

# Water Science Associates

## Expert Report of Kirk Martin, P.G.

United States District Court  
Southern District Court of Florida  
Miami Division

Case Number: 1:16-cv-23017-DPG

Southern Alliance for Clean Energy  
Tropical Audubon Society Incorporated  
Friends of the Everglades  
Plaintiffs  
vs.  
Florida Power & Light Company  
Defendant

### Background

Florida Power & Light (FPL) maintains a cooling canal system (CCS) for operation of power generation units at their Turkey Point Power Generation Facility in southeast Miami-Dade County (Figure 1). The CCS consists of some 6000 acres of canals through which water is circulated for dissipation of heat created by the power generation units. The CCS is characterized as a “closed-loop” cooling system in that the same water is circulated through the extensive canal network without direct input of new water to the system. However, the CCS does not function as a closed loop system hydrologically in that as the warmed water is circulated, evaporation losses to the atmosphere remove freshwater from the canal system causing a concentration of salinity that exceeds typical ocean salinities by a factor of two or more. This increased salinity is accompanied by a corresponding increase in water density that causes hypersaline water to migrate downward into the underlying groundwater system and radially outward from beneath the CCS.



Figure 1 – General Location Map

## Groundwater Contamination

Groundwater salinity data from monitoring wells surrounding the CCS (Figure 2) shows that hypersaline water emanating from the CCS has moved westward of the CCS and L-31E Canal in violation of minimum criteria for groundwater specified in Florida Administrative Code 62-520.400 and in violation of Condition IV.1 of the FPL Turkey Point NPDES by allowing offsite discharges from the CCS to the surrounding groundwater system outside of the CCS area. The data show that hypersaline water from the CCS has moved more than two miles westward of the CCS and is currently influencing movement of the saline water interface within the Biscayne Aquifer more than four miles inland (Figure 3). Groundwater tritium data from the monitoring well network confirms that groundwater impacted by the CCS has extended more than four miles inland from the CCS (Figure 4). Exhibit A shows specific violations of the NPDES permit based on sampling of certain groundwater monitoring wells (shaded cells indicate exceedances of groundwater standards). The violations have continued after July 12, 2016, the date the original Complaint was filed in this case.

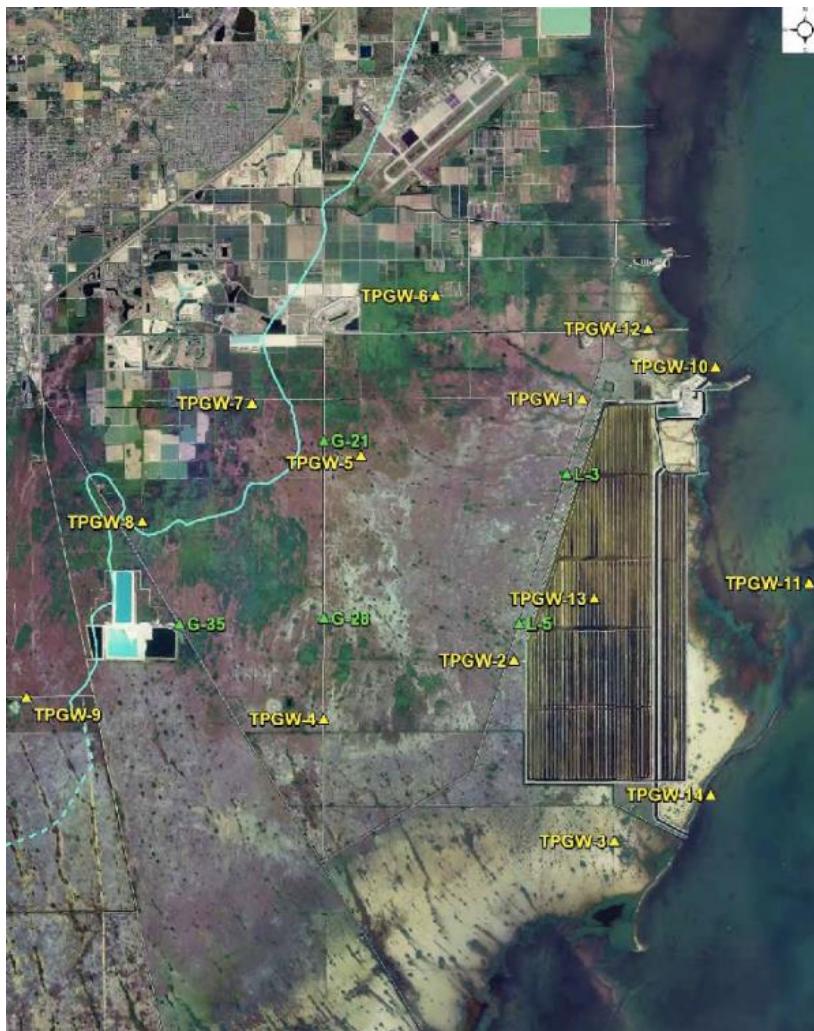


Figure 2 – Groundwater Monitoring Well Locations

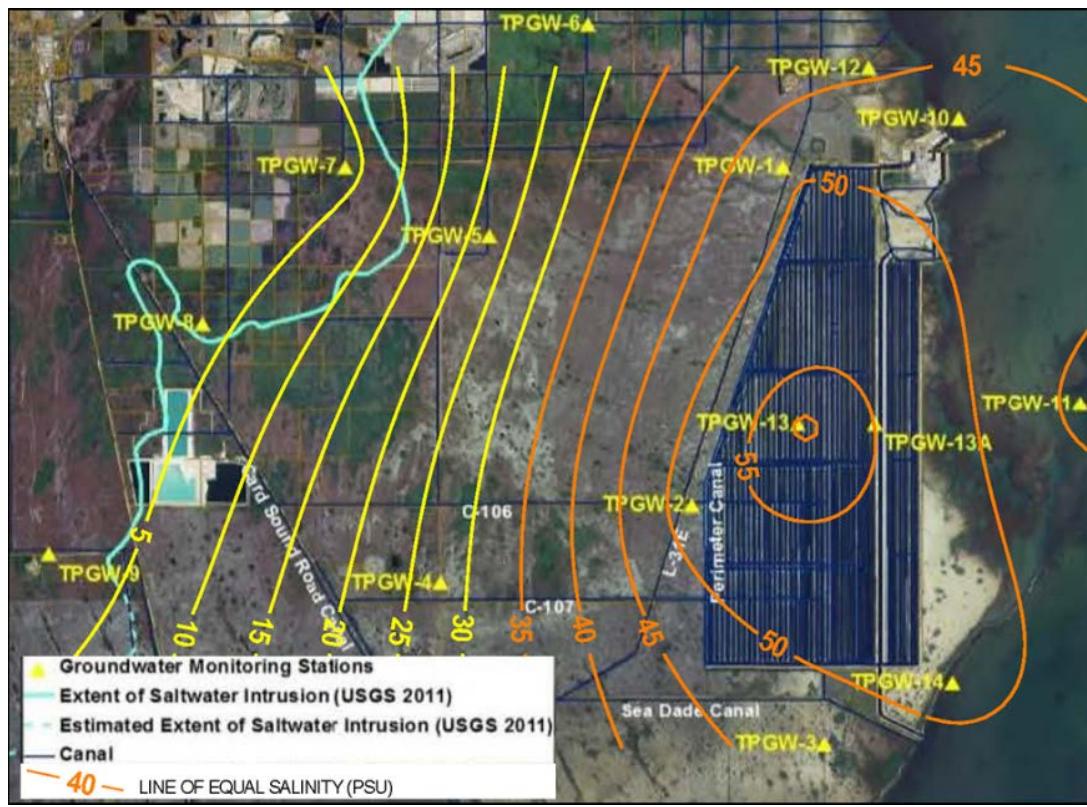


Figure 3 –Hypersaline Plume in the Biscayne Aquifer

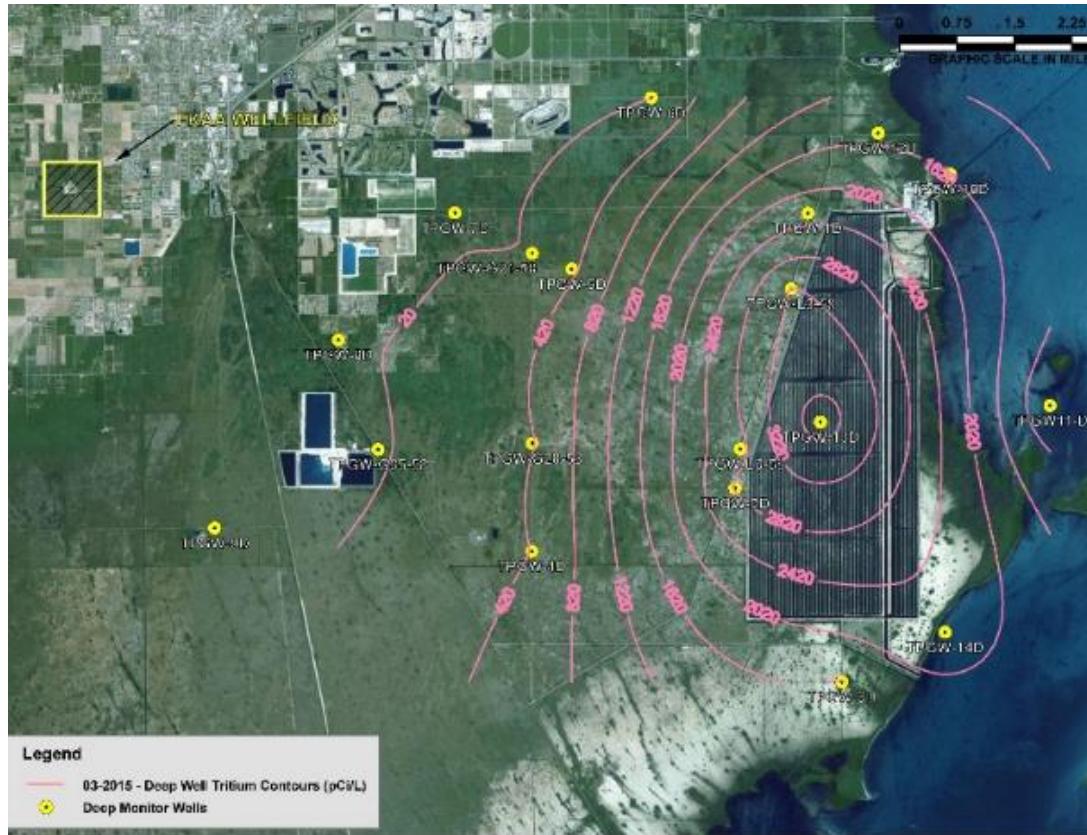


Figure 4 – Tritium Plume in the Biscayne Aquifer

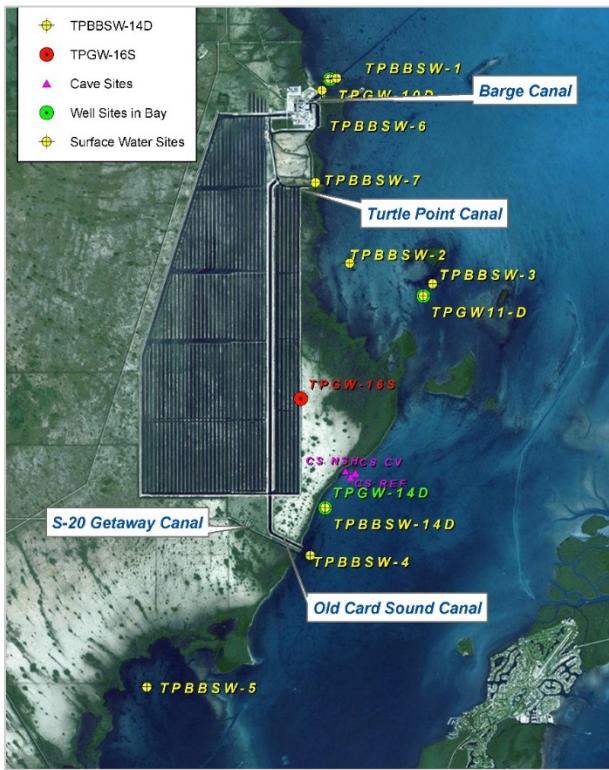


Figure 5 –Sampling Sites in Biscayne Bay

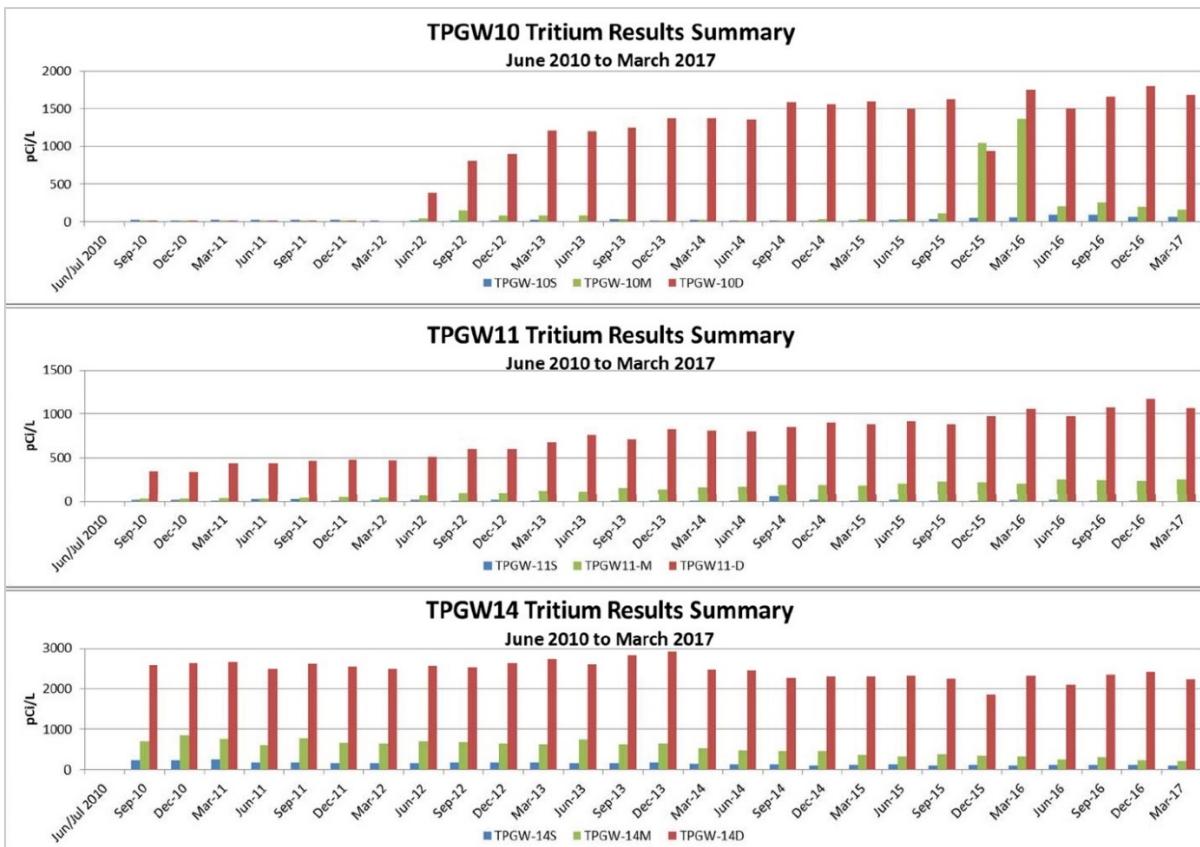


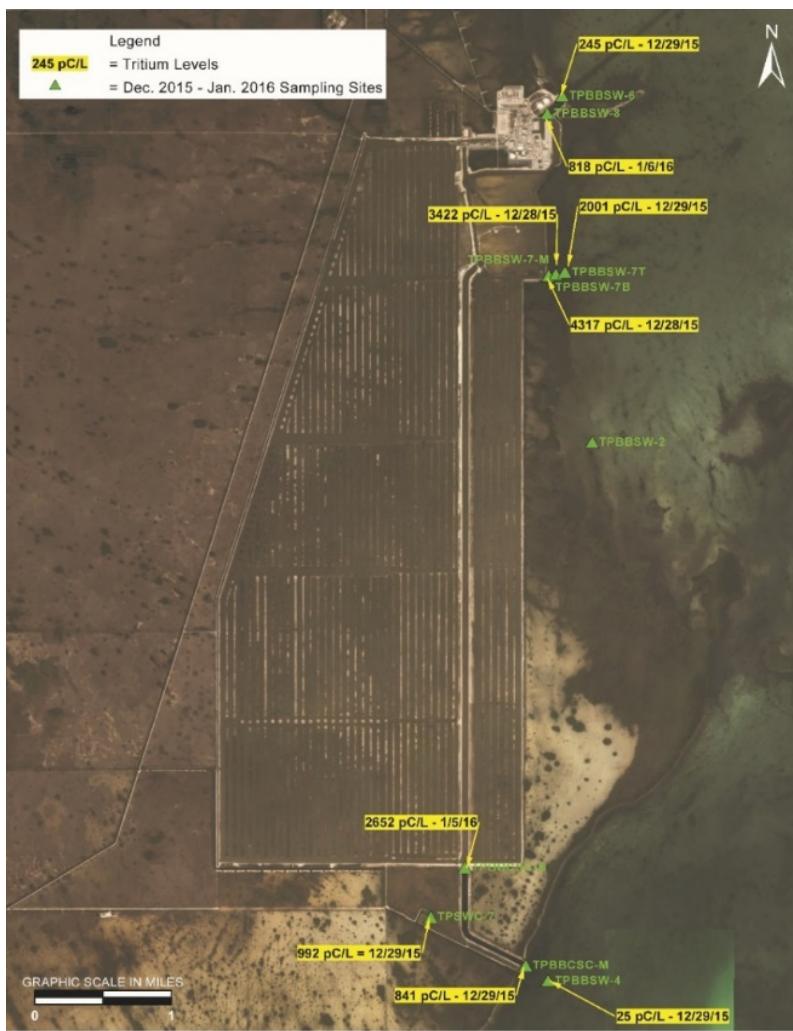
Figure 6 – Groundwater Tritium Levels Beneath Biscayne Bay

Groundwater data from beneath Biscayne Bay to the east is far less available than groundwater data in the Biscayne Aquifer due to the lack of groundwater monitoring stations within the Bay. However, the limited groundwater data that are available from beneath Biscayne Bay indicate that movement of the contaminant plume originating from the CCS is radial and likely extends as far east as the empirical data show the plume migration to the west. Tritium data from three groundwater sampling points in Biscayne Bay (Figure 5) show migration of the CCS contaminant plume to the east beneath Biscayne Bay (Figure 6) with tritium levels ranging between 800 and 3000 pCi/L for the deepest groundwater sampling points. Background levels for tritium in the Biscayne Aquifer should be less than 6.6 pCi/L in the absence of the influence of the CCS contaminant plume.

## Surface Water Contamination

Elevated tritium levels are also indicated in surface water samples taken in deeper portions of Biscayne Bay far above background levels. Surface water sampling conducted at various water depths within Biscayne Bay show elevated concentrations in bottom samples collected in the canals adjacent to the perimeter berm surrounding the CCS. Specifically, water samples taken from sampling sites TTBBSSW-6, TPPPSW-7 as well as TTBBSSW-8, TPBBCSC-B, TPSWC-7, and TPBBSCS-M all show measured tritium levels ranging as high as 4000 pCi/L and well in excess of background levels for the Bay waters (Figure 7).

The elevated nutrient and tritium levels found at these surface water monitoring stations within Biscayne Bay east of the CCS are conclusive evidence of wastewater that originated within or beneath the CCS and demonstrate a direct hydrological connection between the CCS and the



Bay. Bedrock immediately underlying the CCS and Biscayne Bay consists of the Miami Limestone and the Fort Thompson Formation, both of which contain highly porous and permeable limestone within the shallow substratum and provide direct connection of the groundwater and surface water environments. Deeper portions of Biscayne Bay that intersect permeable groundwater strata exist as both natural seeps and manmade excavations (dredged canals). Each connection is likely to facilitate movement of contaminated water from within and beneath the CCS to Biscayne Bay. Discharge of wastewater from the CCS to Biscayne Bay is a violation of Condition I.A.1 of the facility NPDES permit prohibiting discharges to surface waters. The specific violations of this provision during the five years before this lawsuit was filed and during the time since the lawsuit are shown as shaded cells in Exhibit B based on data provided to FDEP and Miami-Dade County by FPL.

Figure 7 – Surface Water Tritium Levels in Biscayne Bay

Surface water sampling conducted in Biscayne Bay also indicate elevated nutrient levels likely originating from the CCS. Numeric Nutrient Criteria ("NNC") established in Florida Administrative Code ("FAC") 62-302.532 were exceeded at several locations near Turkey Point violating Section VIII., 5 and 12 of the NPDES Permit, as well as provisions of the Clean Water Act and the Florida

Statutes. FAC 62-302 requires that the annual geometric mean (AGM) of a regulated nutrient not exceed the established criteria more than once in a three-year period. The sampling locations labeled TTBSW-6 and TPPBW-7 (Figure 5) show Nitrogen, Phosphorous, and Chlorophyll A levels in excess of the FAC NNC (Figures 8-10). Both sampling sites are located adjacent to or within manmade channels that connect Biscayne Bay to the outer edge of the CCS. TTBSW-6 is adjacent to the channel known as the Barge Basin Canal and TTBSW-7 is located within the Turtle Point Canal. Data from discrete depth sampling in and adjacent to these two canals as well as within the Old Card Sound Canal located at the southern end of the CCS all show bottom samples exhibiting significantly higher nutrient levels than do mid or top water samples. Sampling at sites TPBSW-1 through TPBSW-5 show violations of the FAC NNC for phosphorous without deeper excavations being present.

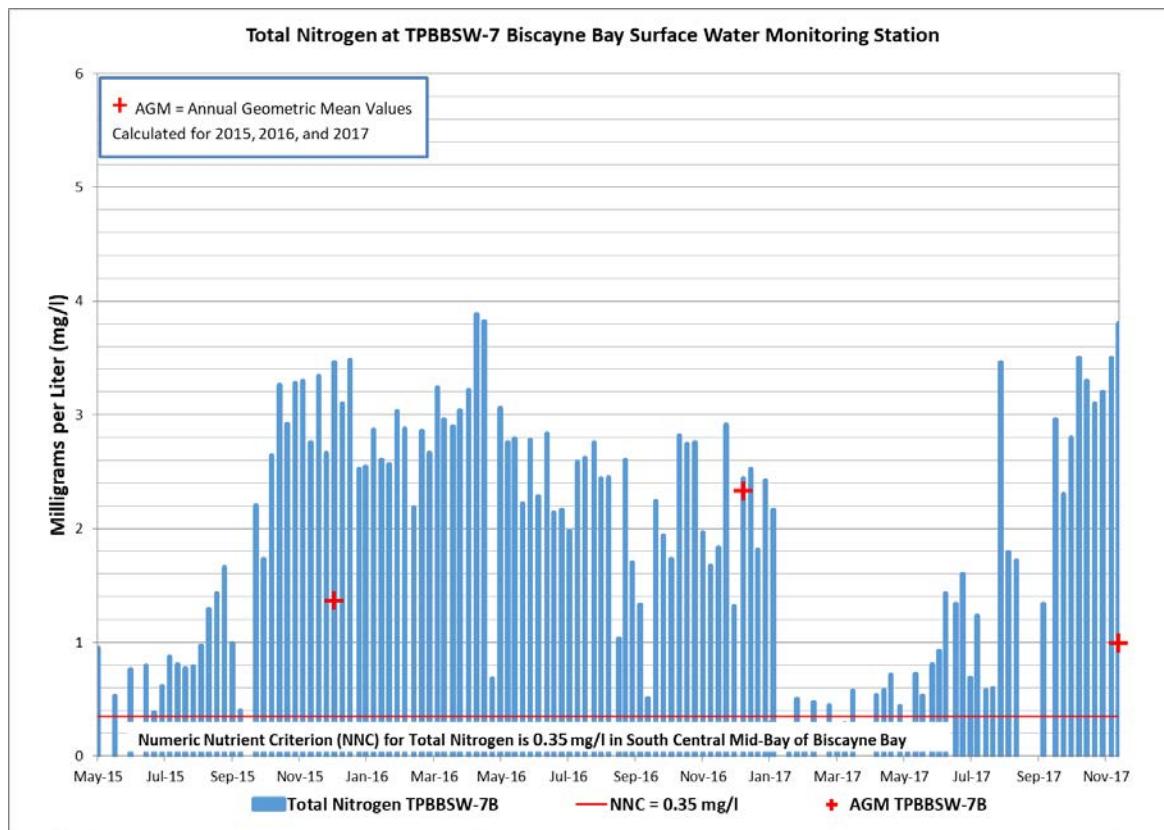
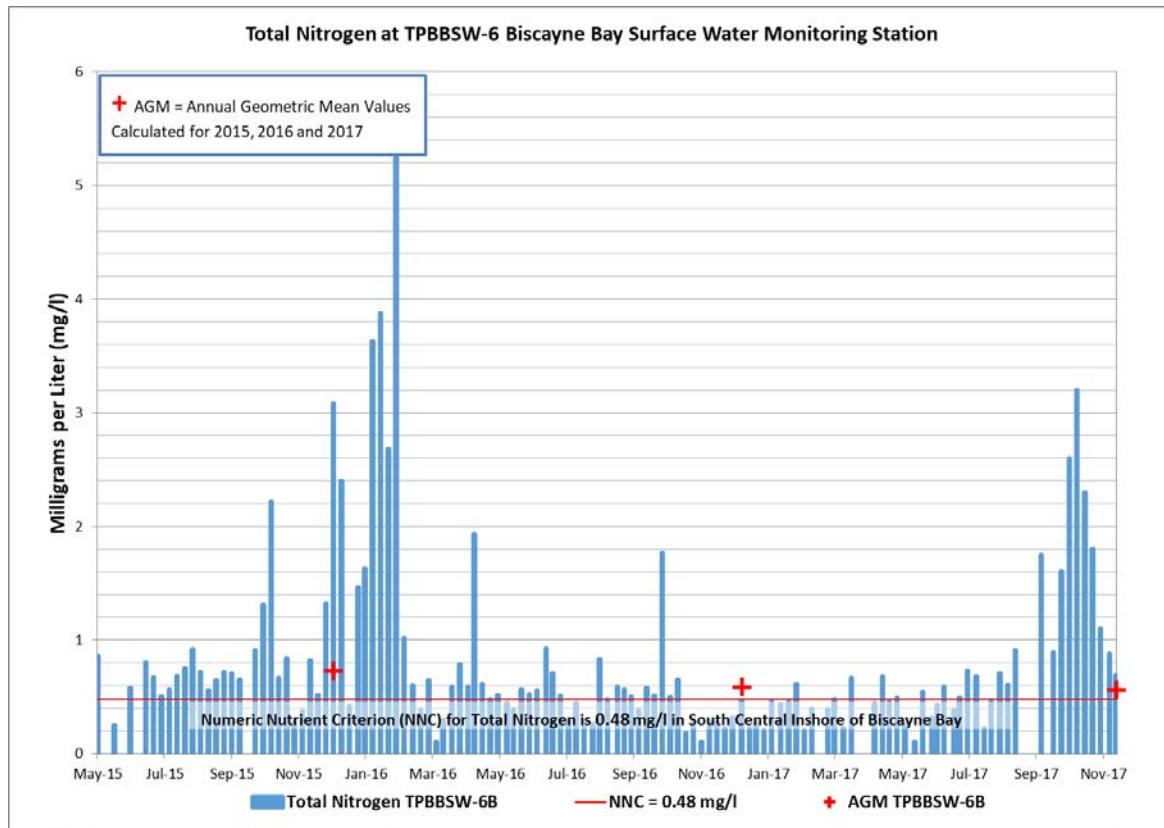
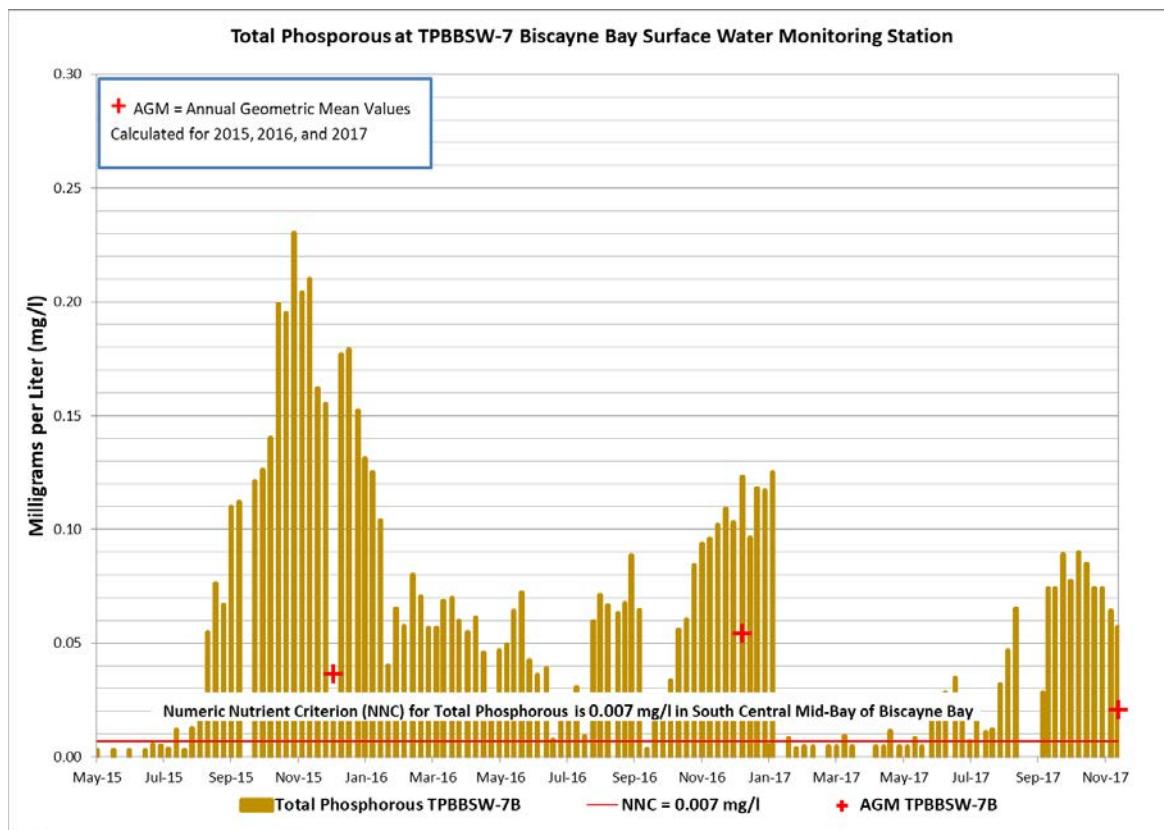
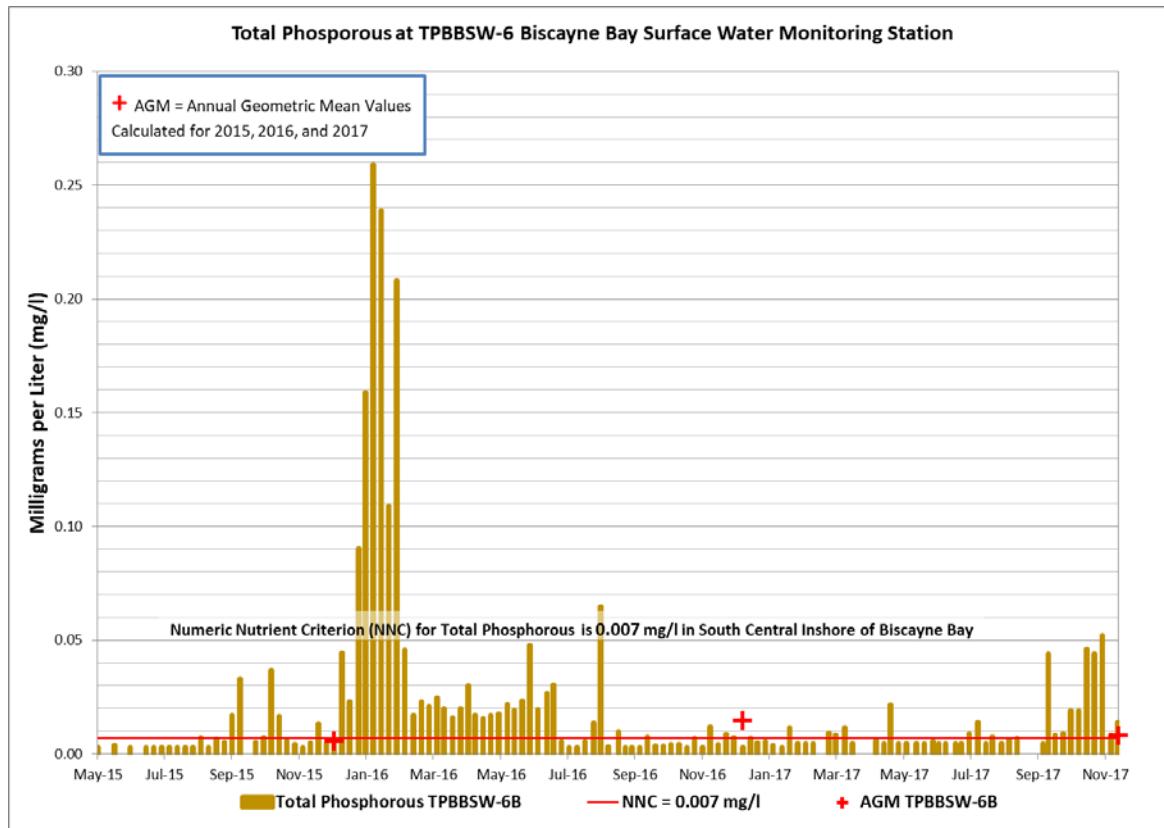


Figure 8. Nitrogen Levels in Biscayne Bay



*Figure 9 – Phosphorous Levels in Biscayne Bay*

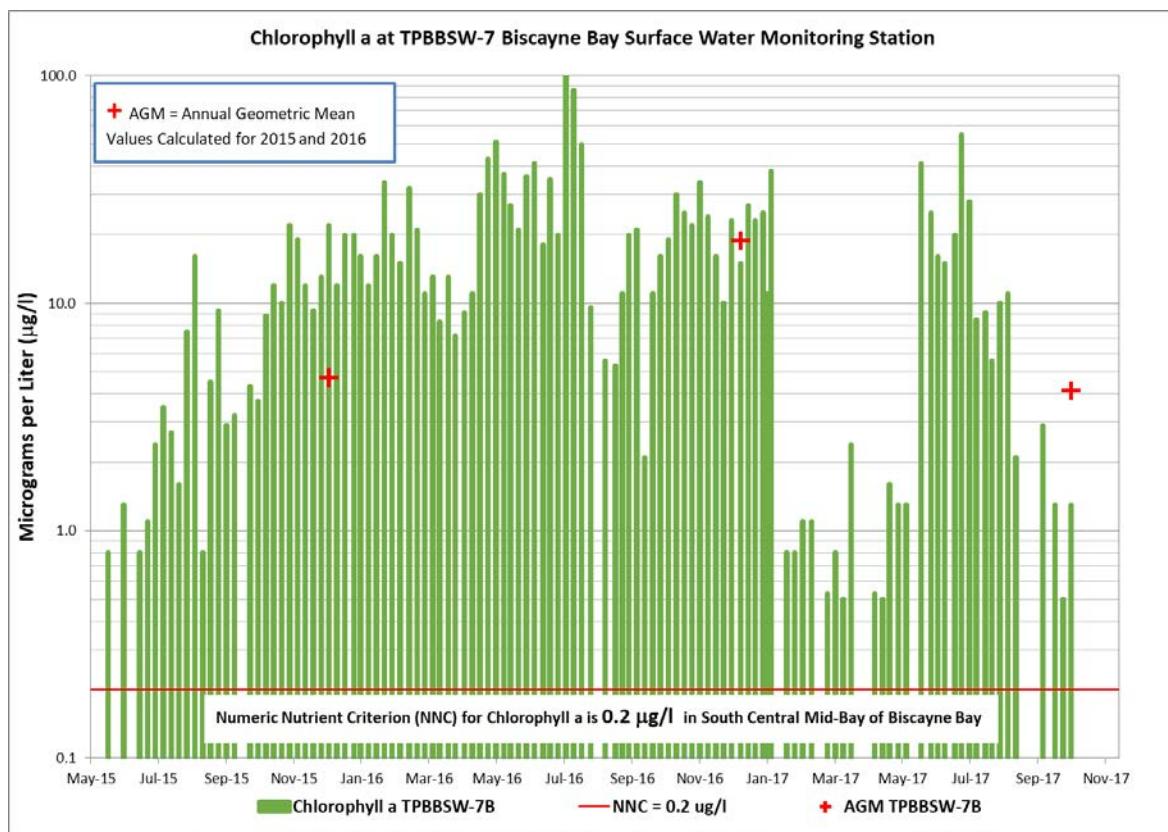
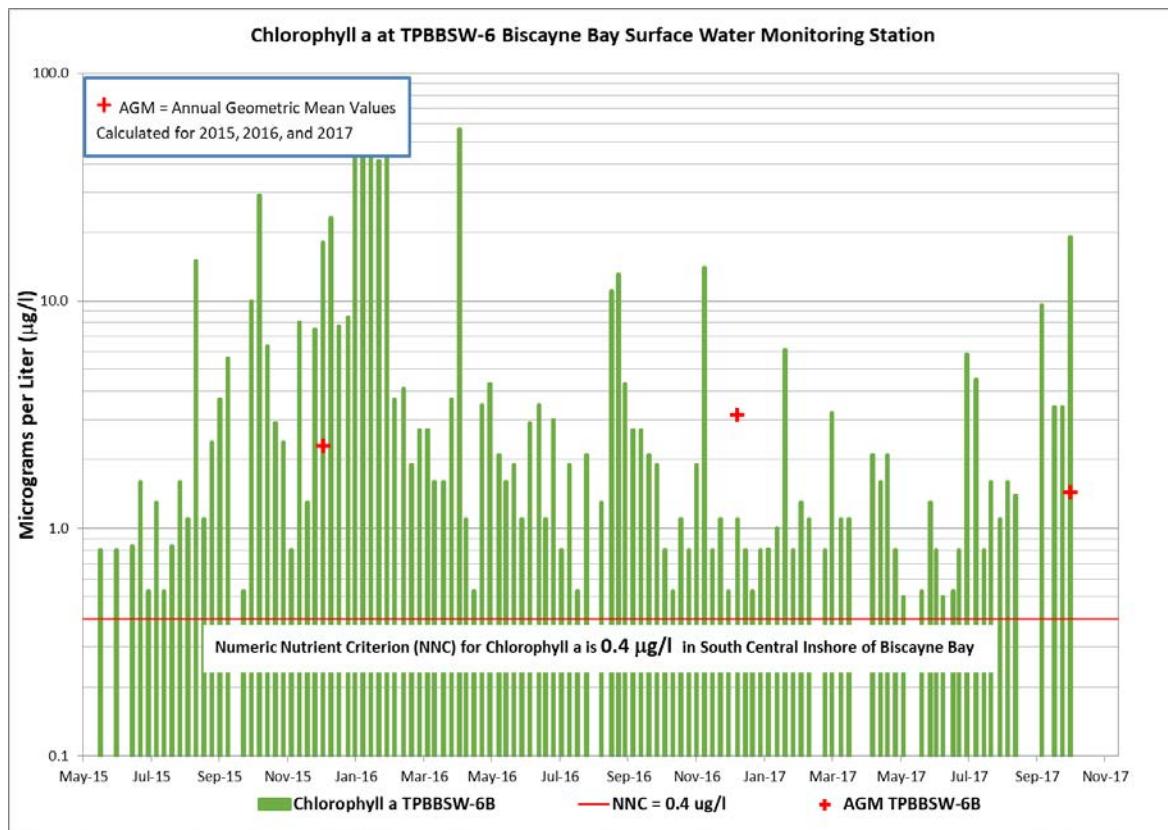


Figure 10 – Chlorophyll A Levels in Biscayne Bay

Data from surface water monitoring stations in Biscayne Bay show particularly elevated nutrient concentrations when water levels are high in the CCS. Figure 11 shows water level conditions in the CCS along with ammonia concentrations at TPBBSW-6 and TPBBSW-7 indicating a correlation between driving head or water level stage in the CCS and ammonia levels in surface waters tidally connected to Biscayne Bay. The period of highest water levels in the CCS corresponds to water being added to the CCS from L-31E and other sources to reduce temperature and salinity within the CCS. Review of Figure 11 indicates movement of wastewaters originating from the CCS to Biscayne Bay during times of high water level in the CCS and strongly suggests that the addition of significant amounts of water to the CCS will increase contaminant flows from the CCS to the surrounding groundwater system and to surface waters of Biscayne Bay.

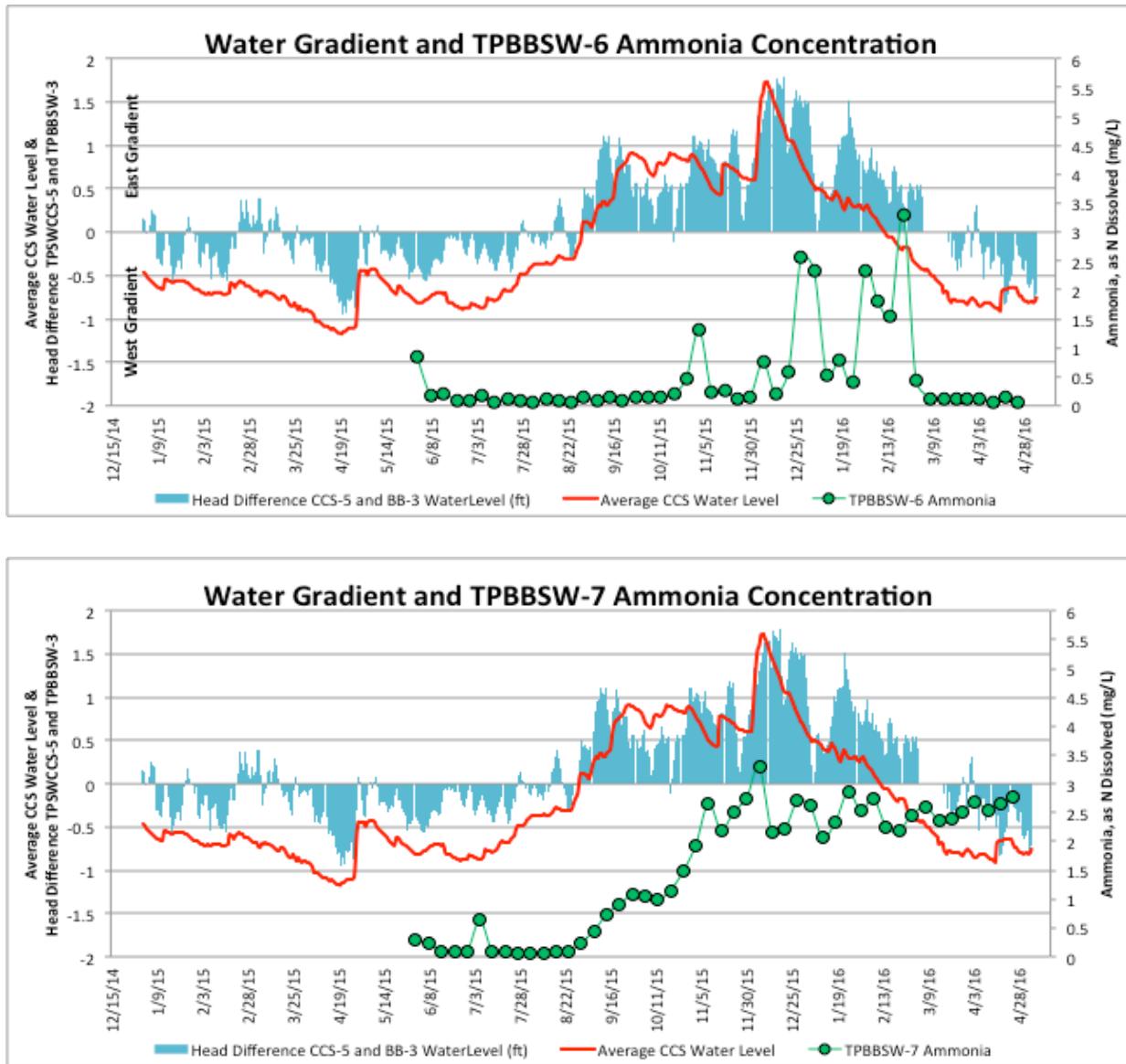


Figure 11 – Ammonia Levels in Biscayne Bay Correlated to High Water Levels in the CCS

Data from electronic monitoring of salinity and water level at a cave site in Biscayne Bay (Figure 12) indicate that the salinity within the cave is higher when tides are low and lower when tides are high. The salinity levels at the mouth of the cave exhibit a pattern of pronounced increase upon each low tide event indicating water outflow from the underlying aquifer that is more saline than the surrounding surface water. The salinity levels of groundwater discharging from the cave are often hypersaline (>35 PSU) and show a strong correlation with salinity levels in groundwater measured within the adjacent CCS at monitor well TPGW-16. Figure 13 demonstrates this strong correlation and indicates that the source of hypersaline groundwater discharging from the cave is at least partially originating from the CCS. The strong correlation of deep surface water salinity at Biscayne Bay site TPBBSW-14D with salinity in the cave site and at the shallow zone of monitor well TPGW-16 indicate that both the cave and the deep surface water are hydraulically connected to the CCS through the groundwater.

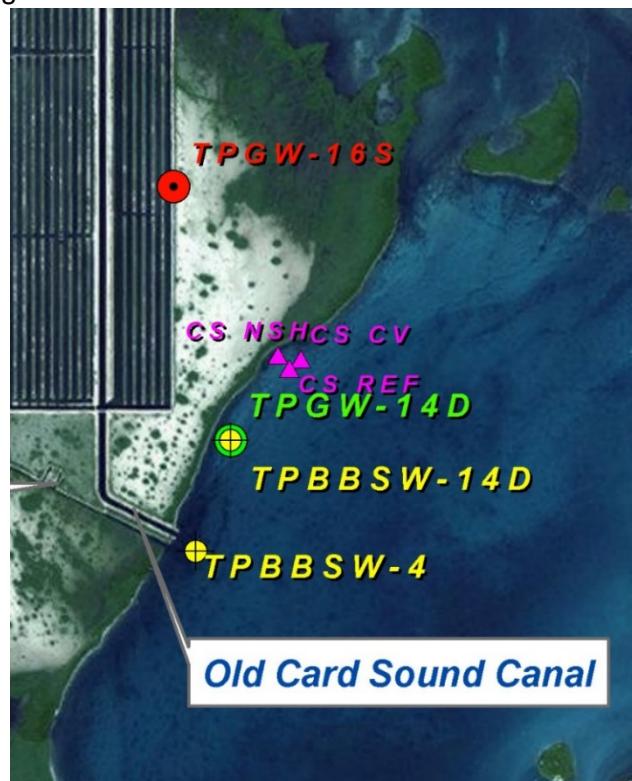


Figure 12 – Location of Cave and Nearby Monitor Sites

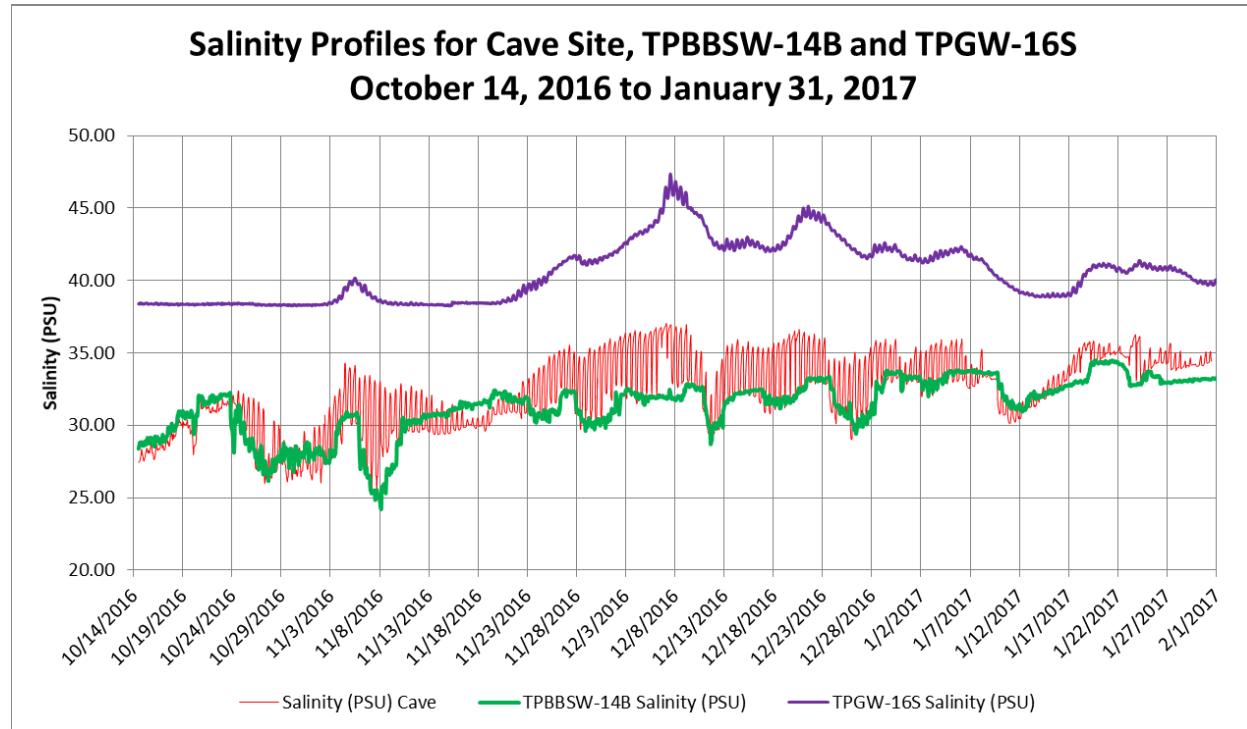


Figure 13 – Salinity for Biscayne Bay Cave Site, TPBBSW-14B, and TPGW-16S

## **Contaminant Remediation**

Based on my review of the proposed remedial actions being implemented by FPL, these actions will not stop the continued flow of contaminated water from the CCS to the surrounding groundwater system or to the surface waters of Biscayne Bay. It is likely that the violations of the NPDES permit discussed in this report will continue even if these remedial actions are implemented as planned.

The Consent Agreements between FPL and Miami Dade County DERM and between FPL and the FDEP focused on requirements for abatement and remediation of hyper-saline groundwater west and north of FPL's property. Principal components of the remediation plan entail installation of Biscayne Aquifer recovery wells located along the western edge of the CCS to extract hypersaline water from the aquifer and the addition of brackish water from the Upper Floridan Aquifer, saline water from Biscayne Aquifer wells, and freshwater from the L-31E canal into the CCS. The Biscayne Aquifer recovery wells are a critical factor in the proposed remediation and removal of the hypersaline plume from the Biscayne Aquifer. However, the well locations being well distant from the western extent of the plume will limit their ability to fully extract the hypersaline water. More importantly, the addition of fresher waters to the CCS, while improving the effectiveness of the CCS for cooling water used at Turkey Point, will have an adverse effect on the proposed extraction program by increasing the driving head of the CCS into the Biscayne Aquifer and Biscayne Bay. The effect of the addition of significant volumes of water to the CCS will likely accelerate extraction of hypersaline water from immediately beneath the CCS but increase the driving head in the CCS resulting in increased outflow from the CCS through groundwater pathways into Biscayne Bay as well as reduce the ability of the recovery wells to extract the full extent of the hypersaline plume to the west.

Addendum 1 to the FPL/Miami-Dade Consent Agreement (August 2016) focused on the assessment and management of nutrient sources, specifically ammonia, exceeding DERM water quality standards in surface water monitoring stations tidally connected to Biscayne Bay. The proposed plan to mitigate the nutrient contamination within Biscayne Bay adjacent to the CCS consists primarily of backfilling the two manmade excavations at the Barge Basin Canal (sites TPBBSW-6 and 8) and the Turtle Point Canal (site TPBBSW-7). While backfilling of deeper excavations at these two sites will likely reduce the direct flow of contaminated groundwater into Biscayne Bay at those sites, only those two pathways for contaminant travel are being addressed, whereas numerous pathways exist. Other existing deep excavated sites such as the Old Card Sound Canal and unfilled continuations of Barge Bay and Turtle Point canals will continue to provide direct pathways for contaminant travel. In addition, numerous natural underground connections exist within the Biscayne Aquifer and sampling from deep seeps within Biscayne Bay indicate groundwater migration into the Bay especially during low tide events.

A groundwater flow model was developed by FPL to evaluate remediation alternatives. Five remedial strategies and 19 remedial alternatives were evaluated with the selected alternative being backfilling deeper areas of the Barge Basin to an elevation of -15 feet NAVD88 and backfilling deeper areas of Turtle Point to an elevation of -7 feet NAVD88. The groundwater model developed by FPL and relied upon by FDEP for evaluation of various remedial measures has a number of technical issues that should be corrected before the model can be used reliably to justify the remedial measures proposed by FPL. Review of the model indicates the following inadequacies:

- Inappropriate representation of canals in the model allowing only one way of water travel between the canals and the groundwater system

- Inaccurate representation of net recharge to the groundwater system that does not allow for accurate simulation of rainfall, runoff, evaporation and transpiration.
- Use of constant hydraulic coefficients over large areas of the model known to have highly varying aquifer characteristics
- Representation of an inappropriate hydraulic disconnect of the CCS from the underlying groundwater system during the remedial action simulations
- A lack of capture of existing contaminated groundwater in the lowermost portions of the aquifer
- Impacts to wetland systems adjacent to the CCS from the proposed remedial actions

These opinions of model inadequacies are supported by technical reviews of the FPL model by University of Florida professor Dr. Lou Motz, SFWMD senior modeler Jeff Giddings, and U.S. Geological Survey SEAWAT model code developer Dr. Weixing Guo.

## **Conclusions**

Given the inaccuracies associated with the FPL model used to develop the proposed remedial actions and the limitations of only addressing two possible hydraulic connections between the CCS and Biscayne Bay within a highly permeable groundwater matrix, the proposed remedial actions by FPL will not stop the continued flow of contaminated water from the CCS to the surrounding groundwater system or to the surface waters of Biscayne Bay. The hypersaline plume originating from the FPL CCS has dramatically impacted water quality in the Biscayne Aquifer west of the CCS and is the principle influence on the movement of the saline water interface in the Biscayne Aquifer that continues to threaten fresh drinking water sources in southern Miami-Dade County. Impacts of the CCS plume are radial and adversely affecting water quality in Biscayne Bay to the east as indicated by nutrient and salinity data collected from Biscayne Bay surface water monitoring sites. Proposed remedial actions have positive elements but are inadequate to fully extract the hypersaline plume from the aquifer or stop the flow of contaminated water into Biscayne Bay.

I reserve the right to supplement this report as new data and new information become available.

## **Qualifications**

My resume is attached as Exhibit C.

W. Kirk Martin, P.G. #79  
Principal Scientist/ President  
Water Science Associates Inc.

**EXHIBIT A**  
**Selected Groundwater Data from FPL Uprate Monitoring**

Groundwater Results 1st Quarter (June/July 2010)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	490	250	20	8.6	1100	
TPGW-4M	13000	7200	1600	325.4	28000	
TPGW-4D	16000	8600	1900	505.6	33000	
TPGW-5S	210	110	19	10.2	690	
TPGW-5M	8900	4900	860	293.5	17000	
TPGW-5D	12000	6500	1300	187.6	21000	
TPGW-6S	210	100	14	9.6	660	
TPGW-6M	8000	4000	880	1	18000	
TPGW-6D	7600	3800	800	12.8	17000	

Groundwater Results 2nd Quarter (Sept 2010)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	420	210	16	18.5	1100	
TPGW-4M	12000	7000	1400	321	24000	
TPGW-4D	15000	8200	1700	611	27000	
TPGW-5S	230	100	17	20.4	720	
TPGW-5M	9500	5200	1000	175	19000	
TPGW-5D	11000	5800	1200	343	21000	
TPGW-6S	210	110	13	2.6	680	
TPGW-6M	7100	4100	1000	4.7	13000	
TPGW-6D	7500	4300	1100	17.9	14000	

Groundwater Results 3rd Quarter (Dec 2010)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	470	240	18	15	1100	
TPGW-4M	15000	7200	1500	277	23000	
TPGW-4D	16000	9000	1700	581	28000	
TPGW-5S	220	110	16	-4.5	660	
TPGW-5M	11000	5600	1200	218	19000	
TPGW-5D	12000	6400	1500	295	21000	
TPGW-6S	190	100	110	3.80	600	
TPGW-6M	7500	4200	700	14.7	12000	
TPGW-6D	8300	4300	820	23.2	13000	

Groundwater Results 4th Quarter (Mar 2011)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	670	360	40	19.4	1400	
TPGW-4M	13000	6900	1500	246	22000	
TPGW-4D	16000	8400	2000	519	26000	
TPGW-5S	300	140	19	-0.1	850	
TPGW-5M	10000	5400	1100	222	18000	
TPGW-5D	11000	5800	1300	283	20000	
TPGW-6S	190	90	9	5.1	620	
TPGW-6M	7900	3800	740	14.1	13000	
TPGW-6D	8400	4000	800	19.4	14000	
TPGW-G21	50	26	16	18.4	340	
TPGW-G21	4900	2100	130	17.8	8700	
TPGW-G28	3300	1200	190	31.1	5600	
TPGW-G28	15000	7300	1600	411	24000	
TPGW-G35	82	44	65	11.6	390	
TPGW-G35	6300	3200	890	-0.7	10000	

Groundwater Results 5th Quarter (Jun 2011)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	610	310	30	10.2	1400	
TPGW-4M	14000	6800	1400	281	24000	
TPGW-4D	15000	8000	1800	433	28000	
TPGW-5S	200	100	14	16.0	640	
TPGW-5M	9800	5500	980	156	20000	
TPGW-5D	11000	6100	1100	288	20000	
TPGW-6S	180	87	7	19.7	610	
TPGW-6M	7300	3800	680	5.7	14000	
TPGW-6D	7300	4000	770	32.7	14000	
TPGW-G21	43	26	14	22.5	340	
TPGW-G21	4600	2200	130	24	9300	
TPGW-G28	2000	1000	140	16.8	4400	
TPGW-G28	13000	6900	1700	410	24000	
TPGW-G35	65	41	62	7.7	400	
TPGW-G35	5900	3200	1100	15.9	10000	

Groundwater Results 6th Quarter (Sept 2011)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	480	240	24	23.9	960	
TPGW-4M	15000	8400	1800	340	27000	
TPGW-4D	13000	7400	1500	520	24000	
TPGW-5S	210	110	17	31.6	650	
TPGW-5M	10000	5400	1000	224	19000	
TPGW-5D	10000	5700	1100	319	20000	
TPGW-6S	200	100	8	21.7	560	
TPGW-6M	7600	4100	690	14.3	13000	
TPGW-6D	8600	4300	800	32.3	14000	
TPGW-G21	55	30	12	14.8	320	
TPGW-G21	4800	2200	170	24.7	9600	
TPGW-G28	2300	1200	140	16.7	4300	
TPGW-G28	14000	7300	1500	430	25000	
TPGW-G35	43	28	45	2.2	300	
TPGW-G35	4600	2800	870	-1.7	9100	

Groundwater Results 7th Quarter (Dec 2011)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	490	220	20	14.9	300	
TPGW-4M	15000	6900	1800	297	21000	
TPGW-4D	17000	6600	2100	510	26000	
TPGW-5S	190	87	21	0.0	530	
TPGW-5M	12000	5700	1200	243	19000	
TPGW-5D	12000	6000	1400	315	20000	
TPGW-6S	190	88	10	-0.3	360	
TPGW-6M	7200	3900	750	5.1	12000	
TPGW-6D	8000	4200	840	13.8	13000	
TPGW-G21	37	22	17	4.3	260	
TPGW-G21	4900	22000	170	22.3	8300	
TPGW-G28	2800	0.31	200	7.5	3900	
TPGW-G28	15000	1100	1800	424	23000	
TPGW-G35	48	29	45	18.7	350	
TPGW-G35	5900	3000	890	12.1	9500	

Groundwater Results 8th Quarter (Mar 2012)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	500	260	25	31.3	1200	
TPGW-4M	14000	7300	1700	311	23000	
TPGW-4D	16000	8400	2000	536	28000	
TPGW-5S	240	140	20	11.5	830	
TPGW-5M	11000	5900	1200	255	22000	
TPGW-5D	11000	6100	1300	293	19000	
TPGW-6S	160	88	8	16.7	570	
TPGW-6M	7900	4200	800	23.9	14000	
TPGW-6D	8600	4500	860	27.6	15000	
TPGW-G21	36	21	13	21.2	230	
TPGW-G21	5300	2500	170	39.6	9300	
TPGW-G28	2700	1400	200	8.9	4700	
TPGW-G28	14000	7300	1700	405	23000	
TPGW-G35	74	45	79	9.1	390	
TPGW-G35	5700	3300	900	0.3	11000	

**Groundwater Results 9th Quarter (Jun 2012)**

Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	270	140	7.4	19.1	840	
TPGW-4M	13000	7400	1600	322	26000	
TPGW-4D	15000	8500	1900	530	31000	
TPGW-5S	260	120	20	5.2	660	
TPGW-5M	11000	6000	1200	285.0	19000	
TPGW-5D	12000	6500	1400	351	21000	
TPGW-6S	160	80	8.2	5.8	470	
TPGW-6M	7600	4100	780	7.0	13000	
TPGW-6D	7800	4300	860	11.7	14000	
TPGW-G21	37	21	9	20.5	300	
TPGW-G21	5000	2800	180	18.4	9900	
TPGW-G28	3000	1600	220	9.2	5400	
TPGW-G28	14000	7800	1700	256.6	26000	

**Groundwater Results 10th Quarter (Sept 2012)**

Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	410	210	20	9	960	
TPGW-4M	13000	6800	1600	306	23000	
TPGW-4D	16000	8100	2000	522	27000	
TPGW-5S	230	110	20	9	620	
TPGW-5M	11000	5900	1200	232	20000	
TPGW-5D	12000	6500	1400	344	21000	
TPGW-6S	160	84	9	2	560	
TPGW-6M	6400	3500	650	-2	12000	
TPGW-6D	7500	4000	820	6	14000	
TPGW-G21	37	20	8	14	250	
TPGW-G21	5100	2700	180	32	9400	
TPGW-G28	2900	1400	210	6	4700	
TPGW-G28	14000	7500	1700	409	23000	

**Groundwater Results 11th Quarter (Dec 2012)**

Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	470	220	19	3.2	1100	
TPGW-4M	15000	7500	1800	330.5	23000	
TPGW-4D	17000	8900	2200	481.3	28000	
TPGW-5S	220	100	21	10.3	630	
TPGW-5M	12000	6300	1300	286.8	20000	
TPGW-5D	13000	6600	1500	355.3	20000	
TPGW-6S	180	92	9.7	8.9	480	
TPGW-6M	7600	3800	770	-0.6	12000	
TPGW-6D	8600	4400	910	12.6	13000	
TPGW-G21	43	23	12	10.2	280	
TPGW-G21	5900	2800	200	26.2	10000	
TPGW-G28	2800	1400	220	7.3	4300	
TPGW-G28	14000	8100	1800	381.4	24000	

**Groundwater Results 12th Quarter (Mar 2013)**

Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	560	270	28	13.7	980	
TPGW-4M	16000	7500	2200	355.1	23000	
TPGW-4D	16000	8500	2100	542.3	28000	
TPGW-5S	300	140	23	21.2	680	
TPGW-5M	12000	6400	1300	284.3	20000	
TPGW-5D	13000	6400	1500	328.5	22000	
TPGW-6S	170	87	7.4	6.3	560	
TPGW-6M	8300	3900	920	6.0	13000	
TPGW-6D	8700	4100	980	9.5	14000	
TPGW-G21	46	23	16	13.3	270	
TPGW-G21	6200	2600	230	31.6	10000	
TPGW-G28	2900	1300	230	6.3	5200	
TPGW-G28	15000	7200	1900	394.9	23000	

Groundwater Results 13th Quarter (Jun 2013)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	342	178		6.5	850	
TPGW-4M	13800	7540		350.4	21300	
TPGW-4D	16400	8800		482.5	25900	
TPGW-5S	204	100		4.1	613	
TPGW-5M	12100	6340		283.3	20800	
TPGW-5D	12700	6650		363.3	20800	
TPGW-6S	178	88.7		14.9	540	
TPGW-6M	7830	4130		3.1	12800	
TPGW-6D	8270	4280		7.6	13900	
TPGW-G21	51.7	23.2		10.3	268	
TPGW-G21	6250	2820		50.4	12000	
TPGW-G28	2670	1190		18.7	4460	
TPGW-G28	16000	7460		397.2	24300	
TPGW-G35	48.4	26.8		18.6	348	
TPGW-G35	5070	2450		15.1	8300	

Groundwater Results 14th Quarter (Sept 2013)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	400	189	9.40	11.3	900	
TPGW-4M	15500	7080	1690	313.1	24000	
TPGW-4D	17600	8130	1990	487.4	27300	
TPGW-5S	170	80.6	16.9	-6.0	507	
TPGW-5M	13100	5910	1340	301.4	19900	
TPGW-5D	13700	6170	1480	385.3	20500	
TPGW-6S	208	99.5	8.87	-5.8	607	
TPGW-6M	8120	3790	825	1.7	13900	
TPGW-6D	8980	3970	872	5.7	14000	
TPGW-G21	46.6	23.9	10.5	5.4	292	
TPGW-G21	6440	2690	216	40.9	10900	
TPGW-G28	2210	988	173	6.5	4120	
TPGW-G28	15300	7140	1730	407.9	24100	

Groundwater Results 15th Quarter (Dec 2013)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	460	228		12.3	1020	
TPGW-4M	15100	7330		294.2	22900	
TPGW-4D	16300	8400		459.0	26900	
TPGW-5S	202	98.5		16.8	613	
TPGW-5M	11900	6040		245.7	19900	
TPGW-5D	12500	6430		284.1	19900	
TPGW-6S	223	103		-7.3	600	
TPGW-6M	7980	3950		4.5	13800	
TPGW-6D	8350	4050		2.8	13500	
TPGW-G21	45.6	24.8		7.9	308	
TPGW-G21	5540	2880		29.5	9700	
TPGW-G28	1910	941		17.0	3140	
TPGW-G28	14900	7070		382.7	24200	

Groundwater Results 16th Quarter (Mar 2014)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	609	291	26.60	1.0	1390	
TPGW-4M	14000	7530	1780	337	23100	
TPGW-4D	15600	8700	2100	522	26900	
TPGW-5S	165	86.4	18.5	-2.0	553	
TPGW-5M	11300	6060	1320	276	19300	
TPGW-5D	12400	6570	1490	356	20900	
TPGW-6S	212	104	9.06	20.0	693	
TPGW-6M	7740	3910	835	21.0	14700	
TPGW-6D	8070	4160	871	24.0	15700	
TPGW-G21	42.9	23.6	14.7	66.1	276	
TPGW-G21	5810	2700	209	36.1	10400	
TPGW-G28	676	350	104	2.8	960	
TPGW-G28	13800	7540	1760	405.5	23700	

Groundwater Results 17th Quarter (Jun 2014)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	1310	575		12.6	2800	
TPGW-4M	14200	6470		321.6	24000	
TPGW-4D	15800	8300		451.8	27600	
TPGW-5S	156	76.7		9.1	527	
TPGW-5M	11000	4220		247.9	19300	
TPGW-5D	12000	6090		342.6	21900	
TPGW-6S	228	108		6.8	673	
TPGW-6M	7590	4060		7.8	13800	
TPGW-6D	8130	4320		9.4	14300	
TPGW-G21	46.9	25.3		4.6	280	0.29
TPGW-G21	5840	2410		31.7	11000	10.26
TPGW-G28	743	344		10.4	1170	1
TPGW-G28	13900	5390		383.3	23300	25.12

Groundwater Results 18th Quarter (Sept. 2014)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	422	225	14.80	16.1	1100	
TPGW-4M	13800	6620	1660	305.3	25200	
TPGW-4D	15300	7540	1920	444.6	27200	
TPGW-5S	142	70.5	14.2	8.0	487	
TPGW-5M	11700	5360	1200	252.3	20700	
TPGW-5D	13800	5540	1390	310.6	22400	
TPGW-6S	223	106	7.40	10.5	640	
TPGW-6M	7510	35200	777	8.3	14100	
TPGW-6D	7940	36800	820	19.2	15100	
TPGW-G21	44.3	22.5	3.9	22.7	268	
TPGW-G21	6170	2490	203	45.0	10100	
TPGW-G28	549	359	99	8.0	1300	
TPGW-G28	13700	6170	1760	393.0	23100	

**Groundwater Results 19th Quarter (Dec. 2014)**

Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	443	233		13.1	900	
TPGW-4M	14300	7320		295.9	23800	
TPGW-4D	15700	7920		434.2	29100	
TPGW-5S	113	57.0		18.2	360	
TPGW-5M	11500	5530		222.3	20000	
TPGW-5D	12500	6130		248.5	22300	
TPGW-6S	232	113		7.0	607	
TPGW-6M	7850	3700		17.4	14600	
TPGW-6D	8310	3810		24.0	14300	
TPGW-G21	41.1	23.6		13.6	268	
TPGW-G21	5980	2920		27.8	11000	
TPGW-G28	487	280		0.2	1120	
TPGW-G28	14100	7840		433.7	25100	

**Groundwater Results 20th Quarter (Mar. 2015)**

Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	929	4100	46.80	20.5	1840	
TPGW-4M	14400	723	1620	311.6	25800	
TPGW-4D	15700	8720	1820	426.8	28200	
TPGW-5S	149	66.6	15.1	-1.8	520	
TPGW-5M	11600	3930	1220	234.9	19800	
TPGW-5D	12700	4400	1400	349.2	21100	
TPGW-6S	219	108	6.40	15.5	676	
TPGW-6M	7950	3930	765	23.3	14100	
TPGW-6D	8390	4230	816	10.4	15000	
TPGW-G21	48.9	25.7	17.0	12.2	314	
TPGW-G21	6200	2590	199	38.9	10000	
TPGW-G28	785	406	107	8.3	1100	
TPGW-G28	14500	7970	1660	393.4	24000	

Groundwater Results 21st Quarter (Jun. 2015)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	900	426		11	1400	1.9
TPGW-4M	14100	7350		293	32300	26.0
TPGW-4D	15500	8140		426	32500	28.5
TPGW-5S	136	68.6		9	514	0.5
TPGW-5M	11400	6040		231	18600	21.0
TPGW-5D	12700	6670		340	20400	23.2
TPGW-6S	255	124		-20	760	0.7
TPGW-6M	15500	3780		8	11900	14.3
TPGW-6D	8560	3970		10	13900	15.1
TPGW-G21	52.9	29.0		-14.6	318	0.3
TPGW-G21	6000	2740		41.1	10400	10.33
TPGW-G28	399	232		-6.6	812	0.85
TPGW-G28	13900	7570		386.7	22500	25.84

Groundwater Results 22nd Quarter (Sep. 2015)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	487	244	15.8	19.3	1150	1.12
TPGW-4M	12900	7530	1640	296.7	24500	25.80
TPGW-4D	15500	8250	1860	422.7	26600	27.52
TPGW-5S	151	74.4	15.9	9.4	526	0.49
TPGW-5M	10700	5870	1170	228.4	18000	19.70
TPGW-5D	11800	6700	1250	329.0	21100	22.71
TPGW-6S	195	112	6.50	15.9	722	0.66
TPGW-6M	7570	3850	801	24.1	14500	14.16
TPGW-6D	7760	3780	847	20.7	15000	14.94
TPGW-G21	44.4	24.8	13.0	1.7	310	0.29
TPGW-G21	5410	2580	169	21.3	11200	10.27
TPGW-G28	353	309	55	8.6	930	0.84
TPGW-G28	14000	7470	1610	355.1	24200	25.79

Groundwater Results 23rd Quarter (Dec. 2015)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	613	326		10.9	1440	1.30
TPGW-4M	14400	7480		339	24700	24.77
TPGW-4D	15400	7950		453	27400	26.99
TPGW-5S	157	85.9		1.8	532	0.47
TPGW-5M	11100	6100		252	19900	20.16
TPGW-5D	12200	6610		365	20500	22.43
TPGW-6S	244	123		-1.4	718	0.67
TPGW-6M	7870	4050		4.7	13700	13.82
TPGW-6D	7910	4250		2.4	13900	14.31
TPGW-G21	41.8	22.6		14.9	288	0.26
TPGW-G21	5840	2690		42.6	10600	9.5
TPGW-G28	420	294		10.2	994	0.81
TPGW-G28	14300	7380		353	24200	24.54

Groundwater Results 24th Quarter (Mar. 2016)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	507	240	20.9	11.7	1130	1.14
TPGW-4M	15000	7150	1920	311.7	24500	25.27
TPGW-4D	15200	7620	1910	495.4	26300	27.11
TPGW-5S	134	61.4	13.6	-5.93	486	0.45
TPGW-5M	12000	5960	1330	277.64	20100	20.67
TPGW-5D	12300	5770	1500	365	21300	22.43
TPGW-6S	244	111	8.25	9.85	714	0.68
TPGW-6M	7870	3340	821	6.06	15000	14.35
TPGW-6D	7570	3480	883	6.99	14400	14.33
TPGW-G21	36.3	19.0	8.02	24.76	256	0.23
TPGW-G21	6080	2860	202	17.98	11400	9.94
TPGW-G28	464	367	80.9	13.63	880	0.81
TPGW-G28	14700	7190	1810	355.2	23000	24.82

Groundwater Results 25th Quarter (Jun. 2016)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	527	304		10.8	1230	1.15
TPGW-4M	15600	7700		344.1	15600	25.45
TPGW-4D	16600	8570		434.3	18200	26.82
TPGW-5S	143	66.3		2.7	508	0.47
TPGW-5M	15200	6130		251.4	13100	20.45
TPGW-5D	14800	6740		353.2	16400	22.76
TPGW-6S	212	114		5.8	658	0.62
TPGW-6M	8090	3490		9.4	9600	13.77
TPGW-6D	8780	3700		9.6	7700	14.54
TPGW-G21	49.8	30.3		25.0	310	0.30
TPGW-G21	6570	2890		37.9	8100	10.17
TPGW-G28	400	213		14.7	804	0.75
TPGW-G28	15500	7420		369.8	17900	24.84

Groundwater Results 26th Quarter (Sep. 2016)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	392	215	10.8	33.1	1060	0.96
TPGW-4M	14400	7950	1730	328.5	18900	25.52
TPGW-4D	12900	8410	1970	424.9	18700	27.48
TPGW-5S	129	67.6	15.7	-1.6	492	0.45
TPGW-5M	11000	6210	1200	235.9	14000	19.39
TPGW-5D	12600	6920	1450	399.9	17700	22.69
TPGW-6S	227	112	5.89	13.3	676	0.66
TPGW-6M	8260	3790	819	-11.8	9800	13.77
TPGW-6D	8550	4210	842	29.4	10200	14.48
TPGW-G21	40.9	22.8	5.83	12.5	276	0.25
TPGW-G21	5870	2660	155	36.0	7000	10.25
TPGW-G28	387	204	72.4	9.1	822	0.78
TPGW-G28	14400	7380	1740	385.0	17800	25.30

Groundwater Results 27th Quarter (Dec. 2016)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	557	282		22.6	1210	1.19
TPGW-4M	14700	7030		324.0	19800	25.16
TPGW-4D	16200	8020		413.9	19500	27.31
TPGW-5S	102	52.4	11.7	-1.6	442	0.41
TPGW-5M	11600	6030	1290	263.6	16300	20.89
TPGW-5D	13400	6600	1590	363.8	17900	22.46
TPGW-6S	241	114		-3.4	716	0.64
TPGW-6M	8130	3830		-2.6	11100	14.04
TPGW-6D	8490	4030		-3.8	9900	14.38
TPGW-G21	43.0	21.6		21.3	282	0.24
TPGW-G21	6500	2940		34.6	9100	10.42
TPGW-G28	446	206		0.0	924	0.76
TPGW-G28	14600	7130		361.4	17800	24.88

Groundwater Results 28th Quarter (Mar. 2017)						
Monitoring Site	Chloride	Sodium	Sulfate	Tritium	TDS	Salinity
	mg/L	mg/L	mg/L	pCi/L	mg/L	PSU
TPGW-4S	1220	630	70.4	17.4	2190	2.12
TPGW-4M	15200	7400	1780	336.0	20600	25.58
TPGW-4D	17200	7910	1860	403.0	19400	26.82
TPGW-5S	157	77.7	17.5	15.8	544	0.55
TPGW-5M	10700	4830	1050	201.0	16700	17.87
TPGW-5D	13600	6390	1530	355.0	21400	22.58
TPGW-6S	258	139	6.82	-5.7	712	0.65
TPGW-6M	9000	3720	845	-7.3	12700	13.92
TPGW-6D	8430	4310	785	-2.9	13000	14.65
TPGW-G21	44.6	24.1	12.3	1.6	292	0.28
TPGW-G21	6930	2610	228	34.6	12100	10.79
TPGW-G28	514	269	78.2	-2.7	1000	1.00
TPGW-G28	15100	6720	1730	374.0	18100	25.26

**EXHIBIT B**

**Nutrient and Tritium Data Collected from Selected Surface Water Stations**

**EXHIBIT B -- SURFACE WATER RESULTS SHOWING CCS DISCHARGES**  
**Class I Permit Monitoring (modified from DERM Spreadsheet)**

Result indicating CCS Discharge to Surface Water

May 31 & Jun 1, 2015								
Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		300	67.4	2.48	0.0204	0.73	0.322	2.48
TPSWC-2B		319	93.3	2.34	0.0107	0.75	0.375	2.34
TPSWC-3B		410	96.4	2.34	0.0121	0.89	0.307	2.34
TPSWC-4B		15700	2010	1.37	0.0101	27.58	0.228	1.37
TPSWC-5B	2.1	21800	2970	0.67	0.00435	40	0.314	0.67
TPBBSW6	0.53	22700	2910	0.858	0.003	41.39	0.842	0.858
TPBBSW7	0.84	23200	2960	0.92	0.003	41.85	0.296	0.951

June 5 to 9, 2015								
Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		312	62.8	1.36	0.0138	0.77	0.334	1.36
TPSWC-2B		322	92.8	1.62	0.0119	0.76	0.158	1.62
TPSWC-3B		423	75.4	1.51	0.011	0.9	0.255	1.51
TPSWC-4B		18300	2370	0.2	0.00362	32.52	0.105	0.22
TPSWC-5B		22600	2960	0.2	0.003	39.96	0.1	0.22
TPBBSW6		22800	3070	0.2	0.003	41.61	0.166	0.22
TPBBSW7		23200	3090	0.236	0.003	41.53	0.226	0.236

Jun 15 & 16, 2015									
Chlorophyll		Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		482	50.8	2.68	0.0399	1.12	0.949	2.71	38.1
TPSWC-2B		320	92.8	1.99	0.0154	0.76	0.176	1.99	46.9
TPSWC-3B		389	75.9	2.06	0.00862	0.86	0.263	2.06	32
TPSWC-4B		19300	2590	0.836	0.00766	34.78	0.23	0.836	39.4
TPSWC-5B	1.3	22500	2980	0.57	0.003	40.21	0.1	0.57	22.4
TPBBSW6	0.8	22800	3320	0.248	0.0037	42.29	0.196	0.248	
TPBBSW7	0.8	22900	3340	0.2	0.003	42.57	0.1	0.525	

Jun 22 & 23, 2015									
Chlorophyll		Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		565	55.8	3.28	0.035	1.28	0.837	3.28	
TPSWC-2B		324	91.7	2.51	0.0131	0.76	0.156	2.51	
TPSWC-3B		435	76.1	1.89	0.00779	0.94	0.163	1.89	
TPSWC-4B		15700	2190	1.21	0.003	29.82	0.1	1.21	
TPSWC-5B	2.1	22100	3060	0.594	0.00579	40.15	0.1	0.594	
TPBBSW6	0.53	23100	3180	1.09	0.003	42.28	0.1	1.09	
TPBBSW7	0.84	23400	3130	0.562	0.003	4.88	0.1	0.562	

Jun 29 & 30, 2015									
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		520	52	3.36	0.0478	1.22	1.42	3.36	
TPSWC-2B		327	88.3	1.66	0.00478	0.77	0.446	1.66	
TPSWC-3B		400	71.9	1.68	0.00549	0.9	0.214	1.68	
TPSWC-4B		15300	2020	0.742	0.003	28.01	0.105	0.742	
TPSWC-5B	1.1	23300	2990	0.236	0.003	40.14	0.1	0.236	
TPBBSW6	0.8	23400	3150	0.55	0.003	42.3	0.1	0.58	
TPBBSW7	1.3	23100	3170	0.734	0.003	42.71	0.1	0.764	

Jul 6 to 8, 2015									
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		447	56.9	1.3	0.0194	1.06	0.1		1.3
TPSWC-2B		341	88.6	1.67	0.00823	0.81	0.252		1.67
TPSWC-3B		388	76.8	1.45	0.00501	1.06	0.142		1.45
TPSWC-4B		16300	2130	1.04	0.0107	31.47	0.394		1.04
TPSWC-5B	1.3	22300	3010	0.292	0.003	41.02	0.1		0.292
TPBBSW6	1.1	23200	3130	0.664	0.003	42.78	0.181		0.664
TPBBSW7	1.4	23300	3150	0.618	0.003	43.07	0.629		0.618

Jul 13 & 14, 2015								
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		468	54.5	1	0.475	1.1	0.127	1
TPSWC-2B		367	86.7	1.56	0.00566	0.84	0.177	1.56
TPSWC-3B		471	72	1.39	0.00588	1.03	0.156	1.39
TPSWC-4B		16700	2170	0.88	0.003	30.78	0.063	0.88
TPSWC-5B	0.83	23200	3050	0.49	0.003	42.08	0.0365	0.49
TPBBSW6	0.83	23700	3160	0.802	0.003	43.45	0.0646	0.802
TPBBSW7	0.8	23600	3180	0.792	0.003	43.63	0.0757	0.792

Jul 20 & 21, 2015								
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		388	70.9	1.97	0.0192	0.96	0.844	2.23
TPSWC-2B		363	110	1.84	0.0275	0.84	0.256	1.89
TPSWC-3B		445	74.3	1.4	0.00804	0.96	0.164	1.4
TPSWC-4B		16500	2230	1.03	0.0127	30.15	0.0495	1.03
TPSWC-5B	2.1	22700	3000	0.2	0.003	39.38	0.0381	0.525
TPBBSW6	1.6	23100	3210	0.674	0.003	42.36	0.113	0.674
TPBBSW7	1.1	22400	3140	0.38	0.00537	42.87	0.099	0.38

Jul 27 & 28, 2015								
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		397	60.7	1.63	0.0193	0.97	0.314	1.63
TPSWC-2B		367	106	2.4	0.00941	0.88	0.541	3.4
TPSWC-3B		330	76	1.37	0.00658	0.78	0.22	1.62
TPSWC-4B		17800	2330	0.874	0.00849	31.44	0.0679	0.874
TPSWC-5B	1.9	23000	3160	0.48	0.00448	41.65	0.0753	0.48
TPBBSW6	0.53	21300	2760	0.504	0.003	39.77	0.1	0.504
TPBBSW7	2.4	21800	3140	0.614	0.00492	41.93	0.0713	0.614

Aug 3 & 4, 2015								
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		322	51.4	1.64	0.021	0.75	0.387	1.64
TPSWC-2B		346	109	2.14	0.00834	0.77	0.304	2.14
TPSWC-3B		338	101	1.56	0.00889	0.77	0.232	1.56
TPSWC-4B		18400	2630	0.802	0.00548	31.81	0.0318	0.802
TPSWC-5B	3.2	23100	3220	0.416	0.00481	38.22	0.026	0.416
TPBBSW6	1.3	21400	3080	0.564	0.003	37.34	0.0515	0.564
TPBBSW7	3.5	22600	3080	0.418	0.00353	38.12	0.0669	0.878

Aug 10 & 11, 2015									
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		206	31.6	1.59	0.0156	0.56	0.489	1.59	
TPSWC-2B		367	110	2.06	0.00904	0.88	0.35	2.06	
TPSWC-3B		336	98.7	1.97	0.011	0.82	0.355	1.97	
TPSWC-4B		18900	2670	0.452	0.00775	35.66	0.0677	0.452	
TPSWC-5B	0.53	22600	3030	0.534	0.003	40.94	0.0573	0.606	
TPBBSW6	0.53	23000	3080	0.684	0.003	42.05	0.117	0.684	
TPBBSW7	2.7	23100	3120	0.8	0.012	42.45	0.0693	0.8	

Aug 17 & 18, 2015									
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		108	10.9	1.29	0.0109	0.33	0.253	1.38	
TPSWC-2B		374	74.1	1.89	0.00678	0.83	0.306	1.89	
TPSWC-3B		264	53.4	1.74	0.00539	0.61	0.288	1.74	
TPSWC-4B		18500	2610	0.774	0.0082	34.7	0.0427	0.774	
TPSWC-5B	2.1	20600	3070	0.388	0.003	40.82	0.0507	0.513	
TPBBSW6	0.83	21600	3260	0.754	0.003	39.95	0.084	0.754	
TPBBSW7	1.6	23500	3200	0.766	0.003	40.07	0.0893	0.766	

Aug 24 & 25 2015									
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		117	8.08	1.67	0.0212	0.33	0.373	1.67	
TPSWC-2B		394	65.5	2.2	0.0105	0.77	0.27	2.2	
TPSWC-3B		281	47.6	2.1	0.0142	0.61	0.23	2.1	
TPSWC-4B		18800	2510	0.892	0.00707	30.24	0.0816	0.892	
TPSWC-5B	0.8	21100	2840	0.588	0.003	33.79	0.0565	0.588	
TPBBSW6	1.6	22400	3070	0.918	0.003	35.63	0.0499	0.918	
TPBBSW7	7.5	22600	3040	0.786	0.0127	36.31	0.0789	0.786	

Aug 31 & Sept 2 2015									
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		139	27.3	0.632	0.0266	0.45	0.203	1.06	
TPSWC-2B		267	28.5	1.95	0.00642	0.56	0.241	1.98	
TPSWC-3B		253	23.5	1.98	0.0202	0.55	0.248	1.98	
TPSWC-4B		21700	2450	0.84	0.00739	34.45	0.1		38.7
TPSWC-5B		21100	2900	0.34	0.003	39.24	0.103		24.8
TPBBSW6	1.1	21300	2890	0.718	0.00724	34.28	0.14	0.718	
TPBBSW7	16	23400	3140	0.97	0.0226	36.82	0.239	0.97	

Sept 8 & 9 2015									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		65.5	18.5	0.356	0.003	0.27	0.11	0.65	16.4
TPSWC-2B		184	8.33	1.25	0.003	0.36	0.162	1.25	55.7
TPSWC-3B		161	6.94	1.33	0.00481	0.32	0.154	1.33	44.6
TPSWC-4B		14800	2040	1.12	0.0165	25.35	0.133	1.12	49.5
TPSWC-5B	2.9	20200	2650	0.636	0.00667	34.24	0.122	0.68	64.9
TPBBSW6	15	17500	2310	0.56	0.003	36.99	0.0828	0.56	9.4
TPBBSW7	0.8	22800	3120	1.29	0.0548	41.17	0.452	1.29	59.5

Results in blue text corrected based on corrections provided by FPL (Amy Blystone) via email on December 14, 2017 at 09:13

Sept 14 & 18 2015									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		57.9	17.2	0.58	0.003	0.27	0.1		31.0
TPSWC-2B		123	3.8	1.4	0.003	0.31	0.159		59.7
TPSWC-3B		133	3.41	1.2	0.003	0.31	0.158		51.7
TPSWC-4B		12900	1710	1.38	0.0134	21.46	0.571	1.38	
TPSWC-5B	2.1	24000	2850	0.724	0.00926	35.31	0.119	724	
TPBBSW6	1.1	19900	2760	0.646	0.00651	36.25	0.14	0.646	
TPBBSW7	4.5	22500	3050	1.43	0.076	40.38	0.744	1.43	

Sept 21 & 22 2015									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		133	23.1	0.384	0.00529	0.46	0.136	0.641	
TPSWC-2B		98.8	2.83	0.99	0.00355	0.29	0.148	0.99	
TPSWC-3B		78.6	2.96	1.04	0.00415	0.25	0.157	1.04	
TPSWC-4B		13600	1820	1.28	0.039	26.1	0.706	1.28	
TPSWC-5B	21	22200	3040	1.19	0.0241	41.88	0.134	1.19	
TPBBSW6	2.4	20200	2730	0.718	0.0051	38.08	0.0888	0.718	
TPBBSW7	9.3	24100	3240	1.66	0.0668	45.7	0.91	1.66	

Sept 28 to Oct 2, 2015									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		73.2	19	0.626	0.00574	0.33	0.392	0.776	
TPSWC-2B		122	2.35	0.93	0.00329	0.3	0.208	0.93	
TPSWC-3B		87.2	1.1	0.95	0.003	0.24	0.169	0.95	
TPSWC-4B		14500	1930	0.852	0.00486	24.76	0.214	0.852	
TPSWC-5B	13	22100	2980	0.994	0.0257	36.86	0.326	0.994	
TPBBSW6	3.7	18600	2440	0.706	0.0169	33.7	0.156	0.706	
TPBBSW7	2.9	24200	3170	0.99	0.11	42.05	1.08	0.99	

Oct 5 to 7, 2015								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		184	30	0.462	0.00536	0.67	0.178	0.652
TPSWC-2B		117	1.69	1.2	0.00345	0.33	0.173	1.2
TPSWC-3B		101	1.33	1.24	0.00341	0.31	0.189	1.24
TPSWC-4B		14500	2400	0.718	0.00495	27.82	0.0862	0.718
TPSWC-5B	4.6	18500	2600	0.434	0.00614	37.82	0.0489	0.434
TPBBSW6	5.6	17400	2480	0.65	0.0331	34.9	0.161	0.65
TPBBSW7	3.2	22800	3190	1.62	0.112	44.17	1.04	0.4

Oct 12 & 13, 2015								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		80.3	19.8	0.362	0.00644	0.38	0.186	0.599
TPSWC-2B		125	2.35	1.06	0.00353	0.35	0.157	1.06
TPSWC-3B		112	1.9	1.01	0.003	0.32	0.167	1.01
TPSWC-4B		16600	2230	0.656	0.00479	30.69	0.0938	0.656
TPSWC-5B	8.5	21500	2710	0.732	0.00786	38.77	0.0584	0.785
TPBBSW6	1.6	17700	2390	0.45	0.003	32.75	0.137	0.45
TPBBSW7	6.7	24900	3200	1.79	0.12	44.76	0.98	1.83

Oct 19 & 20, 2015								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		173	26	0.564	0.0283	0.52	0.156	0.743
TPSWC-2B		119	2.41	0.918	0.00473	0.32	0.17	0.918
TPSWC-3B		659	65.9	1.16	0.00603	0.73	0.279	1.16
TPSWC-4B		16700	2140	0.652	0.003	29.71	0.0904	0.652
TPSWC-5B	5.3	20400	2750	0.476	0.00969	35.9	0.074	0.476
TPBBSW6	0.53	10400	1460	0.78	0.00536	20.03	0.204	0.909
TPBBSW7	4.3	24300	3260	2.2	0.121	42.76	1.15	2.2

Oct 26 & 27, 2015								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		244	33.5	0.598	0.00947	0.64	0.207	6.13
TPSWC-2B		125	3.48	1.12	0.00944	0.35	0.195	1.12
TPSWC-3B		557	59.8	1.38	0.0197	1.13	0.484	1.38
TPSWC-4B		13300	1790	0.612	0.0115	25.44	0.11	0.612
TPSWC-5B	2.7	18300	2490	0.89	0.00881	32.36	0.231	0.89
TPBBSW6	10	14900	1990	1.31	0.00731	28.62	0.481	1.31
TPBBSW7	3.7	23800	3180	1.73	0.126	41.85	1.48	1.73

Nov 2 & 4, 2015									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		304	39.8	0.756	0.0067	0.71	0.323	0.874	
TPSWC-2B		164	8.39	1.19	0.00381	0.38	0.228	1.19	
TPSWC-3B		174	6.89	1.3	0.003	0.39	0.244	1.3	
TPSWC-4B		12500	1620	1.13	0.003	22.57	0.253	1.13	
TPSWC-5B	1.1	15900	2300	0.652	0.003	31.94	0.146	0.652	
TPBBSW6		29	18400	2310	0.0365	31.28	1.32	2.22	
TPBBSW7		8.8	24500	3190	0.14	41.74	1.94	2.64	

Nov 9 to 13, 2015									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		194	32.4	0.442	0.003	0.52	0.167	0.712	
TPSWC-2B		177	2.09	1.33	0.00625	0.39	0.228	1.33	
TPSWC-3B		237	3.51	1.56	0.00562	0.49	0.206	1.56	
TPSWC-4B		14500	1820	1.24	0.00415	25.27	0.374	1.24	
TPSWC-5B	5.3	19200	2530	0.536	0.0095	32.92	0.13	0.536	
TPBBSW6		6.3	16500	2380	0.666	0.0167	29.9	0.22	0.666
TPBBSW7		12	25700	3350	0.199	42.97	2.66	3.26	

Nov 16 to 19, 2015									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		200	14.8	0.974	0.00446	0.42	0.19	1.05	
TPSWC-2B		122	2.34	1.23	0.003	0.25	0.16	1.23	
TPSWC-3B		106	1.66	1.01	0.003	0.23	0.139	1.01	
TPSWC-4B		15500	1980	1.01	0.00586	25.15	0.252	1.01	
TPSWC-5B	11	19600	2570	0.42	0.024	31.53	0.0889	0.42	
TPBBSW6		2.9	15800	2080	0.838	0.00575	24.75	0.27	0.838
TPBBSW7		10	25800	3390	2.92	0.195	39.31	2.2	2.92

Nov 23 & 24, 2015									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		228	18.8	0.812	0.00619	0.49	0.149	0.887	
TPSWC-2B		122	1.35	1.02	0.003	0.27	0.133	1.02	
TPSWC-3B		110	1.29	0.94	0.003	0.25	0.139	0.94	
TPSWC-4B		13600	1840	1.11	0.0055	21.67	0.239	1.11	
TPSWC-5B	9.3	20500	2780	0.518	0.00792	30.31	0.112	0.518	
TPBBSW6		2.4	13500	1830	0.24	0.00413	20.85	0.13	0.278
TPBBSW7		22	26500	3360	3.28	0.230	39.79	2.52	3.28

Nov 30 to Dec 3, 2015								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		189	11	0.804	0.00962	0.49	0.136	0.852
TPSWC-2B		128	2.59	0.94	0.00326	0.29	0.179	0.94
TPSWC-3B		218	8	1.14	0.0067	0.47	0.271	1.14
TPSWC-4B		14700	1940	0.684	0.00627	26.05	0.0693	0.684
TPSWC-5B	0.8	18100	2420	0.524	0.003	31.43	0.124	0.524
TPBBSW6	0.8	16700	2270	0.376	0.003	29.11	0.155	0.376
TPBBSW7	19	25000	3350	3.3	0.204	44.7	2.75	3.3

Dec 7 to 9, 2015								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		94.4	1.88	0.452	0.005	0.22	0.154	0.452
TPSWC-2B		55	0.43	0.59	0.005	0.15	0.0797	0.59
TPSWC-3B		44	0.4	0.358	0.005	0.13	0.0793	0.358
TPSWC-4B		1570	199	0.58	0.005	3.11	0.15	0.58
TPSWC-5B	38	18300	2640	0.572	0.005	33.46	0.241	0.572
TPBBSW6	8	15600	2080	0.818	0.005	25.36	0.757	0.818
TPBBSW7	12	27300	3470	2.76	0.210	44.12	3.29	2.76

Results in blue text corrected based on corrections provided by FPL (Amy Blystone) via email on December 14, 2017 at 09:13

Dec 14 & 15, 2015								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		93.9	5.87	0.668	0.0216	0.24	0.128	0.668
TPSWC-2B		53.4	0.4	0.548	0.0172	0.17	0.0841	0.548
TPSWC-3B		40.1	0.4	0.61	0.0163	0.15	0.083	0.61
TPSWC-4B		1010	88.6	0.604	0.0184	1.9	0.149	0.604
TPSWC-5B		22600	3010	0.744	0.0164	39.7	0.437	0.779
TPBBSW6		13300	1750	0.404	0.0134	23.55	0.196	0.518
TPBBSW7		27400	3460	3.34	0.162	47.01	2.16	3.34

Dec 21 & 22, 2015								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		90.9	1.1	0.818	0.005	0.24	0.126	0.818
TPSWC-2B		69.4	1.23	0.692	0.005	0.21	0.119	0.692
TPSWC-3B		52.1	0.4	0.834	0.005	0.19	0.129	0.834
TPSWC-4B		552	59.9	0.624	0.00684	0.96	0.14	0.624
TPSWC-5B	44	22800	3190	1.81	0.005	41.56	0.924	1.81
TPBBSW6	7.5	12700	1630	1.23	0.005	23.47	0.592	1.32
TPBBSW7	13	26900	3570	2.66	0.155	46.77	2.21	2.66

Dec 28 & 29, 2015								
Chlorophyll		Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		88.6	2.17	0.858	0.005	0.26	0.235	0.858
TPSWC-2B		68.2	4.69	0.806	0.005	0.22	0.138	0.806
TPSWC-3B		63	0.4	0.816	0.005	0.21	0.149	0.855
TPSWC-4B		393	41.9	0.806	0.005	0.82	0.164	0.806
TPSWC-5B	41	25700	3350	2.66	0.027	43.43	1.5	2.66
TPBBSW6	18	19200	2350	3.08	0.005	33.61	2.57	3.08
TPBBSW7	22	28400	3720	3.46	0.0209	47.53	2.7	3.46

Jan 4 & 5, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	
TPSWC-1B		95.6	0.97	1.090	0.00500	0.27	0.0988	1.090
TPSWC-2B		91.9	1.38	1.110	0.00500	0.26	0.143	1.110
TPSWC-3B		86.5	0.715	1.040	0.00500	0.25	0.207	1.040
TPSWC-4B		391	33	1.010	0.05910	0.73	0.159	1.010
TPSWC-5B	21.0	23800	3210	1.95	0.00500	42.83	1.64	1.95
TPBBSW6	23.0	19100	2360	2.40	0.04450	33.85	2.34	2.40
TPBBSW7	12	28300	3570	3.10	0.177	47.14	2.62	3.10

Jan 11 & 12, 2016								
Chlorophyll a		Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		96.8	3.08	0.994	0.00500	0.27	0.101	0.994
TPSWC-2B		92.0	0.94	0.914	0.00500	0.25	0.124	0.914
TPSWC-3B		100.0	1.910	0.814	0.00500	0.27	0.123	0.814
TPSWC-4B		11500	1450	0.562	0.00500	19.82	0.105	0.562
TPSWC-5B	15.0	19500	2620	1.26	0.00500	35.59	0.551	1.26
TPBBSW6	7.7	18100	2270	0.41	0.02310	29.76	0.525	0.41
TPBBSW7	20	27500	3430	3.48	0.179	44.71	2.07	3.48

Jan 18 & 19, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		82.7	1.31	0.706	0.0121	0.25	0.0936	0.706
TPSWC-2B		80.7	1.14	0.778	0.0125	0.22	0.105	0.778
TPSWC-3B		80.5	0.724	0.796	0.01	0.22	0.0999	0.796
TPSWC-4B		11700	1550	0.776	0.0155	20.67	0.147	0.776
TPSWC-5B	5.3	20100	2630	1.02	0.028	35.54	0.698	1.02
TPBBSW6	8.5	17600	2160	1.46	0.0901	30.93	0.799	1.46
TPBBSW7	20	26300	3350	2.52	0.152	44.79	2.34	2.52

Feb 1 to 3, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		75.2	5.86	0.605	0.0083	0.23	0.138	0.605
TPSWC-2B		70.7	2.69	0.498	0.0110	0.21	0.122	0.498
TPSWC-3B		71.2	5.390	0.512	0.0089	0.21	0.144	0.512
TPSWC-4B		12800	1780	0.657	0.0054	23.54	0.216	0.657
TPSWC-5B	34.0	19700	2700	1.03	0.0480	34.87	0.34	1.03
TPBBSW6	53.0	17200	2270	3.63	0.2590	30.93	2.34	3.63
TPBBSW7	12	26700	3570	2.87	0.1250	45.83	2.53	2.87

Feb 8 & 9, 2016								
Chlorophyll a		Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	Nitrogen, Total mg/L
TPSWC-1B		72.8	1.15	0.782	0.02	0.21	0.0913	0.811
TPSWC-2B		80.1	0.68	0.847	0.02	0.21	0.128	0.847
TPSWC-3B		61.6	0.541	0.805	0.02	0.19	0.105	0.805
TPSWC-4B		14200	1820	1.630	0.02	22.48	0.876	1.630
TPSWC-5B	40.0	22800	3000	1.83	0.0548	36.62	0.974	1.83
TPBBSW6	52.0	16300	2190	3.71	0.239	29.29	1.8	3.88
TPBBSW7	16	24100	3320	2.60	0.104	45.34	2.74	2.6

Feb 22 & 23, 2016							
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L
TPSWC-1B		74.6	1.14	1.150	0.00540	0.23	0.115
TPSWC-2B		90.8	0.57	1.020	0.00660	0.23	0.101
TPSWC-3B		79.8	0.400	0.897	0.00231	0.22	0.117
TPSWC-4B		12000	1500	1.300	0.01700	20.69	0.133
TPSWC-5B	24.0	19800	2730	1.42	0.02630	34.99	0.547
TPBBSW6	64.0	16800	2400	5.24	0.20800	31.45	3.3
TPBBSW7	20	26100	3340	3.03	0.06500	44.60	2.18
							3.03

Feb 29 to Mar 4, 2016								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		73.5	1.20	0.883	0.01030	0.26	0.0861	0.883
TPSWC-2B		80.4	0.45	1.070	0.01070	0.24	0.0962	1.070
TPSWC-3B		71.5	1.650	0.822	0.00920	0.23	0.0901	0.822
TPSWC-4B		9920	1290	0.976		17.22	0.1	
TPSWC-5B	12.0	21800	2750	0.84		35.32	0.433	
TPBBSW6	3.7	12000	1740	1.02	0.04560	25.02	0.432	1.02
TPBBSW7	15	20300	3150	2.88	0.05750	43.80	2.46	2.88
								2572.8

Results in blue text corrected based on corrections provided by FPL (Amy Blystone) via email on December 14, 2017 at 09:13

Mar 7 & 8, 2016								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		88.0	1.90	0.784	0.01770	0.24	0.136	104.14
TPSWC-2B		88.4	1.08	0.670	0.01400	0.24	0.115	118.45
TPSWC-3B		81.8	2.210	0.656	0.02090	0.23	0.122	55
TPSWC-4B		11900	1540	0.833	0.0186	21.46	0.094	0.833
TPSWC-5B	4.7	17200	2230	0.48	0.0215	31.99	0.242	0.48
TPBBSW6	4.1	11600	1440	0.60	0.01680	21.51	0.132	0.60
TPBBSW7	32	25500	3060	2.19	0.07970	44.72	2.6	2.19

Results in blue text corrected based on corrections provided by FPL (Amy Blystone) via email on December 14, 2017 at 09:13

Mar 14 & 15, 2016								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		84.6	1.53	0.806	0.02330	0.25	0.151	0.806
TPSWC-2B		84.3	1.16	1.060	0.02430	0.25	0.115	1.060
TPSWC-3B		77.7	1.050	1.000	0.01260	0.25	0.106	1.000
TPSWC-4B		11900	1610	0.618	0.0202	23.04	0.429	0.618
TPSWC-5B	1.6	17700	2280	0.48	0.0211	30.28	0.176	0.48
TPBBSW6	1.9	16500	2150	0.38	0.02290	28.62	0.107	0.38
TPBBSW7	21	23700	3200	2.86	0.07050	44.01	2.35	2.86

Mar 21 & 22, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		85.9	91.70	0.914	0.02080	0.25	0.153	0.914	
TPSWC-2B		92.6	2.48	1.100	0.01780	0.25	0.152	1.100	
TPSWC-3B		88.9	0.867	0.898	0.01660	0.25	0.115	0.898	
TPSWC-4B		11700	1540	1.000	0.0171	20.47	0.0443	1.040	
TPSWC-5B	3.7	17400	2540	0.76	0.0218	33.03	0.17	0.76	
TPBBSW6		2.7	15700	2240	0.65	0.02090	28.75	0.131	0.65
TPBBSW7		11	26600	3420	2.66	0.0568	44.01	2.38	2.66

Mar 28 & 29, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		83.4	3.46	1.020	0.02530	0.26	0.224	1.020	
TPSWC-2B		88.1	2.92	0.952	0.02130	0.25	0.16	0.952	
TPSWC-3B		86.4	1.810	0.806	0.02040	0.25	0.126	0.806	
TPSWC-4B		13500	1830	0.766	0.0218	23.97	0.0386	0.766	
TPSWC-5B	4.3	18700	2500	0.55	0.0226	32.07	0.0951	0.55	
TPBBSW6		2.7	17500	2440	0.20	0.02470	30.75	0.122	0.11
TPBBSW7		13	24900	3190	3.24	0.05670	42.67	2.51	3.24

April 4 & 5, 2016								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		87.2	3.88	0.676	0.02330	0.26	0.132	0.676
TPSWC-2B		87.1	2.45	0.704	0.02050	0.25	0.123	0.704
TPSWC-3B		86.0	3.790	0.642	0.01830	0.26	0.159	0.642
TPSWC-4B		10400	1770	0.776	0.0188	21.81	0.065	0.776
TPSWC-5B	4.8	19200	2670	0.37	0.0224	32.12	0.0949	0.37
TPBBSW6		1.6	17300	2460	0.02000	30.25	0.121	0.29
TPBBSW7		8	25300	3320	0.06840	42.41	2.68	2.96

April 11 & 12, 2016								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		92.5	4.74	0.922	0.02090	0.27	0.0848	0.922
TPSWC-2B		88.3	2.85	0.952	0.01840	0.25	0.103	0.952
TPSWC-3B		179.0	16.700	1.150	0.01750	0.44	0.135	1.150
TPSWC-4B		16400	1960	0.664	0.0208	28.42	0.0447	0.664
TPSWC-5B	7.5	19300	2710	0.86	0.036	33.78	0.162	0.86
TPBBSW6		1.6	15400	2180	0.01580	26.03	0.0675	0.59
TPBBSW7		13	25600	3460	0.06990	41.97	2.55	2.90

April 18 & 19, 2016								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		96.2	4.69	1.080	0.0222	0.27	0.072	1.080
TPSWC-2B		124.0	10.90	1.080	0.0030	0.34	0.0959	1.120
TPSWC-3B		233.0	19.600	1.720	0.0119	0.50	0.394	1.790
TPSWC-4B		16700	2340	0.468	0.0194	28.36	0.0723	0.468
TPSWC-5B	1.3	19400	2710	0.30	0.0200	32.17	0.25	0.30
TPBBSW6		3.7	15000	2160	0.0199	25.57	0.14	0.78
TPBBSW7		7	25000	3340	0.0597	41.44	2.64	3.04

April 25 & 26, 2016								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		107	5.44	1.10	0.0278	0.28	0.115	1.13
TPSWC-2B		165	13.6	1.07	0.0172	0.39	0.156	1.14
TPSWC-3B		268	19.0	1.80	0.0145	0.58	0.389	1.85
TPSWC-4B		16600	2330	0.504	0.0204	28.47	0.0715	0.504
TPSWC-5B	2.7	20100	2670	0.390	0.0218	33.46	0.0882	0.390
TPBBSW6		57	19100	2620	0.0301	31.59	0.0562	0.590
TPBBSW7		9.1	21900	3350	0.0548	41.79	2.77	3.22

May 2 & 3, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		110	5.76	1.13	0.0303	0.30	0.128	1.13	
TPSWC-2B		186	14.5	1.17	0.0214	0.43	0.14	1.17	
TPSWC-3B		151	11.0	1.69	0.0139	0.61	0.223	1.69	
TPSWC-4B		19700	2820	0.470	0.0196	33.63	0.0942	0.470	
TPSWC-5B	1.1	19000	2750	0.448	0.0175	33.03	0.0612	0.448	
TPBBSW6	1.1	23100	2180	1.93	0.0168	30.15	0.0605	1.93	
TPBBSW7	11	25100	3350	3.88	0.0610	42.02	2.7	3.88	

May 9 & 10, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		126	7.43	0.92	0.0222	0.34	0.0938	0.92	
TPSWC-2B		201	16.0	1.25	0.0167	0.46	0.139	1.25	
TPSWC-3B		429	33.2	1.40	0.0151	0.85	0.178	1.40	
TPSWC-4B		21000	2930	0.730	0.0201	35.11	0.0748	0.730	
TPSWC-5B	2.1	19900	2850	0.530	0.0162	34.09	0.0862	0.530	
TPBBSW6	0.5	18700	2620	0.61	0.0155	31.42	0.0491	0.61	
TPBBSW7	30	24900	3340	3.82	0.0457	42.00	2.6	3.82	

May 16 & 17, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	159	11.20	1.57	0.0420	0.45	0.0845	1.60	
TPSWC-2B	269	20.2	1.47	0.0300	0.57	0.124	1.47	
TPSWC-3B	511	42.1	1.22	0.0184	1.03	0.165	1.22	
TPSWC-4B	22400	2860	0.872	0.0235	35.00	0.0422	0.872	
TPSWC-5B	4.5	25800	3280	0.0454	34.89	0.156	3.380	
TPBBSW6	3.5	20200	2670	0.0169	32.69	0.09	0.48	
TPBBSW7	43	20100	2820	0.0212	41.57	2.83	0.68	

May 23 & 24, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	121	22.50	2.12	0.0244	0.34	0.64	2.20	
TPSWC-2B	167	53.8	2.72	0.0089	0.43	0.729	2.82	
TPSWC-3B	170	25.7	1.56	0.0149	0.41	0.323	1.81	
TPSWC-4B	18100	2530	0.880	0.0133	32.14	0.0426	0.880	
TPSWC-5B	3.5	20900	2810	0.0169	35.74	0.143	0.660	
TPBBSW6	4.3	20200	2620	0.0177	33.66	0.0836	0.51	
TPBBSW7	51	24100	3050	0.0467	41.29	2.42	3.06	

May 31 to Jun 3, 2016									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		132	21.20	1.94	0.0162	0.35	0.416	1.98	
TPSWC-2B		184	46.0	2.32	0.0128	0.44	0.441	2.35	
TPSWC-3B		164	40.5	1.95	0.0099	0.40	0.492	2.03	
TPSWC-4B		16000	2160	0.822	0.0197	26.96	0.0606	0.822	
TPSWC-5B	5.3	21200	2780	0.492	0.0178	34.35	0.0657	0.492	
TPBBSW6	2.1	19200	2550	0.41	0.0218	31.64	0.12	0.44	
TPBBSW7	37	23000	3010	2.76	0.0493	39.95	2.34	2.76	

Jun 6 to 10, 2016									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B				2.04	0.0283	0.35	0.443	2.04	79.0
TPSWC-2B				1.88	0.0172	0.44	0.333	1.91	101.6
TPSWC-3B				1.66	0.0130	0.54	0.243	1.71	92.2
TPSWC-4B				0.756	0.0203	24.54	0.0595	0.756	84.0
TPSWC-5B	1.6			0.338	0.0208	33.18	0.0742	0.338	35.5
TPBBSW6	1.6	17400	2550	0.39	0.0194	31.65	0.121	0.39	23.12
TPBBSW7	27	22800	3120	2.76	0.0642	40.20	2.72	2.79	1056.5

Results in blue text corrected based on corrections provided by FPL (Amy Blystone) via email on December 14, 2017 at 09:13

Jun 13 & 14, 2016									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		154	29.80	1.62	0.0179	0.38	0.418	1.62	
TPSWC-2B		151	31.2	1.28	0.0161	0.36	0.245	1.28	
TPSWC-3B		159	16.1	1.49	0.0185	0.40	0.261	1.49	
TPSWC-4B		10600	1570	1.170	0.0191	19.99	0.0862	1.170	
TPSWC-5B	2.1	20600	2780	0.790	0.0217	34.40	0.123	0.790	
TPBBSW6	1.9	19800	2760	0.56	0.0232	34.14	0.0957	0.56	
TPBBSW7	21	26400	2920	2.22	0.0720	38.99	2.01	2.22	

Jun 20 & 23, 2016									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		155	20.30	1.59	0.0161	0.38	0.228	1.59	
TPSWC-2B		163	13.5	1.87	0.0140	0.37	0.202	1.87	
TPSWC-3B		192	17.7	1.58	0.0151	0.43	0.181	1.58	
TPSWC-4B		8760	1110	0.954	0.0139	15.04	0.14	0.954	
TPSWC-5B	3.7	19600	2670	0.974	0.0241	33.78	0.109	0.974	
TPBBSW6	1.1	18100	2390	0.52	0.0478	32.60	0.0628	0.52	
TPBBSW7	36	22000	2980	2.78	0.0425	38.52	1.89	2.78	

Jun 27 & 28, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		157	17.60	1.54	0.0161	0.38	0.321	1.54	
TPSWC-2B		161	12.8	1.74	0.0184	0.37	0.226	1.74	
TPSWC-3B		187	14.8	1.58	0.0136	0.42	0.191	1.58	
TPSWC-4B		9040	1140	0.882	0.0140	15.01	0.106	0.882	
TPSWC-5B	2.9	19100	2610	0.582	0.0182	32.17	0.0921	0.582	
TPBBSW6	2.9	18800	2600	0.56	0.0196	32.17	0.061	0.56	
TPBBSW7	41	22400	2960	2.28	0.0360	38.00	1.83	2.28	

Jul 5 & 6, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		155	14.20	1.73	0.0134	0.38	0.463	1.73	
TPSWC-2B		164	13.4	1.51	0.0089	0.38	0.249	1.51	
TPSWC-3B		186	7.5	1.55	0.0063	0.42	0.222	1.69	
TPSWC-4B		6280	829	1.520	0.0157	11.40	0.163	1.550	
TPSWC-5B	3.7	19500	2660	0.808	0.0248	32.96	0.13	0.808	
TPBBSW6	3.5	20500	2740	0.93	0.0267	34.21	0.0775	0.93	
TPBBSW7	18	22900	2910	2.84	0.0389	38.22	1.71	2.84	

Jul 11 & 12, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		162	16.10	1.09	0.0127	0.39	0.193	1.09	
TPSWC-2B		175	13.6	1.02	0.0160	0.40	0.146	1.02	
TPSWC-3B		182	4.9	1.13	0.0180	0.42	0.157	1.13	
TPSWC-4B		6410	826	0.834	0.0103	10.95	0.123	0.834	
TPSWC-5B	4.8	20100	2710	0.518	0.0036	33.83	0.033	0.518	
TPBBSW6		1.1	20900	2760	0.70	0.0304	35.30	0.0695	0.70
TPBBSW7		35	22900	2980	2.14	0.0075	39.09	1.75	2.14

Jul 18 & 19, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		162	16.50	1.05	0.0122	0.40	0.19	1.05	
TPSWC-2B		180	14.1	0.96	0.0125	0.40	0.169	0.96	
TPSWC-3B		346	18.0	0.91	0.0134	0.73	0.253	0.91	
TPSWC-4B		5260	655	0.808	0.0044	9.46	0.146	0.808	
TPSWC-5B	6.4	19700	2620	0.670	0.0139	33.79	0.0465	0.670	
TPBBSW6		3.0	20200	2720	0.51	0.0054	34.26	0.0753	0.51
TPBBSW7		20	22000	2840	2.16	0.0201	39.02	2.06	2.16

Jul 25 & 26, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		165	16.90	1.20	0.0111	0.40	0.294	1.20
TPSWC-2B		184	12.5	0.99	0.0222	0.41	0.173	0.99
TPSWC-3B		802	61.0	1.19	0.0208	1.53	0.551	1.19
TPSWC-4B		11000	1440	0.574	0.0499	19.14	0.0753	0.674
TPSWC-5B	2.4	20300	2750	0.258	0.0132	34.75	0.141	0.258
TPBBSW6		0.8	19600	2650	0.0030	34.17	0.112	0.28
TPBBSW7		100	22200	2900	0.0201	38.62	2.15	1.98

Aug 1 & 2, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		181	17.30	1.34	0.0058	0.41	0.217	1.34
TPSWC-2B		446	29.6	0.98	0.0030	0.85	0.159	0.98
TPSWC-3B		1410	123.0	1.73	0.0030	2.49	0.389	1.73
TPSWC-4B		17700	2300	0.516	0.0058	29.02	0.0898	0.516
TPSWC-5B	2.9	22400	2870	0.522	0.0090	35.57	0.146	0.522
TPBBSW6		1.9	19000	2550	0.0030	32.24	0.119	0.45
TPBBSW7		86	23000	2990	0.0308	37.91	2.22	2.58

Aug 8 & 9, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		141	51.60	2.14	0.0167	0.41	0.0981	2.30
TPSWC-2B		174	37.2	1.42	0.0179	0.44	0.353	1.64
TPSWC-3B		2390	246.0	3.06	0.0544	4.43	1.95	3.06
TPSWC-4B		16400	2220	0.448	0.0072	29.33	0.0461	0.448
TPSWC-5B	2.7	20400	2770	0.354	0.0030	35.89	0.164	0.354
TPBBSW6	0.5	19200	2690	0.29	0.0056	35.54	0.085	0.29
TPBBSW7	50	21300	2860	2.62	0.0093	38.33	2.56	2.62

Aug 16 & 17, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		164	46.10	1.84	0.0173	0.44	0.508	1.88
TPSWC-2B		324	51.4	1.45	0.0132	0.71	0.263	1.51
TPSWC-3B		584	54.8	1.34	0.0128	1.16	0.31	1.34
TPSWC-4B		11400	1570	0.806	0.0097	20.45	0.055	0.806
TPSWC-5B	2.4	20600	2780	0.260	0.0044	35.34	0.0825	0.260
TPBBSW6	2.1	19700	2710	0.26	0.0136	33.81	0.0747	0.26
TPBBSW7	10	22100	2840	2.76	0.0595	38.07	2.25	2.76

Aug 22 & 23, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	342	52.70	1.40	0.0164	0.75	0.336	1.43	
TPSWC-2B	504	42.3	1.58	0.0206	0.99	0.311	1.58	
TPSWC-3B	398	23.8	1.47	0.0112	0.76	0.38	1.47	
TPSWC-4B	11600	1570	0.766	0.0084	20.52	0.104	0.766	
TPSWC-5B	19500	2710	0.558	0.0037	34.32	0.0996	0.558	
TPBBSW6		18700	2560	0.83	0.0649	32.82	0.42	0.83
TPBBSW7		21400	2820	2.44	0.0712	36.65	1.98	2.44

August 29, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	365	42.20	1.45	0.0185	0.73	0.226	1.48	
TPSWC-2B	339	18.5	1.28	0.0154	0.66	0.194	1.28	
TPSWC-3B	694	58.2	1.56	0.0118	1.27	0.666	1.56	
TPSWC-4B								30.8
TPSWC-5B								37.7
TPBBSW6	1	17300	2350	0.45	0.0032	30.12	0.0773	0.47
TPBBSW7	5.6	21500	2810	2.42	0.0664	37.41	2.25	2.45

Sep 6 & 7, 2016									
Chlorophyll a		Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		292	22.10	1.10	0.0113	0.60	0.224	1.10	45.10
TPSWC-2B		187	5.5	1.21	0.0066	0.38	0.179	1.21	32.60
TPSWC-3B		119	2.94	0.954	0.0057	0.26	0.223	0.84	24.13
TPSWC-4B		2880	317	1.070	0.0081	4.98	0.257	1.070	73.300
TPSWC-5B	2.4	19800	2700	0.612	0.0030	33.39	0.14	0.612	53.800
TPBBSW6	11	19500	2630	0.472	0.0098	33.06	0.185	0.59	8.83
TPBBSW7	5.3	21100	2720	1.03	0.0632	37.25	1.85	1.03	287.70

Sept 13 to 16, 2016									
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium	
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L	
TPSWC-1B		253	18.90	1.06	0.0112	0.54	0.22	1.06	47.60
TPSWC-2B		140	2.13	1.27	0.0100	0.32	0.13	1.27	44.10
TPSWC-3B		114	1.8	1.09	0.0068	0.27	0.141	1.09	22.80
TPSWC-4B		284	21	1.230	0.0043	0.59	0.17	1.230	
TPSWC-5B	0.5	18700	2570	0.858	0.0030	34.00	0.0937	0.858	
TPBBSW6		13	19400	2420	0.56	0.0030	32.26	0.128	0.56
TPBBSW7		11.0	20800	2720	2.60	0.0676	37.39	1.81	2.60

Sept. 19 & 20, 2016									
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium	
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L	
TPSWC-1B		231	17.30	1.23	0.0053	0.50	0.17	1.23	
TPSWC-2B		140	1.5	1.31	0.0054	0.33	0.227	1.31	
TPSWC-3B		125	1.0	1.10	0.0063	0.30	0.192	1.10	
TPSWC-4B		213	8	1.260	0.0055	0.47	0.168	1.260	
TPSWC-5B	2.9	19300	2660	1.110	0.0030	33.97	0.0517	2.780	
TPBBSW6		4	18100	2440	0.50	0.0030	32.15	0.102	0.50
TPBBSW7		20.0	21600	2760	1.70	0.0887	37.01	1.6	1.70

Sept. 26 & 27, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		195	5.19	1.12	0.0030	0.42	0.133	1.12	
TPSWC-2B		151	2.2	1.29	0.0030	0.35	0.21	1.29	
TPSWC-3B		141	1.4	1.29	0.0030	0.33	0.218	1.29	
TPSWC-4B		3920	449	1.310	0.0071	7.22	0.0522	1.310	
TPSWC-5B	5.1	18500	2450	0.490	0.0078	31.60	0.028	0.490	
TPBBSW6		3	18000	2430	0.38	0.0030	31.76	0.0923	0.38
TPBBSW7		21.0	21700	2880	1.33	0.0645	37.14	1.17	1.33

Oct. 3 & 4, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		140	1.66	1.62	0.0106	0.33	0.143	1.62	
TPSWC-2B		101	0.843	1.50	0.0124	0.25	0.192	1.50	
TPSWC-3B		103	0.719	1.41	0.00804	0.25	0.177	1.41	
TPSWC-4B		10800	1370	0.920	0.00770	18.47	0.251	0.920	
TPSWC-5B	2.7	18200	2440	0.520	0.00586	31.18	0.026	0.520	
TPBBSW6	2.7	17600	2350	0.552	0.00771	30.30	0.111	0.578	
TPBBSW7	18	22600	2990	1.10	0.0513	37.47	1.27	1.10	

Oct. 10 & 11, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	137	1.46	1.27	0.0132	0.32	0.21	1.27	
TPSWC-2B	103	0.640	1.37	0.0100	0.25	0.214	1.37	
TPSWC-3B	3240	408.000	1.04	0.00801	5.35	0.298	1.04	
TPSWC-4B	15100	2010	0.528	0.00307	25.56	0.0749	0.556	
TPSWC-5B	1.9	19500	2580	0.362	0.00467	32.05	0.112	0.362
TPBBSW6	2.1	16900	2080	0.464	0.00362	27.97	0.134	0.507
TPBBSW7	11	22300	2920	2.24	0.0205	36.95	1.75	2.24

Oct. 17 & 18, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	1290	129	1.28	0.00680	2.42	0.56	1.28	
TPSWC-2B	1420	134	1.19	0.00783	2.57	0.5	1.19	
TPSWC-3B	7840	1050	1.07	0.00616	13.92	0.391	1.07	
TPSWC-4B	13800	1810	0.570	0.00300	23.37	0.0443	0.570	
TPSWC-5B	0.50	16800	2270	0.374	0.00300	29.19	0.0901	0.374
TPBBSW6	1.9	13500	1760	1.68	0.00339	22.95	0.141	1.77
TPBBSW7	16	22900	2910	1.94	0.0226	37.56	1.89	1.94

Oct. 24 & 25, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		1200	113	1.05	0.00450	2.20	0.26	1.05	
TPSWC-2B		1180	109	0.68	0.00464	2.18	0.24	0.68	
TPSWC-3B		6880	918	2.30	0.00300	12.14	1.6	2.30	
TPSWC-4B		14600	1950	0.500	0.00300	25.75	0.104	0.500	
TPSWC-5B	0.80	17600	2460	0.280	0.00300	31.75	0.165	0.280	
TPBBSW6	0.8	17500	2410	0.50	0.00425	29.46	0.26	0.50	
TPBBSW7	19	21100	2720	1.73	0.0336	37.41	2	1.73	

Oct. 31 & Nov 1, 2016									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		1160	106	0.92	0.01200	2.07	0.259	0.95	
TPSWC-2B		807	68	1.14	0.00543	1.46	0.444	1.17	
TPSWC-3B		7310	957	0.98	0.00456	12.39	0.214	0.98	
TPSWC-4B		12600	1670	0.494	0.00457	21.66	0.0921	0.521	
TPSWC-5B	0.80	15800	2160	0.268	0.00300	26.97	0.132	0.326	
TPBBSW6	0.5	14600	1850	0.59	0.00422	25.66	0.375	0.65	
TPBBSW7	30	22400	2850	2.82	0.0556	37.01	2.15	2.82	

Nov 7 & 8, 2016								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		1000	90	1.09	0.01430	1.75	0.147	1.09
TPSWC-2B		710	57	1.12	0.00892	1.26	0.172	1.12
TPSWC-3B		4550	559	1.73	0.01230	7.46	0.777	1.73
TPSWC-4B		11600	1500	0.920	0.00579	20.54	0.157	0.920
TPSWC-5B	0.53	17200	2240	0.394	0.003	29.23	0.133	0.394
TPBBSW6	1.1	16000	2140	0.20	0.00300	25.86	0.19	0.18
TPBBSW7	25	21100	1880	2.74	0.0604	36.86	2.32	2.74

Nov 14 & 15, 2016								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		1050	96	1.03	0.01850	1.92	0.201	1.03
TPSWC-2B		748	59	0.97	0.01120	1.38	0.26	0.97
TPSWC-3B		3540	450	1.21	0.00826	6.44	0.539	1.21
TPSWC-4B		14900	2060	0.428	0.00680	25.49	0.0922	0.428
TPSWC-5B	0.80	17100	2400	0.508	0.00300	29.41	0.167	0.549
TPBBSW6	0.8	17800	2360	0.29	0.00701	30.31	0.36	0.29
TPBBSW7	22	21200	2720	2.76	0.0843	35.98	2.88	2.76

Nov 21 & 22, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		711	52	0.86	0.01340	1.32	0.138	0.86
TPSWC-2B		364	28	1.06	0.01070	0.73	0.176	1.06
TPSWC-3B		426	32	1.10	0.01100	1.01	0.131	1.10
TPSWC-4B		13600	1840	0.564	0.00698	23.54	0.239	0.669
TPSWC-5B	2.10	18800	2490	0.200	0.00859	31.05	0.177	0.225
TPBBSW6		1.9	18000	2430	0.00300	30.42	0.072	0.23
TPBBSW7		34	20900	2770	0.0935	36.43	2.39	3.48

Nov 28 & 29, 2016								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		893	78	1.63	0.01650	1.61	0.257	1.63
TPSWC-2B		377	28	1.44	0.01020	0.75	0.168	1.44
TPSWC-3B		2700	345	1.86	0.01010	4.87	0.634	1.86
TPSWC-4B								59
TPSWC-5B								59.8
TPBBSW6	14.0	17000	2360	0.20	0.01180	29.64	0.08	0.28
TPBBSW7	24	22300	2820	1.67	0.0960	36.05	2.41	1.67

Dec 5 to 8, 2016									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B				1.15	0.00361	1.48	0.28	1.15	48.1
TPSWC-2B				1.14	0.00489	0.80	0.237	1.14	51.3
TPSWC-3B				1.62	0.00300	2.43	0.463	1.62	10.6
TPSWC-4B	9100	1130		0.918	0.01010	15.94	0.132	0.918	67.4
TPSWC-5B	0.53	18200	2440	0.476	0.00482	31.96	0.18	0.476	33
TPBBSW6	0.8	18100	2430	0.29	0.00412	31.03	0.047	0.29	5.3
TPBBSW7	16	22400	2630	1.83	0.1020	36.18	2.07	1.83	192

Dec 12 & 13, 2016									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		525	39	1.49	0.01910	1.01	0.245	1.49	
TPSWC-2B		265	13	1.24	0.01210	0.57	0.269	1.24	
TPSWC-3B		267	15	1.47	0.00964	0.60	0.294	1.47	
TPSWC-4B		16400	2080	0.426	0.00845	26.93	0.0479	0.465	
TPSWC-5B	1.10	18200	2380	0.210	0.00540	30.57	0.102	0.210	
TPBBSW6	1.1	16200	2330	0.20	0.00858	30.57	0.109	0.23	
TPBBSW7	10	22400	2680	2.66	0.1090	35.98	2.1	2.91	

Dec 19 & 20, 2016									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		576	46	1.27	0.01690	1.10	0.338	1.30	
TPSWC-2B		256	13	1.25	0.01180	0.55	0.272	1.29	
TPSWC-3B		444	39	1.17	0.01380	0.79	0.426	1.17	
TPSWC-4B		10000	1330	0.808	0.01320	17.26	0.22	0.838	
TPSWC-5B	0.80	18900	2580	0.368	0.00401	31.44	0.203	0.368	
TPBBSW6	0.5	16900	2330	0.26	0.00733	27.51	0.135	0.32	
TPBBSW7	23	20900	2760	1.32	0.1030	35.38	1.9	1.32	

Dec 27 & 28, 2016									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		417	28	1.45	0.01600	0.81	0.141	1.45	
TPSWC-2B		272	13	1.79	0.01160	0.55	0.157	1.79	
TPSWC-3B		214	10	1.16	0.01140	0.46	0.209	1.16	
TPSWC-4B		11000	1530	1.060	0.01050	19.53	0.0352	1.060	
TPSWC-5B	1.10	18400	2570	0.474	0.00405	31.74	0.0515	0.474	
TPBBSW6	1.1	17000	2280	0.42	0.00300	27.82	0.0545	0.46	
TPBBSW7	15	20900	2810	2.44	0.1230	35.05	1.85	2.44	

Jan 3 & 4, 2017								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		462	34	0.70	0.01960	0.90	0.184	0.72
TPSWC-2B		282	13	1.51	0.01670	0.59	0.198	1.52
TPSWC-3B		215	11	1.33	0.01260	0.47	0.247	1.35
TPSWC-4B		9250	1220	1.470	0.00300	15.70	0.0935	1.470
TPSWC-5B	0.80	23000	2710	0.200	0.00300	32.24	0.0669	0.225
TPBBSW6		0.8	17200	2530	0.00695	30.33	0.0551	0.23
TPBBSW7		27	22400	2810	0.0961	34.86	2.19	2.52

Jan 9 & 10, 2017								
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L
TPSWC-1B		379	23	1.37	0.01980	0.78	0.109	1.38
TPSWC-2B		227	11	0.72	0.01120	0.50	0.223	0.75
TPSWC-3B		160	1	1.10	0.01040	0.40	0.149	1.12
TPSWC-4B		11800	1480	0.720	0.03260	18.80	0.0926	0.728
TPSWC-5B	10.00	22600	2820	0.362	0.01170	33.94	0.184	0.362
TPBBSW6		0.5	15700	2120	0.00502	26.75	0.041	0.27
TPBBSW7		23	23800	2790	0.1180	35.23	1.81	1.81

Jan 16 & 17, 2017								Tritium pCi/L
Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	
Sample ID								
TPSWC-1B	390	24	1.54	0.00300	0.79	0.147	1.54	
TPSWC-2B	205	7	1.46	0.01910	0.47	0.196	1.48	
TPSWC-3B	172	3	1.60	0.01260	0.44	0.278	1.63	
TPSWC-4B	14000	1820	0.512	0.00300	23.46	0.0529	0.538	
TPSWC-5B	0.80	19500	2560	0.418	0.00366	31.96	0.0922	0.445
TPBBSW6	0.8	17000	2300	0.20	0.00564	29.10	0.142	0.200 U
TPBBSW7	25	19900	2690	2.42	0.1170	34.31	2.38	2.42

Jan 23 & 24, 2017								Tritium pCi/L
Chlorophyll Sample ID	Chloride mg/m3	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	
TPSWC-1B		365	22	1.69	0.03280	0.76	0.115	1.69
TPSWC-2B		196	7	1.52	0.02110	0.46	0.144	1.54
TPSWC-3B		175	2	1.35	0.01680	0.44	0.328	1.39
TPSWC-4B		11900	1580	0.656	0.01530	21.08	0.0389	0.661
TPSWC-5B	1.60	19600	2620	0.256	0.01030	33.88	0.102	1.930
TPBBSW6	0.8	19500	2670	0.45	0.00347	34.16	0.0395	0.46
TPBBSW7	38	19900	2600	2.16	0.1250	34.53	2.29	2.16

Jan 30 & 31, 2017									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		348	20	1.03	0.02950	0.71	0.167	1.03	
TPSWC-2B		205	6	0.99	0.01990	0.45	0.155	1.00	
TPSWC-3B		181	2	1.20	0.01630	0.45	0.383	1.26	
TPSWC-4B		10700	1450	0.770	0.00858	19.12	0.162	0.791	
TPSWC-5B	12.00	19800	2640	0.200	0.00439	33.53	0.0805	0.225 U	
TPBBSW6		1.0	20800	2590	0.00300	33.01	0.0272	0.44	
TPBBSW7		11	19800	2700	0.0030	33.68	0.0535	0.296	

Feb 6 & 7, 2017									
	Chlorophyll mg/m3	Chloride mg/L	Sulfate mg/L	Nitrogen, Kjeldahl mg/L	Phosphorus as P mg/L	Salinity SU	Ammonia as N, Dissolved mg/L	Nitrogen, Total mg/L	Tritium pCi/L
TPSWC-1B		384	20	1.51	0.04160	0.73	0.283	1.51	
TPSWC-2B		196	6		0.02640	0.45	0.185		
TPSWC-3B		294	11	1.31	0.01750	0.64	0.885	1.34	
TPSWC-4B		9910	1270	0.666	0.00581	16.73	0.243	0.706	
TPSWC-5B	12.00	20800	2670	0.444	0.00944	33.35	0.126	0.444	
TPBBSW6		6.1	21000	2740	0.45	0.01150	33.09	0.0306	0.45
TPBBSW7		1	20000	2690	0.20	0.0083	33.19	0.054	0.205 U

Feb 13 & 14, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		354	20	1.24	0.02570	0.71	0.156	1.24
TPSWC-2B		210	6	0.85	0.01550	0.47	0.181	0.86
TPSWC-3B		588	39	0.80	0.01270	1.14	0.801	0.83
TPSWC-4B		9530	1240	0.856	0.00300	16.33	0.241	0.900
TPSWC-5B	15.00	22100	2680	0.914	0.02890	34.38	0.15	0.914
TPBBSW6	0.8	20800	2700	0.61	0.00457	33.37	0.026	0.61
TPBBSW7	1	19500	2780	0.50	0.0039	33.61	0.253	0.50

Feb 20 & 21, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		374	20	1.31	0.03920	0.74	0.384	1.31
TPSWC-2B		227	7	0.86	0.01870	0.49	0.172	0.89
TPSWC-3B		1610	140	1.41	0.01460	2.90	1.13	1.42
TPSWC-4B		9340	1190	0.816	0.00456	15.23	0.229	0.884
TPSWC-5B	31.00	20700	2870	0.440	0.02180	34.75	0.152	0.440
TPBBSW6	1.3	21500	2770	0.20	0.00456	34.95	0.0277	0.205 U
TPBBSW7	1	20000	2890	0.28	0.0046	34.85	0.0479	0.28

Feb 28 to Mar 1, 2017									
Chlorophyll		Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		362	20	1.45	0.03240	0.74	0.287	1.45	
TPSWC-2B		435	23	1.33	0.02200	0.84	0.397	1.38	
TPSWC-3B		2200	213	1.75	0.01980	3.83	0.917	1.77	
TPSWC-4B		14300	1840	0.530	0.00462	23.05	0.122	0.552	
TPSWC-5B	12.00	20900	2860	0.638	0.01080	34.84	0.149	0.638	
TPBBSW6	1.1	23000	2790	0.40	0.00456	34.85	0.048	0.40	
TPBBSW7	1	22300	2850	0.48	0.0046	35.80	0.0811	0.48	

Mar 6 & 7, 2017									
Chlorophyll		Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		377	22	1.15	0.03610	0.78	0.126	1.15	71.4
TPSWC-2B		639	47	1.24	0.00790	1.28	0.319	1.26	50.2
TPSWC-3B		3000	340	1.07	0.02240	5.50	0.348	1.11	48.3
TPSWC-4B		18000	2350	0.444	0.00456	30.47	0.1	0.450	26.37
TPSWC-5B	2.10	25800	2750	0.602	0.00617	36.06	0.126	0.602	9.34
TPBBSW6	1.3	18200	2270	0.55	0.00693	28.86	0.0458	0.58	0.1
TPBBSW7	2	21200	2930	0.44	0.0072	35.73	0.0435	0.44	31.8

Mar 13 & 14, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		377	22	1.49	0.04600	0.76	0.131	1.50
TPSWC-2B		1380	133	1.41	0.02190	2.51	0.261	1.45
TPSWC-3B		2640	285	1.31	0.02160	4.75	0.433	1.33
TPSWC-4B		16100	1920	0.680	0.00643	24.82	0.0929	0.688
TPSWC-5B	6.70	27000	3110	0.518	0.00626	37.16	0.0584	0.518
TPBBSW6		0.8	22800	2880	0.00916	34.10	0.0932	0.39
TPBBSW7		1	21800	2760	0.0046	35.24	0.0729	0.45

Mar 20 & 21, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		388	21	1.54	0.02990	0.81	0.0854	1.54
TPSWC-2B		1680	149	1.21	0.02350	3.03	0.287	1.21
TPSWC-3B		2090	190	1.50	0.02040	3.77	0.326	1.51
TPSWC-4B		13300	1740	0.742	0.00651	22.53	0.0622	0.750
TPSWC-5B	6.90	22500	2980	0.766	0.00520	37.10	0.0512	0.766
TPBBSW6		3.2	19600	2580	0.00838	33.60	0.0687	0.48
TPBBSW7		1	20900	2760	0.0046	35.09	0.0459	0.55

Mar 27 & 28, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		394	22	1.45	0.04310	0.83	0.115	1.45
TPSWC-2B		1600	136	1.26	0.02110	2.89	0.195	1.33
TPSWC-3B		2890	300	1.45	0.01890	5.28	0.517	1.59
TPSWC-4B		19000	2320	0.634	0.01340	29.34	0.0717	0.640
TPSWC-5B	0.53	23000	2970	0.326	0.01120	36.16	0.0371	0.326
TPBBSW6	1.1	24200	2600	0.22	0.01170	32.02	0.045	0.22
TPBBSW7	1	24600	2860	0.29	0.0091	34.72	0.0575	0.29

Apr 3 & 4, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		428	27	1.66	0.03500	0.88	0.17	1.66
TPSWC-2B		1620	150	1.70	0.02590	2.95	0.317	1.70
TPSWC-3B		2520	270	1.73	0.01970	4.56	0.584	1.78
TPSWC-4B		19200	2370	0.730	0.00700	30.72	0.201	0.730
TPSWC-5B	0.53	23100	2960	0.662	0.00456	37.37	0.0374	0.662
TPBBSW6	1.1	22800	2900	0.66	0.00456	37.10	0.0469	0.66
TPBBSW7	2	23600	2810	0.57	0.0070	35.91	0.085	0.57

Apr 10 & 11, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	493	29	1.04	0.03140	0.93	0.115	1.04	
TPSWC-2B	1730	145	1.43	0.02520	2.99	0.1	1.43	
TPSWC-3B	2150	211	1.26	0.02200	4.18	0.105	1.26	
TPSWC-4B	22100	2840	0.636	0.00703	35.69	0.063	0.636	
TPSWC-5B	6.70	23400	3050	0.542	0.01260	38.63	0.0757	0.542
TPBBSW6	1.1	23900	3070	0.34	0.00516	38.76	0.026	0.34
TPBBSW7	1	24100	3050	0.59	0.0046	39.06	0.027	0.59

Apr 24 & 25, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	540	36	0.95	0.03640	1.08	0.0738	0.95	
TPSWC-2B	2030	182	1.15	0.02240	3.56	0.0857	1.16	
TPSWC-3B	12300	1550	1.60	0.01580	21.54	0.456	1.60	
TPSWC-4B	23900	3210	0.566	0.00554	41.09	0.0591	0.566	
TPSWC-5B	1.10	23500	3090	0.432	0.00456	40.36	0.0347	0.432
TPBBSW6	2.1	22400	3010	0.44	0.00580	39.13	0.0284	0.45
TPBBSW7	1	24900	3270	0.53	0.0046	40.11	0.0881	0.53

May 1 & 2, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		542	36	1.44	0.05830	1.09	0.103	1.44
TPSWC-2B		2100	201	1.03	0.01560	3.66	0.107	1.03
TPSWC-3B		13400	1510	1.45	0.00655	23.23	0.562	1.45
TPSWC-4B		24700	3860	0.640	0.00456	42.18	0.0685	0.640
TPSWC-5B	2.70	24000	3110	0.618	0.00456	41.13	0.0918	0.618
TPBBSW6	1.6	24500	3130	0.68	0.00456	39.76	0.0508	0.68
TPBBSW7	1	22700	3140	0.58	0.0046	40.28	0.105	0.58

May 8 & 9, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		594	40.0	1.12	0.0278	1.13	0.103	1.12
TPSWC-2B		3190	400	1.08	0.0200	3.88	0.117	1.08
TPSWC-3B		12300	1570	1.87	0.0412	21.62	0.29	1.87
TPSWC-4B		26000	3300	1.12	0.0177	41.72	0.0878	1.12
TPSWC-5B	6.1	25200	3330	0.822	0.0858	42.33	0.164	0.822
TPBBSW6	2.1	23900	3070	0.458	0.0216	40.25	0.0573	0.458
TPBBSW7	1.6	24600	3180	0.714	0.0113	40.25	0.0813	0.714

May 15 & 16, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	613	42.7	1.16	0.0227	1.21	0.0805	1.16	
TPSWC-2B	2150	221	1.02	0.0211	4.08	0.0714	1.02	
TPSWC-3B	10100	1400	1.83	0.0211	18.95	0.271	1.83	
TPSWC-4B	29400	2990	0.69	0.0068	39.19	0.0691	0.70	
TPSWC-5B	2.9	25100	3340	0.494	42.25	0.026	0.494	
TPBBSW6	0.8	23200	3170	0.490	40.19	0.026	0.490	
TPBBSW7	1.3	23200	3270	0.440	41.27	0.0415	0.440	

May 22 & 23, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	686	28.8	1.01	0.0218	1.28	0.147	1.01	
TPSWC-2B	2430	237	1.33	0.0172	4.27	0.14	1.33	
TPSWC-3B	11200	1490	1.83	0.0217	20.88	0.243	1.83	
TPSWC-4B	25200	3130	0.33	0.0049	39.74	0.112	0.33	
TPSWC-5B	1.6	26700	3330	0.288	41.02	0.0374	0.288	
TPBBSW6	0.5	18200	2650	0.262	41.46	0.0632	0.262	
TPBBSW7	1.3	25200	3410	0.208	42.19	0.0743	0.208	

May 30 & 31, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	629	44.8	1.18	0.0243	1.19	0.148	1.18	
TPSWC-2B	2410	243	1.28	0.0231	4.40	0.109	1.28	
TPSWC-3B	9890	1440	2.08	0.0272	19.02	0.597	2.08	
TPSWC-4B	22600	3130	0.82	0.0050	39.07	0.0769	0.83	
TPSWC-5B	22500	3260	0.428	0.0065	40.62	0.026	0.428	
TPBBSW6		25900	3410	0.200	0.0046	39.19	0.0438	0.205
TPBBSW7		24600	3390	0.724	0.0081	42.02	0.19	0.724

Jun 5 to 7, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	573	45.1	1.04	0.0259	1.15	0.141	1.04	
TPSWC-2B	2370	254	1.31	0.0233	4.37	0.0363	1.31	
TPSWC-3B	4020	478	2.44	0.0288	7.41	0.467	2.44	
TPSWC-4B	21800	3030	0.67	0.0046	38.43	0.0778	0.67	
TPSWC-5B	1.9	23400	3290	0.346	0.0046	40.64	0.026	0.346
TPBBSW6	0.5	23500	3280	0.542	0.0046	39.73	0.0533	0.542
TPBBSW7	41.0	24600	3370	0.530	0.0046	41.81	0.114	0.530

Jun 14 & 15, 2017								
Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		1770	211.0	1.55	0.0172	3.29	0.27	1.98
TPSWC-2B		2260	259	1.50	0.0168	4.16	0.146	1.71
TPSWC-3B		3020	334	1.67	0.0174	5.40	0.216	1.73
TPSWC-4B		16600	2280	0.92	0.0147	30.21	0.026	0.92
TPSWC-5B	4.3	22400	3100	0.484	0.0104	40.03	0.093	0.484
TPBBSW6	1.3	20800	2850	0.306	0.0056	36.55	0.0619	0.318
TPBBSW7	25.0	24500	3330	0.802	0.0201	41.63	0.262	0.802

Jun 19 & 20, 2017									
Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium	
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L	
TPSWC-1B		1780	207.0	2.04	0.0250	3.16	0.779	2.04	
TPSWC-2B		2090	234	1.60	0.0185	4.08	0.392	1.68	
TPSWC-3B		3100	295	1.39	0.0213	5.59	0.254	1.41	
TPSWC-4B		21900	1760	1.14	0.0147	25.89	0.0336	1.14	
TPSWC-5B	5.3	22800	3030	0.552	0.0087	39.70	0.11	0.552	
TPBBSW6	0.8	17200	2540	0.432	0.0046	36.41	0.068	0.432	
TPBBSW7	16.0	22900	3210	0.922	0.0268	40.89	0.493	0.922	

Jun 26 & 27, 2017									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		1630	204.0	2.46	0.0180	2.89	0.764	2.46	
TPSWC-2B		1980	240	1.84	0.0188	3.63	0.306	1.88	
TPSWC-3B		2830	309	1.83	0.0174	5.14	0.22	1.86	
TPSWC-4B		11200	1680	1.33	0.0102	23.13	0.091	1.33	
TPSWC-5B	3.7	22000	2940	0.634	0.0067	37.25	0.0405	0.667	
TPBBSW6		0.5	22300	2900	0.582	0.0046	37.72	0.0703	0.592
TPBBSW7		15.0	23700	3150	1.430	0.0284	40.17	0.533	1.430

Jul 5 to 8, 2017									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		1490	187.0	2.82	0.0139	2.52	0.98	2.82	
TPSWC-2B		1560	192	2.18	0.0332	2.60	0.251	2.18	
TPSWC-3B		2210	243	2.46	0.0359	3.99	0.412	2.46	
TPSWC-4B		10600	1370	1.19	0.0076	18.47	0.11	1.20	
TPSWC-5B	4.0	21900	2870	0.220	0.0074	38.66	0.0321	0.220	
TPBBSW6		0.5	24600	3310	0.384	0.0046	39.46	0.0416	0.384
TPBBSW7		20.0	28700	3170	1.340	0.0347	40.45	0.636	1.340

Jul 10 & 11, 2017									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		1080	166.0	2.70	0.0273	1.97	0.674	2.70	
TPSWC-2B		980	139	1.95	0.0234	1.88	0.157	1.95	
TPSWC-3B		2510	250	3.92	0.0372	4.50	1.12	3.92	
TPSWC-4B		11300	1480	1.03	0.0108	19.24	0.136	1.04	
TPSWC-5B	9.3	23200	5900	0.294	0.0186	39.75	0.0502	0.294	
TPBBSW6		0.8	21100	3190	0.0046	39.97	0.0419	0.492	
TPBBSW7		55.0	23900	5490	0.0267	40.60	0.334	1.600	

Jul 17 & 18, 2017									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		589	126.0	1.85	0.0299	1.22	0.381	1.86	
TPSWC-2B		606	98	1.88	0.0296	1.29	0.192	1.88	
TPSWC-3B		1290	131	1.93	0.0294	2.54	0.325	1.93	
TPSWC-4B		14100	1890	0.72	0.0082	24.95	0.0806	0.72	
TPSWC-5B	1.9	23400	3080	0.436	0.0046	38.97	0.0959	0.436	
TPBBSW6		5.8	23100	3170	0.0089	37.83	0.0428	0.728	
TPBBSW7		28.0	25300	3210	0.0068	40.90	0.0359	0.688	

Jul 24 & 25, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	596	126.0	1.89	0.0240	1.22	0.218	1.89	
TPSWC-2B	557	68	1.64	0.0178	1.09	0.161	1.64	
TPSWC-3B	648	63	1.60	0.0182	1.24	0.21	1.60	
TPSWC-4B	12500	1570	0.98	0.0119	20.70	0.0502	0.98	
TPSWC-5B	2.1	24200	2990	0.602	0.0053	38.16	0.0567	0.602
TPBBSW6	4.5	21900	2940	0.676	0.0140	37.95	0.0349	0.676
TPBBSW7	8.5	24700	3170	1.230	0.0217	40.25	0.408	1.230

Jul 31 & Aug 1, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	602	94.0	1.55	0.0173	1.18	0.21	1.55	
TPSWC-2B	479	36	1.40	0.0144	0.93	0.16	1.40	
TPSWC-3B	350		1.32	0.0131	0.72	0.194	1.32	
TPSWC-4B	14100	1610	0.66	0.0094	22.54	0.0677	0.66	
TPSWC-5B	0.8	23000	2810	1.510	0.0046	37.64	0.0465	1.510
TPBBSW6	0.8	25800	2880	0.224	0.0046	38.68	0.0529	0.224
TPBBSW7	9.1	23000	2900	0.568	0.0108	40.08	0.276	0.580

Aug 7 & 8, 2017									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		601	90.0	1.75	0.0432	1.12	0.235	1.75	
TPSWC-2B		444	16	1.19	0.0141	0.84	0.159	1.19	
TPSWC-3B		439	40	1.92	0.0363	0.83	0.293	1.92	
TPSWC-4B		14800	1790	0.81	0.0112	23.71	0.0781	0.81	
TPSWC-5B	1.3	22300	2780	0.408	0.0049	35.59	0.0685	0.408	
TPBBSW6		1.6	24400	3130	0.468	0.0077	37.98	0.0476	0.468
TPBBSW7		5.6	23700	3050	0.592	0.0118	39.33	0.0943	0.592

Aug 14 & 15, 2017									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		562	77.0	1.69	0.0196	1.10	0.209	1.69	
TPSWC-2B		386	18	1.50	0.0120	0.76	0.181	1.50	
TPSWC-3B		385	8	1.73	0.0139	0.74	0.354	1.73	
TPSWC-4B		12100	1520	0.76	0.0079	19.95	0.0553	0.76	
TPSWC-5B	1.9	25600	3020	0.584	0.0072	36.36	0.1	0.584	
TPBBSW6		1.1	23000	2900	0.690	0.0046	36.93	0.0859	0.704
TPBBSW7		10.0	23900	2960	3.460	0.0320	39.73	0.94	3.460

Aug 21 & 22, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		505	60.5	1.50	0.0237	0.98	0.183	1.50
TPSWC-2B		365	12	1.85	0.0162	0.71	0.142	1.85
TPSWC-3B		371	5	1.65	0.0131	0.70	0.176	1.66
TPSWC-4B		10600	1240	1.51	0.0281	16.42	0.125	1.51
TPSWC-5B	4.4	23400	2900	0.702	0.0164	36.40	0.026	0.702
TPBBSW6		1.6	23100	3060	0.0064	35.84	0.0276	0.602
TPBBSW7		11.0	24300	3320	0.0468	38.81	1.01	1.790

Aug 28 & 29, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		486	69.0	1.46	0.0160	0.96	0.176	1.47
TPSWC-2B		260	17	1.62	0.0115	0.54	0.156	1.63
TPSWC-3B		192	12	1.55	0.0114	0.40	0.142	1.56
TPSWC-4B		9730	1200	1.12	0.0138	16.38	0.582	1.13
TPSWC-5B	8.5	22200	2840	0.634	0.0118	35.09	0.0535	0.640
TPBBSW6		1.4	21700	3010	0.0070	33.72	0.0484	0.910
TPBBSW7		2.1	23800	3260	0.0652	38.13	1	1.720

Sep 21 & 22, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	9080	1120.0	3.10	0.0282	15.61	1.96	3.10	
TPSWC-2B	1330	141	1.00	0.0046	2.52	0.115	1.00	
TPSWC-3B	856	81	1.16	0.0046	1.63	0.11	1.16	
TPSWC-4B	1780	139	1.20	0.0046	3.27	0.145	1.20	
TPSWC-5B	5.1	22100	2860	1.120	0.0046	38.38	0.428	1.120
TPBBSW6	9.6	19800	2410	1.750	0.0046	32.40	0.81	1.750
TPBBSW7	2.9	22700	2480	1.330	0.0284	38.16	0.789	1.340

Sept 26 to 28, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B	9720	1250	3.9	0.082	15.4	3.05		
TPSWC-2B	1040	110	1.3	0.017	1.83	0.23		
TPSWC-3B	587	44.1	1.1	0.017	1.13	0.206		
TPSWC-4B	1970	215	1.3	0.012	3.33	0.247		
TPSWC-5B	23500	3930	1.9	0.029	37.08	0.781		
TPBBSW6	22600	2960	3.6	0.044	31.62	2.26		
TPBBSW7	30200	4150	2.4	0.074	38.12	1.29		

Oct 2 & 3, 2017									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	SU	mg/L	mg/L	pCi/L
TPSWC-1B		9680	1190	3.8	0.1	15.23	3.11		
TPSWC-2B		537	43.8	1.2	0.01	0.95	0.203		
TPSWC-3B		534	34.9	1.2	0.009	0.95	0.188		
TPSWC-4B		13900	1650	0.88	0.009	19.74	0.206		
TPSWC-5B	1.1	28300	3730	2.2	0.037	42.32	0.901		
TPBBSW6	3.4	14100	1850	0.63	0.0082	24.43	0.321	0.89	
TPBBSW7	1.3	25500	3420	2.7	0.074	38.1	1.51		

October 9, 2017									
	Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	salinity unit	mg/L	mg/L	pCi/L
TPSWC-1B		10200	1340	4.92	0.13	14.94	3.87	2.90	
TPSWC-2B		3790	453	1	0.011	6.01	0.626	1.00	
TPSWC-3B		4670	529	1.56	0.009	7.37	0.716	0.51	
TPSWC-4B		2290	268	1.2	0.011	3.65	0.255	1.20	
TPSWC-5B	1.1	21600	2890	0.85	0.0082	29.25	0.284	0.850	
TPBBSW6	3.4	19600	2630	1.6	0.009	27.1	0.734	1.600	
TPBBSW7	1.3	29400	4120	2.3	0.089	37.37	1.9	2.300	

Oct 16 & 17, 2017									
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium	
Sample ID	mg/m3	mg/L	mg/L	mg/L	salinity unit	mg/L	mg/L	pCi/L	
TPSWC-1B		10800	1280	4.4	0.082	14.69	3.37	4.40	
TPSWC-2B		330	21.6	1.3	0.018	0.67	0.231	1.30	
TPSWC-3B		351	17.5	1.2	0.01	0.71	0.244	1.20	
TPSWC-4B		2310	278	1.3	0.0082	3.14	0.234	1.30	
TPSWC-5B	2.1	22000	3080	2.4	0.0082	29.1	0.266	2.400	
TPBBSW6		19	22900	3240	2.6	0.019	28.44	1.33	2.600
TPBBSW7		1.3	29200	4040	2.8	0.077	37.68	2.12	2.800

Oct 23 & 24, 2017									
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium	
Sample ID	mg/m3	mg/L	mg/L	mg/L	salinity unit	mg/L	mg/L	pCi/L	
TPSWC-1B		9020	1080	6.2	0.287	14.49	6.02	6.20	
TPSWC-2B		2830	267	1.62	0.012	4.58	0.499	1.60	
TPSWC-3B		3450	346	1.55	0.0082	5.83	0.53	1.80	
TPSWC-4B		5000	634	1.21	0.013	10.2	0.216	1.20	
TPSWC-5B		20900	2910	1.36	0.012	28.27	0.387	1.400	
TPBBSW6		21700	2950	3.23	0.019	28.54	1.68	3.200	
TPBBSW7		29500	4000	3.49	0.09	37.16	2.89	3.500	

Oct 30 & 31, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	salinity unit	mg/L	mg/L	pCi/L
TPSWC-1B	10300	1110	6.15	0.07	14.08	5.59	6.20	
TPSWC-2B	241	13.9	1.18	0.017	0.5	0.205	1.20	
TPSWC-3B	1420	112	1.49	0.016	2.51	0.266	1.50	
TPSWC-4B	1400	125	1.17	0.015	2.26	0.261	1.20	
TPSWC-5B	21600	3350	1.15	0.011	30.25	0.407	1.200	
TPBBSW6		21500	2910	2.3	0.046	29.69	1.37	2.300
TPBBSW7		27200	3140	3.31	0.085	37.32	2.96	3.300

Nov 6 & 7, 2017								
Chlorophyll a	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	salinity unit	mg/L	mg/L	pCi/L
TPSWC-1B	9860	1090	6.13	0.12	13.31	5.69	6.10	
TPSWC-2B	584	39.4	1.53	0.027	1.08	0.302	1.50	
TPSWC-3B	1840	169	1.39	0.013	3.13	0.361	1.40	
TPSWC-4B	17700	1930	1	0.02	23.5	0.147	1.00	
TPSWC-5B	30500	4220	2.11	0.045	41.83	1.22	2.100	
TPBBSW6		23400	3270	1.83	0.044	30.22	0.612	1.800
TPBBSW7		28200	3900	3.15	0.074	37.09	2.67	3.100

Nov 13 & 14, 2017									
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	salinity unit	mg/L	mg/L	pCi/L
TPSWC-1B	9770	1080		8.57	0.122	12.83	5.12	8.60	
TPSWC-2B	1430	133		1.66	0.021	2.55	0.454	1.70	
TPSWC-3B	1980	199		1.54	0.018	3.84	0.535	1.50	
TPSWC-4B	18100	2420		0.43	0.0082	23.05	0.128	0.43	
TPSWC-5B	22200	3010		0.922	0.0082	28.65	0.203	0.920	
TPBBSW6		17800	2430		0.052	22.41	0.437	1.100	
TPBBSW7		29000	3910		0.074	36.96	2.4	3.200	

Nov 21 & 22, 2017									
	Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	mg/L	salinity unit	mg/L	mg/L	pCi/L
TPSWC-1B	8160	880		7.42	0.135	11.78	5.49	7.40	
TPSWC-2B	2420	228		1.82	0.016	4.25	0.788	1.80	
TPSWC-3B	3090	279		2	0.011	5.33	0.793	2.00	
TPSWC-4B	14500	1910		0.241	0.0082	20.95	0.156	0.24	
TPSWC-5B	17600	2330		0.698	0.0082	24.94	0.18	0.700	
TPBBSW6		20600	2850		0.0082	29.01	0.263	0.880	
TPBBSW7		25200	3360		0.064	36.65	2.72	3.500	

Nov 27 & 28, 2017								
Chlorophyll	Chloride	Sulfate	Nitrogen, Kjeldahl	Phosphorus as P	Salinity	Ammonia as N, Dissolved	Nitrogen, Total	Tritium
Sample ID	mg/m3	mg/L	mg/L	mg/L	alinity unit	mg/L	mg/L	pCi/L
TPSWC-1B	2620	278	3.6	0.054	4.36	1.32	3.60	
TPSWC-2B	3030	264	2.17	0.0082	5.22	0.712	2.20	
TPSWC-3B	3310	291	2.19	0.0082	5.75	0.743	2.20	
TPSWC-4B	16000	2090	0.619	0.0082	22.57	0.222	0.62	
TPSWC-5B	21800	2980	0.655	0.0082	30.11	0.223	0.650	
TPBBSW6	20500	2870	0.694	0.014	28.39	0.377	0.690	
TPBBSW7	26700	3600	3.79	0.057	36.97	2.98	3.800	

Surface Water Results 1st Quarter (Jun-Jul 2010)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	19000	2700	8	0.082	0.36	0.37	0.018
TPBBSW-2B	21000	2900	11.5	0.08	0.26	0.26	0.018
TPBBSW-3B	19000	3000		0.12	0.11	0.25	0.019
TPBBSW-4B	20000	2900		0.05	0.3	0.33	0.02
TPBBSW-5B	19000	2700		0.14	0.41	0.42	0.016
TPSWC-1B	84	6.5	24.0	0.21	1.2	1.2	0.0072
TPSWC-1T	85	5.9	9.6	0.16	1.1	1.1	0.0044
TPSWC-2B	120	5.1	27.52	0.2	1.4	1.4	0.0065
TPSWC-2T	130	4.7	34.24	0.22	1.3	1.3	0.0044
TPSWC-3B	250	14	30.08	0.17	1.1	1.1	0.0046
TPSWC-3T	200	10	35.84	0.12	1.2	1.2	0.0048
TPSWC-4B	13000	1700	1276	0.65	1.7	0.89	0.02
TPSWC-4T	9300	1200	890.01	0.8	1.7	1.7	0.011
TPSWC-5B			261.6				
TPSWC-5T							
TPSWC-6B	160	56	7.975	0.1	0.42	0.47	0.013
TPSWC-6T	150	55	11.803	0.12	0.36	0.38	0.0044

Surface Water Results 2nd Quarter (Sept 2010)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	16000	2100	16.9				
TPBBSW-2B	11000	1200	12.6				
TPBBSW-3B	16000	2200	13.6				
TPBBSW-4B	18000	3300	6.9				
TPBBSW-5B	15000	2200	15.2				
TPSWC-1B	42	6.6	12.3				
TPSWC-1T	39	6.3	8.4				
TPSWC-2B	88	2.7	92.0				
TPSWC-2T	72	3.1	47.6				
TPSWC-3B	92	2.1	41.0				
TPSWC-3T	92	2.0	44.6				
TPSWC-4B	860	96	74.0				
TPSWC-4T	460	44	55.9				
TPSWC-5B	23000	2800	801.0				
TPSWC-5T	15000	2100	178.0				
TPSWC-6B	88	33	43.3				
TPSWC-6T	87	33	17.3				

Surface Water Results 3rd Quarter (Dec 2010)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	19000	2500	11.4				
TPBBSW-2B	16000	2100	23.6				
TPBBSW-3B	17000	2100	30.5				
TPBBSW-4B	19000	2400	26.7				
TPBBSW-5B	17000	2200	24.6				
TPSWC-1B	73	2.4	85.8				
TPSWC-1T	79	2	110				
TPSWC-2B	110	3.4	125				
TPSWC-2T	150	3.8	114				
TPSWC-3B	200	8.8	40.8				
TPSWC-3T	160	6.7	66.4				
TPSWC-4B	16000	2000	310				
TPSWC-4T	11000	1400	405				
TPSWC-5B	21000	2700	946				
TPSWC-5T	19000	2600	479				
TPSWC-6B	170	43	3.5				
TPSWC-6T	140	45	10.1				

Surface Water Results 4th Quarter (Mar 2011)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	20000	2600	19.3	0.053	0.31	0.34	0.017
TPBBSW-2B	21000	2700	13.1	0.072	0.2	0.25	0.017
TPBBSW-3B	21000	2700	13.4	0.052	0.26	0.29	0.016
TPBBSW-4B	21000	3700	34.5	0.065	0.25	0.27	0.016
TPBBSW-5B	20000	2500	26.4	0.064	0.24	0.26	0.017
TPSWC-1B	150	18	69.1	0.2	0.47	0.47	0.042
TPSWC-1T	120	18	102.5	0.16	1.3	1.4	0.033
TPSWC-2B	310	29	46.9	0.081	0.49	0.78	0.011
TPSWC-2T	310	28	63	0.11	0.84	0.94	0.018
TPSWC-3B	750	78	26.8	0.1	0.57	0.57	0.016
TPSWC-3T	470	43	35.8	0.097	0.54	0.54	0.013
TPSWC-4B	20000	2100	226	0.13	1.1	1.1	0.025
TPSWC-4T	10000	1300	403	0.38	0.92	0.94	0.018
TPSWC-5B	21000	3000	152	0.038	0.18	0.25	0.025
TPSWC-5T	21000	4000	136	0.036	0.33	0.34	0.021
TPSWC-6B	99	71	24.7	0.026	0.29	0.29	0.013
TPSWC-6T	100	73	4	0.029	0.2	0.25	0.0089

Surface Water Results 5th Quarter (Jun 2011)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	28000	3400	16.4				
TPBBSW-2B	28000	3200	12.1				
TPBBSW-3B	26000	3100	19.1				
TPBBSW-4B	26000	3000	9.8				
TPBBSW-5B	26000	3100	13.9				
TPSWC-1B	300	30	84.5				
TPSWC-1T	300	29	93.3				
TPSWC-2B	2500	250	74.3				
TPSWC-2T	1700	190	75.4				
TPSWC-3B	5300	640	35.0				
TPSWC-3T	1600	150	55.0				
TPSWC-4B	27000	3900	8.6				
TPSWC-4T	28000	3200	12.6				
TPSWC-5B	27000	3100	12.2				
TPSWC-5T	27000	3100	3.7				
TPSWC-6B	25000	2800	5.6				
TPSWC-6T	15000	1800	16.7				

Surface Water Results 6th Quarter (Sept 2011)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	20000	2500	32.6	0.1	0.28	0.34	0.052
TPBBSW-2B	19000	2600	26.5	0.063	0.37	0.39	0.048
TPBBSW-3B	20000	2600	21.9	0.053	0.34	0.37	0.022
TPBBSW-4B	21000	2600	30.6	0.06	0.43	0.46	0.047
TPBBSW-5B	19000	2500	23.9	0.076	0.63	0.65	0.049
TPSWC-1B	190	16	17.6	0.23	0.94	0.96	0.0044
TPSWC-1T	170	26	18.1	0.23	1	1	0.0044
TPSWC-2B	120	12	15.4	0.22	1	1.6	0.0044
TPSWC-2T	120	11	13.7	0.22	1.1	1.1	0.0044
TPSWC-3B	91	15	10.3	0.37	1.1	1.1	0.0044
TPSWC-3T	95	8.8	15.2	0.23	1	1.3	0.0044
TPSWC-4B	16000	2200	449	0.34	0.97	1	0.14
TPSWC-4T	3000	350	209	0.34	1.1	1.1	0.0051
TPSWC-5B	22000	2900	231	0.17	0.42	0.45	0.022
TPSWC-5T	20000	2700	41.6	0.11	0.34	0.37	0.033
TPSWC-6B	130	43	31.4	0.097	0.4	0.42	0.0044
TPSWC-6T	140	44	19.8	0.11	0.51	0.54	0.0044

Surface Water Results 7th Quarter (Dec 2011)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	12000	1800	4.9				
TPBBSW-2B	12000	1800	0 (7.3)				
TPBBSW-3B	14000	2000	-1.5 (6.5)				
TPBBSW-4B	17000	2400	6.9				
TPBBSW-5B	18000	2300	7.5				
TPSWC-1B	79	5	50.8				
TPSWC-1T	74	4	46.3				
TPSWC-2B	84	6	61				
TPSWC-2T	84	6	56.6				
TPSWC-3B	90	9	45.9				
TPSWC-3T	90	8.1	40.1				
TPSWC-4B	16000	2200	297				
TPSWC-4T	12000	1600	780				
TPSWC-5B	20000	2900	470.0				
TPSWC-5T	16000	2100	40.9				
TPSWC-6B	120	50	37.9				
TPSWC-6T	120	46	16.4				

Surface Water Results 8th Quarter (Mar 2012)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	17000	2700	12	0.06	0.35	0.36	0.0180
TPBBSW-2B	20000	3000	3	0.14	0.36	0.37	0.0180
TPBBSW-3B	21000	2900	19	0.06	0.31	0.31	0.0180
TPBBSW-4B	20000	3000	6	0.16	0.27	0.28	0.0180
TPBBSW-5B	20000	2900	13	0.12	0.31	0.33	0.0180
TPSWC-1B	150	71	154	0.26	1.30	1.30	0.0044
TPSWC-1T	160	72	165	0.28	1.20	1.20	0.0044
TPSWC-2B	140	76	131	0.34	1.30	1.30	0.0044
TPSWC-2T	140	77	182	0.25	1.10	1.10	0.0044
TPSWC-3B	150	56	108	0.15	0.77	1.00	0.0044
TPSWC-3T	160	57	90	0.05	1.10	1.10	0.0044
TPSWC-4B	14000	2000	1160	0.47	0.93	0.99	0.0210
TPSWC-4T	14000	2000	1240	0.03	1.10	1.20	0.0200
TPSWC-5B	19000	2600	312	0.55	0.77	0.79	0.0320
TPSWC-5T	18000	2700	197	0.12	0.29	0.31	0.0200
TPSWC-6B	140	64	249	0.12	0.26		0.0044
TPSWC-6T	120	63	35	0.16	0.24		0.0044

Surface Water Results 9th Quarter (Jun 2012)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	17000	2400	10.6				
TPBBSW-2B	17000	2300	14.6				
TPBBSW-3B	16000	2300	17.5				
TPBBSW-4B	17000	2300	9.8				
TPBBSW-5B	14000	2000	8.6				
TPSWC-1B	140	11	33.3				
TPSWC-1T	120	11	40.6				
TPSWC-2B	120	6	26.8				
TPSWC-2T	130	4.8	29.6				
TPSWC-3B	100	4.9	20.6				
TPSWC-3T	100	4.7	20.7				
TPSWC-4B	2500	340	267				
TPSWC-4T	1400	200	178				
TPSWC-5B	21000	2900	534				
TPSWC-5T	14000	1900	32.3				
TPSWC-6B	110	44	-4.4				
TPSWC-6T	100	47	-0.8				

Surface Water Results 10th Quarter (Sept 2012)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	15000	2100	11.1	0.29	0.87	0.90	0.0044
TPBBSW-2B	17000	2400	11.7	0.31	1.0	1.00	0.0044
TPBBSW-3B	17000	2400	14.4	0.26	1.3	1.30	0.0044
TPBBSW-4B	17000	2400	15.3	0.26	0.94	0.96	0.0044
TPBBSW-5B	15000	2200	20.4	0.28	0.93	0.94	0.0044
TPSWC-1B	84	1.4	43.8	0.36	2	2.01	0.011
TPSWC-1T	84	1.5	42.4	0.37	1.6	1.61	0.0044
TPSWC-2B	74	1.3	51.4	0.41	1.6	1.61	0.0044
TPSWC-2T	76	2.1	60.4	0.46	1.5	1.52	0.0044
TPSWC-3B	76	3.7	37.0	0.37	1.4	1.42	0.0044
TPSWC-3T	76	1.1	36.5	0.41	1.4	1.41	0.0044
TPSWC-4B	370	38	54.3	0.2	1.1	1.11	0.0044
TPSWC-4T	350	36	59.1	0.59	1.2	1.21	0.0056
TPSWC-5B	21000	2800	1095	0.5	1.4	1.41	0.028
TPSWC-5T	15000	2100	33.1	0.47	1.1	1.13	0.0044
TPSWC-6B	76	31	14.2	0.063	0.38	0.39	0.0044
TPSWC-6T	75	31	21.2	0.066	0.44	0.52	0.0044

Surface Water Results 11th Quarter (Dec 2012)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	18000	2600	6.9				
TPBBSW-2B	18000	2600	8.0				
TPBBSW-3B	19000	2700	12.3				
TPBBSW-4B	19000	2700	10.5				
TPBBSW-5B	18000	2500	11.0				
TPSWC-1B	120	6	42.5				
TPSWC-1T	120	6	34.4				
TPSWC-2B	390	42	50.3				
TPSWC-2T	360	39	59.6				
TPSWC-3B	3000	430	31.9				
TPSWC-3T	420	42	39.9				
TPSWC-4B	13000	1800	100.4				
TPSWC-4T	10000	1400	110.7				
TPSWC-5B	18000	2600	121.7				
TPSWC-5T	18000	2500	15.6				
TPSWC-6B	190	66	27.5				
TPSWC-6T	180	65	8.1				

Surface Water Results 12th Quarter (Mar 2013)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B	22000	3200	-3.4	0.047	0.36	0.37	0.004
TPBBSW-2B	22000	3100	13.6	0.045	0.34	0.35	0.004
TPBBSW-3B	21000	3000	9.6	0.029	0.38	0.39	0.004
TPBBSW-4B	21000	3100	22.7	0.069	0.29	0.30	0.004
TPBBSW-5B	21000	3100	18.2	0.032	0.37	0.38	0.004
TPSWC-1B	290	19	60.4	0.16	1.60	1.61	0.0470
TPSWC-1T	260	18	69.3	0.087	1	1	0.0044
TPSWC-2B	440	48	58.7	0.067	1	0.7	0.0044
TPSWC-2T	440	48	50.3	0.09	0.9	0.9	0.0044
TPSWC-3B	3900	540	25.6	0.08	0.5	0.5	0.0220
TPSWC-3T	850	93	12.3	0.065	1	0.7	0.0044
TPSWC-4B	20000	2600	55.6	0.045	0.40	0	0.00
TPSWC-4T	18000	2500	93.7	0.12	0.4	0.4	0.0044
TPSWC-5B	21000	2900	40.3	0.071	0.30	0.31	0.004
TPSWC-5T	21000	3000	48.4	0.12	0.30	0.31	0.004
TPSWC-6B	120	78	7.0	0.055	0.3	0.33	0.0044
TPSWC-6T	120	77	9.2	0.052	1.90	1.93	0.0044

Surface Water Results 13th Quarter (Jun 2013)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B							
TPBBSW-2B							
TPBBSW-3B	20900		0.5				
TPBBSW-4B	21300		27.3				
TPBBSW-5B	17000		-7.5				
TPSWC-1B	55.2		34.3				
TPSWC-1T	53.9		42.4				
TPSWC-2B	106		64.3				
TPSWC-2T	106		72.5				
TPSWC-3B	95.4		67.0				
TPSWC-3T	95.6		62.7				
TPSWC-4B	19500		1636.7				
TPSWC-4T	16300		1447.2				
TPSWC-5B	21500		140.7				
TPSWC-5T	22900		135.7				
TPSWC-6B	89.5		9.0				
TPSWC-6T	83.5		7.2				

Surface Water Results 14th Quarter (Sept 2013)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B							
TPBBSW-2B							
TPBBSW-3B	19900	2580	8.7	0.0426	1.28	1.29	0.00220
TPBBSW-4B	21200	2730	12.3	0.0415	0.935	0.94	0.00220
TPBBSW-5B	20600	2620	23.6	0.0408	0.990	1.00	0.00440
TPSWC-1B	119	1.03	28.3	0.233	2.92	2.94	0.00831
TPSWC-1T	113	1.16	25.5	0.174	1.21	1.23	0.00315
TPSWC-2B	118	0.713	33.0	0.166	1.29	1.30	0.00220
TPSWC-2T	117	1.42	36.7	0.154	1.33	1.34	0.00289
TPSWC-3B	116	3.11	24.8	0.132	1.15	1.18	0.00220
TPSWC-3T	122	4.71	31.1	0.131	1.16	1.17	0.00220
TPSWC-4B	18000	2310	57.1	0.0780	0.849	0.86	0.00220
TPSWC-4T	9050	1040	190.7	0.240	1.02	1.05	0.00220
TPSWC-5B	21500	2750	67.0	0.0260	0.743	0.75	0.00220
TPSWC-5T	20900	2670	28.3	0.0361	0.549	0.57	0.00220
TPSWC-6B	102	48.5	5.8	0.0793	0.512	0.54	0.00220
TPSWC-6T	82.6	53.0	17.4	0.0879	0.591	0.62	0.00220

Surface Water Results 15th Quarter (Dec 2013)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B							
TPBBSW-2B							
TPBBSW-3B	18200		8.0				
TPBBSW-4B	18000		3.0				
TPBBSW-5B	17300		5.0				
TPSWC-1B	139		17.0				
TPSWC-1T	115		30.0				
TPSWC-2B	120		19.0				
TPSWC-2T	119		25.0				
TPSWC-3B	364		15.0				
TPSWC-3T	122		8.0				
TPSWC-4B	10400		179.0				
TPSWC-4T	7290		87.0				
TPSWC-5B	18200		47.0				
TPSWC-5T	18000		13.0				
TPSWC-6B	101		6.0				
TPSWC-6T	97.8		12.0				

Surface Water Results 16th Quarter (Mar 2014)							
Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L
TPBBSW-1B							
TPBBSW-2B							
TPBBSW-3B	19400	2850	17.0	0.1630	0.55	0.59	0.00220
TPBBSW-4B	20200	2770	18.0	0.1110	0.544	0.59	0.00220
TPBBSW-5B	17500	2550	3.0	0.0260	0.533	0.56	0.01130
TPSWC-1B	141	8.91	53.0	0.439	0.87	0.90	0.01030
TPSWC-1T	139	8.03	52.0	0.303	0.70	0.77	0.01220
TPSWC-2B	183	13.000	47.0	0.186	0.82	0.84	0.00443
TPSWC-2T	185	13.10	53.0	0.340	0.70	0.73	0.01840
TPSWC-3B	301	19.60	33.0	0.231	0.76	0.78	0.00565
TPSWC-3T	290	24.30	39.0	0.227	0.69	0.71	0.00566
TPSWC-4B	6560	881	117.0	0.5960	0.952	1.05	0.00300
TPSWC-4T	5240	681	139.0	0.386	1.05	1.15	0.00283
TPSWC-5B	19300	2770	31.0	0.3820	0.396	0.42	0.00594
TPSWC-5T	19500	2780	61.0	0.3030	0.385	0.41	0.00368
TPSWC-6B	93	67.4	2.0	0.2850	0.300	0.34	0.00220
TPSWC-6T	89.1	66.3	2.0	0.1780	0.321	0.35	0.00220

**Surface Water Results 17th Quarter (Jun 2014)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	PSU
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	22400		6.2					40.0
TPBBSW-4B	21800		6.4					38.89
TPBBSW-5B	22500		9.0					40.2
TPSWC-1B	421		117.9					0.96
TPSWC-1T	446		104.9					1.02
TPSWC-2B	3270		107.3					6.21
TPSWC-2T	3180		102.5					5.98
TPSWC-3B	4020		67.0					7.32
TPSWC-3T	2490		78.1					4.58
TPSWC-4B	22400		37.1					38.32
TPSWC-4T	20700		43.5					36.84
TPSWC-5B	22900		12.4					38.96
TPSWC-5T	22600		3.4					39.55
TPSWC-6B	292		11.4					0.78
TPSWC-6T	285		8.5					0.77

**Surface Water Results 18th Quarter (Sept 2014)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	PSU
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	21200	2890	11.4	0.0652	0.3	0.365	0.003	37.1
TPBBSW-4B	21400	2760	7.1	0.915	0.3	1.215	0.003	36.7
TPBBSW-5B	21800	2970	12.7	0.496	0.504	1.000	0.003	37.2
TPSWC-1B	82.6	11.4	55.9	0.817	1.41	2.227	0.0484	0.3
TPSWC-1T	59.2	6.24	84.0	0.827	1.07	1.897	0.0129	0.2
TPSWC-2B	96.9	6.81	128.4	0.812	1.13	1.942	0.00872	0.3
TPSWC-2T	101	5.14	161.3	0.829	1.15	1.979	0.00803	0.3
TPSWC-3B	372	36.5	85.9	0.713	1.15	1.863	0.0103	0.8
TPSWC-3T	123	4.53	119.2	1.12	1.24	2.360	0.00745	0.3
TPSWC-4B	15900	2130	64.6	1.12	0.768	1.888	0.00395	28.1
TPSWC-4T	8430	1060	145.8	0.975	1.37	2.345	0.00547	14.6
TPSWC-5B	21900	2940	20.2	0.94	0.414	1.354	0.0022	38.0
TPSWC-5T	20200	2720	22.5	0.0995	0.336	0.436	0.0022	35.2
TPSWC-6B	128	58.8	11.7	0.465	0.3	0.765	0.0022	0.4
TPSWC-6T	112	52.4	23.0	0.646	0.3	0.946	0.00466	0.4

**Surface Water Results 19th Quarter (Dec 2014)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L as N	mg/L	mg/L	mg/L	*
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	15400		9.4					27.08
TPBBSW-4B	18200		10.5					32.40
TPBBSW-5B	15600		13.8					31.79
TPSWC-1B	153		69.2					0.40
TPSWC-1T	127		71.9					0.38
TPSWC-2B	167		105.9					0.40
TPSWC-2T	150		101.3					0.38
TPSWC-3B	488		84.4					0.98
TPSWC-3T	249		95.5					0.55
TPSWC-4B	16700		50.0					29.61
TPSWC-4T	11900		103.6					20.38
TPSWC-5B	17700		64.0					31.91
TPSWC-5T	17500		35.4					29.88
TPSWC-6B	168		2.2					0.49
TPSWC-6T	136		2.9					0.43

**Surface Water Results 20th Quarter (Mar 2015)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L as N	mg/L	mg/L	mg/L	*
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	19700	2600	-0.2	0.225	0.418	0.643	0.003	34.6
TPBBSW-4B	19700	2030	6.4	0.155	0.424	0.579	0.003	35.0
TPBBSW-5B	20300	2650	10.7	0.264	0.257	0.521	0.003	35.0
TPSWC-1B	250	12.7	61.9	0.446	0.99	1.436	0.0262	0.6
TPSWC-1T	241	11.7	78.3	0.367	0.822	1.189	0.0153	0.6
TPSWC-2B	479	35.9	68.2	0.328	0.986	1.314	0.0101	0.9
TPSWC-2T	380	25.3	60.6	0.163	0.938	1.101	0.0111	0.7
TPSWC-3B	2060	229	45.4	0.114	0.974	1.088	0.049	4.0
TPSWC-3T	551	44.2	44.4	0.364	0.918	1.282	0.0117	1.1
TPSWC-4B	18300	2380	45.9	0.29	0.726	1.016	0.00585	31.5
TPSWC-4T	17700	2220	53.4	0.392	0.65	1.042	0.00628	29.8
TPSWC-5B	19900	2610	18.6	0.349	0.612	0.961	0.003	34.1
TPSWC-5T	20600	2580	17.6	0.183	0.454	0.637	0.00338	34.7
TPSWC-6B	95.1	62.2	12.7	0.131	0.396	0.527	0.003	0.4
TPSWC-6T	93.2	62.5	15.5	0.234	0.248	0.482	0.003	0.4

**Surface Water Results 21st Quarter (June 2015)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L as N	mg/L	mg/L	mg/L	*
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	22600		-7.2					41.0
TPBBSW-4B	22300		-12.7					40.75
TPBBSW-5B	22500		-20.0					40.7
TPSWC-1B	300		31.3					0.73
TPSWC-1T	288		36.4					0.72
TPSWC-2B	319		41.5					0.75
TPSWC-2T	312		32.6					0.75
TPSWC-3B	410		18.8					0.89
TPSWC-3T	399		21.6					0.88
TPSWC-4B	15700		24.1					27.58
TPSWC-4T	12300		53.0					22.89
TPSWC-5B	21800		7.2					40
TPSWC-5T	21600		-0.7					39.44
TPSWC-6B	83		17.5					0.36
TPSWC-6T	81		13.6					0.36

**Surface Water Results 22nd Quarter (Sept 2015)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L as N	mg/L	mg/L	mg/L	PSU
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	19600	2900	4.0	0.100	0.506	0.53	0.00300	38.67
TPBBSW-4B	21700	2910	6.1	0.100	0.618	0.64	0.00300	38.96
TPBBSW-5B	23200	3110	5.2	0.100	0.592	0.62	0.00300	41.51
TPSWC-1B	57.9	17.2	31.0	0.100	0.580	0.82	0.00300	0.27
TPSWC-1T	92.9	7.92	51.1	0.114	0.996	1.07	0.00300	0.28
TPSWC-2B	123	3.80	59.7	0.159	1.40	1.43	0.00300	0.31
TPSWC-2T	155	5.02	50.8	0.147	1.02	1.05	0.00300	0.34
TPSWC-3B	133	3.41	51.7	0.158	1.20	1.23	0.00300	0.31
TPSWC-3T	109	3.27	54.6	0.164	1.22	1.25	0.00300	0.31
TPSWC-4B	21700	2450	38.7	0.100	0.840	0.87	0.00739	34.45
TPSWC-4T	2620	328	51.1	0.262	1.39	1.42	0.00300	5.30
TPSWC-5B	21100	2900	24.8	0.103	0.340	0.37	0.00300	39.24
TPSWC-5T	19900	3740	16.3	0.100	0.258	0.28	0.00300	37.16
TPSWC-6B	72.8	42.7	29.1	0.103	0.446	0.47	0.00300	0.38
TPSWC-6T	91.2	43.0	14.5	0.100	0.590	0.62	0.00300	0.39

**Surface Water Results 23rd Quarter (Dec 2015)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L as N	mg/L	mg/L	mg/L	PSU
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	16100		11.2					27.86
TPBBSW-4B	17300		8.1					33.00
TPBBSW-5B	18200		15.5					30.78
TPSWC-1B	94.4	1.9	98.2	0.154	0.452	0.45	0.00500	0.22
TPSWC-1T	93.9		102					0.22
TPSWC-2B	53	0.43	123	0.080	0.59	0.59	0.00500	0.15
TPSWC-2T	55		85					0.15
TPSWC-3B	44	0.40	79.7	0.079	0.36	0.36	0.00500	0.13
TPSWC-3T	43		96					0.13
TPSWC-4B	1570	199	105	0.150	0.580	0.58	0.00500	3.11
TPSWC-4T	7930		208					14.03
TPSWC-5B	18300	2640	88.8	0.241	0.572	0.57	0.00500	33.46
TPSWC-5T	15800		42					28.76
TPSWC-6B	94.1		12.7					0.33
TPSWC-6T	90.2		9.1					0.34

**Surface Water Results 24th Quarter (March 2016)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L as N	mg/L	mg/L	mg/L	PSU
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	14500	2040	9	0.100	0.372	0.40	0.0163	25.60
TPBBSW-4B	15300	2110	9.3	0.100	0.506	0.67	0.0167	26.23
TPBBSW-5B	14600	2110	10.16	0.100	0.448	0.47	0.0161	26.57
TPSWC-1B	88.0	1.9	104.14	0.136	0.784	0.81	0.0177	0.24
TPSWC-1T	88.6	1.47	93.3	0.129	0.622	0.65	0.0145	0.24
TPSWC-2B	88	1.08	118.45	0.115	0.67	0.70	0.014	0.24
TPSWC-2T	92	1.15	118.55	0.163	0.72	0.76	0.0144	0.24
TPSWC-3B	82	2.21	55.03	0.122	0.66	0.68	0.0209	0.23
TPSWC-3T	83	0.92	66.73	0.124	0.57	0.60	0.0122	0.23
TPSWC-4B	9920	1290	297.9	0.100	0.976	1.00		17.22
TPSWC-4T	8920	1160	289.8	0.183	0.88	0.90		15.61
TPSWC-5B	21800	2750	938.9	0.433	0.844	0.87		35.32
TPSWC-5T	17400	2280	78.78	0.131	0.200	0.23		28.62
TPSWC-6B	149.0	53.6	3.71	0.141	0.362	0.41	0.0069	0.46
TPSWC-6T	121.0	147.0	29.54	0.135	0.334	0.36	0.0064	0.42

**Surface Water Results 25th Quarter (June 2016)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L as N	mg/L	mg/L	mg/L	PSU
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	20600		22.1					33.92
TPBBSW-4B	18500		24.2					31.10
TPBBSW-5B	16100		22.5					26.40
TPSWC-1B	123.0	18.3	79.0					0.35
TPSWC-1T	128.0		92.9					0.36
TPSWC-2B	177	35.60	101.6					0.44
TPSWC-2T	166		109.4					0.44
TPSWC-3B	247	32.00	92.2					0.54
TPSWC-3T	254		77.6					0.59
TPSWC-4B	14300		84.0					24.54
TPSWC-4T	12100		94.6					21.15
TPSWC-5B	19800		35.5					33.18
TPSWC-5T	20700		36.5					33.64
TPSWC-6B	149.0		22.0					0.47
TPSWC-6T	127.0		21.5					0.43

**Surface Water Results 26th Quarter (Sept 2016)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L as N	mg/L	mg/L	mg/L	PSU
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	18300	2460	13.8	0.100	0.590	0.59	0.0030	33.02
TPBBSW-4B	17000	2340	-1.9	0.100	0.550	0.55	0.0030	30.58
TPBBSW-5B	15300	2070	31.3	0.100	0.662	0.66	0.0030	26.93
TPSWC-1B	253.0	18.9	47.6	0.220	1.060	1.06	0.0112	0.54
TPSWC-1T	168.0	6.14	38.6	0.134	1.390	1.39	0.0109	0.37
TPSWC-2B	140	2.13	44.1	0.130	1.27	1.27	0.010	0.32
TPSWC-2T	161	3.16	27	0.150	1.02	1.02	0.0118	0.36
TPSWC-3B	114	1.76	22.8	0.141	1.09	1.09	0.0068	0.27
TPSWC-3T	113	1.54	15.5	0.138	1.14	1.14	0.0093	0.27
TPSWC-4B	13600	1810	30.8	0.100	0.484	0.48	0.00579	23.30
TPSWC-4T	5740	730	78.5	0.337	0.76	0.76	0.00865	9.88
TPSWC-5B	19700	2740	37.7	0.163	0.404	0.40	0.00585	34.01
TPSWC-5T	15100	2100	17.6	0.100	0.808	0.81	0.00580	29.41
TPSWC-6B	76.6	23.3	-1.5	0.100	0.526	0.53	0.0109	0.34
TPSWC-6T	77.5	22.7	1.7	0.100	0.552	0.55	0.0076	0.36

**Surface Water Results 27th Quarter (Dec 2016)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L as N	mg/L	mg/L	mg/L	PSU
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	18000		8.7					30.23
TPBBSW-4B	19400		4					32.12
TPBBSW-5B	18400		14.2					30.86
TPSWC-1B	804.0	68.6	48.1					1.48
TPSWC-1T	597.0		57.2					1.11
TPSWC-2B	418	30.80	51.3					0.80
TPSWC-2T	391		43.3					0.76
TPSWC-3B	1330	154.00	10.6					2.43
TPSWC-3T	244		25.9					0.52
TPSWC-4B	10100	1250	59					17.24
TPSWC-4T	9560		77.2					15.99
TPSWC-5B	18500	2440	59.8					30.73
TPSWC-5T	17600		33					29.46
TPSWC-6B	209.0		10.7					0.55
TPSWC-6T	169.0		13.3					0.49

**Surface Water Results 28th Quarter (March 2017)**

Monitoring Site	Chloride	Sulfate	Tritium	Total Ammonia	TKN	TN	Phosphorous	Salinity
	mg/L	mg/L	pCi/L	mg/L	mg/L	mg/L	mg/L	PSU
TPBBSW-1B								
TPBBSW-2B								
TPBBSW-3B	23700	2890	17.4	0.100	0.200	0.21	0.1120	36.90
TPBBSW-4B	23900	2930	1.28	0.100	0.284	0.28	0.0046	36.65
TPBBSW-5B	22600	2840	-6.4	0.100	0.346	0.35	0.0046	36.21
TPSWC-1B	377.0	21.9	71.4	0.126	1.150	1.15	0.0361	0.78
TPSWC-1T	376.0	22.00	55	0.126	1.140	1.14	0.0347	0.78
TPSWC-2B	639	47.20	50.2	0.319	1.24	1.26	0.008	1.28
TPSWC-2T	394	21.60	47.7	0.154	0.98	0.98	0.0253	0.82
TPSWC-3B	3000	340.00	48.3	0.348	1.07	1.11	0.0224	5.50
TPSWC-3T	1130	94.70	51.2	0.282	0.96	1.01	0.0208	2.14
TPSWC-4B	18000	2350	26.4	0.100	0.444	0.45	0.00456	30.47
TPSWC-4T	11400	1320	77.4	0.102	0.64	0.68	0.00456	18.30
TPSWC-5B	25800	2750	9.34	0.126	0.602	0.60	0.00617	36.06
TPSWC-5T	22400	2710	6.69	0.102	0.378	0.38	0.00456	35.77
TPSWC-6B	95.6	60.2	5.06	0.100	0.200	0.20	0.0098	0.36
TPSWC-6T	96.5	60.5	6.66	0.100	0.200	0.20	0.0096	0.36

**EXHIBIT C**

**RESUME OF KIRK MARTIN, P.G.**

# Water Science Associates

**W. Kirk Martin, P.G., CPG, CGWP**

**President/Principal Scientist**

## **Education**

B.S. – Geology,  
Florida Atlantic  
University, 1981

Graduate  
Geophysics, Wright  
State University,  
1984

## **Registration**

Professional  
Geologist: North  
Carolina (1987),  
Florida, Kentucky,  
Texas, and  
Alabama

## **Certifications**

Certified  
Professional  
Geologist

Certified  
Groundwater  
Professional

Mr. Martin has over 30 years of experience conducting groundwater resource investigations and managing complex integrated water resource programs. He has special expertise in water supply development, groundwater hydraulic interpretations, and fresh/saline water relationships in coastal aquifers. He also has extensive experience in the application of statistical analyses, computer models and geophysical methods to the solution of water resource issues. He takes a “total water management” approach to water resource planning and management challenges that provides for more creative solutions to address multiple level issues. His project experience includes large-scale water supply, aquifer recharge, and injection well design, construction, testing, and evaluation. He has extensive knowledge of water policy and the regulations governing water supply and water resource management. Mr. Martin has completed over 300 reports on regional and local geology/hydrology in Florida and has provided the primary technical direction on development of over 500 mgd of raw water supply and over 100 mgd of aquifer recharge and wastewater disposal projects. Mr. Martin served as the principal hydrologist for three projects winning awards from the Governor’s Commission for a Sustainable South Florida. He has worked with clients in the cities of Fort Myers, Jacksonville, Marco Island, Boca Raton, Cape Coral, Sanibel, Hollywood, Titusville, and Melbourne; and Palm Beach, Charlotte, Lee, Collier, St. Johns, Indian River, Hillsborough, Brevard, Pinellas, Miami-Dade, and Seminole counties. He commonly serves as a technical advisor to state, regional, and local governing bodies on water resource issues.

## **Water Supply Planning and Development**

*Technical Director, Collier County Wellfield Reliability Improvements and Expansion Program, Collier County, FL, 2004-2014.* Recognizing the increasing uncertainty in securing critical raw water resources in a rapidly growing community of 240 square miles, Collier County elevated their water supply efforts to a programmatic status in order to ensure they could meet long-range needs in an environmentally sustainable manner. Mr. Martin serves as the lead technical resource for the program which provides management and direction of multiple engineers, scientists, and contractors in the planning, evaluation, design, permitting, construction, and operations of the County’s water supply facilities. Additionally, the program provides for strategic visioning and streamlining of water supply development with modifications to land development codes, standardized design, land acquisition, tactical permitting, and links to comprehensive plans and capital improvement programs. System elements include fresh, brackish and saline water supplies, supplemental wastewater reuse, aquifer storage and recovery, and hydrologic and operational monitoring and improvements. Among the many success of the program was using long term operating data to obtain a 40 percent increase in the CUP from a freshwater aquifer that had been declared off limits in the 1990s.

*Technical Director, PRASA Water Resource Investigation, Arecibo, Puerto Rico, 2009-2011* Arecibo contains one of the most karstic aquifer regions in the world meaning that water supply capacity is high but that characterization and planning for water resource development can be challenging. Mr. Martin served as the technical director for a comprehensive hydrogeologic and geophysical investigation project to evaluate water supply development potential without

## **W. Kirk Martin, P.G., CPG, CGWP**

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adversely impacting environmentally sensitive estuarine systems or creating conditions for saline water intrusion.

### *Technical Director, Saltwater Intrusion Data Analyses. Florida Keys Aqueduct Authority, 2012-2013.*

Saltwater intrusion was limiting withdrawals from the authority's most efficient water source. Mr. Martin directed a team in a detailed statistical evaluation of a wide range of hydrogeologic data that showed that FKAA withdrawals were not the primary cause of saline water migration but that regional operation of upgradient canal control infrastructure was the critical factor in controlling salinity in the production aquifer.

### *Technical Director, Preliminary Design of the South Miami Heights Brackish Water Wellfield. Miami Dade Water and Sewer Authority, 2013-2014.*

Mr. Martin provided critical guidance in the planning of hydrogeological evaluations and development of a 25 mgd brackish water wellfield to supply raw water to the proposed MDWSA SMH Reverse Osmosis WTP. Key issues in the preliminary design were development of new wells in a highly urbanized area, provision for a robust testing and analysis program, and management and disposal of brackish water during construction and testing efforts.

### *Technical Director, Wellfield Performance Evaluation. City of Cape Coral Florida, 2013-2014.*

The City of Cape Coral has a long and successful history of brackish water development for reverse osmosis treatment. In addition, the City has planned reclaimed water ASR wells and additional Floridan Aquifer supply wells to meet future growth demands. Mr. Martin provided technical direction for a complete brackish wellfield performance evaluation to identify trends in productivity and water quality and any issues with individual wells or wellfield areas. Recommendations were provided for additional assessment of individual wells to determine potential causes of water quality degradation and remedial actions. Additionally, data and analysis developed for the project will be used in development of models for planning, design and operation of future production wells and ASR wells.

### *Technical Director, Wellfield Performance Evaluation. St. Johns County Utilities, 2013.*

Mr. Martin worked closely with SJCUD operations staff at the SR 214 brackish wellfield in evaluating historic and ongoing operational data including production rates, static and dynamic water levels, and production water salinity. Production wells with declining productivity or degraded water quality were identified for further analyses including dynamic video and geophysical logging to identify primary production intervals, contributions to flow, and production water quality with depth. Specific recommendations were provided for upgrades or modifications to well construction and operation of the most impacted wells. Additionally, Mr. Martin provided ongoing services to the operations staff in periodic evaluation of production data to optimize wellfield productivity and minimize raw water salinity over time. These efforts resulted in a more stabilized production water quality and general operational improvements of the SR 214 wellfield.

### *Lead Hydrologist, Water, Transportation, and Stormwater Optimization Study, Collier County, 2014.*

Mr. Martin provided the key technical evaluation for development of irrigation water supplies using available stormwater in concert with planned potable water supply development, reclaimed water production, and Irrigation Quality (IQ) supplemental water management in the Northeast Region of the Collier County Water-Sewer District (CCWSD). The evaluation of these supply sources included a combination of surface water and groundwater systems that maintained a focus on beneficial use and management of available stormwaters generated in the area. The results of the investigation identified multiple opportunities for storage of seasonally or temporally available sources using aquifer storage and recovery technology and surface water reservoirs where appropriate. Key recommendations were provided for numerous water supply development options depending upon area specific demands, resources, constraints, and permitting challenges.

### *Technical Director, Alternative Water Supply Evaluation and Implementation Plan Jacksonville Electric Authority, 2010-2011.*

JEA had completed preliminary evaluations of several alternative water supply (AWS) options as part of their Total Water Management Plans but needed a higher level of certainty as to the timing, quantity, type, and location of AWS alternatives. The effort included evaluation of 18 separate AWS options with prioritization based on a variety of time horizons, demand locations, and potential supply capacities. Evaluation criteria included environmental impacts, regulatory acceptability, technical feasibility, and costs. Key implementation strategies and

specific recommendations included a targeted reuse program to displace competing water users and to develop a salinity barrier adjacent to wellfields experiencing salt water encroachment, providing for recharge of the Upper Floridan Aquifer between the JEA wellfields and Keystone Heights, and desalination of surface water at the Northside Generating Station.

*Technical Director, Integrated Water Supply Plan, Lee County, Florida, 2009-2011.* Mr. Martin provided the key technical direction for a countywide integrated water supply plan, which included evaluation of all ground, surface, and reclaimed water supplies, as well as opportunities for storage of seasonally or temporally available sources using aquifer and recovery technology and surface water reservoirs where appropriate. Key recommendations were provided for numerous water supply development options depending upon area specific demands, resources, constraints, and permitting challenges.

*Technical Reviewer, Emerald Coast Utilities Authority (ECUA) Northern Wellfield Conceptual Design, Pensacola, Florida, 2009.* As a means to provide needed expansion and reliability in the utility's raw water supply system, ECUA sought to develop a new wellfield north of their service area where potential competition for available resources was diminished, the water supply source was less susceptible to urban and industrial contamination, and saline water intrusion was not of concern. Conceptual wellfield design parameters were developed and potential wellfield sites screened for hydrogeologic characteristics, parcel size, competing uses, land cover, ownership, potential environmental impacts, potential hydrologic impacts, distance to existing infrastructure, and costs.

*Water Resource Director, Collier Rural Land Stewardship Area, Collier County, Florida, 2005.* Mr. Martin provided the water resource expertise for development of the first rural land stewardship area designation in Florida. The resulting effort garnered a prestigious award from the Governors Commission for a Sustainable Florida and established an innovative incentive-based system for preservation of critical wetlands and wildlife habitat over a 300-square-mile area at no cost to the public.

*Lead Hydrogeologist, Wellfield Design, Construction, and Management, Collier County, Florida, 1984 to 2010.* Mr. Martin provided primary hydrogeologic expertise for all development activities for the Collier County wellfields, including over 35 freshwater wells and over 45 brackish water wells with depths of up to 1200 feet and with a combined capacity of over 80 mgd.

*Lead Hydrogeologist, Water Supply Planning and Wellfield Design, Construction, and Management, Cape Coral, Florida, 1983 to 1994.* Mr. Martin provided primary hydrogeologic expertise for planning and development activities for the city's wellfields, including wellfield layout for over 40 brackish supply wells and design and construction of over 20 brackish water wells with an installed capacity of over 40 mgd.

*Lead Hydrogeologist, Hobart Park and South County Brackish Supply Wellfields, Indian River County, Florida, 1992 to 2010.* Mr. Martin provided hydrogeologic oversight for expansion and rehabilitation of the county's South County Reverse Osmosis Water Treatment Plant (ROWTP) wellfield and design, permitting, and construction of the Hobart Park ROWTP wellfield with capacities of 6 mgd and 4 mgd respectively.

*Technical Director, Evaluation of Groundwater Under Direct Influence (GWUDI) and Well Rehabilitation and Expansion, Valdosta, Georgia, 2004 to 2010.* Mr. Martin served as the hydrogeologic advisor for the City of Valdosta, Georgia, in assessing GWUDI for the city's primary wellfield and developed a plan of action to minimize the potential for a single well GWUDI declaration from affecting other wells in the wellfield. A comprehensive study of UDI contributing areas and features was undertaken, including groundwater modeling in development of a wellfield expansion program from 15 to 45 mgd.

*Lead Hydrogeologist, Screened Well Design and Construction, Various Clients.* Mr. Martin was the lead hydrogeologist for over 100 mgd capacity of screened well design and construction. Clients have included the City of Titusville, City of Boca Raton, City of Deerfield Beach, Palm Beach County, Town of Jupiter, Cape Hatteras, Dare County, City of Hollywood, U.S. Sugar Corporation, Citrus Producers, and others.

## **Managed Aquifer Recharge/Aquifer Storage and Recovery**

*Project Director, Irrigation Aquifer Storage and Recovery System Permitting, Cape Coral, Florida, 2012.* Mr. Martin provided technical oversight and direction for the permitting of five ASR wells for seasonal storage of irrigation quality water to support the city's reuse and stormwater harvesting program to irrigation demands throughout the city.

*Project Director, Irrigation Aquifer Storage and Recovery System, Collier County, Florida, 2012-2014.* Mr. Martin provided technical direction and hydrogeologic services for the design, permitting, and construction oversight for two irrigation quality Aquifer Storage and Recovery wells to provide critical seasonal storage of large volumes of irrigation quality water that allows more efficient and effective utilization of the county's reclaimed water and supplemental irrigation sources. The wells will provide for storage of up to 240 million gallons annually of a combination of municipal reclaimed water, raw groundwater, and canal water to help in the overall integrated management of available water resources to the county.

*Technical Advisor, Irrigation Quality Aquifer Storage and Recovery, Cape Coral, Florida, 2010.* Mr. Martin provided critical technical analysis in hydrogeologic interpretation and recommendation for siting an irrigation quality (IQ) water aquifer storage and recovery (ASR) system for the city. The site included unusually high salinities that threatened existing city production wellfields. Mr. Martin identified innovative groundwater management opportunities that protected the existing water supplies and provided important seasonal storage of surface water and municipal reclaimed water.

*Technical Advisor, Aquifer Storage and Recovery System, Seminole County, Florida, 2009 to 2011.* The St. Johns River Water Management District (SJRWMD) has sponsored an ASR program to explore alternative water supply sources. Mr. Martin is providing technical review and advisement services for the Seminole County ASR projects, which have a combined budget of \$5 million. The ultimate use of these ASR wells will be to facilitate the county's/city's ability to store and recover potable water when a surface water treatment plant is developed on the St. Johns River. In the near-term, the ASR systems will be used for seasonal demand management such as excess wet-season surface water flows.

*Technical Advisor, Aquifer Storage and Recovery System, Sanford, Florida, 2009 to 2011.* The St. Johns River Water Management District (SJRWMD) has sponsored an ASR program to explore alternative water supply sources. Mr. Martin is providing technical review and advisement services for the Sanford ASR projects, which have a combined budget of \$5 million. The ultimate use of these ASR wells will be to facilitate the county's/city's ability to store and recover potable water when a surface water treatment plant is developed on the St. Johns River. In the near-term, the ASR systems will be used for seasonal demand management such as excess wet-season surface water flows.

*Technical Advisor, Miami-Dade Water and Sewer Department Water Reclamation Project, Miami-Dade County, Florida, 2010.* Under constraint by conditions of their Water Use Permit (WUP) and by legislative requirements to severely reduce ocean outfall of treated wastewater, the Miami-Dade Water and Sewer Department (MDWASD) undertook a progressive project that included very high-level wastewater treatment with indirect potable recharge to the Biscayne Aquifer. A complete understanding of the groundwater hydraulics was required for design and permitting of the recharge facilities. Options evaluated included recharge to an existing mote and multiple configurations of shallow injection wells.

*Technical Director, Reclaimed Water ASR Testing, Design, and Permitting, Hillsborough County, Florida, 2004.* Mr. Martin provided hydrogeologic direction for the reclaimed water test program that resulted in recommendation of the storage and recovery components due to unfavorable hydrogeologic characteristics but continued use of the system for aquifer recharge and provision of a groundwater salinity barrier.

*Technical Director, Manatee Road Aquifer Storage and Recovery System Construction and Expansion, Collier County, Florida, 1999 to 2010.* Mr. Martin provided project oversight for the design and permitting of the expansion of the Manatee Road ASR system and the construction of four additional ASR recharge and recovery wells, associated monitor wells, a 6 MG prestressed concrete storage tank, and associated piping and instrumentation. He also oversaw the evaluation of the

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operational data from the existing ASR wells to identify changes in the operating protocols that would allow for maximization of system performance.

*Technical Director, Livingston Road Reclaimed Water Aquifer Storage and Recovery System, Collier County, Florida, 2009 to 2011.* Mr. Martin directed testing, design, and conceptual operations for the reclaimed water ASR program. Options developed for the site included use of reclaimed water, partially treated surface water, and raw groundwater for seasonal recharge and use to supplement the county's reclaimed water system as part of an overall integrated water management program for the county.

*Project Director, Feasibility Study of Salinity Barrier by Injection, Hollywood, Florida, 2007.* Mr. Martin served as project director for this aquifer recharge and salinity management project that included testing the feasibility of using direct injection of reclaimed water to control movement of the salinity interface threatening the City's primary water supply. The project established a program to test the feasibility of injecting highly treated effluent (reclaimed water) from a Class I wastewater treatment facility into areas where saltwater intrusion contaminated the Biscayne Aquifer as a means to maintain and possibly increase use of the Biscayne Aquifer for municipal supply.

*Lead Hydrogeologist, Construction and Testing of the Potable Water Aquifer Storage and Recovery System for Lee County Utilities, Lee County, Florida, 1994 to 1996.* Mr. Martin provided hydrogeologic oversight for the construction and testing of the first potable water ASR system in Southwest Florida. Since that early success, the system has been expanded to include five ASR wells and proves to be a critical component in the county's water management program.

### **Deep Injection Well/Wastewater Disposal**

*Project Director, Deep Injection Well Design and Permitting for the SWROWTP, Cape Coral, Florida, 2012.* Mr. Martin provided technical direction and hydrogeologic services for the design and permitting of a Class I injection well at the City's Southwest Reverse Osmosis Water Treatment Plant and Water Reclamation Facility. The evaluation included determination of optimum casing selection and construction completion to provide for a full disposal capacity for the SWROWTP and the SWWRF with a cost savings to the City of approximately \$2 million over a conventional design approach. The project approach also included meeting critical milestones to comply with a FDEP Consent Order.

*Technical Advisor, West Water Treatment Plant Concentrate Injection Well System, Deerfield Beach, Florida, 2007.* Mr. Martin was involved in the design, permitting, and construction of a concentrate pump station related to a deep injection well system. The injection well design utilized a tubing and packer with a pressurized annulus. Included in the well design was a dual zone monitor well so that regulatory water quality monitoring requirements could be complied with. The entire system is designed to dispose of approximately 4 mgd of concentrate.

*Lead Hydrogeologist, North County Regional Water Treatment Plant, South County Regional Water Treatment Plant, and South County Water Reclamation Facility, Collier County, Florida, 1995 to 2005.* Mr. Martin provided hydrogeologic direction for design, permitting, and construction of six deep injection wells for the Collier County water (RO concentrate) and wastewater departments with a combined injection capacity of over 60 mgd.

*Technical Director, Wastewater Treatment Plant Class I Injection Well (IW-2), Marco Island, Florida, 2009.* Mr. Martin provided oversight of the design, permitting, and construction of the injection well and wellhead, and the design and permitting of the piping, controls, and instrumentation for the injection well system. As an additional component of this project, Mr. Martin directed investigation of the feasibility of utilizing approximately 1.5 mgd of reclaimed water treated to potable water standards from the Marco Island WWTP for injection into aquifer recharge wells designed to both replenish the Hawthorn Aquifer System and to attenuate the effects of saltwater intrusion on the city's RO production wells.

*Technical Director, Reverse Osmosis Water Treatment Plant, Floridan Aquifer Wellfield, and Deep Injection Well, Clewiston, Florida, 2007.* Mr. Martin provided technical direction for the City of Clewiston water treatment plant, Floridan aquifer wellfield, and deep injection well. Mr. Martin directed engineering services to design, permit, and bid the injection well system. The injection well

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design of approximately 4 mgd capacity considered both initial concentrate and potential wastewater disposal needs.

*Technical Director, Babcock Ranch Community Concentrate and Wastewater Injection Well System, Charlotte County, Florida, 2010.* For the Deep Injection Well IW-1 and Dual Zone Monitor Well, Mr. Martin provided hydrogeological direction for design and permitting of the Class I industrial deep injection well used to dispose of reverse osmosis reject concentrate and for wastewater effluent wet weather disposal.

*Technical Advisor, South Beaches Wastewater Underground Injection Permitting, Brevard County, Florida.* Mr. Martin directed the preparation of an Underground Injection Control operation permit application for a deep injection well system and evaluated hydrogeologic and well integrity criteria for an existing deep injection well system. Detailed evaluation of water quality signature and age resulted in over \$7 million in savings to the county as they did not have to modify the injection system or their wastewater treatment process.

*Lead Hydrogeologist, Pinewoods Reverse Osmosis and Membrane Softening Water Treatment Plant Injection Well Evaluation, Lee County, Florida, 2010.* Mr. Martin provided technical oversight of the deep well evaluation and rehabilitation resulting in more than doubling the well capacity. Further analysis was provided to modify waste blending operations to provide improved well performance.

*Technical Advisor, Lake Region Water Treatment Plant Disposal Well System, Palm Beach County, Florida, 2008.* Project included design, permitting, and construction oversight for a 10 mgd LPRO water treatment plant (WTP), a raw water Floridan Aquifer wellfield, a raw and finished water pipeline, and deep injection well for concentrate disposal to serve the Cities of Belle Glade, South Bay, and Pahokee. Mr. Martin provided technical oversight for the design of the injection well system and associated monitor wells.

*Lead Hydrogeologist, Concentrate and Wet Weather Wastewater Disposal Injection Well, Island Water Association, Sanibel, Florida, 1998.* Mr. Martin provided hydrogeologic evaluation, design, and permitting services for the deep injection well system for the Island Water Association and the City of Sanibel.

## **Professional Activities**

Member, Association of Groundwater Scientists and Engineers

Member, American Institute of Professional Geologists

Member, Florida Water Environment Association

Member, American Water Works Association

Member, American Water Resources Association

## **Publications/Presentations**

Martin, Kirk, S. Magenheimer, "Apparent Upward Migration Determination: Multi-Level Diagnostic Strategies That Can Save Your Deep Injection Well," Groundwater Protection Council Underground Injection Control Conference, 2013.

Martin, Kirk, J. Mills, L. Wiseman, "Patching Holes: Successful Remediation of Production Wells Under the Direct Influence of Surface Water," FSAWWA Annual Meeting, 2012.

Martin, Kirk. "What in the World is Going on with Water?" Florida Watershed Journal, 2012.

Martin, Kirk. "A Coastal Wellfield Salinity Barrier Using Reclaimed Water: Managing the Biscayne Aquifer from Both Sides Now." Presented at the FSAWWA Florida Section Fall Conference, 2012.

Martin, Kirk, G. Reilly, J. Sorrells. "Lessons Learned from Three Decades of Integrated Water Management." FSAWWA Annual Meeting, 2012.

Martin, Kirk. "One Water – Integrated Solutions and Lessons Learned." Presented at the AWRA Florida Section Meeting, 2012.

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- Martin, Kirk. "Public Private Partnerships: A Better Way to Manage Water in Florida?" Presented at the University of Florida Water Institute Symposium, 2012.
- Martin, Kirk. "A Coastal Wellfield Salinity Barrier Using Reclaimed Water: Managing the Biscayne Aquifer from Both Sides Now." FSAWWA Annual Meeting, 2011.
- Martin, Kirk. "Public/Private Partnerships for Better Water Supply Management." 25th Annual Florida Chamber Environmental Permitting School, 2011.
- Martin, Kirk. "ASR: Is it a Viable Solution for Effluent Management." Florida Water Environment Association Effluent Disposal Seminar, 2010.
- Martin, Kirk. "Is There Hope for ASR?" Emerging Solutions to the Arsenic Issue." FSAWWA, 2010.
- Martin, Kirk, R. Cavalieri, K. Hoskins. "Integrated Water Resource Master Planning." 2<sup>nd</sup> Annual University of Florida Water Institute Symposium, 2010.
- Martin, Kirk. "Aquifer Storage and Recovery: Potential for Saudi Arabia." Total Water Solutions Workshop – Ministry of Water and Energy, Kingdom of Saudi Arabia, 2010.
- Martin Kirk. "Case Studies Addressing EPA's Draft Numerical Nutrient Criteria." CDM SmithU – NNC Workshop, 2010.
- Martin, Kirk, R. Cavalieri, K. Hoskins. "Development of an Integrated Water Resources Plan for Lee County Utilities." AWWA-FWEA Florida Water Resources Conference, 2010.
- Martin, Kirk, P. Mattausch, K. Probst, J. Sciandra. "Water Levels and Water Resource Management: Real World Data Still Matters." FSAWWA Water Resources Conference, 2009.
- Martin, Kirk. "Water Resource Planning for Private Development." Presented at Land Development East Conference & Expo, 2007.
- Martin, Kirk. "Sustainable Water Resource Development: West Side Story." Presented at FS AWWA Florida Water Resources Conference, 2006.
- Martin, Kirk, L. Turner, and L. Wiseman. "Aquifer Storage and Recovery System Implementation: Techniques for Improving Success." Presented at FS AWWA Florida Water Resources Conference, 2006.
- Martin, Kirk, R. Maliva, and W. Guo. "Predictive Modeling of Brackish Water ASR System Performance." Presented at FSAWWA Florida Water Resource Conference, 2005.
- Martin, Kirk and T. Missimer. "Natural Hydraulic Entrapment of Relict Saline Water in Semi-Confined Aquifers." Presented at Southwest Florida, NGWA/AGWSE Annual Meeting, 2004.
- Martin, Kirk, R. Maliva, T. Missimer, and R. Blind. "Conjugate Use of Aquifer Storage and Recovery with Desalination to Meet Expanding Potable Water Demand." Presented at 79th Annual Florida Water Resources Conference Technical Proceedings, 2004.
- Martin, Kirk, T. Missimer, and W. Guo. "Hydraulic Entrapment of Relict Saline Water within Semi-Confined Aquifers of Southwest Florida." Presented at Gulf Coast Association of Geological Societies, SEPM Transactions, 2003.
- Martin, Kirk, R. Maliva, W. Guo, and T. Missimer. 2003. Evaluation of Hydrogeology and Recovery Efficiencies of ASR in Brackish Water. Program Abstract, American Water Resources Association Annual Meeting.
- Martin, Kirk, T. Missimer, W. Guo, and D. Thompson. "Concentrate Chemistry as a Control for Reverse Osmosis Water Treatment Plant Design: Tampa Bay Water Brackish Water Plant." Presented at AWWA Annual Conference, 2003.
- Martin, Kirk, R.G. Maliva, and T.M. Missimer. "Aquifer Storage and Recovery for Management and Supply of Water to Meet Recreational Irrigation Demands." Proceedings of the Florida Water Resources Conference, 2003.

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Martin, Kirk, R.G. Maliva, G.P. Kennedy, T.M. Missimer, E.S. Owosina, and J.A. Dickinson. "Dolomitization-Induced Aquifer Heterogeneity: Evidence from the Upper Floridan Aquifer, Southwest Florida." Geological Society of America, Bulletin. v. 114, p. 419-427, 2002.

Martin, Kirk, W. Guo, T.M. Missimer, and M. Coates. "Reverse Osmosis Water Treatment Plant Concentrate Disposal by Deep Well: Regulatory Compliance by Increasing Fluid Density." Proceedings of the Florida Water Resources Conference, p. 487-496, 2002.

Martin, Kirk, T.M. Missimer, W. Guo, and D.M. Thompson. "Concentrate Chemistry as a Control of Deep Well Disposal and Effects on Membrane Treatment Plant Design: The TBW Brackish Water RO Plant." Proceedings of the 2002 Biennial Conference Exposition of the American Membrane Technology Conference, 2002.

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## **EXHIBIT D**

### **TESTIMONY OF KIRK MARTIN, P.G.**

During the past four years, I testified in the following matters by deposition and/or at trial:

1. In re Florida Power and Light Company Turkey Point Power Plant Units 3-5 Modification to Conditions of Certification. Case No. 15-1559EPP (Florida Division of Administrative Hearings, December 1-4, 2015).
2. Miromar Lakes, LLC., v. South Florida Water Management District and Alico East Fund, LLC, Case No. 15-5621 (2016).

### **EXPERT FEE**

Kirk Martin's hourly rate is \$195 per hour.