

FPL Turkey Point Uprate Monitoring Program
September 2015 Semiannual Sampling Event
SDG: Qtr 3 2015 GW

Parameter	Units
Temperature	°C
pH	SU
Dissolved Oxygen	mg/L
Specific Conductance	µS/cm
Turbidity	NTU
Calcium	mg/L
Magnesium	mg/L
Potassium	mg/L
Sodium	mg/L
Boron	mg/L
Strontium	mg/L
Bromide	mg/L
Chloride	mg/L
Fluoride	mg/L
Sulfate	mg/L
Total Ammonia	mg/L as N
Ammonium ion (NH ₄ ⁺)	mg/L
Unionized NH ₃	mg/L
Nitrate/Nitrite	mg/L as N
TKN	mg/L
TN	mg/L
ortho-Phosphate	mg/L
Total Phosphorus (P)	mg/L
Alkalinity	mg/L
Bicarbonate Alkalinity	mg/L as HCO ₃
Sulfide	mg/L
Total Dissolved Solids	mg/L
Salinity	*
Tritium	pCi/L (1σ)

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Parameter	Units	TPGW-1S		TPGW-1M		TPGW-1D		090315-DUP1		TPGW-2S		TPGW-2M		TPGW-2D		TPGW-3S		TPGW-3M		TPGW-3D	
		09/03/2015		09/03/2015		09/03/2015		09/03/2015		09/01/2015		09/01/2015		09/01/2015		09/01/2015		09/01/2015		09/01/2015	
Temperature	°C	27.78		27.30		27.00				27.10		27.24		27.09		28.26		27.95		27.78	
pH	SU	6.74		6.82		6.97				7.07		6.84		6.86		6.70		6.83		6.87	
Dissolved Oxygen	mg/L	0.22		0.16		0.28				0.10		0.20		0.06		0.05		0.03		0.07	
Specific Conductance	µS/cm	58381		71423		72806				71622		78280		78265		61284		69106		68640	
Turbidity	NTU	0.18		0.48		0.00	J			0.14		0.30		0.03		1.01		0.15		0.74	
Calcium	mg/L	529		587		587		577		658		644		629		615		599		596	
Magnesium	mg/L	1230		1540		1570		1520		1540	J	1650	J	1590	J	1290	J	1460	J-	1440	J
Potassium	mg/L	487		662		656		660		604		693		701		522		574		613	
Sodium	mg/L	11800		14500		14800		15000		14100	J	15700	J	15800	J	12000	J	13600	J+	13900	J
Boron	mg/L	4.48		6.21		6.25		6.28		5.81		6.74		6.95		4.94		5.58		5.91	
Strontium	mg/L	10.6		12.3		12.1		12.2		13.3		14.9		14.8		10.7		12.1		12.6	
Bromide	mg/L	70.7	J	91.7	J	91.9	J	92.6		97.4		97.3	J	97.1	J	70.3		2.50	U	2.50	U
Chloride	mg/L	21200		26700		27000		27400		26400		28300		28800		21800		24400		23100	
Fluoride	mg/L	0.239		0.296		0.296		0.302		0.226		0.302		0.254		0.217		0.209	J-	0.213	
Sulfate	mg/L	2950		3680		3690		3740		3500		3840		3860		2990		3270		3470	
Total Ammonia	mg/L as N	1.22		1.52		1.85		1.75		1.94		2.32		2.27							
Ammonium ion (NH ₄ ⁺)	mg/L	1.56		1.95		2.36				2.48		2.97		2.90							
Unionized NH ₃	mg/L	0.00561		0.00812		0.0136				0.0181		0.0129		0.0131							
Nitrate/Nitrite	mg/L as N	0.0250	U	0.0250	U	0.0250	U	0.0250	U	0.0250	U	0.0250	U	0.0250	U						
TKN	mg/L	1.84		2.18		2.10		2.44		2.30		3.00		2.96							
TN	mg/L	1.87		2.21		2.13		2.47		2.33		3.03		2.99							
ortho-Phosphate	mg/L	0.0240	J	0.0270	J	0.0458	J+	0.0458		0.0181		0.0412		0.0397							
Total Phosphorus (P)	mg/L	0.0363		0.0398		0.0435		0.0443		0.0234		0.0421		0.0575							
Alkalinity	mg/L	241		198		190		192		162		222		211		590		272		232	
Bicarbonate Alkalinity	mg/L as HCO ₃	293		241		232		234		197		270		257		720		332		284	
Sulfide	mg/L	0.360	U	0.360	U	0.397	I	0.576	I	0.360	U	1.03		0.360	U	18.5		0.360	U	0.360	U
Total Dissolved Solids	mg/L	37200		39600		48200		47600		47300		51500		51600		37300		46000		44600	
Salinity	*	38.91		48.97		50.08				49.15		54.45		54.44		41.09		47.14		46.77	
Tritium	pCi/L (1σ)																				

NOTES:

Laboratory results are reported with 3 digits although only the first 2 are significant figures.

* PSS-78 salinity is unitless.

Sample 090315-Dup is a duplicate of TPGW-1D.

KEY:

°C = Degrees Celsius.

µS/cm = MicroSiemen(s) per centimeter.

σ = sigma (Standard Deviation).

CaCO₃ = Calcium carbonate.

DUP = Duplicate.

FB = Field Blank.

I = Value between the MDL and PQL.

FPL Turkey Point Uprate Monitoring P1
September 2015 Semiannual Sampling E
SDG: Qtr 3 2015 GW

Parameter	Units	V-10D	TPGW-11S		TPGW-11M		TPGW-11D	
		/2015	09/09/2015		09/09/2015		09/09/2015	
Temperature	°C		28.36		28.21		28.08	
pH	SU		6.92		6.74		6.71	
Dissolved Oxygen	mg/L		0.29		0.17		0.24	
Specific Conductance	µS/cm		56658		59736		64024	
Turbidity	NTU	J	0.07		1.29		0.00	J
Calcium	mg/L		502		535		543	
Magnesium	mg/L	J	1240	J	1240	J	1310	J
Potassium	mg/L		515		506		532	
Sodium	mg/L		10900		11100		13100	
Boron	mg/L		5.41		5.16		5.11	
Strontium	mg/L		8.97		9.47		9.90	
Bromide	mg/L		70.3		74.8		85.7	
Chloride	mg/L		20600		21800		25000	
Fluoride	mg/L		0.900		0.610		0.710	
Sulfate	mg/L		2840		2850		3260	
Total Ammonia	mg/L as N							
Ammonium ion (NH ₄ ⁺)	mg/L							
Unionized NH ₃	mg/L							
Nitrate/Nitrite	mg/L as N	U						
TKN	mg/L							
TN	mg/L							
ortho-Phosphate	mg/L							
Total Phosphorus (P)	mg/L							
Alkalinity	mg/L		312		352		279	
Bicarbonate Alkalinity	mg/L as HCO ₃		380		429		340	
Sulfide	mg/L		7.19		4.90		4.41	J
Total Dissolved Solids	mg/L		35900		37000		40700	
Salinity	*		39.59		39.91		43.2	
Tritium	pCi/L (1σ)							

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Notes

Laboratory results are reported with 3 digits although only the first 2 are significant figures.

* PSS-78 salinity is unitless.

** Schemel, L.E., 2001. Simplified conversions between specific conductance and salinity unit for use with data from monitoring stations. Interagency Ecological Program for the San Francisco Estuary Newsletter. 14(1):17-18.

*** Calculated cation and anion conductivities not reported in ADaPT so all cations/anions are qualified.

Text in blue are revised

Sample 090315-Dup is a duplicate of TPGW-1D.

Key

°C = Degrees Celsius.

µg/L = Microgram(s) per liter.

µmho/cm = Micromho(s) per centimeter.

µS/cm = MicroSiemen(s) per centimeter.

ABS = Absolute value.

mg/L = Milligram(s) per liter.

N.A. = Not applicable.

NH₃ = Ammonia.

NH₄⁺ = Ammonium ion.

NTU = Nephelometric Turbidity Units(s).

pCi/L = PicoCuries per liter.

ppt = Parts per thousand.

PQL = Practical Quantitation Limit.

PSS-78 = Practical Salinity Scale of 1978.

RPD = Relative Percent Difference.

SC = Specific conductance.

SDG = Sample Delivery Group.

SU = Standard Unit(s).

TDS = Total Dissolved Solids.

TKN = Total Kjeldahl nitrogen.

TN = Total nitrogen.

TPGW = Turkey Point Ground Water

Qualifiers

I = Value between the MDL and PQL.

J = Estimated (+/- indicate bias).

Q = Holding time exceeded.

U = Analyzed for but not detected at the reported value.