

Technical Oversight Committee

November 29, 2011

SETTLEMENT AGREEMENT REPORT

July - September 2011

Stuart Van Horn

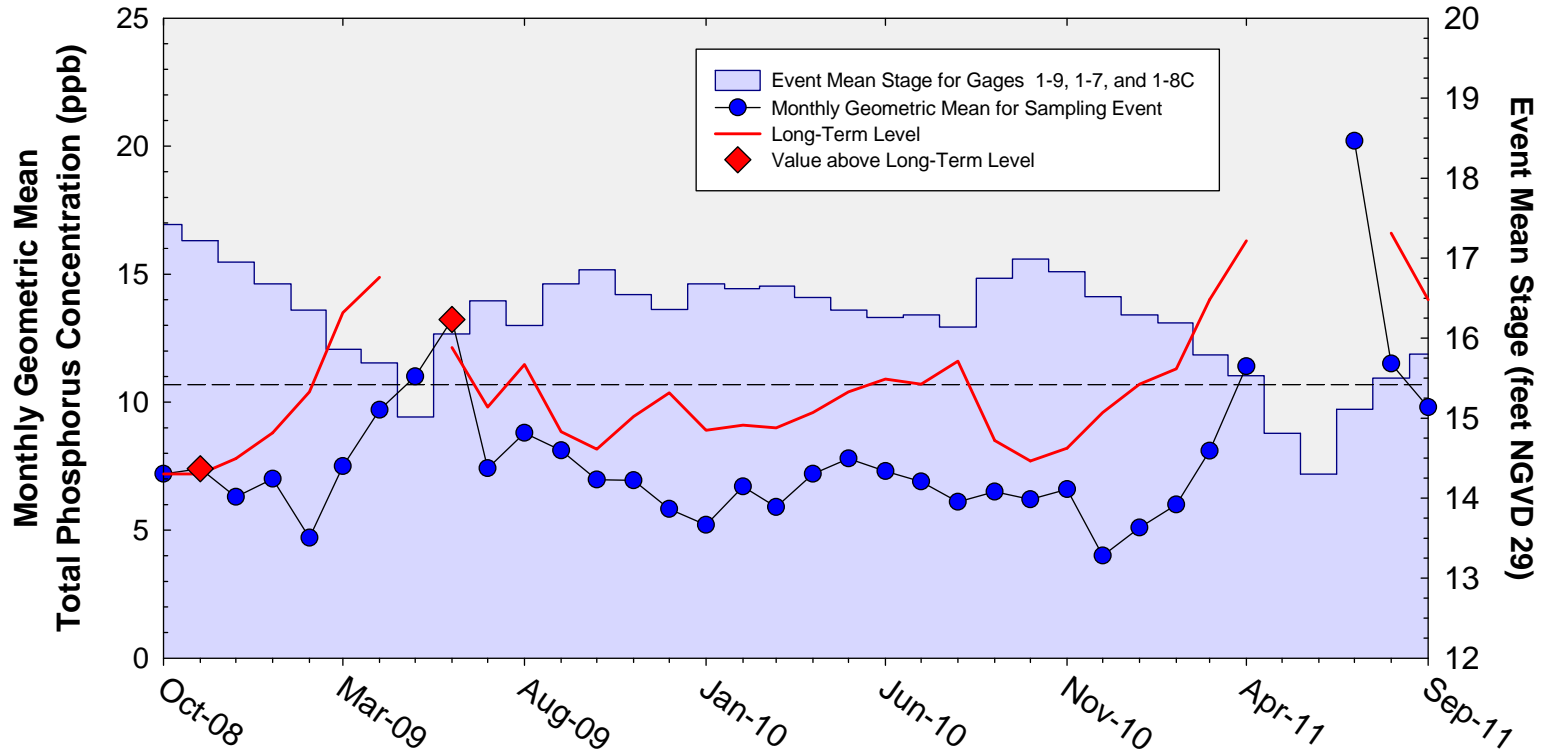
Section Leader, Compliance Assessment and Reporting Section
Water Quality Bureau

SUMMARY

Month	Geometric Mean TP Concentration (ppb)	Long-term Level (ppb)	Mean Stage (ft NGVD 29)	Number of Samples	
Arthur R. Marshall Loxahatchee National Wildlife Refuge					
Jul 2011	20.2	N/A	15.11	4	
Aug 2011	11.5	16.6	15.50	8	
Sep 2011	9.8	14.0	15.80	11	
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					
Jul 2011	399.7	8.0	11.1	58.6	47.6
Aug 2011	311.9	7.4	11.6	61.7	47.4
Sep 2011	247.0	9.2	12.0	64.1	57.9
Everglades National Park – Taylor Slough and Coastal Basins					
Jul 2011	156.3	5.3	11.0	53.1	8.8
Aug 2011	126.4	5.5	11.0	53.1	9.4
Sep 2011	111.4	5.6 (5.5*)	11.0	53.1	9.4 (11.4*)

* Including flagged data

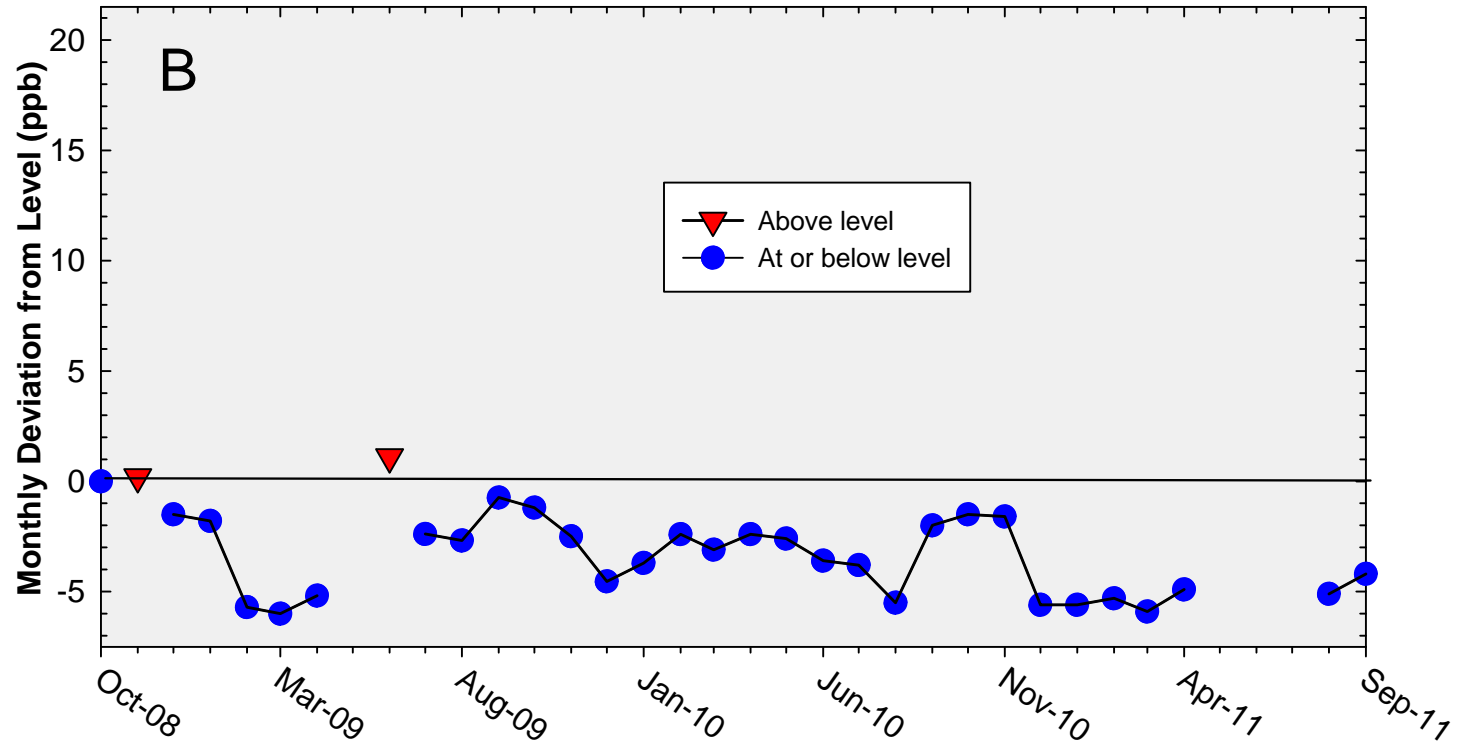
A.R.M Loxahatchee National Wildlife Refuge Monthly Total Phosphorus Geometric Mean Concentrations



Note: Long-term level was not applicable for May 2009, May 2011, June 2011, and July 2011 (average stage < 15.42 ft).

A.R.M Loxahatchee National Wildlife Refuge

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



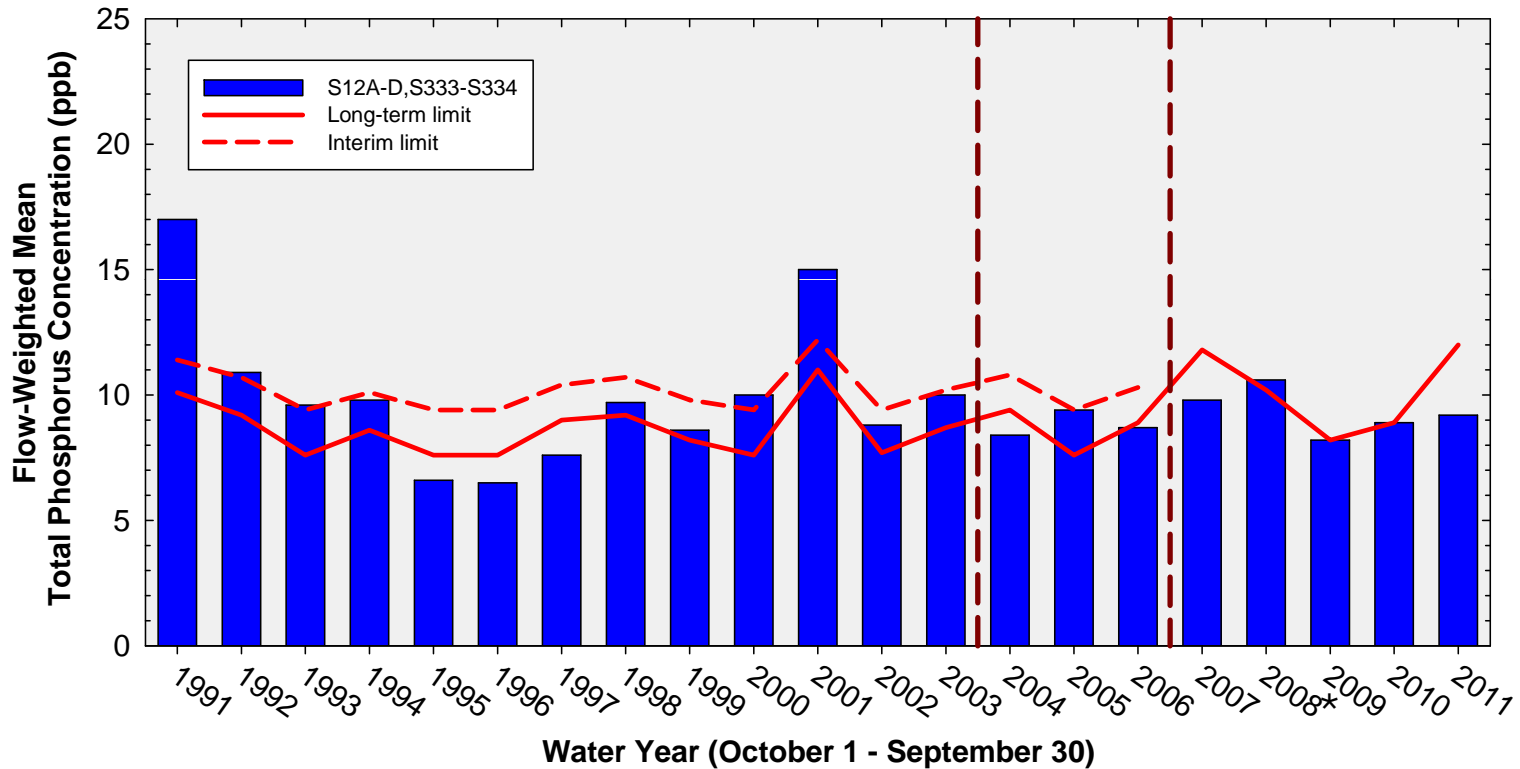
Note: Long-term level was not applicable for May 2009, May 2011, June 2011, and July 2011 (average stage < 15.42 ft).

Refuge TP Compliance Tracking for July 2011 – October 2011

Month	Geometric Mean TP Concentration (ppb)	Long-Term Level (ppb) Effective 12/31/2006	Average Stage (ft NGVD 29)	Number of Samples
Jul-2011	20.2	N/A	15.11	4
Aug-2011	11.5	16.6	15.50	8
Sep-2011	9.8	14.0	15.80	11
Oct-2011	7.4	12.1	16.06	11

Note: October 2011 values are preliminary.

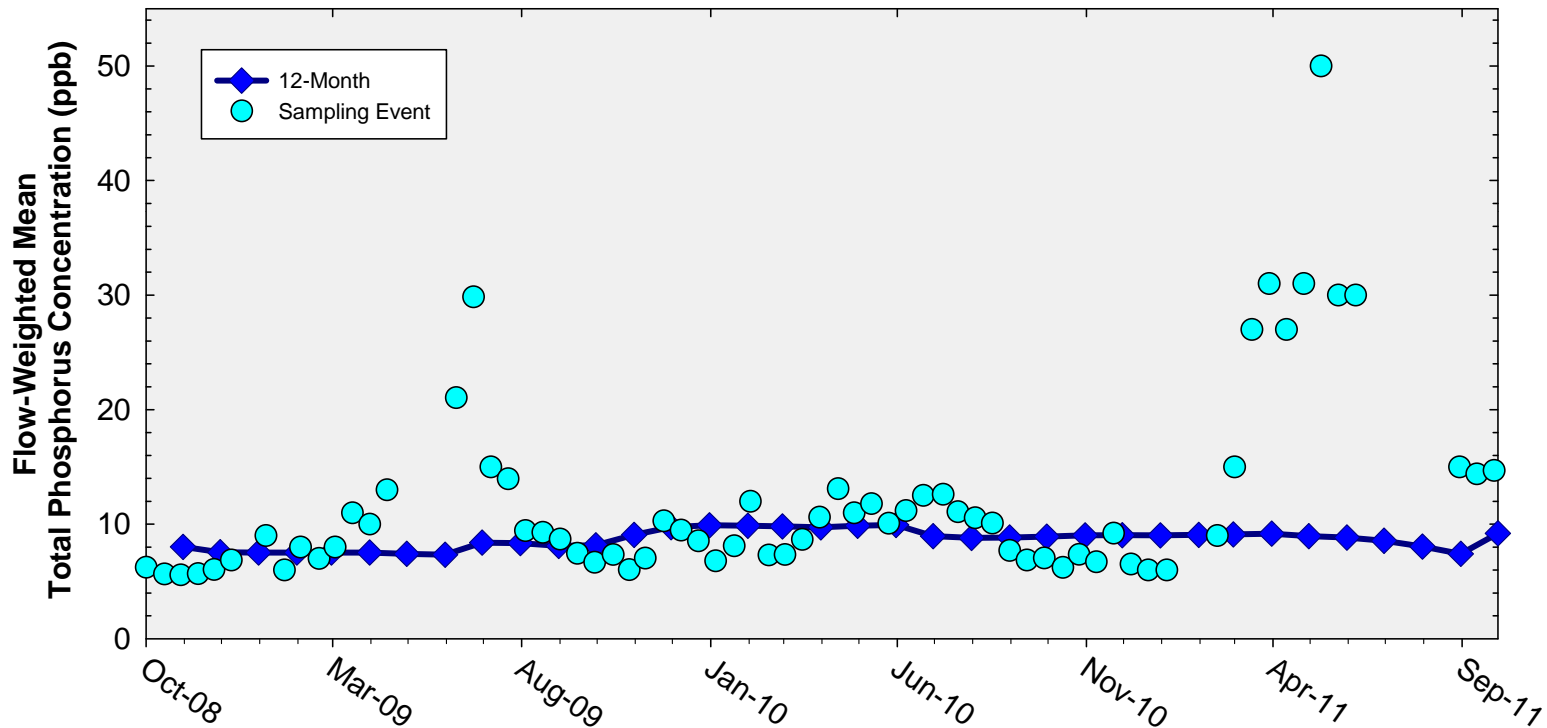
Annual Flow-weighted Mean Concentrations Inflows to ENP through Shark River Slough



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

*TOC determined 2008 exceedance did not constitute a violation of the long-term limit.

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

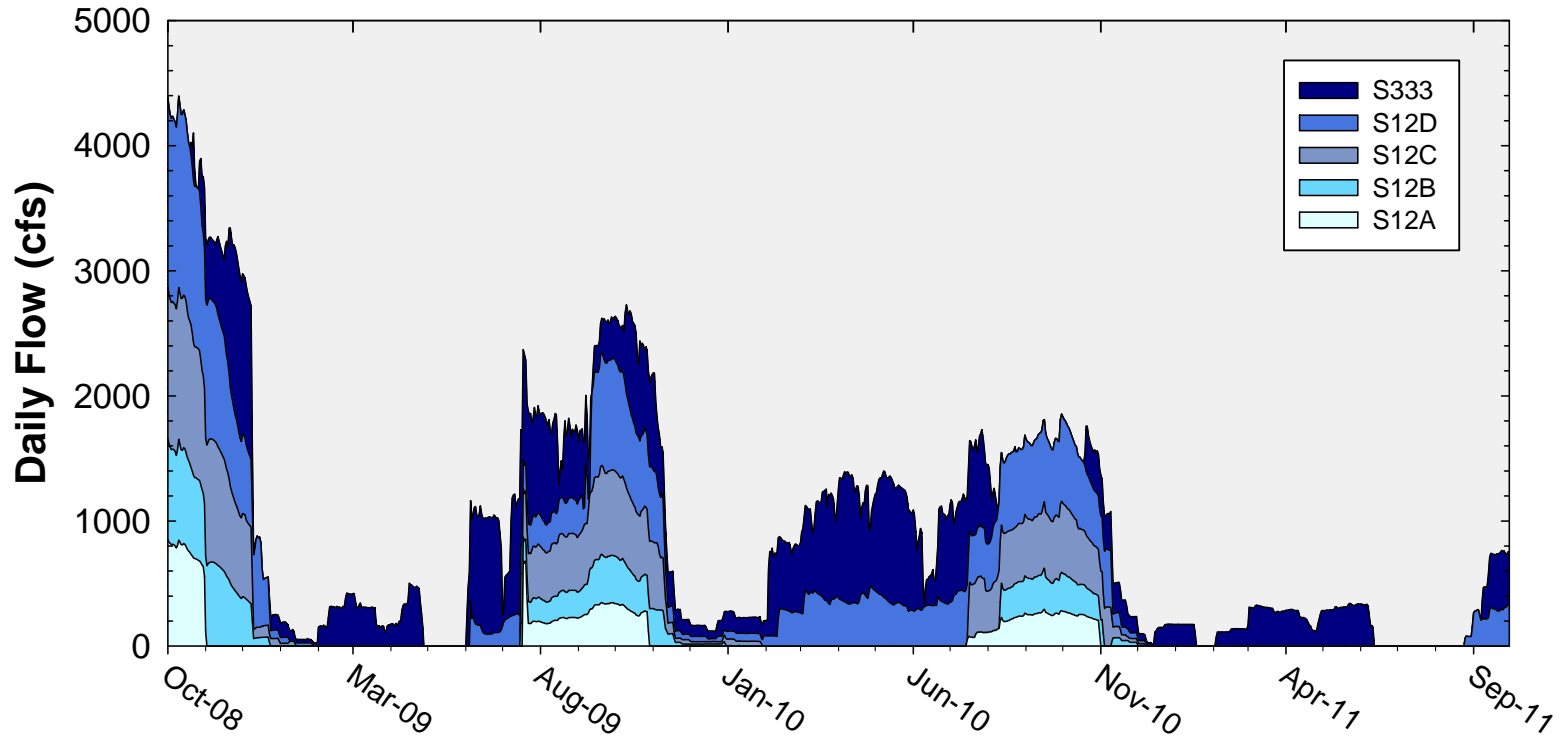


12-month FWMC at the end of each month and the composite TP concentration for each sampling event

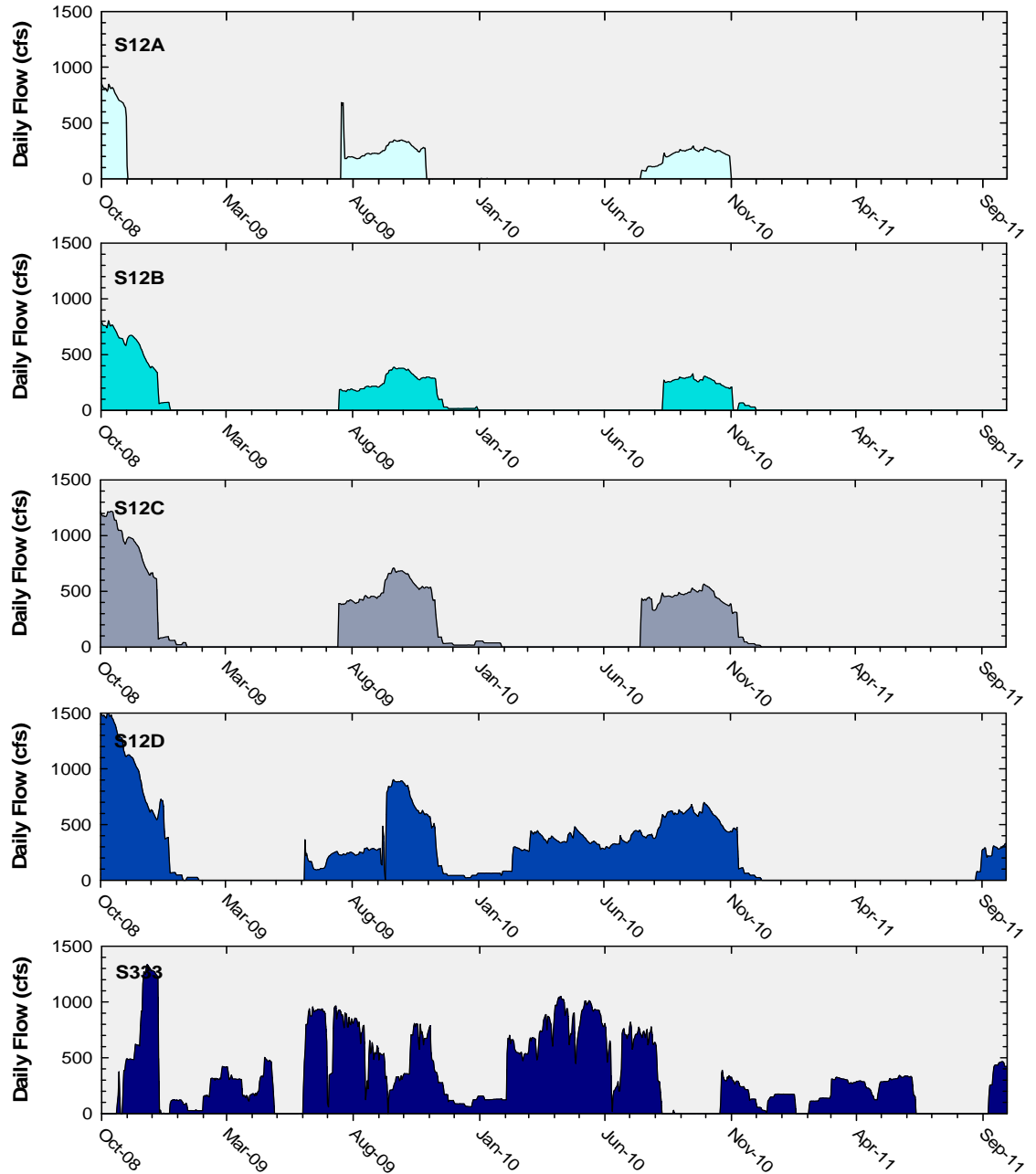
Shark River Slough TP Concentration Compliance Tracking for July 2011 – September 2011

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
Aug 2010 - Jul 2011	399.7	8.0	11.1	58.6	47.6
Sep 2010 - Aug 2011	311.9	7.4	11.6	61.7	47.4
<i>Oct 2010 - Sep 2011</i>	<i>247.0</i>	<i>9.2</i>	<i>12.0</i>	<i>64.1</i>	<i>57.9</i>

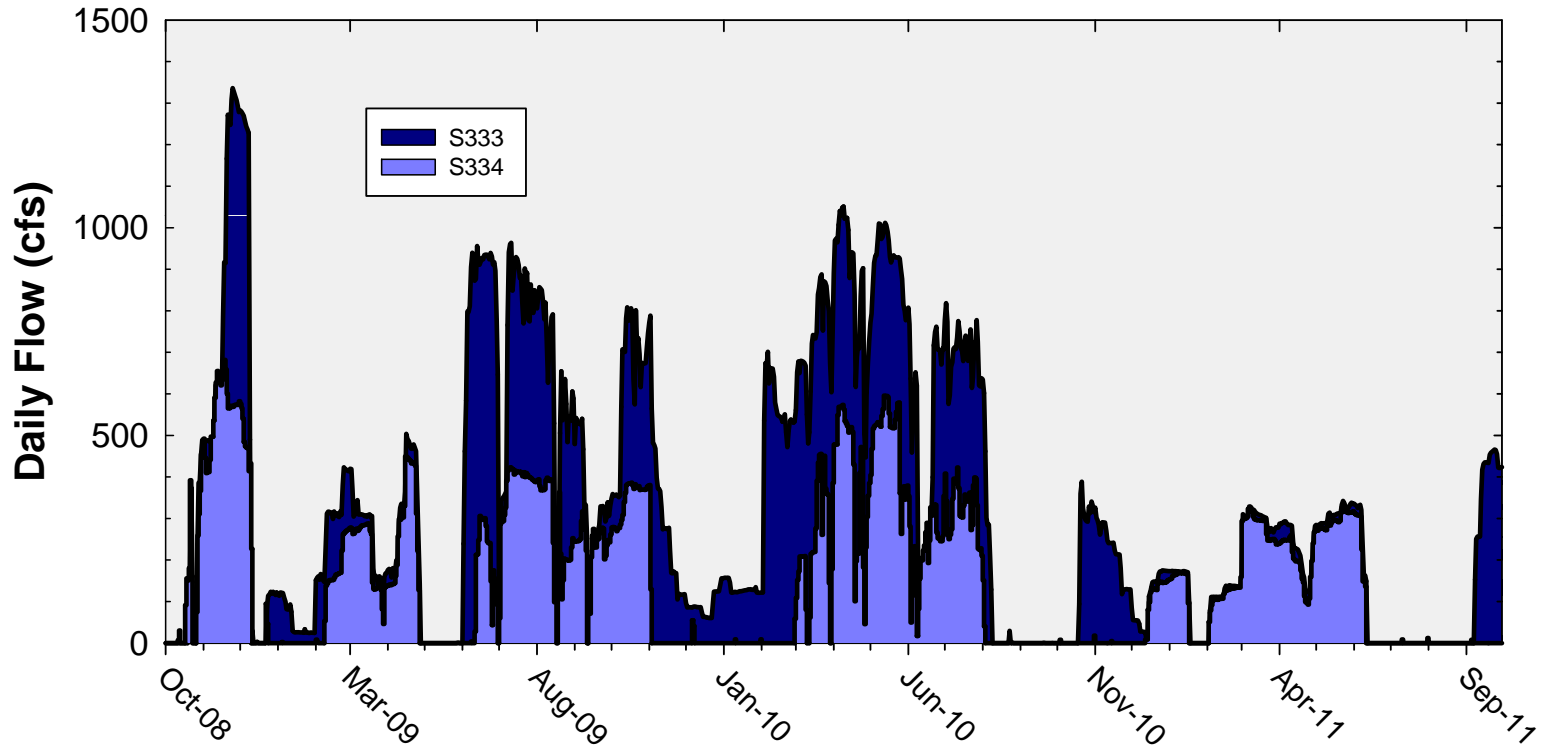
Shark River Slough Daily Flows



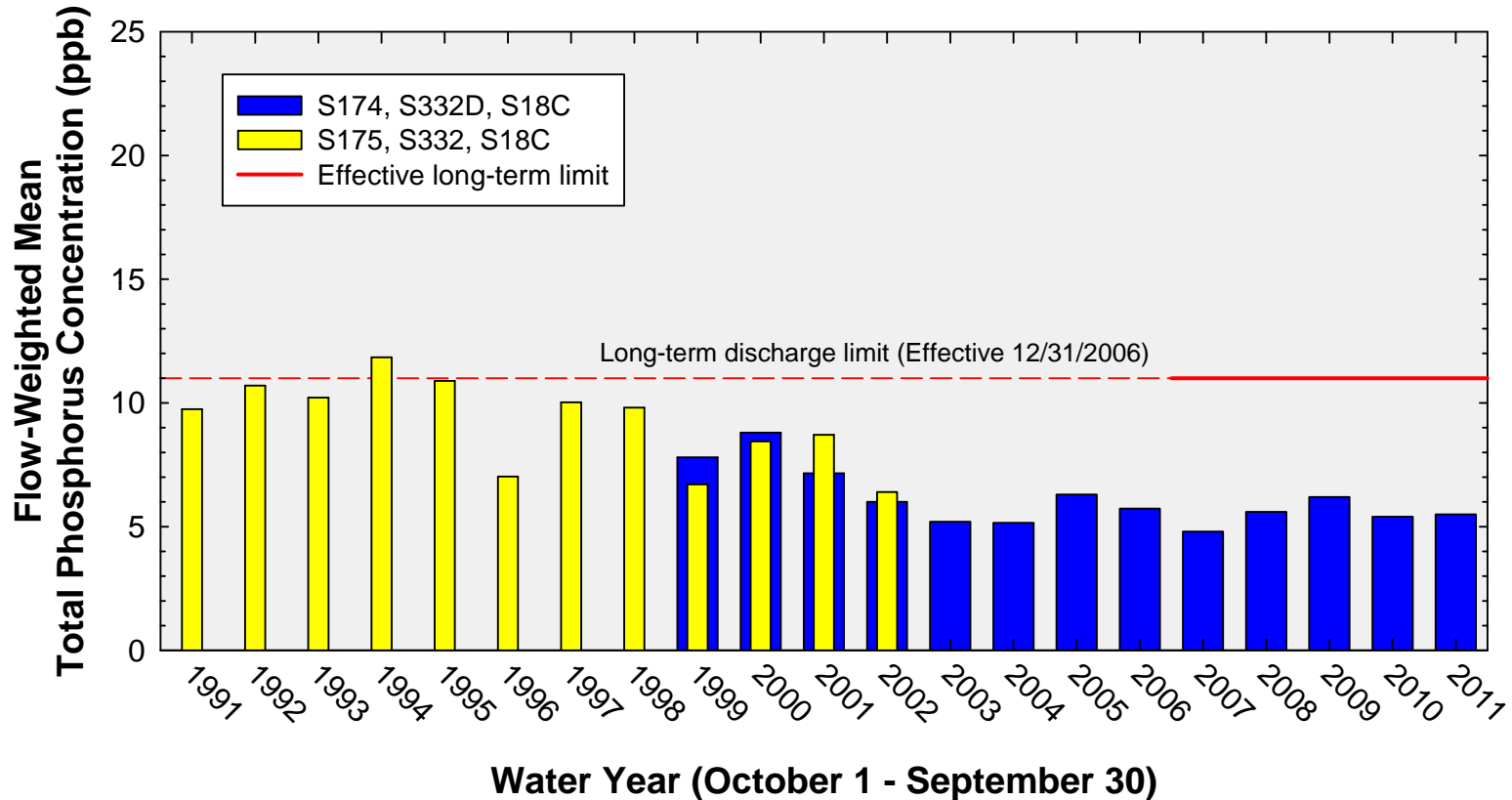
Daily Flows at individual inflow structures to Shark River Slough



Daily Flows at S333 and S334

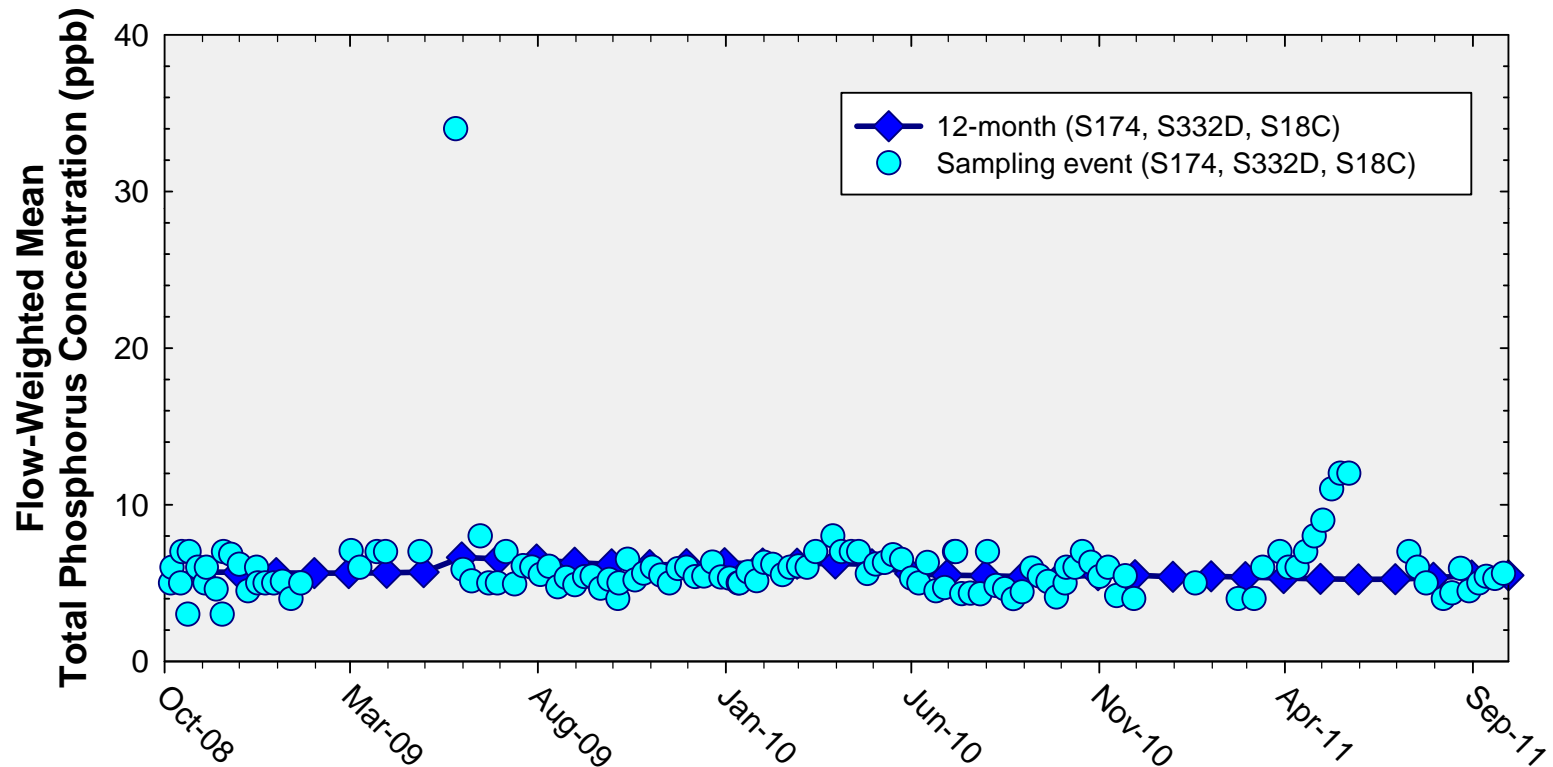


Annual Flow-Weighted Mean Concentrations Inflows to the ENP



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



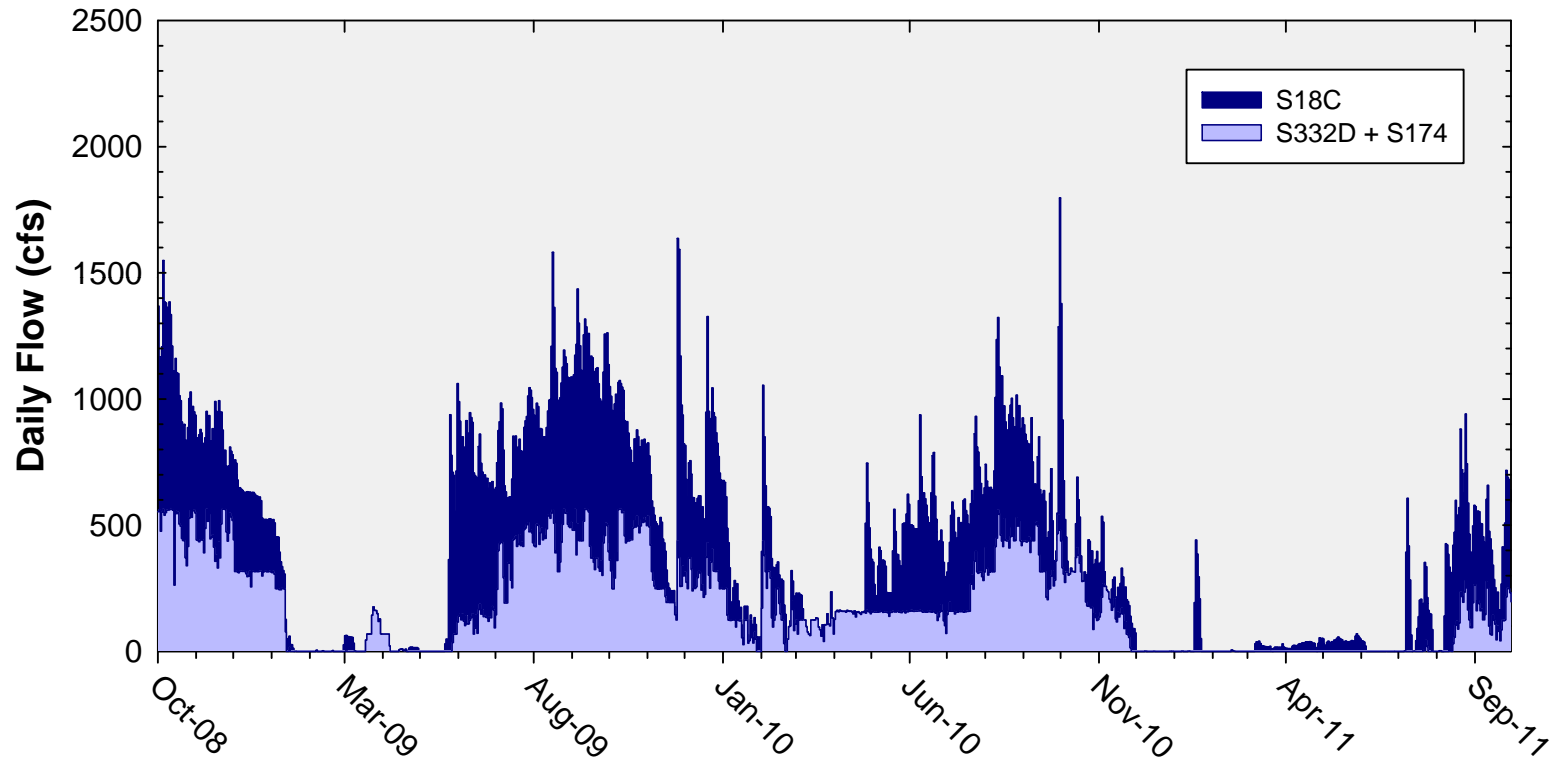
The 12-month FWMC at the end of each month and the composite TP concentration for each sampling event

Taylor Slough and the Coastal Basins TP Concentration Compliance Tracking for July 2011 – September 2011

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
Aug 2010 - Jul 2011	156.3	5.3	11.0	53.1	8.8
Sep 2010 - Aug 2011	126.4	5.5	11.0	53.1	9.4
<i>Oct 2010 - Sep 2011</i>	<i>111.4</i>	<i>5.6 (5.5*)</i>	<i>11.0</i>	<i>53.1</i>	<i>9.4 (11.4*)</i>

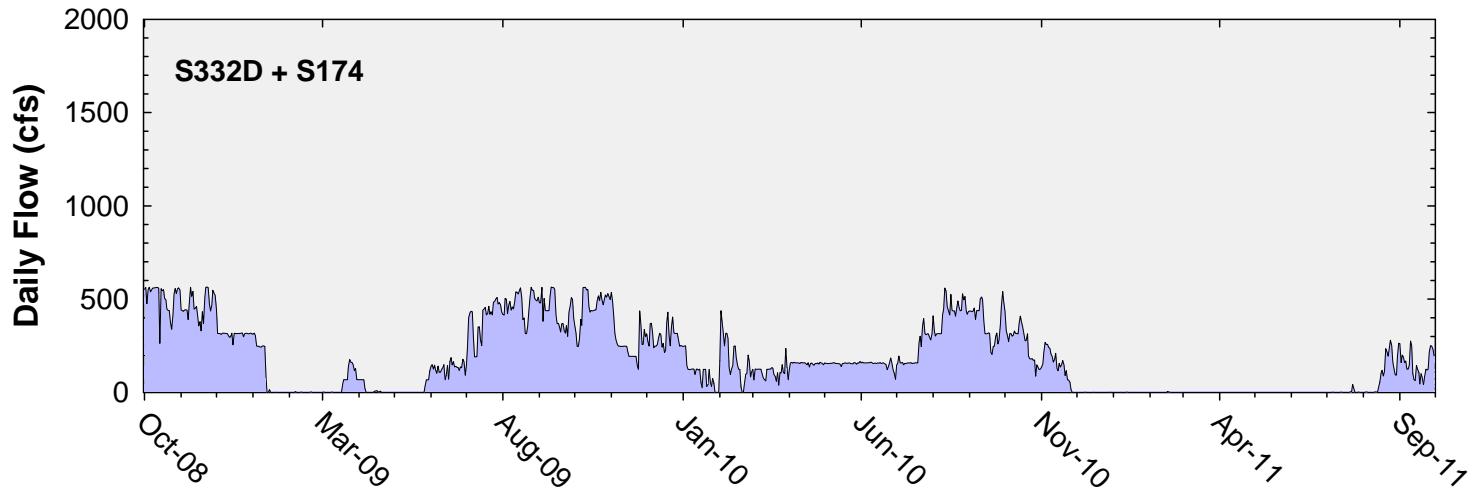
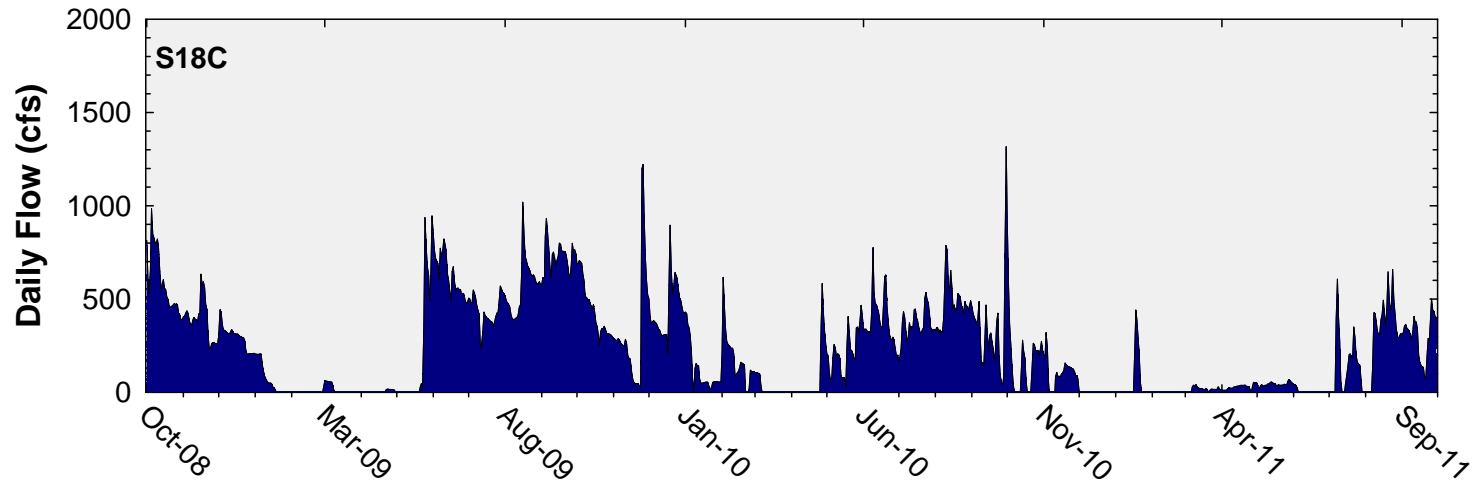
* Including flagged data

Taylor Slough and Coastal Basins Daily Flows

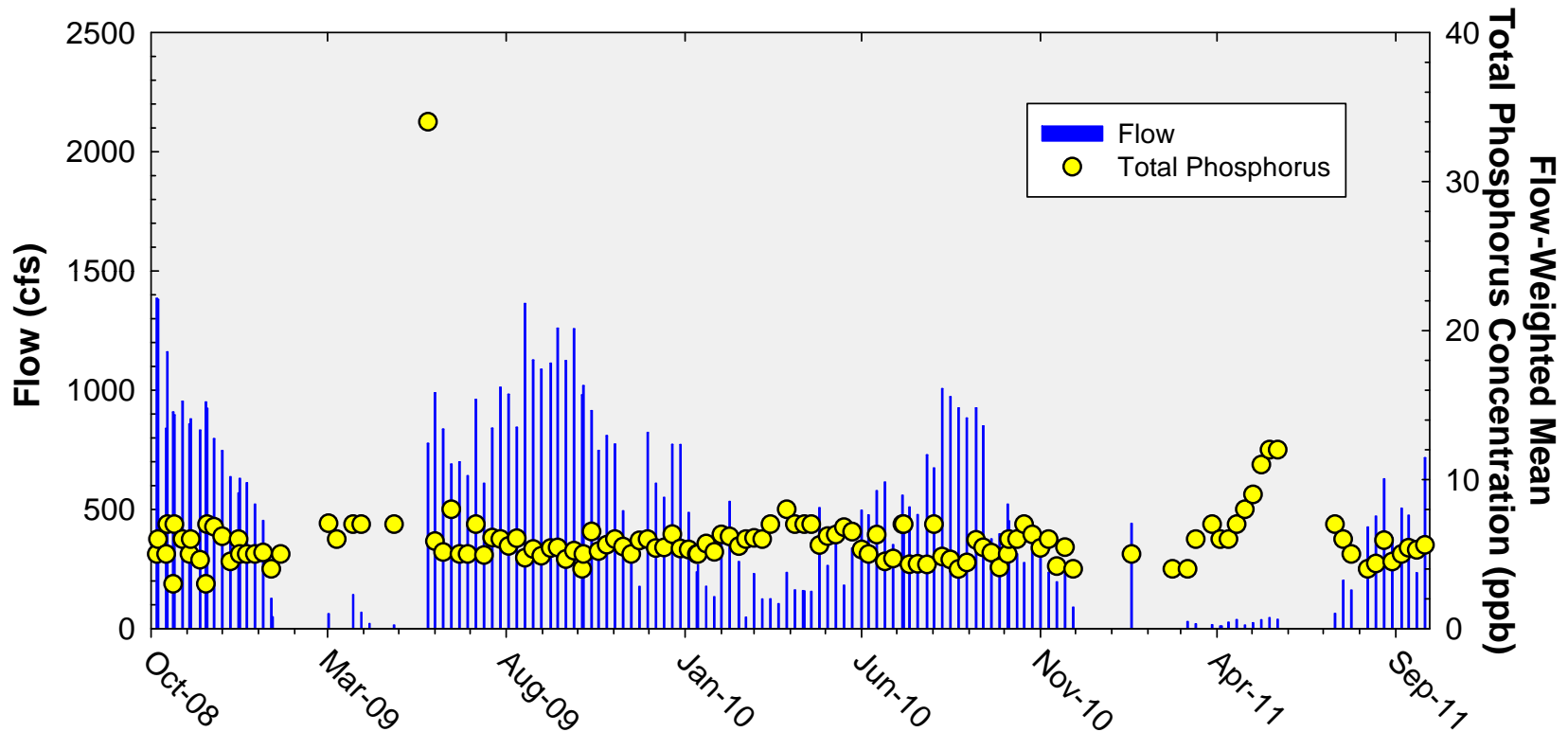


**Daily flows into Everglades National Park
through Taylor Slough and Coastal Basins**

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