

SETTLEMENT AGREEMENT REPORT

January – March 2013

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Compliance Assessment & Reporting Section
Water Quality Bureau

Technical Oversight Committee
April 1, 2014

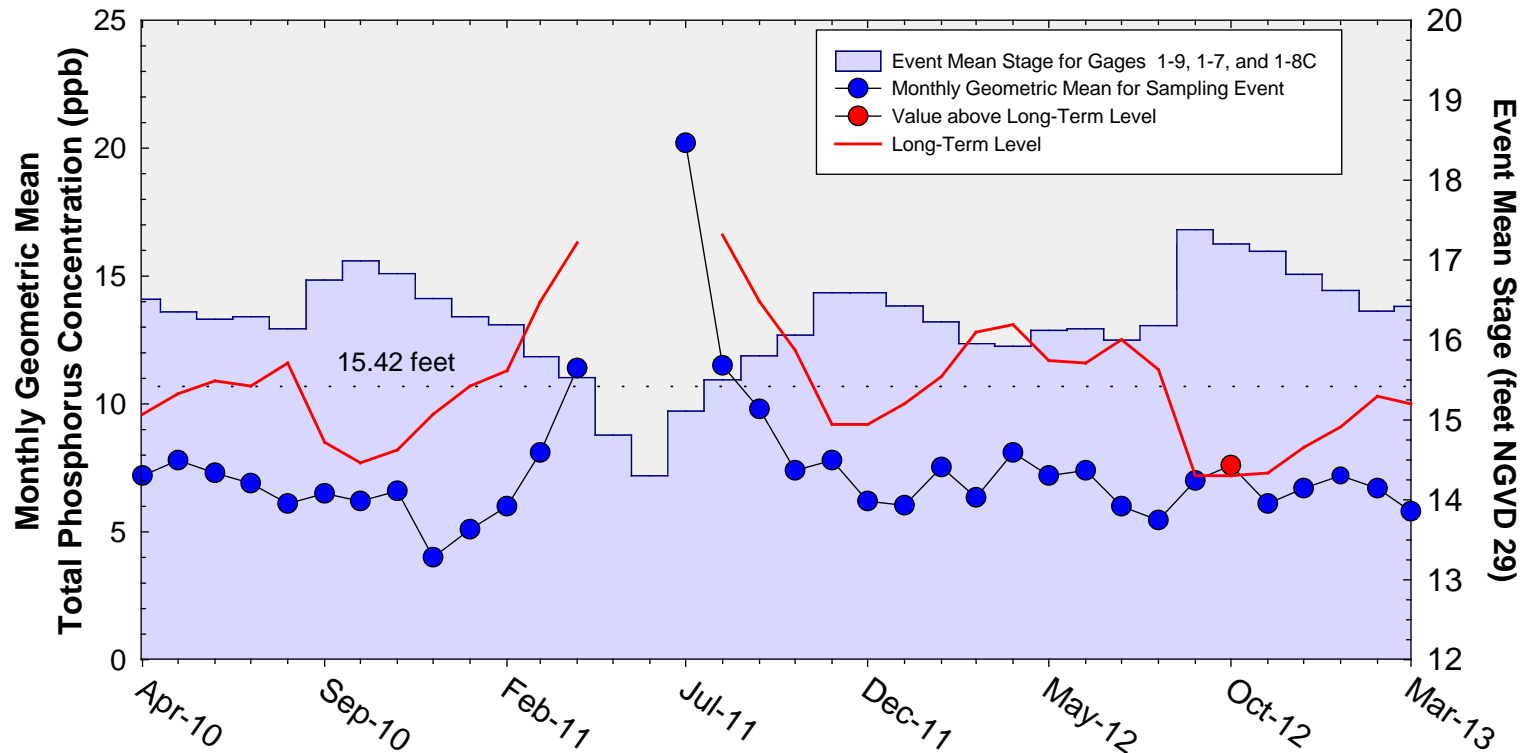


SUMMARY

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					
Jan 2013	7.2	9.1	16.62	14	
Feb 2013	6.7	10.3	16.36	13	
Mar 2013	5.8	10.0	16.42	14	
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					
Jan 2013	The quarterly flow and TP data for this Table is posted separately on the TOC web site. Annual results 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.				
Feb 2013					
Mar 2013					
Everglades National Park – Taylor Slough and Coastal Basins					
Jan 2013	284.9	5.1	11.0	53.1	0.0
Feb 2013	284.9	5.1	11.0	53.1	1.6
Mar 2013	284.9	5.1	11.0	53.1	1.6

A.R.M Loxahatchee National Wildlife Refuge

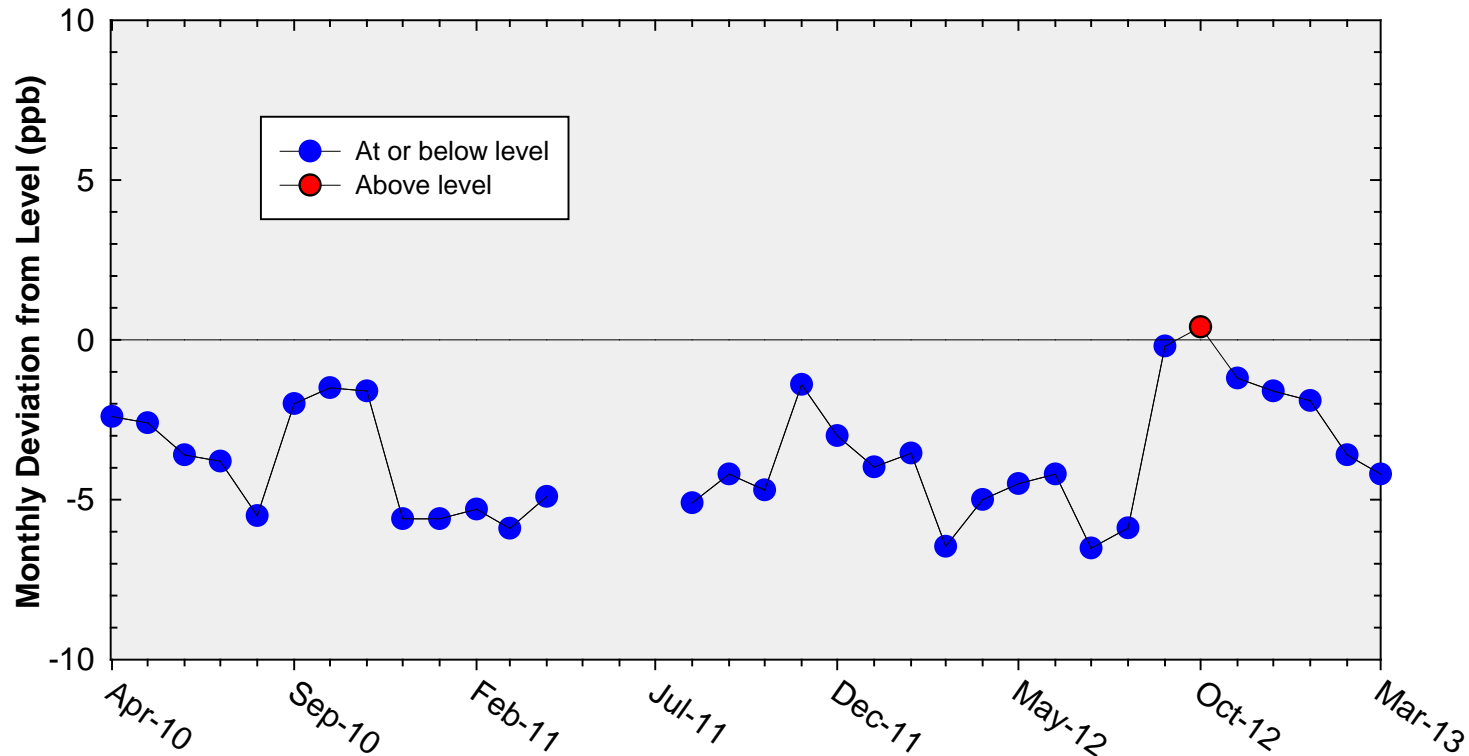
Monthly Total Phosphorus Geometric Mean Concentrations



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

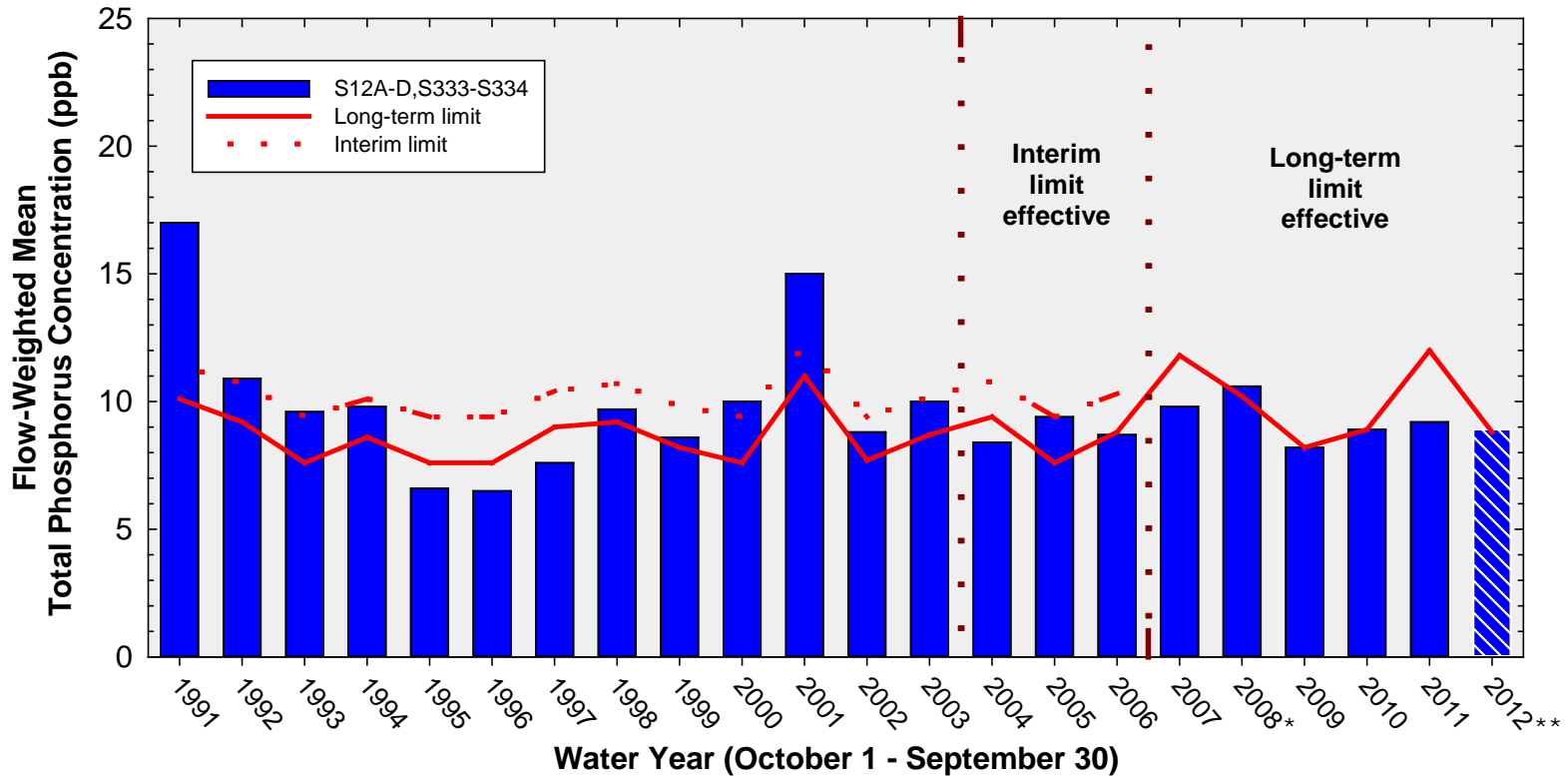


Note: Long-term level was not applicable for May 2011, June 2011, and July 2011 (sampling day average stages < 15.42 ft).

Refuge TP Compliance Tracking For January 2013 – March 2013

Month	Geometric Mean TP Concentration (ppb)	Long-Term Level (ppb) Effective 12/31/2006	Average Stage (feet NGVD 29)	Number of Samples
Jan-2013	7.2	9.1	16.62	14
Feb-2013	6.7	10.3	16.36	13
Mar-2013	5.8	10.0	16.42	14

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



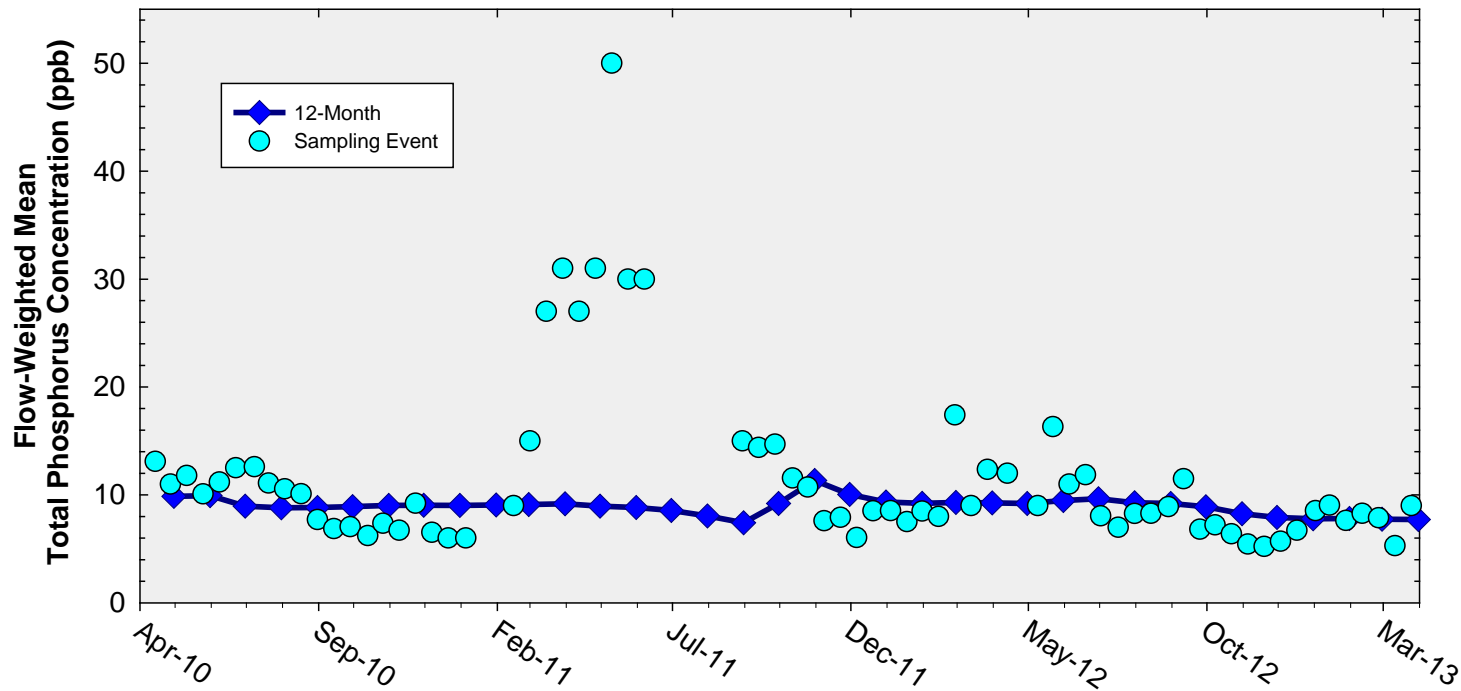
12-month FWMC at the end of each water year compared to the TP interim and long-term limits

* TOC determined WY2008 exceedance did not constitute a violation of the long-term limit.

** WY2012 FWMC was 8.9 ppb without the resampled datum, and 8.8 ppb with the resampled datum. The long-term limit was 8.8 ppb.

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

(October 2012 – March 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

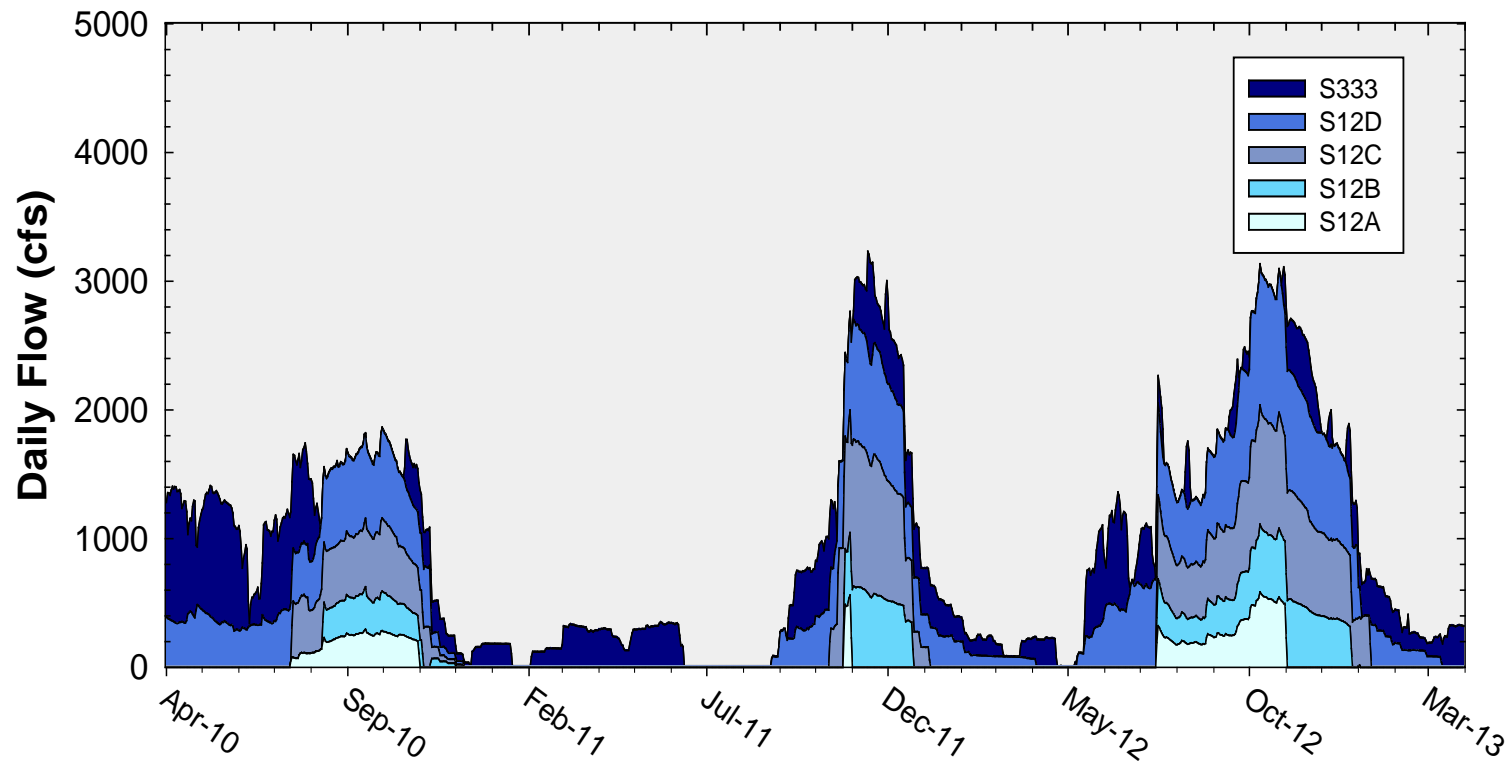
TP Concentration Compliance Interim Tracking for January 2013 – March 2013

(October 2012 – March 2013 Flow Data for S12s are Provisional.)

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
Feb 2012 - Jan 2013	879.3	7.8	8.5	44.3	28.0
Mar 2012 - Feb 2013	882.0	7.8	8.5	44.3	24.0
Apr 2012 - Mar 2013	889.5	7.7	8.5	44.1	20.0

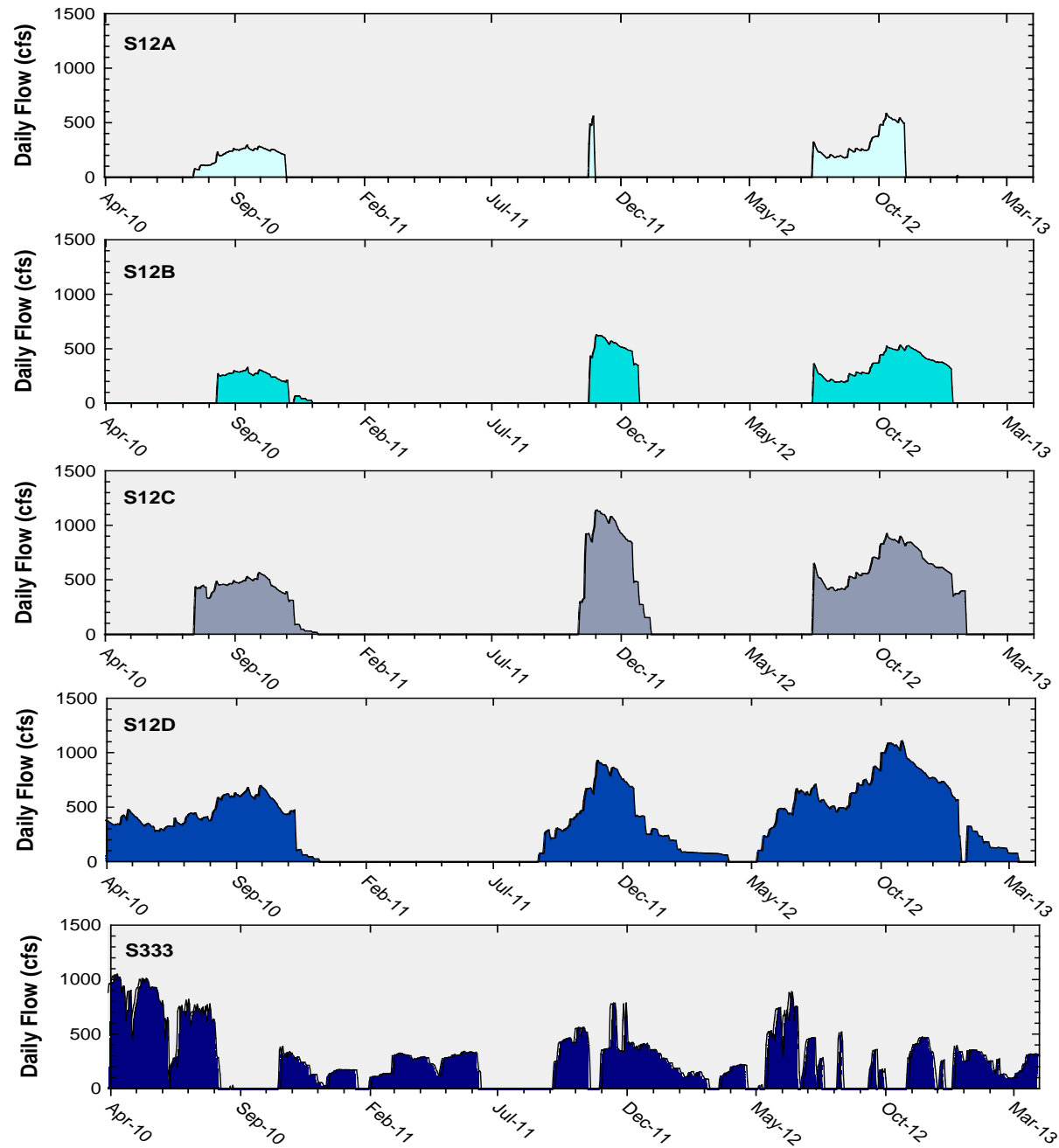
Shark River Slough Daily Flows

(October 2012 – March 2013 Flow Data for S12s are Provisional)

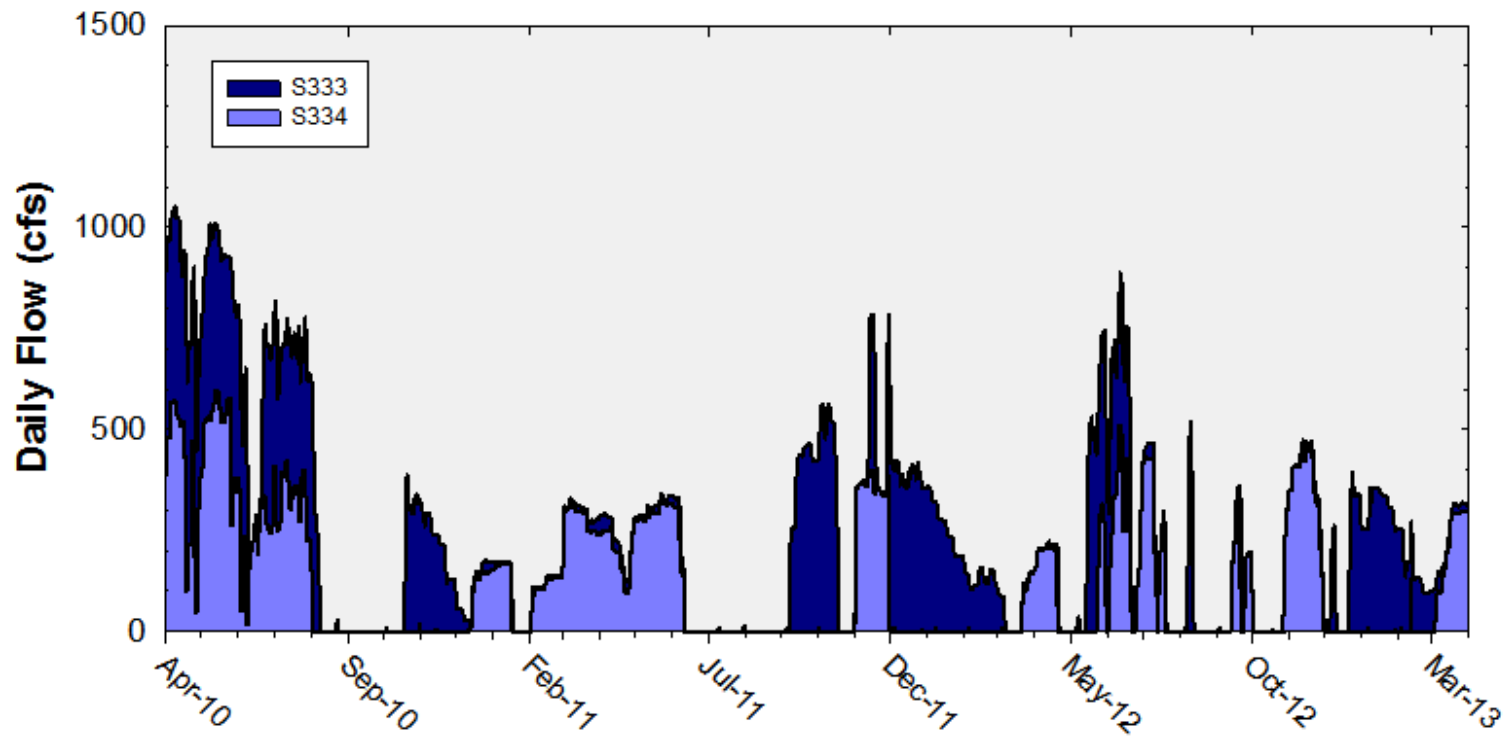


Daily Flows at individual inflow structures to Shark River Slough

(October 2012 – March 2013 Flow Data for S12s are Provisional)



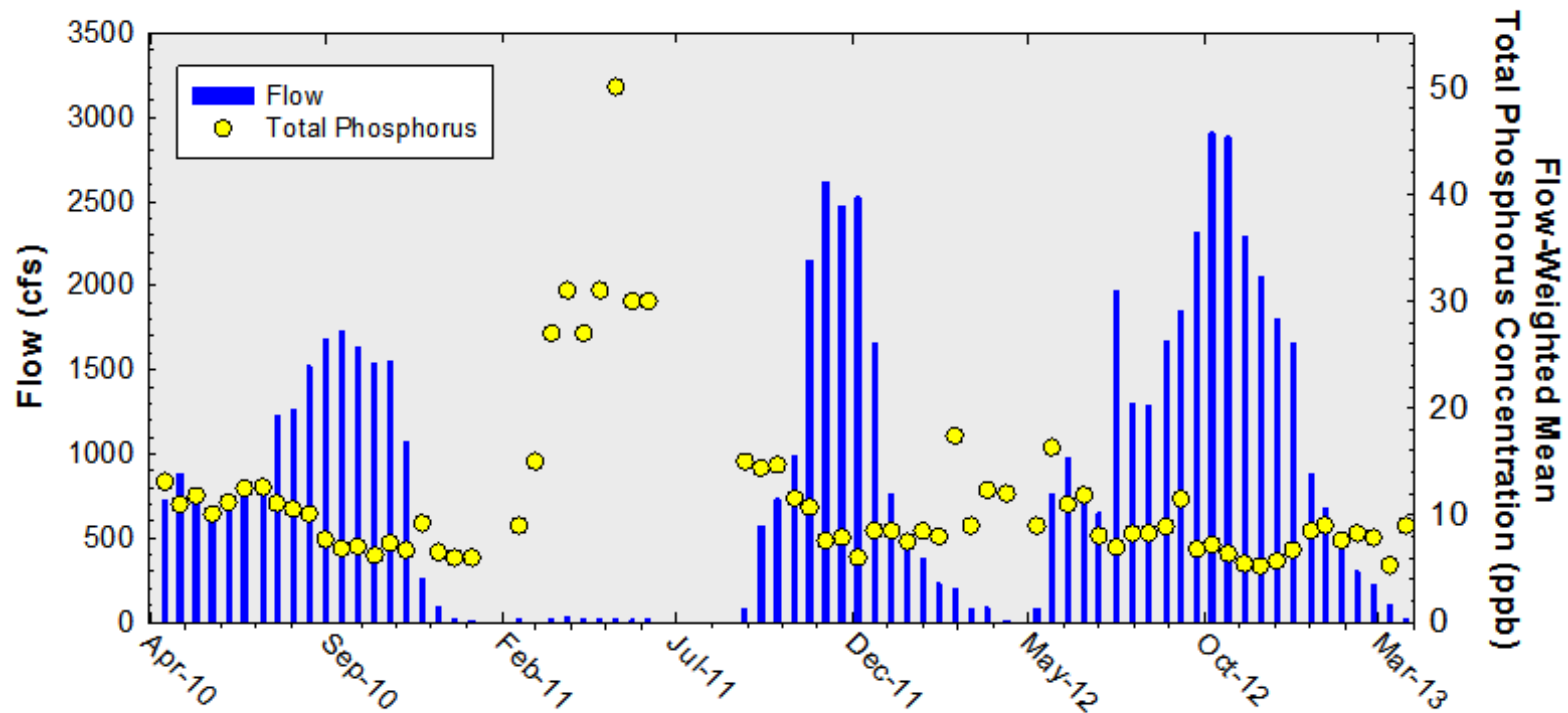
Daily Flows at S333 and S334



Shark River Slough

Sampling Event Flow and FWMC

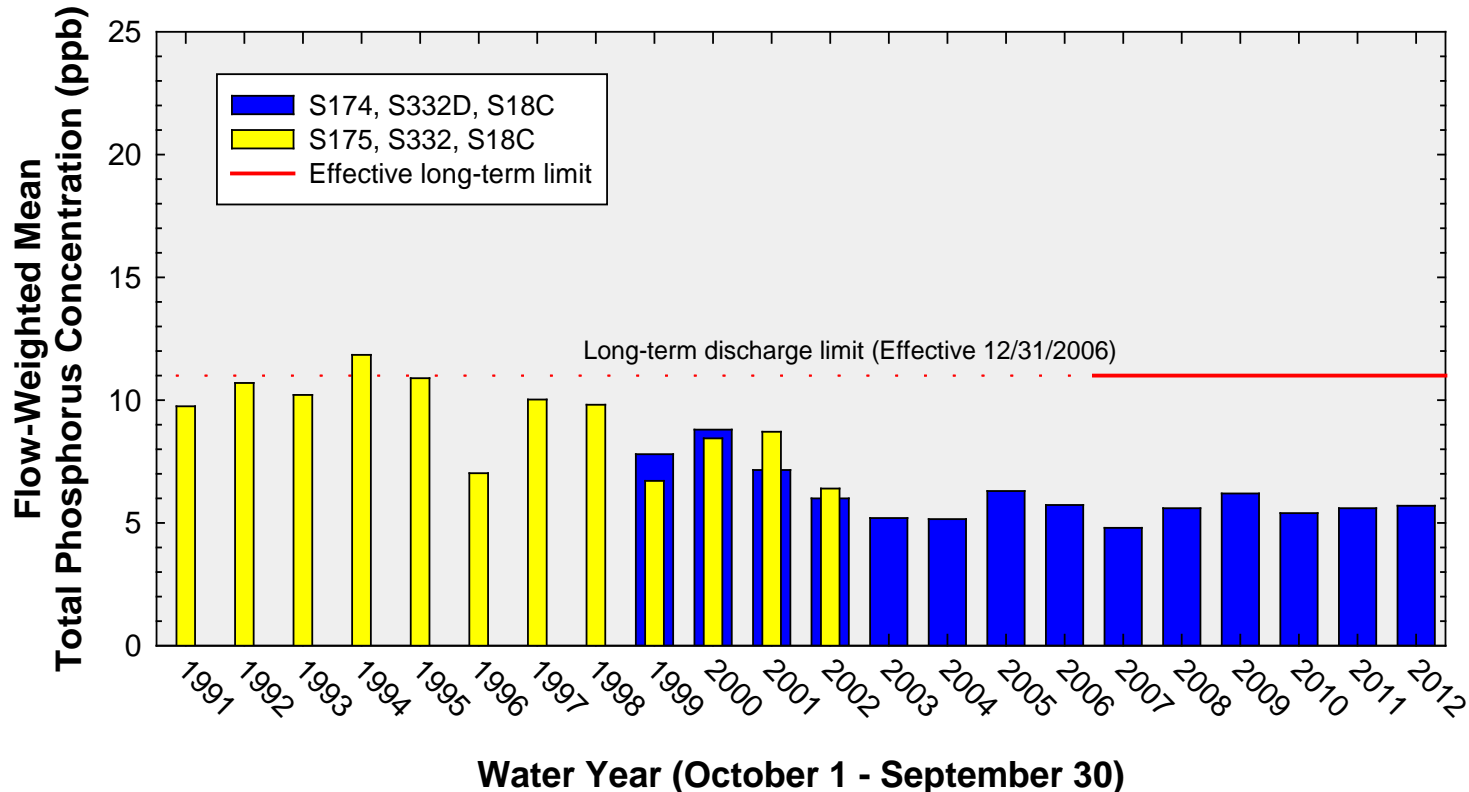
(October 2012 – March 2013 Flow Data for S12s are Provisional)



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

Annual Flow-Weighted Mean Concentrations

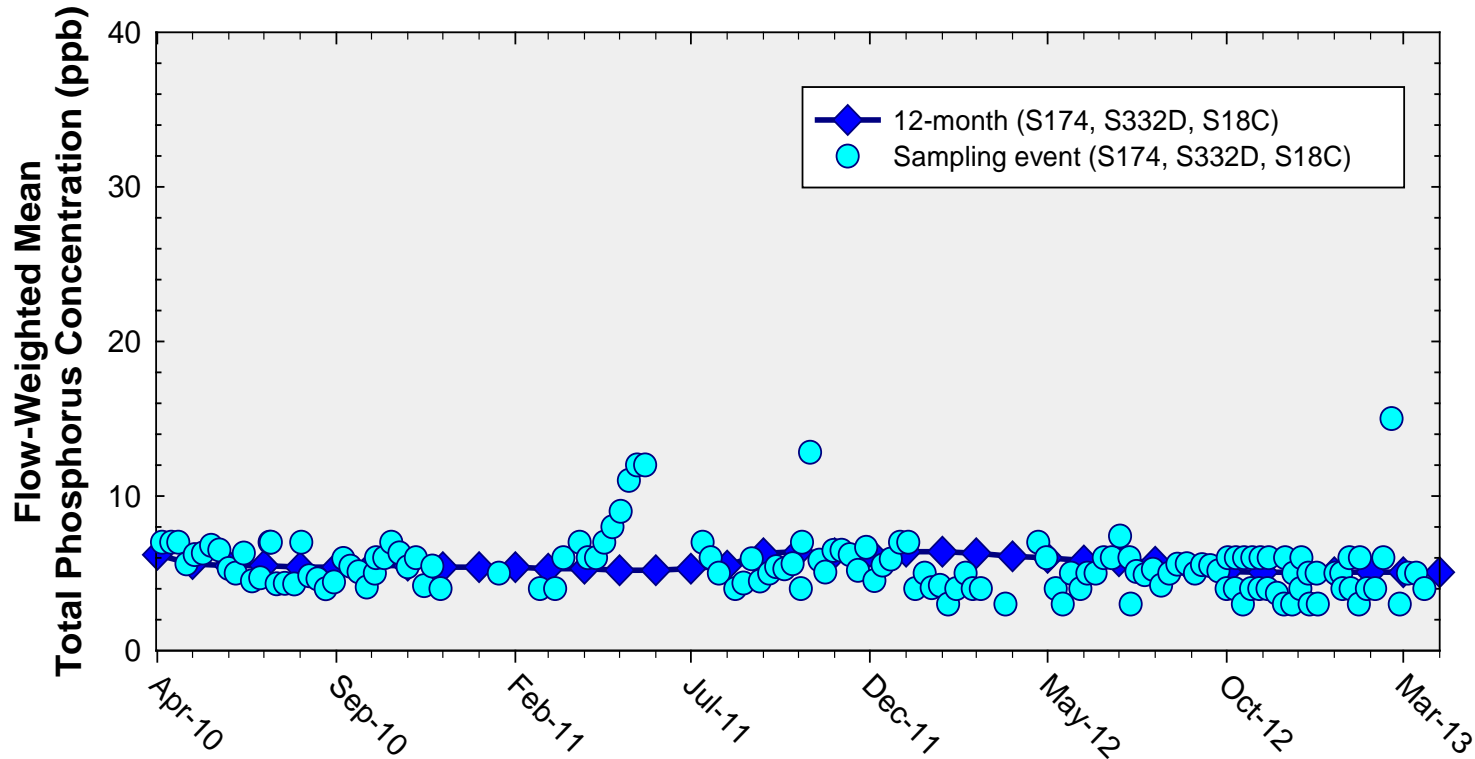
Inflows to the ENP through Taylor Slough and Coastal Basins



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

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

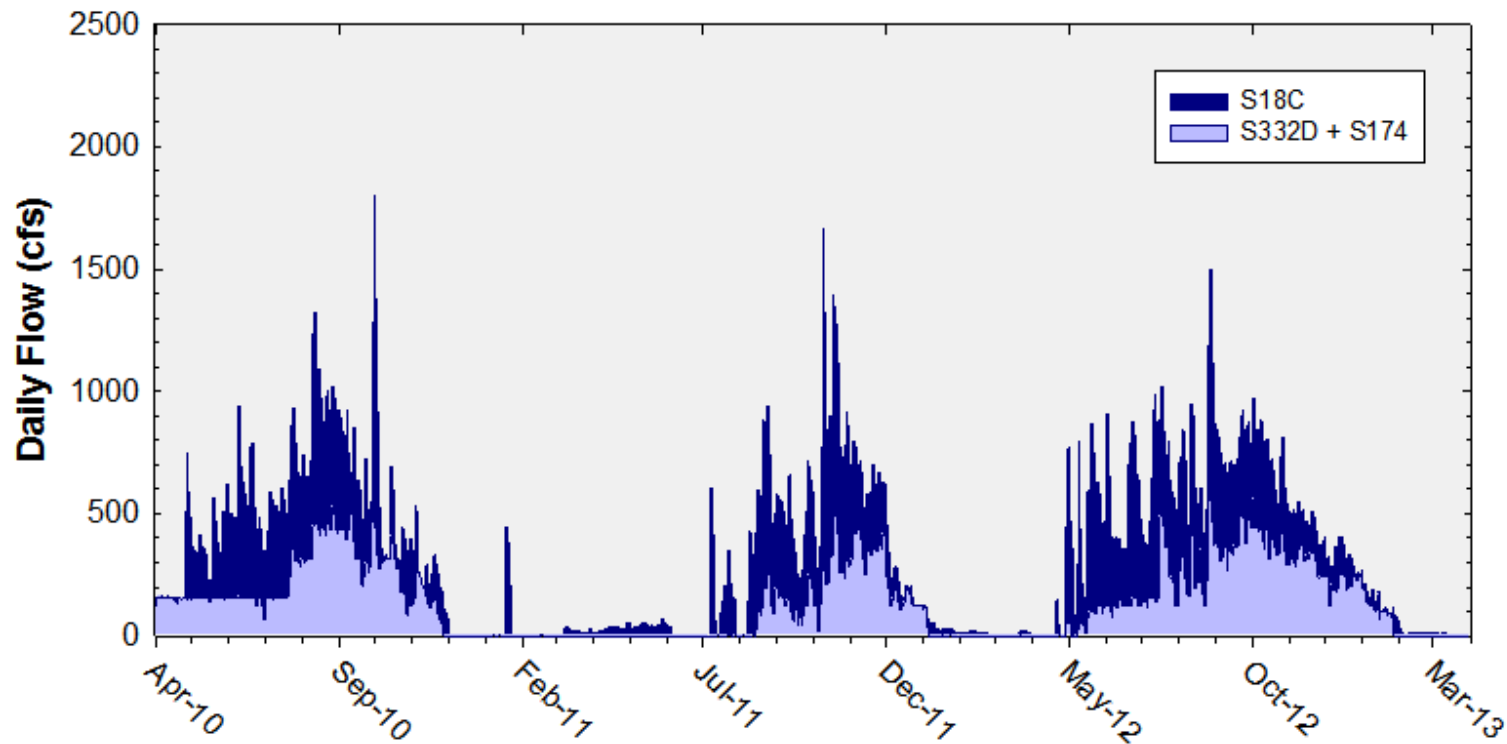
Taylor Slough and the Coastal Basins

TP Concentration Compliance Tracking

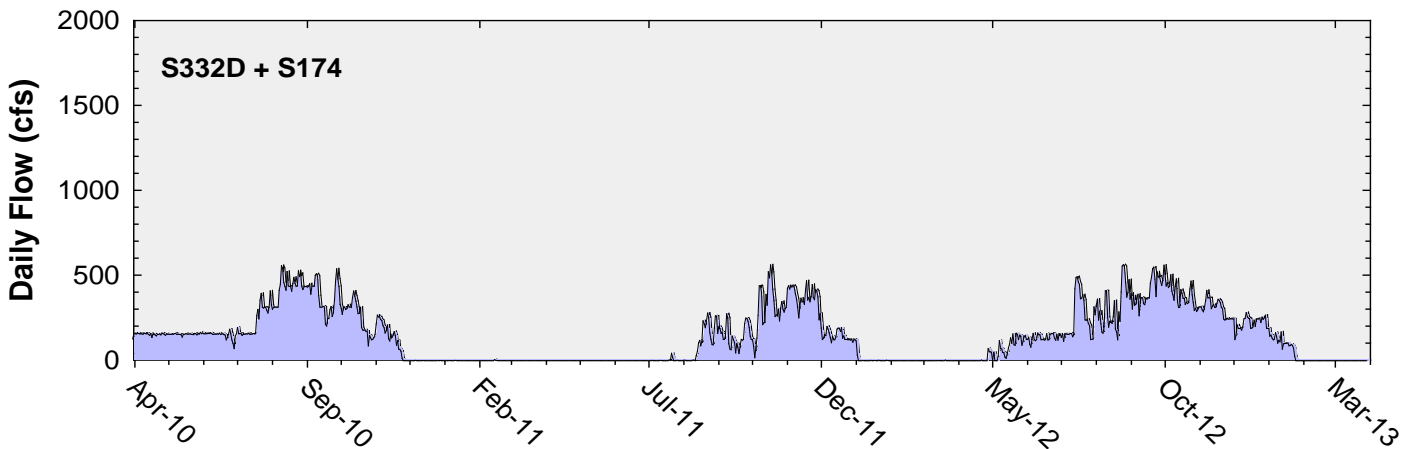
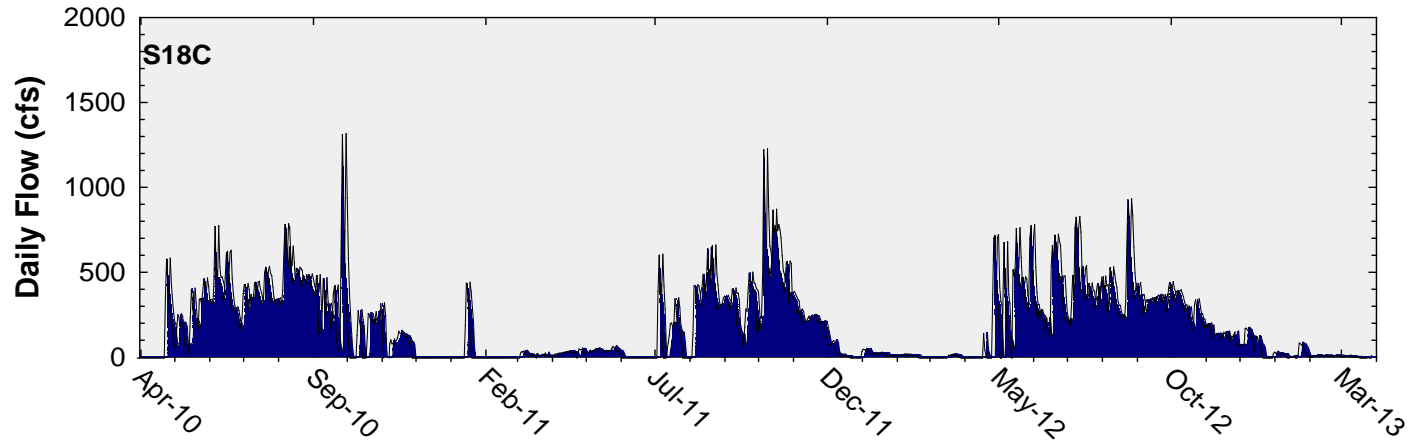
for January 2013 – March 2013

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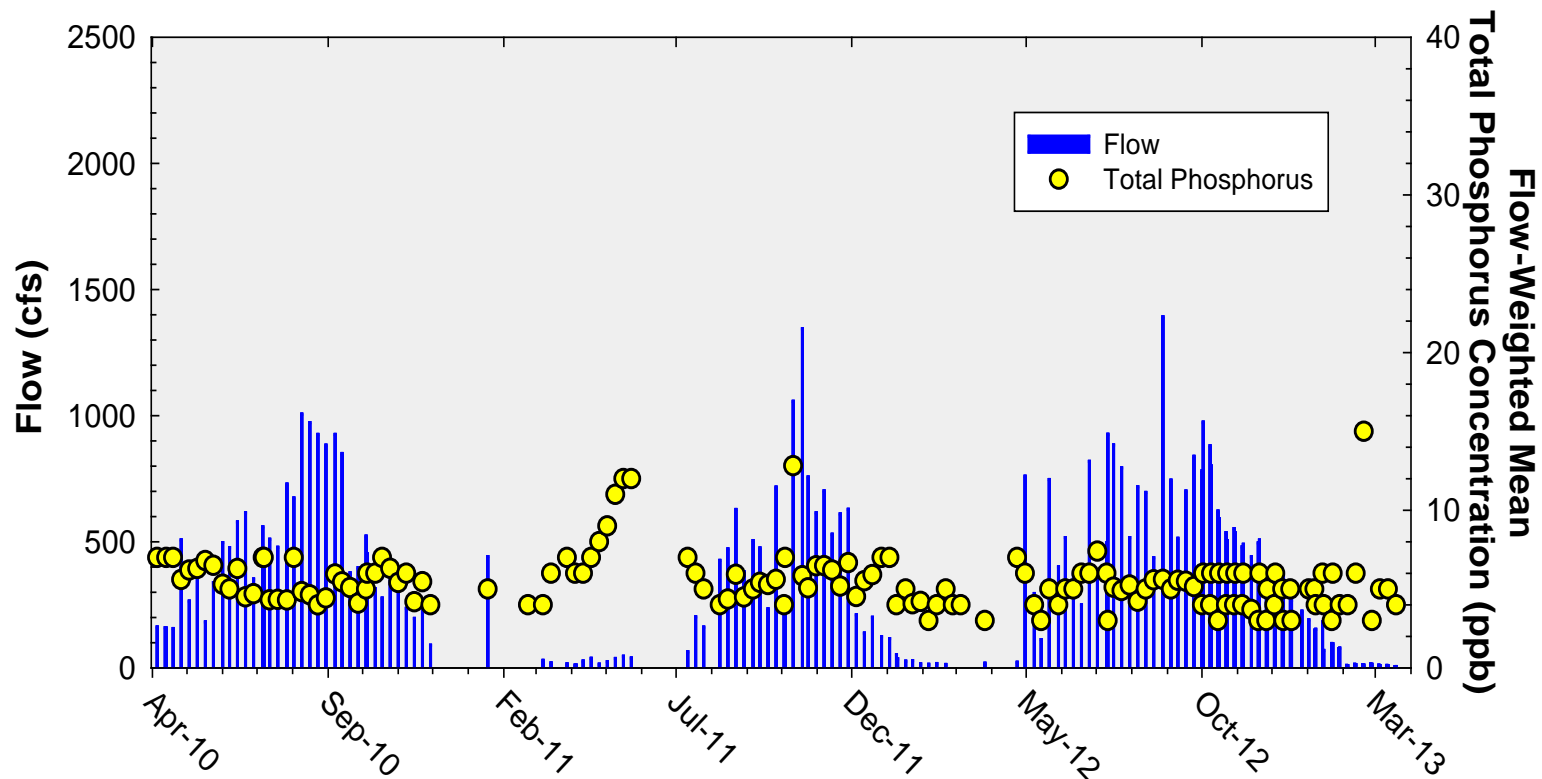
Daily Flows at Taylor Slough and Coastal Basins structures into the ENP



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

