

SETTLEMENT AGREEMENT REPORT

April – June 2015

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Bureau Chief

Water Quality Bureau

Water Resources Division

Technical Oversight Committee

October 27, 2015



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					
Apr 2015	7.6	11.0	16.25	12	
May 2015	8.2	13.1	15.91	10	
Jun 2015	9.7	15.3	15.65	5	
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					
Apr 2015	The quarterly flow and TP data for this table are posted separately on the TOC website. The annual compliance result for the 12-month flow-weighted mean TP concentration for the federal water year ending on September 30 will be published in this report when the final approved flow data are available.				
May 2015					
Jun 2015					
Everglades National Park – Taylor Slough and Coastal Basins					
Apr 2015	184.6	4.4	11.0	53.1	1.6
May 2015	185.2	4.4	11.0	53.1	1.5
Jun 2015	182.9	4.3	11.0	53.1	0.0

Refuge TP Compliance Tracking

For April 2015 – September 2015

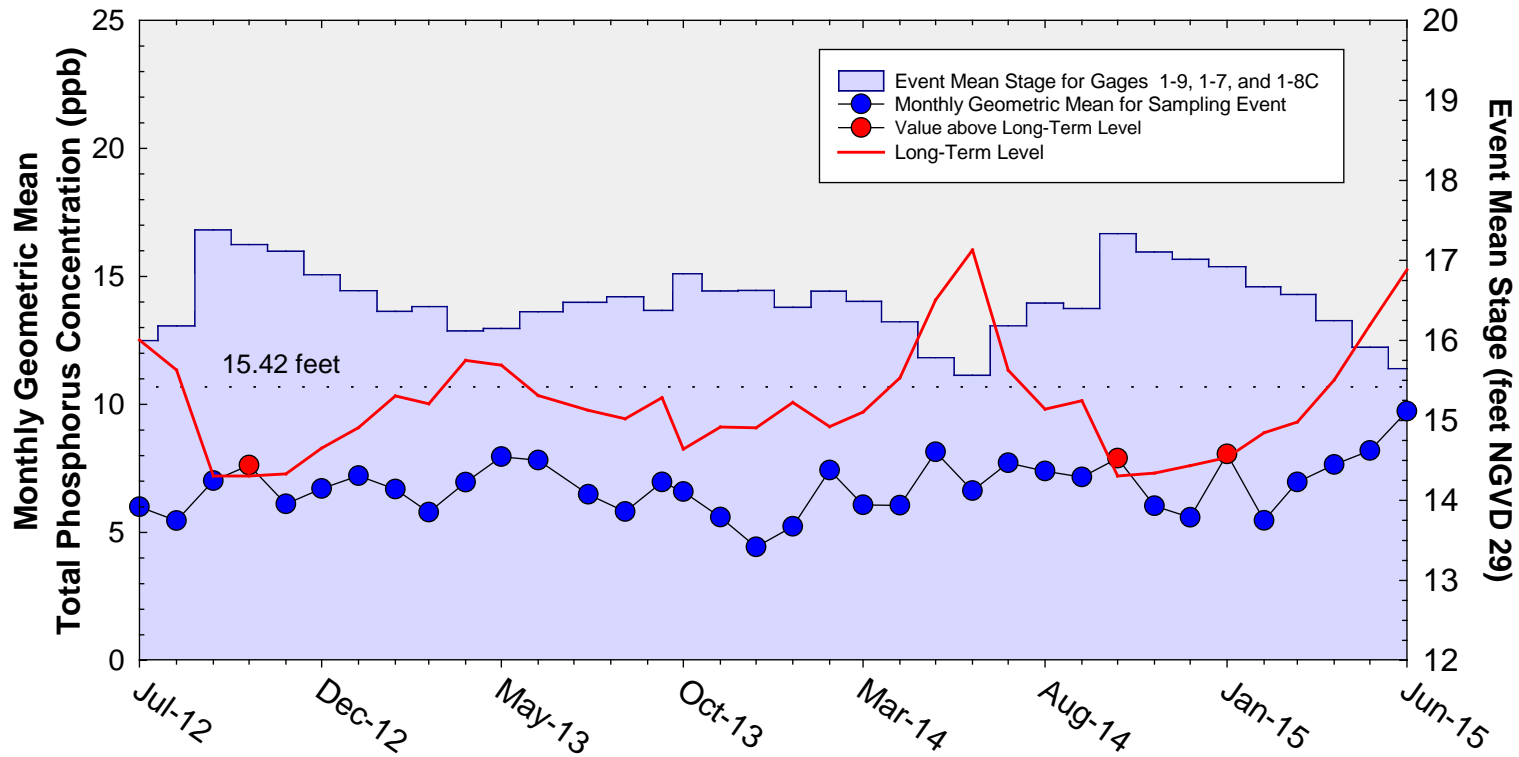
Month	Geometric Mean TP Concentration (ppb)	Long-Term Level (ppb) Effective 12/31/2006	Average Stage (feet NGVD 29)	Number of Samples
Apr-2015	7.6	11.0	16.25	12
May-2015	8.2	13.1	15.91	10
Jun-2015	9.7	15.3	15.65	5
Jul-2015	18.0	NA*	15.18	2
Aug-2015	12.3	14.1	15.78	8
Sep-2015	10.9	11.1	16.23	14

Note: July to September 2015 values are preliminary.

* The long-term level is not applicable (NA) when average stage is below 15.42 feet NGVD 29.

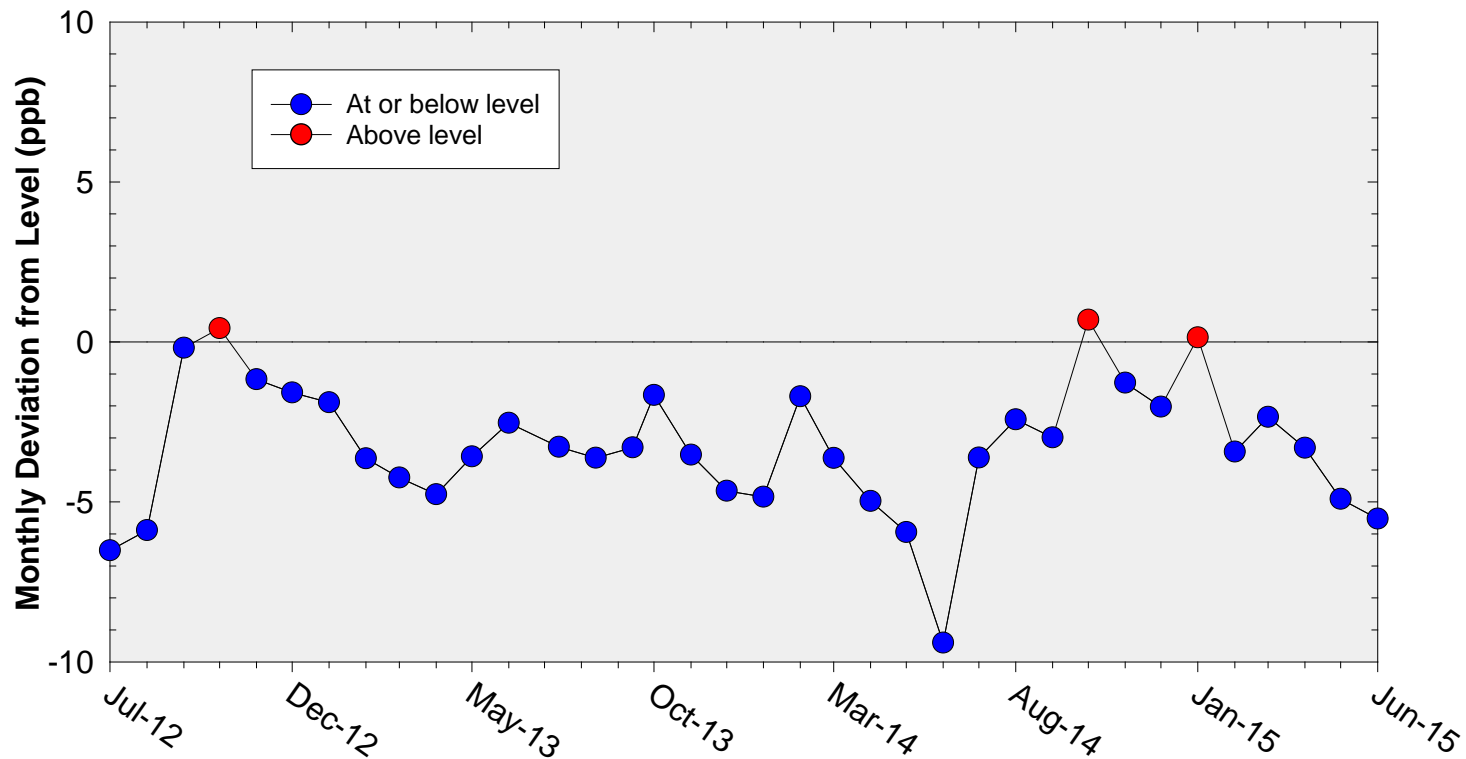
A.R.M Loxahatchee National Wildlife Refuge

Monthly Total Phosphorus Geometric Mean Concentrations



A.R.M Loxahatchee National Wildlife Refuge

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



Shark River Slough

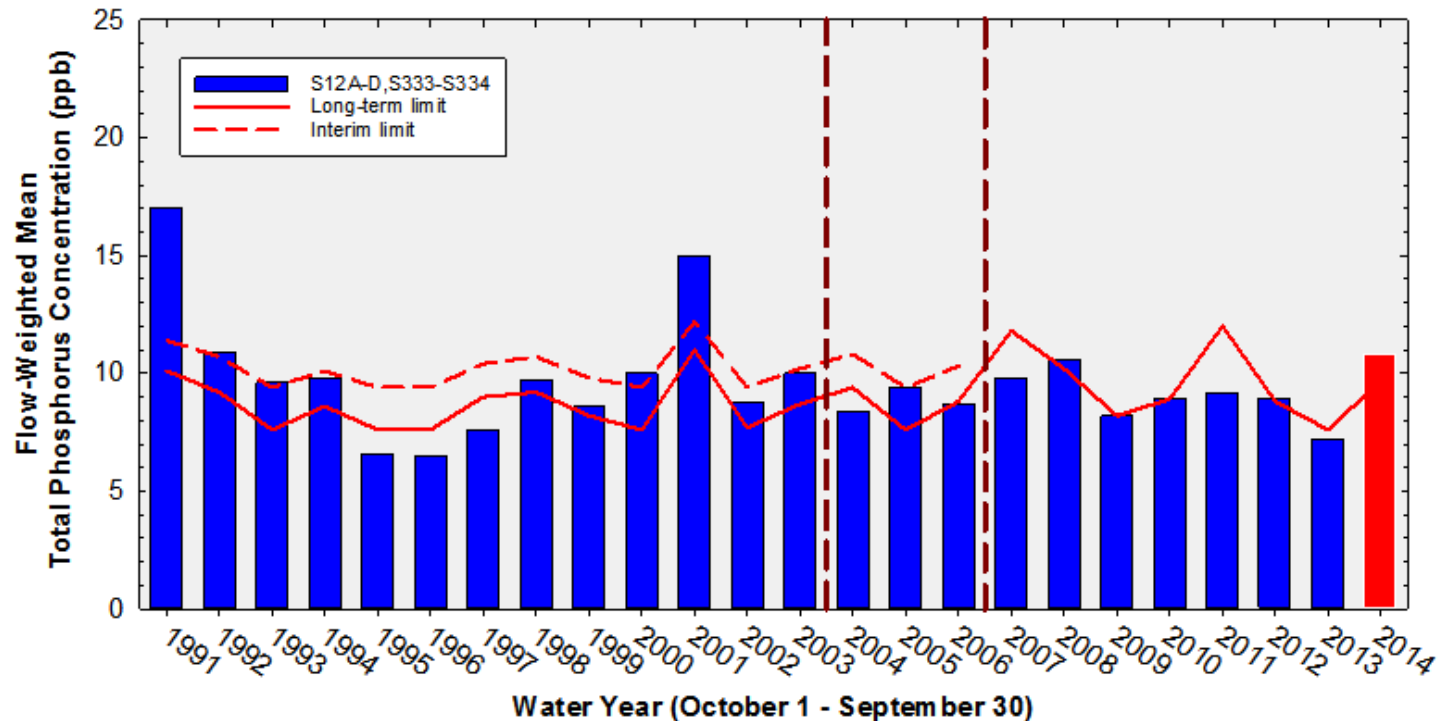
TP Concentration Compliance Interim Tracking for April 2015 – June 2015

(October 2014 – June 2015 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
May 2014 - Apr 2015	519.3	12.0	10.4	54.6	39.1
Jun 2014 - May 2015	502.3	12.0	10.5	55.2	33.3
Jul 2014 - Jun 2015	486.6	11.1	10.6	55.7	26.3

Note: All values are preliminary.

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

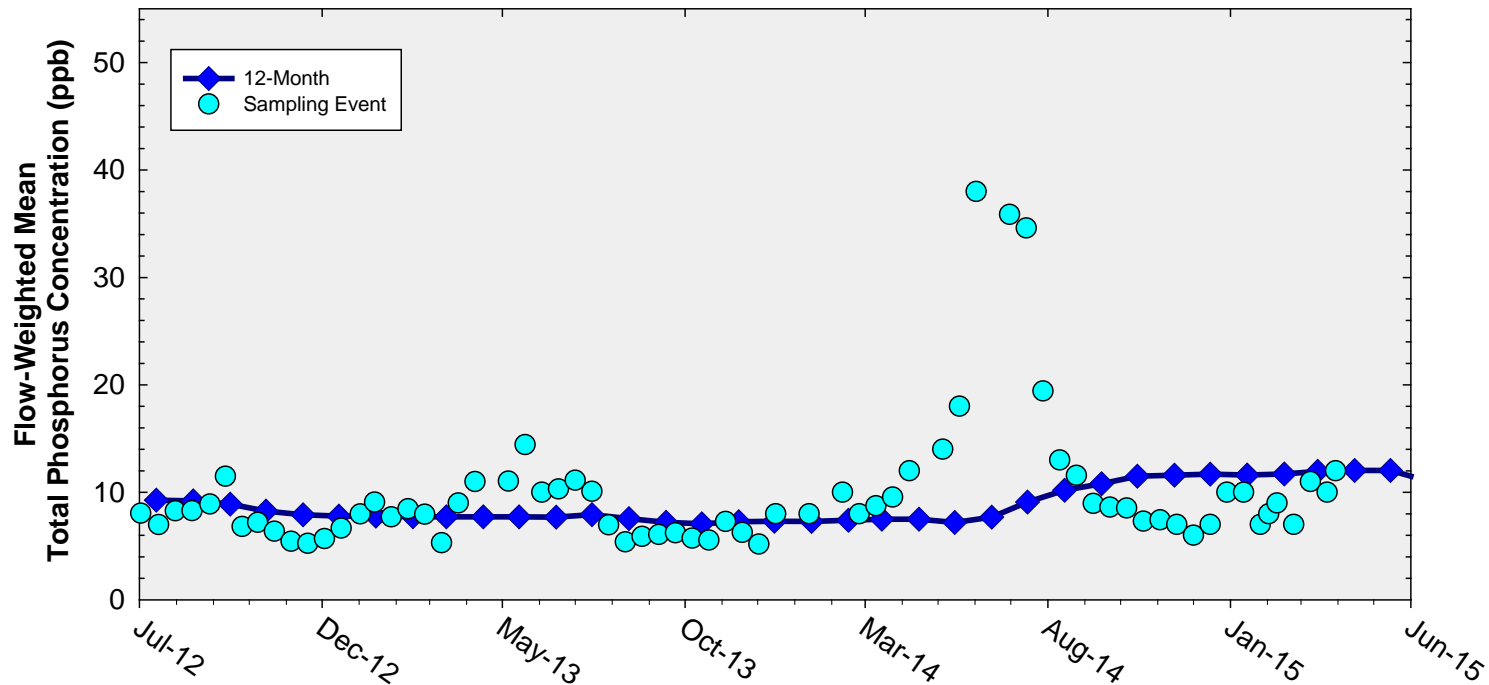


12-month FWMC at the end of each water year compared to the TP interim and long-term limits

Flow-Weighted Mean Concentrations

Inflows to ENP through Shark River Slough

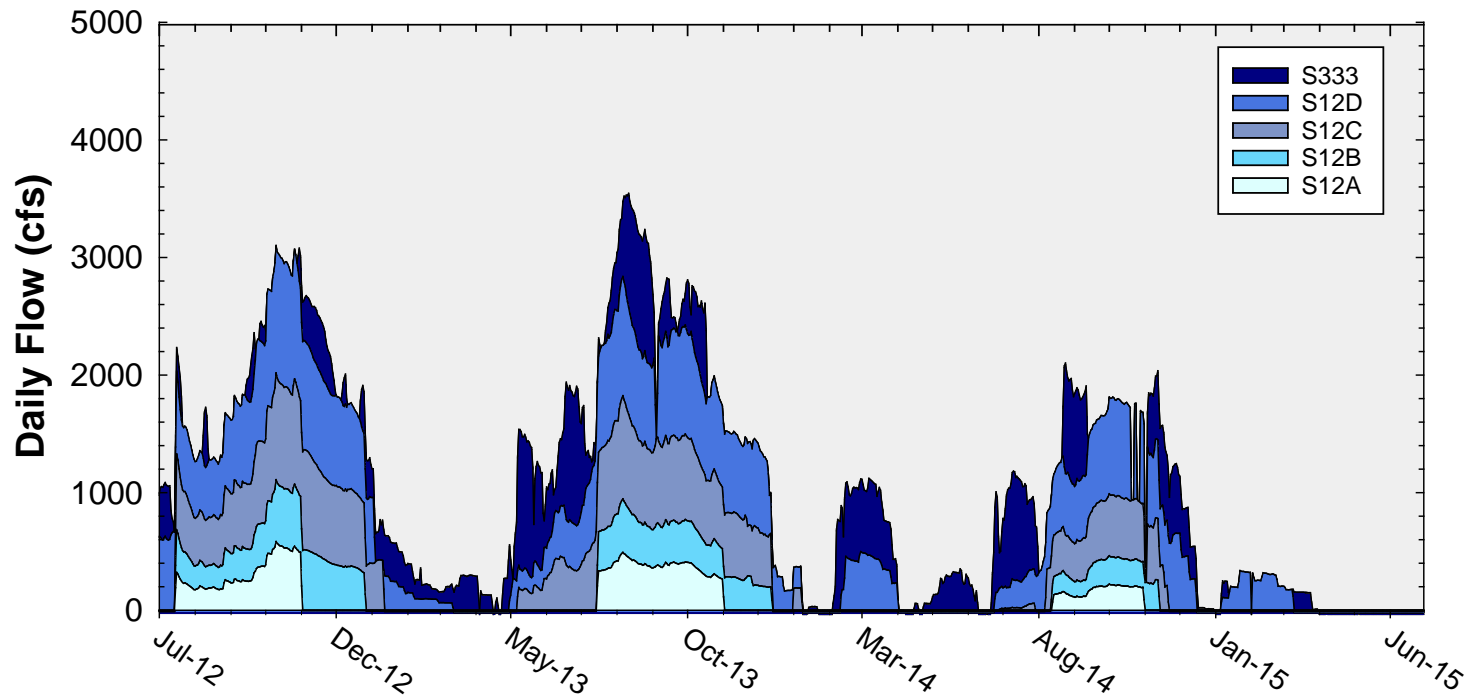
(October 2014 – June 2015 Flow Data for S12s are Provisional)



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

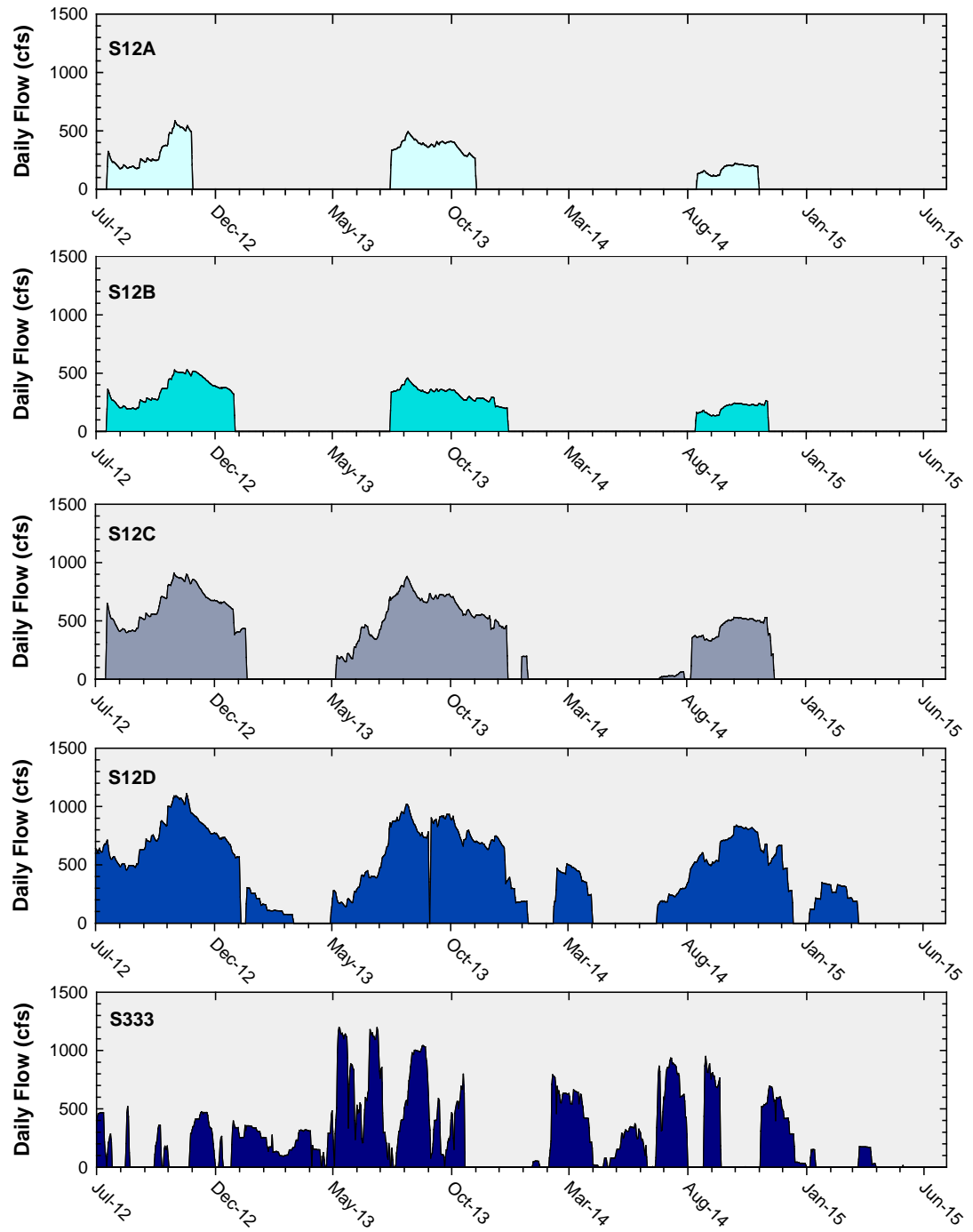
Shark River Slough Daily Flows

(October 2014 – June 2015 Flow Data for S12s are Provisional)

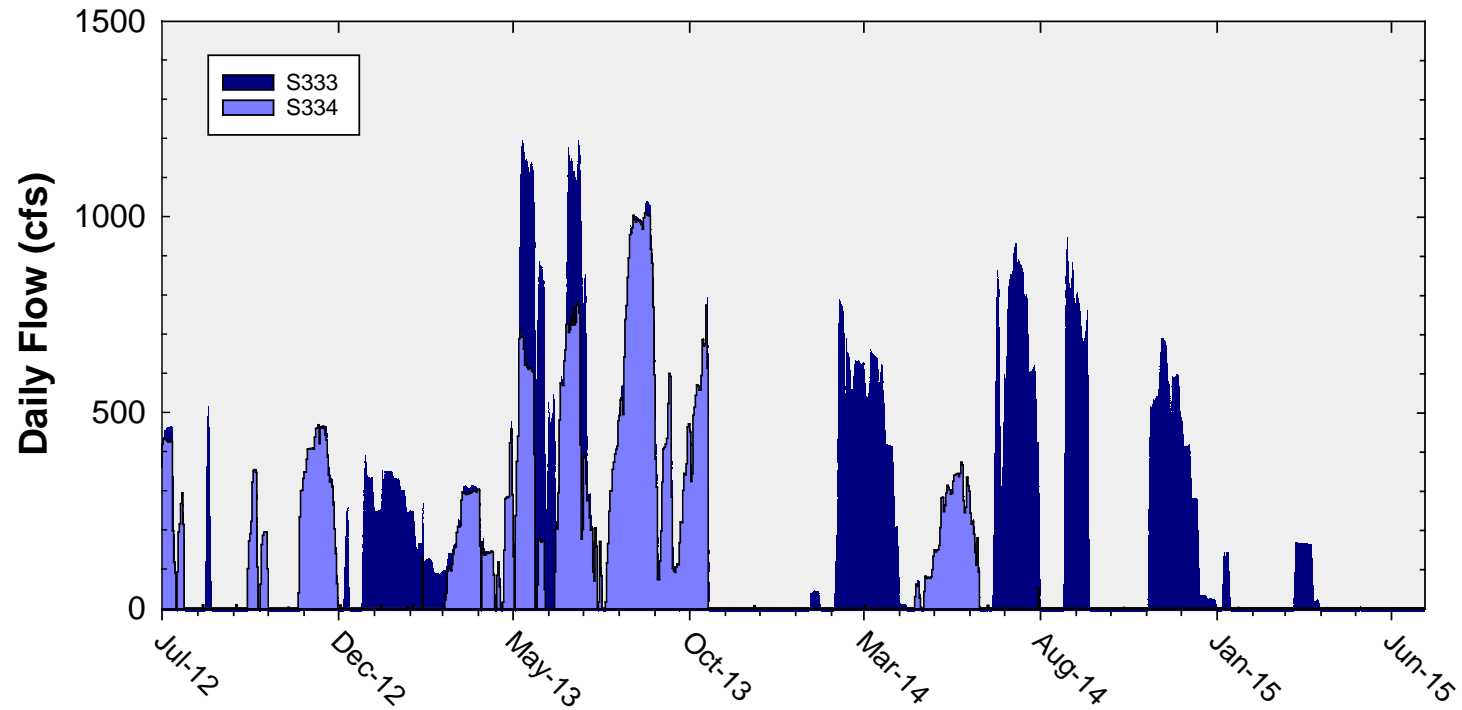


Daily Flows at Individual Inflow Structures to Shark River Slough

(October 2014 – June 2015
Flow Data for S12s are
Provisional)



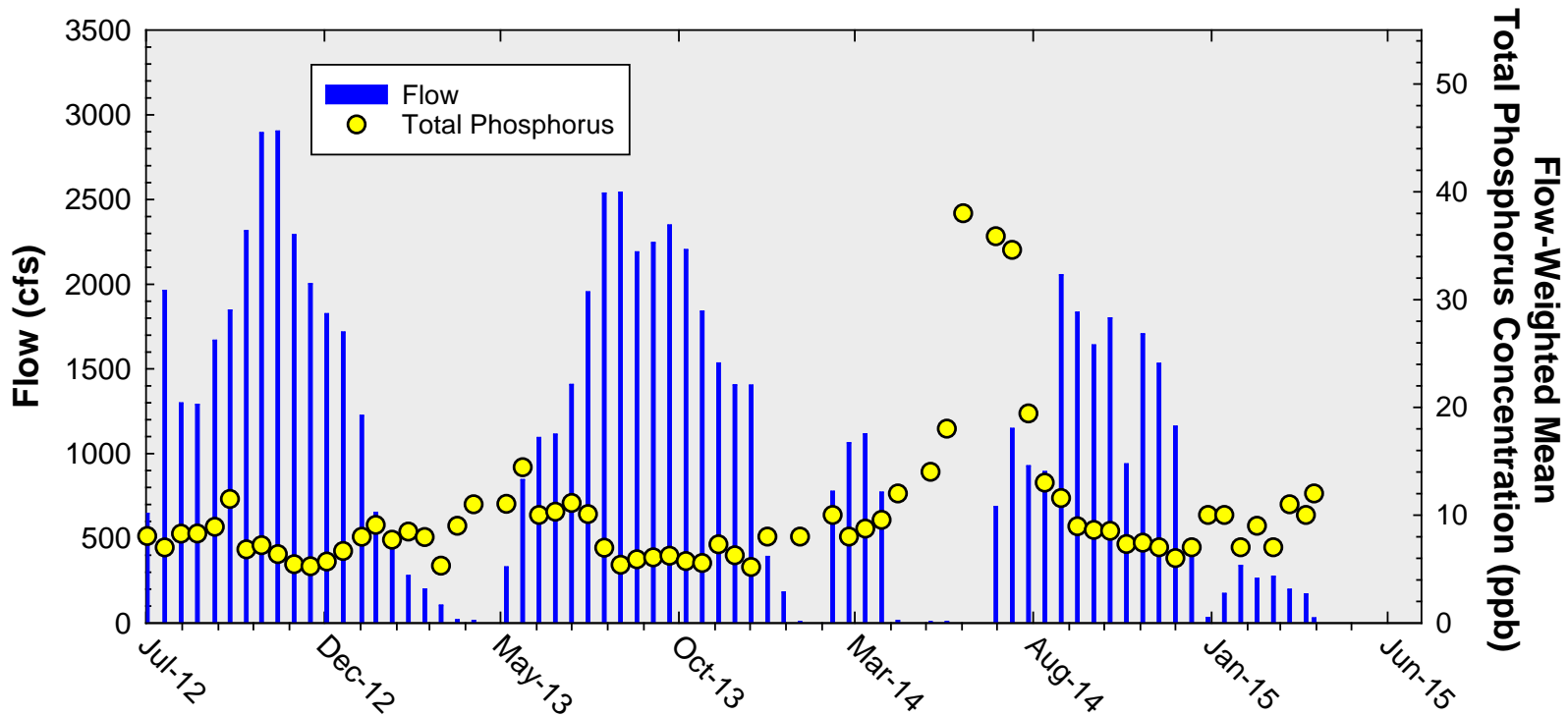
Daily Flows at S333 and S334



Shark River Slough

Sampling Event Flow and FWMC

(October 2014 – June 2015 Flow Data for S12s are Provisional)



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

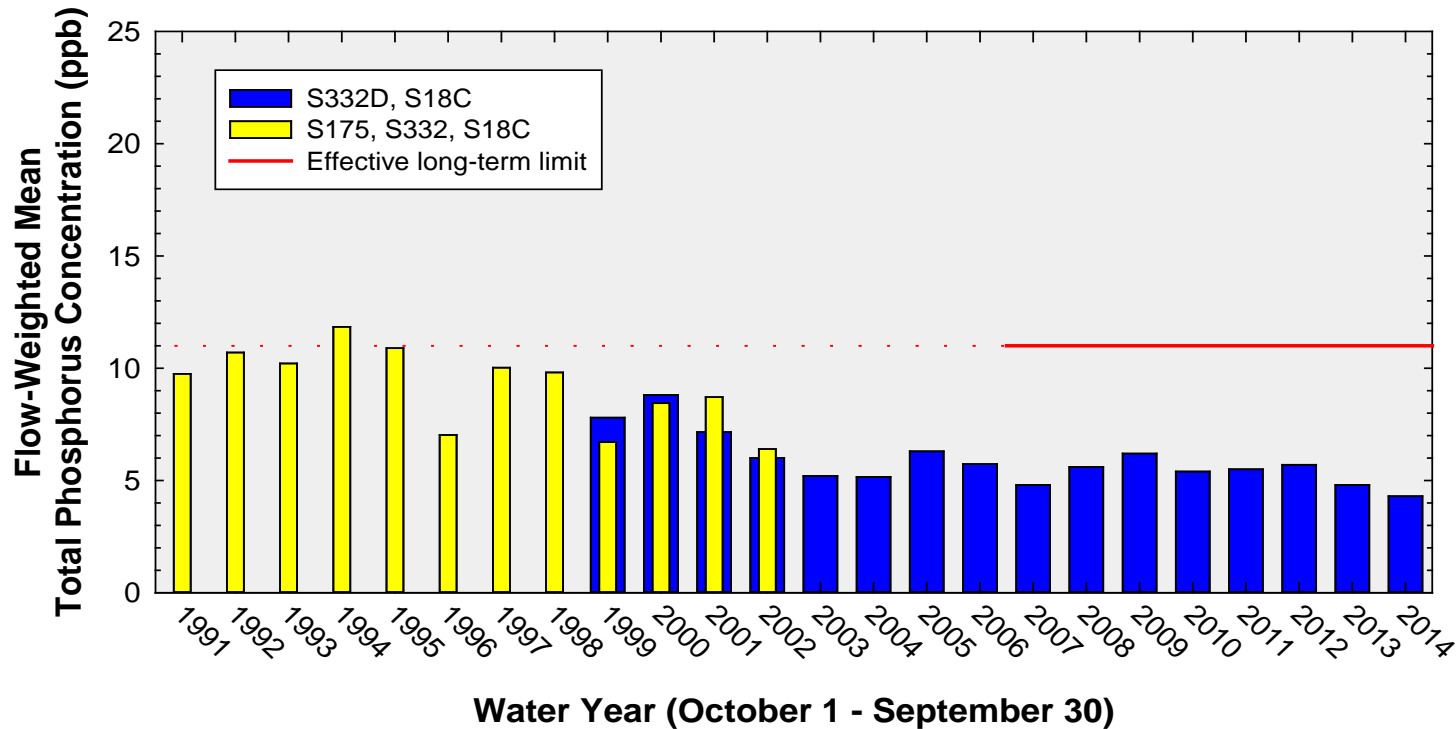
Taylor Slough and Coastal Basins

TP Concentration Compliance Tracking

for April 2015 – June 2015

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
May 2014 - Apr 2015	184.6	4.4	11.0	53.1	1.6
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Jul 2014 - Jun 2015	182.9	4.3	11.0	53.1	0.0

Annual Flow-Weighted Mean Concentrations Inflows to the ENP through Taylor Slough and Coastal Basins

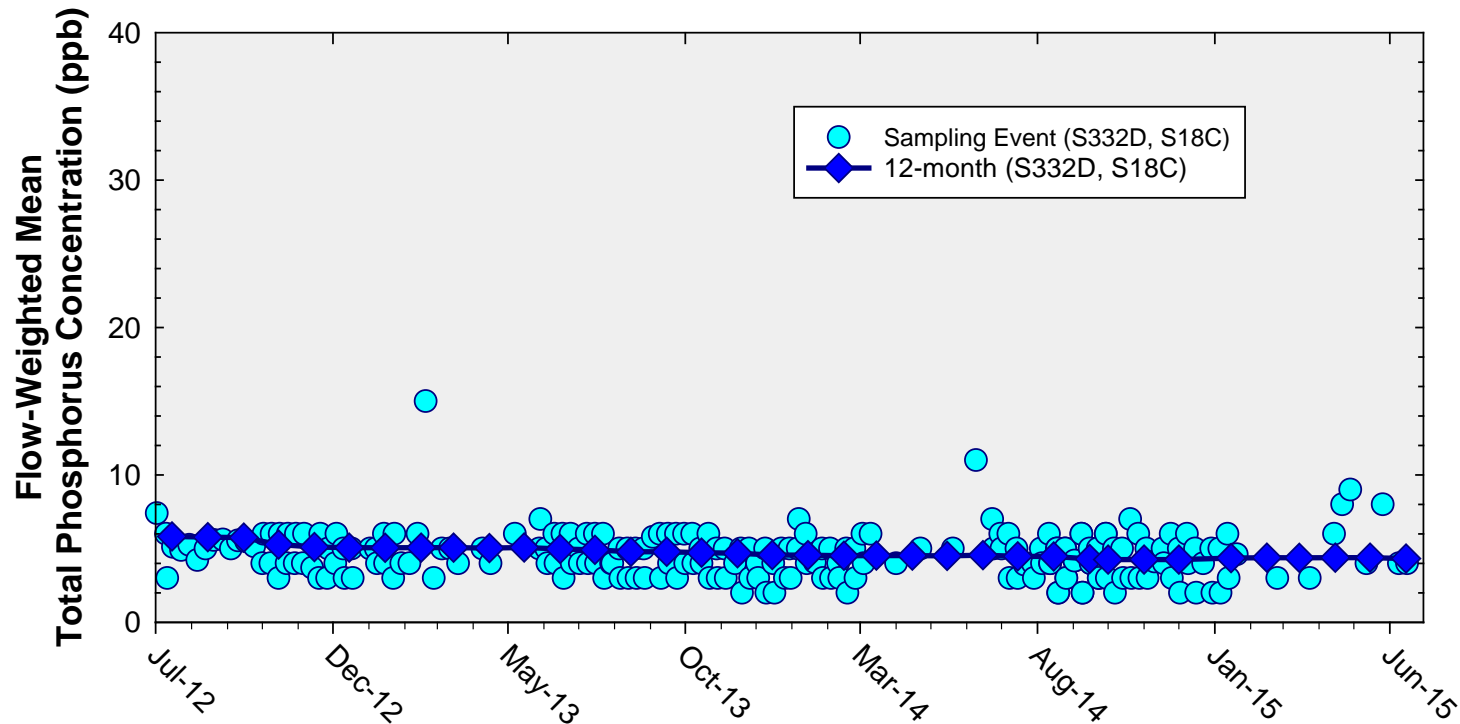


The 12-month FWMC at the end of each water year compared to the 11 ppb long-term TP limit

Note: Blue shows S332D, S18C & S174 until September 2007 when S174 was plugged.

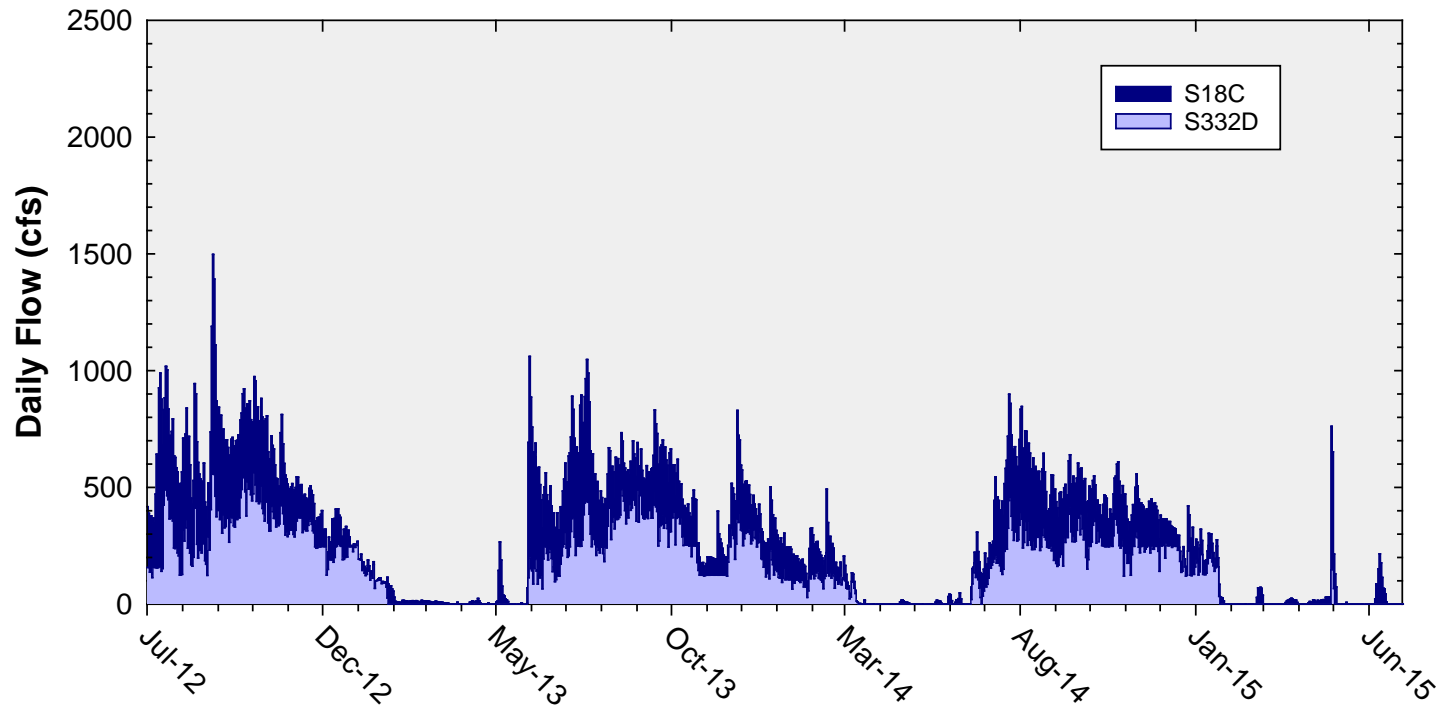
Flow-Weighted Mean Concentrations

Inflows to the ENP through Taylor Slough and Coastal Basins

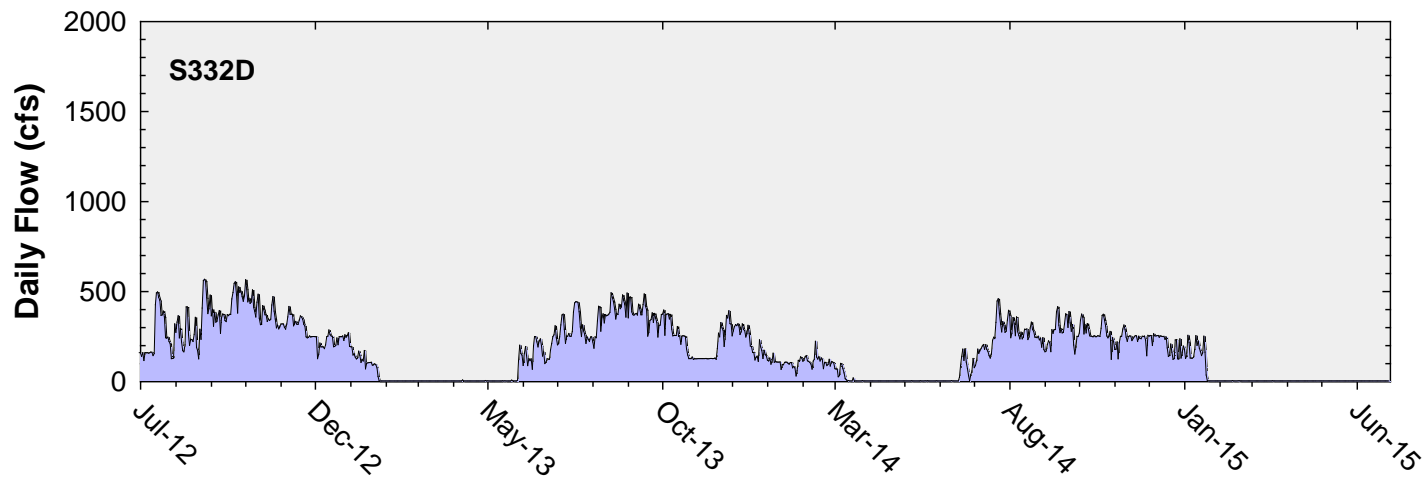
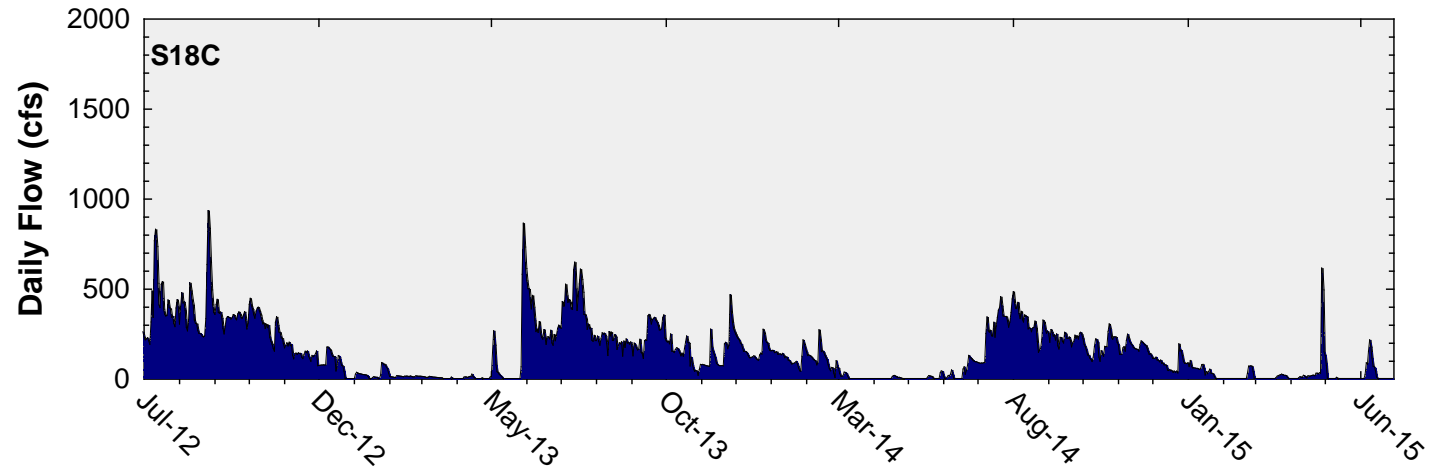


The 12-month FWMC at the end of each month and the composite TP concentration for each sampling event

Daily Flows at Taylor Slough and Coastal Basins Structures into ENP

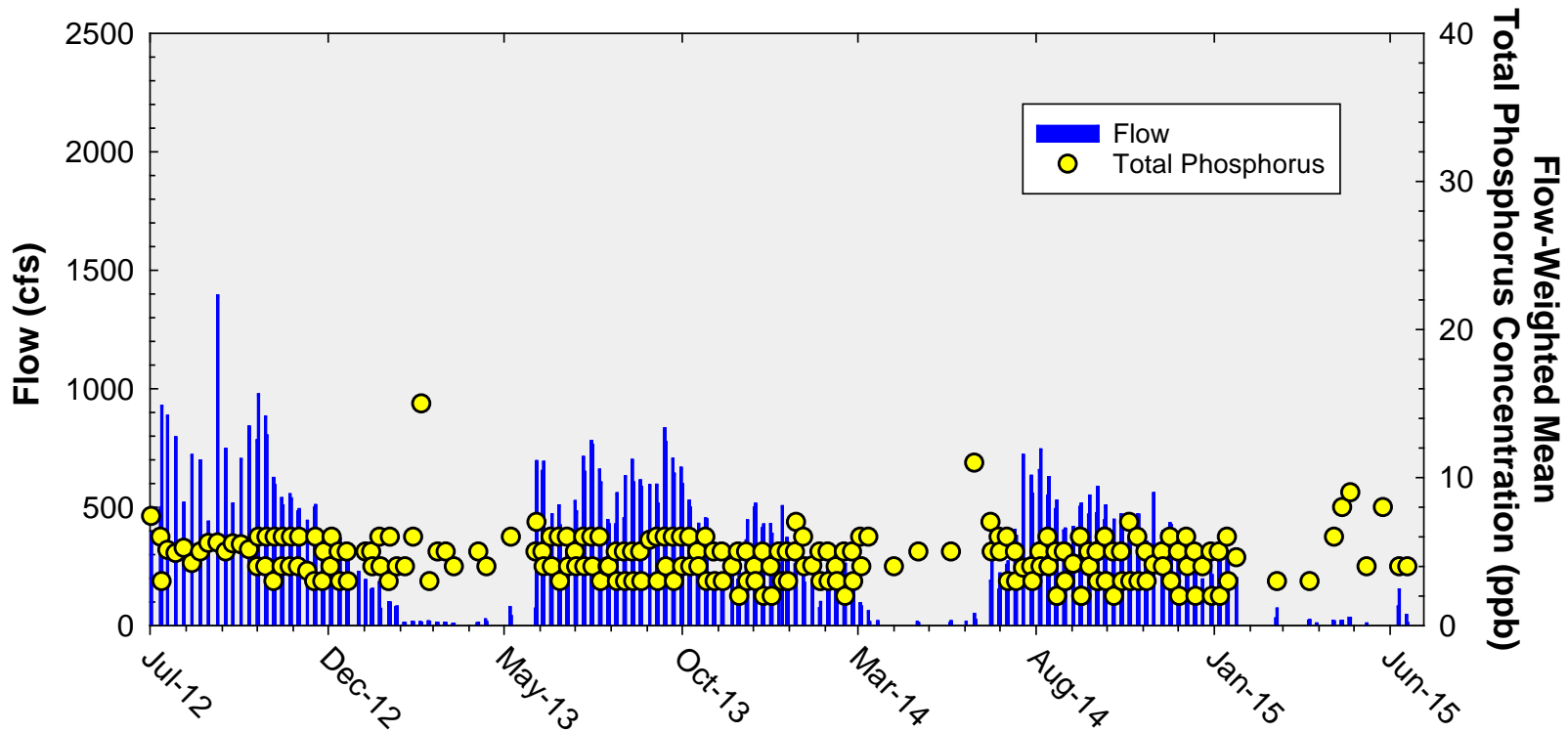


Daily Flows at Individual Taylor Slough and Coastal Basins Structures into ENP



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

