

SETTLEMENT AGREEMENT REPORT

October – December 2013

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Compliance Assessment & Reporting Section
Water Quality Bureau

Technical Oversight Committee

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sfwmd.gov

SUMMARY

Month	Geometric Mean TP Concentration (ppb)	Long-term Level (ppb)	Mean Stage (feet NGVD 29)	Number of Samples	
Arthur R. Marshall Loxahatchee National Wildlife Refuge					
Oct 2013	6.6	8.3*	16.83*	14	
Nov 2013	5.6	9.1	16.61	14	
Dec 2013	4.4	9.1	16.62	13	
12-Month Period Ending	Total Flow (kac-ft)	12-Month Flow-weighted Mean TP Concentration (ppb)	Long-term Limit (ppb)	Percent of Sampling Events Greater than 10 ppb	
				Guideline	Observed
Everglades National Park – Shark River Slough					
Oct 2013	The quarterly flow and TP data for this table is posted separately on the TOC website. The annual compliance result will be published in this report for the 12-month flow-weighted mean TP concentration for the federal water year ending on September 30 when the final approved flow data is available.				
Nov 2013					
Dec 2013					
Everglades National Park – Taylor Slough and Coastal Basins					
Oct 2013	228.9	4.7	11.0	53.1	1.3
Nov 2013	221.7	4.7	11.0	53.1	1.3
Dec 2013	227.5	4.6	11.0	53.1	1.3

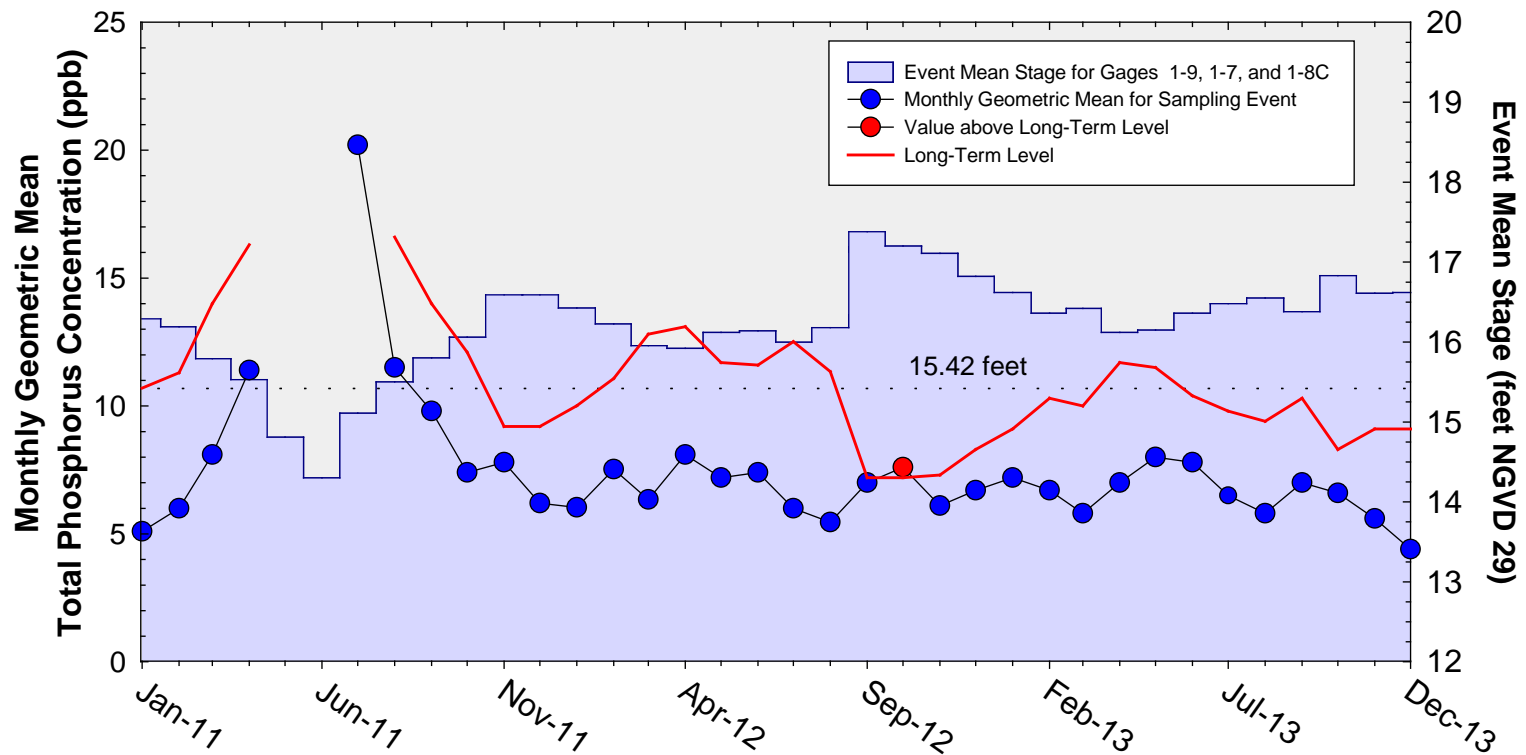
Refuge TP Compliance Tracking For October 2013 – December 2013

Month	Geometric Mean TP Concentration (ppb)	Long-Term Level (ppb) Effective 12/31/2006	Average Stage (feet NGVD 29)	Number of Samples
Oct-2013	6.6	8.3*	16.83*	14
Nov-2013	5.6	9.1	16.61	14
Dec-2013	4.4	9.1	16.62	13

* 1-9 gage stage datum for October 22, 2013, sampling event was missing. The October 23, 2013 stage datum at 1-9 was used for the daily stage for both October 22 and 23, 2013, to calculate the sampling event mean stage.

A.R.M Loxahatchee National Wildlife Refuge

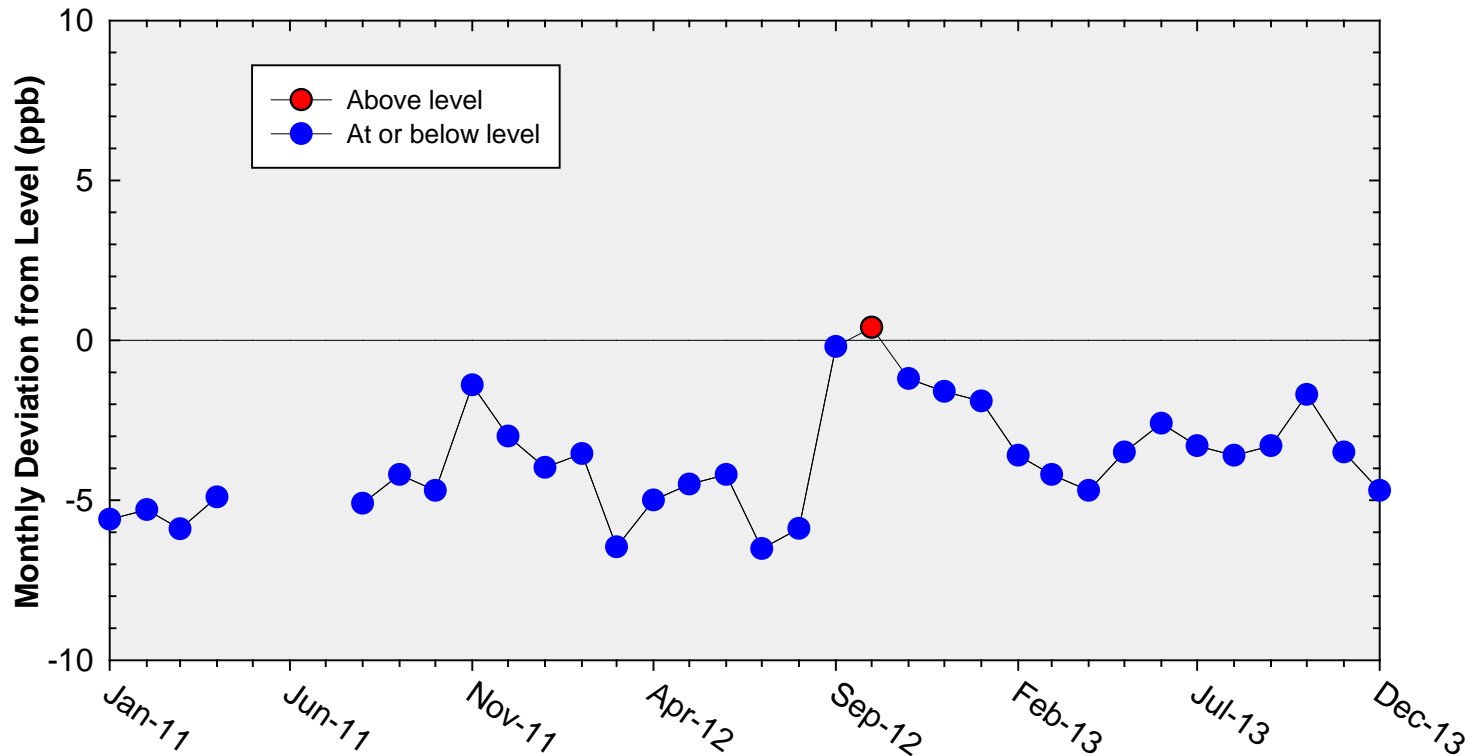
Monthly Total Phosphorus Geometric Mean Concentrations



Note: Long-term level was not applicable for May 2011, June 2011, and July 2011 (sampling day average stages < 15.42 ft).

A.R.M Loxahatchee National Wildlife Refuge

Deviation of monthly geometric mean total phosphorus concentrations with calculated long-term levels



Note: Long-term level was not applicable for May 2011, June 2011, and July 2011 (sampling day average stages < 15.42 ft).

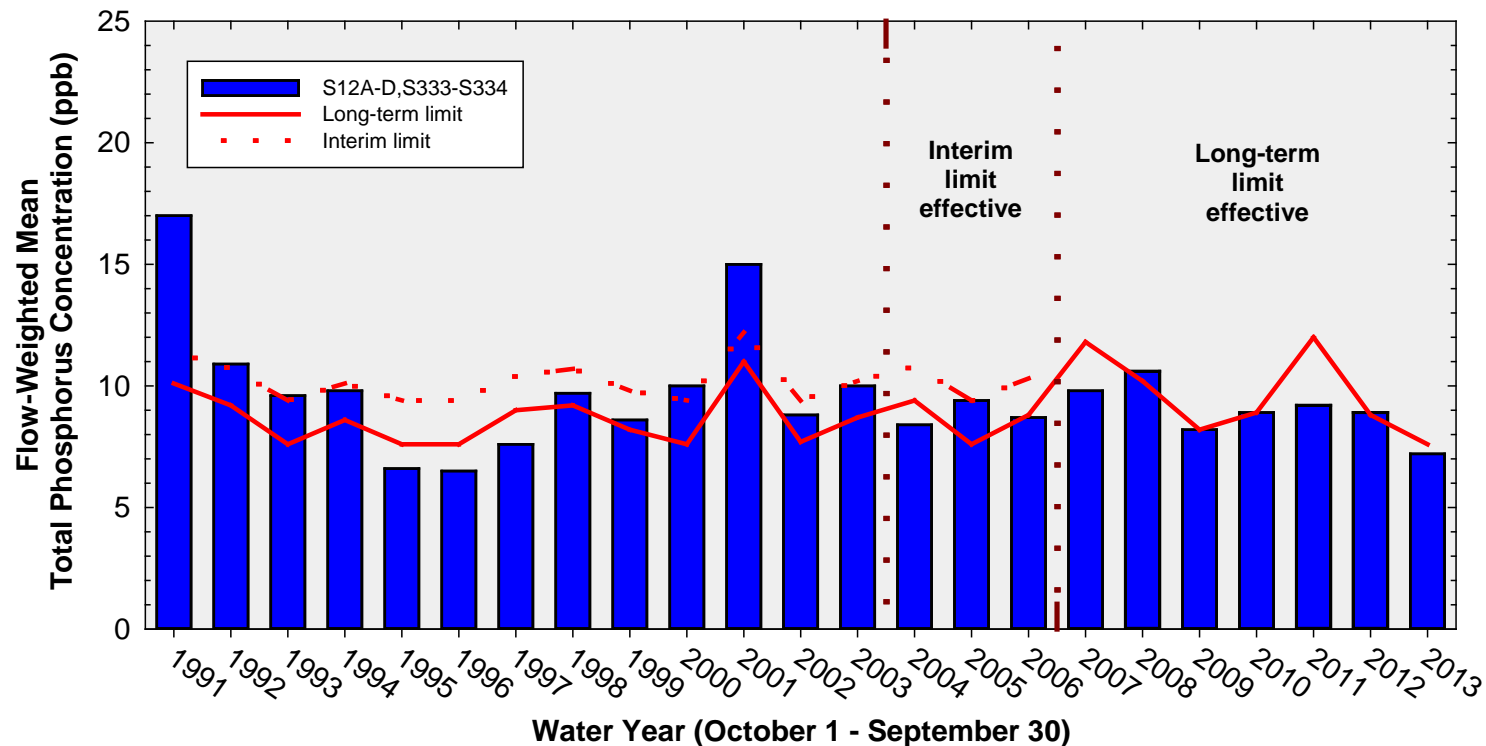
Shark River Slough

TP Concentration Compliance Interim Tracking for October 2013 – December 2013

(October 2013 – December 2013 Flow Data for S12s are Provisional)

12-Month Period	Total Flow (kac-ft)	Flow-Weighted Mean TP Concentration (ppb)	Long-Term Limit (ppb) Effective 12/31/2006	Percent of Sampling Events Greater than 10 ppb	
				Guideline	Observed
Nov 2012 - Oct 2013	1130.0	7.1	7.6	40.1	24.0
Dec 2012 - Nov 2013	1079.0	7.3	7.6	40.1	24.0
Jan 2013 - Dec 2013	1013.2	7.3	7.9	41.2	24.0

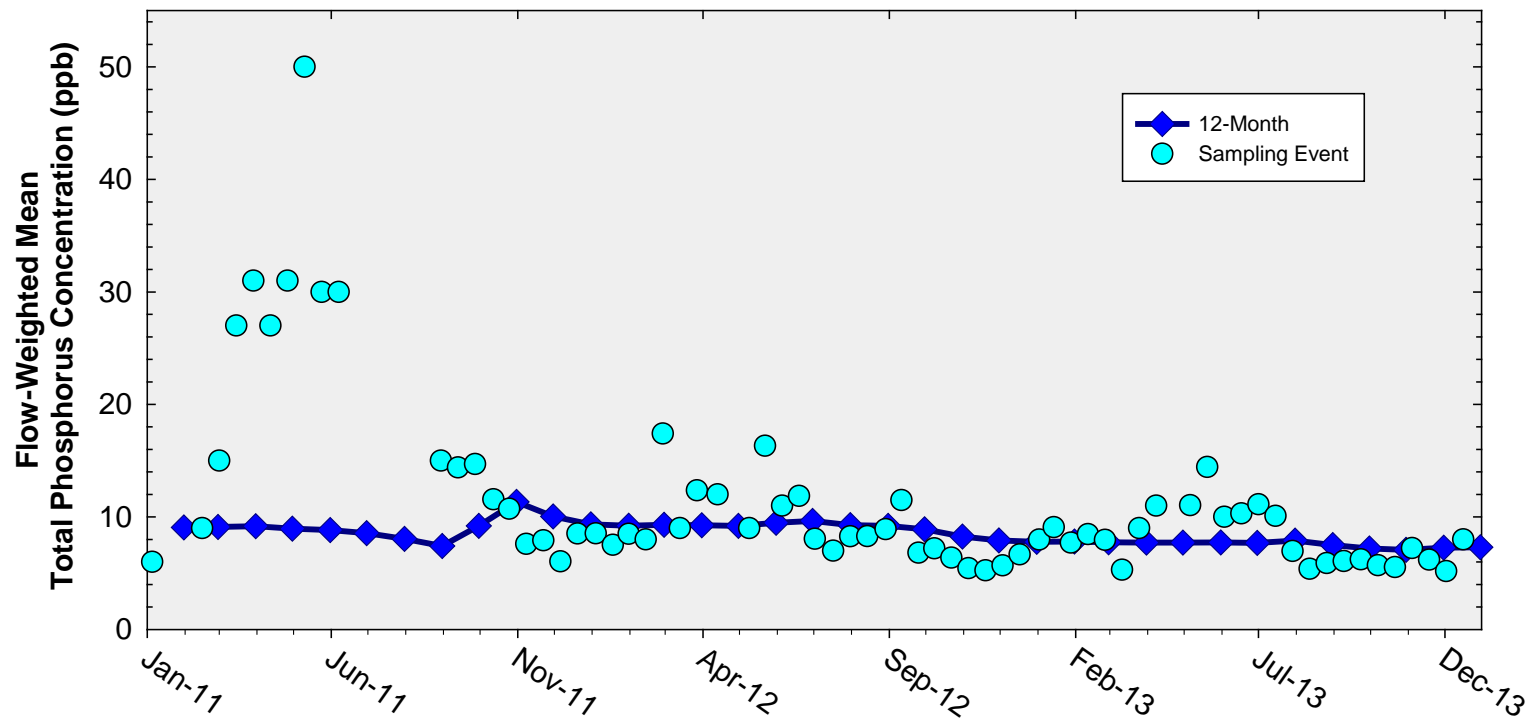
Annual Flow-weighted Mean Concentrations Inflows to ENP through Shark River Slough



12-month FWMC at the end of each water year compared to the TP interim and long-term limits

Flow-Weighted Mean Concentrations Inflows to ENP through Shark River Slough

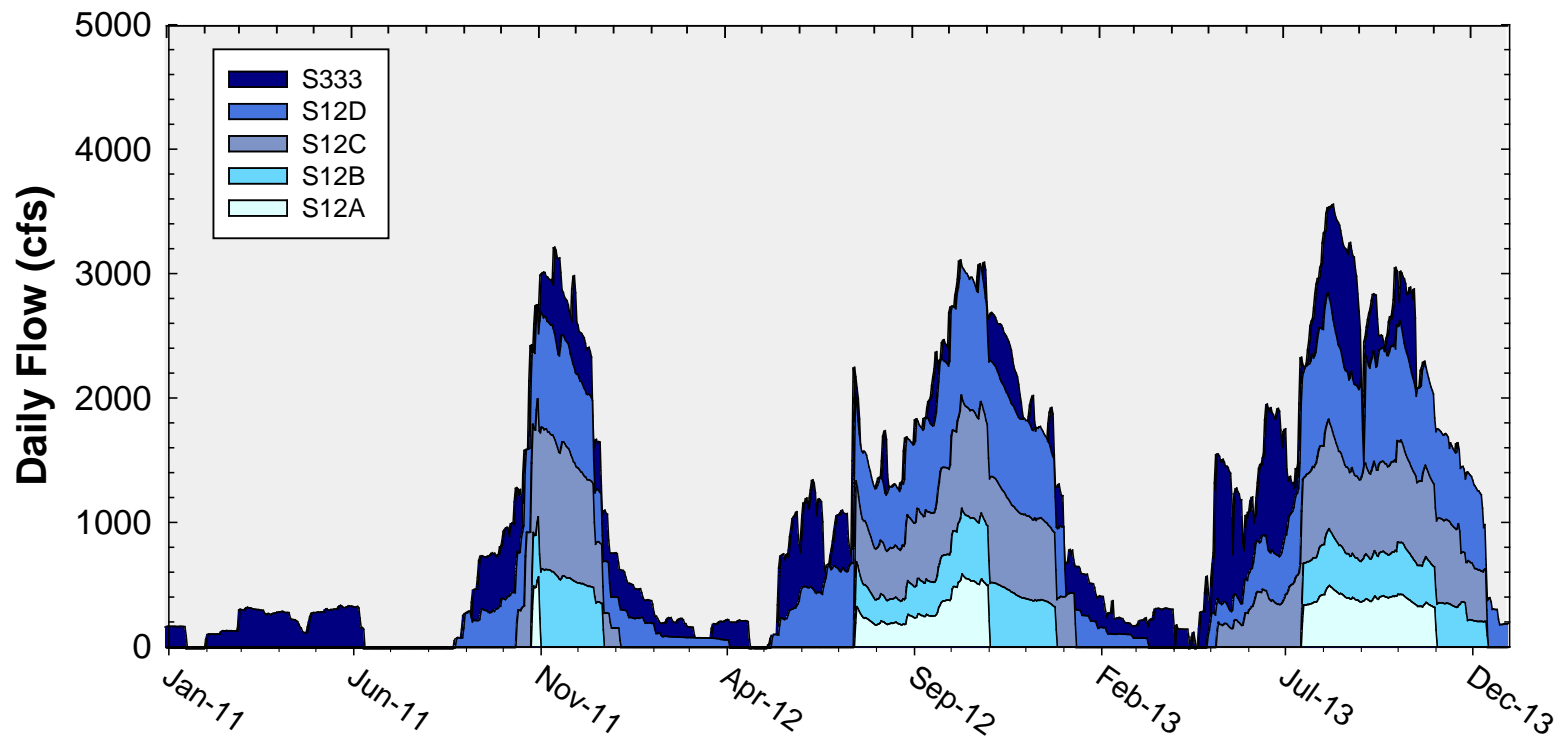
(October 2013 – December 2013 Flow Data for S12s are Provisional)



12-month FWMC at the end of each month and the composite TP concentration for each sampling event

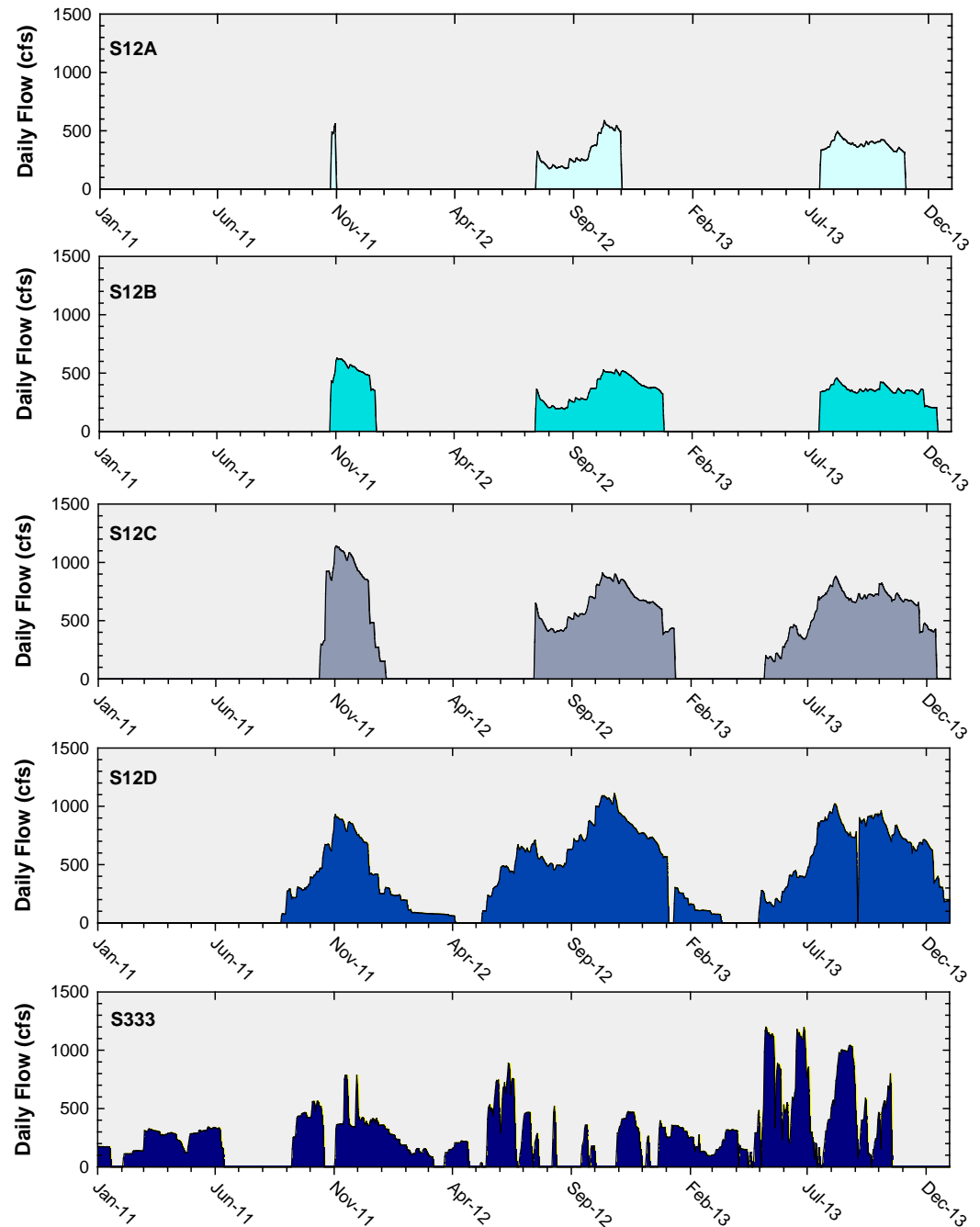
Shark River Slough Daily Flows

(October 2013 – December 2013 Flow Data for S12s are Provisional)

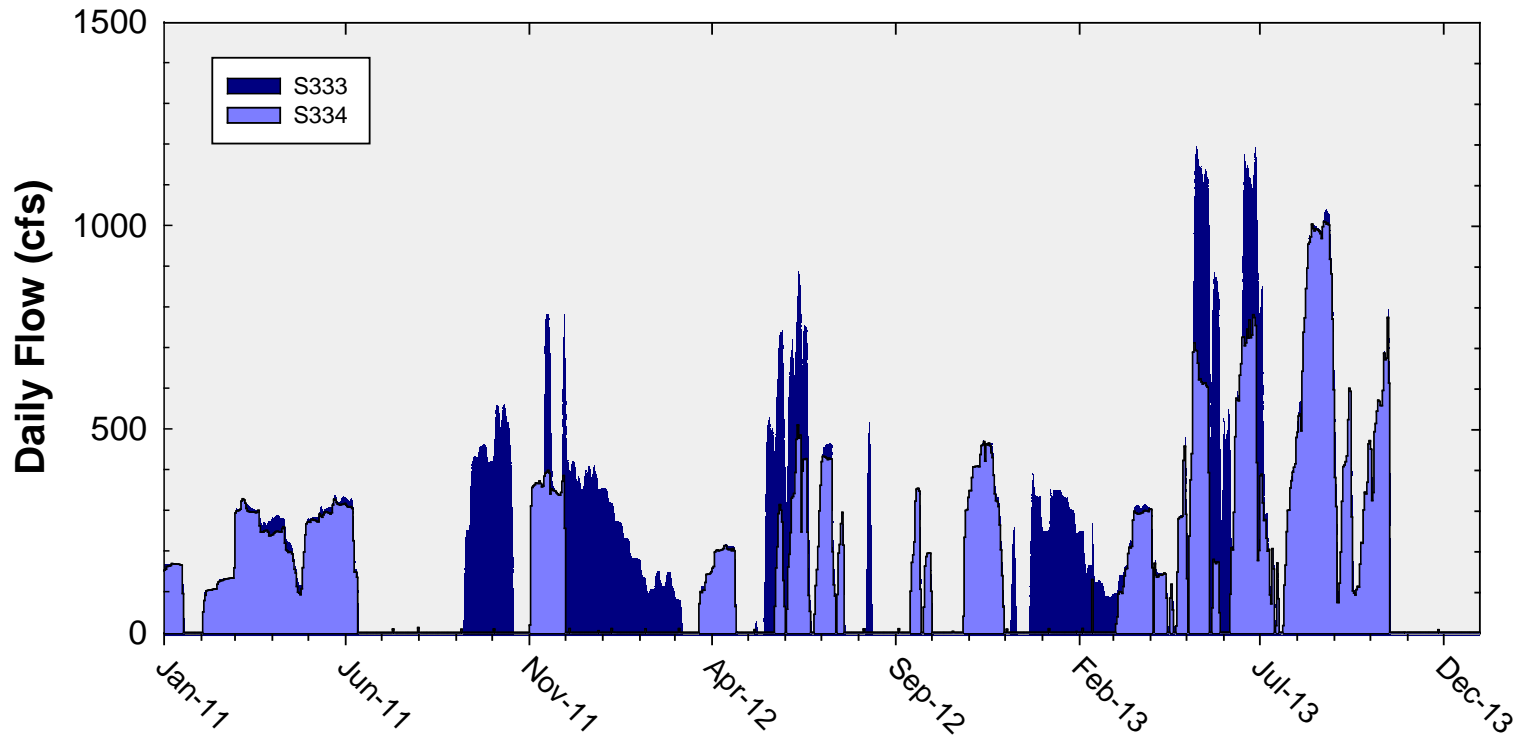


Daily Flows at individual inflow structures to Shark River Slough

(October 2013 – December 2013 Flow Data for S12s are Provisional)



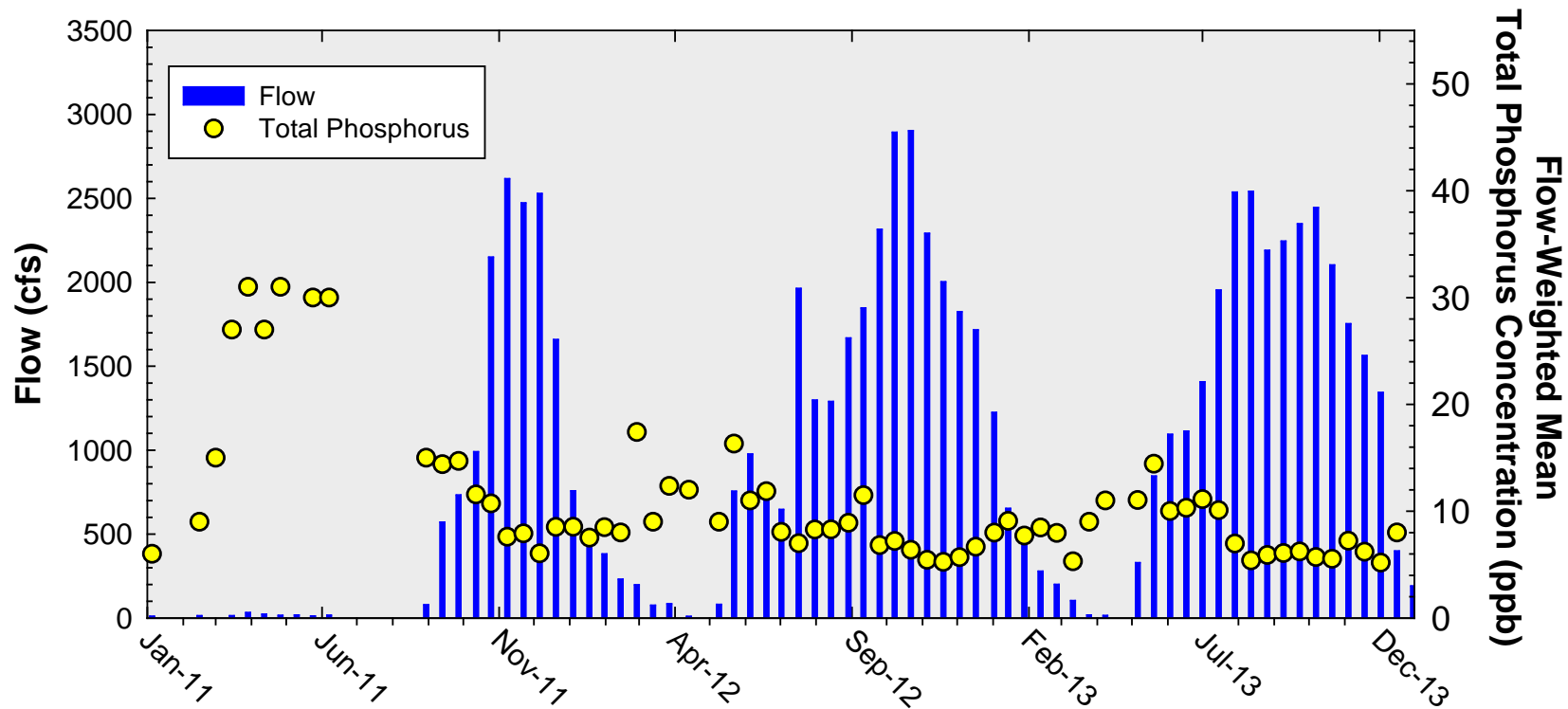
Daily Flows at S333 and S334



Shark River Slough

Sampling Event Flow and FWMC

(October 2013 – December 2013 Flow Data for S12s are Provisional)



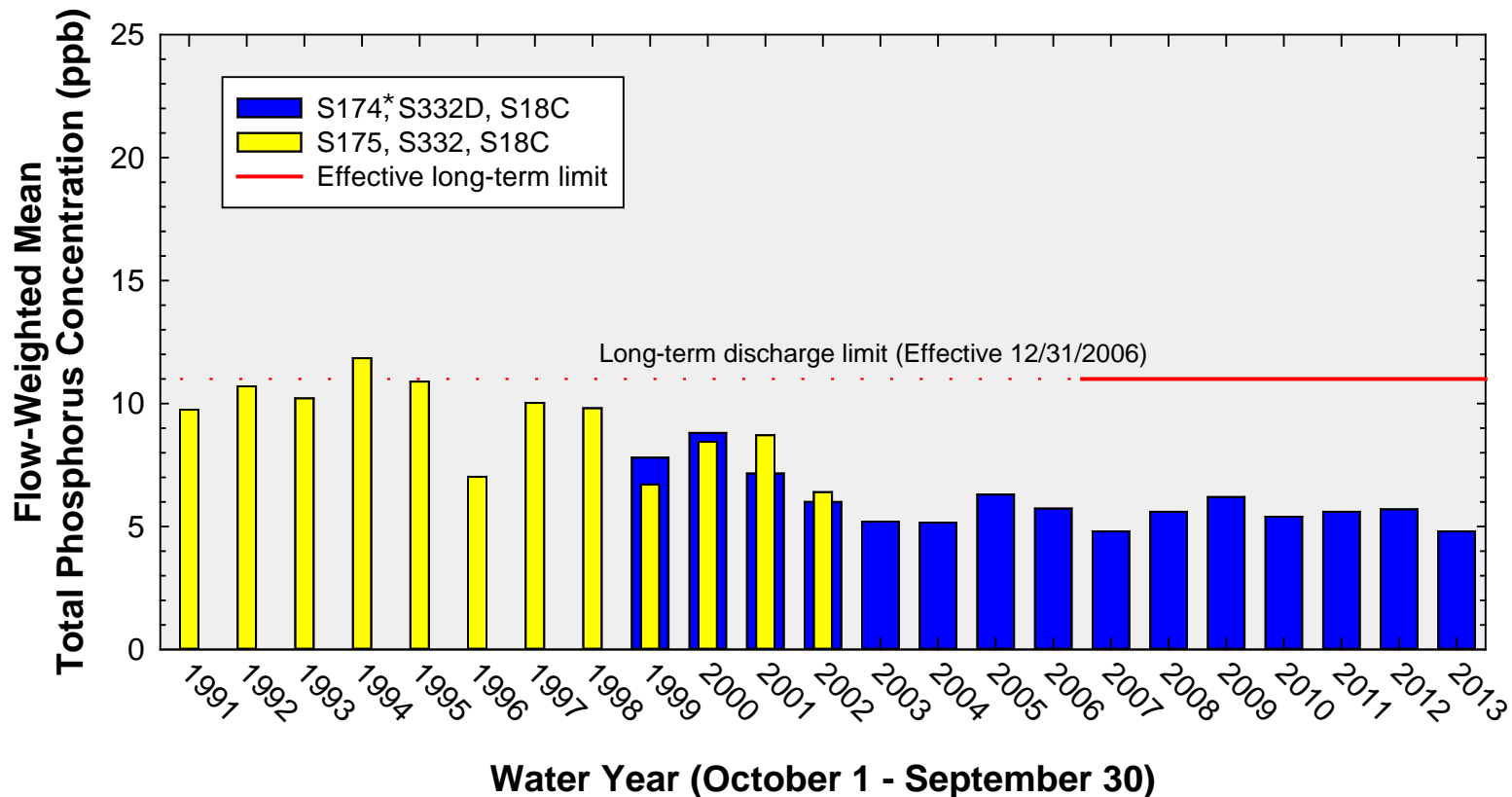
Flow at Shark River Slough structures and the corresponding TP FWMCs for individual sampling events

Taylor Slough and Coastal Basins TP Concentration Compliance Tracking for October 2013 – December 2013

12-Month Period	Total Flow (kac-ft)	Flow-Weighted Mean TP Concentration (ppb)	Long-Term Limit (ppb) <i>Effective 12/31/2006</i>	Percent of Sampling Events Greater than 10 ppb	
				Guideline	Observed
Nov 2012 - Oct 2013	228.9	4.7	11.0	53.1	1.3
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Annual Flow-Weighted Mean Concentrations

Inflows to the ENP through Taylor Slough and Coastal Basins

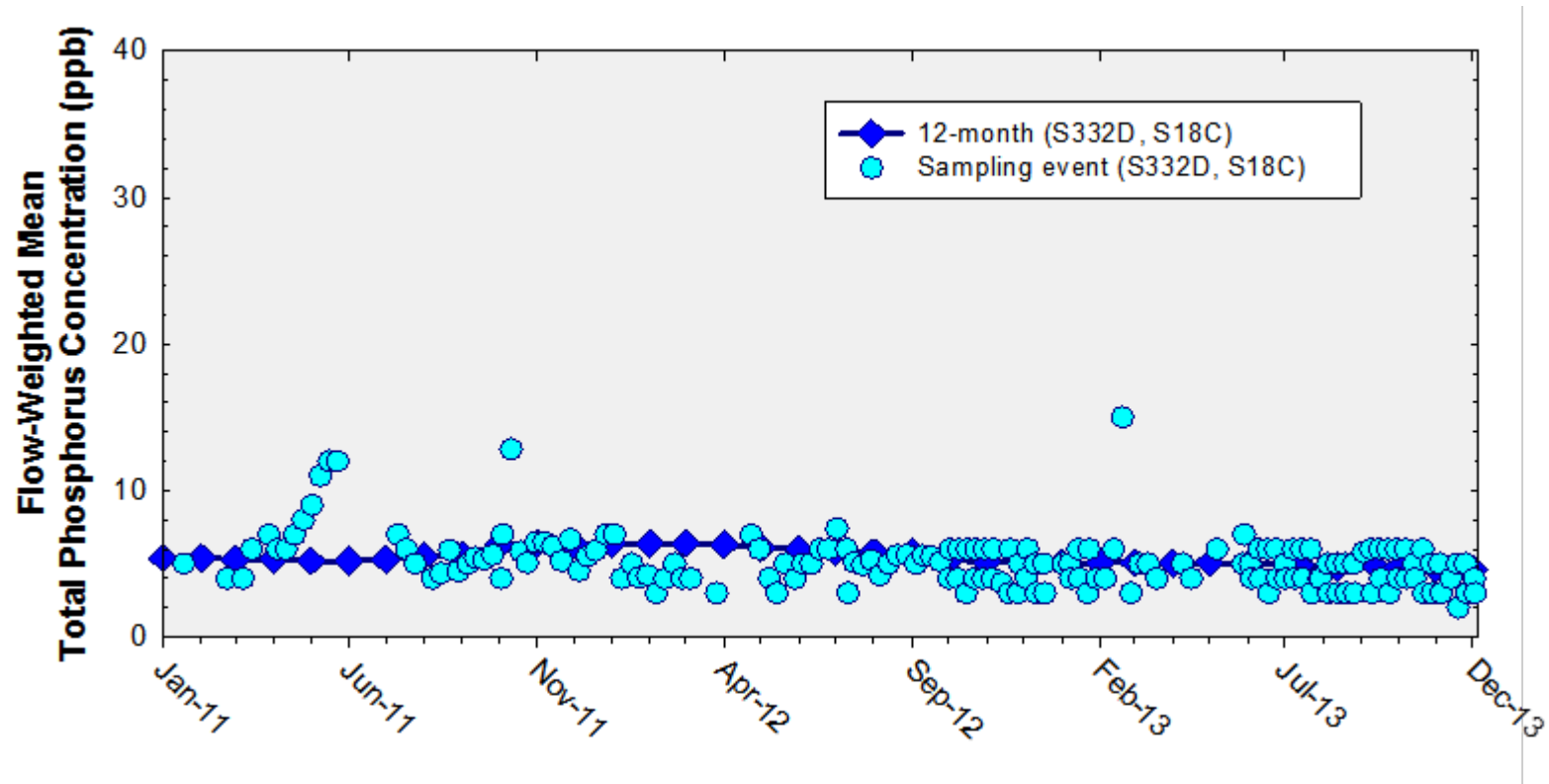


The 12-month FWMC at the end of each water year compared to the 11 ppb long-term TP limit

* S174 was plugged in September 2007

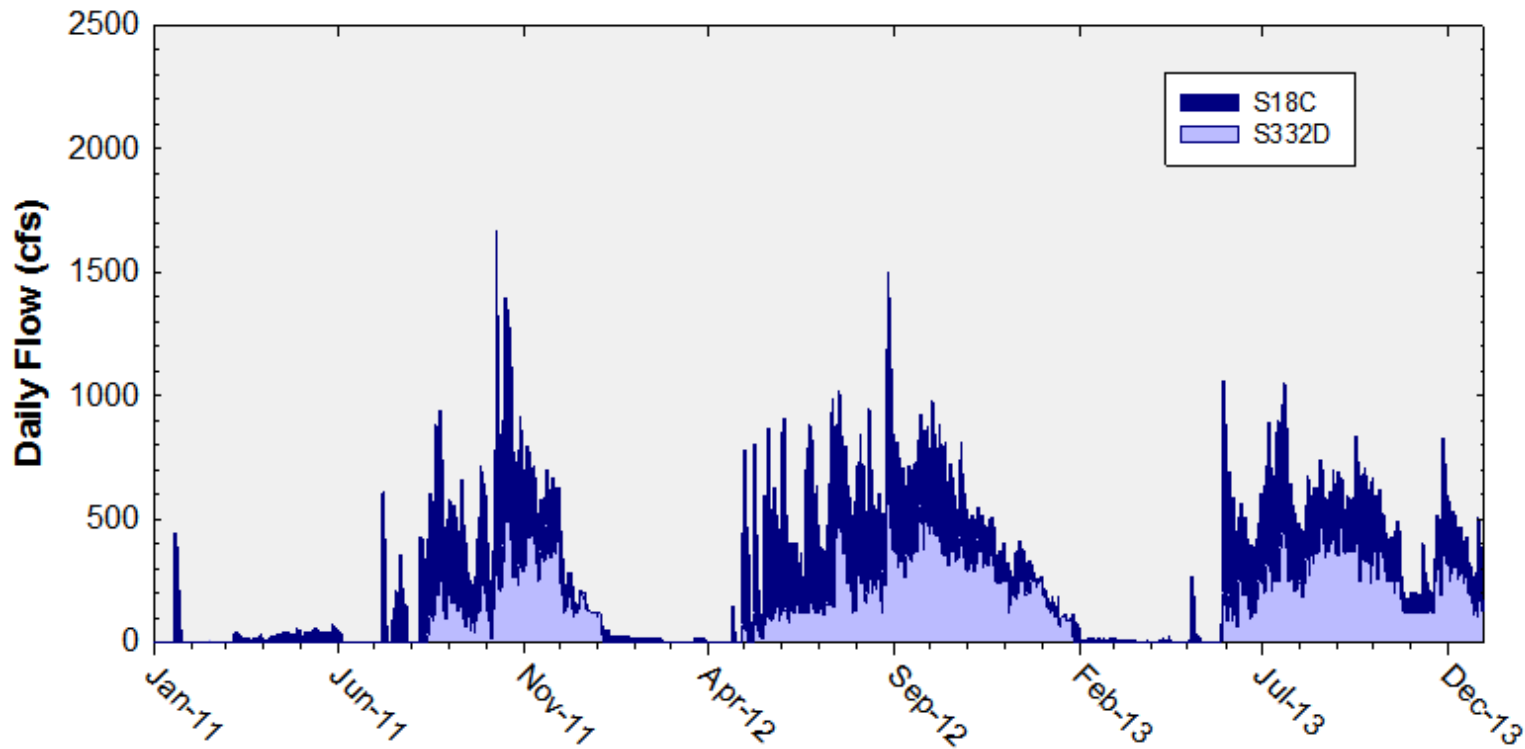
Flow-Weighted Mean Concentrations

Inflows to the ENP through Taylor Slough and Coastal Basins

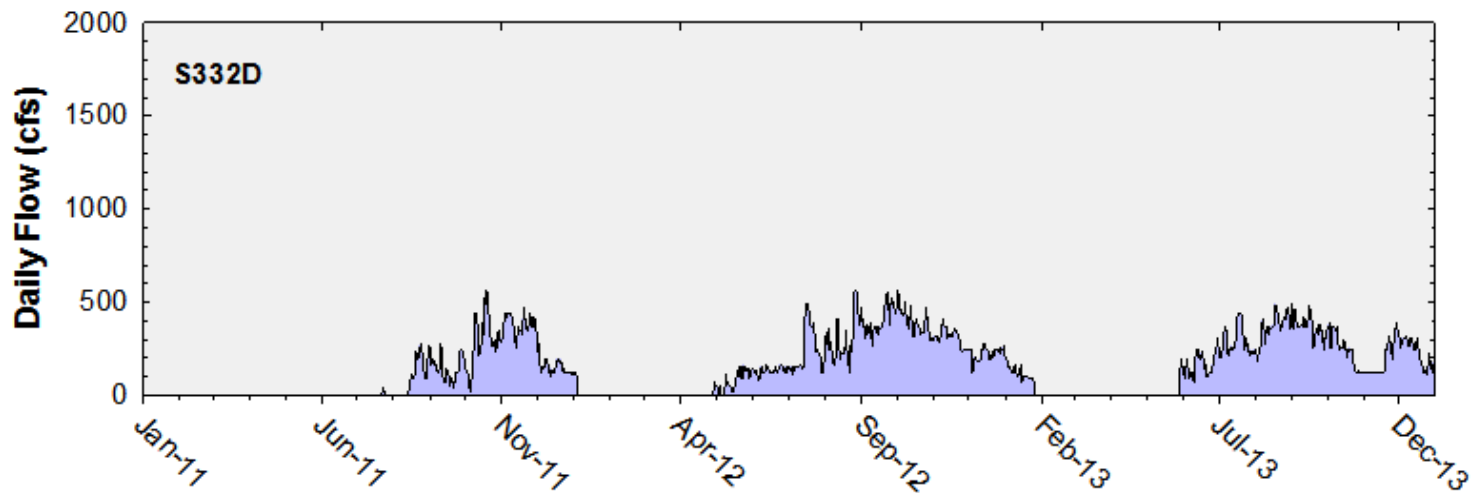
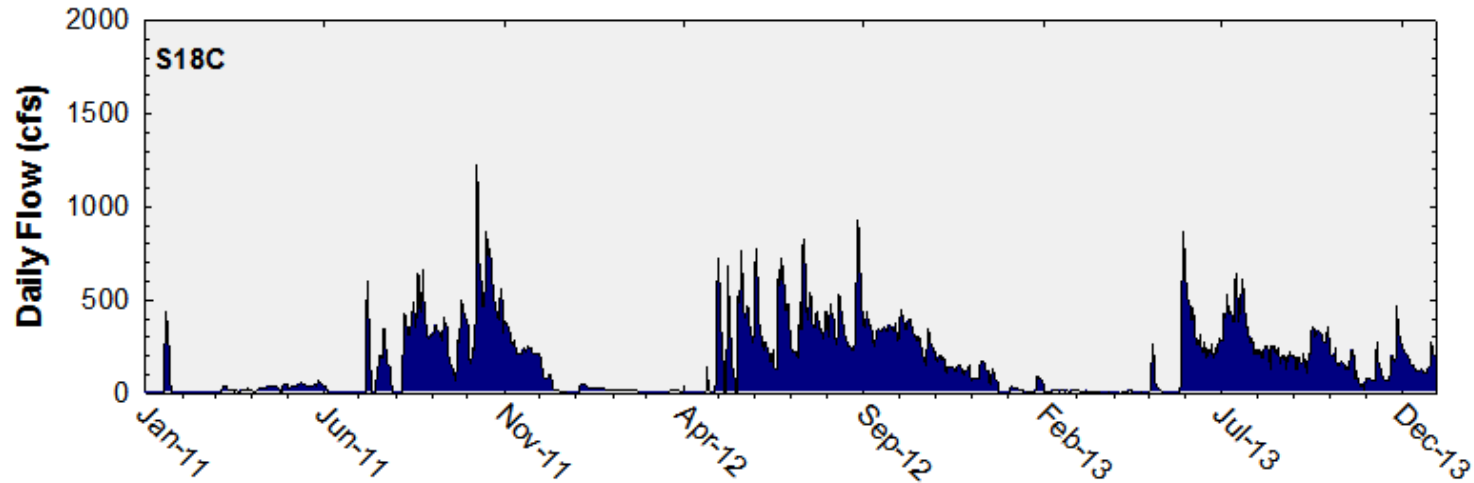


The 12-month FWMC at the end of each month and the composite TP concentration for each sampling event

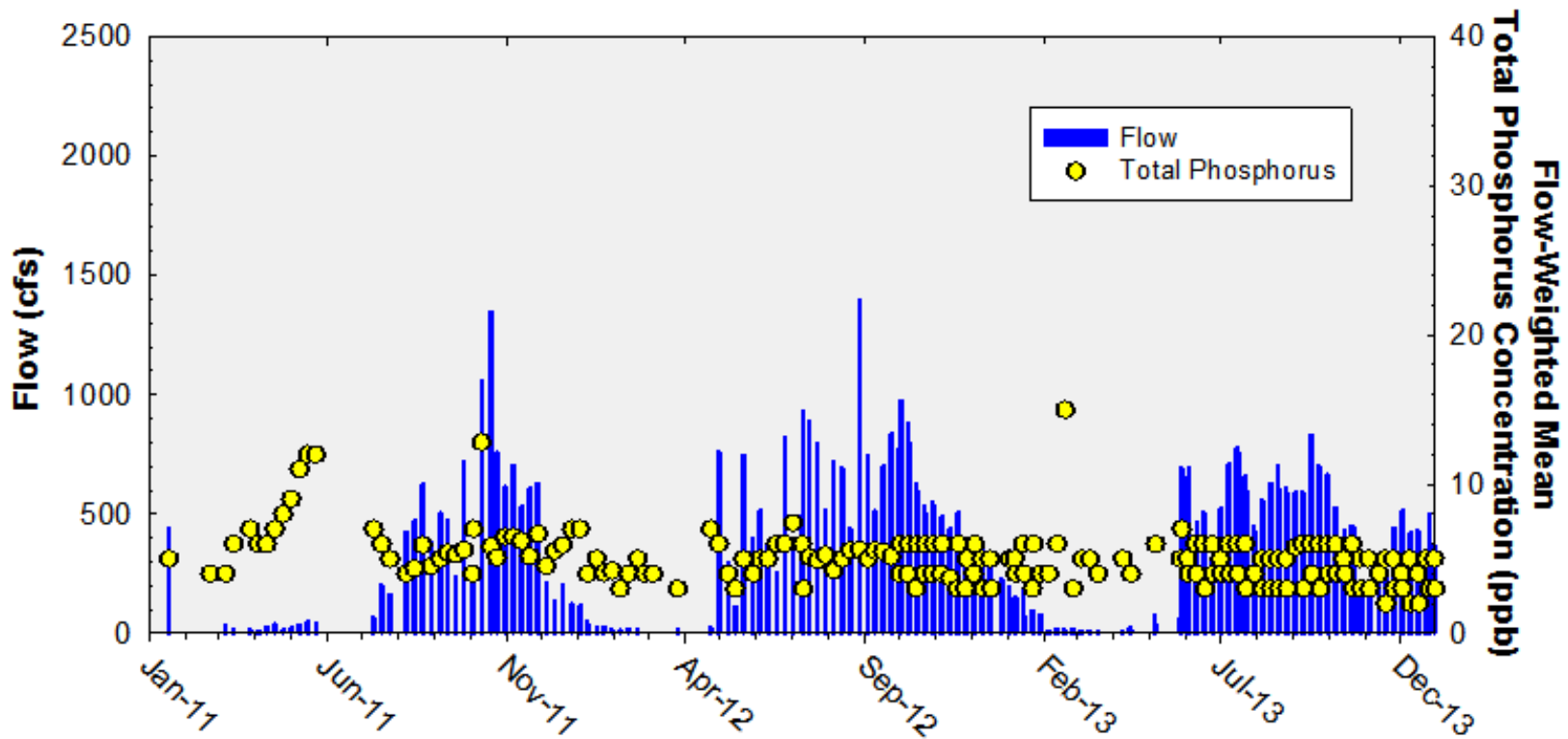
Daily Flows at Taylor Slough and Coastal Basins structures into the ENP



Daily Flows at individual Taylor Slough and Coastal Basins structures into the ENP



Taylor Slough and Coastal Basins Sampling Event Flow and FWMC



Flow at Taylor Slough and Coastal Basins structures and the corresponding TP FWMCs for individual sampling events

Thank You

