



# SETTLEMENT AGREEMENT REPORT

April - June 2012

**Stuart Van Horn**

*Section Leader*

Compliance Assessment & Reporting Section  
Water Quality Bureau

Technical Oversight Committee  
August 21, 2012

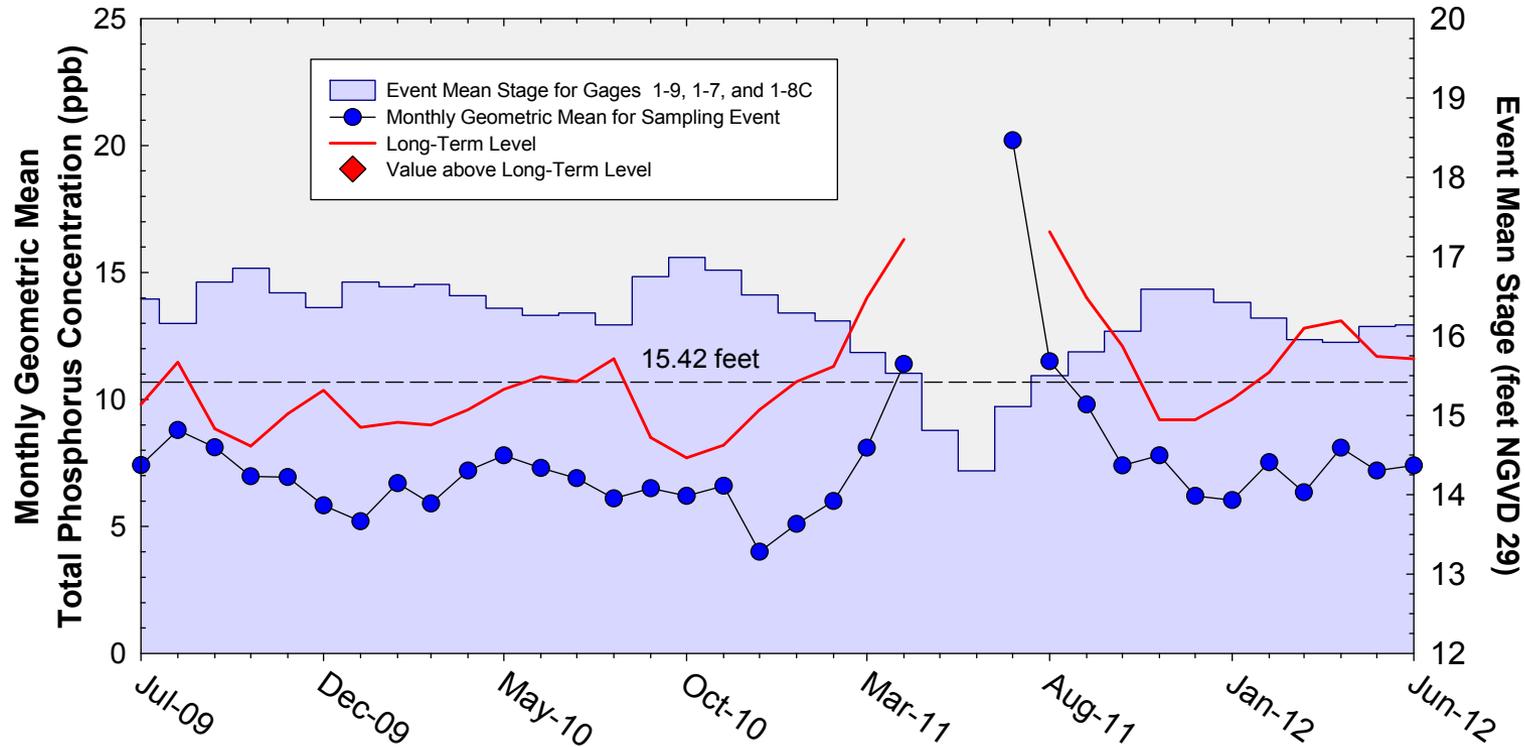


# SUMMARY

Month	Geometric Mean TP Concentration (ppb)	Long-term Level (ppb)	Mean Stage (ft NGVD 29)	Number of Samples	
<b>Arthur R. Marshall Loxahatchee National Wildlife Refuge</b>					
Apr 2012	8.1	13.1	15.92	10	
May 2012	7.2	11.7	16.12	12	
June 2012	7.4	11.6	16.14	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
<b>Everglades National Park – Shark River Slough</b>					
Apr 2012	481.0	9.4	10.7	55.9	55.0
May 2012	489.0	9.7	10.6	55.6	50.0
June 2012	532.2	9.9	10.4	54.2	52.4
<b>Everglades National Park – Taylor Slough and Coastal Basins</b>					
Apr 2012	170.3	6.3	11.0	53.1	10.0
May 2012	193.5	6.1	11.0	53.1	2.5
June 2012	224.6	6.0	11.0	53.1	2.3

# A.R.M Loxahatchee National Wildlife Refuge

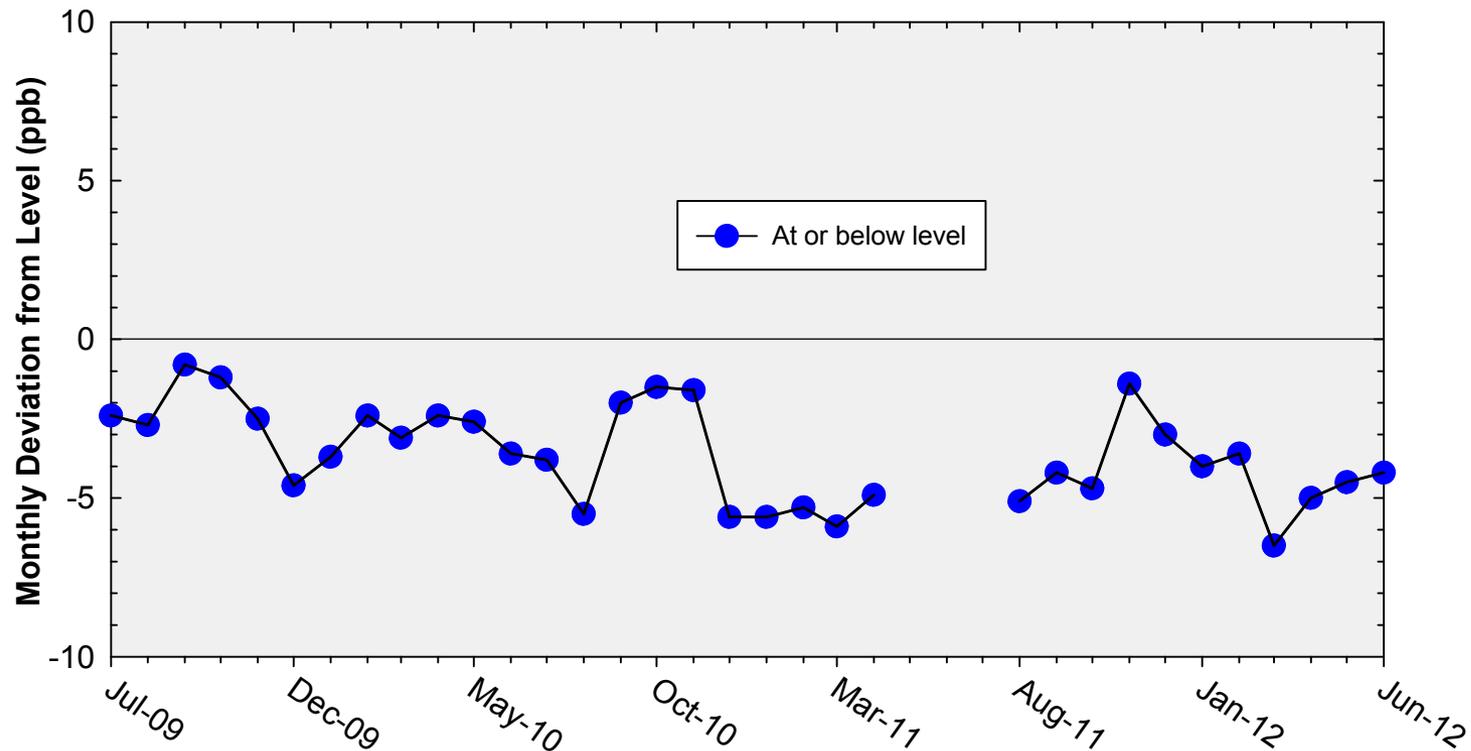
## Monthly Total Phosphorus Geometric Mean Concentrations



Note: Long-term level was not applicable for May 2011, June 2011, and July 2011 (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



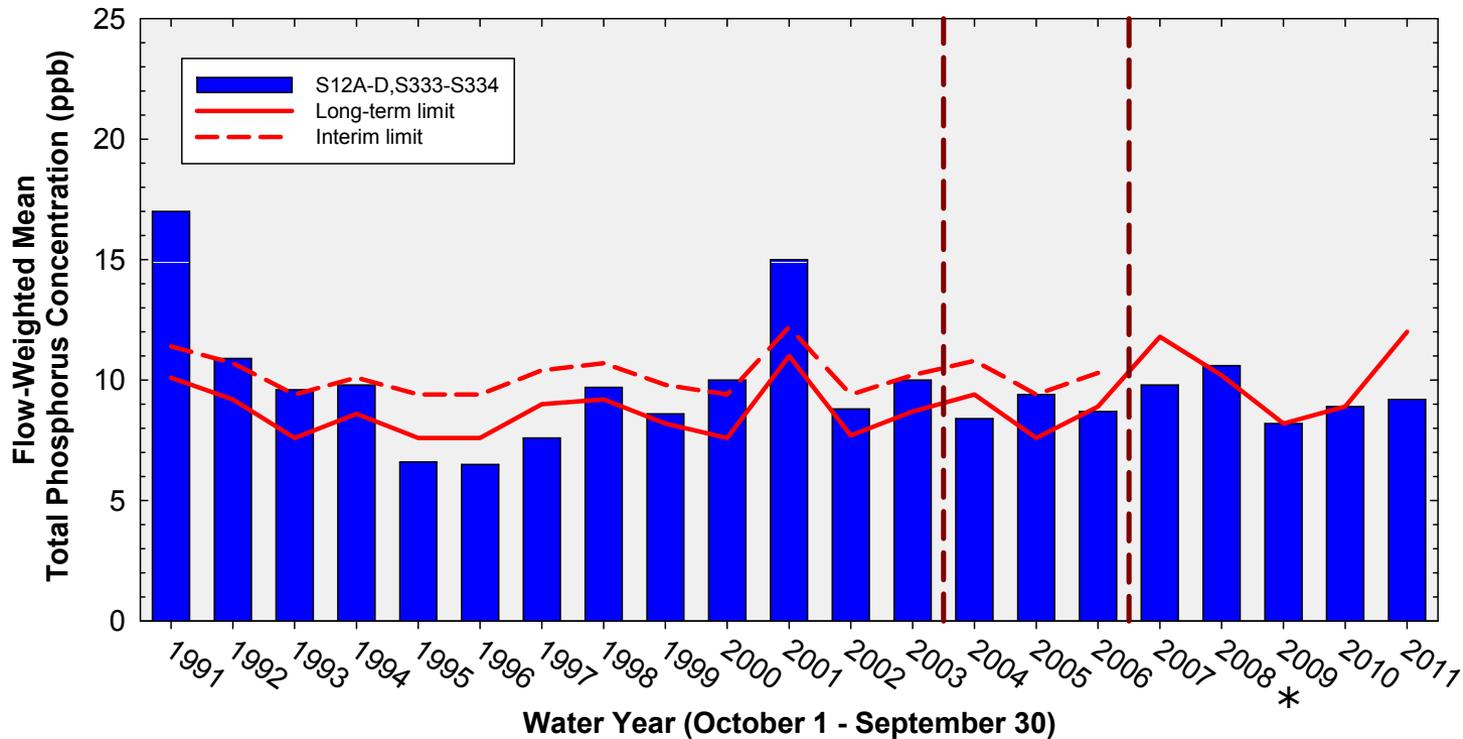
Note: Long-term level was not applicable for May 2011, June 2011, and July 2011 (average stage < 15.42 ft).

## Refuge TP Compliance Tracking For April 2012 – July 2012

Month	Geometric Mean TP Concentration (ppb)	Long-Term Level (ppb) Effective 12/31/2006	Average Stage (ft NGVD 29)	Number of Samples
Apr-2012	8.1	13.1	15.92	10
May-2012	7.2	11.7	16.12	12
Jun-2012	7.4	11.6	16.14	14
Jul-2012	6.0	12.6	15.99	14

Note: July 2012 values are preliminary.

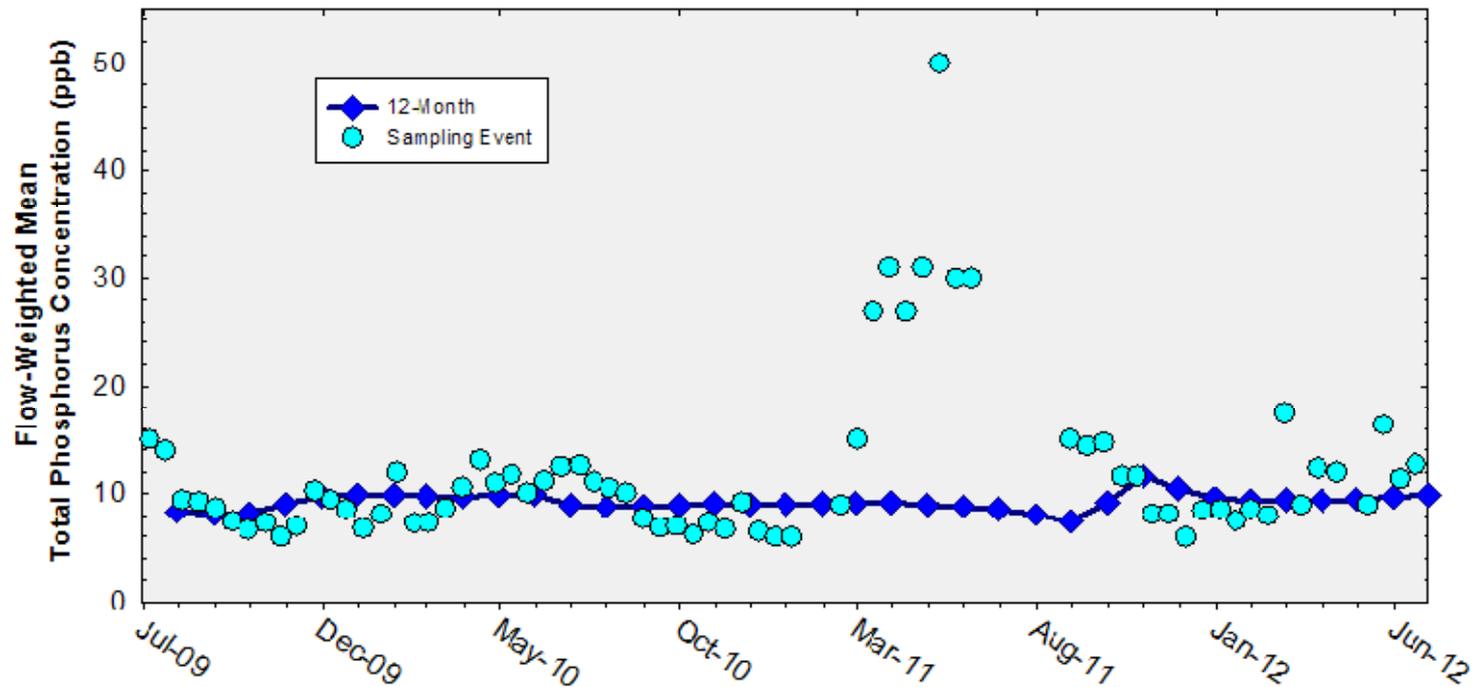
# Annual Flow-weighted Mean Concentrations Inflows to ENP through Shark River Slough



## 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

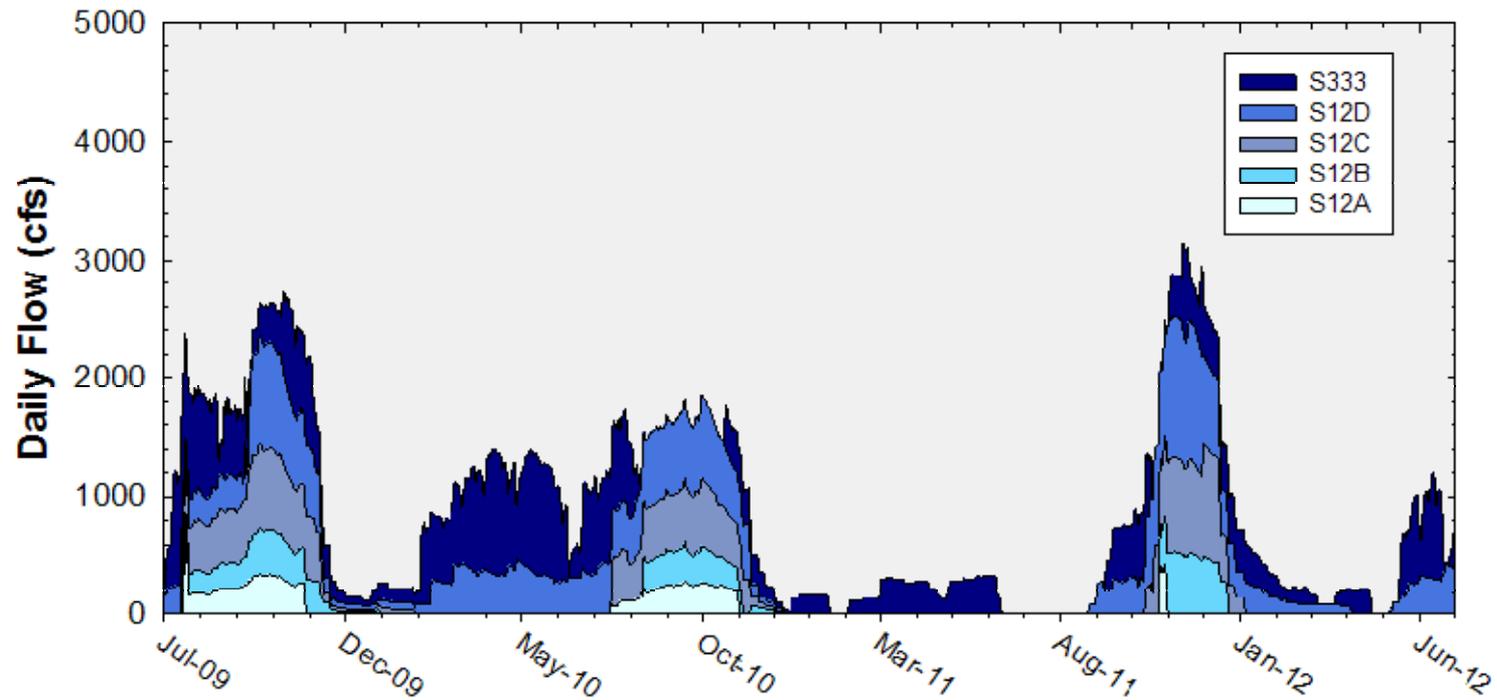


**12-month FWMC at the end of each month and the composite TP concentration for each sampling event**

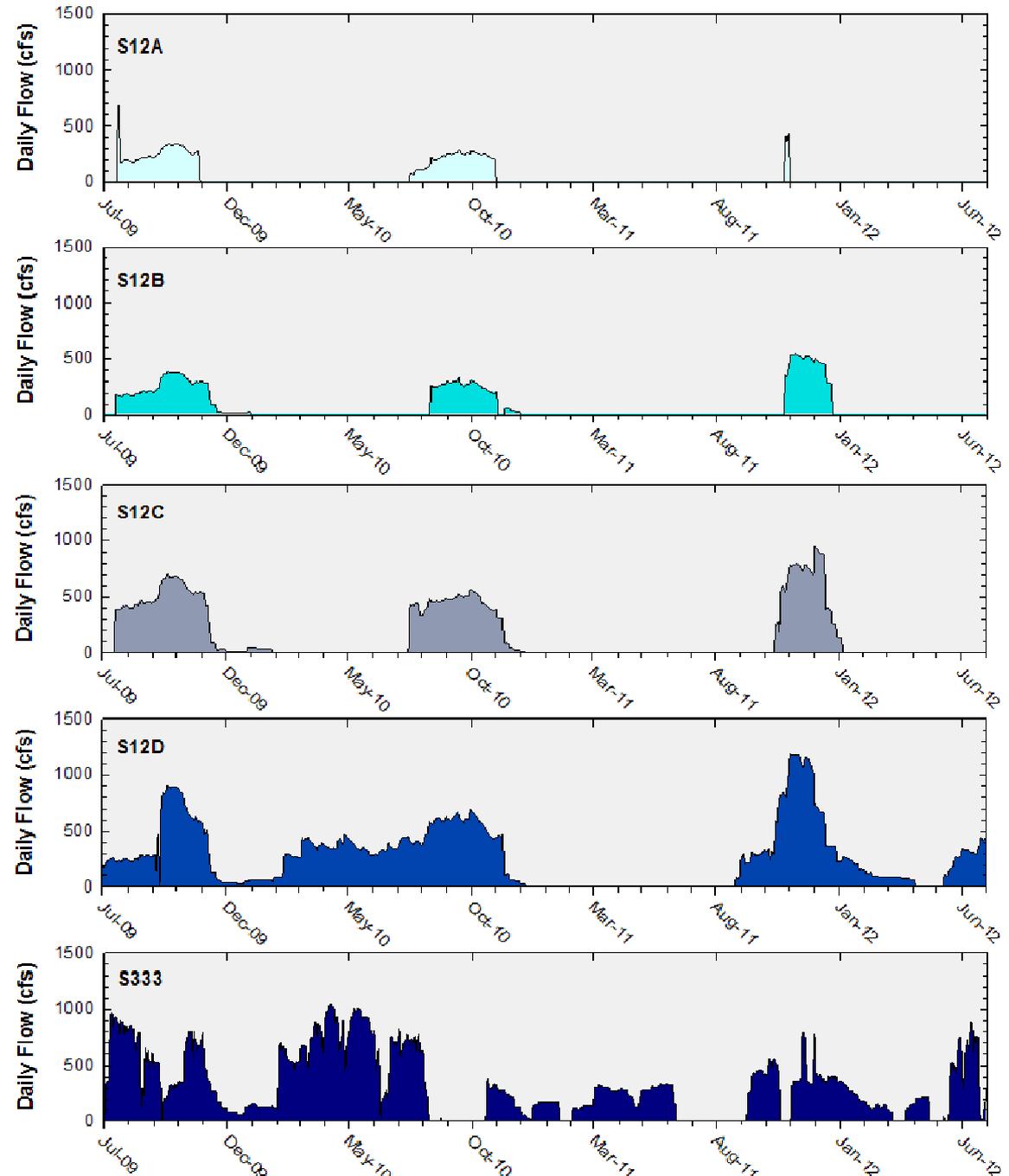
## Shark River Slough TP Concentration Compliance Tracking for April 2012 – June 2012

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 2011 - Apr 2012	481.0	9.4	10.7	55.9	55.0
Jun 2011 - May 2012	489.0	9.7	10.6	55.6	50.0
Jul 2011 - Jun 2012	532.2	9.9	10.4	54.2	52.4

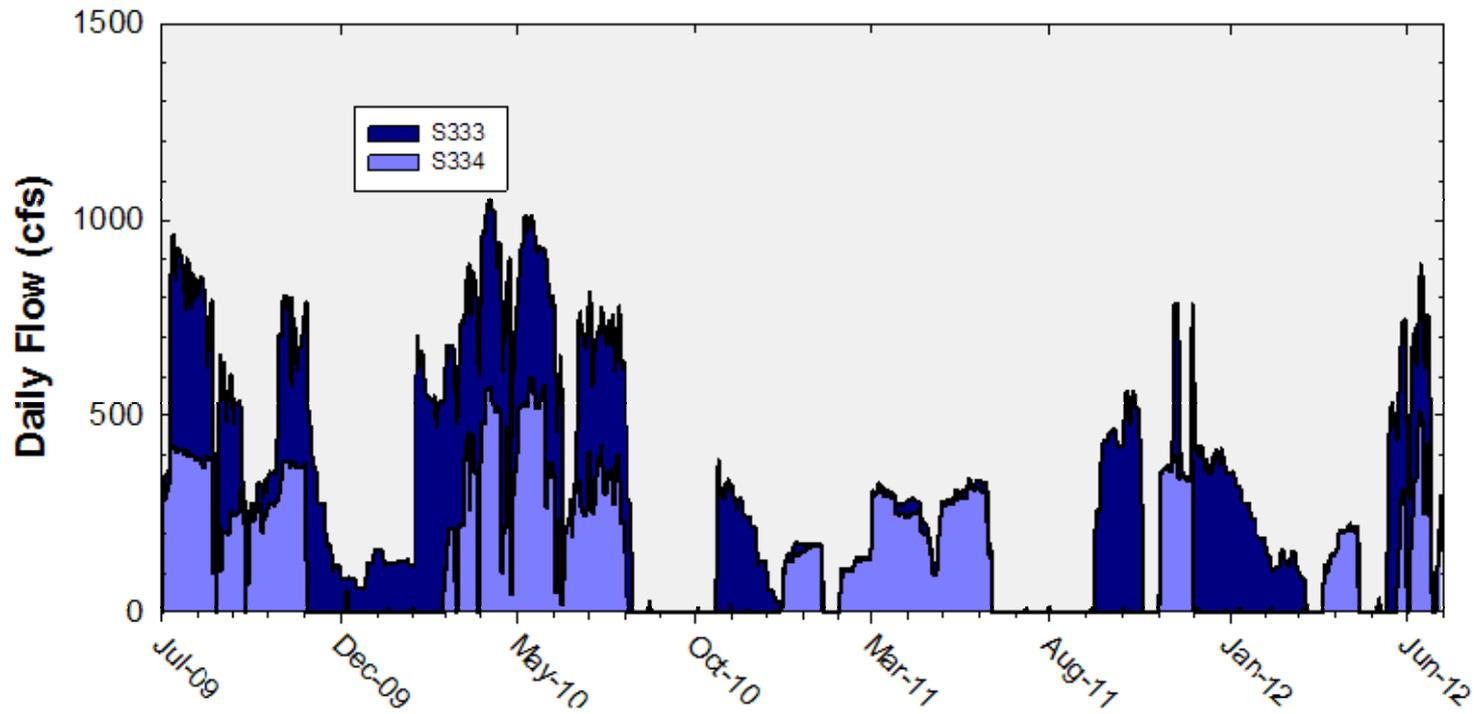
## Shark River Slough Daily Flows



# Daily Flows at individual inflow structures to Shark River Slough

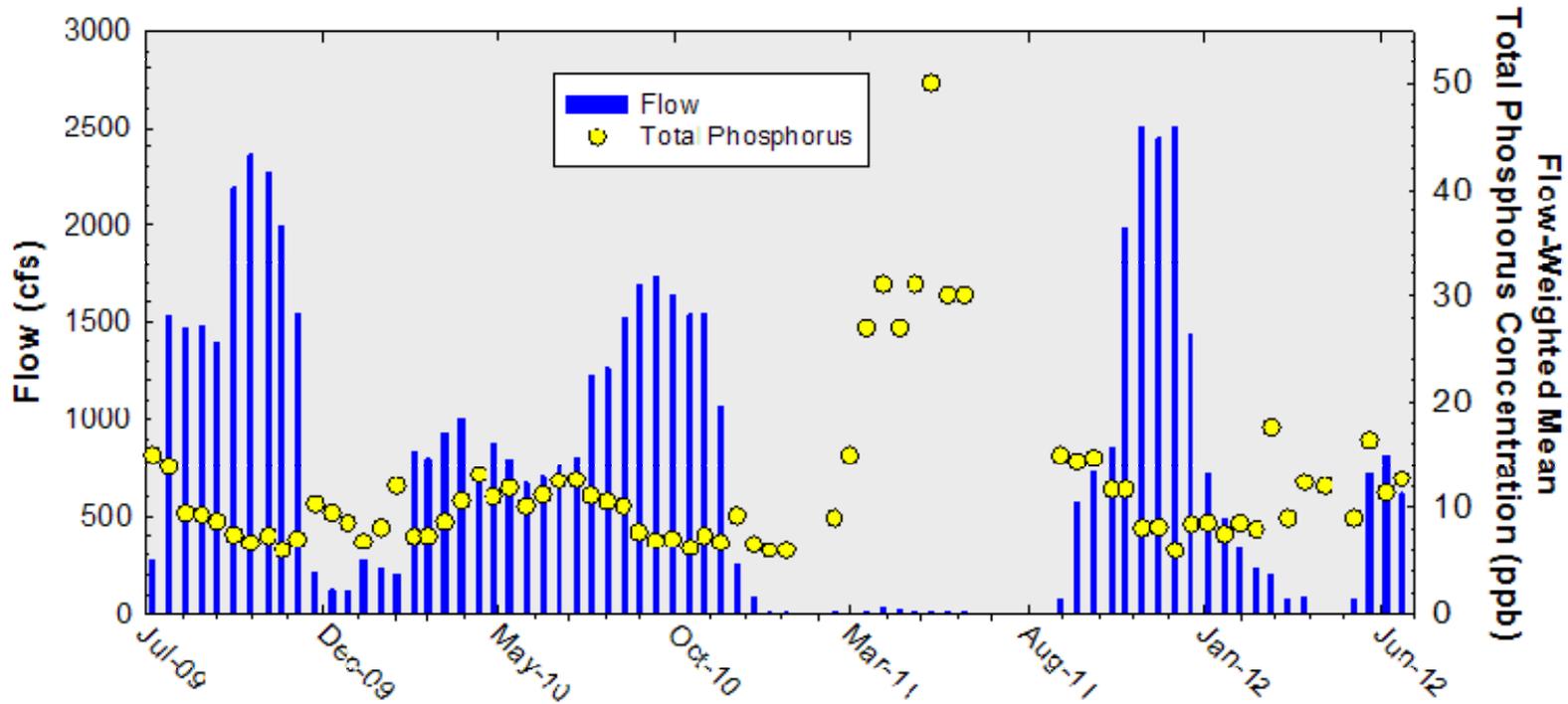


## Daily Flows at S333 and S334



# Shark River Slough

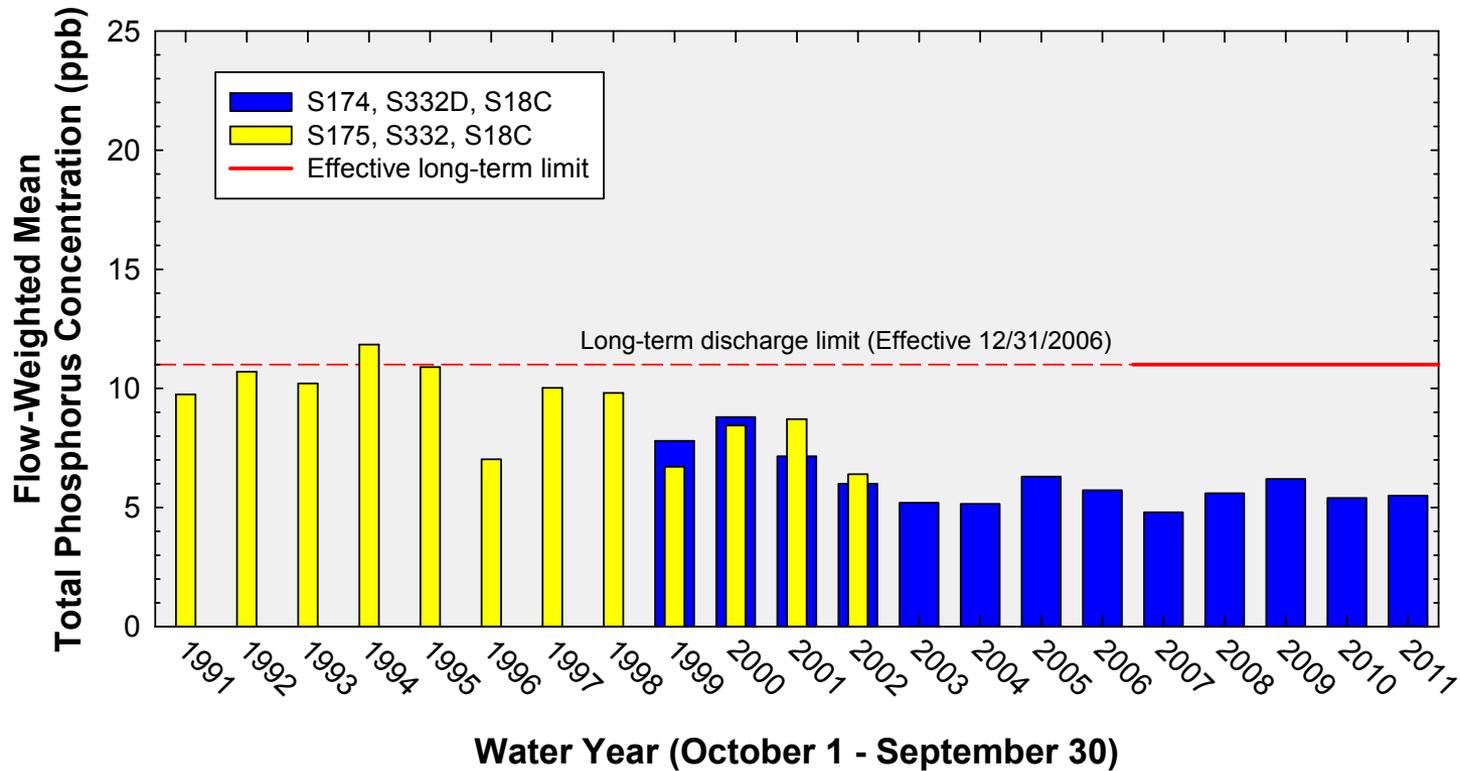
## Sampling Event Flow and FWMC



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

# Annual Flow-Weighted Mean Concentrations

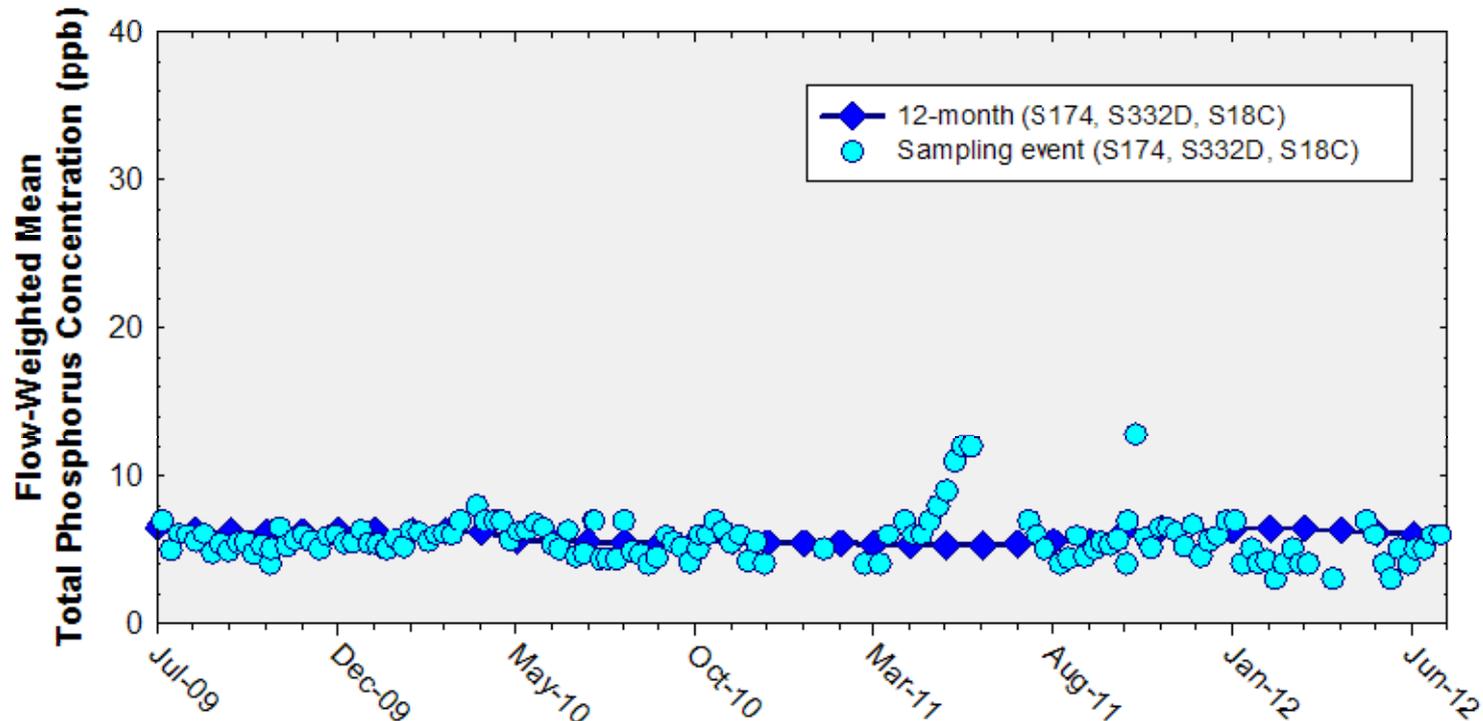
## Inflows to the ENP through Taylor Slough and Coastal Basins



**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

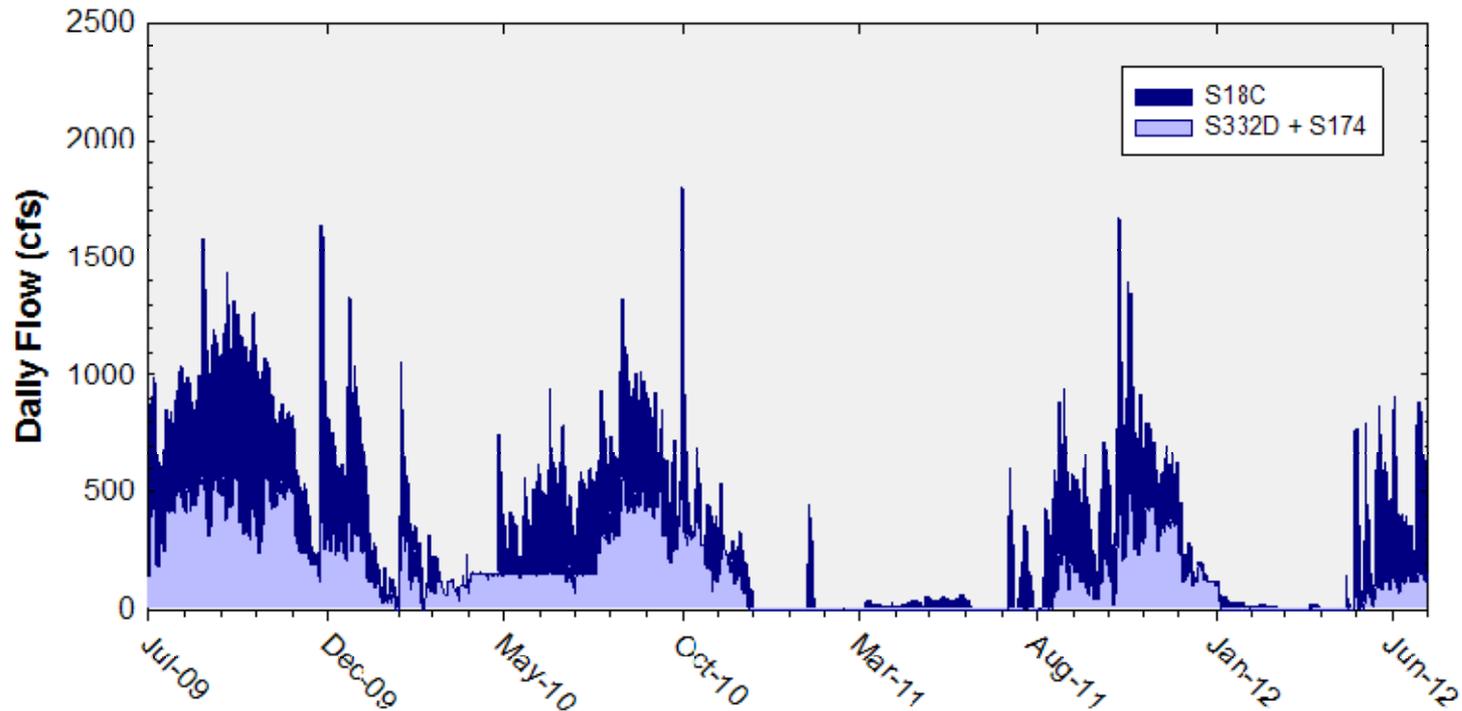
# Taylor Slough and the Coastal Basins

## TP Concentration Compliance Tracking

### for April 2012 – June 2012

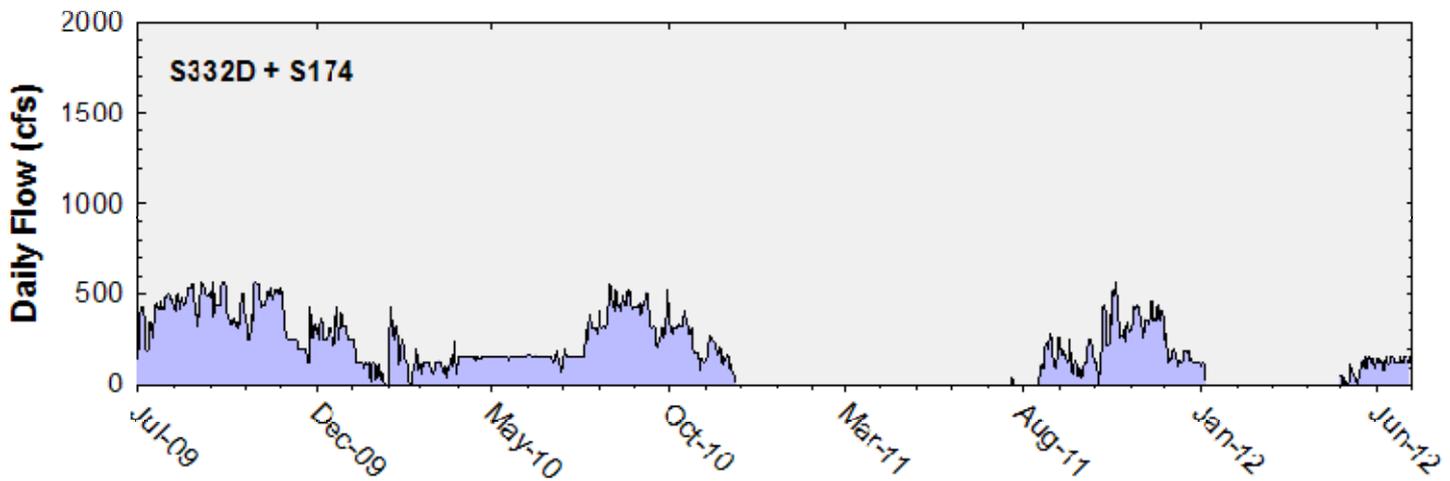
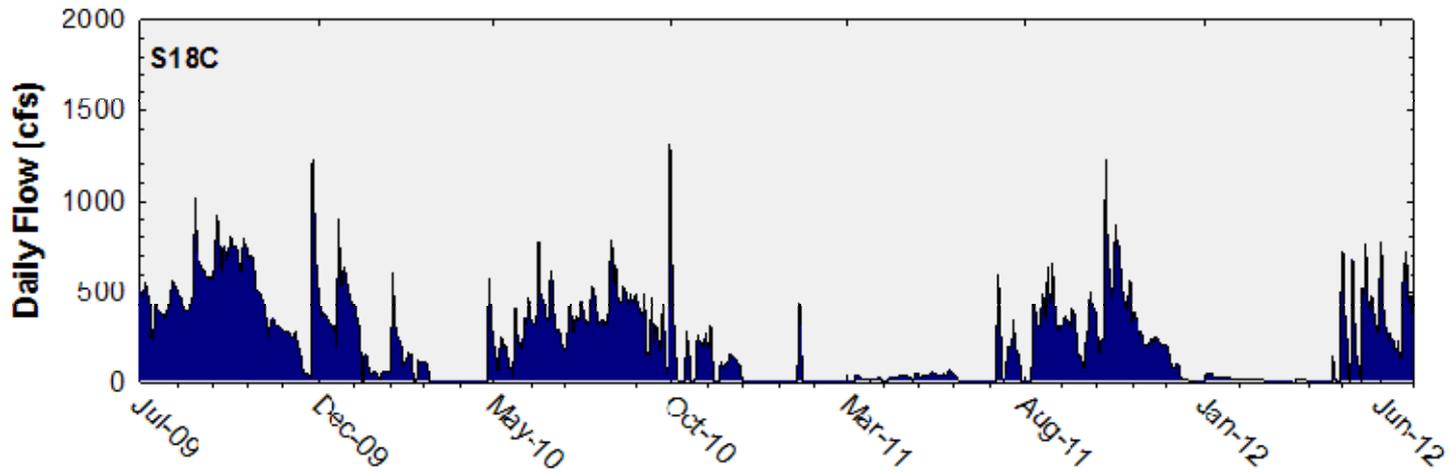
12-Month Period	Total Flow (kac-ft)	Flow-Weighted Mean TP Concentration (ppb)	Long-Term Limit (ppb) <i>Effective 12/31/2006</i>	Percent of Sampling Events Greater than 10 ppb	
				Guideline	Observed
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# Taylor Slough and Coastal Basins Daily Flows

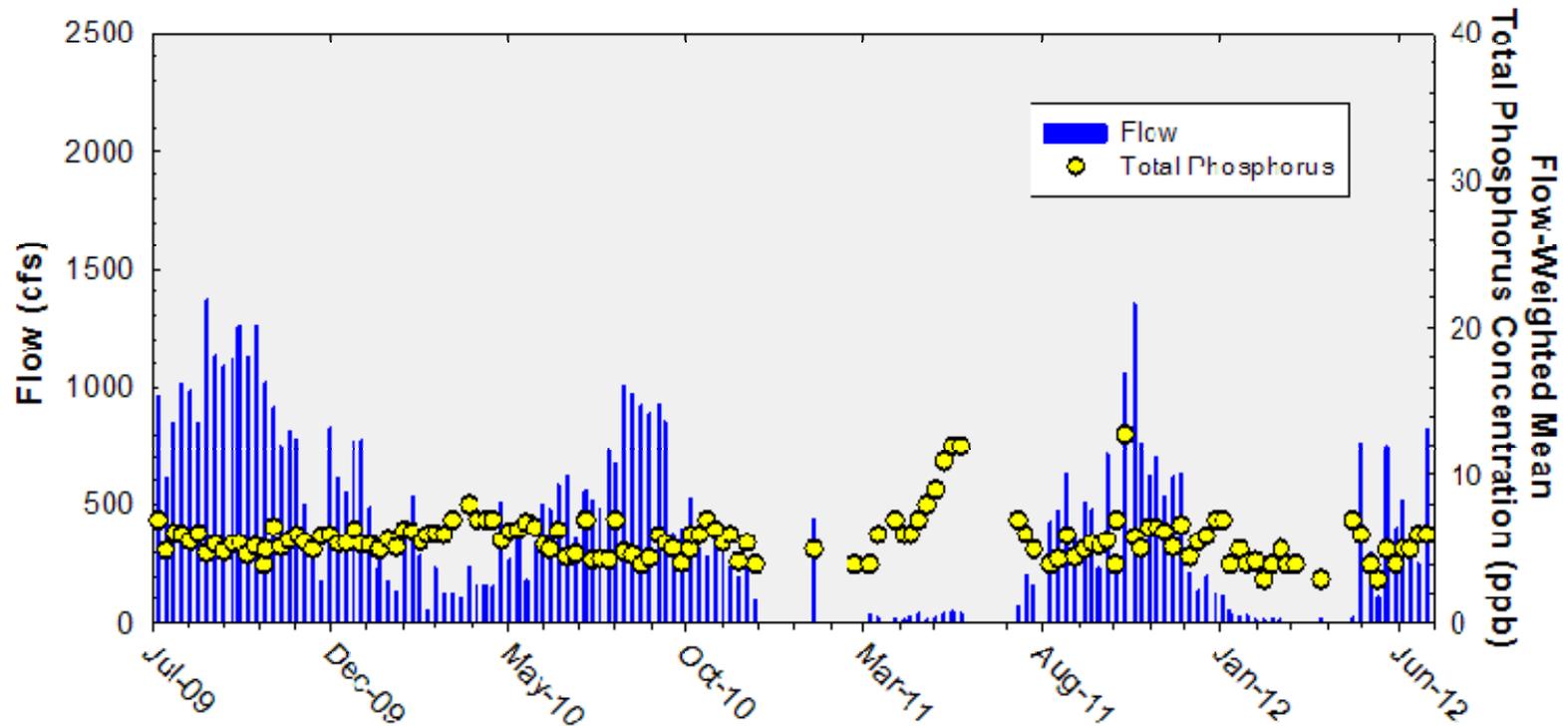


**Daily flows into Everglades National Park through Taylor Slough and Coastal Basins**

# 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**

Thank You

