.79	37277	704.87	37704.63	707.28				
37849.04	704.67	37903.07	704.97	38276.66	713.91	38751.32	719.74	39046.19	721.71				
39513.86	722.41	39883.45	739.54	40103.78	739.87	40193.03	737.24	40639.89	723.42				
41230.84	740	41570.92	730.05	41887.68	722.49	42012.51	718.83	42080.7	716.38				
42182.23	715.74	42523.05	724.59	42687.89	730	42772.16	730	43767.71	707.25				
43860.63	704.35	44073.86	702.56	44298.25	708.96	44377.94	708.29	44578.24	708.29				
44604.89	708.52	44772.95	706.09	45042.19	699.84	45675.09	681.83	45809.12	681.13				
46025.07	690.57	46139.66	696.18	46655.93	726.92	46947.38	731.95	47892.64	739.75				
48056.96	742.14	48528.27	749.63	48656.93	755.55	49489.82	800						

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val
0	.1521551.22	.1521923.67	.15		

Bank Sta: Left 21551.2221923.67 Right 4.99 4.99 4.99

Coeff Contr. .1 Expan. .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.51	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.36	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546546.00	70411.73	1229166.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546546.00	70411.73	1229166.00
Q Total (cfs)	7996901.00	Flow (cfs)	4960030.00	389017.00	2647854.00
Top Width (ft)	45748.42	Top Width (ft)	18571.33	372.45	26804.63
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.52	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.28	189.05	45.86
Conv. Total (cfs)	470659200.0	Conv. (cfs)	291923600.0	22895670.0	155840000.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18593.43	374.40	26845.00
Min Ch El (ft)	565.38	Shear (lb/sq ft)	1.50	3.39	0.83
Alpha	1.19	Stream Power (lb/ft s)	4.81	18.73	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	62986.77	3059.20	47743.88
C & E Loss (ft)	0.00	Cum SA (acres)	758.12	16.23	1128.54

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268060.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.05	760.85	1407.88	760	1915.17	760	2310.83	768.27				
2393.09	768.27	2531	770	2739.35	770	2828.69	768.82	3134.23	749.66				
3663.07	721.01	3920.49	711.55	4525.5	700.48	4628.43	703.63	4759.88	707.93				
5548.19	697.66	5745.52	705.42	5989.67	690.51	6027.99	688.27	6701.05	688.27				
6947.51	685.7	7201.1	665.28	7301.09	658.27	7396.25	658.27	7520.57	668.61				
7793.91	697	7854.93	698.27	8037.49	694.8	8093.41	694.8	8132.74	692.9				
8264.69	688.54	8344.82	689.76	8474.04	697.39	8711.17	709.51	9100.07	726.53				
9336.23	726.53	9358.5	726.3	9500.92	720.17	9612.92	716.53	10474.23	710.59				
10809.91	703.75	11118.15	678.89	11146.92	675.22	11302.69	664.76	11548.13	652.24				
11613.24	653.29	12052.76	688.41	12391.53	710	12899.37	718.27	12908	718.64				
13090.68	724.22	13318.76	716.81	13384.24	715.51	13506.37	715.82	13691.81	720				
14062.29	720	14119.43	713.54	14208.54	703.74	14489	704.61	14681.98	723.16				
14755.44	730	15185.15	730	15724.05	705.21	15909.29	667.36	15926.38	663.33				
16074.98	648.64	16272.42	626.65	16293.99	624.92	16545.26	619.15	16983.79	612.9				
17097.32	611.73	19459.23	611.73	19678.6	620	20052.22	620	20455.88	595.2				
20626.01	595.22	20719.28	593.47	20969.3	591.73	21506.62	590.02	21514	588.65				
21551.7	580	21584.7	574.92	21627.01	569.92	21669.32	565.38	21884.73	571.32				

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CROSS SECTION OUTPUT					Profile #PF 1		
E.G. Elev (ft)	759.50	Element	Left OB	Channel	Right OB		
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150		
W.S. Elev (ft)	759.36	Reach Len. (ft)	4.99	4.99	4.99		
Crit W.S. (ft)		Flow Area (sq ft)	1546608.00	70467.21	1228634.00		
G. Slope (ft/ft)	0.000289	Area (sq ft)	1546608.00	70467.21	1228634.00		
Q Total (cfs)	7996901.00	Flow (cfs)	4961534.00	389423.10	2645945.00		
				Page 630			

Top width (ft)	45761.73	Top width (ft)	18572.75	372.77	26816.21
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15
Max chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.27	189.04	45.82
Conv. Total (cfs)	470525400.0	Conv. (cfs)	291929000.0	22913060.0	155683300.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18594.76	374.71	26856.47
Min Ch El (ft)	565.38	Shear (lb/sq ft)	1.50	3.39	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.81	18.75	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	62632.43	3043.06	47462.32
C & E Loss (ft)	0.00	Cum SA (acres)	753.86	16.14	1122.40

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268050.*

INPUT

Description:

Station	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.1	760.87	1407.94	760	1915.26	760	2310.93	768.22
2393.2	768.22	2531.11	770	2739.48	770	2828.81	768.79	3134.37	749.61
3663.23	721.04	3920.67	711.59	4525.7	700.49	4628.63	703.61	4760.1	707.88
5548.44	697.59	5745.77	705.3	5989.94	690.45	6028.26	688.22	6701.35	688.22
6947.82	685.59	7201.42	665.19	7301.42	658.22	7396.58	658.22	7520.91	668.5
7794.26	696.92	7855.28	698.22	8037.85	694.66	8093.77	694.66	8133.1	692.77
8265.06	688.5	8345.2	689.76	8474.42	697.41	8711.56	709.51	9100.48	726.44
9336.64	726.44	9358.92	726.2	9501.35	720.06	9613.35	716.44	10474.7	710.53
10810.39	703.5811118.64	678.73111147.42	678.73111147.42	675.0311303.19	675.0311303.19	675.0311303.19	664.6211548.65	652.3	
11613.76	653.38	12053.3	688.5312392.08	71012899.95	71012899.95	71012899.95	718.2212908.58	718.59	
13091.27	724.0713319.35	716.5913384.84	716.5913384.84	715.313506.98	715.313506.98	715.313506.98	715.7113692.42	720	
14062.92	72014120.06	713.5814209.17	713.5814209.17	703.8414489.65	703.8414489.65	703.8414489.65	704.7314682.64	723.2	
14756.1	73015185.83	73015724.75	73015724.75	705.34	15910	705.34	15910	667.7115927.09	663.69
16075.7	648.9316273.15	626.7916294.72	626.7916294.72	625.06	16546	625.06	16546	619.2116984.56	612.94
17098.09	611.7819460.11	611.7819679.48	611.7819679.48	62020053.11	62020053.11	62020053.11	62020053.11	62020053.11	595.34
20026.94	595.3420720.21	593.5620970.24	593.5620970.24	591.7821507.59	591.7821507.59	591.7821507.59	590.0221514.96	588.66	
21552.67	58021585.92	574.8821628.56	574.8821628.56	569.88	21671.2	569.88	21671.2	565.38	21886.1
21925.59	58022004.83	608.0522063.56	608.0522063.56	619.622259.85	619.622259.85	619.622259.85	660.9522319.92	664.95	
22599.58	676.1722674.16	680.1123504.45	680.1123504.45	732.323782.83	732.323782.83	732.323782.83	735.0924203.45	731.08	
24450.96	733.5624675.89	730.9625183.89	730.9625183.89	716.8625220.04	716.8625220.04	716.8625220.04	713.8325492.24	694.17	
25639.06	688.9825685.21	690.6825733.54	690.6825733.54	690.6825977.93	690.6825977.93	690.6825977.93	698.9126344.29	709.48	
26490.64	714.4126743.27	726.4827234.55	726.4827234.55	743.0327441.43	743.0327441.43	743.0327441.43	748.4627816.34	745.67	
28191	734.7628246.94	733.5528954.25	733.5528954.25	723.129020.67	723.129020.67	723.129020.67	723.5630042.38	723.56	
30403.06	731.7831828.51	707.1232296.88	707.1232296.88	715.3433033.86	715.3433033.86	715.3433033.86	715.3433937.17	713.56	
34102.17	713.5634452.82	714.9234559.89	714.9234559.89	713.48	34927.3	713.48	34927.3	707.1235335.49	707.12
35870.58	70035876.24	699.5436022.53	699.5436022.53	648.0936181.04	648.0936181.04	648.0936181.04	605.3436205.25	606.81	
36316.16	614.5536783.52	626.9537199.92	626.9537199.92	691.6937288.47	691.6937288.47	691.6937288.47	704.6637716.36	707.04	
37860.86	704.2937914.93	704.5938288.75	704.5938288.75	713.79	38763.7	713.79	38763.7	719.7339058.75	721.78
39526.71	722.5139896.54	739.52	40117	739.8640206.31	739.8640206.31	739.8640206.31	737.2640653.45	723.56	
41244.76	74041585.05	730.1341902.01	730.1341902.01	722.7242026.92	722.7242026.92	722.7242026.92	719.142095.15	716.64	
42196.75	715.9442537.78	724.6442702.71	724.6442702.71	73042787.04	73042787.04	73042787.04	73043783.21	707.44	
43876.19	704.5344089.55	702.6644314.09	702.6644314.09	708.9244393.82	708.9244393.82	708.9244393.82	708.2244594.24	708.22	
44620.92	708.4644789.08	706.1345058.48	706.1345058.48	699.9245691.78	699.9245691.78	699.9245691.78	681.945825.89	681.17	
46041.97	690.4846156.64	696.0446673.23	696.0446673.23	726.7946964.86	726.7946964.86	726.7946964.86	731.9447910.71	739.74	
48075.13	742.1248546.73	749.6248675.48	749.6248675.48	755.549508.88	755.549508.88	755.549508.88	800		

Manning's n Values

Sta	n	Sta	n	Sta	n	Sta	n
0	.1521552.67	.1521925.59	.15				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
21552.6721925.59		4.99	4.99	4.99	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.50	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.35	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546657.00	70492.35	1228377.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546657.00	70492.35	1228377.00
Q Total (cfs)	7996901.55	Flow (cfs)	4962309.00	389605.20	2644987.00
Top width (ft)	45768.55	Top width (ft)	18573.55	372.92	26822.08
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15
Max chl Dpth (ft)	193.97	Hydr. Depth (ft)	83.27	189.03	45.80
Conv. Total (cfs)	470463900.0	Conv. (cfs)	291936500.0	22920780.0	155606700.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18595.51	374.86	26862.29
Min Ch El (ft)	565.38	Shear (lb/sq ft)	1.50	3.39	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.81	18.75	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	62455.25	3034.99	47321.59
C & E Loss (ft)	0.00	Cum SA (acres)	751.74	16.10	1119.33

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268045.*

INPUT

Description:

Station	Elev	Sta	Elev	Sta	Elev	Sta	Elev	
0	800	1236.13	760.88	1407.97	760	1915.3	760	2310.98
2393.25	768.2	2531.17	770	2739.54	770	2828.88	768.78	3134.44
3663.31	721.05	3920.76	711.61	4525.8	700.5	4628.74	703.6	4760.2
5548.56	697.56	5745.9	705.24	5990.07	690.42	6028.39	688.2	6701.5
6947.98	685.53	7201.58	665.15	7301.58	658.2	7396.75	658.2	7521.08
7794.43	696.88	7855.46	698.2	8038.03	694.59	8093.95	694.59	8133.28
8265.25	688.48	8345.38	689.76	8474.61	697.41	8711.75	709.51	9100.69
9336.85	726.39	9359.13	726.15	9501.56	720	9613.57	716.3910474.94	710.5
10810.63	703.511118.89	678.6511147.67	678.6511147.67	674.9311303.45	674.9311303.45	674.9311303.45	664.5511548.91	652.33
11614.02	653.4212053.57	688.5912392.36	688.5912392.36	71012900.23	71012900.23	71012900.23	718.212908.87	718.57
13091.56	723.9913319.65	716.4913385.14	716.4913385.14	715.213507.28	715.213507.28	715.213507.28	715.6513692.73	720
14063.24	72014120.38	713.614209.49	713.614209.49	703.8914489.97	703.8914489.97	703.8914489.97	704.7914682.97	723.22
14756.43	73015186.17	730	15725.1	705.4115910.35	705.4115910.35	705.4115910.35	667.8915927.45	663.87

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16076.06	649.0816273.51	626.8516295.08	625.1216546.37	619.2416984.94	612.96				
17098.47	611.819460.54	611.819679.92	62020053.56	62020457.26	595.41				
20627.4	595.4120720.67	593.6120970.71	591.821508.07	590.0221515.44	588.66				
21553.15	58021586.53	574.8621629.33	569.8721672.13	565.3721886.79	571.38				
21926.23	58022005.48	608.1722064.22	619.6922260.56	660.9622320.64	664.97				
22600.36	676.122674.95	680.0323505.41	732.223783.86	735.0224204.56	731.09				
24452.12	733.61 24677.1	730.9725185.21	716.8225221.36	713.7925493.62	694.18				
25640.46	689.0925686.63	690.8225734.97	690.82 25979.4	699.0326345.84	709.53				
26492.23	714.4526744.91	726.5527236.29	743.0527443.22	748.44 27818.2	745.61				
28192.94	734.6928248.88	733.4828956.35	723.1429022.78	723.6130044.71	723.61				
30405.46	731.8 31831.2	707.2132299.67	715.41 33036.8	715.41 33940.3	713.61				
34105.33	713.6134456.06	714.9934563.15	713.5634930.63	707.2135338.91	707.21				
35874.11	70035879.77	699.5336026.09	648.0336184.63	605.4136208.85	606.88				
36319.79	614.6136787.24	627.0537203.72	691.6537292.29	704.5937720.28	706.97				
37864.8	704.1637918.88	704.4638292.78	713.7538767.82	719.7339062.94	721.8				
39531	722.5439900.89	739.5140121.41	739.8640210.73	737.2740657.97	723.61				
41249.4	74041589.77	730.1641906.79	722.842031.73	719.1942099.97	716.73				
42201.59	716.0142542.69	724.6642707.66	730 42792	73043788.38	707.51				
43881.38	704.5944094.78	702.744319.36	708.944399.11	708.244599.58	708.2				
44626.26	708.4444794.45	706.1445063.92	699.9545697.34	681.9345831.48	681.19				
46047.61	690.4546162.29	696 46679	726.7546970.69	731.9347916.73	739.73				
48081.19	742.1248552.88	749.6148681.66	755.4849515.23	800					

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521553.15 .1521926.23 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21553.1521926.23 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.50	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.35	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546706.00	70520.99	1228108.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546706.00	70520.99	1228108.00
Q Total (cfs)	7996901.00	Flow (cfs)	4963103.00	389811.60	2643987.00
Top width (ft)	45775.28	Top width (ft)	18574.25	373.08	26827.95
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.27	189.02	45.78
Conv. Total (cfs)	470402500.0	Conv. (cfs)	291945100.0	22929920.0	155527500.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18596.16	375.01	26868.10
Min Ch El (ft)	565.37	Shear (lb/sq ft)	1.50	3.39	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.82	18.75	1.78
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	62278.07	3026.91	47180.89
C & E Loss (ft)	0.00	Cum SA (acres)	749.61	16.06	1116.25

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 268040.*

INPUT

Description:

Station Elevation Data num= 174									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800 1236.16	760.89	1408	760	1915.34	760	2311.03	768.17	
2393.3	768.17 2531.23	770 2739.6		770	2828.94	768.76	3134.51	749.55	
3663.4	721.07 3920.85	711.64 4525.9		700.5	4628.84	703.59	4760.31	707.82	
5548.69	697.53 5746.03	705.18 5990.21		690.39	6028.52	688.17	6701.65	688.17	
6948.13	685.47 7201.74	665.11 7301.75		658.17	7396.91	658.17	7521.25	668.39	
7794.61	696.84 7855.63	698.17 8038.21		694.52	8094.13	694.52	8133.46	692.64	
8265.43	688.47 8345.57	689.75 8474.8		697.42	8711.95	709.51	9100.89	726.35	
9397.06	726.35 9359.34	726.11 9501.78		719.94	9613.78	716.35	10475.17	710.47	
10810.87	703.4111119.14	678.5611147.92		674.83	11303.7	664.4811549.16		652.36	
11614.28	653.4712053.84	688.6512392.64		71012900.52		718.1712909.16		718.54	
13091.86	723.9113319.95	716.3813385.44		715.0913507.58		715.5913693.03		720	
14063.55	72014120.69	713.6114209.81		703.94	14490.3	704.85	14683.3	723.24	
14756.76	73015186.51	73015725.46		705.4815910.71		668.0715927.81		664.05	
16076.42	649.2216273.87	626.9216295.45		625.1916546.74		619.2716985.32		612.98	
17098.85	611.8319460.98	611.8319680.36		62020054.01		62020457.72		595.48	
20627.86	595.4820721.13	593.6520971.18		591.8321508.55		590.0221515.93		588.66	
21553.63	58021587.14	574.85 21630.1		569.8521673.07		565.3721887.47		571.4	
21926.87	58022006.14	608.2922064.89		619.7822261.27		660.9722321.36		664.98	
22601.14	676.0222675.75	679.9423506.38		732.123784.88		734.9624205.68		731.11	
24453.28	733.6524678.31	730.9825186.52		716.7825222.68		713.75 25495		694.2	
25641.88	689.2125688.04	690.96 25736.4		690.9625980.88		699.1526347.39		709.59	
26493.81	714.526746.55	726.6127238.03		743.07 27445		748.4227820.06		745.56	
28194.88	734.6228250.83	733.4128958.44		723.1829024.89		723.6530047.03		723.65	
30407.86	731.8331833.89	707.3132302.46		715.4833039.74		715.4833943.43		713.65	
34108.5	713.6534459.29	715.05 34566.4		713.6434933.96		707.3135342.33		707.31	
35877.64	700 35883.3	699.5236029.65		647.9836188.22		605.4836212.45		606.94	
36323.4	614.6736790.96	627.1437207.53		691.6237296.12		704.5237724.29		706.98	
37868.74	704.0437922.83	704.34 38296.8		713.7238771.95		719.7339067.13		721.83	
39535.28	722.5739905.26	739.5140125.82		739.8640215.16		737.2840662.49		723.65	
41254.04	74041594.48	730.1941911.56		722.8842036.53		719.2742104.79		716.82	
42206.43	716.09 42547.6	724.67 42712.6		73042796.96		73043793.55		707.57	
43886.57	704.6544100.01	702.7344324.64		708.8944404.41		708.1744604.91		708.17	
44631.6	708.4244799.83	706.1545069.35		699.98 45702.9		681.9345837.07		681.2	
46053.24	690.4246167.95	695.9546684.76		726.746976.52		731.9347922.76		739.73	
48087.24	742.1148559.04	749.6148687.84		755.4749521.58		800			

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521553.63 .1521926.87 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21553.6321926.87 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.50	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150

W.S. Elev (ft)	759.35	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546734.00	70547.98	1227839.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546734.00	70547.98	1227839.00
Q Total (cfs)	7996901.00	Flow (cfs)	4963852.00	390011.80	2643037.00
Top width (ft)	45781.93	Top width (ft)	18575.04	373.24	26833.65
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.27	189.02	45.76
Conv. Total (cfs)	47033300.0	Conv. (cfs)	291946200.0	22938330.0	155448800.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18596.91	375.17	26873.73
Min Ch El (ft)	565.37	Shear (lb/sq ft)	1.50	3.39	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.82	18.77	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	61923.70	3010.75	46899.58
C & E Loss (ft)	0.00	Cum SA (acres)	745.35	15.97	1110.11

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268035.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.19	760.9	1408.03	760	1915.39	760	2311.09	768.15				
2393.36	768.15	2531.28	770	2739.66	770	2829	768.74	3134.58	749.53				
3663.48	721.08	3920.93	711.66	4526	700.51	4628.94	703.58	4760.42	707.79				
5548.81	697.5	5746.16	705.11	5990.34	690.36	6028.66	688.15	6701.8	688.15				
6948.29	685.41	7201.9	665.06	7301.91	658.15	7397.08	658.15	7521.41	668.34				
7794.78	696.8	7855.81	698.15	8038.39	694.45	8094.31	694.45	8133.65	692.58				
8265.62	688.45	8345.76	689.75	8474.99	697.43	8712.14	709.51	9101.09	726.3				
9337.27	726.3	9359.55	726.05	9501.99	719.89	9614	716.310475.41	710.44					
10811.12	703.331119.39		678.4811148.17		674.7311303.95		664.4111549.42	652.39					
11614.54	653.5112054.11		688.7212392.91		71012900.81		718.1512909.45	718.52					
13092.15	723.8313320.25		716.2813385.74		714.9913507.88		715.5413693.34	720					
14063.87	72014121.01		713.6314210.13		703.9914490.62		704.9214683.63	723.26					
14757.09	73015186.85		73015725.81		705.5515911.07		668.2415928.16	664.23					
16076.78	649.3716274.24		626.9916295.81		625.2616547.11		619.316985.7	613					
17099.23	611.8519461.41		611.8519680.8		62020054.46		62020458.17	595.55					
20628.32	595.5520721.6		593.720971.65		591.8521509.03		590.0321516.41	588.67					
21554.11	58021587.75		574.8321630.88		569.8421674		565.3721888.16	571.41					
21927.51	58022006.79		608.4122065.56		619.8622261.98		660.9822322.08	665					
22601.92	675.9522676.54		679.8523507.35		731.9923785.9		734.8924206.79	731.12					
24454.45	733.724679.52		730.9925187.83		716.7325224		713.7125496.38	694.22					
25643.28	689.3325689.46		691.125737.83		691.125982.36		699.2626348.95	709.65					
26495.4	714.5426748.19		726.6827239.77		743.0927446.78		748.427821.92	745.5					
28196.81	734.5528252.78		733.3528960.54		723.2229027		723.730049.55	723.7					
30410.25	731.8531836.58		707.432305.24		715.5533042.68		715.5533946.55	713.7					
34111.66	713.734462.53		715.1234569.66		713.7134937.29		707.43345.75	707.4					
35881.16	70035886.82		699.5236033.21		647.9336191.81		605.5536216.04	607.01					
36327.02	614.7336794.67		627.2337211.33		691.5937299.94		704.4537728.1	706.81					
37872.68	703.9137926.79		704.2138300.84		713.6838776.08		719.7239071.32	721.85					
39539.57	722.639909.62		739.540130.23		739.8640219.59		737.2940667.01	723.7					
41258.69	74041599.19		730.2241916.34		722.9542041.34		719.3642109.61	716.91					
42211.27	716.1742552.51		724.6942717.55		73042801.93		73043798.72	707.64					
43891.75	704.7144105.24		702.7744329.92		708.8744409.7		708.1544610.25	708.15					
44636.94	708.444805.2		706.1645074.78		700.0145708.46		681.9845842.66	681.22					
46058.88	690.3946173.61		695.9146690.53		726.6646982.34		731.9247928.78	739.73					
48093.3	742.1148565.19		749.648694.02		755.4549527.94		800						

Manning's n Values

Sta	n	Val	Sta	n	Val
0	.1521554.11		.1521927.51	.15	

Bank	Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
	21554.11	21927.51	4.99	4.99	4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.50	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.35	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546768.00	70576.94	1227581.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546768.00	70576.94	1227581.00
Q Total (cfs)	7996901.00	Flow (cfs)	4964588.00	390221.50	2642091.00
Top width (ft)	45788.67	Top width (ft)	18575.75	373.40	26839.52
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.27	189.01	45.74
Conv. Total (cfs)	470269300.0	Conv. (cfs)	291949800.0	22947540.0	155372000.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18597.57	375.33	26879.55
Min Ch El (ft)	565.37	Shear (lb/sq ft)	1.50	3.39	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.82	18.77	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	61923.70	3010.75	46899.58
C & E Loss (ft)	0.00	Cum SA (acres)	745.35	15.97	1110.11

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268030.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.21	760.91	1408.06	760	1915.43	760	2311.14	768.13		
2393.41	768.13	2531.34	770	2739.72	770	2829.07	768.73	3134.65	749.5		
3663.56	721.09	3921.02	711.68	4526.1	700.52	4629.05	703.57	4760.52	707.76		
5548.94	697.47	5746.29	705.05	5990.47	690.33	6028.79	688.13	6701.95	688.13		
6948.44	685.36	7202.06	665.02	7302.07	658.13	7397.25	658.13	7521.58	668.29		
7794.96	696.76	7855.99	698.13	8038.57	694.38	8094.49	694.38	8133.83	692.51		
8265.8	688.43	8345.94	689.75	8475.18	697.43	8712.33	709.51	9101.3	726.25		
9337.48	726.25	9359.76	726	9502.2	719.83	9614.21	716.2510475.64	710.41			
10811.36	703.2411119.64		678.4111148.42		674.6311304.21		664.3411549.68	652.42			

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11614.8	653.5612054.38	688.7812393.19	710.12901.1	718.1312909.74	718.49				
13092.44	723.7513320.55	716.1713386.04	714.8913508.19	715.4813693.65	720				
14064.18	72014121.33	713.6514210.44	704.0414490.95	704.9814683.96	723.28				
14757.42	73015187.19	73015726.16	705.6215911.42	668.4215928.52	664.41				
16077.14	649.5116274.6	627.0516296.18	625.3216547.48	619.3316986.08	613.02				
17099.62	611.8719461.85	611.8719681.24	62020054.91	62020458.63	595.62				
20628.79	595.6220722.06	593.7520972.12	591.8721509.51	590.0321516.89	588.67				
21554.6	58021588.36	574.8221631.65	569.8321674.94	565.3721888.84	571.43				
21928.15	58022007.45	608.5322066.23	619.9522262.69	661.22322.8	665.01				
22602.7	675.8722677.34	679.772308.31	731.8923786.93	734.8324207.9	731.14				
24455.61	733.7524680.73	731.0125189.15	716.6925225.32	713.6725497.75	694.23				
25644.69	689.4525690.88	691.2425739.26	691.2425983.84	699.3826350.5	709.71				
26496.98	714.5826749.82	726.7527241.51	743.1127448.56	748.3827823.78	745.44				
28198.75	734.4828254.73	733.2828962.63	723.2629029.11	723.7530051.67	723.75				
30412.65	731.8731839.27	707.4932308.03	715.6233045.62	715.6233949.68	713.75				
34114.82	713.7534465.77	715.1834572.92	713.7934940.62	707.4935349.16	707.49				
35884.7	70035890.36	699.5136036.77	647.8836195.41	605.6236219.64	607.08				
36330.64	614.7936798.39	627.3237215.14	691.5537303.76	704.3837732.01	706.74				
37876.62	703.7937930.73	704.0838304.86	713.6438780.21	719.7239075.51	721.87				
39543.86	722.6439913.98	739.4940134.64	739.8540224.02	737.2940671.53	723.75				
41263.33	74041603.91	730.2441921.12	723.0342046.14	719.4542114.42	716.99				
42216.11	716.2542557.42	724.742722.49	73042806.89	73043803.89	707.7				
43896.94	704.7644110.48	702.8.44335.2	708.8644414.99	708.1344615.59	708.13				
44642.28	708.3844810.58	706.1745080.21	700.0445714.03	68245848.25	681.23				
46064.51	690.3646179.27	695.8646696.29	726.6246988.17	731.9247934.8	739.72				
48099.36	742.148571.34	749.6.48700.2	755.4449534.29	800					
Manning's n Values									
Sta	n Val	Sta	num=	Sta	n Val	Sta	n Val	Sta	n Val
0	.15	21554.6	.1521928.15						
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.									
21554.621928.15		4.99	4.99	4.99	.1	.3			
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.50	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.35	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1546822.00	70602.11	1227318.00				
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546822.00	70602.11	1227318.00				
Q Total (cfs)	7996901.00	Flow (cfs)	4965387.00	390402.40	2641113.00				
Top width (ft)	45795.23	Top width (ft)	18576.46	373.55	26845.22				
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15				
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.27	189.00	45.72				
Conv. Total (cfs)	470209900.0	Conv. (cfs)	291959800.0	22955280.0	155294800.0				
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18598.24	375.47	26885.20				
Min Ch El (ft)	565.37	Shear (lb/sq ft)	1.50	3.40	0.82				
Alpha	1.19	Stream Power (lb/ft s)	4.82	18.78	1.77				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	61746.51	3002.66	46758.97				
C & E Loss (ft)	0.00	Cum SA (acres)	743.22	15.93	1107.03				
CROSS SECTION									
RIVER: BRAZOS RIVER									
REACH: LOWER BRAZOS RS: 268025.*									
INPUT									
Description:									
Station	Elevation	Data	num=	174					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800.1236.24	760.93	1408.1	760.1915.47	760.2311.19	768.1			
2393.47	768.1.2531.4	770.2739.78	770.2829.13	768.71.3134.72	749.47				
3663.64	721.11.3921.11	711.7.4526.21	700.32.4629.15	703.56.4760.63	707.74				
5549.06	697.44.5746.42	704.99.5990.61	690.3.6028.93	688.1.6702.1	688.1				
6948.6	685.3.7202.23	664.98.7302.24	658.1.7397.41	658.1.7521.75	668.24				
7795.13	696.72.7856.16	698.1.8038.75	694.31.8094.67	694.31.8134.01	692.45				
8265.99	688.41.8346.13	689.74.8475.37	697.44.8712.53	709.52.9101.5	726.21				
9337.69	726.21.9359.97	725.95.9502.41	719.77.9614.43	716.2110475.88	710.38				
10811.6	703.1611119.89	678.3211148.67	674.5311304.46	664.2711549.94	652.45				
11615.06	653.612054.65	688.8412393.47	71012901.39	718.112910.02	718.47				
13092.74	723.6813320.84	716.0713386.34	714.7913508.49	715.4313693.95	720				
14064.5	72014121.64	713.6714210.76	704.0914491.27	705.0414684.28	723.3				
14757.75	73015187.53	73015726.51	705.6915911.78	668.615928.88	664.59				
16077.5	649.6616274.97	627.1216296.54	625.3916547.85	619.3616986.46	613.04				
17100	611.919462.28	611.919681.68	62020055.36	62020459.09	595.62				
20629.25	595.6920722.53	593.7920972.59	591.9.21510	590.0321517.37	588.67				
21555.08	58021588.97	574.8121632.42	569.8221675.88	565.3721889.53	571.45				
21928.79	58022008.11	608.65.22066.9	620.04.22263.4	661.0122323.52	665.03				
22603.48	675.822678.13	679.6823509.28	731.7923787.95	734.7624209.01	731.15				
24456.77	733.7924681.94	731.0225190.46	716.6525226.64	713.6325499.13	694.25				
25646.1	689.57.25692.3	691.3825740.69	691.3825985.32	699.526352.06	709.77				
26498.57	714.6326751.46	726.8127243.25	743.1327450.34	748.3627825.63	745.38				
28200.69	734.4128256.68	733.2128964.73	723.3129031.22	723.7930053.99	723.79				
30415.04	731.931841.96	707.5932310.82	715.6933048.56	715.6933952.81	713.79				
34117.98	713.79.34469	715.2534576.17	713.8634943.96	707.5935352.58	707.59				
35888.22	70035893.88	699.5136040.33	647.83.36199	605.6936223.23	607.14				
36334.27	614.8536802.11	627.4137218.94	691.5237307.58	704.3137735.92	706.66				
37880.56	703.6637934.69	703.9638308.89	713.638784.34	719.72.39079.7	721.9				
39548.14	722.6739818.34	739.4940139.04	739.8540228.44	737.340676.05	723.79				
41267.97	74041608.62	730.2741925.89	723.1142050.94	719.5442119.24	717.08				
42220.92	716.3342562.33	724.7242727.43	73042811.85	73043809.05	707.77				
43902.12	704.8244115.71	702.8444340.47	708.8544420.29	708.144620.92	708.1				
44647.62	708.3644815.96	706.1845085.64	700.0745719.59	682.0345853.84	681.25				
46070.15	690.3346184.93	695.8146702.06	726.58.46994	731.9147940.83	739.72				
48105.41	742.09.48577.5	749.5948706.38	755.4249540.64	800					
Manning's n Values									
Sta	n Val	Sta	num=	3	Sta	n Val	Sta	n Val	Sta
0	.1521555.08	.1521928.79	.1521928.79						
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.									
21555.0821928.79		4.99	4.99	4.99	.1	.3			

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E.G. Elev (ft)	759.49	Element	Left 08	Channel	Right 08
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.35	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546833.00	70628.77	1227045.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546833.00	70628.77	1227045.00
Q Total (cfs)	7996901.00	Flow (cfs)	4966117.00	390605.40	2640179.00
Top Width (ft)	45802.04	Top Width (ft)	18577.24	373.71	26851.09
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	4.25
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.26	188.99	45.70
Conv. Total (cfs)	470133800.0	Conv. (cfs)	291955500.0	22963500.0	155214800.0
Length wtd. (ft)	4.99	wetted Per. (ft)	18598.99	375.62	26891.01
Min Ch El (ft)	565.37	Shear (lb/sq ft)	1.50	3.40	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.82	18.78	1.77
Frcn Loss (ft)	0.00	Cum Volume (acre-ft)	61569.31	2994.57	46618.39
C & E Loss (ft)	0.00	Cum SA (acres)	741.10	15.89	1103.95

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 268020.*

INPUT

Description:

[illegible]

Manning's	n Values		num=	3			
Sta	n Val	Sta	n Val	Sta	n Val		
0	.1521555.56		.1521929.43		.15		

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
21555.5621929.43		4.99	4.99	4.99	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.49	Element	Left 08	Channel	Right 08
Vel Head (ft)	0.15	wt. n-val.	0.150	0.150	0.150
W.S. Elev (ft)	759.35	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546887.00	70656.09	1226776.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546887.00	70656.09	1226776.00
Q Total (cfs)	7996901.00	Flow (cfs)	4966925.00	390798.80	2639177.00
Top Width (ft)	45808.53	Top Width (ft)	18577.87	373.87	26856.79
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.27	188.99	45.68
Conv. Total (cfs)	470074800.0	Wetted Per. (ft)	831666400.0	22971990.0	155136400.0
Length of Bed (ft)	4.99	Shear (lb/sq ft)	18599.57	375.78	26896.66
Min Ch El (ft)	565.37	Stream Power (lb/ft s)	1.50	3.40	0.82
Alpha	1.19	Cum Volume (acre-ft)	4.82	18.79	1.77
Frctn Loss (ft)	0.00	Cum SA (acres)	61392.11	2986.48	46477.85
C & E Loss (ft)	0.00		738.97	15.85	1100.88

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 268015.*

INPUT

INFO1
Description:

Description		Station Elevation Data		num=	174	Elev		Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev			Elev	Sta	Elev	Sta	Elev	Sta	Elev	
2393.57	768.06	1236.3	760.95		1408.16	760	1915.56	760	2311.29	768.06			
3663.81	721.14	2531.51	770	2739.91		770	2829.26	768.68	3134.86	749.42			
5549.31	697.37	3921.28	711.74	4526.41		700.54	4629.36	703.54	4760.84	707.68			
9548.91	685.18	5746.67	704.87	5990.88		690.24	6029.2	688.06	6702.4	688.06			
		7202.55	664.89	7302.56		658.06	7397.74	658.06	7522.09	668.13			

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7795.48	696.64	7856.51	698.06	8039.11	694.17	8095.04	694.17	8134.37	692.32
8266.36	688.37	8346.5	689.74	8475.75	697.46	8712.92	709.52	9101.91	726.11
9338.11	726.11	9360.39	725.85	9502.84	719.66	9614.86	716.11	10476.34	710.32
10812.08	702.99	11120.39	678.15	11149.16	674.33	11304.96	664.13	11550.46	652.51
11615.58	653.69	12055.19	688.96	12394.02	710.12	12901.97	718.06	12910.6	718.42
13093.32	723.52	13321.44	715.86	13386.94	714.59	13509.09	715.31	13694.57	720
14065.13	720.14	1422.27	713.71	14211.4	704.21	14491.92	705.16	14684.94	723.34
14758.42	730.15	1488.21	730.15	15727.21	705.83	15912.49	668.95	15929.59	664.95
16078.21	649.95	16275.7	627.25	16297.27	625.52	16548.59	619.42	16987.22	613.08
17100.77	611.94	19463.15	611.94	19682.56	620.20	20056.26	620.20	20460.01	595.83
20630.17	595.83	20723.45	593.89	20973.53	591.94	21510.96	590.03	21518.33	588.68
21556.04	580.21	1590.19	574.78	21633.97	569.82	1677.75	565.36	21890.9	571.49
21930.07	580.22	2009.42	608.88	22068.23	620.21	22264.81	661.03	22324.96	665.05
22605.03	675.65	22679.72	679.51	23511.21	731.59	23790	734.63	24211.23	731.18
24459.1	733.89	24684.36	731.05	25193.09	716.57	25229.29	713.55	25501.89	694.28
25648.92	689.82	25695.14	691.66	25743.54	691.66	25988.28	699.73	26355.17	709.89
26501.74	714.72	26754.73	726.95	27246.72	743.17	27453.91	748.32	27829.36	745.27
28204.56	734.27	28260.58	733.08	28968.92	723.39	29035.44	723.89	30058.63	723.89
30419.83	731.94	31847.34	707.78	32316.4	715.83	33054.44	715.83	33959.07	713.89
34124.3	713.89	34475.47	715.38	34582.69	714.01	34950.62	707.78	35359.41	707.78
35895.28	700.35	3900.94	699.49	36047.45	647.73	36206.18	605.83	36230.43	607.27
36341.51	614.97	36809.54	627.59	37226.55	691.45	37315.23	704.17	37743.74	706.51
37888.44	703.41	37942.59	703.73	38316.95	713.52	38792.59	719.71	39088.07	721.94
39556.71	722.74	39927.07	739.48	40147.86	739.85	40237.3	737.32	40685.09	723.89
41277.25	740.41	41618.04	730.33	41935.45	723.26	42060.55	719.71	42128.88	717.26
42230.62	716.48	42572.14	724.75	42737.32	730.42	42821.77	730.43	43119.39	707.89
43912.5	704.94	44126.17	702.91	44351.03	708.82	44440.88	708.06	44631.59	708.06
44658.3	708.32	44826.71	706.24	45096.51	700.12	45730.72	682.08	45865.02	681.28
46081.42	690.27	46196.25	695.72	46713.59	726.49	47005.65	731.94	47952.87	739.71
48117.53	742.08	48589.81	749.58	48718.74	755.39	49553.35	800		

Manning's n values num= 3
 Sta n Val Sta n Val
 0 .1521556.04 .1521930.07 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21556.0421930.07 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.49	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.34	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546930.00	70684.75	1226500.00
E.G. Slope (ft/ft)	0.000289	Area (sq ft)	1546930.00	70684.75	1226500.00
Q Total (cfs)	7996901.00	Flow (cfs)	4967719.00	391007.90	2638174.00
Top width (ft)	45815.34	Top width (ft)	18578.65	374.03	26862.65
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.26	188.98	45.66
Conv. Total (cfs)	47000930.0	Conv. (cfs)	291972400.0	22981070.0	155055800.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18600.31	375.94	26902.46
Min Ch El (ft)	565.36	Shear (lb/sq ft)	1.50	3.40	0.82
Alpha	1.49	Stream Power (lb/ft s)	4.83	18.80	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	61214.91	2978.39	46337.33
C & E Loss (ft)	0.00	Cum SA (acres)	736.84	15.80	1097.80

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 268010.*

INPUT

Description:	num= 174
Station Elevation Data	
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev	
0 800 1236.32	760.96 1408.19
2393.63 768.03 2531.57	770 2739.97
3663.89 721.15 3921.37	711.76 4526.51
5549.43 697.34 5746.8	704.8 5991.01
6949.06 685.12 7202.71	664.85 7302.73
7795.66 696.6 7856.69	698.03 8039.29
8266.54 688.35 8346.69	689.73 8475.94
9338.32 726.07 9360.6	725.8 9503.05
10812.33 702.99 11120.63	678.07 11149.41
11615.84 653.73 12055.46	689.02 12394.3
13093.62 723.44 13321.74	715.76 13387.24
14065.44 720.14 1422.59	713.72 14211.72
14758.75 730.15 1488.55	730.15 15727.57
16078.58 650.11 16276.06	627.32 16297.64
17101.15 611.97 19463.59	611.97 19683
20630.63 595.92 20723.92	593.93 20974
21556.53 580.21 1590.19	574.76 21634.74
21930.71 580.22 2010.07	609 22068.9
22605.81 675.57 22680.51	679.42 23512.18
24460.26 733.93 24685.56	731.06 25194.4
25650.33 689.92 25696.55	691.82 25744.97
26503.32 714.76 26756.37	727.01 27248.46
28206.5 734.22 28262.53	733.01 28971.02
30422.23 731.97 31850.03	707.87 32319.18
34127.47 713.93 34478.3	715.44 34585.95
35898.81 700.35 3904.47	699.49 36051.01
36345.13 615.03 36813.26	627.69 37230.35
37892.38 703.28 37946.54	703.58 38320.98
39561 722.77 39931.43	739.47 40152.27
41281.89 740.41 41622.75	730.36 41940.23
42235.46 716.56 42577.05	724.76 42742.27
43917.69 705 44131.4	702.94 44356.3
44663.64 708.34 44832.08	706.22 45101.94
46087.05 690.24 46201.91	695.68 46719.36
48123.58 742.08 48589.96	749.58 48724.93

Manning's n values num= 3
 Sta n Val Sta n Val
 0 .1521556.53 .1521930.71 .15

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Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
21556.532	1930.71	4.99	4.99	4.99	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.49	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.34	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1546960.00	70711.61	1226248.00
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1546960.00	70711.61	1226248.00
Q Total (cfs)	7996901.00	Flow (cfs)	4968437.00	391208.00	2637257.00
Top Width (ft)	45822.16	Top Width (ft)	18579.44	374.18	26868.53
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.26	188.98	45.64
Conv. Total (cfs)	469943800.0	Conv. (cfs)	291973900.0	22989630.0	154980300.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18601.06	376.08	26908.30
Min Ch El (ft)	565.36	Shear (lb/sq ft)	1.50	3.40	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.83	18.81	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	61037.70	2970.29	46196.84
C & E Loss (ft)	0.00	Cum SA (acres)	734.71	15.76	1094.72

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268005.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.35	760.97	1408.22	760	1915.64	760	2311.4	768.01				
2393.68	768.01	2531.62	770	2740.03	770	2829.38	768.65	3135.01	749.36				
3663.97	721.16	3921.46	711.78	4526.61	700.55	4629.57	703.52	4761.06	707.62				
5549.56	697.31	5746.93	704.74	5991.15	690.18	6029.47	688.01	6702.7	688.01				
6949.22	685.07	7202.87	664.8	7302.89	658.01	7398.07	658.01	7522.42	668.03				
7795.83	696.56	7856.87	698.01	8039.47	694.03	8095.4	694.03	8134.74	692.19				
8266.73	688.33	8346.88	689.73	8476.13	697.47	8713.31	709.52	9102.32	726.02				
9338.53	726.02	9360.81	725.75	9503.26	719.54	9615.29	716.02	10476.81	710.26				
10812.57	702.82	1120.88	677.99	11149.66	674.13	11305.47	663.99	11550.97	652.57				
11616.1	653.78	12055.73	689.08	12394.58	710	12902.54	718.01	12911.18	718.37				
13093.91	723.36	13322.04	715.65	13387.54	714.39	13509.7	715.21	13695.18	720				
14065.76	720	14122.91	713.74	14122.04	704.31	14492.57	705.29	14685.6	723.38				
14759.08	730	15188.89	730	15727.92	705.97	15913.2	669.31	15930.3	665.31				
16078.93	650.24	16276.42	627.38	16298	625.66	16549.33	619.49	16987.98	613.12				
17101.53	611.99	19464.03	611.99	19683.44	620	20057.15	620	20460.92	595.97				
20631.09	595.97	20724.38	593.98	20974.46	591.99	21511.92	590.03	21519.3	588.69				
21557.01	580	21591.41	574.75	21635.52	569.78	21679.62	565.36	21892.27	571.52				
21931.34	580	22010.73	609.12	22069.57	620.38	22266.23	661.06	22326.41	665.08				
22606.59	675.52	22681.31	679.34	23513.15	731.39	23792.05	734.51	24213.46	731.21				
24461.42	733.98	24686.77	731.07	25195.72	716.49	25231.93	713.47	25504.65	694.32				
25651.73	690.04	25697.97	691.94	25746.4	691.94	25991.23	699.97	26358.28	710				
26504.91	714.81	26758.01	727.08	27250.2	743.21	27457.47	748.28	27833.07	745.16				
28208.44	734.13	28264.47	732.95	28973.11	723.47	29039.65	723.98	29063.27	723.98				
30424.62	731.99	31852.72	707.96	32321.97	715.97	33060.32	715.97	33965.32	713.98				
34130.63	713.98	34481.94	715.51	34589.2	714.16	34957.29	707.96	35366.25	707.96				
35902.34	700	35908	699.48	36054.57	647.62	36213.37	605.97	36237.62	607.41				
36348.75	615.09	36816.98	627.78	37234.15	691.39	37322.87	704.03	37751.56	706.35				
37896.32	703.15	37950.49	703.45	38325.01	713.44	38800.85	719.73	39096.45	721.99				
39565.28	722.83	39935.79	739.46	40156.68	739.85	40246.15	737.33	40694.12	723.98				
41286.54	740	41627.46	730.38	41945.01	723.42	42070.16	719.89	42138.51	717.43				
42240.3	716.64	42581.96	724.78	42747.21	730	42831.7	730	43829.72	708.02				
43922.87	705.06	44136.63	702.98	44361.58	708.79	44441.46	708.01	44642.26	708.01				
44668.98	708.28	44837.46	706.23	45107.37	700.18	45741.84	682.13	45876.2	681.31				
46092.69	690.21	46207.57	695.63	46725.12	726.41	47017.3	731.89	47964.92	739.71				
48129.64	742.07	48602.12	749.57	48731.11	755.36	49566.06	800						

Manning's n Values

Sta	n Val	Sta	n Val
0	.1521557.01	.1521931.34	.15

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
21557.012	1931.34	4.99	4.99	4.99	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.49	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.34	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547007.00	70736.48	1225973.00
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1547007.00	70736.48	1225973.00
Q Total (cfs)	7996901.00	Flow (cfs)	4969248.00	391391.30	2636263.00
Top Width (ft)	45828.72	Top Width (ft)	18580.15	374.33	26874.24
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.53	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.26	188.97	45.62
Conv. Total (cfs)	469879600.0	Conv. (cfs)	291981600.0	22997260.0	154900800.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18601.72	376.23	26913.95
Min Ch El (ft)	565.36	Shear (lb/sq ft)	1.50	3.40	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.83	18.81	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	60860.48	2962.19	46056.39
C & E Loss (ft)	0.00	Cum SA (acres)	732.58	15.72	1091.65

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 268000.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.38	760.98	1408.25	760	1915.69	760	2311.45	767.99		

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2393.73	767.99	2531.68	770	2740.09	770	2829.45	768.63	3135.08	749.34
3664.05	721.18	3921.55	711.8	4526.71	700.55	4629.67	703.51	4761.16	707.6
5549.68	697.28	5747.06	704.68	5991.28	690.15	6029.6	687.99	6702.85	687.99
6949.37	685.01	7203.03	664.76	7303.06	657.99	7398.24	657.99	7522.59	667.97
7796	696.52	7857.04	697.99	8039.65	693.96	8095.58	693.96	8134.92	692.12
8266.91	688.31	8347.06	689.73	8476.32	697.48	8713.5	709.52	9102.52	725.97
9338.73	725.97	9361.02	725.7	9503.48	719.49	9615.51	715.97	10477.05	710.23
10812.81	702.74	11121.13	677.91	11149.91	674.03	11305.72	663.92	11551.23	652.6
11616.36	653.82	12056	689.14	12394.86	71012902.83		717.99	12911.47	718.35
13094.2	723.28	13322.33	715.55	13387.83	714.29	13510	715.14	13695.49	720
14066.07	72014123.22		713.76	14212.35	704.35	14492.89	705.35	14685.93	723.39
14759.41	73015189.23		73015728.27		706.04	15913.56	669.49	15930.66	665.49
16079.29	650.39	16276.79	627.45	16298.37	625.72	16549.71	619.52	16988.36	613.14
17101.91	612.01	19464.46	612.01	19683.88	620	20057.6	62020461.38		596.04
20631.55	596.04	20724.84	594.03	20974.94	592.01	21512.4	590.03	21519.78	588.69
21557.49	58021592.02		574.74	21636.29	569.77	21680.56	565.36	21892.96	571.54
21931.98	58022011.38		609.24	22070.24	620.47	22266.94	661.07	22327.13	665.1
22607.37	675.42	22682.1	679.25	23514.11	731.29	23793.07	734.44	24214.57	731.22
24462.58	734.03	24687.98	731.08	25197.03	716.45	25233.25	713.44	25506.02	694.33
25653.14	690.16	25699.39	692.08	25747.83	692.08	25992.71	700.08	26359.83	710.06
26506.49	714.85	26759.65	727.15	27251.94	743.23	27459.25	748.26	27834.93	745.1
28210.38	734.06	28266.42	732.88	28975.21	723.51	29041.76	724.03	30065.59	724.03
30427.02	732.01	1855.42	708.06	32324.76	716.04	33063.26	716.04	33968.45	714.03
34133.79	714.03	34485.17	715.57	34592.46	714.24	34960.62	708.06	35369.66	708.06
35905.86	70035911.53		699.48	36058.13	647.57	36216.96	606.04	36241.22	607.47
36352.37	615.15	36820.7	627.87	37237.96	691.35	37326.69	703.96	37755.47	706.27
37900.27	703.03	37954.45	703.32	38329.04	713.43	38804.97	719.73	39100.64	722.01
39569.57	722.84	39940.16	739.46	40161.09	739.84	40250.57	737.34	40698.64	724.03
41291.18	74041632.18		730.41	41949.79	723.54	42074.96	719.98	42143.33	717.52
42245.14	716.72	42586.88	724.79	42752.15	73042836.66		73043834.89		708.09
43928.06	705.12	44141.86	703.01	44366.86	708.77	44444.76	707.99	44647.6	707.99
44674.33	708.26	44842.84	706.24	45112.8	700.21	45747.41	682.15	45881.8	681.33
46098.32	690.18	46213.23	695.59	46730.89	726.37	47023.13	731.88	47970.94	739.7
48135.7	742.06	48608.27	749.57	48737.29	755.34	49572.41	800		
Manning's n Values									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.1521557.49			.1521931.98					
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.									
21557.49	1931.98		4.99	4.99		4.99	.1	.3	
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.49	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.34	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1547047.00	70763.59	1225697.00				
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1547047.00	70763.59	1225697.00				
Q Total (cfs)	7996901.00	Flow (cfs)	4970046.00	391588.90	2635266.00				
Top width (ft)	45835.45	Top width (ft)	18580.85	374.49	26880.11				
Vel Total (ft/s)	2.81	Avg. Vel (ft/s)	3.21	5.53	2.15				
Max Ch Dpth (ft)	193.98	Hydr. Depth (ft)	83.26	188.96	45.60				
Conv. Total (cfs)	469813500.0	Conv. (cfs)	291987500.0	23005630.0	154820400.0				
Length wtd. (ft)	4.99	Wetted Per. (ft)	18602.38	376.38	26919.77				
Min Ch El (ft)	565.36	Shear (lb/sq ft)	1.50	3.40	0.82				
Alpha	1.19	Stream Power (lb/ft s)	4.83	18.82	1.77				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	60683.26	2954.08	45915.96				
C & E Loss (ft)	0.00	Cum SA (acres)	730.46	15.67	1088.57				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267995.*

INPUT

Description:

Station	Elevation	Data	num=	174					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.41	760.99	1408.28	760	1915.73	760	2311.5	767.96
2393.79	767.96	2531.74	770	2740.15	770	2829.51	768.62	3135.15	749.31
3664.13	721.19	3921.64	711.82	4526.81	700.56	4629.77	703.51	4761.27	707.57
5549.81	697.25	5747.19	704.62	5991.41	690.12	6029.74	687.96	6703	687.96
6949.53	684.95	7203.19	664.72	7303.22	657.96	7398.4	657.96	7522.76	667.92
7796.18	696.48	7857.22	697.96	8039.83	693.89	8095.76	693.89	8135.1	692.06
8267.1	688.29	8347.25	689.72	8476.5	697.49	8713.7	709.52	9102.72	725.93
9338.94	725.93	9361.23	725.65	9503.69	719.43	9615.72	715.93	10477.28	710.2
10813.05	702.65	11121.38	677.93	11150.16	673.93	11305.98	663.85	11551.49	652.63
11616.62	653.87	12056.27	689.21	12395.13	71012903.12		717.96	12911.76	718.32
13094.49	723.21	13322.63	715.44	13388.13	714.19	13510.3	715.09	13695.79	720
14066.39	72014123.54		713.78	14212.67	704.41	14493.22	705.41	14686.26	723.41
14759.74	73015189.57		73015728.62		706.11	15913.92	669.66	15931.02	665.67
16079.65	650.53	16277.15	627.51	16298.73	625.79	16550.08	619.55	16988.74	613.16
17102.3	612.04	19464.9	612.04	19684.32	62020058.05		62020461.84		596.11
20632.02	596.11	20725.31	594.07	20975.4	592.04	21512.88	590.03	21520.26	588.7
21557.97	58021592.63		574.72	21637.06	569.76	21681.5	565.36	21893.64	571.56
21932.62	58022012.04		609.36	22070.9	620.55	22267.65	661.08	22327.85	665.11
22608.15	675.35	22682.9	679.17	23515.08	731.18	23794.1	734.38	24215.68	731.24
24463.75	734.07	24689.19	731.12	25198.35	716.42	25234.58	713.4	25507.4	694.35
25654.55	690.28	25700.81	692.22	25749.26	692.22	25994.19	700.22	26361.39	710.12
26508.08	714.92	26761.28	727.22	27253.68	743.25	27461.04	748.24	27836.79	745.04
28212.31	733.99	28268.37	732.81	28977.3	723.55	29043.87	724.07	30067.91	724.07
30429.42	732.04	31858.11	708.15	32327.55	716.11	33066.2	716.11	33971.57	714.07
34136.95	714.07	34488.41	715.64	34595.71	714.32	34963.96	708.15	35373.08	708.15
35909.39	70035915.06		699.47	36061.69	647.52	36220.55	606.11	36244.82	607.54
36355.99	615.21	36824.41	627.96	37241.76	691.32	37330.51	703.93	37759.38	706.2
37904.2	702.9	37958.4	703.19	38333.07	713.36	38809.1	719.73	39104.83	722.04
39573.86	722.87	39944.52	739.45	40165.49	739.84	40255	737.35	40703.16	724.07
41295.82	74041636.89		730.44	41954.56	723.58	42079.77	720.07	42148.14	717.61
42249.98	716.84	42591.78	724.81	42757.09	73042841.62		73043840.06		708.15
43933.25	705.18	44147.09	703.05	44372.14	708.76	44452.05	707.96	44652.93	707.96
44679.67	708.24	44848.21	706.25	45118.23	700.24	45752.97	682.18	45887.39	681.34
46103.96	690.15	46218.89	695.54	46736.66	726.32	47028.96	731.88	47976.96	739.7
48141.75	742.06	48614.43	749.56	48743.47	755.33	49578.77	800		

SS_Rev3.rep

Manning's n values num= 3
 Sta n Val Sta n Val
 0 .1521557.97 .1521932.62 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21557.9721932.62 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel	Right OB
E.G. Elev (ft)	759.49	wt. n-Val.	0.150	0.150	0.150
Vel Head (ft)	0.15	Reach Len. (ft)	4.99	4.99	4.99
W.S. Elev (ft)	759.34	Flow Area (sq ft)	1547074.00	70790.63	1225436.00
Crit W.S. (ft)		Area (sq ft)	1547074.00	70790.63	1225436.00
E.G. Slope (ft/ft)	0.000290	Flow (cfs)	4970776.00	391787.90	2634338.00
Q Total (cfs)	7996901.00	Top width (ft)	18581.55	374.65	26885.81
Top width (ft)	45842.01	Avg. Vel. (ft/s)	3.21	5.53	2.15
Vel Total (ft/s)	2.81	Hydr. Depth (ft)	83.26	188.95	45.58
Max Chl Dpth (ft)	193.98	Conv. (cfs)	291988800.0	23014050.0	154743900.0
Conv. Total (cfs)	469746700.0	Wetted Per. (ft)	18603.04	376.54	26925.42
Length wtd. (ft)	4.99	Shear (lb/sq ft)	1.50	3.40	0.82
Min Ch El (ft)	565.36	Stream Power (lb/ft s)	4.83	18.83	1.77
Alpha	1.19	Cum Volume (acre-ft)	60506.04	2945.97	45775.57
Frctn Loss (ft)	0.00	Cum SA (acres)	728.33	15.63	1085.49
C & E Loss (ft)	0.00				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267990.*

INPUT

Description:

Station	Elevation	Data	num= 174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.43	761.01	1408.32	760	1915.77	760	2311.55	767.94			
2393.84	767.94	2531.79	770	2740.21	770	2829.57	768.6	3135.22	749.28			
3664.22	721.2	3921.72	711.84	4526.91	700.57	4629.88	703.49	4761.38	707.54			
5549.93	697.21	5747.32	704.56	5991.55	690.09	6029.87	687.94	6703.15	687.94			
6949.69	684.89	7203.35	664.67	7303.38	657.94	7398.57	657.94	7522.93	667.87			
7796.35	696.43	7857.39	697.94	8040.01	693.82	8095.94	693.82	8135.28	691.99			
8267.28	688.27	8347.44	689.72	8476.69	697.49	8713.9	709.53	9102.93	725.88			
9339.15	725.88	9361.44	725.6	9503.9	719.37	9615.94	715.88	10477.52	710.17			
10813.29	702.57	11121.63	677.75	11150.41	673.83	11306.23	663.78	11551.75	652.66			
11616.88	653.91	12056.54	689.27	12395.41	710.12	12903.41	717.94	12912.05	718.3			
13094.79	723.13	13322.93	715.34	13388.43	714.09	13510.61	715.03	13696.1	720			
14066.7	720.14	14123.85	713.81	14212.99	704.45	14493.54	705.48	14686.58	723.43			
14760.07	730.15	15189.91	730.15	15728.97	706.18	15914.27	669.84	15931.37	665.85			
16080.01	650.68	16277.52	627.58	16299.1	625.86	16550.45	619.58	16989.12	613.18			
17102.68	612.06	19465.33	612.06	19684.76	620	20058.5	620	20462.29	596.18			
20632.48	596.18	20725.77	594.12	20975.87	592.06	21513.37	590.03	21520.74	588.7			
21558.46	580.21	21593.24	574.71	21637.84	569.74	21682.44	565.36	21894.33	571.57			
21933.26	580	22012.7	609.48	22071.57	620.64	22268.36	661.12	22328.57	665.13			
22608.93	675.28	22683.69	679.08	23516.04	731.08	23795.12	734.31	24216.79	731.25			
24464.91	734.12	24690.4	731.11	25199.66	716.36	25235.9	713.36	25508.78	694.36			
25655.96	690.39	25702.23	692.37	25750.68	692.37	25995.67	700.32	26362.94	710.18			
26509.66	714.94	26762.92	727.28	27255.42	743.27	27462.82	748.22	27838.65	744.99			
28214.25	733.91	28270.32	732.74	28979.4	723.59	29045.98	724.12	30070.23	724.12			
30431.81	732.06	31860.8	708.24	32330.34	716.18	33069.14	716.18	33974.7	714.12			
34140.11	714.12	34491.64	715.73	34598.97	714.39	34967.29	708.24	35376.5	708.24			
35912.92	700.35	35918.59	699.46	36065.25	647.47	36224.14	606.18	36248.42	607.61			
36359.61	615.27	36828.13	628.05	37245.56	691.29	37334.34	703.82	37763.29	706.12			
37908.14	702.78	37962.35	703.07	38337.1	713.32	38813.23	719.69	39109.02	722.06			
39578.14	722.93	39948.88	739.44	40169.9	739.84	40259.43	737.36	40707.68	724.12			
41300.46	740	41641.6	730.47	41959.34	723.65	42084.57	720.15	42152.96	717.69			
42254.82	716.87	42596.69	724.82	42762.04	73042	42846.58	73043	43845.23	708.22			
43938.43	705.24	44152.32	703.08	44377.41	708.75	44457.34	707.94	444658.27	707.94			
44685.01	708.22	44853.59	706.26	45123.66	700.27	45758.53	682.24	45892.98	681.36			
46109.59	690.12	446224.54	695.49	46742.42	726.28	47034.79	731.87	47982.98	739.69			
48147.81	742.05	48620.58	749.56	48749.65	755.31	49585.12	800					

Manning's n values num= 3
 Sta n Val Sta n Val
 0 .1521558.46 .1521933.26 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21558.4621933.26 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

		Element	Left OB	Channel	Right OB
E.G. Elev (ft)	759.48	wt. n-Val.	0.150	0.150	0.150
Vel Head (ft)	0.15	Reach Len. (ft)	4.99	4.99	4.99
W.S. Elev (ft)	759.34	Flow Area (sq ft)	1547122.00	70817.63	1225190.00
Crit W.S. (ft)		Area (sq ft)	1547122.00	70817.63	1225190.00
E.G. Slope (ft/ft)	0.000290	Flow (cfs)	4971517.00	391983.20	2633401.00
Q Total (cfs)	7996901.00	Top width (ft)	18582.35	374.80	26891.68
Top width (ft)	45848.83	Avg. Vel. (ft/s)	3.21	5.54	2.15
Vel Total (ft/s)	2.81	Hydr. Depth (ft)	83.26	188.95	45.56
Max Chl Dpth (ft)	193.98	Conv. (cfs)	291996200.0	23022670.0	154669700.0
Conv. Total (cfs)	469688500.0	Wetted Per. (ft)	18603.80	376.68	26931.25
Length wtd. (ft)	4.99	Shear (lb/sq ft)	1.51	3.40	0.82
Min Ch El (ft)	565.36	Stream Power (lb/ft s)	4.84	18.83	1.77
Alpha	1.19	Cum Volume (acre-ft)	60328.81	2937.86	45635.20
Frctn Loss (ft)	0.00	Cum SA (acres)	726.20	15.59	1082.41
C & E Loss (ft)	0.00				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267985.*

INPUT

Description:									
Station Elevation Data									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.46	761.02	1408.35	760	1915.82	760	2311.6	767.92
2393.89	767.92	2531.85	770	2740.27	770	2829.64	768.59	3135.29	749.25
3664.3	721.22	3921.81	711.87	4527.02	700.57	4629.98	703.48	4761.48	707.51
5550.05	697.18	5747.45	704.49	5991.68	690.06	6030.01	687.92	6703.3	687.92
6949.84	684.83	7203.52	664.63	7303.55	657.92	7398.74	657.92	7523.1	667.81
7796.53	696.39	7857.57	697.92	8040.19	693.75	8096.12	693.75	8135.47	691.93
8267.47	688.25	8347.62	689.72	8476.88	697.5	8714.09	709.53	9103.13	725.83
9339.36	725.83	9361.64	725.55	9504.12	719.32	9616.15	715.8310477.75		710.14
10813.54	702.4811121.88		677.6611150.66		673.7311306.48		663.7111552.01		652.69
11617.14	653.9612056.81		689.3312395.69		710	12903.7	717.9212912.34		718.27
13095.08	723.0513323.23		715.2413388.73		713.9913510.91		714.9713696.41		720
14067.02	72014124.17		713.8114213.31		704.514493.87		705.5414686.91		723.45
14760.4	73015190.25		73015729.33		706.2515914.63		670.0215931.73		666.03
16080.37	650.8216277.88		627.6516299.46		625.9216550.82		619.6116989.5		613.2
17103.06	612.0819465.77		612.0819685.21		62020058.95		62020462.75		596.25
20632.94	596.2520726.23		594.1720976.34		592.0821513.85		590.0321521.22		588.71
21558.94	58021593.85		574.721638.61		569.7321683.37		565.3521895.01		571.59
21933.9	58022013.35		609.622072.24		620.7322269.06		661.1122329.29		665.14
22609.71	675.222684.48		67923517.01		730.9823796.14		734.25	24217.9	731.27
24466.07	734.1724691.61		731.1225200.98		716.3225237.22		713.3225510.16		694.38
25657.37	690.5125703.65		692.5125752.11		692.5125997.15		700.43	26364.5	710.24
26511.25	714.9826764.56		727.3527257.16		743.29	27464.6	748.227840.51		744.93
28216.19	733.8428272.27		732.6828981.49		723.6329048.09		724.1730072.56		724.17
30434.21	732.0831863.49		708.3432333.12		716.2533072.08		716.2533977.83		714.17
34143.28	714.1734494.88		715.7734602.23		714.4734970.62		708.3435379.92		708.34
35916.45	70035922.12		699.4636068.81		647.4236227.74		606.2536252.02		607.67
36363.23	615.3336831.85		628.1437249.37		691.2537338.16		703.75	37767.2	706.04
37912.09	702.65	37966.3	702.9438341.12		713.2838817.36		719.6939113.21		722.08
39582.43	722.9339953.24		739.4440174.31		739.8440263.86		737.36	40712.2	724.17
41305.1	74041646.31		730.541964.12		723.7342089.37		720.2442157.78		717.78
42259.66	716.95	42601.6	724.8442766.98		73042851.54		73043850.39		708.28
43943.62	705.344157.55		703.1244382.69		708.7344462.64		707.9244663.61		707.92
44690.35	708.244858.96		706.27	45129.1	700.345764.09		682.2345898.57		681.37
46115.23	690.09	46230.2	695.4546748.19		726.2447040.61		731.8747989.01		739.69
48153.87	742.0548626.73		749.5548755.83		755.349591.47		800		
Manning's n Values									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.1521558.94		.15	21933.9		.15			
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.									
21558.94	21933.9		4.99	4.99		4.99	.1		.3
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.48	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.34	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1547170.00	70846.28	1224888.00				
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1547170.00	70846.28	1224888.00				
Q Total (cfs)	7996901.00	Flow (cfs)	4972376.00	392194.60	2632331.00				
Top width (ft)	45855.38	Top width (ft)	18583.04	374.96	26897.37				
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.54	2.15				
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.26	188.94	45.54				
Conv. Total (cfs)	469620800.0	Conv. (cfs)	292004500.0	23031760.0	154584500.0				
Length wtd. (ft)	4.99	Wetted Per. (ft)	18604.44	376.84	26936.90				
Min Ch El (ft)	565.35	Shear (lb/sq ft)	1.51	3.40	0.82				
Alpha	1.19	Stream Power (lb/ft s)	4.84	18.84	1.77				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	60151.58	2929.75	45494.87				
C & E Loss (ft)	0.00	Cum SA (acres)	724.07	15.55	1079.33				
CROSS SECTION									
RIVER: BRAZOS RIVER									
REACH: LOWER BRAZOS RS: 267980.*									
INPUT									
Description:									
Station Elevation Data									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.49	761.03	1408.38	760	1915.86	760	2311.66	767.89
2393.95	767.89	2531.91	770	2740.33	770	2829.7	768.57	3135.36	749.23
3664.38	721.23	3921.9	711.89	4527.12	700.58	4630.08	703.47	4761.59	707.49
5550.18	697.15	5747.58	704.43	5991.82	690.03	6030.14	687.89	6703.45	687.89
6950	684.78	7203.68	664.59	7303.71	657.89	7398.9	657.89	7523.27	667.76
7796.7	696.35	7857.74	697.89	8040.37	693.68	8096.31	693.68	8135.65	691.86
8267.65	688.23	8347.81	689.71	8477.07	697.51	8714.29	709.53	9103.33	725.78
9339.57	725.78	9361.85	725.5	9504.33	719.26	9616.37	715.7810477.98		710.11
10813.78	702.411122.13		677.5811150.91		673.6311306.74		663.6411552.27		652.72
11617.4	65412057.08		689.3912395.96		71012903.99		717.8912912.62		718.25
13095.37	722.9713323.53		715.1313389.03		713.8913511.21		714.9213696.71		720
14067.33	72014124.49		713.8314213.62		704.5514494.19		705.614687.24		723.47
14760.73	73015190.59		73015729.68		706.3215914.98		670.215932.09		666.21
16080.73	650.9716278.25		627.7116299.83		625.9916551.19		619.6416989.88		613.22
17103.45	612.11	19466.2	612.1119685.64		620	20059.4	62020463.21		596.32
20633.4	596.32	20726.7	594.2220976.81		592.1121514.33		590.0321521.71		588.71
21559.42	58021594.46		574.6821639.38		569.7221684.31		565.35	21895.7	571.61
21934.54	58022014.01		609.7222072.91		620.8122269.77		661.1222330.01		665.15
22610.49	675.1322685.28		678.9123517.98		730.8823797.17		734.1824219.01		731.28
24467.23	734.2224692.82		731.1325202.29		716.2825238.54		713.2825511.54		694.4
25658.78	690.6325705.06		692.6525753.54		692.6525998.63		700.5526366.05		710.29
26512.83	715.03	26766.2	727.42	27258.9	743.3127466.38		748.1827842.37		744.87
28218.12	733.7728274.22		732.6128983.59		723.67	29050.2	724.2230074.88		724.22
30436.6	732.1131866.18		708.4332335.91		716.3233075.02		716.3233980.96		714.22
34146.44	714.2234498.11		715.8334605.48		714.5434973.96		708.4335383.34		708.43
35919.98	70035925.65		699.4536072.37		647.3636231.33		606.236255.61		607.74
36366.85	615.3936835.57		628.2337253.17		691.2237341.98		703.6837771.11		705.97
37916.03	702.5237970.25		702.8138345.16		713.2438821.48		719.6839117.39		722.11
39586.71	722.9739957.61		739.4340178.71		739.8440268.28		737.3740716.72		724.22
41309.74	74041651.02		730.5341968.89		723.8142094.18		720.33	42162.6	717.87
42264.49	717.0342606.51		724.8542771.93		730	42856.5	73043855.56		708.34

43948.8 705.3644162.79 703.1544387.97 708.7244467.93 707.8944668.94 707.89
 44695.69 708.1844864.34 706.2845134.53 700.3345769.66 682.2545904.16 681.39
 46120.87 690.0646235.86 695.446753.96 726.247046.44 731.8647995.03 739.69
 48159.92 742.0448632.89 749.5548762.01 755.2849597.83 800

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521559.42 .1521934.54 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21559.4221934.54 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.33	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547191.00	70873.42	1224623.00
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1547191.00	70873.42	1224623.00
Q Total (cfs)	7996901.00	Flow (cfs)	4973108.00	392397.00	2631396.00
Top width (ft)	45862.11	Top width (ft)	18583.75	375.12	26903.24
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.54	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.25	188.94	45.50
Conv. Total (cfs)	469550700.0	Conv. (cfs)	292003900.0	23040210.0	154506600.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18605.12	376.99	26942.71
Min Ch El (ft)	565.35	Shear (lb/sq ft)	1.51	3.40	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.84	18.85	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	59974.34	2921.63	45354.57
C & E Loss (ft)	0.00	Cum SA (acres)	721.94	15.50	1076.24

CROSS SECTION

RIVER: BRAZOS RIVER

REACH: LOWER BRAZOS

RS: 267975.*

INPUT

Description:

Station Elevation Data num= 174

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.52	761.04	1408.41	760	1915.9	760	2311.71	767.87
2394	767.87	2531.96	770	2740.4	770	2829.76	768.55	3135.43	749.2
3664.46	721.25	3921.99	711.91	4527.22	700.59	4630.19	703.46	4761.7	707.46
5550.3	697.12	5747.7	704.37	5991.95	690	6030.28	687.87	6703.6	687.87
6950.15	684.72	7203.84	664.54	7303.87	657.87	7399.07	657.87	7523.44	667.71
7796.88	696.31	7857.92	697.87	8040.55	693.61	8096.49	693.61	8135.83	691.8
8267.83	688.21	8348	689.71	8477.26	697.52	8714.48	709.53	9103.54	725.74
9339.78	725.74	9362.06	725.45	9504.54	719.2	9616.58	715.74	10478.22	710.08
10814.02	702.31	11122.38	677.51	1151.16	673.53	11306.99	663.57	11552.52	652.75
11617.66	654.05	12057.35	689.45	12396.24	710	12904.28	717.87	12912.91	718.22
13095.67	722.89	13323.83	715.03	13389.33	713.79	13511.51	714.86	13697.02	720
14067.65	720	14124.8	713.85	14213.94	704.61	14494.51	705.66	14687.57	723.49
14761.06	730	15190.93	730	15730.03	706.39	15915.34	670.37	15932.44	666.39
16081.09	651.11	16278.61	627.78	16300.19	626.06	16551.56	619.67	16990.26	613.24
17103.83	612.13	19466.64	612.13	19686.09	620	20059.85	620	20463.67	596.39
20633.86	596.39	20727.16	594.26	20977.28	592.13	21514.81	590.03	21522.19	588.71
21559.9	580	21595.07	574.67	21640.16	569.71	21685.25	565.35	21896.38	571.63
21935.18	580	22014.66	609.84	22073.58	620.92	2270.48	661.13	22330.73	665.17
22611.27	675.05	22686.07	678.82	23518.95	730.78	23798.19	734.12	24220.12	731.29
24468.4	734.26	24694.03	731.15	25203.61	716.24	25239.86	713.24	25512.91	694.41
25660.19	690.75	25706.48	692.79	25754.97	692.79	26000.11	700.67	26367.61	710.35
26514.42	715.07	26767.83	727.48	27260.64	743.33	27468.16	748.16	27844.23	744.81
28220.06	733.72	28276.17	732.54	28985.69	723.71	29052.31	724.26	30077.2	724.26
30439	732.13	31868.87	708.52	32338.7	716.39	33077.96	716.39	33984.09	714.26
34149.6	714.26	34501.34	715.89	34608.74	714.62	34977.29	708.52	35386.75	708.52
35923.5	700	35929.18	699.44	36075.93	647.31	36234.92	606.39	36259.21	607.8
36370.47	615.45	36839.28	628.33	37256.98	691.19	37345.8	703.61	37775.02	705.89
37919.97	702.4	37974.2	702.69	38349.18	713.23	38825.61	719.68	39121.59	722.13
39591	723	39961.97	739.42	40183.12	739.83	40272.71	737.38	40721.24	724.26
41314.39	740	41655.74	730.55	41973.68	723.89	42098.98	720.42	42167.42	717.96
42269.33	717.11	42611.42	724.87	42776.87	730	42861.46	730	43860.73	708.41
43953.99	705.42	44168.02	703.19	44393.25	708.74	44473.23	707.87	44674.27	707.87
44701.03	708.16	44869.71	706.29	45139.96	700.35	45775.22	682.28	45909.75	681.4
46126.5	690.03	46241.52	695.36	46759.72	726.16	47052.26	731.85	48001.05	739.68
48165.98	742.03	48639.04	749.55	48768.19	755.26	49604.18	800		

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .15 21559.9 .1521935.18 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21559.921935.18 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15 <td>Wt. n-Val.</td> <td>0.150</td> <td>0.150</td> <td>0.150</td>	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.33	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547231.00	70900.47	1224390.00
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1547231.00	70900.47	1224390.00
Q Total (cfs)	7996901.00	Flow (cfs)	4973807.00	392587.60	2630507.00
Top width (ft)	45868.92	Top width (ft)	18584.54	375.28	26909.11
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.21	5.54	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.25	188.93	45.50
Conv. Total (cfs)	469492700.0	Conv. (cfs)	292008900.0	23048550.0	154435300.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18605.86	377.15	26948.54
Min Ch El (ft)	565.35	Shear (lb/sq ft)	1.51	3.40	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.84	18.85	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	59797.10	2913.51	45214.29
C & E Loss (ft)	0.00	Cum SA (acres)	719.81	15.46	1073.16

CROSS SECTION

SS_Rev3.rep

INPUT

Description:

Station Elevation Data

num= 174

	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
2394.05	0	800	1236.55	761.05	1408.44	760	1915.94	760	2311.76	767.85
2364.05	767.85	2532.02	770	2740.46	770	2829.83	768.54	3135.5	749.17	767.85
3664.54	721.26	3922.07	711.93	4527.32	700.59	4630.29	703.45	4761.8	707.43	707.43
5550.43	697.09	5747.83	704.31	5992.08	689.97	6030.41	687.85	6703.75	687.85	687.85
6950.31	684.66	7204	664.5	7304.04	657.85	7399.23	657.85	7523.6	667.66	667.66
7797.05	696.27	7858.1	697.85	8040.73	693.54	8096.67	693.54	8136.01	691.79	691.79
8268.02	688.19	8348.19	689.71	8477.45	697.52	8714.67	709.53	9103.74	725.69	725.69
9389.99	725.69	9362.27	725.4	9504.75	719.14	9616.8	715.69	10478.45	710.05	710.05
10814.26	702	2311122.62	677	4211151.41	673	4311307.24	663	511552.78	652.08	652.08
11617.92	654.09	12057.62	689	5112396.52	710	12904.57	717.85	12913.2	718.2	718.2
13095.96	722	8213324.12	714	92123389.63	713	6931511.82	714	81369.37	720	720
14067.96	720	14125.12	713	8714214.26	704	6514494.8	705.72	14687.9	723.51	723.51
14761.39	730	15191.27	730	15730.38	706	46	15915.7	670.55	15932.8	666.57
16081.45	651	2616278.7	627	8416300.56	626	1216551.93	619	716990.64	613.26	613.26
17104.21	612	1519467.07	612	1519686.53	620	20060.3	620	20464.13	596.46	596.46
20634.33	596	4620727.63	594	3120977.75	592	1521515.29	590	3321522.67	588.72	588.72
21560.38	580	21595.68	574	6521640.93	569	721686.18	565	3521897.07	571.65	571.65
21935.82	580	22015.3	609	962074.24	620	9922271.19	661	1422331.45	665.18	665.18
22612.04	674	9822686.87	678	743519.91	730	6823799.22	734	0524221.23	731.31	731.31
24469.56	734	3124695.24	731	1662504.27	716	225241.19	713	225514.29	694.43	694.43
25661.6	690	87	25707.9	692	93	25756.4	690	7926369.16	710.41	710.41
26516	715	1262769.47	727	5527262.38	743	352746.95	748	1427846.09	744.76	744.76
28222	733	6328278.12	732	4828987.78	723	752905.42	724	310079.52	724.31	724.31
30441.39	732	1531871.56	708	6232341.49	716	4633080.91	716	4633987.21	714.34	714.34
34152.76	714	313450.54	715	96	34612	714	6934080.62	708	6235390.17	708.62
35927.03	700	35932.71	699	4436079.49	647	2636238.52	606	4636262.81	607.87	607.87
36374.09	615.51	36843	628	4237260.78	691	1537349.62	703	5437778.93	705.81	705.81
37923.91	702	2737978.16	702	563835.23	713	1638829.74	719	6839125.77	722.15	722.15
39595.28	723	033966.33	739	4240187.53	739	830277.13	737	3940725.76	724.31	724.31
41319.03	740	14660.45	730	5841978.45	723	9642103.78	720	5142172.23	718.04	718.04
42274.17	717	1942613.6	724	8942781.81	730	42866.42	730	3865.89	708.47	708.47
43959.18	705	4844173.25	703	2244398.53	708	6944478.52	707	8544679.61	707.85	707.85
44706.38	708	1444875.09	706	345145.39	700	3845780.79	682	345915.34	681.42	681.42
46132.14	690	46247.18	695	3146765.49	726	1147058.09	731	8548007.07	739.68	739.68
48172.04	742.03	48645.2	749	5448774.37	755	2549610.54	800			

Manning's n Values

num= 3

Sta	n	Val	Sta	n	Val	Sta	n	Val
0		.1521560.38			.1521935.82			.15

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21560.382	1935.82		4.99	4.99	4.99		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.s. Elev (ft)	759.33	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547282.00	70928.00	1224089.00
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1547282.00	70928.00	1224089.00
Q Total (cfs)	7996901.00	Flow (cfs)	4974674.00	392789.90	2629438.00
Top Width (ft)	45875.48	Top Width (ft)	18585.23	375.44	26914.81
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.22	5.54	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.25	188.92	45.48
Conv Tm (hrs)	469425600.0	Conv Tm (cfs)	18000.0	057130.0	154350400.0
Length Wtd. (ft)	4.99	wetted Per. (ft)	18606.52	377.30	26954.19
Min Ch El (ft)	565.35	Shear (lb/sq ft)	1.51	3.41	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.84	18.86	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	59619.86	2905.39	45074.05
C & E Loss (ft)	0.00	Cum SA (acres)	717.68	15.42	1070.08

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267965.*

INPUT

Description:

Station Elevation Data

num= 174

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
2394.11	767.82	2532.08	761.06	1408.47	760.1915	99	760.2311.81	767.82	
3664.63	721.27	3922.16	770.2740.52		770.2829.89	768.52	3135.57	749.14	
5550.55	697.06	5747.96	711.95	4572.42	700.6	4630.34	703.43	4761.91	707.4
6930.46	684.6	7204.16	704.25	5992.22	689.94	6030.55	687.82	6703.9	687.82
7677.23	696.23	7204.23	664.46	7304.2	657.82	7399.4	657.82	7523.77	667.6
8268.12	685.8	8348.77	732.82	8040.91	697.53	8786.85	697.53	8103.94	725.04
9340.2	628.6	9362.48	689.7	9577.46	697.53	8786.85	709.53	8103.94	725.04
10814.5	702.1511122.87		725.35	9054.97	719.09	9617.01	715.6410478.69	710.02	
11618.18	654.312057.89		673.341151.66		673.3311307.49		663.4311553.04	652.81	
13096.25	722.7413324.42		689.57	12396.8	701.12904.85		717.8212913.49	718.17	
14068.28	72014125.43		714.8213389.93		713.5913515.12		714.7513697.63	720	
14761.72	73015191.61		713.8912414.58		704.714495.16		705.7914688.23	723.53	
16081.81	651.416279.34		73015730.73		706.5315916.05		670.7315933.16	666.75	
17104.59	612.1819647.91		627.9116300.92		626.19	16552.3	619.7316991.02	613.28	
20634.79	596.5320728.09		612.1819686.97		62020060.74		62020464.59	596.53	
21560.87	58021596.29		594.3620978.22		592.182155.77		590.0321523.15	588.72	
21936.46	58022015.98		574.64	21641.7	569.6921687.12		565.3521897.75	571.66	
22412.82	674.922687.66		610.082074.91		621.07	22271.9	661.1622317.17	665.2	
22662.47	732.632742.67		678.6523520.88		730.5823800.24		733.992422.35	731.32	
25663	690.9825709.32		732.632742.91		716.252426.24		713.962426.24	713.96	
26517.59	715.162677.11		693.072575.82		693.072575.82		700.556370.72	710.47	
28223.94	733.5628280.07		727.6227264.12		743.3727471.73		748.1227847.95	744.7	
30443.79	732.1831874.25		732.4128989.88		728.92056.53		724.3630081.84	724.36	
34155.93	714.3634507.81		708.7132344.28		716.533083.84		716.533990.34	714.36	
35930.56	70035936.24		716.0234615.25		714.7734983.95		708.7135393.59	708.71	
36377.71	615.5736846.41		699.4336083.05		647.2136242.11		606.5336266.41	607.94	
			628.5137264.58		691.1237353.45		703.4737782.84	705.75	

37927.85	702.1537982.11	702.4338357.24	713.1338833.87	719.6739129.96	722.18
39599.57	723.0739970.69	739.4140191.94	739.8340281.56	737.440730.28	724.36
41323.67	74041665.16	730.6141983.23	724.0442108.59	720.5942177.05	718.13
42279.01	717.2642621.24	724.942786.76	73042871.38	73043871.06	708.54
43964.37	705.5444178.48	703.26 44403.8	708.6844483.82	707.8244684.95	707.82
44711.71	708.1244880.46	706.3245150.82	700.4145786.35	682.3345920.93	681.44
46137.77	689.9746252.84	695.2746771.25	726.0747063.92	731.84 48013.1	739.68
48178.09	742.0248651.35	749.5348780.55	755.2349616.89	800	

Manning's n Values			num=	3
Sta	n Val	Sta	n Val	Sta
0	.1521560.87	.1521936.46	.15	

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
21560.8721936.46		4.99	4.99	4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.33	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547314.00	70954.91	1223800.00
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1547314.00	70954.91	1223800.00
Q Total (cfs)	7996901.00	Flow (cfs)	4975477.00	392995.20	2628429.00
Top Width (ft)	45882.29	Top Width (ft)	18586.02	375.59	26920.68
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.22	5.54	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.25	188.92	45.46
Conv. Total (cfs)	469353600.0	Conv. (cfs)	292020400.0	23065650.0	154267600.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18607.27	377.45	26960.01
Min Ch El (ft)	565.35	Shear (lb/sq ft)	1.51	3.41	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.85	18.87	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	59442.61	2897.26	44933.84
C & E Loss (ft)	0.00	Cum SA (acres)	715.55	15.37	1067.00

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267960.*

INPUT

Description:

Station Elevation Data	num=	174
Sta Elev Sta	Elev Sta	Elev Sta
0 800 1236.6	761.07 1408.51	760 1916.03
2394.16 767.8 2532.13	770 2740.58	770 2829.95
3664.71 721.29 3922.25	711.97 4527.52	700.61 4630.5
5550.67 697.03 5748.09	704.19 5952.35	689.91 6030.68
6950.62 694.54 7204.32	664.42 7304.36	657.8 7399.56
7797.4 696.19 7858.45	697.8 8041.09	693.4 8097.03
8268.39 688.15 8348.56	689.7 8477.83	697.54 8715.07
9340.41 725.6 9362.69	725.3 9505.18	719.03 9617.23
10814.75 702.0611123.12	677.2511151.91	673.2311307.75
11618.44 654.1812058.16	689.6312397.07	71012905.14
13096.54 722.6613324.72	714.7113390.23	713.4913512.42
14068.59 72014125.75	713.91 14214.9	704.7514495.49
14762.05 73015191.95	73015731.09	706.615916.41
16082.17 651.55 16279.7	627.9816301.29	626.2616552.67
17104.98 612.219467.95	612.219687.41	62020061.19
20635.25 596.620728.55	594.420978.69	592.221516.25
21561.35 580 21596.9	574.6321642.48	569.6821688.06
21937.1 58022016.63	610.222075.58	621.1622272.61
22613.6 674.832688.46	678.5723521.84	730.4723801.27
24471.88 734.424697.66	731.1825207.55	716.1125243.83
25664.41 691.125710.74	693.2125759.25	693.2126004.54
26519.17 715.2126772.75	727.6827265.86	743.3927473.51
28225.87 733.4928282.02	732.3428991.97	723.8429058.64
30446.18 732.231876.94	708.8132347.06	716.633086.79
34159.09 714.434511.05	716.0934618.51	714.8434987.29
35934.09 70035939.77	699.4336086.61	647.16 36245.7
36381.33 615.6336850.43	628.637268.39	691.0937357.27
37931.79 702.0237986.06	702.338361.27	713.09 38838
39603.85 723.139975.05	739.4140196.35	739.8340285.98
41328.31 74041669.88	730.6441988.01	724.1242113.39
42283.85 717.3442626.15	724.92 42791.7	73042876.34
43969.55 705.644183.71	703.2944409.08	708.6644489.11
44717.05 708.144885.84	706.3345156.25	700.4445791.91
46143.41 689.94 46238.5	695.2246777.02	726.0347069.74
48184.15 742.02 48657.5	749.5348786.73	755.2249623.24

Manning's n Values			num=	3
Sta	n Val	Sta	n Val	Sta
0	.1521561.35	.15 21937.1	.15	

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
21561.35 21937.1		4.99	4.99	4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.48	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.33	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547348.00	70981.67	1223550.00
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1547348.00	70981.67	1223550.00
Q Total (cfs)	7996901.00	Flow (cfs)	4976204.00	393187.40	2627510.00
Top Width (ft)	45888.77	Top Width (ft)	18586.64	375.75	26926.37
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.22	5.54	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.25	188.91	45.44
Conv. Total (cfs)	469292000.0	Conv. (cfs)	292024700.0	23073900.0	154193400.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18607.85	377.61	26965.66
Min Ch El (ft)	565.35	Shear (lb/sq ft)	1.51	3.41	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.85	18.88	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	59265.35	2889.13	44793.67
C & E Loss (ft)	0.00	Cum SA (acres)	713.42	15.33	1063.91

SS_Rev3.rep

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267955.*

INPUT

Description:

Station Elevation Data

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.63	761.09	1408.54	760	1916.07	760	2311.91	767.78
2394.22	767.78	2532.19	770	2740.64	770	2830.02	768.49	3135.71	749.09
3664.79	721.3	3922.34	711.99	4527.62	700.61	4630.6	703.41	4762.12	707.35
5550.8	696.99	5748.22	704.12	5992.49	689.88	6030.82	687.78	6704.2	687.78
6950.77	684.49	7204.48	664.37	7304.53	657.78	7399.73	657.78	7524.11	667.5
7797.57	696.15	7858.62	697.78	8041.27	693.33	8097.21	693.33	8136.56	691.54
8268.58	688.13	8348.75	689.7	8478.02	697.55	8715.26	709.54	9104.35	725.55
9340.62	725.55	9362.9	725.25	9505.39	718.97	9617.44	715.55	10479.16	709.96
10814.99	701.98	11123.37	677.17	11152.16	673.13	11308	663.29	11553.56	652.87
11618.7	654.22	12058.43	689.69	12397.35	71012905.43		717.78	12914.07	718.13
13096.84	722.58	13325.02	714.61	13390.53	713.39	13512.72	714.63	13698.25	720
14068.9	72014126.07		713.92	14215.22	704.81	14495.81	705.91	14688.89	723.57
14762.38	73015192.29		73015731.44		706.67	15916.76	671.08	15933.87	667.11
16082.53	651.71	16280.07	628.04	16301.65	626.32	16553.04	619.79	16991.78	613.32
17105.36	612.22	19468.38	612.22	19687.85	62020061.64		620	20465.5	596.67
20635.71	596.67	20729.02	594.45	20979.16	592.22	21516.73	590.03	21524.11	588.73
21561.83	58021597.51		574.61	21643.25	569.67	21688.99	565.34	21899.12	571.7
21937.74	58022017.29		610.32	22076.25	621.25	22273.32	661.18	22333.62	665.23
22614.38	674.75	22689.25	678.48	23522.81	730.37	23802.29	733.86	24224.57	731.35
24473.05	734.45	24698.87	731.22	25208.86	716.07	25245.15	713.08	25518.43	694.48
25665.82	691.22	25712.16	693.35	25760.68	693.35	26006.02	701.14	26373.83	710.59
26520.76	715.25	26774.38	727.75	27267.59	743.41	27475.29	748.08	27851.67	744.59
28227.81	733.42	28283.96	732.27	28994.07	723.88	29060.75	724.45	30086.48	724.45
30448.58	732.22	31879.63	708.93	3249.85	716.67	33089.73	716.67	33996.6	714.45
34162.25	714.45	34514.28	716.15	34621.77	714.92	34990.62	708.93	35400.42	708.9
35937.62	700	35943.3	699.42	36090.17	647.11	36249.29	606.67	36273.6	608.07
36384.95	615.69	36854.15	628.69	37272.19	691.05	37361.09	703.33	37790.67	705.58
37935.73	701.89	37990.01	702.18	38365.3	713.05	38842.12	719.67	39138.34	722.22
39608.14	723.13	39979.62	739.44	40200.76	739.83	40290.41	737.41	40739.31	724.45
41332.95	74041674.59		730.67	41992.79	724.24	42118.19	720.77	42186.69	718.31
42288.69	717.42	42631.06	724.93	42796.64	730	42881.3	730	43881.4	708.67
43974.74	705.66	44188.94	703.33	44414.36	708.65	44494.4	707.78	44695.62	707.78
44722.39	708.08	44891.22	706.34	45161.69	700.47	45797.47	682.38	45932.11	681.47
46149.04	689.91	46264.16	695.17	46782.79	725.99	47075.57	731.83	48025.14	739.67
48190.21	742.01	48663.66	749.52	48792.91	755.24	49629.59	800		

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val
0	.152	1561.83	.152	1937.74	.15

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
21561.83	21937.74	4.99	4.99	4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.47	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-val.	0.150	0.150	0.150
W.S. Elev (ft)	759.33	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547399.00	71010.45	1223272.00
E.G. Slope (ft/ft)	0.000290	Area (sq ft)	1547399.00	71010.45	1223272.00
Q Total (cfs)	7996901.00	Flow (cfs)	4977013.00	393397.10	2626491.00
Top width (ft)	45895.57	Top width (ft)	18587.42	375.91	26932.24
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.22	5.54	2.15
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.25	188.90	45.42
Conv. Total (cfs)	469229000.0	Conv. (cfs)	292033000.0	23083110.0	154112900.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18608.59	377.76	26971.48
Min Ch El (ft)	565.34	Shear (lb/sq ft)	1.51	3.41	0.82
Alpha	1.19	Stream Power (lb/ft s)	4.85	18.88	1.77
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	59088.09	2881.00	44653.52
C & E Loss (ft)	0.00	Cum SA (acres)	711.30	15.29	1060.83

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267950.*

INPUT

Description:

Station Elevation Data

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.66	761.1	1408.57	760	1916.12	760	2311.97	767.75
2394.22	767.75	2532.25	770	2740.7	770	2830.08	768.47	3135.78	749.06
3664.87	721.31	3922.43	712.01	4527.73	700.62	4630.71	703.4	4762.23	707.32
5550.92	696.96	5748.35	704.06	5992.62	689.85	6030.95	687.75	6704.35	687.75
6950.93	684.43	7204.64	664.33	7304.69	657.75	7399.89	657.75	7524.28	667.45
7797.75	696.11	7858.8	697.75	8041.45	693.26	8097.39	693.26	8136.74	691.48
8268.76	688.11	8348.93	689.69	8478.21	697.55	8715.46	709.54	9104.56	725.5
9340.82	725.5	9363.11	725.2	9505.6	718.92	9617.66	715.51	10479.39	709.93
10815.23	701.89	11123.62	677.09	11152.41	673.03	11308.25	663.22	11553.82	652.9
11618.96	654.27	12058.7	689.76	12397.63	71012905.72		717.75	12914.36	718.1
13097.13	722.51	13325.32	714.51	13390.83	713.28	13513.02	714.58	13698.55	720
14069.22	72014126.38		713.94	14215.53	704.85	14496.14	705.97	14689.21	723.59
14762.71	73015192.63		73015731.79		706.74	15917.12	671.26	15934.22	667.29
16082.89	651.84	16280.43	628.11	16302.01	626.39	16553.41	619.82	16992.16	613.34
17105.74	612.25	19468.82	612.25	19688.29	62020062.09		62020465.96		596.74
20636.17	596.74	20729.48	594.52	20979.63	592.25	21517.22	590.03	21524.59	588.73
21562.31	58021598.12		574.62	21644.02	569.66	21689.93	565.34	21899.81	571.72
21938.38	58022017.94		610.44	22076.92	621.33	22274.03	661.19	22334.34	665.24
22615.16	674.68	22690.04	678.42	23523.78	730.27	23803.31	733.79	24225.68	731.36
24474.21	734.52	24700.07	731.21	25210.18	716.03	25246.47	713.04	25519.81	694.5
25667.23	691.34	25713.57	693.49	25762.11	693.49	26007.5	701.25	26375.38	710.65
26522.34	715.32	26776.02	727.82	27269.33	743.43	27477.07	748.05	27853.53	744.53
28229.75	733.35	28285.91	732.21	28996.16	723.92	29062.86	724.5	30088.8	724.5

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30450.97	732.2531882.32	708.9932352.64	716.7433092.67	716.7433999.73	714.5				
34165.41	714.534517.52	716.2234625.02	715.34993.95	708.9935403.84	708.99				
35941.14	70035946.82	699.4136093.73	647.0636252.89	606.74 36277.2	608.13				
36388.57	615.7536857.87	628.7837275.99	691.0237364.91	703.2637794.58	705.5				
37939.67	701.7737993.96	702.0538369.33	713.0138846.25	719.6639142.53	722.25				
39612.43	723.1739983.78	739.3940205.16	739.8340294.84	737.4240743.83	724.5				
41337.59	740 41679.3	730.6941997.56	724.27 42123	720.86 42191.5	718.39				
42293.53	717.542635.97	724.9542801.59	73042886.27	73043886.57	708.73				
43979.93	705.7244194.17	703.3644419.64	708.63 44499.7	707.7544700.95	707.75				
44727.74	708.0644896.59	706.3545167.12	700.545803.04	682.4 45937.7	681.48				
46154.68	689.8846269.82	695.1346788.55	725.9447081.39	731.8348031.16	739.67				
48196.26	74248669.81	749.52 48799.1	755.1949635.95	800					
Manning's n Values									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.1521562.31	.1521938.38	.15						
Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.		
21562.31	21938.38	4.99	4.99	4.99	.1	.3			
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.47	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.33	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1547429.00	71037.65	1222997.00				
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547429.00	71037.65	1222997.00				
Q Total (cfs)	7996901.00	Flow (cfs)	4977776.00	393598.60	2625527.00				
Top width (ft)	45902.21	Top width (ft)	18588.20	376.07	26937.94				
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.22	5.54	2.15				
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.25	188.89	45.38				
Conv. Total (cfs)	469159700.0	Conv. (cfs)	292034600.0	23091520.0	154033600.0				
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18609.33	377.92	26977.14				
Min Ch El (ft)	565.34	Shear (lb/sq ft)	1.51	3.41	0.82				
Alpha	1.20	Stream Power (lb/ft s)	4.85	18.89	1.77				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	58910.83	2872.86	44513.40				
C & E Loss (ft)	0.00	Cum SA (acres)	709.17	15.24	1057.74				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267945.*

INPUT

Description:									
Station	Elevation	Data	num=	174					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800 1236.68	761.11	1408.6	760 1916.16	760 2312.02	767.73			
2394.32	767.73 2532.3	770 2740.76		770 2830.14	768.46	3135.85	749.03		
3664.95	721.33 3922.51	712.03 4527.83	700.63 4630.81	703.39 4762.34	703.39	4762.34	707.29		
5551.05	696.93 5748.48	704 5992.75	689.82 6031.09	687.73 6704.5	687.73	6704.5	687.73		
6951.09	684.37 7204.81	664.29 7304.85	657.73 7400.06	657.73 7524.44	657.73	7524.44	667.39		
7797.92	696.07 7858.98	697.73 8041.63	693.18 8097.57	693.18 8136.92	693.18	8136.92	691.41		
8268.95	688.09 8349.12	689.69 8478.4	697.56 8715.65	709.54 9104.76	709.54	9104.76	725.46		
9341.03	725.46 9363.32	725.15 9505.82	718.86 9617.87	715.4610479.63	715.46	10479.63	709.9		
10815.47	701.8111123.87	677.0111152.66	672.9311308.51	663.1511554.08	663.15	11554.08	652.93		
11619.22	654.3112058.97	689.8212397.91	71012906.01	717.7312914.65	717.73	12914.65	718.08		
13097.42	722.4313325.61	714.413391.13	713.1813513.33	714.5213698.86	714.52	13698.86	720		
14069.53	720 14126.7	713.9614215.85	704.914496.46	706.0414689.54	706.04	14689.54	723.61		
14763.04	73015192.97	73015732.14	706.8215917.48	671.4415934.58	671.44	15934.58	667.47		
16083.25	651.9916280.79	628.1816302.38	626.4616553.78	619.8516992.54	619.85	16992.54	613.36		
17106.12	612.2719469.25	612.2719688.73	62020062.54	62020466.42	62020466.42		596.82		
20636.63	596.8220729.95	594.54 20980.1	592.27 21517.7	590.0321525.08	590.03	21525.08	588.74		
21562.8	58021598.73	574.58 21644.8	569.6421690.87	565.3421900.49	565.34	21900.49	571.74		
21939.02	580 22018.6	610.5622077.58	621.4222274.73	661.2122335.06	661.21	22335.06	665.26		
22615.94	674 622690.84	678.3123524.74	730.1723804.34	733.7324226.79	733.73	24226.79	731.38		
24475.37	734.5424701.28	731.2225211.49	715.9925247.79	71325521.18	71325521.18		694.51		
25668.64	691.4625714.99	693.6325763.54	693.6326008.98	701.3726376.94	701.37	26376.94	710.7		
26523.93	715.3426777.66	727.8927271.07	743.4527478.86	748.0327855.39	748.03	27855.39	744.47		
28231.69	733.2828287.86	732.1428998.26	723.9629064.96	724.5430091.12	724.54	30091.12	724.54		
30453.37	732.2731885.02	709.0932355.43	716.8233095.61	716.8234002.85	716.82	34002.85	714.54		
34168.57	714.5434520.75	716.2834628.28	715.0734997.29	709.0935407.26	709.09	35407.26	709.09		
35944.68	70035950.36	699.4136097.29	64736256.48	606.82 36280.8	606.82	36280.8	608.2		
36392.2	615.8136861.59	628.88 37279.8	690.9937368.73	703.1837798.49	703.18	37798.49	705.43		
37943.61	701.6437997.91	701.9238373.36	712.9738850.38	719.6639146.72	719.66	39146.72	722.27		
39616.71	723.239988.14	739.3940209.57	739.8240299.27	737.4340748.35	737.43	40748.35	724.54		
41342.23	74041684.01	730.7242002.34	724.35 42127.8	720.9542196.32	720.95	42196.32	718.48		
42298.36	717.5842640.88	724.9642806.53	73042891.23	73043891.73	73043891.73		708.79		
43985.11	705.78 44199.4	703.444424.91	708.6244504.99	707.7344706.29	707.73	44706.29	707.73		
44733.08	708.0444901.97	706.3645172.55	700.53 45808.6	682.4345943.29	682.43	45943.29	681.5		
46160.31	689.8546275.48	695.0846794.32	725.947087.22	731.8248037.19	731.82	48037.19	739.66		
48202.32	74248675.97	749.5148805.28	755.17 49642.3	800					

Manning's n Values									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.15 21562.8	.1521939.02	.15						
Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.		
21562.82	21939.02	4.99	4.99	4.99	.1	.3			
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.47	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.32	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1547455.00	71063.45	1222726.00				
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547455.00	71063.45	1222726.00				
Q Total (cfs)	7996901.00	Flow (cfs)	4978538.00	393795.30	2624568.00				
Top width (ft)	45908.94	Top width (ft)	18588.91	376.22	26943.81				
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.22	5.54	2.15				
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.25	188.89	45.38				
Conv. Total (cfs)	469090200.0	Conv. (cfs)	292036000.0	23099630.0	153954500.0				
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18610.01	378.06	26982.97				
Min Ch El (ft)	565.34	Shear (lb/sq ft)	1.51	3.41	0.82				

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Alpha	1.20	Stream Power (lb/ft s)	4.85	18.90	1.76
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	58733.57	2864.72	44373.32
C & E Loss (ft)	0.00	Cum SA (acres)	707.04	15.20	1054.66

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS RS: 267940.*

INPUT

Description:

[illegible]

Manning's	n Values		num=	3	
Sta	n val	Sta	n val	Sta	n val
0	.1521563.28		.1521939.66		.15

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21563.2821	1939.66		4.99	4.99	4.99		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.47	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.32	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547485.00	71092.23	1222450.00
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547485.00	71092.23	1222450.00
Q Total (cfs)	79969001.00	Flow (cfs)	4979298.00	394007.80	2623595.00
Total width (ft)	45915.50	Top Width (ft)	18589.61	376.38	26949.51
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.22	5.54	2.15
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.24	188.88	45.36
Conv. Total (cfs)	469022300.0	Conv. (cfs)	292038400.0	23108750.0	153875200.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18610.67	378.22	26988.62
Min Ch El (ft)	565.34	Shear (lb/sq ft)	1.51	3.41	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.86	18.91	1.76
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	58556.30	2856.58	44232.26
C & E Loss (ft)	0.00	Cum SA (acres)	704.91	15.16	1051.57

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS RS: 267935.*

INPUT

Description:

Station Elevation Data			num= 174								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.74	761.13	1408.66	760	1916.24	760	2312.12	767.68		
2394.43	767.68	2532.42	770	2740.89	770	2830.27	768.43	3135.99	748.98		
3665.12	721.35	3922.69	712.08	4528.03	700.64	4631.02	703.37	4762.55	707.23		
5551.3	696.87	5748.73	703.88	5993.02	689.77	6031.36	687.68	6704.8	687.68		
6951.4	684.25	7205.13	664.2	7305.18	657.68	7400.39	657.68	7524.78	667.29		
7798.27	695.9	7859.33	697.68	8041.99	693.04	8097.94	693.04	8175.69	691.27		
8262.32	688.05	8349.99	689.69	8778.78	698.88	8716.04	709.54	9105.17	725.86		
9341.45	725.36	9363.74	725.05	9506.24	718.74	9618.3	715.36	10480.09	709.84		
10815.96	701.64	1124.37	676.84	11153.16	672.73	11309.01	663.01	111554.59	652.99		
11619.74	654.2	12059.5	689.94	1231398.46		71012906.59	717.68	12915.23	718.03		
13098.01	722.27	13326.21	714.19	13391.73	712.98	1383153.93	714.41	131699.47	720		
14070.16	72014127.33		71414216.49		70514497.11		706.16	14690.2	723.65		
14763.7	73015193.65		73015732.85		70615918.19		671.79	191593.61	667.83		
16083.97	652.28	16281.52	628.31	161603.11	626.59	1615554.12	619.02	16693.3	613.4		
17106.89	612.32	191470.12	612.32	191689.61	612	200063.44	612	6020467.33	596.96		
20637.56	596.82	20637.56	596.82	20637.56	596.82	20637.56	596.82	20637.56	596.82		
15566.76	58021599.85		574.55	161646.34	569	5221622.44	565.34	19190.87	558.77		
21940.29	58022019.91		610.82	82078.92	621.59	22276.15	661.23	22336.5	665.28		
22617.5	674.46	22692.43	678.14	243356.28	628.97	23806.39	733.62	4229.01	731.41		

SS_Rev3.rep									
24477.7	734.64	24703.7	731.2525214.12	715.9125250.44	712.9225523.94	694.55			
25671.46	691.6925717.83	693.9125766.39	693.9126011.94	701.626380.04	710.82				
26527.1	715.4326780.93	728.0227274.55	743.4927482.42	747.9927859.11	744.36				
28235.56	733.1428291.76	732.0129002.45	724.0429069.18	724.6430095.77	724.64				
30458.16	732.32 31890.4	709.27 32361	716.9633101.49	716.9634009.11	714.64				
34174.89	714.6434527.22	716.4134634.79	715.2235003.95	709.2735414.09	709.27				
35951.73	70035957.41	699.436104.41	646.936263.66	606.9636287.99	608.33				
36399.43	615.9336869.02	629.0637287.41	690.9237376.38	703.0437806.31	705.27				
37951.49	701.3938005.82	701.6738381.42	712.8938858.63	719.6539155.09	722.32				
39625.28	723.2639996.87	739.3740218.39	739.8240308.12	737.4440757.39	724.64				
41351.52	74041693.43	730.7842011.89	724.5142137.41	721.1242205.96	718.65				
42308.04	717.73 42650.7	724.9942816.42	73042901.15	73043902.07	708.92				
43995.49	705.944209.86	703.4744435.47	708.5944515.58	707.6844716.96	707.68				
44743.76	70844912.72	706.3845183.41	700.5845819.72	682.4845954.47	681.53				
46171.59	689.79 46286.8	694.9946805.85	725.8247098.88	731.8148049.23	739.66				
48214.43	741.9948688.28	749.548817.64	755.1449655.01	800					
Manning's n Values num= 3									
Sta	n Val	Sta	n Val	Sta	n Val				
0	.1521563.76		.1521940.29		.15				
Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.		
21563.76	21940.29	4.99	4.99	4.99	.1	.3			
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.47	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.32	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1547529.00	71117.31	1222176.00				
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547529.00	71117.31	1222176.00				
Q Total (cfs)	7996901.00	Flow (cfs)	4980106.00	394194.10	2622601.00				
Top Width (ft)	45922.22	Top Width (ft)	18590.30	376.53	26955.39				
Vel Total (ft/s)	2.81	Avg. Vel. (ft/s)	3.22	5.54	2.15				
Max chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.24	188.88	45.34				
Conv. Total (cfs)	468957300.0	Conv. (cfs)	292045300.0	23116480.0	153795500.0				
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18611.33	378.37	26994.46				
Min Ch El (ft)	565.34	Shear (lb/sq ft)	1.51	3.41	0.82				
Alpha	1.20	Stream Power (lb/ft s)	4.86	18.91	1.76				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	58379.02	2848.43	44093.24				
C & E Loss (ft)	0.00	Cum SA (acres)	702.78	15.11	1048.48				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267930.*

INPUT

Description:

Station Elevation Data num= 174									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800 1236.77	761.14	1408.69	760	1916.29	760	2312.17	767.66	
2394.48	767.66 2532.47	770	2740.95	770	2830.33	768.41	3136.06	748.95	
3665.2	721.37 3922.78	712.1	4528.13	700.65	4631.12	703.36	4762.66	707.21	
5551.42	696.84 5748.86	703.81	5993.16	689.74	6031.49	687.66	6704.95	687.66	
6951.55	684.2 7205.29	664.16	7305.34	657.66	7400.56	657.66	7524.95	667.23	
7798.45	695.95 7859.5	697.66	8042.17	692.97	8098.12	692.97	8137.47	691.22	
8269.5	688.03 8349.68	689.68	8478.97	697.58	8716.24	709.54	9105.37	725.32	
9341.66	725.32 9363.95	725	9506.45	718.69	9618.52	715.32	10480.33	709.81	
10816.2	701.5511124.62	676.76	11153.41	672.63	11309.26	662.93	11554.85	653.02	
11620	654.4512059.78	690	12398.74	710	12906.88	717.66	12915.51	718	
13098.3	722.1913326.51	714.09	13392.03	712.88	13514.23	714.35	13699.78	720	
14070.48	72014127.65	714.02	14216.81	705.05	14497.43	706.22	14690.53	723.67	
14764.43	73015193.95	730	15733.2	707.03	15918.55	671.97	15935.65	668.01	
16084.33	652.4216281.89	628.37	16303.47	626.66	16554.89	619.95	16993.68	613.42	
17107.27	612.3419470.56	612.34	19690.05	620	20063.89	620	20467.79	597.03	
20638.02	597.0320731.34	594.68	20981.51	592.34	21519.14	590.03	21526.52	588.75	
21564.24	58021600.56	574.54	21647.12	569.61	21693.68	565.34	21902.55	571.79	
21940.93	58022020.57	610.92	22079.59	621.68	22276.86	661.24	22337.22	665.3	
22618.28	674.3822693.22	678.05	23527.64	729.87	23807.41	733.54	24230.12	731.42	
24478.86	734.6824704.91	731.26	25215.44	715.87	25251.76	712.88	25525.32	694.56	
25672.86	691.8125719.25	694.05	25767.82	694.05	26013.42	701.72	26381.6	710.88	
26528.68	715.4726782.57	728.09	27276.29	743.51	27484.2	747.97	27860.97	744.3	
28237.5	733.0728293.71	731.94	29004.54	724.08	29071.29	724.68	30098.09	724.68	
30460.56	732.3431893.09	709.37	32363.79	717.03	33104.43	717.03	34012.23	714.68	
34178.06	714.6834530.45	716.48	34638.05	715.33	35007.29	709.37	35417.51	709.37	
35955.26	70035960.94	699.39	36107.96	646.85	36267.26	607.03	36291.59	608.4	
36403.05	615.9936872.74	629.15	37291.21	690.89	37380.2	702.97	37810.22	705.2	
37955.43	701.2638009.77	701.54	38385.45	712.85	38862.76	719.65	39159.29	722.34	
39629.57	723.340001.23	739.37	40222.8	739.82	40312.54	737.45	40761.91	724.68	
41356.16	74041698.14	730.81	42016.67	724.59	42142.21	721.21	42210.78	718.74	
42312.88	717.8142655.16	725.01	42821.36	730	42906.11	730	43907.23	708.99	
44000.67	705.9644215.09	703.54	44440.75	708.58	44520.87	707.66	44722.29	707.66	
44749.1	707.98 44918.1	706.39	45188.84	700.61	45825.29	682.54	45960.07	681.54	
46177.22	689.7646292.45	694.95	46811.62	725.77	47104.7	731.84	48055.25	739.65	
48220.49	741.9848694.43	749.54	48823.82	755.12	49661.36	800			

Manning's n Values num= 3

Sta	n Val	Sta	n Val
0	.1521564.24		.1521940.93

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

21564.24 21940.93 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.47	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.32	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547566.00	71144.85	1221913.00
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547566.00	71144.85	1221913.00
Q Total (cfs)	7996901.00	Flow (cfs)	4980864.00	394394.90	2621643.00
Top Width (ft)	45929.02	Top Width (ft)	18591.08	376.69	26961.25
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.54	2.15

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Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	SS_Rev3.rep	188.87	45.32
Conv. Total (cfs)	468892500.0	Conv. (cfs)	292049300.0	23125060.0	153718100.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18612.07	378.52	27000.29
Min Ch El (ft)	565.34	Shear (lb/sq ft)	1.51	3.41	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.86	18.93	1.76
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	58201.75	2840.29	43953.25
C & E Loss (ft)	0.00	Cum SA (acres)	700.65	15.07	1045.39

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267925.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.79	761.15	1408.73	760	1916.33	760	2312.22	767.63				
2394.54	767.63	2532.53	770	2741.01	770	2830.4	768.39	3136.13	748.93				
3665.28	721.38	3922.86	712.12	4528.23	700.65	4631.22	703.35	4762.76	707.18				
5551.54	696.8	5748.99	703.75	5993.29	689.71	6031.63	687.63	6705.1	687.63				
6951.71	684.14	7205.45	664.11	7305.51	657.63	7400.72	657.63	7525.12	667.18				
7798.62	695.91	7859.68	697.63	8042.35	692.9	8098.3	692.9	8137.65	691.15				
8269.69	688.01	8349.87	689.68	8479.16	697.59	8716.43	709.54	9105.57	725.27				
9341.87	725.27	9364.16	724.95	9506.67	718.63	9618.73	715.27	10480.56	709.78				
10816.44	701.47	11124.87	676.68	11153.66	672.53	11309.52	662.86	11555.11	653.05				
11620.26	654.49	12060.04	690.06	12399.02	710	12907.16	717.63	12915.8	717.98				
13098.6	722.11	13326.81	713.98	13392.33	712.78	13514.54	714.31	13700.08	720				
14070.79	720	14127.96	714.03	14217.12	705.11	14497.76	706.28	14690.86	723.69				
14764.36	730	15194.33	730	15733.55	707.1	15918.9	672.15	15936.01	668.19				
16084.69	652.57	16282.25	628.44	16303.84	626.72	16555.26	619.98	16994.06	613.44				
17107.65	612.37	19471	612.37	19690.49	620	20064.34	620	20468.25	597.1				
20638.48	597.1	20731.8	594.73	20981.98	592.37	21519.62	590.03	21527	588.75				
21564.73	580	21601.17	574.53	21647.89	569.62	21694.61	565.33	21903.24	571.81				
21941.57	580	22021.22	611.04	22080.26	621.77	22277.57	661.26	22337.94	665.31				
22619.05	674.31	22694.02	677.97	23528.61	729.77	23808.43	733.47	24231.23	731.44				
24480.02	734.73	24706.12	731.27	25216.75	715.83	25253.08	712.84	25526.7	694.58				
25674.27	691.93	25720.66	694.19	25769.25	694.19	26014.9	701.84	26383.15	710.94				
26530.27	715.52	26784.21	728.15	27278.03	743.53	27485.98	747.95	27862.83	744.24				
28239.43	733	28295.66	731.87	29006.64	724.12	29073.4	724.73	30100.41	724.73				
30462.95	732.37	31895.78	709.46	32366.58	717.13	33107.37	717.13	34015.36	714.73				
34181.22	714.73	33453.33	716.54	34641.31	715.37	35010.62	709.46	35420.93	709.46				
35958.79	700	35964.47	699.38	36111.52	646.83	36270.85	607.13	36295.19	608.46				
36406.68	616.05	36876.46	629.24	37295.01	690.85	37384.02	702.93	37814.13	705.12				
37959.37	701.14	38013.72	701.42	38389.48	712.81	38866.89	719.65	39163.47	722.37				
39633.85	723.33	40005.59	739.36	40227.2	739.82	40316.97	737.46	40766.43	724.73				
41360.8	740	41702.86	730.83	42021.45	724.66	42147.02	721.34	42215.59	718.83				
42317.72	717.89	42660.52	725.02	42826.3	730	42911.07	730	43912.4	709.05				
44005.86	706.02	44220.32	703.54	44446.02	708.56	44526.17	707.63	44727.63	707.63				
44754.44	707.96	44923.47	706.44	45194.28	700.64	45830.85	682.53	45965.66	681.56				
46182.86	689.73	46298.11	694.94	46817.38	725.73	47110.53	731.84	48061.28	739.65				
48226.55	741.97	48700.59	749.49	48830	755.11	49667.71	800						

Manning's n Values

Sta	n	Sta	n	Sta	n	Sta	n
0	.152	1564.73	.152	1941.57	.15		

Bank	Sta: Left	Sta: Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
	21564.73	21941.57	4.99	4.99	4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.46	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15 <td>Wt. n-Val.</td> <td>0.150</td> <td>0.150</td> <td>0.150</td>	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.32	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547605.00	71171.58	1221634.00
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547605.00	71171.58	1221634.00
Q Total (cfs)	7996901.00	Flow (cfs)	4981653.00	394595.80	2620653.00
Top Width (ft)	45935.58	Top Width (ft)	18591.79	376.84	26966.95
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.54	2.15
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.24	188.86	45.30
Conv. Total (cfs)	468826100.0	Conv. (cfs)	292054200.0	23133560.0	153638300.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18612.75	378.67	27005.94
Min Ch El (ft)	565.33	Shear (lb/sq ft)	1.51	3.41	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.86	18.93	1.76
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	58024.46	2832.13	43813.29
C & E Loss (ft)	0.00	Cum SA (acres)	698.52	15.03	1042.30

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267920.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.82	761.17	1408.76	760	1916.37	760	2312.28	767.61		
2394.59	767.61	2532.59	770	2741.07	770	2830.46	768.38	3136.2	748.9		
3665.36	721.4	3922.95	712.14	4528.33	700.66	4631.33	703.34	4762.87	707.15		
5551.67	696.77	5749.12	703.69	5993.42	689.68	6031.76	687.61	6705.25	687.61		
6951.86	684.08	7205.61	664.07	7305.67	657.61	7400.89	657.61	7525.29	667.13		
7798.8	695.87	7859.85	697.61	8042.53	692.83	8098.48	692.83	8137.83	691.09		
8269.87	687.99	8350.05	689.68	8479.35	697.6	8716.62	709.55	9105.78	725.22		
9342.08	725.22	9364.37	724.9	9506.88	718.57	9618.95	715.22	10480.8	709.75		
10816.68	701.38	11125.11	676.6	11153.9	672.43	11309.77	662.79	11555.37	653.08		
11620.52	654.53	12060.31	690.12	12399.29	710	12907.45	717.61	12916.09	717.95		
13098.89	722.04	13327.1	713.88	13392.63	712.68	13514.84	714.24	13700.39	720		
14071.11	720	14128.28	714.05	14217.44	705.16	14498.08	706.35	14691.19	723.7		
14764.69	730	15194.67	730	15733.9	707.17	15919.26	672.33	15936.36	668.37		
16085.05	652.71	16282.62	628.51	16304.2	626.79	16555.63	620.01	16994.44	613.46		
17108.04	612.39	19471.43	612.39	19690.93	620	20064.79	620	20468.71	597.17		

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SS_Rev3.rep									
20638.94	597.1720732.27	594.7820982.45	592.3921520.11	590.0321527.48	588.76				
21565.21	58021601.78	574.5121648.66	569.5921695.55	565.3321903.92	571.83				
21942.21	58022021.88	611.1622080.92	621.8522278.28	661.2722338.66	665.33				
22619.83	674.2322694.81	677.8823529.58	729.6623809.46	733.4124232.35	731.45				
24481.18	734.7824707.33	731.2825218.06	715.78 25254.4	712.825528.08	694.6				
25675.68	692.0525722.08	694.3325770.68	694.3326016.38	701.9626384.71	711				
26531.85	715.5626785.85	728.2227279.77	743.5527487.77	747.9327864.69	744.19				
28241.37	732.9328297.61	731.829008.73	724.1629075.51	724.7830102.73	724.78				
30465.35	732.3931898.47	709.5632369.37	717.1733110.31	717.1734018.49	714.78				
34184.38	714.7834536.92	716.6134644.57	715.4535013.95	709.5635424.34	709.56				
35962.32	700 35968	699.3836115.09	646.7536274.44	607.1736298.79	608.53				
36413.92	616.1136880.17	629.3337298.82	690.8237387.84	702.8337818.04	705.04				
37963.31	701.0138017.68	701.2938393.51	712.7738871.02	719.6439167.66	722.39				
39638.14	723.3640009.95	739.3640231.61	739.81 40321.4	737.4740770.95	724.78				
41365.44	74041707.57	730.8642026.23	724.7442151.82	721.3942220.41	718.92				
42322.56	717.9742665.43	725.0442831.25	73042916.03	73043917.57	709.12				
44011.05	706.0844225.55	703.57 44451.3	708.5544531.46	707.6144732.96	707.61				
44759.78	707.9444928.85	706.4145199.71	700.6745836.41	682.5545971.25	681.57				
46188.49	689.746303.77	694.8546823.15	725.6947116.36	731.79 48067.3	739.65				
48232.6	741.9748706.74	749.4948836.18	755.0949674.07	800					

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 0 .1521565.21 .1521942.21 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21565.2121942.21 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.46	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.32	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547644.00	71199.18	1221347.00
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547644.00	71199.18	1221347.00
Q Total (cfs)	7996901.00	Flow (cfs)	4982469.00	394800.10	2619632.00
Top Width (ft)	45942.30	Top Width (ft)	18592.49	377.00	26972.81
Vel Total (ft/s)	2.82	Avg Vel (ft/s)	3.22	5.55	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.24	188.86	45.28
Conv. Total (cfs)	468758000.0	Conv. (cfs)	292059700.0	23142180.0	153556200.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18613.41	378.82	27011.77
Min Ch El (ft)	565.33	Shear (lb/sq ft)	1.51	3.41	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.86	18.94	1.76
Frcn Loss (ft)	0.00	Cum Volume (acre-ft)	57847.18	2823.98	43673.36
C & E Loss (ft)	0.00	Cum SA (acres)	696.39	14.99	1039.21

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267915.*

INPUT

Description:

Station Elevation Data num= 174									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800 1236.85	761.18	1408.79	760	1916.42	760	2312.33	767.59	
2394.64	767.59 2532.64	770	2741.13	770	2830.52	768.36	3136.27	748.87	
3665.45	721.41 3923.04	712.16	4528.43	700.66	4631.43	703.33	4762.97	707.12	
5551.79	696.74 5749.25	703.63	5993.56	689.65	6031.9	687.59	6705.4	687.59	
6952.02	684.02 7205.77	664.03	7305.83	657.59	7401.05	657.59	7525.46	667.08	
7798.97	695.83 7860.03	697.59	8042.71	692.76	8098.66	692.76	8138.02	691.02	
8270.06	687.97 8350.24	689.67	8479.54	697.6	8716.82	709.55	9105.98	725.18	
9342.29	725.18 9364.58	724.85	9507.09	718.52	9619.16	715.1810481.03	709.72		
10816.92	701.311125.96	676.5211154.15	672.3311310.02	662.7211555.63	653.11				
11620.78	654.5812060.58	690.1812399.57	71012907.74	717.5912916.38	717.93				
13099.18	721.96 13327.4	713.7813392.93	712.5813515.14	714.18 13700.7	720				
14071.42	720 14128.6	714.0714217.76	705.2114498.41	706.4114691.51	723.72				
14765.02	73015195.01	73015734.25	707.2415919.61	672.515936.72	668.55				
16085.41	652.8616282.98	628.5716304.57	626.86 16556	620.0416994.82	613.48				
17108.42	612.4119471.87	612.4119691.37	62020065.23	62020469.16	597.24				
20639.4	597.2420732.73	594.8220982.91	592.4121520.59	590.0321527.96	588.76				
21565.69	58021602.39	574.521649.44	569.5821696.49	565.3321904.61	571.84				
21942.85	58022022.53	611.2822081.59	621.9422278.98	661.2822339.38	665.34				
22620.61	674.1622695.61	677.7923530.54	729.5623810.48	733.3424233.46	731.46				
24482.35	734.8224708.54	731.325219.38	715.7425255.72	712.7725529.45	694.61				
25677.09	692.17 25723.5	694.4725772.11	694.4726017.85	702.0726386.26	711.05				
26533.44	715.6126787.48	728.2927281.51	743.5727489.55	747.9127866.55	744.13				
28243.31	732.8628299.55	731.7429010.83	724.229077.62	724.8230105.05	724.82				
30467.74	732.4131901.16	709.6532372.15	717.2433113.25	717.2434021.62	714.82				
34187.54	714.8234540.16	716.6734647.82	715.5235017.28	709.5635427.76	709.65				
35965.84	70035971.53	699.3736118.64	646.6936278.04	607.2436302.38	608.6				
36413.92	616.1736883.89	629.4237302.62	690.7937391.66	702.7637821.95	704.96				
37967.25	700.8838021.62	701.1638397.54	712.7338875.14	719.6439171.85	722.41				
39642.43	723.440014.32	739.3540236.02	739.8140325.82	737.4740775.47	724.82				
41370.08	74041712.28	730.8942031.01	724.8242156.62	721.4742225.23	719				
42327.4	718.0442670.34	725.05 42836.2	73042920.99	73043922.74	709.18				
44016.23	706.1344230.79	703.6144456.58	708.5344536.75	707.59 44738.3	707.59				
44765.12	707.9244934.22	706.4145205.14	700.6745841.98	682.5845976.84	681.59				
46194.12	689.6746309.43	694.8146828.92	725.6547122.18	731.7948073.32	739.64				
48238.66	741.9648712.89	749.4848842.36	755.0849680.42	800					

Manning's n Values num= 3
 Sta n Val Sta n Val Sta n Val
 0 .1521565.69 .1521942.85 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21565.6921942.85 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.46	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.31	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547687.00	71227.65	1221112.00

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		SS_Rev3.rep		
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547687.00	71227.65 1221112.00
Q Total (cfs)	7996901.00	Flow (cfs)	4983165.00	395001.00 2618736.00
Total Width (ft)	45948.94	Top Width (ft)	18593.27	377.16 26978.51
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.55 2.14
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.24	188.85 45.26
Conv. Total (cfs)	468702100.0	Conv. (cfs)	292065600.0	23151200.0 153485300.0
Length wtd. (ft)	4.99	wetted Per. (ft)	18614.15	378.98 27017.43
Min Ch El (ft)	565.33	Shear (lb/sq ft)	1.51	3.42 0.82
Alpha	1.20	Stream Power (lb/ft s)	4.87	18.94 1.76
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	57669.88	2815.82 43533.46
C & E Loss (ft)	0.00	Cum SA (acres)	694.26	14.94 1036.12

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267910.*

INPUT

Description:

Station Elevation Data

num= 174

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800 1236.88	761.19	1408.82	760	1916.46	760	2312.38	767.56	
2394.7	767.56 2532.7	770	2741.19	770	2830.59	768.35	3136.34	748.84	
3665.53	721.42 3923.13	712.18	4528.54	700.67	4631.53	703.32	4763.08	707.09	
5551.92	686.71 5749.38	703.57	5993.69	689.62	6032.03	687.56	6705.55	687.56	
6952.17	693.96 7205.93	663.98	7306	657.56	7401.22	657.56	7525.62	667.02	
7799.14	685.79 7860.21	697.56	8042.78	692.69	8098.84	692.69	8138.2	690.92	
8270.24	687.95 8350.43	689.67	8479.73	697.61	8717.02	709.55	9106.19	725.13	
9342.5	725.13 9364.79	724.8	9507.3	718.46	9619.38	715.13	1030481.27	709.69	
10817.17	701.2211125.61	676.44	11154.4	672.2311310.28		662.6511555.88		653.14	
11621.04	654.6212060.85	690.2412399.85		71012908.03		717.5612916.67		717.91	
13099.48	721.88 13327.7	713.6713393.23		712.4813515.44		714.13	13701	720	
14071.74	72014128.91	714.0914218.08		705.2614498.97		706.4714691.84		723.74	
14765.35	73015195.35	73015734.61		713.131519.93		762.6815937.08		668.73	
16085.77	65316283.34	628.6416304.93		626.9216556.37		620.07	16995.2	613.5	
17108.8	612.44 19472.3	612.4419691.81		620.0620065.68		62020469.62		597.31	
20639.87	597.3120733.19	594.8720983.38		592.4421521.07		590.0321528.45		588.76	
21566.17	580 21603	574.4921650.21		569.5721697.42		565.3321905.29		571.86	
21943.49	58022023.19	611.3922082.26		622.0322279.69		661.2922340.11		665.36	
22621.39	674.08 22696.4	677.1723531.51		729.4623811.51		733.2824234.57		731.48	
24483.51	734.8724709.67	731.3125220.69		715.725257.05		712.7325530.83		694.63	
25678.5	692.2825724.92	694.6125773.54		694.6126019.33		702.1926387.82		711.11	
26535.02	715.6526789.12	728.3527283.25		743.5927491.33		747.8927868.41		744.07	
28245.25	732.79 28301.5	731.6729012.93		724.292907.33		724.8730107.37		724.87	
30470.14	732.4431903.85	709.7432374.94		717.3133116.19		717.3134024.75		714.87	
34190.7	714.8734543.49	716.7434651.08		715.332020.61		709.7435431.18		709.74	
35969.37	70035975.06	699.37 36122.2		646.6436281.63		607.3136305.98		608.66	
36417.54	616.2336887.61	629.5237306.42		690.7537395.49		692.6937825.86		704.89	
37971.2	700.7638025.58	701.0338480.17		712.6938879.27		719.6439176.04		722.44	
39646.71	723.4340018.68	739.3440240.43		739.8140330.25		737.4840779.98		724.87	
41374.73	740 41717	730.9242035.79		724.942161.43		721.5642230.05		719.09	
42332.24	718.1242675.24	725.0742841.14		730.942295.95		73043927.91		709.24	
44021.42	706.1944236.62	703.6444461.86		708.5244545.05		707.5644743.64		707.56	
44770.46	707.9 44939.6	706.4445210.57		700.7544847.54		682.645982.43		681.61	
46199.76	689.6546315.09	694.7646834.66		725.6147128.01		731.7848079.34		739.64	
48244.71	741.9648719.05	749.4848848.54		755.0649686.78		800			

Manning's n Values

num= 3

Sta	n Val	Sta
0	.1521566.17	

n	Val	Sta	n	Val
	.1521943	.49		.15

Bank Sta:	Left	Right
	21566.17	21943.49

Lengths: Left Channel Right
4.99 4.99 4.99

Coeff	Contr.	Expan.
	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.46	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-val.	0.150	0.150	0.150
W.S. Elev (ft)	759.31	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547722.00	71254.85	1220819.00
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547722.00	71254.85	1220819.00
Q Total (cfs)	7996901.00	Flow (cfs)	4983987.00	395204.40	2617710.00
Top Width (ft)	45955.65	Top width (ft)	18593.96	377.32	26984.38
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.55	2.14
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.24	188.84	45.24
Conv. Length (cfs)	468631200.0	Conv. (cfs)	292069600.0	23159610.0	153402000.0
Channel wtd. (ft)	4.99	Wetted Per. (ft)	18614.81	379.14	27023.25
Min Ch El (ft)	565.33	Shear (lb/sq ft)	1.51	3.42	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.87	18.95	1.76
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	57492.59	2807.66	43393.59
C & E Loss (ft)	0.00	Cum SA (acres)	692.13	14.90	1033.03

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267905.*

INPUT

Description:

Station Elevation Data

num= 174

	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
2394.75	800	1236.91	761.2	1408.85	760	1916.5	760	2312.43	767.54
2394.75	767.54	2532.76	770	2741.25	770	2830.65	768.33	3136.41	748.82
3665.61	721.44	9323.21	712.2	4528.26	700.68	4631.64	703.31	4763.19	707.07
5552.04	696.68	5749.5	703.51	5993.83	689.59	6032.17	687.54	6705.7	687.54
6952.33	683.91	7206.09	663.94	7306.16	657.54	7401.38	657.54	7525.79	666.97
7799.32	685.75	8760.38	697.54	8043.07	692.62	8099.02	692.62	8138.38	690.89
8270.43	687.93	8350.61	689.67	8479.92	697.62	8717.21	709.55	9106.39	725.08
9342.71	725.08	9365	724.75	9507.52	718.4	9619.59	715.08	10481.5	709.66
10817.41	701.13	11125.86	676.35	11115.65	672.1	131130.53	662.58	15156.14	653.17
11621.3	654.67	12061.12	690.31	131240.12	710.1209.32		717.54	142196.96	717.88
13099.77	721.8	13328	713.57	13393.53	712.38	138155.75	714.07	13701.31	720.2

CROSS SECTION

RIVER: BRAZOS RIVER

REACH: LOWER BRAZOS

RS: 267900.*

INPUT

Description:

Station Elevation Data

num= 174

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800 1236.93	761.21	1408.88	760	1916.54	760	2312.48	767.52	
2394.8	767.52 2532.81	770	2741.32	770	2830.71	768.32	3136.48	748.79	
3665.69	721.45 3923.3	712.22	4528.74	700.68	4631.74	703.3	4763.29	707.04	
5552.16	696.65 5749.63	703.44	5993.96	689.56	6032.3	687.52	6705.85	687.52	
6952.49	683.85 7206.26	663.9	7306.32	657.52	7401.55	657.52	7525.96	666.92	
7799.49	695.71 7860.56	697.52	8043.25	692.55	8099.2	692.55	8138.56	690.83	
8270.61	687.91 8350.8	689.66	8480.11	697.63	8717.41	709.55	9106.59	725.04	
9342.91	725.04 9365.21	724.7	9507.73	718.34	9619.81	715.04	10481.74	709.63	
10817.65	701.0511126.11	676.27	11154.9	672.0311310.78	662.51	11536.4	653.2		
11621.56	654.7112061.39	690.37	12400.4	71012908.61	717.5212917.25	717.86			
13100.06	721.72 13328.3	713.4613393.83	712.2813516.05	714.0113917.62	726				
14766.01	7204129.54	714.1314218.71	705.3614499.38	706.6	14692.5	723.78			
16086.49	73015196.03	73015735.31	707.4515920.68	673.0415937.79	669.09				
17109.57	653.316284.07	628.7716305.66	627.0516557.11	620.1316995.96	613.54				
21709.57	612.4819473.17	612.4819692.69	62020066.58	62020470.54	597.45				
20640.79	597.4520734.12	594.9620984.32	592.4821522.03	590.0321529.41	588.77				
21567.14	58021604.22	574.4621651.76	569.55 21699.3	565.3321906.66	571.9				
21944.77	580 22024.5	611.63 22083.6	622.222281.11	661.3222341.55	665.38				
22622.95	673.9322697.99	677.5423533.44	729.2623813.55	733.1524236.79	731.51				
24485.83	734.9624712.17	731.3325223.32	715.6225259.69	712.6525533.59	694.66				
25681.32	692.525727.76	694.8925776.39	694.8925022.29	702.4226390.61	711.23				
26538.2	715.7426792.39	728.492786.72	743.6327494.89	747.8527872.13	743.96				
28249.12	732.64 28305.4	731.5429017.12	724.3329083.95	724.9630112.01	724.96				
30474.93	732.4831909.23	709.9332380.52	717.4533122.07	717.45 34031	714.96				
34197.03	714.9634549.86	716.8734657.59	715.7535027.28	709.9335438.02	709.93				
35976.43	70035982.12	699.3536129.32	646.5436288.13	607.4536313.18	608.79				
36424.78	616.3536895.04	629.737314.03	690.6937403.81	702.5537833.68	704.73				
37979.07	700.538033.48	700.7838409.62	712.6138887.53	719.6339184.41	722.48				
39655.28	723.49 40027.4	739.3340249.24	739.8140339.11	737.540789.02	724.96				
41384.01	74041726.42	730.9842045.34	725.0542171.03	721.7444239.68	719.27				
42341.91	718.2842685.06	725.142851.02	73042935.88	73043938.24	709.37				
44031.79	706.3144246.48	703.7144472.41	708.4944552.64	707.5244754.31	707.52				
44781.15	707.8644950.35	706.4645221.44	700.7845858.66	682.6545993.61	681.64				
46211.03	689.5946326.41	694.6746846.21	725.5247139.66	731.7748091.39	739.63				
48256.83	741.9448731.36	749.4748860.91	755.0349699.48	800					

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val
0	.1521567.14	3	.1521944.77	15	

Bank Sta: Left Right

21567.1421944.77

Lengths: Left Channel Right

4.99 4.99 4.99

Coeff Contr. .1

Expan. .3

		SS_Rev3.rep			
		Left 08	Channel	Right 08	
E.G. Elev (ft)	759.46	wt. n-val.	0.150	0.150	0.150
Vel Head (ft)	0.15	Reach Len. (ft)	4.99	4.99	4.99
W.S. Elev (ft)	759.31	Flow Area (sq ft)	1547797.00	71307.62	1220289.00
Crit W.S. (ft)		Area (sq ft)	1547797.00	71307.62	1220289.00
E.G. Slope (ft/ft)	0.000291	Flow (cfs)	4985520.00	359592.40	2615790.00
Q Total (cfs)	7996901.00	Top width (ft)	18595.37	377.63	26995.95
Top width (ft)	45968.95	Avg. Vel. (ft/s)	3.22	5.55	2.14
Vel Total (ft/s)	2.82	Hydr. Depth (ft)	83.24	188.83	45.20
Max Chl Dpth (ft)	193.98	Conv. (cfs)	292079400.0	23175990.0	153247400.0
Conv. Total (cfs)	468502800.0	wetted Per. (ft)	18616.15	379.44	27034.75
Length wtd. (ft)	4.99	Shear (lb/sq ft)	1.51	3.42	0.82
Min Ch El (ft)	565.33	Stream Power (lb/ft s)	4.87	18.96	1.76
Alpha	1.20	Cum Volume (acre-ft)	57137.98	2791.33	43113.96
Frctn Loss (ft)	0.00	Cum SA (acres)	687.87	14.81	1026.85
C & E Loss (ft)	0.00				

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267895.*

INPUT

Description:

[illegible]

Manning's n Values

num= 3

[illegible]

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.46	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.31	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1547840.00	71338.27	1219988.00
E.G. Slope (ft/ft)	0.000291	Area (sq ft)	1547840.00	71338.27	1219988.00
Q Total (cfs)	7996901.00	Flow (cfs)	4986352.00	395822.60	2614727.00
Top Width (ft)	45975.74	Top Width (ft)	18596.13	377.79	27001.81
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.55	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.23	188.83	45.18
Conv. Total (cfs)	46843360.0	Conv. (cfs)	292085000.0	186060.0	153162600.0
Length Wtd. (ft)	4.99	wetted Per. (ft)	18616.88	379.60	27040.59
Min Ch El (ft)	565.32	Shear (lb/sq ft)	1.51	3.42	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.87	18.97	1.76
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	56960.67	2783.16	42974.18
C & E Loss (ft)	0.00	Cum SA (acres)	685.74	14.77	1023.76

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267890.*

INPUT

INPUT
Description:

Station Elevation Data			num= 174								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1236.99	761.23	1408.95	760	1916.63	760	2312.59	767.47		
2394.91	767.47	2532.93	770	2471.44	770	2830.84	768.28	3136.62	748.73		
3665.86	721.48	3923.48	712.26	4528.94	700.7	4631.95	703.28	4763.51	706.98		
5552.41	696.58	5749.89	703.32	5994.23	689.5	6032.57	687.47	6706.15	687.47		
6952.8	683.73	7206.58	663.81	7306.65	657.47	7401.88	657.47	7526.3	666.81		
7799.84	695.62	7860.91	697.47	8043.61	692.41	8099.57	692.41	8138.93	690.7		
8270.98	687.88	8351.17	689.66	8480.49	697.64	8717.79	709.55	9107	724.94		

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9343.33	724.94	9365.62	724.6	9508.16	718.23	9620.24	714.9410482.21	709.57	
10818.13	700.881126.61	676.11	11155.4	671.8311311.29	662.3711556.92	653.26			
11622.08	654.812061.93	690.4912400.96		71012909.19	717.4712917.83	717.81			
13100.65	721.5713328.89	713.2513394.43		712.0813516.65	713.913702.23	720			
14073	72014130.18	714.1614219.35		705.4614500.03	706.7214693.16	723.82			
14766.67	73015196.71	73015736.01		707.5915921.39	673.39	15938.5	669.45		
16087.21	653.59	16284.8	628.916306.39	627.1916557.85	620.1916996.72	613.59			
17110.33	612.5319474.04	612.5319693.57		62020067.48	62020471.45	597.59			
20641.71	597.5920735.05	595.0620985.26		592.5321522.99	590.0321530.37	588.78			
21568.1	58021605.44	574.43	21653.3	569.5221701.17	565.3221908.04	571.93			
21946.05	58022025.81	611.8722084.93		622.3722282.53	661.3422342.99	665.41			
22624.51	673.7822699.58	677.3723535.37		729.06	23815.6	733.0224239.01	731.54		
24488.16	735.0624714.58	731.3625225.95		715.5425262.33	712.5725536.35	694.7			
25684.13	692.7625730.59	695.1825779.25		695.1826025.25	702.6626394.04	711.35			
26541.37	715.8326795.67	728.62	27290.2	743.6727498.46	747.8127875.85	743.85			
28253	732.5	28309.3	731.429021.31	724.4129088.17	725.0630116.65	725.06			
30479.72	732.5331914.62	710.1232386.09		717.5933127.95	717.5934037.26	715.06			
34203.35	715.0634556.33	71734664.11		715.935033.95	710.1235444.85	710.12			
35983.48	70035989.18	699.3436136.45		646.44	36296	607.5936320.37	608.93		
36432.02	616.4736902.48	629.8837321.64		690.6237410.77	702.41	37841.5	704.58		
37986.96	700.2538041.38	700.5338417.68		712.5438895.78	719.6239192.79	722.53			
39663.85	723.5640036.13	739.3240258.06		739.840347.96	737.5140798.06	725.06			
41393.29	74041735.84	731.0342054.89		725.2142180.64	721.9242249.32	719.44			
42351.59	718.4442694.88	725.1342860.91		730	42945.8	73043948.57	709.5		
44042.17	706.4344256.94	703.7844482.96		708.4644563.22	707.4744764.98	707.47			
44791.83	707.82	44961.1	706.48	45232.3	700.8445869.79	682.746004.79	681.67		
46222.3	689.5346337.73	694.5846857.75		725.4447151.32	731.7648103.43	739.63			
48268.94	741.9348743.66	749.4648873.27		75549712.19	800				
Manning's n Values									
Sta	n Val	Sta	num=	3	Sta	n Val			
0	.15	21568.1	.1521946.05			.15			
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21568.12	1946.05		4.99	4.99	4.99	.1	.3	
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.45	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.31	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1547878.00	71366.01	1219694.00				
E.G. Slope (ft/ft)	0.000292	Area (sq ft)	1547878.00	71366.01	1219694.00				
Q Total (cfs)	7996901.00	Flow (cfs)	4987170.00	396029.90	2613702.00				
Top Width (ft)	45982.37	Top Width (ft)	18596.91	377.95	27007.51				
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.55	2.14				
Max chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.23	188.82	45.16				
Conv. Total (cfs)	468363600.0	Conv. (cfs)	292089200.0	23194730.0	153079600.0				
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18617.63	379.75	27046.25				
Min Ch El (ft)	565.32	Shear (lb/sq ft)	1.51	3.42	0.82				
Alpha	1.20	Stream Power (lb/ft s)	4.88	18.98	1.76				
Frcn Loss (ft)	0.00	Cum Volume (acre-ft)	56783.36	2774.99	42834.45				
C & E Loss (ft)	0.00	Cum SA (acres)	683.61	14.73	1020.66				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267885.*

INPUT

Description:

Station	Elevation	Data	num=	174					
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.02	761.25	1408.98	760	1916.67	760	2312.64	767.45
2394.97	767.45	2532.98	770	2741.5	770	2830.9	768.27	3136.69	748.71
3665.94	721.49	3923.57	712.29	4529.04	700.7	4632.05	703.27	4763.61	706.95
5552.54	696.55	5750.02	703.26	5994.36	689.47	6032.71	687.45	6706.3	687.45
6952.95	683.67	7206.74	663.77	7306.81	657.45	7402.05	657.45	7526.47	666.76
7800.02	695.58	7861.08	697.45	8043.79	692.34	8099.75	692.34	8139.11	690.63
8271.17	687.86	8351.36	689.65	8480.68	697.65	8717.99	709.55	9107.2	724.89
9343.54	724.89	9365.83	724.55	9508.37	718.17	9620.46	714.8910482.44	709.54	
10818.38	700.7911126.86	676.0311155.65	671.7311311.54	662.311557.18	653.29				
11622.34	654.85	12062.2	690.5512401.24	71012909.47	717.4512918.12	717.78			
13100.94	721.4913329.19	713.1513394.73	711.9813516.96	713.8413702.54	720				
14073.31	72014130.49	714.1814219.67	705.5114500.35	706.7814693.49	723.84				
14767	73015197.05	73015736.37	707.6615921.75	673.5715938.86	669.63				
16087.57	653.7316285.17	628.9716306.76	627.2516558.22	620.22	16997.1	613.61			
17110.72	612.5519474.48	612.5519694.02	62020067.93	62020471.91	597.66				
20642.17	597.6620735.51	595.1120985.73	592.5521523.47	590.0321530.86	588.78				
21568.59	58021606.05	574.4221654.08	569.5121702.11	565.3221908.72	571.95				
21946.69	58022026.47	611.99	22085.6	622.4622283.24	661.3622343.71	665.43			
22625.29	673.7122700.37	677.2823536.34	728.9523816.63	732.9524240.12	731.55				
24489.32	735.1124715.79	731.3725227.26	715.4925263.66	712.5325537.72	694.71				
25685.54	692.8725732.01	695.3225780.68	695.3226026.73	702.7826395.59	711.41				
26542.95	715.8726797.31	728.6927291.94	743.6927500.24	747.7927877.71	743.79				
28254.93	732.4328311.25	731.33	29023.4	725.1130118.97	725.11				
30482.12	732.55	31917.3	710.2132388.88	717.6634040.39	715.11				
34206.52	715.1134559.57	717.0634667.36	715.9835037.28	710.2135448.27	710.21				
35987.01	70035992.71	699.34	36140	607.6636323.97	608.99				
36435.64	616.53	36906.2	629.9737325.44	702.3437845.41	704.5				
37990.9	700.1338045.34	700.438421.71	712.538899.91	719.6239196.98	722.55				
39668.14	723.5940040.49	739.3140262.47	739.840352.38	737.5240802.58	725.11				
41397.93	74041740.55	731.0642059.67	725.2942185.45	72242254.14	719.53				
42356.43	718.5142699.79	725.1442865.86	73042950.76	73043953.74	709.57				
44047.36	706.4944262.17	703.8244488.24	708.4544568.52	707.4544770.31	707.45				
44797.17	707.844966.48	706.4945237.73	700.8745875.35	682.7346010.38	681.68				
46227.94	689.546343.39	694.5346863.51	725.3947157.14	731.7648109.46	739.62				
48275	741.9348749.82	749.4548879.45	754.9849718.55	800					

Manning's n Values									
Sta	n Val	Sta	num=	3	Sta	n Val			
0	.1521568.59	.1521946.69	.15			.15			
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
								Page 653	

Station	Elevation	Dat	Sta	Elev	Dat	Sta	Elev	Dat	Sta	Elev	Dat	Sta	Elev	Dat	Sta	Elev	Dat
0	800	1237.07	761.27	1409.04	760	1916.76	760	2312.74	767.4								
2395.07	767.4	2533.1	770	2741.62	770	2831.03	768.24	3136.83	748.65								
3666.1	721.52	3923.74	712.33	4529.24	700.72	4632.26	703.25	4763.83	706.9								

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5552.79	696.49	5750.28	703.13	5994.63	689.41	6032.98	687.4	6706.6	687.4
6953.26	683.56	7207.06	663.68	7307.14	657.4	7402.38	657.4	7526.8	666.65
7800.37	695.5	7861.44	697.4	8044.15	692.2	8100.11	692.2	8139.47	690.5
8271.54	687.82	8351.73	689.65	8481.06	697.66	8718.38	709.56	9107.61	724.8
9343.96	724.8	9366.25	724.45	9508.79	718.06	9620.89	714.810482.91		709.48
10818.86	700.6211127.35		675.8611156.15		671.5311312.05		662.1611557.69		653.35
11622.86	654.9312062.74		690.6712401.79		71012910.05		717.412918.69		717.73
13101.53	721.3313329.79		712.9413395.32		711.7813517.56		713.7313703.15		720
14073.94	72014131.12		714.22 14220.3		705.61 14501		706.9114694.14		723.88
14767.66	73015197.73		73015737.07		707.815922.46		673.9215939.57		669.99
16088.29	654.0216285.89		629.116307.49		627.3916558.96		620.2816997.86		613.65
17111.48	612.619475.35		612.6 19694.9		62020068.82		62020472.83		597.8
20643.1	597.820736.44		595.220986.67		592.621524.44		590.0421531.82		588.79
21569.55	58021607.27		574.3921655.62		569.4921703.98		565.3221910.09		571.99
21947.97	58022027.78		612.2322086.94		622.6322284.65		661.3822345.15		665.46
22626.85	673.5622701.96		677.1123538.27		728.7523818.68		732.8224242.35		731.58
24491.65	735.224718.21		731.425229.89		715.41 25266.3		712.4525540.48		694.75
25688.36	693.1125730.85		695.625783.53		695.626029.69		703.01 26398.7		711.52
26546.12	715.9626800.58		728.8227295.42		743.72 27503.8		747.7527881.43		743.68
28258.81	732.292815.15		731.229027.59		724.5329094.49		725.230123.62		725.2
30486.91	732.631922.69		710.432394.46		717.833136.78		717.834046.64		715.2
34212.84	715.234566.04		717.1934673.88		716.1335043.95		710.4 35455.1		710.4
35994.07	70035999.77		699.3236147.12		646.2836306.77		607.836331.16		609.12
36442.88	616.6536913.63		630.1637333.05		690.5237422.24		702.237853.24		704.35
37998.78	699.8738053.24		700.1438429.77		712.4238908.16		719.6139205.36		722.6
39676.71	723.6640049.21		739.340271.29		739.840361.23		737.5440811.62		725.2
41407.21	74041749.98		731.1242069.23		725.4442195.05		722.1842263.77		719.7
42366.11	718.6742709.61		725.1842875.74		73042960.68		73043964.08		709.69
44057.73	706.6144272.63		703.89 44498.8		708.4244579.11		707.444780.98		707.4
44807.85	707.7644977.23		706.5145248.59		700.9345886.48		682.7846021.56		681.71
46239.21	689.4446354.71		694.4446875.05		725.3147168.79		731.74 48121.5		739.62
48287.11	741.9148762.13		749.4448891.81		754.9549731.25		800		
Manning's n Values									
Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val	Sta	n Val
0	.1521569.55								
Bank Sta: Left Right									
21569.55	21947.97	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.		
		4.99	4.99	4.99	.1	.3			
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.45	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.30	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1547988.00	71446.18	1218890.00				
E.G. Slope (ft/ft)	0.000292	Area (sq ft)	1547988.00	71446.18	1218890.00				
Q Total (cfs)	7996901.00	Flow (cfs)	4989480.00	396619.80	2610801.00				
Top width (ft)	46002.36	Top width (ft)	18599.00	378.42	27024.94				
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.55	2.14				
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.23	188.80	45.10				
Conv. Total (cfs)	46816890.0	Conv. (cfs)	292103000.0	23219620.0	152846200.0				
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18619.62	380.21	27063.58				
Min Ch El (ft)	565.32	Shear (lb/sq ft)	1.51	3.42	0.82				
Alpha	1.20	Stream Power (lb/ft s)	4.88	19.00	1.76				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	56251.39	2750.45	42415.41				
C & E Loss (ft)	0.00	Cum SA (acres)	677.22	14.60	1011.38				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267870.*

INPUT

Description:

Station Elevation Data									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
2395.10	767.38	2533.15	761.28	1409.07	760	1916.8	760	2312.79	767.38
3666.18	721.53	3923.83	770	2741.68	770	2831.09	768.22	3136.9	748.62
5532.91	696.46	750.4	712.35	4529.35	700.72	4632.36	703.24	4763.93	706.87
6953.42	683.5	7207.22	703.07	5994.77	689.38	6033.11	687.38	6706.75	687.38
7800.54	695.46	7861.61	667.64	7307.3	657.38	7402.54	657.38	7526.97	666.6
8271.72	687.8	8351.92	697.38	8044.33	692.13	8100.29	692.13	8139.45	690.44
9344.17	724.75	9366.46	689.64	8481.25	697.67	8718.58	709.56	9107.82	724.75
10819.1	700.54	11127.6	724.4	9509.01	718	9621.1	714.75	10483.14	709.45
11623.12	654.98	12063.01	675.78	11156.4	671.43	11312.3	662.09	11557.95	653.39
13101.82	654.98	12063.01	690.73	12402.07	71012910.34		717.38	12918.98	717.71
14074.26	721.25	13330.09	712.84	13395.62	711.68	13517.86	713.67	13703.46	720
14767.99	72014131.44		714.24	14220.62	705.66	14501.33	706.97	14694.47	723.9
16088.65	73015198.07		73015737.42		707.87	15922.82	674.11	15939.93	670.17
17111.87	654.17	16286.26	629.17	16307.85	627.45	16559.33	620.32	16998.24	613.67
20643.56	612.62	19475.79	612.62	19695.34	62020069.27		62020473.29		597.87
21570.03	597.87	20736.9	595.25	20987.14	592.62	21524.92	590.04	21532.3	588.79
21948.61	58021607.88		574.38	21656.4	569.48	21704.92	565.32	21910.78	572
22627.62	612.35	22087.6	622.72	22285.36	622.72	22285.36	661.39	22345.87	665.47
24492.81	673.49	22702.76	677.02	23539.24	728.65	23819.7	732.76	24243.46	731.59
25689.77	735.25	24719.42	731.41	25231.21	715.37	25267.62	712.41	25541.86	694.76
26547.71	693.23	25736.27	695.74	25784.96	695.74	26031.16	703.13	26400.26	711.58
28260.74	716.01	26802.22	728.89	27297.16	743.74	27505.59	747.73	27883.29	743.62
30489.3	732.22	28317.1	731.13	29029.69	724.57	29096.6	725.25	30125.94	725.25
34216	732.62	31925.38	710.49	32397.25	717.87	33139.71	717.87	33404.97	715.25
35997.6	715.25	34569.27	717.26	34677.13	716.23	35047.28	710.49	35458.52	710.49
36446.5	700	36003.3	699.32	36150.68	646.23	36310.37	607.87	36334.76	609.19
38002.72	616.71	36917.35	630.25	37336.85	690.49	37426.06	702.13	37857.15	704.27
39681	699.75	38057.19	700.02	38433.8	712.38	38912.29	719.61	39209.55	722.62
41411.86	723.69	40053.58	739.29	40275.69	739.84	40365.66	737.54	40816.14	725.25
42370.95	74041754.69		731.14	42074.01	725.52	42199.86	722.27	42268.59	719.79
44062.91	718.75	42714.52	725.19	42880.69	73042965.64		73043969.25		709.76
44813.19	706.67	44277.86	703.92	44504.07	708.4	44584.4	707.38	44786.32	707.38
46244.84	707.74	444982.61	706.52	45254.03	700.96	45892.04	682.84	46027.15	681.73
48293.17	689.41	46360.36	694.44	46880.81	725.27	47174.62	731.74	48127.52	739.61
	741.91	48768.28	749.44	48897.99	754.94	49737.61	800		

Manning's n Values num= 3

						SS_Rev3.rep	
Sta	n Val	Sta	n Val	Sta	n Val		
0	.1521570.03	.1521948.61	.15				
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff
	21570.03	21948.61		4.99	4.99	4.99	Contr.
							.1
							Expan.
							.3
CROSS SECTION OUTPUT Profile #PF 1							
E.G. Elev (ft)	759.45	Element	Left OB	Channel	Right OB		
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150		
W.S. Elev (ft)	759.30	Reach Len. (ft)	4.99	4.99	4.99		
Crit W.S. (ft)		Flow Area (sq ft)	1548031.00	71474.70	1218614.00		
E.G. Slope (ft/ft)	0.000292	Area (sq ft)	1548031.00	71474.70	1218614.00		
Q Total (cfs)	7996901.00	Flow (cfs)	4990262.00	396828.80	2609811.00		
Top width (ft)	46008.99	Top width (ft)	18599.78	378.58	27030.63		
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.55	2.14		
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.23	188.80	45.08		
Conv. Total (cfs)	468104400.0	Conv. (cfs)	292108600.0	23228670.0	152767200.0		
Length Wtd. (ft)	4.99	wetted Per. (ft)	18620.36	380.36	27069.24		
Min Ch El (ft)	565.32	Shear (lb/sq ft)	1.51	3.42	0.82		
Alpha	1.20	Stream Power (lb/ft s)	4.88	19.01	1.76		
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	56074.05	2742.26	42275.80		
C & E Loss (ft)	0.00	Cum SA (acres)	675.09	14.55	1008.28		

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267865.*

INPUT

Description:

Station Elevation Data	num=	174						
Sta Elev Sta	Elev Sta	Elev Sta	Elev Sta	Elev Sta	Elev Sta			
0 800 1237.13	761.29 1409.1	760 1916.84	760 2312.85	767.35				
2395.18 767.35 2533.21	770 2741.75	770 2831.16	768.2 3136.97	748.6				
3666.27 721.55 3923.92	712.37 4529.45	700.73 4632.47	703.23 4764.04	706.84				
5553.03 696.42 5750.53	703.01 5994.9	689.35 6033.25	687.35 6706.9	687.35				
6953.57 683.44 7207.38	663.59 7307.47	657.35 7402.71	657.35 7527.14	666.55				
7800.71 695.42 7861.79	697.35 8044.51	692.06 8100.47	692.06 8139.84	690.37				
8271.91 687.78 8352.11	689.64 8481.44	697.68 8718.77	709.56 9108.02	724.71				
9344.38 724.71 9366.67	724.35 9509.22	717.94 9621.32	714.7110483.38	709.42				
10819.34 700.4611127.85	675.711156.65	671.3311312.55	662.0211558.21	653.42				
11623.38 655.0212063.28	690.812402.34	71012910.63	717.3512919.27	717.69				
13102.11 721.1813330.38	712.7313395.92	711.5813518.16	713.6213703.76	720				
14074.57 72014131.76	714.2514220.94	705.7114501.65	707.03 14694.8	723.92				
14768.32 73015198.41	73015737.77	707.9415923.17	674.2815940.29	670.35				
16089.01 654.3116286.62	629.2316308.22	627.5216559.71	620.3516998.62	613.69				
17112.25 612.6519476.22	612.6519695.78	62020069.72	62020473.74	597.94				
20644.02 597.9420737.37	595.2920987.61	592.65 21525.4	590.0421532.78	588.8				
21570.52 58021608.49	574.3621657.17	569.4721705.86	565.3121911.46	572.02				
21949.25 58022029.09	612.4722088.27	622.8122286.07	661.4122346.59	665.49				
22628.4 673.4122703.55	676.9423540.21	728.5523820.72	732.724244.57	731.61				
24493.97 735.2924720.63	731.4225232.52	715.3325268.94	712.3725543.24	694.78				
25691.18 693.3525737.68	695.8825786.39	695.8826032.64	703.2426401.81	711.64				
26549.29 716.0526803.86	728.96 27298.9	743.7627507.37	747.7127885.15	743.56				
28262.68 732.1528319.04	731.0729031.79	724.6129098.71	725.2930128.26	725.29				
30491.7 732.6531928.07	710.5932400.03	717.9433142.66	717.94 34052.9	715.29				
34219.16 715.29 34572.5	717.3234680.39	716.2835050.61	710.5935461.94	710.59				
36001.12 70036006.82	699.3136154.24	646.1836313.96	607.9436338.36	609.26				
36450.12 616.7736921.06	630.3437340.66	690.4537429.89	702.0637861.06	704.19				
38006.66 699.6238061.14	699.8938437.83	712.3438916.42	719.639213.74	722.65				
39685.28 723.7340057.94	739.29 40280.1	739.7940370.09	737.5540820.66	725.29				
41416.5 740 41759.4	731.1742078.79	725.642204.66	722.3642273.41	719.88				
42375.79 718.8342719.43	725.2142885.63	73042970.61	73043974.41	709.82				
44068.1 706.7344283.09	703.9644509.35	708.39 44589.7	707.3544791.66	707.35				
44818.54 707.7244987.98	706.5445259.46	700.99 45897.6	682.8346032.74	681.74				
46250.48 689.3846366.02	694.3546886.58	725.2347180.45	731.7348133.55	739.61				
48299.22 741.948774.44	749.4348904.17	754.9249743.96	800					

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val
0	.1521570.52	.1521949.25	.15		

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
21570.5221949.25		4.99	4.99	4.99	.1	.3	

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.45	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.30	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1548051.00	71501.97	1218332.00				
E.G. Slope (ft/ft)	0.000292	Area (sq ft)	1548051.00	71501.97	1218332.00				
Q Total (cfs)	7996901.00	Flow (cfs)	4991025.00	397040.30	2608836.00				
Top width (ft)	46015.71	Top width (ft)	18600.48	378.73	27036.50				
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.55	2.14				
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.23	188.79	45.06				
Conv. Total (cfs)	468031700.0	Conv. (cfs)	292107900.0	23237430.0	152686400.0				
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18621.04	380.51	27075.07				
Min Ch El (ft)	565.31	Shear (lb/sq ft)	1.52	3.42	0.82				
Alpha	1.20	Stream Power (lb/ft s)	4.89	19.02	1.76				
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	55896.72	2734.07	42136.21				
C & E Loss (ft)	0.00	Cum SA (acres)	672.95	14.51	1005.19				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267860.*

INPUT

Description:

Station Elevation Data	num=	174
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SS_Rev3.rep											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
2395.23	767.33	2533.27	761.3	1409.14	760	1916.89	760	2312.9	767.33		
3666.35	721.56	3924	770	2741.81	770	2831.22	768.19	3137.04	748.57		
5553.16	696.39	5750.66	712.39	4529.55	700.74	4632.57	703.22	4764.15	706.81		
6953.73	683.38	7207.55	702.95	5995.03	689.32	6033.38	687.33	6707.05	687.33		
7800.89	695.38	7861.96	663.55	7307.63	657.33	7402.87	657.33	7527.31	666.5		
8272.09	687.76	8352.29	697.33	8044.69	691.99	8100.65	691.99	8140.02	690.31		
9344.59	724.66	9366.88	689.64	8481.63	697.69	8718.96	709.56	9108.22	724.66		
10819.59	700.37	11128.1	724.3	9509.43	717.89	9621.53	714.66	10483.61	709.39		
11623.64	655.07	12063.55	675.62	11156.9	671.23	11312.81	661.95	11558.47	653.45		
13102.41	721.11	13330.68	690.86	12402.62	71012910.92		717.33	12919.56	717.66		
14074.89	72014132.07		712.63	13396.22	711.47	13518.47	713.56	13704.07	720		
14768.65	73015198.75		714.27	14221.26	705.76	14501.97	707.09	14695.13	723.94		
16089.37	654.46	1616286.99	73015738.13		708.01	15923.53	674.46	15940.64	670.53		
17112.63	612.67	1719476.66	629.31	16308.58	627.59	16560.08	620.38	16999	613.71		
20644.48	598.01	20737.83	612.67	179696.22	62020070.17		620	20474.2	598.01		
21571	580	21609.1	595.34	20988.08	592.67	21525.88	590.04	21533.26	588.8		
21949.88	58022029.75		574.35	21657.94	569.46	21706.79	565.31	21912.15	572.04		
22629.18	673.34	22704.35	612.59	22088.94	622.89	22286.78	661.42	22347.31	665.5		
24495.13	735.34	242721.84	676.85	23541.17	728.45	23821.75	732.63	24245.68	731.62		
25692.59	693.46	25739.1	731.44	25233.84	715.29	25270.27	712.33	25544.61	694.8		
26550.88	716.12	26805.49	696.02	25787.82	696.02	26034.12	703.36	26403.37	711.7		
28264.62	732.08	28320.99	729.02	27300.64	743.78	27509.15	747.69	27887.01	743.5		
30494.1	732.67	31930.76	73129033.88		724.65	29100.82	725.34	30130.58	725.34		
34222.32	715.34	3434575.74	710.68	32402.82	718.01	33145.6	718.01	34056.02	715.34		
36004.66	70036010.36		716.36	35053.94	716.36	35053.94	710.68	35465.35	710.68		
36453.74	616.83	36924.78	699.3	36157.8	646.13	36317.55	608.01	36341.96	609.32		
38010.6	699.53	38065.09	630.43	37344.46	690.42	37433.71	701.99	37864.97	704.12		
39689.57	723.76	40062.3	699.76	38441.86	712.33	38920.55	719.63	39217.93	722.67		
41421.14	74041764.12		739.28	40284.51	739.79	40374.52	737.56	40825.18	725.34		
42380.62	718.94	2724.34	731.24	2083.56	725.67	42209.46	722.44	42278.23	719.97		
44073.29	706.79	44288.32	725.22	42890.57	73042975.57		73043979.58		709.89		
44823.88	707.74	44993.36	703.99	44514.63	708.38	44594.99	707.33	44796.99	707.33		
46256.12	707.74	44993.36	706.55	45264.89	701.01	45903.17	682.85	46038.33	681.76		
48305.28	741.89	48780.59	694.31	46892.34	725.18	47186.27	731.73	48139.57	739.6		
			749.43	48910.35	754.94	49750.31	800				
Manning's n values											
Sta	n Val	Sta	num=	3	Sta	n Val	Sta	n Val	Sta	n Val	Sta
0	.15	21571	.15	21949.88	.15						
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.											
21571	21949.88	4.99	4.99	4.99	.1	.3					
CROSS SECTION OUTPUT Profile #PF 1											
E.G. Elev (ft)	759.45	Element	Left OB	Channel	Right OB						
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150						
W.S. Elev (ft)	759.30	Reach Len. (ft)	4.99	4.99	4.99						
Crit W.S. (ft)		Flow Area (sq ft)	1548095.00	71527.57	1218072.00						
E.G. Slope (ft/ft)	0.000292	Area (sq ft)	1548095.00	71527.57	1218072.00						
Q Total (cfs)	7996901.00	Flow (cfs)	4991799.00	397227.50	2607875.00						
Top width (ft)	46022.43	Top width (ft)	18601.17	378.88	27042.37						
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.55	2.14						
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.23	188.79	45.04						
Conv. Total (cfs)	467970500.0	Conv. (cfs)	292114900.0	23245350.0	152610200.0						
Length wtd. (ft)	4.99	Wetted Per. (ft)	18621.70	380.66	27080.91						
Min Ch El (ft)	565.31	Shear (lb/sq ft)	1.52	3.43	0.82						
Alpha	1.20	Stream Power (lb/ft s)	4.89	19.02	1.76						
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	55719.38	2725.88	41996.66						
C & E Loss (ft)	0.00	Cum SA (acres)	670.82	14.47	1002.09						
CROSS SECTION											
RIVER: BRAZOS RIVER											
REACH: LOWER BRAZOS RS: 267855.*											
INPUT											
Description: Station Elevation Data num= 174											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.18	761.31	1409.17	760	1916.93	760	2312.95	767.31		
2395.29	767.31	2533.32	770	2741.87	770	2831.28	768.17	3137.11	748.54		
3666.43	721.57	3924.09	712.41	4529.65	700.74	4632.67	703.21	4764.25	706.79		
5553.28	696.36	5750.79	702.89	5995.17	689.29	6033.52	687.31	6707.2	687.31		
6953.88	683.32	7207.71	663.51	7307.79	657.31	7403.04	657.31	7527.48	666.44		
7801.06	695.34	7862.14	697.31	8044.87	691.92	8100.83	691.92	8140.2	690.24		
8272.28	687.74	8352.48	689.63	8481.82	697.69	8719.16	709.56	9108.43	724.61		
9344.79	724.61	9367.09	724.25	9509.64	717.83	9621.75	714.61	10483.85	709.36		
10819.83	700.29	11128.35	675.54	11157.15	671.13	11313.06	661.88	11558.73	653.48		
11623.9	655.11	12063.82	690.92	12402.9	71012911.21		717.31	12919.85	717.64		
13102.7	721.02	13330.98	712.53	13396.52	711.37	13518.77	713.51	13704.37	720		
14075.2	72014132.39		714.29	14221.58	705.81	14502.3	707.16	14695.46	723.96		
14768.98	73015199.09		73015738.48		708.08	15923.89	674.63	15941	670.71		
16089.73	654.61	1616287.35	629.37	16308.95	627.65	16560.45	620.41	16999.38	613.73		
17113.01	612.69	19477.09	612.69	19696.66	62020070.62		62020474.66		598.08		
20644.95	598.08	20738.29	595.39	20988.55	592.69	21526.36	590.04	21533.74	588.8		
21571.48	58022029.75		574.33	21658.72	569.45	21707.73	565.31	21912.83	572.06		
21950.53	580	22030.4	612.71	22089.61	622.98	22287.49	661.43	22348.04	665.51		
22629.96	673.26	22705.14	676.77	23542.14	728.35	23822.77	732.57	24246.79	731.63		
24496.3	735.39	242723.05	731.45	25235.15	715.25	25271.59	712.33	25545.99	694.81		
25693.99	693.58	25740.52	696.16	25789.24	696.16	26035.6	703.48	26404.92	711.76		
26552.46	716.14	26807.13	729.09	27302.38	743.82	27510.93	747.67	27888.87	743.45		
28266.56	732.01	28322.94	730.93	29035.97	724.69	29102.93	725.39	30132.9	725.39		
30496.49	732.69	31933.45	710.77	32405.61	718.08	33148.54	718.08	34059.15	715.39		
34225.48	715.39	3434578.97	717.45	34686.9	716.43	35057.28	710.77	35468.77	710.77		
36008.18	70036013.88		699.33	36161.36	646.08	36321.14	608.08	36345.55	609.39		
36457.36	616.89	36928.5	630.52	37348.26	690.39	37437.53	701.92	37868.88	704.04		
38014.54	699.37	38069.05	699.64	38445.89	712.26	38924.68	719.63	39222.11	722.69		
39693.85	723.79	40066.66	739.27	40288.91	739.79	40378.94	737.57	40829.7	725.39		
41425.78	74041768.83		731.23	42088.34	725.75	42214.27	722.53	42283.04	720.05		
42385.46	718.98	42729.25	725.24	42895.52	73042980.53		73043984.75		709.95		
44078.48	706.85	44293.56	704.03	44519.91	708.36	44600.28	707.31	44802.33	707.31		
44829.21	707.68	44998.73	706.56	45270.32	701.04	45908.73	682.88	46043.93	681.78		

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42621.75	689.3246377.34	694.2646898.11	725.14	47192.1	731.7248145.59	739.6
48311.34	741.8948786.75	749.4248916.54	754.8949756.67	800		

ss_rev3.rep

Manning's n	Values	num=	3
Sta	n Val	Sta	n Val
0	.1521571.48	.1521950.53	.15

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21571.48	21950.53		4.99	4.99	4.99		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.44	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.30	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548143.00	71556.71	1217790.00
E.G. Slope (ft/ft)	0.000292	Area (sq ft)	1548143.00	71556.71	1217790.00
Q Total (cfs)	7996901.00	Flow (cfs)	4992604.00	397473.60	2606859.00
Top width (ft)	46029.07	Top width (ft)	18601.95	379.05	27048.07
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.22	5.55	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.22	188.78	45.02
Conv. Total (cfs)	467906700.0	Conv. (cfs)	292122200.0	23254470.0	152529900.0
Length wtd. (ft)	4.99	wetted Per. (ft)	18622.44	380.82	27086.58
Min Ch El (ft)	565.31	Shear (lb/sq ft)	1.52	3.43	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.89	19.03	1.76
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	55542.04	2717.68	41857.14
C & E Loss (ft)	0.00	Cum SA (acres)	668.69	14.42	998.99

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267850.*

INPUT

Description:

Station Elevation Data

```
num= 174
```

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.21	761.33	1409.2	760	1916.97	760	2313	767.28
2395.34	767.28	2533.38	770	2741.93	770	2831.35	768.16	3137.18	748.51
3666.51	721.59	3924.18	712.43	4529.75	700.75	4632.78	703.2	4764.36	706.76
5553.41	696.33	5750.92	702.82	5995.3	689.26	6033.65	687.28	6707.35	687.28
6954.04	683.27	7207.87	663.46	7307.96	657.28	7403.21	657.28	7527.64	666.39
7801.24	695.3	7862.32	697.28	8045.04	691.85	8101.02	691.85	8140.38	690.15
8272.46	687.72	8352.67	689.63	8482.01	697.7	8719.36	709.56	9108.63	724.57
9345	724.57	9367.3	724.2	9509.86	717.77	9621.96	714.57	10484.08	709.33
10820.07	700.2	11128.6	675.45	11157.4	671.03	13113.31	661.81	11558.99	653.51
11624.16	655.16	112064.09	690.98	12403.18	710	12911.5	717	2812920.14	717.61
13102.99	720.94	13331.28	712.43	13396.82	711	27135.07	713.45	13704.68	720
14075.51	720	14132.7	714.31	14122.81	705.86	14502.62	707.22	14695.79	723.98
14769.32	730	15199.43	730	15738.83	708.15	15924.24	674.81	15941.36	670.89
16090.09	654.75	16287.72	629.43	16309.31	627.72	16560.82	620.44	16999.76	613.75
17113.4	612.72	171947.77	532	1617.96	620	20071.07	620	20475.12	598.15
20645.41	598.15	20738.76	595.43	20989.02	592.72	221526.85	590.04	21523.34	588.81
21571.96	580	21610.32	574.32	221659.49	569.43	22710.78	565.31	221913.52	572.08
21951.16	580	22031.06	612.83	222090.28	623.07	22288.2	661.44	222348.76	665.53
22630.74	673.19	22705.93	676.68	23543.11	728.25	23283.79	732.5	24247.9	731.65
24497.46	735.43	247424.26	731.46	25236.46	715.21	25272.91	712.25	25547.37	694.83
25695.4	693.72	72574.94	696.32	32579.07	696.32	326037.08	703.59	26406.47	711.81
26554.04	716.18	268608.77	729.16	27304.12	743.82	27512.71	747.65	27890.72	743.39
28268.49	731.94	283824.89	730.87	29038.07	724.73	292105.04	725.43	33013.52	725.43
30498.89	732.73	291396.14	710.87	32408.4	718.15	335135.11	718.15	34062.28	715.43
34228.65	715.43	34582.21	717.51	34690.16	716.51	35060.61	710.87	35472.19	710.87
36011.71	700	36017.41	699.23	36164.92	646.03	36324.74	608.15	356349.15	609.45
36440.98	616.95	36932.21	630.61	37332.07	690.35	37441.35	701.85	37872.79	703.96
38018.48	699.24	38073	699.51	38449.91	712.22	38928.8	719.59	39226.3	722.72
39698.14	723.82	40071.03	739.27	42093.32	739.79	43083.37	737.57	440834.21	725.43
41430.43	7404	1773.54	731.26	42093.12	725.83	42281.07	722.62	42287.86	720.14
42390.3	719.06	427234.16	725.25	42900.46	730	42959.49	730	43989.91	710.02
44083.66	706.91	444298.79	704.06	4525.18	708.35	44605.57	707.28	484807.66	707.28
44834.56	707.66	5004.11	706.57	45275.75	701.07	45914.29	682.94	5049.52	681.79
46267.39	689.29	46383	694.21	46903.88	725.14	47197.93	731.72	48151.61	739.6
48317.39	741.88	48792.9	749.42	484822.71	754.87	49763.02	800		

Manning's	n Values		num=	3					
Sta	n Val	Sta	n Val	Sta	n Val				
0	.1521571	.96	.1521951	.16	.15				
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21571.9621951	.16		4.99	4.99	4.99		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

Elev. Elev (ft)		759.44	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15		wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.29		Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)			Flow Area (sq ft)	1548169.00	71582.83	1217521.00
E.G. Slope (ft/ft)	0.000292		Area (sq ft)	1548169.00	71582.83	1217521.00
Q Total (cfs)	7996901.00		Flow (cfs)	4993358.00	397635.80	2605908.00
Top width (ft)	46035.77		Top width (ft)	18602.63	379.20	27053.94
Vel Total (ft/s)	2.82		Avg. Vel. (ft/s)	3.23	5.55	2.14
Max Chl Dpth (ft)	193.98		Hydr. Depth (ft)	83.22	188.77	45.00
Conv. Total (cfs)	467838100.0		conv. (cfs)	292123500.0	23262660.0	152451900.0
Length wtd. (ft)	4.99		Wetted Per (ft)	18623.10	380.97	27092.43
Min Ch El (ft)	565.31		Shear (lb/sq ft)	1.52	3.43	0.82
Alpha	1.20		Stream Power (lb/ft s)	4.89	19.04	1.75
Frctn Loss (ft)	0.00		Cum Volume (acre-ft)	53564.69	2709.48	41717.66
C & E Loss (ft)	0.00		Cum SA (acres)	666.56	14.38	995.89

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267845.*

SS_Rev3.rep

INPUT

Description:

Station Elevation Data		num= 174											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800.1237.24	761.34	1409.23	760	1917.02	760	2313.05	767.26					
2395.39	767.26 2533.44	770	2741.99	770	2831.41	768.14	3137.25	748.49					
3666.59	721.6 3924.27	712.45	4529.85	700.76	4632.88	703.19	4764.47	706.73					
5553.53	696.3 5751.05	702.76	5995.44	689.23	6033.79	687.26	6707.5	687.26					
6954.2	683.21 7208.03	663.42	7308.12	657.26	7403.37	657.26	7527.81	666.34					
7801.41	695.26 7862.49	697.26	8045.23	691.78	8101.2	691.78	8140.56	690.11					
8272.65	687.7 8352.86	689.63	8482.2	697.71	8719.55	709.57	9108.83	724.52					
9345.21	724.52 9367.51	724.13	9510.07	717.72	9622.18	714.52	10484.32	709.3					
10820.31	700.1211128.85	675.3711157.65		670.9311313.57		661.7411559.25		653.54					
11624.42	655.212064.36	691.0412403.45		71012911.78		717.2612920.43		717.59					
13103.29	720.8613331.58	712.3213397.12		711.1713519.37		713.3913704.99		720					
14075.83	72014133.02	714.3314222.21		705.9114502.95		707.2814696.12		724					
14769.65	73015199.77	73015739.18		708.22 15924.6		674.9915941.71		671.07					
16090.45	654.916288.08	629.516309.67		627.7916561.19		620.4717000.14		613.77					
17113.78	612.7419477.96	612.7419697.54		62020071.52		62020475.57		598.22					
20645.87	598.2220739.22	595.4820989.49		592.7421527.33		590.0421534.71		588.81					
21572.45	58021610.93	574.3121660.26		569.42 21709.6		565.3121914.21		572.09					
21951.8	58022031.71	612.9522090.94		623.15 22288.9		661.4622349.48		665.54					
22631.52	673.1122706.73	676.5923544.07		728.1423824.82		732.4424249.01		731.66					
24498.62	735.4824725.46	731.4725237.78		715.1625274.23		712.2125548.75		694.85					
25696.81	693.8225743.36	696.44 25792.1		696.4426038.56		703.7126408.03		711.87					
26555.63	716.2326810.41	729.2327305.86		743.84 27514.5		747.6327892.58		743.33					
28270.43	731.8728326.84	730.829040.17		724.7729107.15		725.4830137.54		725.48					
30501.28	732.7431938.83	710.9632411.19		718.2233154.42		718.2234065.41		715.48					
34231.81	715.4834585.44	717.5834693.41		716.5835063.94		710.9635475.61		710.96					
36015.24	70036020.94	699.2936168.48		645.9736328.33		608.2236352.75		609.52					
36464.61	617.0136935.93	630.737355.87		690.3237445.17		701.78 37876.7		703.89					
38022.42	699.1238076.95	699.3838453.95		712.1838932.93		719.5939230.49		722.74					
39702.43	723.8640075.39	739.2640297.73		739.7940387.79		737.5840838.73		725.48					
41435.07	74041778.25	731.2842097.89		725.9142223.87		722.7142292.68		720.23					
42395.14	719.1442739.07	725.27 42905.4		73042990.45		73043995.08		710.08					
44088.85	706.9744304.02	704.144530.46		708.3344610.87		707.26 44813		707.26					
44839.9	707.6445009.48	706.5845281.18		701.145919.86		682.9346055.11		681.81					
46273.02	689.2646388.66	694.1746909.64		725.0647203.75		731.7148157.64		739.59					
48323.45	741.8848799.05	749.4148928.89		754.8649769.38		800							

Manning's n Values

Sta	n Val	Sta	n Val
0	.1521572.45	.15	21951.8

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
21572.45	21951.8	4.99	4.99	4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.44	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.29	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548207.00	71610.08	1217252.00
E.G. Slope (ft/ft)	0.000292	Area (sq ft)	1548207.00	71610.08	1217252.00
Q Total (cfs)	7996901.00	Flow (cfs)	4994123.00	397838.20	2604940.00
Top Width (ft)	46042.33	Top Width (ft)	18603.34	379.35	27059.63
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.22	188.77	44.98
Conv. Total (cfs)	467774200.0	Conv. (cfs)	292128400.0	23271320.0	152374500.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18623.78	381.12	27098.09
Min Ch El (ft)	565.31	Shear (lb/sq ft)	1.52	3.43	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.89	19.05	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	55187.34	2701.28	41578.20
C & E Loss (ft)	0.00	Cum SA (acres)	664.43	14.34	992.79

CROSS SECTION

RIVER: BRAZOS RIVER

REACH: LOWER BRAZOS

RS: 267840.*

INPUT

Description:

Station Elevation Data		num= 174											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800.1237.26	761.35	1409.26	760	1917.06	760	2313.1	767.24					
2395.45	767.24 2533.49	770	2742.05	770	2831.47	768.12	3137.32	748.46					
3666.68	721.61 3924.36	712.47	4529.95	700.76	4632.99	703.18	4764.57	706.7					
5553.66	696.27 5751.18	702.7	5995.57	689.2	6033.92	687.24	6707.65	687.24					
6954.35	683.15 7208.19	663.38	7308.29	657.24	7403.54	657.24	7527.98	666.29					
7801.59	695.22 7862.67	697.24	8045.4	691.71	8101.38	691.71	8140.75	690.05					
8272.83	687.68 8353.04	689.62	8482.39	697.72	8719.75	709.57	9109.04	724.47					
9345.42	724.47 9367.72	724.1	9510.28	717.66	9622.39	714.47	10484.55	709.27					
10820.55	700.03 11129.1	675.29 11157.9		670.8311313.82		661.67 11559.5		653.57					
11624.68	655.2512064.63	691.112403.73		71012912.07		717.2412920.72		717.56					
13103.58	720.7913331.88	712.2113397.42		711.0713519.68		713.3413705.29		720					
14076.14	72014133.34	714.3514222.53		705.9614503.27		707.3414696.44		724.01					
14769.98	73015200.11	73015739.53		708.2915924.96		675.1615942.07		671.25					
16090.81	655.0416288.44	629.5616310.04		627.8516561.56		620.517000.52		613.79					
17114.16	612.76 19478.4	612.7619697.98		62020071.97		62020476.03		598.29					
20646.33	598.2920739.69	595.5320989.96		592.7621527.81		590.0421535.19		588.82					
21572.93	58021611.54	574.2921661.04		569.42121710.54		565.3121914.89		572.11					
21952.44	58022032.37	613.0722091.61		623.2422289.61		661.47 22350.2		665.56					
22632.3	673.0422707.52	676.5123545.04		728.0423825.84		732.3724250.12		731.68					
24499.78	735.5324726.67	731.4925239.09		715.1225275.55		712.1725550.13		694.86					
25698.22	693.9425744.77	696.5825793.53		696.5826040.04		703.8326409.58		711.93					
26557.21	716.2726812.04	729.29 27307.6		743.8627516.28		747.6127894.45		743.28					
28272.37	731.828328.79	730.7329042.26		724.8229109.26		725.5330139.86		725.53					
30503.68	732.7631941.52	711.0532413.97		718.2933157.36		718.2934068.54		715.53					
34234.97	715.5334588.68	717.6434696.67		716.6635067.27		711.0535479.02		711.05					
36018.77	70036024.7	699.2836172.04		645.9236331.92		608.2936356.35		609.59					
36468.23	617.0736939.65	630.837359.67		690.29 37449		701.7137880.61		703.81					
38026.36	698.99 38080.9	699.2638457.97		712.1438937.06		719.5939234.68		722.76					
39706.71	723.8940079.75	739.2540302.14		739.7840392.22		737.5940843.25		725.53					

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 41439.71 74041782.96 731.3142102.67 725.9842228.68 722.8 42297.5 720.32
 42399.98 719.2242743.98 725.2842910.35 73042995.41 73044000.25 710.14
 44094.04 707.0344309.25 704.1344535.74 708.3244616.16 707.2444818.33 707.24
 44845.24 707.6145014.86 706.5945286.62 701.1345925.42 682.95 46060.7 681.82
 46278.66 689.2346394.32 694.1246915.41 725.0147209.58 731.7148163.66 739.59
 48329.51 741.8748805.21 749.4148935.08 754.8449775.73 800

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521572.93 .1521952.44 .15
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21572.9321952.44 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.44	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.29	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548262.00	71637.50	1216972.00
E.G. Slope (ft/ft)	0.000292	Area (sq ft)	1548262.00	71637.50	1216972.00
Q Total (cfs)	7996901.00	Flow (cfs)	4994951.00	398038.00	2603913.00
Top width (ft)	46049.13	Top width (ft)	18604.12	379.51	27065.51
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.22	188.76	44.96
Conv. Total (cfs)	467711700.0	Conv. (cfs)	292137800.0	23279900.0	152294100.0
Length wtd. (ft)	4.99	wetted Per. (ft)	18624.52	381.27	27103.94
Min Ch El (ft)	565.31	Shear (lb/sq ft)	1.52	3.43	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.89	19.05	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	55009.98	2693.08	41438.77
C & E Loss (ft)	0.00	Cum SA (acres)	662.30	14.29	989.69

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267835.*

INPUT

Description:

Station Elevation Data num= 174

Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.29	761.36	1409.29	760	1917.1	760	2313.16	767.21
2395.5	767.21	2533.55	770	2742.11	770	2831.54	768.11	3137.39	748.43
3666.76	721.63	3924.44	712.49	4530.06	700.77	4633.09	703.17	4764.68	706.67
5553.78	696.23	5751.31	702.64	5995.7	689.17	6034.06	687.21	6707.8	687.21
6954.51	683.09	7208.35	663.33	7308.45	657.21	7403.7	657.21	7528.15	666.23
7801.76	695.18	7862.84	697.21	8045.58	691.64	8101.56	691.64	8140.93	689.98
8273.02	687.66	8353.23	689.62	8482.58	697.72	8719.94	709.57	9109.24	724.43
9345.63	724.43	9367.93	724.05	9510.5	717.6	9622.61	714.43	10484.78	709.24
10820.8	699.95	11129.34	675.21	11158.15	670.73	11314.07	661.61	11559.76	653.6
11624.94	655.29	12064.9	691.16	12404.01	710	12912.36	717.21	12921	717.54
13103.87	720.71	13332.17	712.11	13397.72	710.97	13519.98	713.28	13705.6	720
14076.46	720	14133.65	714.36	14222.85	706.02	14503.6	707.41	14696.77	724.03
14770.31	730	15200.45	730	15739.89	708.36	15925.31	675.34	15942.42	671.43
16091.17	655.19	16288.81	629.63	16310.4	627.92	16561.93	620.53	17000.9	613.81
17114.54	612.71	19478.84	612.79	19698.42	592.79	21528.29	590.04	21535.67	588.82
20646.79	598.36	20740.15	595.57	20990.43	569.42	21711.47	565.32	21915.58	572.13
21573.41	580	21612.15	613.19	22092.28	623.33	22290.32	661.48	22350.92	665.57
21953.08	672.96	22708.32	676.42	23546	727.94	23826.87	732.31	24251.24	731.69
22630.95	735.57	24727.88	731.52	25240.41	715.08	25276.88	712.14	25551.51	694.88
25699.63	694.06	25746.19	696.72	25794.96	696.72	26041.52	703.95	26411.14	711.99
26558.8	716.32	26813.68	729.36	27309.33	743.88	27518.06	747.59	27896.3	743.22
28274.31	731.73	28330.74	730.66	29044.36	724.86	29111.37	725.57	30142.18	725.57
30506.07	733.79	31944.21	711.15	32416.76	718.36	33160.3	718.36	34071.66	715.57
34238.13	715.57	34591.91	717.71	34699.93	716.73	35070.61	711.15	35482.44	711.15
36022.3	700	36028	699.27	36175.6	645.87	36335.52	608.36	36359.95	609.65
36471.85	617.13	36943.37	630.89	37363.48	690.25	37452.82	701.64	37884.52	703.73
38030.3	698.86	38084.86	699.13	38462	712.13	38941.18	719.58	39238.87	722.79
39711	723.92	40084.11	739.25	40306.55	739.78	40396.65	737.64	40847.77	725.57
41444.35	740	41787.68	731.34	42107.45	726.06	42233.48	722.88	42302.31	720.4
42404.82	719.29	42748.89	725.34	42915.29	730	43000.37	730	44005.42	710.21
44099.22	707.09	44314.48	704.17	44541.02	708.34	44621.46	707.21	44823.67	707.21
44850.58	707.59	45020.24	706.64	45292.05	701.16	45930.98	682.98	46066.29	681.84
46284.29	689.24	46399.98	694.08	46921.18	724.97	47215.41	731.74	48169.68	739.59
48335.56	741.86	48811.36	749.44	48941.26	754.83	49782.08	800		

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521573.41 .1521953.08 .15
 Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21573.4121953.08 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.44	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.29	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548289.00	71666.20	1216696.00
E.G. Slope (ft/ft)	0.000292	Area (sq ft)	1548289.00	71666.20	1216696.00
Q Total (cfs)	7996901.00	Flow (cfs)	4995704.00	398252.20	2602945.00
Top width (ft)	46055.67	Top width (ft)	18604.80	379.67	27071.20
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.22	188.76	44.94
Conv. Total (cfs)	467644000.0	Conv. (cfs)	292139600.0	23289050.0	152215400.0
Length wtd. (ft)	4.99	wetted Per. (ft)	18625.18	381.43	27109.61
Min Ch El (ft)	565.30	Shear (lb/sq ft)	1.52	3.43	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.90	19.06	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	54832.61	2684.87	41299.38
C & E Loss (ft)	0.00	Cum SA (acres)	660.17	14.25	986.59

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267830.*

Description:

[illegible]

Manning's n Values

num= 3

Sta	n Val	Sta	n Val	Sta	n Val
0	.1521573.89	.1521953.72	.15		

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21573.89	21953.72		4.99	4.99	4.99		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.44	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-val.	0.150	0.150	0.150
W.S. Elev (ft)	759.29	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548333.00	71694.04	1216422.00
E.G. Slope (ft/ft)	0.000293	Area (sq ft)	1548333.00	71694.04	1216422.00
Q Total (cfs)	7996901.00	Flow (cfs)	4996493.00	398456.20	2601952.00
Top Width (ft)	46062.46	Top Width (ft)	18605.57	379.83	27077.06
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.22	188.75	44.92
Conv. Total (cfs)	46757970.0	Conv. (cfs)	292145500.0	23297780.0	152136400.0
Length wtd. (ft)	4.99	Wetted (ft)	18625.92	381.33	27115.45
Min Chl El (ft)	565.30	Shear (lb/sq ft)	1.52	0.53	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.90	19.07	1.75
Frcn Loss (ft)	0.00	Cum Volume (acre-ft)	54655.25	2676.66	41160.02
C & F Loss (ft)	0.00	Cum SA (acres)	658.04	14.20	983.49

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267825.*

Description:

[illegible]

SS_Rev3.rep
 36029.35 70036035.06 699.2636182.72 645.77 36342.7 608.536367.14 609.79
 36479.09 617.25 36950.8 631.0737371.09 690.1937460.46 701.537892.34 703.58
 38038.18 698.6138092.76 698.8738470.06 712.0338949.44 719.5839247.25 722.83
 39719.57 723.9940092.84 739.2440315.36 739.78 40405.5 737.6140856.81 725.67
 41453.63 740 41797.1 731.442117.01 726.2242243.09 723.0642311.95 720.58
 42414.5 719.45 42758.7 725.3342925.18 73043010.29 73044015.75 710.34
 44109.59 707.2144324.94 704.2444551.57 708.2844632.05 707.1744834.34 707.17
 44861.26 707.5545030.99 706.6245302.91 701.2245942.11 683.0346077.47 681.87
 46295.56 689.14 46411.3 693.9946932.71 724.8947227.06 731.6948181.73 739.58
 48347.68 741.8548823.67 749.3948953.62 754.7949794.79 800

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521574.38 .1521954.36 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21574.3821954.36 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.44	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.29	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548368.00	71719.35	1216126.00
E.G. Slope (ft/ft)	0.000293	Area (sq ft)	1548368.00	71719.35	1216126.00
Q Total (cfs)	7996901.00	Flow (cfs)	4997332.00	398650.80	2600918.00
Top Width (ft)	46069.11	Top Width (ft)	18606.20	379.98	27082.93
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.22	188.75	44.90
Conv. Total (cfs)	467508700.0	Conv. (cfs)	292150200.0	23305620.0	152052900.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18626.52	381.73	27121.28
Min Ch El (ft)	565.30	Shear (lb/sq ft)	1.52	3.43	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.90	19.08	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	54477.88	2668.44	41020.69
C & E Loss (ft)	0.00	Cum SA (acres)	655.91	14.16	980.39

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267820.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.38	761.39	1409.39	760	1917.23	760	2313.31	767.14				
2395.66	767.14	2533.72	770	2742.3	770	2831.73	768.06	3137.6	748.35				
3667	721.67	3924.71	712.56	4530.36	700.79	4633.4	703.14	4765	706.59				
5554.15	696.14	5751.69	702.45	5996.11	689.08	6034.46	687.14	6708.25	687.14				
6954.97	682.92	7208.83	663.2	7308.94	657.14	7404.2	657.14	7528.65	666.08				
7802.29	695.06	7863.37	697.14	8046.12	691.43	8102.1	691.43	8141.47	689.79				
8273.57	687.6	8353.79	689.61	8483.14	697.75	8720.53	709.57	9109.85	724.29				
9346.26	724.29	9368.56	723.9	9511.13	717.43	9623.25	714.2910485.49		709.15				
10821.52	699.711130.09		674.96	11158.9	670.4311314.83		661.3911560.54		653.69				
11625.72	655.4212065.71		691.3512404.84		71012913.23		717.1412921.87		717.47				
13104.75	720.4713333.07		711.813398.62		710.6713520.89		713.1113706.52		720				
14077.4	720 14134.6		714.42 14223.8		706.1714504.57		707.5914697.76		724.09				
14771.3	73015201.47		73015740.94		708.5715926.38		675.8715943.49		671.97				
16092.25	655.62 16289.9		629.83 16311.5		628.1216563.04		620.6217002.04		613.87				
17115.69	612.8619480.14		612.8619699.74		62020073.76		62020477.87		598.57				
20648.18	598.5720741.54		595.7120991.83		592.8621529.73		590.0421537.12		588.83				
21574.86	58021613.98		574.2421664.13		569.3721714.29		565.321917.63		572.18				
21955	58022034.99		613.5522094.28		623.5922292.45		661.5222353.08		665.61				
22635.41	672.74 22710.7		676.16 23548.9		727.6423829.94		732.1124254.57		731.73				
24504.43	735.7124731.51		731.5425244.35		714.9625280.84		712.0225555.64		694.93				
25703.85	694.4125750.45		697.1425799.24		697.1426045.95		704.3 26415.8		712.17				
26563.55	716.4526818.59		729.5627314.55		743.9427523.41		747.5327901.88		743.05				
28280.12	731.5228336.58		730.4629050.64		724.98 29117.7		725.7130149.14		725.71				
30513.26	732.8631952.29		711.4332425.12		718.5733169.12		718.5734081.05		715.71				
34247.62	715.7134601.61		717.9 34709.7		716.9635080.61		711.4335492.69		711.43				
36032.88	70036038.59		699.2636186.28		645.7236346.29		608.5736370.74		609.85				
36482.71	617.3136954.52		631.1637374.89		690.1537464.28		701.4337896.25		703.5				
38042.12	698.4938096.71		698.7538474.09		711.9938953.57		719.5739251.43		722.86				
39723.85	724.02 40097.2		739.2340319.77		739.7840409.93		737.6240861.33		725.71				
41458.27	74041801.81		731.4342121.79		726.342247.89		723.1542316.77		720.67				
42419.34	719.5342763.61		725.3442930.12		73043015.25		73044020.92		710.4				
44114.78	707.2744330.17		704.2744556.85		708.2644637.34		707.1444839.68		707.14				
44866.6	707.5345036.36		706.6445308.34		701.2445947.67		683.0546083.06		681.88				
46301.2	689.1146416.96		693.9446938.47		724.8547232.89		731.6848187.75		739.58				
48353.73	741.8548829.82		749.39 48959.8		754.7849801.14		800						

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521574.86 .15 21955 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21574.86 21955 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.43	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.29	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548393.00	71748.34	1215862.00
E.G. Slope (ft/ft)	0.000293	Area (sq ft)	1548393.00	71748.34	1215862.00
Q Total (cfs)	7996901.00	Flow (cfs)	4998049.00	398865.30	2599986.00
Top Width (ft)	46075.73	Top Width (ft)	18606.96	380.14	27088.63
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.22	188.74	44.88
Conv. Total (cfs)	467441900.0	Conv. (cfs)	292150400.0	23314830.0	151976700.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18627.26	381.89	27126.96
Min Ch El (ft)	565.30	Shear (lb/sq ft)	1.52	3.43	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.90	19.08	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	54300.50	2660.23	40881.39

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C & E Loss (ft) 0.00 Cum SA (acres) SS_Rev3.rep 14.12 977.28
653.77

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267815.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.4	761.41	1409.42	760	1917.27	760	2313.36	767.12						
2395.72	767.12	2533.78	770	2742.36	770	2831.79	768.05	3137.67	748.32						
3667.09	721.68	3924.79	712.58	4530.46	700.79	4633.5	703.13	4765.11	706.56						
5554.28	696.11	5751.82	702.39	5996.24	689.05	6034.6	687.12	6708.4	687.12						
6955.13	682.86	7209	663.16	7309.1	657.12	7404.36	657.12	7528.82	666.02						
7802.46	695.02	7863.55	697.12	8046.3	691.36	8102.28	691.36	8141.66	689.72						
8273.76	687.58	8353.98	689.61	8483.33	697.75	8720.72	709.57	9110.06	724.24						
9346.47	724.24	9368.77	723.85	9511.35	717.37	9623.47	714.2410485.72		709.12						
10821.76	699.6111130.34		674.8811159.14		670.3411315.08		661.32	11560.8	653.72						
11625.98	655.4712065.98		691.4112405.12		71012913.52		717.1212922.16		717.44						
13105.04	720.413333.37		711.6913398.92		710.5713521.19		713.0513706.83		720						
14077.72	72014134.92		714.4414224.12		706.2214504.89		707.6514698.09		724.11						
14771.63	73015201.81		73015741.29		708.6415926.74		676.0515943.85		672.15						
16092.61	655.7716290.27		629.916311.86		628.1916563.41		620.6517002.42		613.89						
17116.08	612.8819480.58		612.8819700.18		62020074.21		62020478.32		598.64						
20648.64	598.64	20742	595.76	20992.3	592.8821530.21		590.04	21537.6	588.84						
21575.34	58021614.59		574.22	21664.9	569.3621715.22		565.321918.32		572.2						
21955.64	58022035.65		613.6722094.95		623.6722293.16		661.53	22353.8	665.63						
22636.19	672.67	22711.5	676.0823549.87		727.5423830.96		732.0524255.68		731.75						
24505.6	735.7624732.72		731.5525245.66		714.9225282.16		711.9825357.02		694.95						
25705.26	694.5325751.87		697.2825800.67		697.2826047.43		704.4126417.36		712.22						
26565.14	716.4926820.23		729.6327316.29		743.9627525.19		747.5127905.74		742.99						
28282.05	731.4528338.53		730.429052.74		725.02	29119.8	725.7630151.46		725.76						
30515.66	732.8831954.98		711.5232427.91		718.6433172.06		718.6434084.17		715.76						
34250.78	715.7634604.85		717.9734712.96		717.0435083.94		711.5235496.11		711.52						
36036.41	70036042.12		699.2536189.84		645.6636349.89		608.6436374.34		609.92						
36486.33	617.3736958.24		631.2537378.69		690.1237468.11		701.3637900.16		703.42						
38046.07	698.3638100.66		698.6238478.12		711.95	38957.7	719.5739255.62		722.88						
39728.14	724.0640101.56		739.2240324.18		739.7840414.35		737.6340865.85		725.76						
41462.91	74041806.25		731.4542126.56		726.37	42252.7	723.2442321.59		720.75						
42424.18	719.6142768.52		725.3642935.07		73043020.21		73044026.09		710.46						
44119.97	707.3344335.41		704.3144562.12		708.2544642.63		707.1244845.01		707.12						
44871.95	707.5145041.74		706.6545313.77		701.2745953.23		683.0846088.65		681.9						
46306.84	689.0846422.61		693.8946944.24		724.847238.71		731.6848193.77		739.57						
48359.79	741.8448835.98		749.3848965.98		754.76	49807.5	800								

Manning's n Values

num= 3

Sta	n Val	Sta	n Val
0	.1521575.34	.1521955.64	.15

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
21575.3421955.64		4.99	4.99		.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.43	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.28	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548444.00	71776.29	1215587.00
E.G. Slope (ft/ft)	0.000293	Area (sq ft)	1548444.00	71776.29	1215587.00
Q Total (cfs)	7996901.00	Flow (cfs)	4998862.00	399067.50	2598972.00
Top Width (ft)	46082.44	Top Width (ft)	18607.65	380.30	27094.49
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.22	188.74	44.86
Conv. Total (cfs)	467380900.0	Conv. (cfs)	292159700.0	23323600.0	151897600.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18627.92	382.05	27132.79
Min Ch El (ft)	565.30	Shear (lb/sq ft)	1.52	3.43	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.90	19.09	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	54123.12	2652.01	40742.13
C & E Loss (ft)	0.00	Cum SA (acres)	651.64	14.07	974.18

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267810.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.43	761.42	1409.45	760	1917.32	760	2313.41	767.1						
2395.77	767.1	2533.83	770	2742.42	770	2831.85	768.03	3137.74	748.3						
3667.17	721.7	3924.88	712.6	4530.56	700.8	4633.61	703.12	4765.21	706.54						
5554.4	696.08	5751.95	702.33	5996.3	689.02	6034.73	687.1	6708.55	687.1						
6955.28	682.8	7209.16	663.12	7309.27	657.1	7404.53	657.1	7528.99	665.97						
7802.63	694.98	7863.72	697.1	8046.48	691.29	8102.47	691.29	8141.84	689.66						
8273.94	687.56	8354.16	689.61	8483.52	697.76	8720.92	709.58	9110.26	724.19						
9346.68	724.19	9368.98	723.8	9511.56	717.32	9623.68	714.1910485.96		709.09						
10822.01	699.5311130.59		674.811159.39		670.2411315.34		661.2511561.05		653.75						
11626.24	655.5112066.25		691.47	12405.4	71012913.81		717.1212922.45		717.42						
13105.34	720.3213333.66		711.5913399.22		710.4713521.49		71313707.13		720						
14078.03	72014135.23		714.4614224.44		706.2714505.22		707.7214698.42		724.13						
14771.96	73015202.15		73015741.65		708.7115927.09		676.2315944.21		672.33						
16092.97	655.9116290.63		629.9616312.23		628.2516563.78		620.68	17002.8	613.91						
17116.46	612.919481.01		612.919700.62		62020074.66		62020478.78		598.71						
20649.1	598.7120742.47		595.8120992.77		592.9	21530.7	590.0421538.08		588.84						
21575.82	580	21615.2	574.2121665.68		569.3521716.16		565.3	21919	572.22						
21956.28	580	22036.3	613.7822095.62		623.7622293.87		661.5422354.53		665.64						
22636.97	672.5922712.29		675.9923550.84		727.4323831.99		731.9824256.79		731.76						
24506.76	735.8124733.93		731.5625246.98		714.8725283.48		711.94	25558.4	694.96						
25706.67	694.6525753.28		697.42	25802.1	697.4226048.91		704.5326418.91		712.28						

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26566.72	716.5426821.87	729.6927318.03	743.9827526.97	747.49 27905.6	742.93
28283.99	731.3728340.48	730.3329054.83	725.0629121.91	725.8130153.79	725.81
30518.05	732.931957.67	711.62 32430.7	718.71 33175	718.71 34087.3	715.81
34253.94	715.8134608.08	718.0334716.21	717.1135087.27	711.6235499.53	711.62
36039.94	70036045.65	699.24 36193.4	645.6136353.48	608.7136377.93	609.98
36489.95	617.4336961.96	631.35 37382.5	690.0937471.93	701.2937904.07	703.35
38050	698.2338104.61	698.4938482.15	711.9138961.82	719.5739259.81	722.9
39732.42	724.0940105.93	739.2240328.59	739.7740418.78	737.6440870.37	725.81
41467.56	74041811.23	731.4842131.34	726.45 42257.5	723.32 42326.4	720.84
42429.01	719.6942773.43	725.3742940.01	73043025.18	73044031.25	710.53
44125.16	707.3944340.64	704.34 44567.4	708.2344647.93	707.144850.35	707.1
44877.29	707.4945047.12	706.6645319.21	701.345958.79	683.146094.24	681.91
46312.47	689.0546428.27	693.8546950.01	724.7647244.54	731.67 48199.8	739.57
48365.85	741.8348842.13	749.3848972.16	754.7549813.85	800	

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521575.82 .1521956.28 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21575.8221956.28 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.43	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.28	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548472.00	71803.34	1215310.00
E.G. Slope (ft/ft)	0.000293	Area (sq ft)	1548472.00	71803.34	1215310.00
Q Total (cfs)	7996901.00	Flow (cfs)	4999627.00	399269.70	2598005.00
Top Width (ft)	46089.00	Top width (ft)	18608.35	380.46	27100.19
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.21	188.73	44.83
Conv. Total (cfs)	467312200.0	Conv. (cfs)	292161500.0	23331990.0	151818700.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18628.59	382.20	27138.47
Min Ch El (ft)	565.30	Shear (lb/sq ft)	1.52	3.43	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.91	19.10	1.75
Frcn Loss (ft)	0.00	Cum Volume (acre-ft)	53945.74	2643.78	40602.89
C & E Loss (ft)	0.00	Cum SA (acres)	649.51	14.03	971.08

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267805.*

INPUT
Description:

Station	Elevation	Data	num=	174
Sta	Elev	Sta	Elev	Sta
0	800	1237.46	761.43	1409.48
2395.82	767.07	2533.89	770	2742.48
3667.25	721.71	3924.97	712.62	4530.66
5554.52	696.04	5752.08	702.27	5996.51
6955.44	682.74	7209.32	663.07	7309.43
7802.81	694.94	7863.9	697.07	8046.66
8274.13	687.54	8354.35	689.6	8483.71
9346.88	724.15	9369.19	723.75	9511.77
10822.25	699.44	11130.84	674.72	11159.64
11626.5	655.56	12066.52	691.53	12405.67
13105.63	720.24	13333.96	711.48	13399.52
14078.35	720.14	1335.55	714.47	14224.76
14772.29	730.15	15202.49	739	15742
16093.33	656.06	16290.99	630.03	16312.59
17116.84	612.93	19481.45	612.93	19701.06
20649.56	598.78	20742.93	595.85	20993.24
21576.3	580.21	21615.81	574.22	21666.45
21956.92	580.22	2036.96	613.92	2096.29
22637.75	672.52	22713.08	675.91	23551.8
24507.92	735.85	24735.14	731.57	25248.29
25708.08	694.76	25754.7	697.56	25803.53
26568.31	716.58	26823.51	729.76	27319.77
28285.93	731.32	28342.43	730.26	29056.93
30520.45	732.93	31960.36	711.71	32433.49
34257.11	715.85	34611.32	718.13	34719.47
36043.46	70036049.18		699.24	36196.96
36493.57	617.49	36965.67	631.44	37386.3
38053.95	698.11	38108.57	698.37	38486.18
39736.71	724.12	40110.29	739.21	40333
41472.2	74041815.95		731.51	42136.12
42433.85	719.76	42778.34	725.39	42944.95
44130.34	707.44	44345.87	704.38	44572.68
44882.62	707.47	45052.49	706.67	45324.64
46318.11	689.02	46433.93	693.84	46955.77
48371.9	741.83	48848.29	749.37	48978.34

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .15 21576.3 .1521956.92 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21576.321956.92 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.43	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.28	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548502.00	71830.86	1215031.00
E.G. Slope (ft/ft)	0.000293	Area (sq ft)	1548502.00	71830.86	1215031.00
Q Total (cfs)	7996901.00	Flow (cfs)	5000400.00	399475.80	2597025.00
Top Width (ft)	46095.78	Top width (ft)	18609.12	380.62	27106.05
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.21	188.72	44.83
Conv. Total (cfs)	467242600.0	Conv. (cfs)	292163200.0	23340550.0	151738900.0

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Length Wtd. (ft)	4.99	Wetted Per. (ft)	18629.33	382.36	27144.32
Min Ch El (ft)	565.30	Shear (lb/sq ft)	1.52	3.44	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.91	19.11	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	53768.35	2635.56	40463.69
C & E Loss (ft)	0.00	Cum SA (acres)	647.38	13.99	967.97

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267800.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.49	761.44	1409.51	760	1917.4	760	2313.52	767.05				
2395.88	767.05	2533.95	770	2742.54	770	2831.98	768	3137.88	748.24				
3667.33	721.72	3925.06	712.64	4530.76	700.81	4633.81	703.1	4765.43	706.48				
5554.65	696.01	5752.21	702.21	5996.64	688.96	6035	687.05	6708.85	687.05				
6955.6	682.69	7209.48	663.03	7309.59	657.05	7404.86	657.05	7529.33	665.86				
7802.98	694.9	7864.07	697.05	8046.84	691.15	8102.83	691.15	8142.2	689.53				
8274.31	687.52	8354.54	689.6	8483.9	697.77	8721.31	709.58	9110.67	724.1				
9347.09	724.1	9369.4	723.7	9511.98	717.2	9624.11	714.110486	9347.09	709.03				
10822.49	699.3611131	10822.49	674.6411159	89	670.0411315	84	661.1111561	57	653.81				
11626.75	655.612066	79	691.5912405	95	71012914	38	717.0512923	03	717.37				
13105.92	720.1613334	26	711.3813399	82	710.2713522	09	712.8813707	75	720				
14078.66	72014135	87	714.4914225	08	706.3714505	87	707.8414699	07	724.17				
14772.62	73015202	83	73015742	35	708.85	15927.8	676.5815944	92	672.69				
16093.69	656.2116291	36	630.0916312	96	628.3916564	52	620.7517003	56	613.95				
17117.22	612.9519481	88	612.95	19701.5	62020075	56	620	20479.7	598.85				
20650.02	598.85	20743.4	595.920993	71	592.9521531	66	590.0421539	04	588.85				
21576.79	58021616	42	574.1821667	22	569.3221718	03	565.2921920	38	572.25				
21957.56	58022037	62	614.0222096	95	623.9322295	28	661.5722355	97	665.67				
22638.53	672.4422713	88	675.8223552	77	727.2323834	04	731.8524259	02	731.79				
24509.08	735.924736	35	731.5925249	61	714.7925286	13	711.8625561	15	695				
25709.49	694.8825756	12	697.725804	96	697.726051	87	704.7726422	02	712.4				
26569.9	716.6326825	14	729.8327321	51	744.0227530	54	747.4527905	32	742.82				
28287.87	731.2328344	38	730.1929059	03	725.1429126	13	725.930158	43	725.9				
30522.84	732.9531963	05	711.832436	28	718.8533180	88	718.8534093	56	715.9				
32460.27	715.934614	55	718.1634722	73	717.2635093	94	711.835506	36	711.8				
36046.99	70036052	71	699.2336200	52	645.5136360	66	608.8536385	13	610.12				
36497.19	617.5536969	39	631.53	37390.1	690.0237479	57	701.15	37911.9	703.19				
38057.89	697.9838112	52	698.2438490	21	711.8338970	08	719.5639268	19	722.95				
39741	724.1540114	65	739.2	40337.4	739.7740427	63	737.6540879	41	725.9				
41476.84	74041820	66	731.5442140	89	726.6142267	11	723.542336	04	721.02				
42438.69	719.8442783	25	725.4	42949.9	730	43035.1	73044041	59	710.66				
44135.53	707.5	44351.1	704.4144577	96	708.2144658	52	707.0544861	02	707.05				
44887.97	707.4545057	87	706.6845330	07	701.3645969	92	683.1546105	42	681.94				
46323.74	688.9946439	59	693.7646961	54	724.68	47256.2	731.6648211	84	739.56				
48377.96	741.8248854	44	749.3748984	52	754.7249826	55	800						

Manning's n Values

Sta	n Val	Sta	n Val
0	.1521576.79	.1521957.56	.15

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
21576.7921957.56		4.99	4.99	4.99	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.43	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.28	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548555.00	71860.40	1214768.00
E.G. Slope (ft/ft)	0.000293	Area (sq ft)	1548555.00	71860.40	1214768.00
Q Total (cfs)	7996901.00	Flow (cfs)	5001168.00	399692.20	2596041.00
Top width (ft)	46102.32	Top width (ft)	18609.81	380.77	27111.74
Vel Total (ft/s)	2.82	Avg. Vel (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.21	188.72	44.81
Conv. Total (cfs)	467186000.0	Conv. (cfs)	292172600.0	23350370.0	151663000.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18630.00	382.51	27149.98
Min Ch El (ft)	565.29	Shear (lb/sq ft)	1.52	3.44	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.91	19.11	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	53590.96	2627.33	40324.52
C & E Loss (ft)	0.00	Cum SA (acres)	645.25	13.94	964.87

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267795.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.51	761.45	1409.55	760	1917.44	760	2313.57	767.03		
2395.93	767.03	2534	770	2742.6	770	2832.04	767.98	3137.95	748.21		
3667.41	721.74	3925.15	712.66	4530.87	700.82	4633.92	703.09	4765.53	706.45		
5554.77	695.98	5752.33	702.14	5996.78	688.93	6035.14	687.03	6709	687.03		
6955.75	682.63	7209.64	662.99	7309.76	657.03	7405.03	657.03	7529.5	665.81		
7803.16	694.85	7864.25	697.03	8047.02	691.08	8103.01	691.08	8142.38	689.46		
8274.5	687.5	8354.72	689.6	8484.09	697.78	8721.5	709.58	9110.87	724.05		
9347.3	724.05	9369.61	723.65	9512.2	717.14	9624.33	714.0510486	9347.3	709		
10822.73	699.2711131	34	674.5511160	14	669.94	11316.1	661.0411561	83	653.84		
11627.02	655.6512067	06	691.6512406	23	71012914	67	717.0312923	32	717.34		
13106.22	720.0813334	56	711.2713400	12	710.17	13522.4	712.8313708	05	720		
14078.98	72014136	18	714.5114225	39	706.4214506	19	707.9	14699.4	724.19		
14772.95	73015203	17	730	15742.7	708.9215928	16	676.7615945	28	672.87		
16094.05	656.3516291	72	630.1616313	32	628.4516564	89	620.7817003	95	613.97		
17117.61	612.9719482	32	612.9719701	94	62020076	01	62020480	15	598.92		
20650.49	598.9220743	86	595.9520994	18	592.9721532	14	590.0421539	52	588.85		
21577.27	58021617	03	574.17	21668	569.3121718	97	565.2921921	06	572.27		

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Top width (ft)	46115.60	Top width (ft)	18611.19	381.09	27123.32
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.21	188.71	44.76
Conv. Total (cfs)	467045300.0	Conv. (cfs)	292182500.0	23367580.0	151495200.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18631.33	382.82	27161.52
Min Ch El (ft)	565.29	Shear (lb/sq ft)	1.52	3.44	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.91	19.13	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	53236.16	2610.86	40046.27
C & E Loss (ft)	0.00	Cum SA (acres)	640.98	13.86	958.65

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267785.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.57	761.47	1409.61	760	1917.53	760	2313.67	766.98				
2396.04	766.98	2534.12	770	2742.73	770	2832.17	767.95	3138.09	748.16				
3667.58	721.77	3925.32	712.7	4531.07	700.83	4634.12	703.06	4765.75	706.4				
5555.02	695.92	5752.59	702.02	5997.04	688.87	6035.41	686.98	6709.3	686.98				
6956.06	682.51	7209.96	662.9	7310.08	656.98	7405.36	656.98	7529.83	665.71				
7803.51	694.77	7864.6	696.98	8047.38	690.94	8103.37	690.94	8142.75	689.33				
8274.87	687.46	8355.1	689.59	8484.47	697.8	8721.89	709.58	9111.28	723.96				
9347.72	723.96	9370.02	723.55	9512.62	717.03	9624.76	713.9610487.13		708.94				
10823.21	699.111131.83		674.3911160.64		669.74	11316.6	660.911562.35		653.9				
11627.54	655.73	12067.6	691.7712406.78		71012915.25		716.9812923.89		717.29				
13106.8	719.9313335.15		711.0713400.72		709.97	13523	712.7113708.67		720				
14079.61	72014136.81		714.5514226.03		706.5214506.84		708.0314700.06		724.23				
14773.61	73015203.85		73015743.41		709.0615928.87		677.1215945.99		673.23				
16094.77	656.6416292.45		630.2916314.05		628.5916565.63		620.8417004.71		614.01				
17118.37	613.0219483.19		613.0219702.82		620	20076.9	6020481.07		599.06				
20651.41	599.0620744.79		596.0420995.12		593.02	21533.1	590.0421540.49		588.86				
21578.23	58021618.25		574.1421669.54		569.2921720.84		565.2921922.43		572.31				
21959.47	58022039.58		614.3822098.96		624.1922297.41		661.6122358.13		665.72				
22640.87	672.2222716.26		675.5623555.67		726.9323837.11		731.6624262.35		731.83				
24512.57	736.0424739.97		731.6225253.55		714.6725290.09		711.7425565.29		695.05				
25713.71	695.2425760.38		698.1325809.24		698.13	26056.3	705.1226426.69		712.58				
26574.65	716.7626830.05		730.0327326.73		744.0827535.88		747.39	27914.9	742.65				
28293.68	731.0228350.23		729.9929065.31		725.2629132.46		726.0430165.39		726.04				
30530.03	733.0231971.12		712.0832444.64		719.0633189.71		719.0634102.94		716.04				
32469.75	716.0434624.26		718.36	34732.5	717.4935103.93		712.0835516.61		712.08				
36057.58	700	36063.3	699.21	36211.2	645.3636371.44		609.0636395.92		610.31				
36508.05	617.7336980.54		631.837401.51		689.9237491.04		700.9437923.63		702.96				
38069.71	697.638124.37		697.8638502.29		711.7138982.46		719.5539280.76		723.02				
39753.85	724.2540127.73		739.1840350.62		739.7640440.91		737.6840892.96		726.04				
41490.77	740	41834.8	731.6242155.23		726.8442281.52		723.7642350.49		721.28				
42453.21	720.0842797.98		725.4542964.73		73043049.98		73044057.09		710.85				
44151.09	707.6844366.79		704.5244593.79		708.16	44674.4	706.9844877.02		706.98				
44903.99	707.39	45074	706.7145346.36		701.4445986.61		683.2346122.19		681.99				
46340.65	688.946456.57		693.6246978.84		724.5547273.67		731.6448229.91		739.55				
48396.13	741.848872.91		749.3549003.07		754.6749845.62		800						

Manning's n Values

Sta	n Val	Sta	n Val
0	.1521578.23	.1521959.47	.15

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
21578.23	21959.47	4.99	4.99	4.99	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.42	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.27	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548669.00	71941.21	1213941.00
E.G. Slope (ft/ft)	0.000293	Area (sq ft)	1548669.00	71941.21	1213941.00
Q Total (cfs)	7996901.00	Flow (cfs)	5003523.00	400292.20	2593086.00
Top Width (ft)	46122.39	Top Width (ft)	18611.96	381.24	27129.19
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.56	2.14
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.21	188.70	44.75
Conv. Total (cfs)	466988800.0	Conv. (cfs)	292186800.0	23375550.0	151426400.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18632.06	382.96	27167.37
Min Ch El (ft)	565.29	Shear (lb/sq ft)	1.52	3.44	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.92	19.14	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	53058.75	2602.62	39907.20
C & E Loss (ft)	0.00	Cum SA (acres)	638.85	13.81	955.55

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267780.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.6	761.49	1409.64	760	1917.57	760	2313.72	766.96				
2396.09	766.96	2534.17	770	2742.79	770	2832.23	767.93	3138.16	748.13				
3667.66	721.78	3925.41	712.73	4531.17	700.84	4634.23	703.05	4765.85	706.37				
5555.15	695.89	5752.72	701.96	5997.18	688.84	6035.54	686.96	6709.45	686.96				
6956.22	682.45	7210.12	662.86	7310.25	656.96	7405.52	656.96	7530	665.65				
7803.68	694.73	7864.78	696.96	8047.56	690.87	8103.55	690.87	8142.93	689.27				
8275.05	687.44	8355.28	689.59	8484.66	697.8	8722.08	709.58	9111.48	723.91				
9347.93	723.91	9370.23	723.5	9512.83	716.97	9624.97	713.9110487.36		708.91				
10823.46	699.0211132.08		674.3111160.89		669.6411316.86		660.8311562.61		653.93				
11627.79	655.7812067.87		691.8312407.06		71012915.54		716.9612924.18		717.27				
13107.09	719.8513335.45		710.9613401.02		709.87	13523.3	712.6613708.97		720				
14079.92	72014137.13		714.5714226.35		706.5714507.16		708.0914700.39		724.25				
14773.94	73015204.19		73015743.76		709.1315929.23		677.2915946.35		673.41				

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E.G. Elev (ft)	759.42	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
			Page 668		

W.S. Elev (ft)	759.27	Reach Len. (ft)	SS_Rev3.rep	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548744.00	71996.16	1213347.00
E.G. Slope (ft/ft)	0.000293	Area (sq ft)	1548744.00	71996.16	1213347.00
Q Total (cfs)	7996901.00	Flow (cfs)	5005177.00	400709.80	2591015.00
Top width (ft)	46135.71	Top width (ft)	18613.42	381.55	27140.75
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.57	2.14
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.21	188.69	44.71
Conv. Total (cfs)	466848700.0	Conv. (cfs)	292195700.0	23392920.0	151260100.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18633.48	383.27	27178.89
Min Ch El (ft)	565.29	Shear (lb/sq ft)	1.52	3.44	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.92	19.15	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	52703.93	2586.13	39629.14
C & E Loss (ft)	0.00	Cum SA (acres)	634.59	13.73	949.33

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267770.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.65	761.51	1409.7	760	1917.66	760	2313.83	766.91		
2396.2	766.91	2534.29	770	2742.91	770	2832.36	767.9	3138.3	748.08		
3667.82	721.81	3925.58	712.77	4531.37	700.85	4634.44	703.03	4766.06	706.31		
5555.39	695.82	5752.98	701.83	5997.45	688.78	6035.81	686.91	6709.75	686.91		
6956.53	682.34	7210.45	662.77	7310.57	656.91	7405.85	656.91	7530.34	665.55		
7804.03	694.65	7865.13	696.91	8047.92	690.73	8103.91	690.73	8143.29	689.14		
8275.42	687.4	8355.66	689.58	8485.04	697.82	8722.48	709.59	9111.89	723.82		
9348.35	723.82	9370.65	723.4	9513.26	716.86	9625.4	713.82	10487.83	708.85		
10823.94	698.85	11132.58	674.14	11161.39	669.44	11317.36	660.69	11563.12	653.99		
11628.32	655.89	12068.41	691.96	12407.62	710.12	12916.12	716.91	12924.76	717.22		
13107.68	719.69	13336.05	710.75	13401.62	709.66	13523.91	712.54	13709.58	720		
14080.55	720.14	14137.76	714.61	14226.98	706.67	14507.81	708.21	14701.05	724.29		
14774.6	730.15	15204.87	730.15	15244.46	709.27	15929.94	677.65	15947.06	673.77		
16095.85	657.08	16293.54	630.49	16315.15	628.79	16566.74	620.93	17005.85	614.07		
17119.52	613.09	19484.5	613.09	19704.15	620.20	20078.25	620.20	20482.44	599.27		
20652.79	599.27	20746.18	596.18	20996.53	593.09	21534.55	590.04	21541.93	588.87		
21579.68	580.21	2620.88	574.12	1671.86	569.26	21723.65	565.28	21924.49	572.36		
21961.39	580.21	2041.55	614.74	22100.96	624.45	22299.53	661.64	22360.29	665.76		
22643.2	672.22	2718.64	675.31	23558.57	726.62	23840.18	731.47	24265.68	731.88		
24516.06	736.18	24743.6	731.66	25257.49	714.54	25294.06	711.62	25569.42	695.1		
25717.94	695.59	25764.63	698.55	25813.53	698.55	26060.74	705.47	26431.35	712.75		
26579.41	716.89	26834.97	730.23	27331.94	744.14	27541.23	747.33	27920.48	742.48		
28299.49	730.81	28356.07	729.79	29071.6	725.39	29138.79	726.18	30172.35	726.18		
30537.22	733.09	31979.2	712.37	32453	719.27	33198.53	719.27	34112.32	716.18		
34279.24	716.18	34633.96	718.55	34742.27	717.72	35113.93	712.37	35526.87	712.37		
36068.16	700.36	36073.88	699.19	36221.88	645.23	36382.22	609.27	36406.71	610.51		
36518.91	617.91	36991.7	632.08	37412.93	689.82	37502.5	700.73	37935.36	702.73		
38081.53	697.22	38136.23	697.48	38514.38	711.59	38994.84	719.54	39293.32	723.09		
39766.71	724.35	40140.82	739.17	40363.85	739.76	40454.19	737.74	40906.52	726.18		
41504.69	740.41	41848.93	731.71	42169.56	727.07	42295.93	724.03	42364.95	721.54		
42467.72	720.31	42812.71	725.54	42979.56	730.43	43064.86	730.44	43072.59	711.04		
44166.65	707.86	44382.48	704.62	44609.62	708.12	44690.28	706.91	44893.03	706.91		
44920.01	707.33	45090.12	706.75	45362.66	701.53	46003.3	683.34	46138.96	682.04		
46357.55	688.81	46473.55	693.48	46996.14	724.42	47291.15	731.63	48247.98	739.54		
48414.3	741.79	484891.37	749.34	49021.61	754.62	49864.68	800				

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val
0	.1521579.68	.1521961.39	.15		
Bank Sta: Left	21579.68	21961.39	Lengths: 4.99	Channel 4.99	Right 4.99
				Coeff Contr. .1	Expan. .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.42	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.27	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548784.00	72025.03	1213075.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1548784.00	72025.03	1213075.00
Q Total (cfs)	7996901.00	Flow (cfs)	5005952.00	400922.30	2590027.00
Top width (ft)	46142.43	Top width (ft)	18614.11	381.71	27146.61
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.57	2.14
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.20	188.69	44.69
Conv. Total (cfs)	466785500.0	Conv. (cfs)	292201400.0	23402150.0	151181900.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18634.15	383.43	27184.74
Min Ch El (ft)	565.28	Shear (lb/sq ft)	1.52	3.44	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.92	19.16	1.75
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	52526.51	2577.88	39490.16
C & E Loss (ft)	0.00	Cum SA (acres)	632.46	13.68	946.22

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267765.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.68	761.52	1409.73	760	1917.7	760	2313.88	766.89		
2396.25	766.89	2534.34	770	2742.97	770	2832.42	767.89	3138.37	748.05		
3667.91	721.82	3925.67	712.79	4531.47	700.86	4634.54	703.02	4766.17	706.28		
5555.52	695.79	5753.11	701.77	5997.58	688.75	6035.95	686.89	6709.9	686.89		
6956.68	682.28	7210.61	662.73	7310.74	656.89	7406.02	656.89	7530.51	665.5		
7804.2	694.61	7865.31	696.89	8048.1	690.66	8104.1	690.66	8143.48	689.07		
8275.61	687.38	8355.84	689.58	8485.23	697.83	8722.67	709.59	9112.09	723.77		
9348.56	723.77	9370.86	723.35	9513.47	716.8	9625.62	713.77	10488.07	708.82		
10824.18	698.77	11132.83	674.06	11161.64	669.34	11317.61	660.62	11563.38	654.02		

SS_Rev3.rep									
11628.58	655.9112068.68	692.0212407.89	710.12916.4	716.8912925.05	717.2				
13107.97	719.6113336.35	710.6513401.92	709.5613524.21	712.4913709.89	720				
14080.87	72014138.08	714.62 14227.3	706.7214508.14	708.2814701.38	724.31				
14774.93	73015205.21	73015744.81	709.34 15930.3	677.8315947.42	673.95				
16096.21	657.2216293.91	630.5616315.51	628.8516567.11	620.9617006.23	614.09				
17119.9	613.1119484.93	613.1119704.59	620.20078.7	620.20482.9	599.34				
20653.26	599.5420746.64	596.23 20997	593.1121535.03	590.0421542.41	588.87				
21580.16	58021620.69	574.0821672.64	569.2521724.59	565.2821925.17	572.38				
21962.03	58022042.21	614.8622101.63	624.5422300.24	661.6622361.02	665.77				
22643.98	671.9222719.44	675.2223559.54	726.5223841.21	731.424266.79	731.89				
24517.22	736.2324744.81	731.6725258.81	714.525295.38	711.58 25570.8	695.11				
25719.35	695.7125766.05	698.6925814.95	698.6926062.22	705.5826432.91	712.81				
26580.99	716.94 26836.6	730.327333.68	744.1627543.01	747.3127922.34	742.42				
28301.43	730.7428358.02	729.7229073.69	725.43 29140.9	726.2330174.67	726.23				
30539.61	733.1131981.89	712.4632455.79	719.3433201.47	719.3434115.45	716.23				
34282.4	716.23 34637.2	718.6234745.52	717.7935117.27	712.4635530.29	712.46				
36071.69	70036077.41	699.1936225.44	645.1536385.81	609.3436410.31	610.58				
36522.54	617.9736995.41	632.1737416.73	689.7937506.32	700.6637939.27	702.65				
38085.47	697.138140.18	697.3538518.41	711.5538998.97	719.5339297.51	723.11				
39771	724.3840145.18	739.1640368.26	739.7640458.62	737.7140911.04	726.23				
41509.33	74041853.64	731.7342174.34	727.1542300.73	724.1242369.76	721.63				
42472.56	720.3942817.62	725.51 42984.5	73043069.82	73044077.76	711.11				
44171.84	707.9244387.71	704.66 44614.9	708.1144695.57	706.8944898.37	706.89				
44925.36	707.31 45095.5	706.7645368.09	701.5646008.86	683.3346144.55	682.05				
46363.19	688.7846479.21	693.44 47001.9	724.3847296.98	731.62 48254	739.54				
48420.36	741.7848897.52	749.3349027.79	754.6149871.03	800					
Manning's n Values									
Sta	n Val	Sta	n Val	Sta	n Val				
0	.1521580.16		.1521962.03		.15				
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.									
21580.1621962.03 4.99 4.99 4.99 .1 .3									
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.42	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.27	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1548828.00	72052.64	1212806.00				
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1548828.00	72052.64	1212806.00				
Q Total (cfs)	7996901.00	Flow (cfs)	5006727.00	401123.50	2589050.00				
Top width (ft)	46148.97	Top width (ft)	18614.79	381.87	27152.31				
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.57	2.13				
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.20	188.68	44.67				
Conv. Total (cfs)	466724100.0	Conv. (cfs)	292208200.0	23410820.0	151105100.0				
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18634.80	383.58	27190.41				
Min Ch El (ft)	565.28	Shear (lb/sq ft)	1.52	3.44	0.82				
Alpha	1.20	Stream Power (lb/ft s)	4.92	19.17	1.75				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	52349.09	2569.63	39351.21				
C & E Loss (ft)	0.00	Cum SA (acres)	630.32	13.64	943.11				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267760.*

INPUT

Description:

Station Elevation Data									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800 1237.71	761.53	1409.77	760	1917.74	760	2313.93	766.86	
2396.3	766.86 2534.4	770	2743.03	770	2832.48	767.87	3138.44	748.02	
3667.99	721.83 3925.76	712.81	4531.57	700.86	4634.64	703.01	4766.28	706.26	
5555.64	695.76 5753.23	701.71	5997.71	688.72	6036.08	686.86	6710.05	686.86	
6956.84	682.22 7210.77	662.68	7310.9	656.86	7406.19	656.86	7530.67	665.44	
7804.38	694.57 7865.48	696.86	8048.28	690.59	8104.28	690.59	8143.66	689.01	
8275.79	687.36 8356.03	689.57	8485.42	697.83	8722.87	709.59	9112.3	723.72	
9348.77	723.72 9371.07	723.3	9513.69	716.74	9625.83	713.72	10488.3	708.79	
10824.42	698.6811133.08	673.9811161.89	669.2411317.87	660.5511563.64	654.05				
11628.83	655.9612068.95	692.0812408.17	71012916.69	716.8612925.34	717.17				
13108.27	719.5413336.64	710.5413402.22	709.4613524.51	712.43 13710.2	720				
14081.18	72014138.39	714.6414227.62	706.7714508.46	708.34 14701.7	724.32				
14775.26	73015205.55	73015745.17	709.4115930.65	67815947.77	674.13				
16096.57	657.3716294.27	630.6216315.88	628.9216567.48	620.9917006.61	614.11				
17120.29	613.1419485.37	613.1419705.03	62020079.15	62020483.36	599.41				
20653.72	599.5420747.11	596.2820997.47	593.1421535.51	590.0421542.89	588.88				
21580.65	580 21621.3	574.0721673.41	569.2421725.53	565.2821925.86	572.4				
21962.67	58022042.86	614.98 22102.3	624.6322300.95	661.6722361.74	665.79				
22644.76	671.8522720.23	675.14 23560.5	726.4223842.23	731.3424267.91	731.9				
24518.38	736.2824746.02	731.6925260.12	714.46 25296.7	711.5425572.18	695.13				
25720.76	695.8325767.46	698.8325816.38	698.83 26063.7	705.726434.46	712.87				
26582.58	716.9826838.24	730.3627335.42	744.1827544.79	747.28 27924.2	742.36				
28303.37	730.728359.97	729.6629075.79	725.4729143.01	726.2830176.99	726.28				
30542.01	733.1431984.58	712.5532458.58	719.4133204.41	719.4134118.58	716.28				
34285.56	716.2834640.43	718.6834748.78	717.87 35120.6	712.55 35533.7	712.55				
36075.22	70036080.94	699.18 36229	645.1 36389.4	609.4136413.91	610.64				
36526.16	618.0336999.13	632.2637420.53	689.7637510.15	700.5937943.18	702.58				
38089.41	696.9738144.13	697.2238522.44	711.51 39003.1	719.53 39301.7	723.14				
39775.28	724.4240149.55	739.1540372.67	739.7640463.04	737.7240915.56	726.28				
41513.97	74041858.36	731.7642179.12	727.2342305.54	724.242374.58	721.71				
42477.4	720.4742822.53	725.5342989.45	73043074.79	73044082.93	711.17				
44177.02	707.9844392.95	704.6944620.18	708.0944700.87	706.86 44903.7	706.86				
44930.7	707.2945100.88	706.7745373.52	701.5946014.42	683.3546150.14	682.07				
46368.82	688.7546484.87	693.3947007.67	724.34 47302.8	731.6248260.02	739.54				
48426.41	741.7748903.68	749.3349033.97	754.5949877.39	800					
Manning's n Values									
Sta	n Val	Sta	n Val	Sta	n Val				
0	.1521580.65		.1521962.67		.15				
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.									
21580.6521962.67 4.99 4.99 4.99 .1 .3									

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CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.42	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.27	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548868.00	72078.49	1212506.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1548868.00	72078.49	1212506.00
Q Total (cfs)	7996901.00	Flow (cfs)	5007574.00	401322.40	2588005.00
Top Width (ft)	46155.76	Top Width (ft)	18615.57	382.02	27158.17
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.57	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.20	188.68	44.65
Conv. Total (cfs)	466653000.0	Conv. (cfs)	292213100.0	23418860.0	151021000.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18635.56	383.73	27196.26
Min Ch El (ft)	565.28	Shear (lb/sq ft)	1.52	3.44	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.93	19.17	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	52171.66	2561.37	39212.29
C & E Loss (ft)	0.00	Cum SA (acres)	628.19	13.59	940.00

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267755.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.74	761.54	1409.8	760	1917.79	760	2313.98	766.84		
2396.36	766.84	2534.46	770	2743.09	770	2832.55	767.85	3138.51	747.99		
3668.07	721.85	3925.85	712.83	4531.68	700.87	4634.75	703	4766.38	706.23		
5555.77	695.73	5753.36	701.65	5997.85	688.69	6036.22	686.84	6710.2	686.84		
6957.15	692.13	7210.93	662.64	7311.06	656.84	7406.35	656.84	7530.84	665.39		
7804.55	694.53	7865.66	696.84	8048.46	690.52	8104.46	690.52	8143.84	688.95		
8275.98	687.34	8356.22	689.57	8485.61	697.84	8723.06	709.59	9112.5	723.68		
9348.97	723.68	9371.28	723.25	9513.9	716.69	9626.05	713.68	10488.54	708.76		
10824.67	698.61	11133.33	673.91	11162.14	669.14	11318.12	660.48	11563.9	654.08		
11629.09	656.12	1069.22	692.14	12408.45	710.12	12916.98	716.84	12925.63	717.15		
13108.56	719.46	13336.94	710.44	13402.51	709.36	13524.82	712.38	13710.5	720		
14081.5	720.14	138.71	714.66	14227.94	706.82	14508.79	708.41	14702.03	724.34		
14775.59	730.15	205.89	730.15	205.89	709.48	15931.01	678.18	15948.13	674.31		
16096.93	657.52	16294.64	630.69	16316.24	628.98	16567.85	621.02	17006.99	614.13		
17120.67	613.16	19485.8	613.16	19705.47	620	20079.6	620.20	20483.82	599.48		
20654.18	599.48	20747.57	596.32	20997.94	593.16	21535.99	590.04	21543.38	588.88		
21581.13	580.22	1621.91	574.06	21674.18	569.22	21726.46	565.28	21926.54	572.42		
21963.31	580.22	2043.52	615.12	21202.96	624.71	22301.66	661.68	22362.46	665.8		
22645.54	671.77	22721.03	675.05	23561.47	726.32	23843.25	731.27	24269.02	731.92		
24519.55	736.32	24747.23	731.72	25261.44	714.42	25298.02	711.52	25573.56	695.15		
25722.17	695.94	25768.88	698.97	25817.81	698.97	26065.18	705.82	26436.02	712.93		
26584.16	717.03	26839.88	730.43	27337.16	744.22	27546.57	747.26	27926.06	742.31		
28305.3	730.62	8361.92	729.59	29077.88	725.51	29145.12	726.32	30179.31	726.32		
30544.4	733.16	31987.27	712.65	32461.37	719.48	33207.35	719.48	34121.71	716.32		
34288.72	716.32	34643.66	718.75	34752.04	717.94	35123.93	712.65	35537.12	712.65		
36078.75	700.36	6084.47	699.18	36232.55	645.05	36393	609.48	36417.5	610.71		
36529.78	618.09	37002.85	632.35	37424.34	689.72	37513.97	700.52	37947.09	702.5		
38093.35	696.85	38148.08	697.13	38526.47	711.48	39007.23	719.53	39305.89	723.16		
39779.57	724.45	40153.91	739.15	40377.07	739.75	40467.47	737.72	40920.08	726.32		
41518.61	740.41	1863.07	731.79	42183.89	727.31	42310.34	724.29	42379.4	721.8		
42482.24	720.54	42827.44	725.54	42994.39	730.43	43079.75	730	44088.1	711.24		
44182.21	708.04	4398.18	704.73	44625.46	708.08	44706.16	706.84	44909.04	706.84		
44936.04	707.27	45106.25	706.78	45378.95	701.62	46019.98	683.38	46155.74	682.08		
46374.46	688.72	46490.52	693.35	47013.43	724.34	47308.63	731.61	48266.04	739.53		
48432.47	741.77	48909.83	749.32	49040.15	754.58	49883.74	800				

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val
0	.1521581.13		.1521963.31		.15

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21581.13	21963.31		4.99	4.99	4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.41	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.27	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548899.00	72106.59	1212233.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1548899.00	72106.59	1212233.00
Q Total (cfs)	7996901.00	Flow (cfs)	5008324.00	401531.90	2587045.00
Top Width (ft)	46162.38	Top Width (ft)	18616.33	382.18	27163.87
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.57	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.20	188.67	44.63
Conv. Total (cfs)	466585900.0	Conv. (cfs)	292214900.0	23427720.0	150943300.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18636.31	383.88	27201.95
Min Ch El (ft)	565.28	Shear (lb/sq ft)	1.52	3.44	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.93	19.18	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	51994.23	2553.11	39073.41
C & E Loss (ft)	0.00	Cum SA (acres)	626.06	13.55	936.89

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267751.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.76	761.55	1409.83	760	1917.83	760	2314.03	766.82		
2396.41	766.82	2534.51	770	2743.16	770	2832.61	767.84	3138.58	747.97		
3668.15	721.86	3925.94	712.85	4531.78	700.88	4634.85	702.99	4766.49	706.2		
5555.89	695.7	5753.49	701.59	5997.98	688.66	6036.35	686.82	6710.35	686.82		
6957.15	682.11	7211.09	662.6	7311.23	656.82	7406.52	656.82	7531.01	665.34		

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7804.73	694.49	7865.83	696.82	8048.64	690.44	8104.64	690.44	8144.02	688.88
8276.16	687.32	8356.41	689.57	8485.8	697.85	8723.25	709.59	9112.7	723.63
9349.18	723.63	9371.49	723.2	9514.11	716.63	9626.26	713.63	10488.77	708.73
10824.91	698.51	11133.58	673.82	11162.39	669.04	11318.37	660.41	11564.16	654.11
11629.35	656.05	12069.49	692.21	12408.72	710.12	12917.27	716.82	12925.92	717.12
13108.85	719.38	13337.24	710.34	13402.81	709.26	13525.12	712.32	13710.81	720
14081.81	720.14	14139.03	714.67	14228.26	706.87	14509.11	708.46	14702.36	724.36
14775.92	730.15	15206.23	730.15	15745.87	709.56	15931.37	678.36	15948.49	674.49
16097.29	657.66	16295	630.75	16316.6	629.05	16568.22	621.05	17007.37	614.15
17121.05	613.18	19486.24	613.18	19705.91	620.20	20080.05	620.20	20484.28	599.56
20654.64	599.56	20748.03	596.37	20998.4	593.18	21536.47	590.04	21543.86	588.89
21581.61	580.21	21622.52	574.04	21674.96	569.21	21727.4	565.28	21927.23	572.43
21963.95	580.22	2044.17	615.22	222103.63	624.82	2302.37	661.69	22363.18	665.82
22646.32	671.72	22721.82	674.96	23562.43	726.22	23844.28	731.21	24270.13	731.93
24520.71	736.37	24748.44	731.71	25262.75	714.38	25299.35	711.47	25574.94	695.16
25723.57	696.06	25770.3	699.11	25819.24	699.11	26066.66	705.94	26437.57	712.98
26585.75	717.07	26841.52	730.5	27338.9	744.22	27548.36	747.24	27927.92	742.25
28307.24	730.53	28363.87	729.52	29079.98	725.55	29147.22	726.37	30181.64	726.37
30546.8	733.18	31989.96	712.74	32464.16	719.56	33210.29	719.56	34124.83	716.37
34291.89	716.37	34646.9	718.81	34755.29	718.02	35127.27	712.74	35540.54	712.74
36082.28	700	36088	699.17	36236.12	644.99	36396.59	609.56	36421.1	610.78
36533.39	618.15	37006.56	632.44	37428.14	689.69	37517.79	700.44	37951	702.42
38097.29	696.72	38152.04	696.97	38530.5	711.44	39011.36	719.52	39310.08	723.18
39783.85	724.48	40158.27	739.14	40381.48	739.75	40471.9	737.73	40924.6	726.37
41523.26	740.41	41867.78	731.82	42188.67	727.38	42315.14	724.38	42384.21	721.89
42487.08	720.62	42832.35	725.56	42999.33	730.43	43084.71	730.44	43093.27	711.3
44187.39	708.14	44403.41	704.76	44630.73	708.06	44711.46	706.82	44914.37	706.82
44941.38	707.25	45111.62	706.79	45384.39	701.65	46025.55	683.44	46161.33	682.1
46380.09	688.69	46496.18	693.3	47019.2	724.25	47314.46	731.61	48272.07	739.53
48438.53	741.76	48915.98	749.32	49046.34	754.56	49890.09	800		

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521581.61 .1521963.95 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21581.61 21963.95 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.41	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.26	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548936.00	72135.87	1211954.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1548936.00	72135.87	1211954.00
Q Total (cfs)	7996901.00	Flow (cfs)	5009112.00	401748.80	2586040.00
Top width (ft)	46169.02	Top width (ft)	18616.94	382.34	27169.74
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.57	2.13
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.20	188.67	44.61
Conv. Total (cfs)	466521400.0	Conv. (cfs)	292220400.0	23437130.0	150863800.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18636.90	384.04	27207.80
Min Ch El (ft)	565.28	Shear (lb/sq ft)	1.52	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.93	19.19	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	51816.79	2544.85	38934.56
C & E Loss (ft)	0.00	Cum SA (acres)	623.93	13.51	933.78

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267746.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.79	761.57	1409.86	760	1917.87	760	2314.09	766.79				
2396.46	766.79	2534.57	770	2743.22	770	2832.67	767.82	3138.65	747.94				
3668.23	721.87	3926.02	712.87	4531.88	700.88	4634.95	702.98	4766.6	706.17				
5556.01	695.66	5753.62	701.53	5998.12	688.63	6036.49	686.79	6710.5	686.79				
6957.31	682.05	7211.25	662.55	7311.39	656.79	7406.68	656.79	7531.18	665.28				
7804.9	694.45	7866.01	696.79	8048.82	690.37	8104.82	690.37	8144.21	688.82				
8276.35	687.3	8356.59	689.56	8485.99	697.86	8723.45	709.59	9112.91	723.58				
9349.39	723.58	9371.7	723.15	9514.32	716.57	9626.48	713.58	10489	708.7				
10825.15	698.43	11133.83	673.73	11162.64	668.94	11318.63	660.34	11564.42	654.14				
11629.62	656.09	12069.76	692.26	12409	710.12	12917.56	716.79	12926.21	717.1				
13109.15	719.31	13337.54	710.23	13403.11	709.16	13525.42	712.32	13711.12	720				
14082.12	720.14	14139.34	714.69	14228.57	706.93	14509.43	708.52	14702.69	724.38				
14776.25	730.15	15206.57	730.15	15746.22	709.63	15931.72	678.54	15948.84	674.67				
16097.65	657.81	16295.37	630.82	16316.97	629.12	16568.5	621.08	17007.75	614.17				
17121.43	613.21	19486.68	613.21	19706.35	620	20080.5	620.20	20484.73	599.63				
20655.1	599.63	20748.5	596.42	20998.88	593.21	21536.96	590.04	21544.34	588.89				
21582.09	580.21	21623.12	574.03	21675.73	569.22	21728.34	565.28	21927.92	572.45				
21964.59	580.22	2044.83	615.34	22104.3	624.88	22303.08	661.7	22363.9	665.83				
22647.1	671.72	22722.62	674.88	23563.4	726.12	23845.3	731.14	24271.24	731.95				
24521.87	736.42	24749.65	731.72	25264.07	714.34	25300.67	711.43	25576.31	695.18				
25724.98	696.18	25771.72	699.25	25820.67	699.25	26068.13	706.05	26439.12	713.04				
26587.33	717.12	26843.15	730.52	27340.64	744.24	27550.14	747.22	27929.78	742.19				
28309.18	730.46	28365.82	729.46	29082.07	725.59	29149.33	726.42	30183.96	726.42				
30549.19	733.21	31992.65	712.83	32466.94	719.63	33213.23	719.63	34127.96	716.42				
34295.05	716.42	34650.13	718.87	34758.55	718.09	35130.6	712.83	35543.95	712.83				
36085.8	700.36	6091.53	699.16	36239.68	644.94	36400.18	609.63	36424.7	610.84				
36537.02	618.21	37010.28	632.53	37431.94	689.66	37521.61	700.37	37954.91	702.34				
38101.23	696.59	38155.98	696.84	38534.53	711.43	39015.48	719.52	39314.27	723.21				
39788.14	724.52	40162.63	739.13	40385.89	739.75	40476.32	737.74	40929.12	726.42				
41527.9	740.41	41872.49	731.85	42193.45	727.46	42319.95	724.47	42389.04	721.98				
42491.92	720.74	42837.25	725.57	43004.28	730.43	43089.67	730.44	43098.43	711.36				
44192.58	708.16	44408.64	704.84	44636.01	708.05	44716.75	706.79	44919.71	706.79				
44946.72	707.23	45117	706.85	45389.82	701.67	46031.11	683.43	46166.92	682.11				
46385.73	688.66	46501.84	693.25	47024.96	724.21	47320.29	731.64	48278.09	739.52				
48444.58	741.76	48922.14	749.31	49052.52	754.54	49896.45	800						

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521582.09 .1521964.59 .15

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Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21582.0921964.59 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

Left OB		Channel		Right OB	
E.G. Elev (ft)	759.41	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.26	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1548980.00	72163.59	1211673.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1548980.00	72163.59	1211673.00
Q Total (cfs)	7996901.00	Flow (cfs)	5009915.00	401953.30	2585033.00
Top Width (ft)	46175.81	Top Width (ft)	18617.71	382.50	27175.60
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.57	2.13
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.20	188.66	44.59
Conv. Total (cfs)	466456200.0	Conv. (cfs)	292226500.0	23445790.0	150784000.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18637.64	384.20	27213.64
Min Ch El (ft)	565.28	Shear (lb/sq ft)	1.53	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.93	19.20	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	51639.35	2536.58	38795.74
C & E Loss (ft)	0.00	Cum SA (acres)	621.79	13.46	930.66

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267741.*

INPUT

Description:

Station Elevation Data		num= 174		Elev Sta		Elev Sta		Elev Sta	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800.1237.85	761.58	1409.89	760	1917.92	760	2314.14	766.77	
2396.50	766.77 2534.63	770	2743.28	770	2832.74	767.81	3138.72	747.91	
3668.32	721.89 3926.11	712.89	4531.98	700.89	4635.06	702.97	4766.7	706.14	
5556.14	695.63 5753.75	701.46	5998.25	688.6	6036.62	686.77	6710.65	686.77	
6957.46	681.99 7211.41	662.51	7311.55	656.77	7406.85	656.77	7531.35	665.23	
7805.08	694.41 7866.18	696.77	8049	690.3	8105	690.3	8144.39	688.75	
8276.53	687.28 8356.78	689.56	8486.18	697.86	8723.65	709.6	9113.11	723.54	
9349.6	723.54 9371.91	723.1	9514.54	716.52	9626.7	713.54	10489.24	708.67	
10825.39	698.3411134.07	673.6511162.89		668.8411318.88		660.2711564.67		654.17	
11629.88	656.1312070.03	692.3212409.28		71012917.85		716.7712926.49		717.07	
13109.44	719.2213337.84	710.1313403.41		709.0613525.72		712.2113711.42		720	
14082.44	72014139.66	714.7114228.89		706.9814509.76		708.5914703.02		724.4	
14776.58	73015206.91	73015746.57		709.715932.08		678.71 15949.2		674.85	
16098.01	657.9516295.73	630.8916317.33		629.1816568.96		621.1117008.13		614.19	
17121.82	613.2319487.11	613.2319706.79		62020080.94		62020485.19		599.7	
20655.56	599.720748.96	596.4620999.34		593.2321537.44		590.0421544.82		588.89	
21582.58	58021623.74	574.01 21676.5		569.1921729.27		565.27 21928.6		572.47	
21965.23	58022045.48	615.4622104.97		624.9722303.79		661.7222364.62		665.84	
22647.88	671.5522723.41	674.7923564.37		726.0223846.33		731.0824272.35		731.96	
24523.03	736.4624750.86	731.7425265.38		714.325301.99		711.3925577.69		695.2	
25726.39	696.325773.14	699.3925822.09		699.3926069.61		706.1726440.68		713.1	
26588.92	717.1626844.79	730.6327342.38		744.2627551.92		747.227931.64		742.14	
28311.12	730.3928367.77	729.3929084.17		725.6329151.44		726.4630186.28		726.46	
30551.59	733.2331995.34	712.9332469.73		719.733216.17		719.734131.09		716.46	
34298.21	716.4634653.37	718.94 34761.8		718.1735133.93		712.9335547.37		712.93	
36089.33	70036095.06	699.1636243.23		644.8936403.77		609.7 36428.3		610.91	
36540.64	618.27 37014	632.6337435.75		689.6237525.43		700.337958.82		702.27	
38105.17	696.4738159.94	696.7138538.56		711.3639019.61		719.5239318.45		723.23	
39792.42	724.55 40167	739.13 40390.3		739.7540480.75		737.7540933.64		726.46	
41532.54	74041877.21	731.8742198.23		727.3442324.75		724.5642393.85		722.06	
42496.76	720.7842842.16	725.5943009.22		73043094.63		730 44103.6		711.43	
44197.77	708.2244413.87	704.8344641.29		708.0344722.04		706.7744925.04		706.77	
44952.06	707.2145122.38	706.8145395.25		701.746036.68		683.4546172.51		682.13	
46391.37	688.63 46507.5	693.2147030.73		724.1747326.11		731.648284.11		739.52	
48450.64	741.7548928.29	749.31 49058.7		754.53 49902.8		800			

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521582.58 .1521965.23 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21582.5821965.23 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

Left OB		Channel		Right OB	
E.G. Elev (ft)	759.41	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.26	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549019.00	72191.09	1211382.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1549019.00	72191.09	1211382.00
Q Total (cfs)	7996901.00	Flow (cfs)	5010729.00	402163.20	2584009.00
Top Width (ft)	46182.34	Top Width (ft)	18618.39	382.65	27181.30
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.23	5.57	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.20	188.66	44.57
Conv. Total (cfs)	466389300.0	Conv. (cfs)	292232000.0	23454660.0	150702600.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18638.30	384.35	27219.33
Min Ch El (ft)	565.27	Shear (lb/sq ft)	1.53	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.93	19.21	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	51461.91	2528.32	38656.95
C & E Loss (ft)	0.00	Cum SA (acres)	619.66	13.42	927.55

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267736.*

INPUT

Description:

Station Elevation Data		num= 174		Elev Sta		Elev Sta		Elev Sta	
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800.1237.85	761.59	1409.92	760	1917.96	760	2314.19	766.74	

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2396.57	766.74	2534.68	770	2743.34	770	2832.8	767.79	3138.79	747.88
3668.4	721.9	3926.2	712.91	4532.08	700.9	4635.16	702.96	4766.81	706.12
5556.26	695.6	5753.88	701.4	5998.39	688.57	6036.76	686.74	6710.8	686.74
6957.62	681.93	7211.58	662.47	7311.72	656.74	7407.01	656.74	7531.52	665.18
7805.25	694.37	7866.36	696.74	8049.18	690.23	8105.18	690.23	8144.57	688.69
8276.72	687.27	8356.96	689.56	8486.37	697.87	8723.84	709.6	9113.32	723.49
9349.81	723.49	9372.12	723.05	9514.75	716.46	9626.91	713.49	10489.47	708.64
10825.63	698.26	11134.32	673.57	11163.14	668.74	11319.13	660.21	11564.93	654.2
11630.13	656.18	12070.3	692.39	12409.56	710	12918.14	716.74	12926.78	717.05
13109.73	719.15	13338.14	710.02	13403.71	708.96	13526.03	712.15	13711.73	720
14082.75	720	14139.97	714.73	14229.21	707.03	14510.08	708.65	14703.35	724.42
14776.91	730	15207.25	730	15746.93	709.77	15932.43	678.89	15949.55	675.03
16098.37	658.11	16296.09	630.95	16317.7	629.25	16569.33	621.15	17008.51	614.21
17122.2	613.26	19487.55	613.26	19707.23	620	20081.39	620	20485.65	599.77
20656.03	599.77	20749.43	596.51	20999.81	593.26	21537.92	590.04	21545.3	588.9
21583.06	580	21624.35	574	21677.28	569.18	21730.21	565.27	21929.29	572.49
21965.87	580	22046.14	615.58	22105.64	625.06	22304.49	661.73	22365.34	665.86
22648.66	671.47	22724.21	674.71	23565.33	725.91	23847.35	731.01	24273.46	731.98
24524.2	736.51	24752.07	731.75	25266.69	714.25	25303.31	711.35	25579.07	695.21
25727.8	696.42	25774.56	699.53	25823.52	699.53	26071.09	706.29	26442.23	713.16
26590.5	717.21	26846.43	730.72	27344.12	744.28	27553.7	747.18	27933.5	742.08
28313.05	730.32	28369.71	729.32	29086.27	725.67	29153.55	726.51	30188.6	726.51
30553.98	733.26	31998.03	713.02	32472.52	719.77	33219.11	719.77	34134.22	716.51
34301.37	716.51	34656.6	719	34765.06	718.24	35137.27	713.02	35550.79	713.02
36092.86	700	36098.59	699.15	36246.8	644.84	36407.37	609.77	36431.89	610.97
36544.26	618.33	37017.71	632.72	37439.55	689.59	37529.26	700.23	37962.73	702.19
38109.11	696.34	38163.89	696.59	38542.59	711.32	39023.74	719.51	39322.64	723.26
39796.71	724.58	40171.36	739.12	40394.71	739.75	40485.18	737.75	40938.16	726.51
41537.18	740	41881.92	731.9	42203	727.62	42329.55	724.64	42398.67	722.15
42501.59	720.86	42847.07	725.64	43014.16	730	43099.59	730	44108.77	711.49
44202.96	708.28	44419.1	704.87	44646.57	708.02	44727.34	706.74	44930.38	706.74
44957.4	707.19	45127.75	706.82	45400.68	701.73	46042.24	683.48	46178.1	682.15
46397	688.64	46513.16	693.16	47036.5	724.13	47331.94	731.59	48290.13	739.52
48456.7	741.74	48934.45	749.34	9064.88	754.51	49909.15	800		

Manning's n Values num= 3
Sta n Val Sta n Val
0 .1521583.06 .1521965.87 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
21583.0621965.87 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.41	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.26	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549033.00	72218.40	1211109.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1549033.00	72218.40	1211109.00
Q Total (cfs)	7996901.00	Flow (cfs)	5011455.00	402372.20	2583075.00
Top width (ft)	46189.13	Top width (ft)	18619.16	382.81	27187.16
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.24	5.57	2.13
Max Ch Dpth (ft)	193.99	Hydr. Depth (ft)	83.20	188.65	44.55
Conv. Total (cfs)	466316100.0	Conv. (cfs)	292228400.0	23463160.0	150624500.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18639.05	384.50	27225.18
Min Ch El (ft)	565.27	Shear (lb/sq ft)	1.53	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.94	19.21	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	51284.46	2520.04	38518.20
C & E Loss (ft)	0.00	Cum SA (acres)	617.53	13.38	924.43

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS RS: 267731.*

INPUT

Description: Station Elevation Data num= 174									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.87	761.6	1409.96	760	1918	760	2314.24	766.72
2396.63	766.72	2534.74	770	2743.4	770	2832.86	767.77	3138.86	747.86
3668.48	721.92	3926.29	712.93	4532.18	700.9	4635.26	702.95	4766.92	706.09
5556.39	695.57	5754.01	701.34	5998.52	688.54	6036.89	686.72	6710.95	686.72
6957.77	681.87	7211.74	662.42	7311.88	656.72	7407.18	656.72	7531.68	665.13
7805.43	694.33	7866.54	696.72	8049.36	690.16	8105.36	690.16	8144.75	688.62
8276.9	687.25	8357.15	689.55	8486.56	697.88	8724.04	709.6	9113.52	723.44
9350.02	723.44	9372.33	723	9514.96	716.4	9627.13	713.44	10489.71	708.61
10825.88	698.26	11134.57	673.49	11163.39	668.64	11319.39	660.13	11565.19	654.23
11630.39	656.22	12070.57	692.45	12409.83	710	12918.43	716.72	12927.07	717.02
13110.02	719.07	13338.43	709.92	13404.01	708.86	13526.33	712.09	13712.04	720
14083.07	720	14140.29	714.75	14229.53	707.08	14510.41	708.71	14703.67	724.44
14777.24	730	15207.59	730	15747.28	709.84	15932.79	679.07	15949.91	675.21
16098.73	658.24	16296.46	631.02	16318.06	629.32	16569.71	621.18	17008.89	614.23
17122.58	613.28	19487.98	613.28	19707.67	620	20081.84	620	20486.11	599.84
20656.49	599.84	20749.89	596.56	21000.28	593.28	21538.4	590.04	21545.78	588.9
21583.54	580	21624.96	573.99	21678.05	569.17	21731.15	565.27	21929.97	572.51
21966.51	580	22046.8	615.7	22106.3	625.14	22305.2	661.74	22366.06	665.87
22649.44	671.4	22725	674.62	23566.3	725.81	23848.37	730.95	24274.57	731.99
24525.36	736.56	24753.28	731.76	25268.01	714.21	25304.63	711.31	25580.45	695.23
25729.21	696.54	25775.97	699.67	25824.95	699.67	26072.57	706.42	26443.79	713.22
26592.09	717.25	26848.07	730.77	27345.86	744.32	27555.48	747.16	27935.36	742.02
28314.99	730.25	28371.66	729.26	29088.36	725.71	29155.66	726.56	30190.92	726.56
30556.38	733.28	32000.72	713.11	32475.31	719.84	33222.05	719.84	34137.34	716.56
34304.54	716.56	34659.84	719.07	34768.32	718.32	35140.96	713.11	35554.21	713.11
36096.39	700	36102.12	699.15	36250.36	644.79	36410.96	609.84	36435.49	611.04
36547.88	618.39	37021.43	632.81	37443.35	689.56	37533.08	700.16	37966.64	702.11
38113.05	696.21	38167.84	696.46	38546.62	711.28	39027.84	719.51	39326.83	723.28
39801	724.62	40175.72	739.11	40399.11	739.74	40489.6	737.76	40942.67	726.56
41541.82	740	41886.63	731.93	42207.79	727.69	42334.36	724.73	42403.49	722.24
42506.43	720.93	42851.98	725.62	43019.11	730	43104.55	730	44113.93	711.56
44208.14	708.34	44424.33	704.94	44651.84	708.01	44732.63	706.72	44935.71	706.72
44962.74	707.17	45133.13	706.83	45406.11	701.76	46047.8	683.54	46183.69	682.16
46402.64	688.57	46518.82	693.12	47042.27	724.08	47337.77	731.58	48296.16	739.51
48462.75	741.74	48940.6	749.34	49071.06	754.54	49915.51	800		

SS_Rev3.rep

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521583.54 .1521966.51 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21583.5421966.51 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.41	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.26	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549078.00	72246.39	1210833.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1549078.00	72246.39	1210833.00
Q Total (cfs)	7996901.00	Flow (cfs)	5012248.00	402575.70	2582077.00
Top Width (ft)	46195.68	Top Width (ft)	18619.86	382.97	27192.85
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.24	5.57	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.19	188.65	44.53
Conv. Total (cfs)	466253800.0	Conv. (cfs)	292235600.0	23471890.0	150546200.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18639.72	384.66	27230.85
Min Ch El (ft)	565.27	Shear (lb/sq ft)	1.53	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.94	19.22	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	51107.00	2511.77	38379.48
C & E Loss (ft)	0.00	Cum SA (acres)	615.39	13.33	921.32

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267726.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.9	761.61	1409.99	760	1918.04	760	2314.29	766.7				
2396.68	766.7	2534.8	770	2743.46	770	2832.93	767.76	3138.93	747.83				
3668.56	721.93	3926.37	712.96	4532.28	700.91	4635.37	702.94	4767.02	706.06				
5556.51	695.54	5754.13	701.28	5998.65	688.51	6037.03	686.7	6711.1	686.7				
6957.93	681.82	7211.9	662.38	7312.04	656.7	7407.34	656.7	7531.85	665.07				
7805.6	694.29	7866.71	696.7	8049.54	690.09	8105.54	690.09	8144.93	688.56				
8277.09	687.23	8357.34	689.55	8486.75	697.89	8724.23	709.6	9113.72	723.4				
9350.23	723.4	9372.54	722.95	9515.17	716.34	9627.34	713.4	10489.94	708.58				
10826.12	698.09	11134.82	673.41	11163.64	668.54	11319.64	660.06	11565.45	654.26				
11630.65	656.27	12070.84	692.51	12410.11	71012918.71		716.71	12927.36	717				
13110.32	718.99	13338.73	709.81	13404.31	708.76	13526.63	712.04	13712.34	720				
14083.38	72014140.61		714.77	14229.85	707.13	14510.73	708.77	14704	724.46				
14777.57	73015207.93		73015747.63		709.91	15933.15	679.25	15950.27	675.39				
16099.09	658.39	16296.82	631.09	16318.43	629.38	16570.07	621.21	17009.27	614.25				
17122.96	613.31	19488.42	613.31	19708.11	62020082.29		62020486.56		599.91				
20656.95	599.91	20750.35	596.62	1000.75	593.32	1538.88	590.04	21546.27	588.9				
21584.02	58021625.57		573.97	1678.82	569.16	1732.08	565.27	1930.66	572.52				
21967.15	58022047.45		615.82	22106.97	625.23	232305.91	661.75	2366.78	665.89				
22650.21	671.32	22725.79	674.53	23567.27	725.71	23849.4	730.89	24275.68	732				
24526.52	736.62	24754.48	731.78	25269.32	714.17	25305.96	711.27	25581.83	695.25				
25730.62	696.65	25777.39	699.81	25826.38	699.81	26074.05	706.52	26445.34	713.28				
26593.67	717.29	26849.7	730.83	27347.6	744.32	27557.27	747.14	27937.22	741.97				
28316.93	730.18	28373.61	729.19	29090.46	725.75	29157.77	726.63	10193.24	726.6				
30558.78	733.33	30203.41	713.21	32478.1	719.91	33224.99	719.91	34140.47	716.6				
34307.7	716.63	34663.07	719.13	34771.58	718.39	35143.93	713.21	35557.62	713.21				
36099.92	70036105.65		699.14	36253.91	644.74	36414.55	609.91	36439.09	611.11				
36551.5	618.45	37025.15	632.93	7447.16	689.52	37536.9	700.09	37970.55	702.04				
38117	696.09	38171.79	696.33	38550.64	711.24	39031.99	719.51	39331.02	723.3				
39805.28	724.65	40180.08	739.11	40403.52	739.74	40494.03	737.77	40947.19	726.6				
41546.46	74041891.34		731.96	42212.56	727.77	42339.16	724.82	42408.3	722.33				
42511.27	721.01	42856.89	725.63	43024.05	73043109.52		730	44119.1	711.62				
44213.33	708.44	44429.56	704.94	44657.12	707.99	44737.93	706.74	44941.05	706.7				
44968.08	707.15	45138.5	706.84	45411.54	701.79	46053.36	683.53	46189.28	682.18				
46408.27	688.54	46524.48	693.07	47048.03	724.04	47343.59	731.58	48302.18	739.51				
48468.81	741.73	48946.76	749.29	49077.24	754.48	49921.86	800						

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521584.02 .1521967.15 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21584.0221967.15 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.41	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.26	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549112.00	72275.76	1210557.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1549112.00	72275.76	1210557.00
Q Total (cfs)	7996901.00	Flow (cfs)	5013017.00	402794.20	2581090.00
Top Width (ft)	46202.38	Top Width (ft)	18620.53	383.13	27198.72
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.24	5.57	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.19	188.65	44.51
Conv. Total (cfs)	466188500.0	Conv. (cfs)	292239600.0	23481350.0	150467600.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18640.38	384.82	27236.71
Min Ch El (ft)	565.27	Shear (lb/sq ft)	1.53	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.94	19.23	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	50929.55	2503.49	38240.79
C & E Loss (ft)	0.00	Cum SA (acres)	613.26	13.29	918.20

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267721.*

INPUT

SS_Rev3.rep

Description:
Station Elevation Data

Sta	Elev	Sta	num=	174	Elev	Sta	Elev	Sta	Elev
0	800	1237.93	761.62	1410.02	760	1918.09	760	2314.35	766.67
2396.73	766.67	2534.85	770	2743.52	770	2832.99	767.74	3139	747.8
3668.64	721.94	3926.46	712.98	4532.38	700.92	4635.47	702.93	4767.13	706.03
5556.64	695.51	5754.26	701.22	5998.79	688.49	6037.16	686.67	6711.25	686.67
6958.08	681.76	7212.06	662.34	7312.21	656.67	7407.51	656.67	7532.02	665.02
7805.77	694.25	7866.89	696.67	8049.72	690.02	8105.73	690.02	8145.12	688.49
8277.27	687.21	8357.53	689.55	8486.94	697.89	8724.42	709.6	9113.93	723.35
9350.44	723.35	9372.75	722.9	9515.39	716.29	9627.56	713.35	10490.18	708.55
10826.36	698.01	11135.07	673.33	11163.89	668.44	11319.89	659.99	11565.71	654.29
11630.92	656.31	12071.11	692.57	12410.39	710	12919	716.67	12927.65	716.98
13110.61	718.91	13339.03	709.71	13404.61	708.66	13526.93	711.98	13712.65	720
14083.7	72014140.92	714.78	14230.16	707.18	14511.06	708.84	14704.33	724.48	
14777.9	73015208.27	73015747.98	709.98	15933.5	679.42	15950.62	679.42	15950.62	675.57
16099.45	658.53	16297.19	631.15	16318.79	629.45	16570.45	621.24	17009.65	614.27
17123.35	613.33	19488.86	613.33	19708.55	62020082.74	62020487.02	599.98		
20657.41	599.98	20750.82	596.65	21001.22	593.33	21539.36	590.05	21546.75	588.91
21584.51	58021626.18	573.96	21679.6	569.15	21733.02	565.27	21931.34	572.54	
21967.79	58022048.11	615.94	22107.64	625.32	22306.62	661.77	22367.5	665.9	
22650.99	671.25	22726.59	674.45	23568.23	725.61	23850.42	730.82	24276.79	732.02
24527.68	736.65	24755.69	731.79	25270.64	714.13	25307.28	711.23	25583.21	695.26
25732.03	696.77	25778.81	699.95	25827.81	699.95	26075.53	706.64	26446.9	713.34
26595.26	717.34	26851.34	730.92	27349.34	744.34	27559.05	747.12	27939.08	741.91
28318.87	730.11	28375.56	729.12	29092.55	725.79	29159.88	726.65	30195.56	726.65
30561.17	733.33	32006.1	713.33	32480.88	719.98	33227.93	719.98	34143.6	716.65
34310.86	716.65	34666.3	719.23	34774.83	718.47	35147.26	713.33	35561.04	713.3
36103.45	70036109.18	699.13	36257.47	644.69	36418.14	609.98	36442.69	611.17	
36555.12	618.51	37028.87	632.99	37450.96	689.49	37540.72	700.02	37974.46	701.96
38120.94	695.96	38175.75	696.21	38554.68	711.23	39036.12	719.53	39335.21	723.33
39809.57	724.68	40184.45	739.14	40407.93	739.74	40498.46	737.78	40951.71	726.65
41551.11	74041896.05	731.99	42217.34	727.85	42343.96	724.91	42413.12	722.41	
42516.11	721.09	42861.8	725.65	43029	73043114.48	73044124.27	711.69		
44218.52	708.46	44434.79	704.97	44662.4	707.98	44743.22	706.67	44946.38	706.67
44973.42	707.13	45143.88	706.86	45416.98	701.82	46058.93	683.55	46194.87	682.19
46413.91	688.51	46530.14	693.03	47053.8	72447349.42	731.57	48308.2	739.51	
48474.87	741.73	48952.91	749.29	49083.42	754.47	49928.21	800		

Manning's n Values

Sta	n Val	Sta	num=	3	n Val	Sta	n Val
0	.1521584.51	.1521967.79	.15				

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

21584.51	21967.79	4.99	4.99	4.99	.1	.3
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CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.40	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.25	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549143.00	72301.24	1210255.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1549143.00	72301.24	1210255.00
Q Total (cfs)	7996901.00	Flow (cfs)	5013841.00	402994.00	2580066.00
Top Width (ft)	46209.00	Top Width (ft)	18621.30	383.28	27204.41
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.24	5.57	2.13
Max Chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.19	188.64	44.49
Conv. Total (cfs)	466114500.0	Conv. (cfs)	292241200.0	23489270.0	150384000.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18641.13	384.96	27242.40
Min Ch El (ft)	565.27	Shear (lb/sq ft)	1.53	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.94	19.24	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	50752.09	2495.21	38102.13
C & E Loss (ft)	0.00	Cum SA (acres)	611.13	13.24	915.09

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267716.*

INPUT
 Description:
 Station Elevation Data

Sta	Elev	Sta	num=	174	Elev	Sta	Elev	Sta	Elev
0	800	1237.96	761.63	1410.05	760	1918.13	760	2314.4	766.65
2396.79	766.65	2534.91	770	2743.58	770	2833.05	767.73	3139.07	747.78
3668.73	721.96	3926.55	713	4532.49	700.92	4635.58	702.92	4767.24	706
5556.76	695.47	5754.39	701.15	5998.92	688.46	6037.3	686.65	6711.4	686.65
6958.24	681.7	7212.22	662.29	7312.37	656.65	7407.68	656.65	7532.19	664.97
7805.95	694.21	7867.06	696.65	8049.9	689.95	8105.91	689.95	8145.13	688.43
8277.46	687.19	8357.71	689.55	8487.13	697.9	8724.62	709.6	9114.13	723.3
9350.65	723.3	9372.96	722.85	9515.6	716.23	9627.77	713.31	10490.41	708.52
10826.6	697.92	11135.32	673.24	11164.13	668.34	11320.14	659.92	11565.97	654.32
11631.17	656.36	12071.38	692.63	12410.67	71012919.29	716.65	12927.94	716.95	
13110.9	718.83	13339.33	709.61	13404.91	708.56	13527.23	711.92	13712.96	720
14084.01	72014141.24	714.81	14230.48	707.23	14511.38	708.91	14704.66	724.5	
14778.23	73015208.61	73015748.33	710.05	15933.86	679.61	15950.98	679.61	15950.98	675.75
16099.81	658.68	16297.55	631.22	16319.16	629.52	16570.82	621.27	17010.03	614.29
17123.73	613.35	19489.29	613.35	19708.99	62020083.19	62020487.48	600.05		
20657.87	600.05	20751.28	596.72	21001.69	593.35	21539.84	590.05	21547.23	588.91
21584.99	58021626.79	573.95	21680.37	569.14	21733.96	565.27	21932.03	572.56	
21968.43	58022048.76	616.06	22108.31	625.42	22307.33	661.78	22368.22	665.92	
22651.77	671.17	22727.38	674.36	23569.2	725.51	23851.45	730.76	24277.91	732.03
24528.85	736.7	24756.9	731.82	25271.95	714.09	25308.6	711.19	25584.58	695.28
25733.44	696.89	25780.23	700.09	25829.23	700.09	26077.01	706.76	26448.45	713.39
26596.84	717.38	26852.98	730.97	27351.07	744.36	27560.83	747.12	27940.94	741.85
28320.8	730.03	28377.51	729.05	29094.65	725.84	29161.99	726.73	30197.88	726.7
30563.57	733.35	303008.79	713.43	32483.67	720.05	33230.88	720.05	34146.73	716.7
34314.02	716.73	34669.54	719.26	34778.09	718.55	35150.59	713.43	35564.46	713.4
36106.97	70036112.71	699.13	36261.04	644.63	36421.74	610.05	36446.29	611.24	
36558.74	618.57	37032.59	633.08	37454.77	689.46	37544.54	699.95	37978.38	701.88
38124.88	695.84	38179.7	696.08	38558.7	711.16	39040.25	719.5	39339.4	723.35
39813.85	724.74	40188.81	739.14	40412.34	739.74	40502.88	737.79	40956.23	726.7
41555.75	74041900.77	732.02	42222.12	727.93	42348.77	72542417.94	72542417.94	722.5	
42520.95	721.17	42866.71	725.66	43033.94	73043119.44	73044129.44	711.75		

44223.7 708.5244440.02 705.0144667.68 707.9644748.51 706.6544951.72 706.65
 44978.77 707.1145149.26 706.8745422.41 701.8546064.49 683.5846200.46 682.21
 46419.54 688.48 46535.8 692.9847059.56 723.9647355.25 731.5748314.22 739.5
 48480.92 741.7248959.07 749.28 49089.6 754.4549934.57 800

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521584.99 .1521968.43 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21584.9921968.43 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.40	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.25	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549195.00	72328.99	1209960.00
E.G. Slope (ft/ft)	0.000294	Area (sq ft)	1549195.00	72328.99	1209960.00
Q Total (cfs)	7996901.00	Flow (cfs)	5014701.00	403197.80	2579003.00
Top Width (ft)	46215.63	Top Width (ft)	18621.91	383.44	27210.28
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.24	5.57	2.13
Max chl Dpth (ft)	193.98	Hydr. Depth (ft)	83.19	188.63	44.47
Conv. Total (cfs)	466050800.0	Conv. (cfs)	292251400.0	23497930.0	150301500.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18641.72	385.12	27248.25
Min Ch El (ft)	565.27	Shear (lb/sq ft)	1.53	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.94	19.24	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	50574.62	2486.93	37963.50
C & E Loss (ft)	0.00	Cum SA (acres)	608.99	13.20	911.97

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267711.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1237.98	761.65	1410.08	760	1918.17	760	2314.45	766.63		
2396.84	766.63	2534.97	770	2743.65	770	2833.12	767.71	3139.14	747.75		
3668.81	721.97	3926.64	713.02	4532.59	700.93	4635.68	702.91	4767.34	705.98		
5556.88	695.44	5754.52	701.09	5999.06	688.43	6037.43	686.63	6711.55	686.63		
6958.4	681.64	7212.38	662.25	7312.53	656.63	7407.84	656.63	7532.36	664.92		
7806.12	694.17	7867.24	696.63	8050.08	689.88	8106.09	689.88	8145.48	688.36		
8277.64	687.17	8357.9	689.54	8487.32	697.91	8724.82	709.6	9114.33	723.26		
9350.86	723.26	9373.17	722.8	9515.81	716.17	9627.99	713.26	10490.65	708.49		
10826.84	697.84	11135.57	673.16	11164.38	668.24	11320.4	659.85	11566.22	654.35		
11631.43	656.41	12071.65	692.69	12410.94	710	12919.58	716.63	12928.23	716.93		
13111.2	718.76	13339.63	709.51	13405.21	708.46	13527.54	711.87	13713.26	720		
14084.33	720.14	1411.55	714.82	14230.8	707.28	14511.7	708.96	14704.99	724.52		
14778.56	730.15	15208.95	730.15	15748.69	710.12	15934.21	679.78	15951.34	675.93		
16100.17	658.82	16297.92	631.28	16318.52	629.58	16571.19	621.31	17010.41	614.31		
17124.11	613.37	19489.73	613.37	19709.43	620	20083.64	620	20487.94	600.12		
20658.33	600.12	20751.74	596.74	21002.16	593.37	21540.32	590.05	21547.71	588.92		
21585.47	580.21	1627.39	573.93	21681.14	569.13	21734.89	565.26	21932.71	572.58		
21969.07	580.22	2049.42	616.18	22108.98	625.49	22308.04	661.79	22368.95	665.93		
22652.55	671.12	122728.18	674.28	23570.17	725.41	23852.47	730.69	24279.02	732.05		
24530.01	736.74	24758.11	731.81	25273.27	714.05	25309.92	711.15	25585.96	695.3		
25734.84	697.01	25781.65	700.23	25830.66	700.23	26078.49	706.87	26450.01	713.45		
26598.43	717.43	26854.62	731.04	27352.81	744.38	27562.61	747.08	27942.8	741.79		
28322.74	729.96	28379.46	728.99	29096.74	725.88	29164.1	726.74	30200.2	726.74		
30565.96	733.37	32011.49	713.49	32486.46	720.12	33233.82	720.12	34149.86	716.74		
34317.18	716.74	344672.77	719.33	34781.35	718.62	35153.93	713.49	35567.88	713.49		
36110.5	700.36	116.24	699.12	36264.59	644.58	36425.33	610.12	36449.88	611.3		
36562.36	618.62	37036.3	633.18	37458.57	689.42	37548.37	699.88	37982.29	701.81		
38128.82	695.71	38183.65	695.95	38562.73	711.12	39044.38	719.53	39343.59	723.37		
39818.14	724.75	40193.17	739.09	40416.75	739.74	40507.31	737.79	40960.75	726.74		
41560.39	740.41	1905.48	732.04	42226.89	728.01	42353.57	725.08	42422.76	722.59		
42525.79	721.25	42871.62	725.68	43038.88	730	43124.4	730	44134.61	711.81		
44228.89	708.58	44445.25	705.04	44672.95	707.95	44753.81	706.63	44957.05	706.63		
44984.11	707.09	45154.63	706.88	45427.84	701.88	46070.05	683.64	46206.05	682.22		
46425.18	688.45	46541.46	692.93	47065.33	723.92	47361.07	731.56	48320.25	739.5		
48486.98	741.71	48965.22	749.28	49095.78	754.43	49940.92	800				

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521585.47 .1521969.07 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21585.4721969.07 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.40	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.25	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549230.00	72358.45	1209710.00
E.G. Slope (ft/ft)	0.000295	Area (sq ft)	1549230.00	72358.45	1209710.00
Q Total (cfs)	7996901.00	Flow (cfs)	5015409.00	403413.60	2578079.00
Top Width (ft)	46222.41	Top Width (ft)	18622.67	383.60	27216.14
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.24	5.58	2.13
Max chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.19	188.63	44.45
Conv. Total (cfs)	465990400.0	Conv. (cfs)	292254800.0	23507460.0	150228200.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18642.46	385.27	27254.10
Min Ch El (ft)	565.26	Shear (lb/sq ft)	1.53	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.95	19.25	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	50397.15	2478.64	37824.91
C & E Loss (ft)	0.00	Cum SA (acres)	606.86	13.16	908.85

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267706.*

SS_Rev3.rep

INPUT

Description:

Station Elevation Data		num=	174										
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.01	761.66	1410.11	760	1918.22	760	2314.5	766.6				
2396.89	766.6	2535.02	770	2743.71	770	2833.18	767.7	3139.21	747.72				
3668.89	721.98	3926.73	713.04	4532.69	700.94	4635.78	702.9	4767.45	705.95				
5557.01	695.41	5754.65	701.03	5999.19	688.4	6037.57	686.6	6711.7	686.6				
6958.55	681.58	7212.54	662.21	7312.7	656.6	7408.01	656.6	7532.53	664.86				
7806.3	694.13	7867.42	696.6	8050.26	689.81	8106.27	689.81	8145.66	688.3				
8277.83	687.15	8358.09	689.54	8487.51	697.92	8725.01	709.61	9114.54	723.21				
9351.06	723.21	9373.38	722.75	9516.02	716.12	9628.2	713.2110490.88		708.46				
10827.09	697.7511135.82		673.0811164.63		668.1411320.65		659.7811566.48		654.38				
11631.69	656.4512071.92		692.7512411.22		71012919.87		716.612928.52		716.9				
13111.49	718.6813339.92		709.413405.51		708.3613527.84		711.8113713.57		720				
14084.64	72014141.87		714.8414231.12		707.3314512.03		709.0214705.32		724.54				
14778.89	73015209.29		73015749.04		710.1915934.57		679.9615951.69		676.12				
16100.53	658.9716298.28		631.3516319.89		629.6516571.56		621.3317010.79		614.33				
17124.5	613.419490.16		613.419709.87		62020084.09		620	20488.4	600.19				
20658.8	600.1920752.21		596.7921002.63		593.421540.81		590.0521548.19		588.92				
21585.95	58021628.01		573.9221681.92		569.1121735.83		565.26	21933.4	572.59				
21969.71	58022050.08		616.2922109.64		625.5822308.75		661.822369.67		665.95				
22653.33	671.0322728.97		674.1923571.13		725.3123853.49		730.6324280.13		732.06				
24531.17	736.7924759.32		731.8325274.58		714.0125311.24		711.1125587.34		695.31				
25736.25	697.1325783.07		700.3725832.09		700.3726079.96		706.9326451.56		713.51				
26600.01	717.4726856.25		731.127354.55		744.427564.39		747.0627944.66		741.74				
28324.68	729.8928381.41		728.9229098.84		725.9229166.21		726.7930202.52		726.79				
30568.36	733.432014.18		713.5832489.25		720.1933236.75		720.1934152.98		716.79				
34320.34	716.7934676.01		719.39	34784.6	718.735157.26		713.5835571.29		713.58				
36114.03	70036119.77		699.1236268.15		644.5336428.92		610.1936453.48		611.37				
36565.98	618.6837040.02		633.2737462.37		689.3937552.19		699.81	37986.2	701.73				
38132.76	695.58	38187.6	695.8338566.76		711.08	39048.5	719.4939347.78		723.4				
39822.42	724.7840197.53		739.0840421.15		739.7440511.73		737.840965.27		726.79				
41565.03	74041910.19		732.0742231.67		728.0842358.38		725.1742427.57		722.68				
42530.63	721.3342876.53		725.6943043.82		73043129.36		73044139.77		711.88				
44234.08	708.6444450.48		705.0844678.23		707.93	44759.1	706.644962.39		706.6				
44989.45	707.0745160.01		706.8945433.27		701.946075.61		683.6346211.64		682.24				
46430.81	688.4246547.12		692.8947071.09		723.87	47366.9	731.5648326.27		739.5				
48493.04	741.7148971.38		749.2749101.96		754.4249947.27		800						

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val
0	.1521585.95				

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
21585.95	21969.71	4.99	4.99	4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.40	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-val.	0.150	0.150	0.150
W.S. Elev (ft)	759.25	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549257.00	72388.20	1209414.00
E.G. Slope (ft/ft)	0.000295	Area (sq ft)	1549257.00	72388.20	1209414.00
Q Total (cfs)	7996901.00	Flow (cfs)	5016199.00	403639.70	2577063.00
Top width (ft)	46228.94	Top width (ft)	18623.35	383.76	27221.83
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.24	5.58	2.13
Max Ch Dpth (ft)	193.99	Hydr. Depth (ft)	83.19	188.63	44.43
Conv. Total (cfs)	46591950.0	Conv. (cfs)	292256300.0	23517060.0	150146100.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18643.12	385.43	27259.79
Min Ch El (ft)	565.26	Shear (lb/sq ft)	1.53	3.45	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.95	19.26	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	50219.68	2470.35	37686.35
C & E Loss (ft)	0.00	Cum SA (acres)	604.73	13.11	905.74

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267701.*

INPUT

Description:

Station Elevation Data		num=	174										
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.04	761.67	1410.14	760	1918.26	760	2314.55	766.58				
2396.95	766.58	2535.08	770	2743.77	770	2833.24	767.68	3139.29	747.69				
3668.97	722	3926.81	713.06	4532.79	700.94	4635.89	702.89	4767.56	705.92				
5557.13	695.38	5754.78	700.97	5999.32	688.37	6037.7	686.58	6711.85	686.58				
6958.71	685.53	7212.7	662.16	7312.86	656.58	7408.17	656.58	7532.69	664.81				
7806.47	694.08	7867.59	696.58	8050.44	689.74	8106.45	689.74	8145.84	688.23				
8278.01	687.13	8358.27	689.54	8487.7	697.92	8725.21	709.61	9114.74	723.16				
9351.27	723.16	9373.59	722.7	9516.24	716.06	9628.42	713.1610491.12		708.43				
10827.33	697.6711136.06		67311164.88		668.04	11320.9	659.7111566.74		654.41				
11631.95	656.4912072.19		692.81	12411.5	71012920.16		716.5812928.81		716.88				
13111.78	718.613340.22		709.2913405.81		708.2613528.14		711.7513713.88		720				
14084.96	72014142.19		714.8614231.44		707.3814512.35		709.0814705.65		724.56				
14779.22	73015209.63		73015749.39		710.2615934.93		680.1315952.05		676.3				
16100.88	659.1216298.64		631.4216320.25		629.7216571.93		621.3617011.17		614.35				
17124.88	613.42	19490.6	613.4219710.31		62020084.54		62020488.85		600.26				
20659.26	600.2620752.67		596.84	21003.1	593.4221541.29		590.0521548.67		588.92				
21586.44	58021628.02		573.921682.69		569.121736.77		565.2621934.09		572.61				
21970.34	58022050.73		616.4122110.31		625.6622309.46		661.8222370.39		665.96				
22654.11	670.9522729.77		674.11	23572.1	725.223854.52		730.5624281.24		732.08				
24532.33	736.8424760.53		731.8425275.89		713.9725312.56		711.0725588.72		695.33				
25737.66	697.2425784.48		700.5225833.52		700.5226081.44		707.1126453.12		713.57				
26601.6	717.5226857.89		731.1727356.29		744.4227566.18		747.0427946.52		741.68				
28326.61	729.8228383.36		728.8529100.93		725.9629168.31		726.8430204.84		726.84				
30570.75	733.4323016.87		713.6832492.04		720.26	33239.7	720.2634156.11		716.84				
34323.5	716.8434679.24		719.4634787.86		718.7735160.59		713.6835574.71		713.68				
36117.56	700	36123.3	699.1136271.71		644.4836432.52		610.2636457.08		611.44				
36569.6	618.7437043.74		633.3637466.18		689.3637556.01		699.7437990.11		701.65				

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38136.7	695.4638191.55	695.738570.79	711.0439052.63	719.4939351.96	723.42	SS_Rev3.rep	
39826.71	724.8140201.89	739.0840425.56	739.7340516.16	737.8140969.79	726.84		
41569.67	740.41914.9	732.142236.45	728.1642363.18	725.2642432.39	722.76		
42535.47	721.442881.44	725.7143048.77	73043134.32	73044144.94	711.94		
44239.26	708.744455.71	705.1144683.51	707.9244784.39	706.5844967.73	706.58		
44994.79	707.0545165.39	706.945438.7	701.9346081.18	683.6546217.23	682.25		
46436.45	688.3946552.77	692.8447076.86	723.8347372.73	731.5548332.29	739.49		
48499.09	741.748977.53	749.2749108.14	754.449953.63	800			
Manning's n Values							
Sta	n Val	Sta	n Val	Sta	n Val		
0	.1521586.44		.1521970.34		.15		
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.							
21586.4421970.34		4.99	4.99	4.99	.1	.3	
CROSS SECTION OUTPUT Profile #PF 1							
E.G. Elev (ft)	759.40	Element	Left OB	Channel	Right OB		
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150		
W.S. Elev (ft)	759.25	Reach Len. (ft)	4.99	4.99	4.99		
Crit W.S. (ft)		Flow Area (sq ft)	1549309.00	72412.54	1209131.00		
E.G. Slope (ft/ft)	0.000295	Area (sq ft)	1549309.00	72412.54	1209131.00		
Q Total (cfs)	7996901.00	Flow (cfs)	5017036.00	403826.60	2576039.00		
Top width (ft)	46235.72	Top width (ft)	18624.12	383.90	27227.70		
Vel Total (ft/s)	2.82	Avg. Vel. (ft/s)	3.24	5.58	2.13		
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.19	188.62	44.41		
Conv. Total (cfs)	465855500.0	Conv. (cfs)	292264900.0	23524720.0	150065900.0		
Length wtd. (ft)	4.99	wetted Per. (ft)	18643.87	385.57	27265.65		
Min Ch El (ft)	565.26	Shear (lb/sq ft)	1.53	3.45	0.82		
Alpha	1.20	Stream Power (lb/ft s)	4.95	19.27	1.74		
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	50042.20	2462.06	37547.82		
C & E Loss (ft)	0.00	Cum SA (acres)	602.59	13.07	902.62		

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267696.*

INPUT

Description:

Station Elevation Data									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800.1238.07	761.68	1410.18	760	1918.3	760	2314.6	766.56	
2397	766.56 2535.14	770	2743.83	770	2833.31	767.66	3139.36	747.67	
3669.05	722.01 3926.9	713.08	4532.89	700.95	4635.99	702.88	4767.66	705.89	
5557.26	695.35 5754.91	700.91	5999.46	688.34	6037.84	686.56	6712	686.56	
6958.86	681.47 7212.86	662.12	7313.02	656.56	7408.34	656.56	7532.86	664.76	
7806.65	694.04 7867.77	696.56	8050.62	689.67	8106.63	689.67	8146.03	688.17	
8278.2	687.11 8358.46	689.53	8487.89	697.93	8725.4	709.61	9114.94	723.11	
9351.48	723.11 9373.79	722.65	9516.45	716	9628.63	713.11	10491.35	708.4	
10827.57	697.5811136.31	672.9211165.13	667.9411321.16	659.64	11567	654.44			
11632.21	656.5312072.46	692.8712411.78	71012920.45	716.5612929.09	716.85				
13112.08	718.5213340.52	709.1913406.11	708.1613528.44	711.713714.18	720				
14085.27	720.14142.5	714.8814231.75	707.4314512.68	709.1514705.98	724.58				
14779.55	73015209.97	73015749.74	710.3315935.28	680.3115952.41	676.48				
16101.25	659.2616299.01	631.4816320.62	629.78 16572.3	621.3917011.55	614.37				
17125.26	613.4419491.03	613.4419710.75	62020084.98	62020489.31	600.33				
20659.72	600.3320753.13	596.8921003.57	593.4421541.77	590.0521549.15	588.93				
21586.92	58021629.22	573.8921683.46	569.0921737.71	565.2621934.77	572.63				
21970.98	58022051.39	616.5322110.98	625.7522310.16	661.8322371.11	665.97				
22654.89	670.8822730.56	674.0223573.06	725.123855.54	730.524282.35	732.09				
24533.5	736.8924761.74	731.8525277.21	713.9225313.89	711.03 25590.1	695.35				
25739.07	697.36 25785.9	700.6625834.95	700.6626082.92	707.2226454.67	713.63				
26603.18	717.5626859.53	731.2427358.03	744.4427567.96	747.0227948.38	741.62				
28328.55	729.7528385.31	728.7929103.03	72629170.42	726.8930207.17	726.89				
30573.15	733.4432019.56	713.7732494.82	720.333242.64	720.3334159.24	716.89				
34326.67	716.8934682.48	719.5234791.12	718.8535163.93	713.7735578.13	713.77				
36121.09	70036126.82	699.136275.27	644.4336436.11	610.3336460.68	611.5				
36573.22	618.837047.46	633.4537469.98	689.3237559.83	699.6737994.02	701.57				
38140.64	695.33 38195.5	695.5738574.82	71139056.76	719.4939356.15	723.44				
39830.99	724.8540206.26	739.0740429.97	739.7340520.59	737.8240974.31	726.89				
41574.31	74041919.61	732.1342241.23	728.2442367.98	725.3542437.21	722.85				
42540.3	721.4842886.35	725.7243053.71	73043139.28	73044150.11	712.01				
44244.45	708.7644460.95	705.1544688.79	707.9144769.69	706.5644973.06	706.56				
45000.13	707.0345170.76	706.9145444.13	701.9646086.74	683.6846222.82	682.27				
46442.09	688.3646558.43	692.847082.63	723.7947378.55	731.5548338.31	739.49				
48505.15	741.748983.68	749.2649114.32	754.3949959.98	800					

Manning's n Values						num=3				
Sta	n Val	Sta	n Val	Sta	n Val					
0	.1521586.92	.1521970.98	.15							
Bank Sta:	Left	Right	Lengths:		Left	Channel	Right	Coeff	Contr.	Expan.
21586.92	21970.98		4.99	4.99	4.99		.1	.3		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.40	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.25	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1549355.00	72440.30	1208835.00				
E.G. Slope (ft/ft)	0.000295	Area (sq ft)	1549355.00	72440.30	1208835.00				
Q Total (cfs)	7996901.00	Flow (cfs)	5017871.00	404032.60	2574997.00				
Top width (ft)	46242.27	Top width (ft)	18624.81	384.06	27233.40				
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.24	5.58	2.13				
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.19	188.62	44.39				
Conv. Total (cfs)	465789600.0	Conv. (cfs)	292272300.0	23533390.0	149984000.0				
Length wtd. (ft)	4.99	Wetted Per. (ft)	18644.54	385.73	27271.34				
Min Ch El (ft)	565.26	Shear (lb/sq ft)	1.53	3.46	0.82				
Alpha	1.20	Stream Power (lb/ft s)	4.95	19.27	1.74				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	49864.72	2453.76	37409.32				
C & E Loss (ft)	0.00	Cum SA (acres)	600.46	13.02	899.50				

SS_Rev3.rep

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267691.*

INPUT

Description:

Station Elevation Data			num= 174								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.09	761.69	1410.21	760	1918.34	760	2314.66	766.53		
2397.05	766.53	2535.19	770	2743.89	770	2833.37	767.65	3139.43	747.64		
3669.14	722.03	3926.99	713.1	4532.99	700.96	4636.09	702.87	4767.77	705.86		
5557.38	695.32	5755.03	700.85	5999.59	688.31	6037.97	686.53	6712.15	686.53		
6959.02	681.41	7213.03	662.08	7313.19	656.53	7408.5	656.53	7533.03	664.7		
7806.82	694	7867.94	696.53	8050.8	689.6	8106.81	689.6	8146.21	688.1		
8278.38	687.09	8358.65	689.53	8488.08	697.94	8725.59	709.61	9115.15	723.07		
9351.69	723.07	9374	722.6	9516.66	715.94	9628.85	713.07	10491.58	708.37		
10827.81	697.51	11136.56	672.83	11165.38	667.84	11321.41	659.57	11567.26	654.47		
11632.47	656.58	12072.73	692.94	12412.05	710	12920.74	716.53	12929.38	716.83		
13112.37	718.44	13340.82	709.08	13406.41	708.06	13528.75	711.64	13714.49	720		
14085.59	720	14142.82	714.89	14232.07	707.48	14513	709.21	14706.3	724.6		
14779.88	730	15210.31	730	15750.09	710.41	15935.64	680.49	15952.76	676.66		
16101.6	659.41	16299.37	631.55	16320.98	629.85	16572.67	621.42	17011.93	614.39		
17125.64	613.47	17194.1	613.47	19711.2	620	20085.43	620	20489.77	600.4		
20660.18	600.4	20753.6	596.93	21004.04	593.47	21542.25	590.05	21549.64	588.93		
21587.4	580	21629.84	573.88	21684.24	569.08	21738.64	565.26	21935.46	572.65		
21971.62	580	22052.04	616.65	22111.65	625.84	22310.87	661.84	22371.83	665.99		
22655.67	670.82	22731.36	673.93	23574.03	725	23856.57	730.43	24283.46	732.1		
24534.66	736.93	24762.95	731.86	25278.52	713.88	25315.21	710.99	25591.47	695.36		
25740.48	697.48	25787.32	700.82	25836.38	700.8	26084.4	707.34	26456.23	713.69		
26604.77	717.61	26861.17	731.32	27359.77	744.46	27569.74	747	27950.23	741.57		
28330.49	729.68	28387.26	728.72	29105.12	726.04	29172.53	726.93	30209.49	726.93		
30575.54	733.47	30222.25	713.86	32497.61	720.43	3245.58	720.43	3245.58	716.93		
34329.83	716.93	34685.71	699.59	34794.38	718.92	35167.26	713.86	35581.54	713.86		
36124.62	700	36130.36	699.13	36278.83	644.38	36439.7	610.43	36464.27	611.57		
36576.84	618.47	37051.17	633.54	37473.78	689.29	37563.66	699.63	37997.93	701.5		
38144.58	695.21	38199.46	695.44	38578.85	710.96	39060.89	719.48	39360.34	723.47		
39835.28	724.88	40210.62	739.06	40434.38	739.73	40525.02	737.82	40978.83	726.93		
41578.96	740	41924.32	732.16	42246	728.32	42372.79	725.44	42442.03	722.94		
42545.14	721.56	42891.26	725.74	43058.66	730	43144.24	730	44155.27	712.07		
44249.64	708.81	44466.18	705.18	44694.06	707.89	44774.98	706.53	44978.4	706.53		
45005.47	707.01	45176.14	706.92	45449.57	701.99	46092.3	683.74	46228.41	682.28		
46447.72	688.33	46564.09	692.75	47088.39	723.75	47384.38	731.54	48344.34	739.49		
48511.21	741.69	48989.84	749.26	49120.51	754.37	49966.34	800				

Manning's n Values

Sta	n Val	Sta	n Val
0	.15	21587.4	.15
		1521971.62	.15

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
21587.4	21971.62	4.99	4.99	4.99	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.40	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.25	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549372.00	72467.66	1208588.00
E.G. Slope (ft/ft)	0.000295	Area (sq ft)	1549372.00	72467.66	1208588.00
Q Total (cfs)	7996901.00	Flow (cfs)	5018553.00	404235.90	2574113.00
Top width (ft)	46248.98	Top width (ft)	18625.48	384.22	27239.28
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.24	5.58	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.19	188.61	44.37
Conv. Total (cfs)	465724100.0	Conv. (cfs)	292270800.0	23541920.0	149911400.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18645.20	385.88	27277.21
Min Ch El (ft)	565.26	Shear (lb/sq ft)	1.53	3.46	0.82
Alpha	1.20	Stream Power (lb/ft s)	4.95	19.28	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	49687.23	2445.46	37270.86
C & E Loss (ft)	0.00	Cum SA (acres)	598.33	12.98	896.38

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267686.*

INPUT

Description:

Station Elevation Data			num= 174								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.12	761.7	1410.24	760	1918.39	760	2314.71	766.51		
2397.11	766.51	2535.25	770	2743.95	770	2833.43	767.63	3139.5	747.61		
3669.22	722.04	3927.08	713.12	4533.09	700.96	4636.2	702.86	4767.88	705.84		
5557.51	695.28	5755.16	700.78	5999.73	688.28	6038.11	686.51	6712.3	686.51		
6959.17	681.35	7213.19	662.03	7313.35	656.51	7408.67	656.51	7533.2	664.65		
7807	693.96	7868.12	696.51	8050.98	689.53	8106.99	689.53	8146.39	688.04		
8278.57	687.07	8358.83	689.53	8488.27	697.95	8725.79	709.61	9115.35	723.02		
9351.9	723.02	9374.21	722.55	9516.88	715.89	9629.06	713.02	10491.82	708.34		
10828.05	697.42	11136.81	672.75	11165.93	667.74	11321.66	659.51	11567.52	654.5		
11632.73	656.62	12073	693	12412.33	710	12921.02	716.51	12929.67	716.8		
13112.66	718.37	13341.12	708.98	13406.71	707.96	13529.05	711.58	13714.79	720		
14085.9	720	14143.13	714.91	14232.39	707.53	14513.33	709.27	14706.63	724.62		
14780.21	730	15210.65	730	15750.45	710.47	15936	680.67	15953.12	676.84		
16101.96	659.55	16299.74	631.61	16321.35	629.92	16573.04	621.45	17012.31	614.41		
17126.03	613.49	17194.9	613.49	19711.63	620	20085.88	620	20490.23	600.47		
20660.64	600.47	20754.06	596.98	21004.51	593.49	21542.73	590.05	21550.12	588.94		
21587.88	580	21630.45	573.86	21685.01	569.07	21739.58	565.26	21936.14	572.67		
21972.26	580	22052.7	616.77	22112.32	625.92	22311.58	661.85	22372.55	666		
22656.45	670.73	22732.15	673.85	23575	724.92	23857.59	730.37	24284.57	732.12		
24535.82	736.98	24764.16	731.88	25279.84	713.84	25316.53	710.95	25592.85	695.38		
25741.89	697.62	25788.74	700.94	25837.8	700.94	26085.88	707.46	26457.78	713.74		
26606.35	717.65	26862.8	731.37	27361.51	744.48	27571.52	746.98	27952.1	741.51		
28332.43	729.61	28389.21	728.65	29107.22	726.08	29174.64	726.93	30211.81	726.98		

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E.G. Elev (ft)		759.39	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15		wt. n-val.	0.150	0.150	0.150
W.S. Elev (ft)	759.24		Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)			Flow Area (sq ft)	1549477.00	72524.73	1208008.00
E.G. Slope (ft/ft)	0.000295		Area (sq ft)	1549477.00	72524.73	1208008.00
Q Total (cfs)	7996901.00		Flow (cfs)	5020219.00	404660.20	2572022.00
Top width (ft)	46262.28		Top width (ft)	18626.92	384.53	27250.83
Vel Total (ft/s)	2.83		Avg. Vel. (ft/s)	3.24	5.58	2.13
Max Chl Dpth (ft)	193.99		Hydr. Depth (ft)	83.18	188.61	4.33
Conv. Tm (s)	465598600.0		Wetted Per. (ft)	292289100.0	0	23560280.0
Length wtd. (ft)	4.99		Shear (lb/sq ft)	18646.61	386.19	27288.75
Min Ch El (ft)	565.25			1.53	3.46	0.82

Alpha	1.21	Stream Power (lb/ft s)	4.96	19.30	1.74
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	49332.24	2428.85	36994.03
C & E Loss (ft)	0.00	Cum SA (acres)	594.06	12.89	890.14

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267676.*

INPUT

Description:

[illegible]

Manning's n Values		num= 3					
Sta	n Val	Sta	n Val	Sta	n Val		
0	.1521588.85		.1521973.54		.15		
Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff Contr.
	21588.85	21973.54		4.99	4.99	4.99	Expn.
							.1
							.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.39	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-val.	0.150	0.150	0.150
W.S. Elev (ft)	759.24	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549491.00	72552.62	1207708.00
E.G. Slope (ft/ft)	0.000295	Area (sq ft)	1549491.00	72552.62	1207708.00
Q Total (cfs)	7996901.00	Flow (cfs)	5021007.00	404878.50	2571016.00
Top Width (ft)	46269.00	Top Width (ft)	18627.62	384.69	27256.69
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.24	5.58	2.13
Max Ch Dpth (ft)	193.99	Hydr. Depth (ft)	83.18	188.60	44.31
Conv Ch Total (cfs)	465521300.0	Wetted Per. (ft)	292286400.0	569080.0	149665800.0
Length Wtd. (ft)	4.99	Shear (lb/sq ft)	18647.29	386.34	27294.62
Min Ch El (ft)	565.25	Stream Power (lb/ft s)	1.53	3.46	0.82
Alpha	1.21	Cum Volume (acre-ft)	4.96	19.31	1.74
Frctn Loss (ft)	0.00	Cum SA (acres)	49154.74	2420.54	36855.66
C & E Loss (ft)	0.00		591.93	12.85	887.01

CROSS SECTION

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS

RS: 267671.*

INPUT

Description:

Station Elevation Data			num= 174								
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.21	761.74	1410.33	760	1918.52	760	2314.86	766.44		
2397.27	766.44	2535.42	770	2744.14	770	2833.62	767.58	3139.71	747.53		
3669.46	722.08	3927.34	713.19	4533.4	700.98	4636.51	702.83	4768.2	705.75		
5557.88	695.19	5755.55	700.6	6000.13	688.19	6038.51	686.44	6712.75	686.44		
6959.64	681.18	7213.67	661.9	7301.84	656.44	7409.17	656.44	7533.7	664.49		
7807.52	693.84	7868.65	696.44	8035.52	689.32	8107.54	689.32	8146.94	687.84		
8279.12	687.01	8359.39	689.52	8488.83	697.97	8726.38	709.62	9115.96	722.88		
9352.53	722.88	9374.84	722.4	9515.71	715.72	9629.71	712.88	10492.52	708.25		
10828.78	697.16	11137.56	672.51	11166.38	667.44	11322.82	659.29	12930.54	656.59		
11633.51	656.76	12073.8	693.18	1313.16	707.65	1321.49	716.44	15960.54	714.44		
12033.54	718.74	12073.8	707.65	1321.49	707.65	1329.96	711.44	15960.54	714.44		
14086.85	720.14	14144.08	71.97	14234.67	707.68	14514.3	709.46	14707.62	724.76		
14781.21	730.15	15211.67	730	15751.5	710.68	15937.06	681.21	21594.9	677.38		
16103.04	659.99	16300.83	631.81	16322.44	630.12	161574.15	621.55	17013.45	614.47		
17127.17	613.56	19493.21	613.56	19712.96	620	20087.23	620	20491.6	600.68		
20662.03	600.68	20755.46	597.12	22005.92	593.56	21544.18	590.05	21551.56	588.95		
21589.33	580.21	2632.28	573.82	22687.33	569.04	221742.39	565.25	21938.2	572.72		
21974.18	580.22	2054.67	517.13	23214.13	626.18	282233.31	661.89	242874.71	666.05		
22658.78	670.52	22734.53	673.59	23577.9	724.62	383860.66	730.17	242878.91	732.16		

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Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.18	188.59	44.27
Conv. Total (cfs)	465394800.0	Conv. (cfs)	292300400.0	23586490.0	149507800.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18648.69	386.66	27306.15
Min Ch El (ft)	565.25	Shear (lb/sq ft)	1.53	3.46	0.81
Alpha	1.21	Stream Power (lb/ft s)	4.96	19.33	1.73
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	48799.73	2403.91	36579.03
C & E Loss (ft)	0.00	Cum SA (acres)	587.66	12.76	880.77

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267661.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.26	761.76	1410.4	760	1918.6	760	2314.97	766.39				
2397.38	766.39	2535.53	770	2744.26	770	2833.75	767.55	3139.85	747.47				
3669.63	722.11	3927.52	713.23	4533.6	700.99	4636.72	702.81	4768.41	705.7				
5558.13	695.13	5755.81	700.47	6000.4	688.13	6038.78	686.39	6713.05	686.39				
6959.95	681.06	7213.99	661.82	7314.17	656.39	7409.5	656.39	7534.04	664.39				
7807.87	693.76	7869	696.39	8051.88	689.18	8107.9	689.18	8147.3	687.71				
8279.49	686.97	8359.77	689.51	8489.21	697.98	8726.77	709.62	9116.37	722.79				
9352.95	722.79	9375.26	722.3	9517.94	715.6	9630.14	712.79	10492.99	708.19				
10829.26	696.99	11138.06	672.34	11166.88	667.24	11322.93	659.15	11568.81	654.65				
11634.03	656.85	12074.34	693.31	12413.72	710	12922.47	716.39	12931.12	716.68				
13114.13	717.97	13342.61	708.46	13408.21	707.45	13530.56	711.31	13716.33	720				
14087.48	720	14144.71	715	14233.98	707.78	14514.95	709.58	14708.28	724.71				
14781.87	730	15212.35	730	15752.21	710.82	15937.78	681.55	15954.9	677.74				
16103.76	660.28	16301.56	631.95	16323.17	630.25	16574.89	621.61	17014.21	614.51				
17127.94	613.61	19494.08	613.61	19713.84	620	20088.13	620	20492.52	600.82				
20662.95	600.82	20756.38	597.21	21006.85	593.61	21545.14	590.05	21552.53	588.95				
21590.29	580	21633.49	573.79	21688.88	569.02	21744.26	565.25	21939.57	572.76				
21975.46	580	2055.98	617.37	22115.66	626.36	22315.12	661.92	22376.16	666.07				
22660.34	670.35	22736.12	673.42	23579.83	724.39	23862.71	730.04	24290.13	732.19				
24541.63	737.21	24770.2	731.94	25286.41	713.63	25323.14	710.76	25599.74	695.46				
25748.93	698.19	25795.83	701.64	25844.95	701.64	26093.28	708.04	26465.35	714.04				
26614.28	717.87	26870.99	731.71	27370.21	744.58	27580.43	746.88	27961.39	741.22				
28342.11	729.26	28398.95	728.32	29117.7	726.28	29185.19	727.21	30223.41	727.21				
30589.92	733.61	3038.39	714.43	32514.34	720.82	33263.22	720.82	34181.13	717.21				
34348.8	717.21	34705.12	719.98	34813.91	719.98	35187.26	714.43	35602.05	714.43				
36145.79	700	36151.53	699.06	36300.19	644.07	36461.25	610.82	36485.86	611.97				
36598.57	619.22	37073.48	634.09	37496.61	689.09	37586.59	699.18	38021.39	701.03				
38168.22	694.45	38223.16	694.68	38603.02	710.73	39085.65	719.46	39385.47	723.61				
39860.99	725.08	40236.79	739.03	40460.82	739.72	40551.57	737.87	41005.94	727.21				
41606.8	740.41	41952.6	732.32	42274.67	728.78	42401.61	725.97	42470.94	723.46				
42574.18	722.03	42920.71	725.83	43088.32	730	43174.01	730	44186.28	712.46				
44280.76	709.17	44497.56	705.39	44725.73	707.81	44806.75	706.39	45010.41	706.39				
45037.52	706.89	45208.39	706.99	45482.16	702.16	46125.68	683.85	46261.96	682.38				
46481.53	688.15	46598.05	692.48	47122.99	723.49	47419.34	731.51	48380.47	739.47				
48547.54	741.65	49026.76	749.23	49157.59	754.28	50004.46	800						

Manning's n Values

Sta	n Val	Sta	n Val
0	.1521590.29	.1521975.46	.15

Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
21590.29	2921975.46		4.99	4.99		4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.39	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.24	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549607.00	72636.94	1206866.00
E.G. Slope (ft/ft)	0.000295	Area (sq ft)	1549607.00	72636.94	1206866.00
Q Total (cfs)	7996901.00	Flow (cfs)	5023365.00	405504.10	2568032.00
Top Width (ft)	46288.92	Top Width (ft)	18629.81	385.17	27273.94
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.24	5.58	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.18	188.58	44.25
Conv. Total (cfs)	465324900.0	Conv. (cfs)	292300300.0	23595540.0	149429100.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18649.43	386.82	27311.86
Min Ch El (ft)	565.25	Shear (lb/sq ft)	1.53	3.46	0.81
Alpha	1.21	Stream Power (lb/ft s)	4.97	19.33	1.73
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	48622.22	2395.59	36440.76
C & E Loss (ft)	0.00	Cum SA (acres)	585.52	12.72	877.64

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267656.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.29	761.77	1410.43	760	1918.65	760	2315.02	766.37		
2397.43	766.37	2535.59	770	2744.32	770	2833.81	767.54	3139.92	747.45		
3669.71	722.12	3927.6	713.25	4533.7	701.46	4636.82	702.8	4768.52	705.67		
5558.25	695.09	5755.94	700.41	6000.53	688.1	6038.92	686.37	6713.2	686.37		
6960.11	681.72	7214.15	661.77	7314.33	656.37	7409.66	656.37	7534.21	664.34		
7808.04	693.72	7869.17	696.37	8052.06	689.11	8108.08	689.11	8147.48	687.65		
8279.68	686.95	8359.95	689.51	8489.4	697.99	8726.96	709.62	9116.57	722.74		
9353.15	722.74	9375.47	722.25	9518.15	715.54	9630.35	712.74	10493.22	708.16		
10829.51	696.91	11138.3	672.26	11167.13	667.14	11323.18	659.08	11569.07	654.68		
11634.29	656.89	12074.61	693.36	12413.99	710	12922.76	716.37	12931.41	716.66		
13114.42	717.91	13342.91	708.36	13408.51	707.35	13530.86	711.25	13716.63	720		
14087.79	720	14145.03	715.02	14234.3	707.83	14515.27	709.64	14708.61	724.73		
14782.2	730	15212.69	730	15752.56	710.89	15938.13	681.73	15955.26	677.92		
16104.12	660.43	16301.92	632.01	16323.54	630.32	16575.26	621.64	17014.59	614.53		
17128.32	613.63	19494.52	613.63	19714.28	620	20088.57	620	20492.97	600.89		

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E.G. Elev (ft)	759.38	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.23	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549700.00	72693.98	1206293.00

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14088.74	72014145.98	715.0814235.25	707.9914516.25	709.8314709.59	724.79
14783.19	73015213.71	73015753.61	711.1 15939.2	682.2615956.33	678.46
16105.2	660.8616303.01	632.2116324.63	630.5216576.37	621.7317015.73	614.59
17129.47	613.719495.82	613.7 19715.6	62020089.92	62020494.35	601.1
20664.8	601.120758.24	597.421008.73	593.721547.06	590.0521554.45	588.97
21592.22	58021635.93	573.7421691.97	568.9721748.01	565.2421942.31	572.83
21978.02	580 22058.6	617.8522118.33	626.722317.96	661.9722379.04	666.13
22663.46	670.06 22739.3	673.08 23583.7	723.9923866.81	729.7924294.57	732.25
24546.28	737.424775.04	731.9925291.67	713.4725328.43	710.625605.26	695.53
25754.56	698.66 25801.5	702.225850.66	702.226099.19	708.5126471.77	714.27
26620.62	718.0526877.54	731.9727377.16	744.6627587.56	746.827968.83	741
28349.86	728.9828406.74	728.0529126.08	726.4529193.62	727.4 30232.7	727.4
30599.5	733.732049.16	714.832525.49	721.133274.98	721.134193.64	717.4
34361.45	717.434718.06	720.2434826.94	719.6835200.59	714.835615.72	714.8
36159.9	70036165.65	699.0436314.43	643.8636475.62	611.136500.25	612.23
36613.05	619.4637088.35	634.4637511.82	688.9637601.88	698.938037.04	700.73
38183.98	693.9438238.97	694.1738619.14	710.5739102.16	719.4539402.23	723.7
39878.14	725.2140254.24	73940478.46	739.7140569.28	737.941024.02	727.4
41625.37	74041971.45	732.4442293.78	729.0942420.82	726.3242490.21	723.81
42593.53	722.3442940.36	725.8943108.09	73043193.85	73044206.95	712.71
44301.5	709.4144518.49	705.5344746.84	707.7544827.92	706.345031.75	706.3
45058.88	706.8145228.89	707.0345503.88	702.2846147.93	683.9546284.32	682.44
46504.07	688.0346620.68	692.2947146.05	723.3247442.64	731.4848404.56	739.45
48571.77	741.6349051.38	749.2149182.32	754.2250029.87	800	

Manning's n Values	num=	3			
Sta n Val Sta n Val					
0 .1521592.22		.1521978.02			
Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.		
21592.2221978.02	4.99 4.99 4.99	.1	.3		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.38	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.23	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549763.00	72749.36	1205730.00
E.G. Slope (ft/ft)	0.000296	Area (sq ft)	1549763.00	72749.36	1205730.00
Q Total (cfs)	7996901.00	Flow (cfs)	5026551.00	406348.60	2564002.00
Top width (ft)	46315.48	Top width (ft)	18632.61	385.80	27297.06
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.24	5.59	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.17	188.57	44.17
Conv. Total (cfs)	465062800.0	Conv. (cfs)	292320900.0	23631350.0	149110500.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18652.18	387.43	27334.97
Min Ch El (ft)	565.24	Shear (lb/sq ft)	1.53	3.47	0.81
Alpha	1.21	Stream Power (lb/ft s)	4.97	19.36	1.73
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	47912.12	2362.28	35888.01
C & E Loss (ft)	0.00	Cum SA (acres)	576.99	12.54	865.14

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267636.*

INPUT

Description:	num=	174			
Station Elevation Data					
Sta Elev Sta Elev Sta Elev Sta Elev Sta Elev					
0 800 1238.4	761.82 1410.55	760 1918.82	760 2315.22	766.28	
2397.64	766.28 2535.82	770 2744.57	767.47 3140.2	747.34	
3670.04	722.18 3927.95	713.33 4534.11	701.03 4637.23	702.76 4768.94	705.56
5558.75	694.97 5756.45	700.16 6001.07	687.98 6039.46	686.28 6713.8	686.28
6960.73	680.77 7214.8	661.6 7314.99	656.28 7410.32	656.28 7534.88	664.13
7808.74	693.56 7869.88	696.28 8052.78	688.83 8108.81	688.83 8148.21	687.39
8280.42	686.87 8360.7	689.49 8490.16	698.02 8727.74	709.62 9117.39	722.55
9353.99	722.55 9376.31	722.05 9519	715.32 9631.21	712.5510494.16	708.04
10830.47	696.57 11139.3	671.9311168.13	666.7411324.19	658.8 11570.1	654.81
11635.33	657.0712075.69	693.61 12415.1	71012923.91	716.2812932.56	716.56
13115.59	717.58 13344.1	707.9413409.71	706.9513532.07	711.0213717.86	720
14089.05	72014146.29	715.114235.57	708.0414516.57	709.8914709.92	724.81
14783.52	73015214.05	73015753.96	711.1715939.56	682.4415956.69	678.64
16105.56	661.0116303.38	632.2816324.99	630.5816576.37	621.7617016.11	614.61
17129.85	613.7219496.26	613.7219716.04	62020090.37	62020494.81	601.17
20665.26	601.17 20758.7	597.45 21009.2	593.7221547.55	590.0521554.93	588.97
21592.71	58021636.54	573.7221692.74	568.9621748.95	565.24 21943	572.85
21978.66	58022059.26	617.97 22119	626.7922318.67	661.9822379.76	666.15
22664.23	669.9822740.09	672.9923584.66	723.8923867.83	729.7224295.69	732.26
24547.45	737.4524776.25	73225292.98	713.4325329.75	710.5625606.63	695.55
25755.97	698.7825802.92	702.3425852.09	702.3426100.67	708.6326473.33	714.33
26622.2	718.0926879.18	732.04 27378.9	744.6827589.34	746.7827970.69	740.94
28351.8	728.9128408.69	727.9829128.17	726.4929195.73	727.4530235.02	727.45
30601.9	733.7232051.85	714.8932528.28	721.1733277.92	721.1734196.77	717.45
34364.61	717.4534721.29	720.3 34830.2	719.7535203.92	714.8935619.14	714.89
36163.43	70036169.18	699.0336317.99	643.8136479.22	611.1736503.85	612.3
36616.67	619.5237092.06	634.5537515.62	688.92 37605.7	698.8338040.95	700.65
38187.93	693.8238242.93	694.0538623.17	710.5339106.29	719.4439406.42	723.72
39882.42	725.2440258.61	738.9940482.86	739.7140573.71	737.9141028.54	727.45
41630.01	74041976.16	732.4742298.56	729.1742425.62	726.4142495.02	723.9
42598.37	722.4242945.26	725.9143113.04	73043198.81	73044212.12	712.78
44306.69	709.4744523.72	705.5744752.11	707.7344833.21	706.2845037.09	706.28
45064.22	706.7945235.27	707.0445509.31	702.31 46153.5	683.9846289.91	682.45
46509.71	68846626.34	692.2547151.82	723.2847448.47	731.4848410.59	739.45
48577.83	741.6249057.54	749.2 49188.5	754.250036.23	800	

Manning's n Values	num=	3			
Sta n Val Sta n Val					
0 .1521592.71		.1521978.66			
Bank Sta: Left Right	Lengths: Left Channel Right	Coeff Contr.	Expan.		
21592.7121978.66	4.99 4.99 4.99	.1	.3		

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.38	Element	SS_Rev3.rep		
Vel Head (ft)	0.15	wt. n-Val.	Left OB	Channel	Right OB
W.S. Elev (ft)	759.23	Reach Len. (ft)	0.150	0.150	0.150
Crit W.S. (ft)		Flow Area (sq ft)	4.99	4.99	4.99
E.G. Slope (ft/ft)	0.000296	Area (sq ft)	1549807.00	72776.03	1205446.00
Q Total (cfs)	7996901.00	Flow (cfs)	1549807.00	72776.03	1205446.00
Top Width (ft)	46322.19	Top Width (ft)	5027365.00	406550.30	2562986.00
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	18633.31	385.95	27302.92
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.17	188.56	44.15
Conv. Total (cfs)	464998000.0	Conv. (cfs)	292327600.0	23639790.0	149030600.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18652.86	387.58	27340.84
Min Ch El (ft)	565.24	Shear (lb/sq ft)	1.53	3.47	0.81
Alpha	1.21	Stream Power (lb/ft s)	4.98	19.37	1.73
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	47734.59	2353.95	35749.91
C & E Loss (ft)	0.00	Cum SA (acres)	574.85	12.49	862.01

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267631.*

INPUT

Description:

Station	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.43	761.83	1410.59	760	1918.86	760	2315.28	766.25
2397.7	766.25	2535.87	770	2744.63	770	2834.13	767.46	3140.27	747.31
3670.12	722.19	3928.04	713.35	4534.21	701.03	4637.34	702.75	4769.05	705.53
5558.87	694.94	5756.58	700.1	6001.2	687.95	6039.59	686.25	6713.95	686.25
6960.88	680.71	7214.96	661.56	7315.15	656.25	7410.49	656.25	7535.05	664.07
7808.91	693.52	7870.05	696.25	8052.96	688.76	8108.99	688.76	8148.39	687.32
8280.6	686.85	8360.89	689.49	8490.35	698.03	8727.94	709.63	9117.59	722.51
9354.2	722.51	9376.52	722	9519.21	715.26	9631.43	712.51	10494.4	708.01
10830.72	696.49	11139.55	671.85	11168.38	666.64	11324.45	658.73	11570.36	654.84
11635.59	657.11	112075.96	693.67	12415.38	710	12924.2	716.25	12932.85	716.54
13115.89	717.51	13344.4	707.83	13410	706.85	13532.37	710.96	13718.17	720
14089.37	72014146.61		715.11	14235.89	708.09	14516.89	709.96	14710.25	724.83
14783.85	73015214.39		73015754.32		711.24	15939.91	682.62	15957.04	678.82
16105.92	661.15	16303.74	632.34	16325.36	630.65	16577.11	621.79	17016.49	614.63
17130.24	613.75	19496.7	613.75	19716.48	620	20090.82	620	20495.27	601.24
20665.72	601.24	20759.17	597.49	21009.67	593.75	21548.03	590.05	21555.42	588.98
21593.19	58021637.15		573.71	21693.52	568.95	21749.88	565.24	21943.68	572.86
21979.29	58022059.91		618.09	22119.66	626.88	22319.38	661.99	22380.48	666.16
22665.01	669.91	22740.89	672.92	23585.63	723.79	23868.86	729.66	24296.8	732.27
24548.61	737.49	24777.46	732.01	25294.29	713.39	25331.07	710.52	25608.01	695.56
25757.38	698.92	25804.34	702.48	25853.52	702.48	26102.15	708.75	26474.88	714.39
26623.79	718.14	26880.81	732.11	27380.64	744.72	27591.12	746.76	27972.55	740.88
28353.74	728.84	28410.64	727.91	29130.27	726.53	29197.84	727.49	30237.34	727.49
30604.29	733.75	32054.34	714.99	32531.06	721.24	33280.86	721.24	34199.9	717.49
34367.77	717.49	34724.53	720.36	34833.45	719.83	35207.25	714.99	35622.55	714.99
36166.95	700	36172.71	699.02	36321.55	643.76	36482.81	611.24	36507.45	612.36
36620.29	619.58	37095.78	634.64	37519.43	688.89	37609.52	698.76	38044.86	700.57
38191.87	693.69	38246.88	693.92	38627.2	710.49	39110.42	719.44	39410.61	723.75
39886.71	725.28	40262.96	738.99	40487.27	739.71	40578.13	737.92	41033.05	727.49
41634.65	74041980.87		732.49	42303.34	729.25	42430.43	726.49	42499.84	723.99
42603.21	722.54	2950.17	725.92	43117.98	730	43203.78	730	44217.29	712.84
44311.88	709.53	44528.95	705.64	44757.39	707.72	44838.51	706.25	45042.42	706.25
45069.56	706.77	45240.65	707.05	45514.75	702.33	46159.06	684	46295.5	682.47
46515.34	687.97	46632	692.24	47157.59	723.24	47454.3	731.47	48416.61	739.45
48583.88	741.62	49063.69	749.24	49194.68	754.18	50042.58	800		

Manning's n Values

Sta	n	Sta	n	Sta	n
0	.1521593.19	.1521979.29	.15		

Bank	Sta: Left	Sta: Right	Lengths: Left	Channel	Right	Coeff	Contr.	Expan.
	21593.19	21979.29	4.99	4.99	4.99	.1		.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.38	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.23	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549831.00	72803.20	1205170.00
E.G. Slope (ft/ft)	0.000296	Area (sq ft)	1549831.00	72803.20	1205170.00
Q Total (cfs)	7996901.00	Flow (cfs)	5028120.00	406759.70	2562022.00
Top Width (ft)	46328.88	Top Width (ft)	18633.98	386.10	27308.79
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.24	5.59	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.17	188.56	44.13
Conv. Total (cfs)	464929100.0	Conv. (cfs)	292328100.0	23648470.0	148952500.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18653.52	387.73	27346.70
Min Ch El (ft)	565.24	Shear (lb/sq ft)	1.53	3.47	0.81
Alpha	1.21	Stream Power (lb/ft s)	4.98	19.38	1.73
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	47557.05	2345.61	35611.83
C & E Loss (ft)	0.00	Cum SA (acres)	572.72	12.45	858.89

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267626.*

INPUT

Description:

Station	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.45	761.84	1410.62	760	1918.9	760	2315.33	766.23
2397.75	766.23	2535.93	770	2744.69	770	2834.19	767.44	3140.34	747.28
3670.2	722.2	3928.13	713.38	4534.31	701.04	4637.44	702.74	4769.15	705.5
5559	694.9	5756.71	700.04	6001.33	687.92	6039.73	686.23	6714.1	686.23
6961.04	680.65	7215.12	661.51	7315.31	656.23	7410.66	656.23	7535.22	664.02
7809.09	693.48	7870.23	696.23	8053.14	688.69	8109.17	688.69	8148.57	687.26
8280.79	686.83	8361.08	689.49	8490.54	698.03	8728.13	709.63	9117.8	722.46

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9354.41	722.46	9376.73	721.95	9519.43	715.2	9631.64	712.4610494.63	707.98	
10830.96	696.4	11139.8	671.7711168.63	666.54	11324.7	658.6611570.62	654.87		
11635.85	657.1612076.23	693.7312415.66	693.7312415.66	71012924.49	716.2312933.14	716.51			
13116.18	717.4313344.69	707.73	13410.3	706.7513532.68	710.9113718.47	720			
14089.68	72014146.93	715.1314236.21	715.1314236.21	708.1414517.22	710.0214710.58	724.85			
14784.18	73015214.73	73015754.67	73015754.67	711.3115940.27	682.8	15957.4	679		
16106.28	661.316304.11	632.4116325.72	632.4116325.72	630.7216577.48	621.8217016.87	614.65			
17130.62	613.7719497.13	613.7719716.92	613.7719716.92	62020091.27	62020495.72	601.31			
20666.18	601.3120759.63	597.5421010.14	597.5421010.14	593.7721548.51	590.05	21555.9	588.98		
21593.67	58021637.76	573.721694.29	573.721694.29	568.9421750.82	565.2421944.37	572.88			
21979.93	58022060.57	618.2122120.33	618.2122120.33	626.9622320.08	662	22381.2	666.18		
22665.79	669.8322741.68	672.8223586.59	672.8223586.59	723.6823869.88	729.5924297.91	732.29			
24549.77	737.5424778.67	732.0325295.61	732.0325295.61	713.3525332.39	710.4825609.39	695.58			
25578.79	699.0225805.76	702.6225854.94	702.6225854.94	702.6226103.63	708.8626476.44	714.45			
26625.37	718.1826882.45	732.1727382.38	732.1727382.38	744.7227592.91	746.7427974.41	740.83			
28355.67	728.7628412.59	727.8529132.37	727.8529132.37	726.5729199.95	727.5430239.66	727.54			
30606.69	733.7732057.23	715.0832533.85	715.0832533.85	721.31	33283.8	721.3134203.03	717.54		
34370.93	717.5434727.76	720.4334836.71	720.4334836.71	719.9135210.59	715.0835625.97	715.08			
36170.48	70036176.24	699.0236325.11	699.0236325.11	643.71	36486.4	611.3136511.04	612.43		
36623.91	619.64	37099.5	634.7337523.23	688.8637613.34	698.6938048.77	700.5			
38195.8	693.5638250.83	693.7938631.23	693.7938631.23	710.4539114.54	719.44	39414.8	723.77		
39890.99	725.3140267.33	738.9840491.68	738.9840491.68	739.7140582.56	737.9341037.57	727.54			
41639.3	74041985.58	732.5242308.12	732.5242308.12	729.3342435.23	726.5842504.66	724.07			
42608.05	722.5842955.08	725.9443122.92	725.9443122.92	73043208.74	73044222.45	712.91			
44317.06	709.5944534.18	705.6444762.67	705.6444762.67	707.71	44843.8	706.23			
45074.9	706.7545246.02	707.0745520.18	707.0745520.18	702.3646164.62	684.0346301.09	682.49			
46520.98	687.9446637.66	692.1647163.36	692.1647163.36	723.247460.12	731.4748422.63	739.44			
48589.94	741.6149069.84	749.1949200.86	749.1949200.86	754.1750048.93	800				

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521593.67 .1521979.93 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
 21593.6721979.93 4.99 4.99 4.99 .1 .3

CROSS SECTION OUTPUT Profile #P 1

E.G. Elev (ft)	759.38	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.23	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1549881.00	72831.17	1204870.00
E.G. Slope (ft/ft)	0.000296	Area (sq ft)	1549881.00	72831.17	1204870.00
Q Total (cfs)	7996901.00	Flow (cfs)	5028967.00	406968.30	2560966.00
Top width (ft)	46335.49	Top width (ft)	18634.74	386.26	27314.49
Vel Total (ft/s)	2.83	Avg. Vel (ft/s)	3.24	5.59	2.13
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.17	188.55	44.11
Conv. Total (cfs)	464863200.0	Conv. (cfs)	292335900.0	23657240.0	148870000.0
Length wtd. (ft)	4.99	Wetted Per. (ft)	18654.27	387.89	27352.40
Min Ch El (ft)	565.24	Shear (lb/sq ft)	1.53	3.47	0.81
Alpha	1.21	Stream Power (lb/ft s)	4.98	19.38	1.73
Frctn Loss (ft)	0.00	Cum volume (acre-ft)	47379.50	2337.27	35473.79
C & E Loss (ft)	0.00	Cum SA (acres)	570.58	12.41	855.76

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267621.*

INPUT

Description:

Station	Elevation	Data	num=	174	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.48	761.85	1410.65	760	1918.95	760	2315.38	766.21				
2397.8	766.21	2535.99	770	2744.75	770	2834.26	767.43	3140.41	747.26				
3670.28	722.22	3928.22	713.4	4534.41	701.05	4637.54	702.73	4769.26	705.47				
5559.12	694.87	5756.84	699.98	6001.47	687.89	6039.86	686.21	6714.25	686.21				
6961.19	680.6	7215.28	661.47	7315.48	656.21	7410.82	656.21	7535.39	663.97				
7809.26	693.44	7870.4	696.21	8053.32	688.62	8109.35	688.62	8148.76	687.19				
8280.97	686.81	8361.26	689.48	8490.73	698.04	8728.33	709.63	9118	722.41				
9354.62	722.43	9276.94	721.9	9519.64	715.14	9631.66	712.4110494.87	707.95					
10831.2	696.3211140.05	671.6911168.88	666.4411324.95	71012924.78	716.2112933.43	716.49							
11636.11	657.2	12076.5	693.7912415.94	706.6513532.98	710.8513718.78	720							
13116.47	717.3513344.99	707.63	13410.6	708.1914517.54	710.0814710.91	724.87							
14090	72014147.24	715.1514236.53	708.1914517.54	711.3815940.63	682.9715957.75	679.18							
14784.51	73015215.07	73015755.02	73015755.02	630.7816577.85	621.8517017.25	614.67							
16106.64	661.4416304.47	632.4716326.09	632.4716326.09	62020091.72	62020496.18	601.38							
17131	613.7919497.13	613.7919717.36	613.7919717.36	593.7921548.99	590.0521556.38	588.98							
20666.64	601.3820760.09	597.5921010.61	597.5921010.61	568.9321751.76	565.2321945.05	572.9							
21594.15	58021638.37	573.6821695.06	573.6821695.06	627.0522320.79	662.0222381.93	666.19							
21980.57	58022061.22	618.33	22121	723.58	23870.9	729.5324299.02	732.3						
22666.57	669.7622742.48	672.7323587.56	672.7323587.56	713.325333.71	710.4425610.77	695.59							
24550.93	737.5924779.88	732.0425296.92	732.0425296.92	702.7626105.11	708.9826477.99	714.5							
25760.2	699.1325807.18	702.7625856.37	702.7625856.37	744.7427594.69	746.7227976.27	740.77							
26626.96	718.2326884.09	732.2427384.12	732.2427384.12	726.6129202.06	727.5930241.98	727.59							
28357.61	728.6928414.54	727.7829134.46	727.7829134.46	721.3833286.75	721.3834206.16	717.59							
30609.08	733.7932059.92	715.1832536.64	715.1832536.64	719.9835213.92	715.1835629.39	715.18							
34374.09	717.59	34731	720.4934839.97	643.65	36490	611.3836514.64	612.49						
36174.01	70036179.77	699.0136328.67	699.0136328.67	688.8237617.16	698.6238052.68	700.42							
36627.53	619.737103.21	634.8237527.04	634.8237527.04	710.4139118.67	719.4339418.98	723.79							
38199.75	693.4438254.78	693.6738635.26	693.6738635.26	739.740586.98	737.9341042.09	727.59							
39895.28	725.3440271.69	738.9840496.09	738.9840496.09	729.442440.04	726.6742509.48	724.16							
41643.94	740	41990.3	732.5542312.89	725.9543127.87	730	43213.7	73044227.62	712.97					
42612.89	722.6542959.99	705.6744767.95	705.6744767.95	707.69	44849.1	706.2145053.09	706.21						
44322.25	709.6544539.41	707.0845525.61	707.0845525.61	702.3946170.18	684.0546306.68	682.5							
45080.24	706.73	45251.4	707.1147169.12	723.1647465.95	731.4648428.65	739.44							
46326.61	687.9146643.32	692.1647169.12	692.1647169.12	754.1550055.29	800								
48596	741.6	49076	749.1949207.04										

Manning's n Values num= 3
 Sta n Val Sta n Val
 0 .1521594.15 .1521980.57 .15

Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.
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SS_Rev3.rep									
5559.37	694.81	5757.09	699.86	6001.74	687.83	6040.13	686.16	6714.55	686.16
6961.51	680.48	7215.6	661.38	7315.8	656.16	7411.15	656.16	7535.72	663.86
7809.61	693.36	7870.76	696.16	8053.68	688.48	8109.71	688.48	8149.12	687.06
8281.34	686.77	8361.63	689.48	8491.11	698.06	8728.71	709.63	9118.41	722.32
9355.04	722.32	9377.36	721.8	9520.07	715.03	9632.29	712.32	10495.33	707.89
10831.68	696.15	11140.54	671.53	11169.38	666.24	11325.46	658.45	11571.39	654.96
11636.63	657.29	12077.04	693.91	12416.49	710.12	12925.36	716.16	12934.01	716.44
13117.06	717.19	13345.59	707.42	13411.2	706.45	13533.58	710.74	13719.39	720
14090.62	72014147.88		715.19	14237.16	708.29	14518.19	710.21	14711.56	724.91
14785.17	73015215.75		73015755.73		711.52	15941.34	683.33	15958.47	679.54
16107.36	661.73	16305.2	632.61	16326.82	630.91	16578.59	621.91	17018.01	614.71
17131.77	613.84	19498.44	613.84	19718.24	620.20	20092.62	620	20497.1	601.52
20667.57	601.52	20761.02	597.68	21011.55	593.84	21549.95	590.05	21557.34	588.99
21595.12	58022062.54		573.65	21696.61	568.92	21753.63	565.23	221946.42	572.93
21981.85	58022062.54		618.57	22122.33	627.22	22322.21	662.04	22383.37	666.22
22668.13	669.61	22744.07	672.56	23589.49	723.38	23872.95	729.42	424301.24	732.33
24553.26	737.68	24782.29	732.06	25299.55	713.22	25336.36	710.36	25613.53	695.63
25763.02	699.37	25810.01	703.04	25859.23	703.04	26108.06	709.21	26481.1	714.62
26630.13	718.32	26887.36	732.38	27387.6	744.78	27598.25	746.68	27979.99	740.66
28361.48	728.55	28418.44	727.64	29138.65	726.69	29206.28	727.68	30246.62	727.68
30613.88	733.84	32065.3	715.36	32542.22	721.52	33292.62	721.52	34212.41	717.68
34380.42	717.68	34737.46	720.62	34846.48	720.13	35220.59	715.36	35636.22	715.36
36181.07	70036186.82		69936335.79		643.55	36497.18	611.52	36521.84	612.63
36634.77	619.82	37110.65	635.01	37534.64	688.76	37624.8	698.48	38060.5	700.26
38207.63	693.19	38262.68	693.41	38643.32	710.34	39126.93	719.43	39427.36	723.84
39903.85	725.41	40280.41	738.96	40504.91	739.74	40595.84	737.95	41051.13	727.68
41653.22	74041999.72		732.61	42322.45	729.56	42449.64	726.85	42519.11	724.34
42622.57	722.81	42969.81	725.98	43137.75	73043223.62		73044237.95		713.1
44332.62	709.77	44549.87	705.74	44778.5	707.66	44859.69	706.16	45063.77	706.16
45090.93	706.69	45262.15	707.14	45536.47	702.45	46181.31	684.14	46317.87	682.53
46537.89	687.85	46654.64	692.02	47180.65	723.07	47477.61	731.45	48440.7	739.43
48608.11	741.59	49088.3	749.18	49219.4	754.12	50067.99	800		
Manning's n Values									
Sta	n Val	Sta	num=	3	Sta	n Val	Sta	n Val	
0	.1521595.12				.1521981.85			.15	
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.									
21595.12	21981.85		4.99	4.99	4.99		.1	.3	
CROSS SECTION OUTPUT Profile #PF 1									
E.G. Elev (ft)	759.37	Element	Left OB	Channel	Right OB				
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150				
W.S. Elev (ft)	759.22	Reach Len. (ft)	4.99	4.99	4.99				
Crit W.S. (ft)		Flow Area (sq ft)	1549997.00	72917.13	1204029.00				
E.G. Slope (ft/ft)	0.000296	Area (sq ft)	1549997.00	72917.13	1204029.00				
Q Total (cfs)	7996901.00	Flow (cfs)	5031317.00	407614.20	2557970.00				
Top width (ft)	46355.50	Top width (ft)	18636.87	386.73	27331.90				
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.25	5.59	2.12				
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.17	188.55	44.05				
Conv. Total (cfs)	464669200.0	Conv. (cfs)	292350500.0	23684900.0	148633800.0				
Length wtd. (ft)	4.99	Wetted Per. (ft)	18656.36	388.35	27369.84				
Min Ch El (ft)	565.23	Shear (lb/sq ft)	1.54	3.47	0.81				
Alpha	1.21	Stream Power (lb/ft s)	4.99	19.41	1.73				
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	46846.85	2312.22	35059.86				
C & E Loss (ft)	0.00	Cum SA (acres)	564.18	12.27	846.37				

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS RS: 267606.*

INPUT

Description: Station Elevation Data									
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.57	761.89	1410.74	760	1919.07	760	2315.54	766.14
2397.96	766.14	2536.16	770	2744.93	770	2834.45	767.38	3140.62	747.17
3670.53	722.26	3928.48	713.46	4534.71	701.06	4637.85	702.69	4769.58	705.39
5559.49	694.78	5757.22	699.79	6001.87	687.8	6040.26	686.14	6714.7	686.14
6961.66	680.42	7215.77	661.34	7315.97	656.14	7411.32	656.14	7535.89	663.81
7809.79	693.32	7870.93	696.14	8053.86	688.41	8109.89	688.41	8149.3	687
8281.53	686.75	8361.82	689.48	8491.3	698.06	8728.91	709.63	9118.61	722.27
9355.24	722.27	9377.57	721.75	9520.28	714.97	9632.51	712.27	10495.57	707.86
10831.93	696.06	11140.79	671.44	11169.62	666.14	11325.71	658.38	11571.65	654.99
11636.89	657.33	12077.31	693.98	12416.77	710.12	12925.64	716.14	12934.3	716.41
13117.35	717.12	13345.89	707.31	13411.5	706.35	13533.89	710.68	13719.7	720
14090.94	72014148.19		715.21	14237.48	708.34	14518.19	710.27	14711.89	724.93
14785.5	73015216.09		73015756.08		711.59	15941.69	683.51	15958.82	679.72
16107.72	661.88	16305.56	632.67	16327.18	630.98	16578.96	621.94	17018.39	614.73
17132.15	613.86	19498.87	613.86	19718.68	620.20	20093.06	620.20	20497.55	601.59
20668.03	601.52	20761.48	597.73	21012.02	593.86	21550.44	590.05	21557.82	589
21595.6	580	21640.2	573.64	21697.38	568.89	21754.57	565.23	21947.11	572.95
21982.49	58022063.19		618.69	22123	627.31	22322.92	662.05	22384.09	666.23
22668.91	669.53	22744.86	672.48	23590.46	723.28	23873.98	729.33	24302.35	732.35
24554.42	737.73	24783.5	732.08	25300.87	713.18	25337.68	710.32	25614.9	695.64
25764.43	699.49	25811.43	703.04	25860.66	703.04	26109.54	709.33	26482.66	714.68
26631.71	718.36	26889	732.44	27389.34	744.82	27600.04	746.66	27981.85	740.6
28363.42	728.48	28420.39	727.58	29140.75	726.73	29208.39	727.73	30248.94	727.73
30616.27	733.86	32067.99	715.46	32545	721.59	33295.57	721.59	34215.54	717.73
34383.58	717.73	34740.7	720.62	34849.74	720.13	35223.92	715.46	35636.22	715.46
36184.59	70036190.36		698.99	36339.35	643.53	36500.77	611.59	36525.43	612.69
36638.39	619.88	37114.37	635.01	37538.45	688.72	37628.63	698.41	38064.41	700.19
38211.57	693.06	38266.64	693.28	38647.35	710.33	39131.05	719.42	39431.55	723.86
39908.14	725.44	40284.78	738.96	40509.31	739.74	40600.27	737.96	41055.65	727.73
41657.86	74042004.43		732.63	42327.23	729.64	42454.45	726.93	42523.93	724.42
42627.4	722.89	42974.72	726	43142.7	73043228.58		73044243.12		713.16
44337.81	709.83	44555.1	705.78	44783.78	707.65	44864.98	706.14	45069.1	706.14
45096.27	706.66	45267.53	707.11	45541.9	702.48	46186.87	684.13	46323.46	682.55
46543.52	687.82	46660.3	691.98	47186.42	723.03	47483.43	731.45	48446.72	739.43
48614.17	741.59	49094.46	749.17	49225.58	754.11	50074.35	800		

Manning's n Values num= 3

SS_Rev3.rep

Sta	n Val	Sta	n Val	Sta	n Val		
0	.15	21595.6	.15	21598.2	.15		
Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.	
21595.6	21598.2	4.99	4.99	4.99	.1	.3	
CROSS SECTION OUTPUT Profile #PF 1							
E.G. Elev (ft)	759.37	Element	Left OB	Channel	Right OB		
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150		
W.S. Elev (ft)	759.22	Reach Len. (ft)	4.99	4.99	4.99		
Crit W.S. (ft)		Flow Area (sq ft)	1550045.00	72945.14	1203715.00		
E.G. Slope (ft/ft)	0.000296	Area (sq ft)	1550045.00	72945.14	1203715.00		
Q Total (cfs)	7996901.00	Flow (cfs)	5032200.00	407825.40	2556877.00		
Top Width (ft)	46362.02	Top Width (ft)	18637.53	386.89	27337.60		
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.25	5.59	2.12		
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.17	188.54	44.03		
Conv. Total (cfs)	464601000.0	Conv. (cfs)	292358800.0	23693690.0	148548500.0		
Length wtd. (ft)	4.99	wetted Per. (ft)	18657.00	388.51	27375.54		
Min Ch El (ft)	565.23	Shear (lb/sq ft)	1.54	3.47	0.81		
Alpha	1.21	Stream Power (lb/ft s)	4.99	19.42	1.73		
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	46669.29	2303.87	34921.95		
C & E Loss (ft)	0.00	Cum SA (acres)	562.04	12.23	843.24		

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267601.*

INPUT

Description:	Station	Elevation	Data	num=	174
	Sta	Elev	Sta	Elev	Sta
	0	760	1238.59	761.9	1410.77
2398.02	766.11	2536.21	770	2745	770
2670.61	722.27	3928.57	713.48	4534.82	701.07
5559.62	694.75	5757.35	699.73	6002.01	687.77
6961.82	680.36	7215.93	661.3	7316.13	656.11
7809.96	693.27	7871.11	696.11	8054.04	688.34
8281.71	686.73	8362.01	689.47	8491.49	698.07
9355.45	722.22	9377.78	721.7	9520.49	714.92
10832.17	695.98	11141.04	671.36	11169.87	666.04
11637.15	657.38	12077.58	694.04	12417.05	71012925.93
13117.64	717.04	13346.19	707.21	13411.8	706.25
14091.25	72014148.51	715.22	14237.8	708.39	14518.84
14785.83	73015216.43	73015756.43	711.66	15942.05	683.68
16108.08	662.03	16305.93	632.74	16327.55	631.05
17132.53	613.89	19499.31	613.89	19719.12	62020093.51
20668.49	601.66	20761.95	597.78	21012.49	593.89
21596.08	58021640.81	573.63	21698.16	568.88	21755.5
21983.13	58022063.85	618.82	2123.67	627.42	2323.62
22669.69	669.46	22745.66	672.39	23591.43	723.18
24555.58	737.78	24784.71	732.09	25302.18	713.14
25765.83	699.61	25812.85	703.33	25862.08	703.33
26633.3	718.41	26890.64	732.51	27391.08	744.82
28365.36	728.41	28422.34	727.51	29142.84	726.77
30618.67	733.89	30707.69	715.55	32547.79	721.66
34386.74	717.78	34743.93	720.75	34853	720.28
36188.12	70036193.88	698.99	36342.91	643.45	36504.37
36642.01	619.94	37118.09	635.19	37542.25	688.69
38215.51	692.93	38270.59	693.16	38651.38	710.26
39912.42	725.47	40289.14	738.95	40513.72	739.74
41662.5	74042009.14	732.66	42332	729.72	42459.25
42632.24	722.97	42979.63	726.01	43147.64	73043233.54
44343	709.89	44560.34	705.81	44789.05	707.64
45101.61	706.64	45272.9	707.12	45547.34	702.51
46549.16	687.79	46665.96	691.93	47192.18	722.99
48620.22	741.58	49100.61	749.17	49231.76	754.09

Manning's n Values

Sta	n Val	Sta	n Val	Sta	n Val
0	.15	21596.08	.15	21598.3	.15

Bank Sta: Left	Right	Lengths: Left	Channel	Right	Coeff Contr.	Expan.
21596.08	21598.3	4.99	4.99	4.99	.1	.3

CROSS SECTION OUTPUT Profile #PF 1

E.G. Elev (ft)	759.37	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.22	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1550069.00	72973.03	1203425.00
E.G. Slope (ft/ft)	0.000296	Area (sq ft)	1550069.00	72973.03	1203425.00
Q Total (cfs)	7996901.00	Flow (cfs)	5032984.00	408038.40	2555879.00
Top Width (ft)	46368.73	Top Width (ft)	18638.22	387.05	27343.46
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.25	5.59	2.12
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.17	188.54	44.01
Conv. Total (cfs)	464529600.0	Conv. (cfs)	292359500.0	23702420.0	148467600.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18657.69	388.66	27381.40
Min Ch El (ft)	565.23	Shear (lb/sq ft)	1.54	3.47	0.81
Alpha	1.21	Stream Power (lb/ft s)	4.99	19.42	1.73
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	46491.72	2295.51	34784.08
C & E Loss (ft)	0.00	Cum SA (acres)	559.91	12.18	840.10

CROSS SECTION

RIVER: BRAZOS RIVER
 REACH: LOWER BRAZOS

RS: 267596.*

INPUT

Description:	Station	Elevation	Data	num=	174
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SS_Rev3.rep											
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
2398.07	766.09	1238.62	761.91	1410.81	760.19	1919.16	760.23	1515.64	766.09		
3670.69	722.29	3928.66	713.5	4534.92	701.08	4638.06	702.67	4769.79	705.33		
5559.74	694.71	5757.48	699.67	6002.14	687.74	6040.53	686.09	6715	686.09		
6961.97	680.31	7216.09	661.26	7316.29	656.09	7411.65	656.09	7536.23	663.7		
7810.14	693.23	7871.28	696.09	8054.22	688.27	8110.26	688.27	8149.67	686.87		
8281.9	686.71	8362.2	689.47	8491.68	698.08	8729.3	709.64	9119.02	722.18		
9355.66	722.18	9377.98	721.65	9520.7	714.86	9632.94	712.18	1010496.04	707.8		
10832.41	695.89	11141.29	671.28	11170.12	665.94	11326.22	658.24	11572.17	655.05		
11637.41	657.42	12077.85	694.11	12417.32	706.15	12926.22	716.09	12934.87	716.36		
13117.94	716.96	13346.48	707.1	13412.1	706.15	13534.49	710.57	13720.31	720		
14091.57	72014148.82		715.24	14238.12	708.44	14519.16	710.39	14712.55	724.96		
14786.16	73015216.77		73015756.78		711.73	15942.41	683.86	15959.54	680.08		
16108.44	662.17	16306.29	632.81	16327.91	631.11	16579.71	622.01	17019.15	614.77		
17132.92	613.91	19499.74	613.91	19719.56	62020093.96		62020498.47		601.73		
20668.95	601.73	20762.41	597.82	21012.96	593.91	21551.4	590.05	21558.79	589		
21596.57	58021641.42		573.61	21698.93	568.87	21756.44	565.23	21948.48	572.99		
21983.77	580	22064.5	618.92	22124.34	627.48	22324.33	662.08	22385.53	666.26		
22670.47	669.39	22746.45	672.32	23592.39	723.08	23876.03	729.22	24304.58	732.37		
24556.75	737.82	24785.92	732.1	25303.5	713.12	25340.32	710.24	25617.66	695.68		
25767.24	699.72	25814.27	703.47	25863.51	703.47	26112.5	709.56	26485.77	714.8		
26634.88	718.45	26892.28	732.58	27392.81	744.84	27603.6	746.62	27985.57	740.48		
28367.3	728.34	28424.29	727.44	29144.94	726.81	29212.61	727.82	30253.58	727.82		
30621.06	733.91	3073.38	715.64	32550.58	721.73	33301.45	721.73	34221.79	717.82		
34389.91	717.82	34747.17	720.82	34856.25	720.36	35230.58	715.64	35646.48	715.64		
36191.65	70036197.41		698.98	36346.47	643.43	36507.96	611.73	36532.63	612.82		
36645.63	620	37121.8	635.28	37546.05	688.66	37636.27	698.27	38072.23	700.03		
38219.45	692.81	38274.54	693.03	38655.41	710.22	39139.31	719.42	39439.93	723.91		
39916.71	725.51	40293.5	738.94	40518.13	739.74	40609.12	737.97	41064.69	727.82		
41667.14	74042013.86		732.69	42336.78	729.79	42464.05	727.11	42533.57	724.6		
42637.08	723.04	42984.54	726.03	43152.59	730	43238.5	73044253.46		713.29		
44348.18	709.95	44565.57	705.85	44794.33	707.62	44875.57	706.09	45079.77	706.09		
45106.95	706.62	45278.28	707.13	45552.77	702.54	46198	684.18	46334.64	682.58		
46554.79	687.76	466671.62	691.88	47197.95	722.94	47495.08	731.43	48458.77	739.42		
48626.28	741.57	49106.77	749.16	49237.95	754.07	50087.05	800				
Manning's n Values											
Sta	n Val	Sta	num=	3	Sta	n Val	Sta	n Val	Sta	n Val	Sta
0	.1521596.57				.1521983.77						
Bank Sta: Left Right Lengths: Left Channel Right Coeff Contr. Expan.											
21596.57	21983.77		4.99	4.99	4.99		.1		.3		
CROSS SECTION OUTPUT Profile #PF 1											
E.G. Elev (ft)	759.37	Element	Left OB	Channel	Right OB						
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150						
W.S. Elev (ft)	759.22	Reach Len. (ft)	4.99	4.99	4.99						
Crit W.S. (ft)		Flow Area (sq ft)	1550112.00	72999.45	1203182.00						
E.G. Slope (ft/ft)	0.000296	Area (sq ft)	1550112.00	72999.45	1203182.00						
Q Total (cfs)	7996901.00	Flow (cfs)	5033705.00	408232.10	2554964.00						
Top width (ft)	46375.43	Top width (ft)	18638.90	387.20	27349.33						
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.25	5.59	2.12						
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.17	188.53	43.99						
Conv. Total (cfs)	464473200.0	Conv. (cfs)	292365900.0	23710790.0	148396500.0						
Length wtd. (ft)	4.99	Wetted Per. (ft)	18658.36	388.81	27387.28						
Min Ch El (ft)	565.23	Shear (lb/sq ft)	1.54	3.47	0.81						
Alpha	1.21	Stream Power (lb/ft s)	4.99	19.43	1.73						
Frctn Loss (ft)	0.00	Cum Volume (acre-ft)	46314.15	2287.15	34646.23						
C & E Loss (ft)	0.00	Cum SA (acres)	557.77	12.14	836.97						
CROSS SECTION											
RIVER: BRAZOS RIVER											
REACH: LOWER BRAZOS RS: 267591.*											
INPUT											
Description:											
Station	Elevation	Data	num=	174							
Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev	Sta	Elev
0	800	1238.65	761.92	1410.84	760.19	1919.2	760.23	1515.69	766.07		
2398.13	766.07	2536.33	770	2745.12	770	2834.64	767.33	3140.83	747.09		
3670.78	722.3	3928.74	713.52	4535.02	701.08	4638.17	702.66	4769.9	705.31		
5559.86	694.68	5757.61	699.61	6002.27	687.71	6040.67	686.07	6715.15	686.07		
6962.13	680.25	7216.25	661.21	7316.46	656.07	7411.81	656.07	7536.4	663.65		
7810.31	693.19	7871.46	696.07	8054.4	688.2	8110.44	688.2	8149.85	686.8		
8282.08	686.69	8362.38	689.47	8491.87	698.09	8729.5	709.64	9119.22	722.13		
9355.87	722.13	9378.19	721.6	9520.92	714.8	9633.15	712.13	1010496.27	707.77		
10832.65	695.81	11141.54	671.21	11170.37	665.84	11326.47	658.17	11572.43	655.08		
11637.67	657.47	12078.12	694.16	12417.6	71012926.51		716.07	12935.16	716.34		
13118.23	716.88	13346.78	707	13412.4	706.04	13534.79	710.51	13720.62	720		
14091.88	72014149.14		715.26	14238.43	708.49	14519.49	710.45	14712.88	724.98		
14786.49	73015217.11		73015757.13		711.81	15942.76	684.04	15959.89	680.26		
16108.8	662.32	16306.66	632.87	16328.28	631.18	16580.07	622.04	17019.53	614.79		
17133.3	613.93	1919500.18	613.93	19720	62020094.41		62020498.93		601.8		
20669.42	601.82	20762.88	597.82	21013.43	593.93	21551.88	590.05	21559.27	589.01		
21597.05	58021642.03		573.62	21699.71	568.86	21757.38	565.22	21949.17	573.01		
21984.41	58022065.16		619.04	22125.01	627.57	22325.04	662.09	22386.25	666.28		
22671.25	669.31	22747.24	672.22	23593.36	722.98	23877.05	729.14	24305.69	732.39		
24557.91	717.82	24787.13	732.12	25304.81	713.06	25341.64	710.22	25619.04	695.69		
25768.65	699.84	25815.68	703.61	25864.94	703.61	26113.98	709.68	26487.32	714.86		
26636.47	718.49	26893.91	732.64	27394.55	744.86	27605.38	746.62	27987.43	740.43		
28369.23	728.27	28426.23	727.38	29147.03	726.86	29214.72	727.87	30255.9	727.87		
30623.46	733.93	30730.67	715.74	32553.37	721.83	33304.39	721.83	34224.92	717.87		
34393.07	717.87	34750.4	720.83	34859.51	720.43	35233.91	715.74	35649.89	715.74		
36195.18	70036200.95		698.98	36350.03	643.35	36511.55	611.83	36536.23	612.89		
36649.25	620.06	37125.52	635.37	37549.86	688.62	37640.09	698.23	38076.14	699.96		
38223.39	692.68	38278.49	692.93	38659.43	710.18	39143.44	719.41	39444.12	723.93		
39920.99	725.54	40297.86	738.94	40522.54	739.69	40613.54	737.98	41069.21	727.87		
41671.79	74042018.57		732.72	42341.56	729.87	42468.86	727.24	42538.38	724.69		
42641.92	723.12	42989.45	726.05	43157.53	73043243.46		73044258.62		713.36		
44353.37	710.01	44570.8	705.88	44799.61	707.61	44880.86	706.07	45085.11	706.07		
45112.29	706.64	5283.65	707.14	45558.2	702.56	46203.56	684.24	46340.23	682.59		

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Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21597	0521984.41		4.99	4.99	4.99		.1	.3

E.G. Elev (ft)	759.37	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.	0.150	0.150	0.150
W.S. Elev (ft)	759.22	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1550158.00	73028.71	1202857.00
E.G. Slope (ft/ft)	0.000297	Area (sq ft)	1550158.00	73028.71	1202857.00
Q Total (cfs)	7996901.00	Flow (cfs)	5034594.00	408457.20	2533851.00
Top Width (ft)	46382.02	Top Width (ft)	18639.65	387.36	27355.02
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.25	5.59	2.12
Max Chl Dpth (ft)	194.00	Hydr. Depth (ft)	83.16	188.53	43.97
Conv. Total (cfs)	464401700.0	Conv. (cfs)	292372500.0	23720220.0	148309000.0
Length Wtd. (ft)	4.99	Wetted Per. (ft)	18659.10	388.97	27392.97
Min Chl El (ft)	565.22	Shear (lb/sq ft)	1.54	3.48	0.81
Alpha	1.21	Stream Power (lb/ft s)	4.99	19.44	1.73
Frcn Loss (ft)	0.00	Cum Volume (acre-ft)	46136.58	2278.79	34508.42
C & E Loss (ft)	0.00	Cum SA (acres)	555.64	12.10	833.84

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS RS: 267586.*

[illegible]

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Manning's n values      num=      3
Sta  n Val      Sta  n Val      Sta  n Val
0      .1521597.53      .1521985.05      .15

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Bank Sta:	Left	Right	Lengths:	Left	Channel	Right	Coeff	Contr.	Expan.
	21597	5321985.05		4.99	4.99	4.99		.1	.3

E.G. Elev (ft)	759.36	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	wt. n-val.	0.150	0.150	0.150
W.S. Elev (ft)	759.21	Reach Len. (ft)	4.99	4.99	4.99
Crit W.S. (ft)		Flow Area (sq ft)	1550188.00	73058.67	1202577.00
E.G. Slope (ft/ft)	0.000297	Area (sq ft)	1550188.00	73058.67	1202577.00
Q Total (cfs)	7996901.00	Flow (cfs)	5035352.00	408683.00	2552866.00
Top width (ft)	46388.80	Top width (ft)	18640.41	387.52	27360.88
Vel Total (ft/s)	2.83	Avg. Vel. (ft/s)	3.25	5.59	2.12
Max Chl Dpth (ft)	193.99	Hydr. Depth (ft)	83.16	188.53	43.95
Conv. Total (cfs)	46434460.0	Conv. (cfs)	292374300.0	0.23729900.0	148230400.0
Length wtd. (ft)	4.99	Wetted Perim (ft)	18659.85	389.85	27359.88
Min El (ft)	565.22	Shear (lb/sq ft)	1.54	1.48	0.81
Alpha	1.21	Stream Power (lb/ft s)	5.00	19.45	1.73
Frcn Loss (ft)	0.00	Cum Volume (acre-ft)	4959.00	2270.42	34370.64
C & F Loss (ft)	0.00	Cum SA (acres)	553.50	12.05	830.70

RIVER: BRAZOS RIVER
REACH: LOWER BRAZOS RS: 267581.*