

# SETTLEMENT AGREEMENT REPORT

WY2017 Annual Shark River Slough Compliance

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Technical Oversight Committee May 1, 2018

#### **SUMMARY**

Month Geometric Mea TP Concentration			Long-term Level (ppb)		Mean Stage (feet NGVD29)		Number of Samples					
Arthur R. Marshall Loxahatchee National Wildlife Refuge												
Jul 2017	7.9		10.1		16.40		13					
Aug 2017	6.6	6.6		8.8		16.69		14				
Sep 2017	7.5	7.5		8.0		16.89		13				
12-Month	Total Flow				term Limit		of Sampling Events ater than 10 ppb					
Period Ending	(kac-ft)		(ppb)		(ppb)	Guideline		Observed				
Everglades National Park – Shark River Slough												
Jul 2017	768.2 (772.0)		10.7 (10.7)	9.	1 (9.1)	47.2 (47.1)		20.8 (20.0)				
Aug 2017	871.9 (872.7)		10.1 (10.1)	8.	5 (8.5)	44.5 (44.5)		20.8 (20.0)				
Sep 2017	1,010.6 (1,014.8)		9.7 (9.7)	7.	9 (7.8)	3) 41.2 (41.		20.8 (20.0)				
Everglades National Park – Taylor Slough and Coastal Basins												
Jul 2017	322.1 (336.4, 329.9)	5	.2 (5.2, 5.2)		11.0 53			0.0 (0.0, 0.0)				
Aug 2017	346.6 (374.6, 368.2)	5	.3 (5.3, 5.3)		11.0	53.1		0.0 (0.0, 0.0)				
Sep 2017	383.3 (420.1, 413.7)	5	.9 (5.9, 6.0)		11.0	53.1		1.6 (1.6, 1.6)				

SRS - Method 1 (left values) computed as S12s+(S333+S355A+S355B-S334) and Method 2 (values in parentheses) computed as S12s+(S333+S355A+S355B+S356-S334)

Neither method excludes S334 flow from the total flow for long-term limit calculations.

TS and CB - Method 1 (left values) computed as S332D+S18C, Method 2 (first values in parentheses) computed as S332D+S18C+G737, and Method 3 as (S332D-S332DX1-S328)+S328+G737+S18C.



# **Shark River Slough**TP Concentration Compliance Tracking

12-Month Period	Total Flow (kac-ft)	Flow-Weighted Mean TP Concentration	Long-Term Limit (ppb) Effective	Percent of Sampling Events Greater than 10 ppb		
		(ppb)	12/31/2006	Guideline	Observed	
Aug 2016 - Jul 2017	768.2 (772.0)	10.7 (10.7)	9.1 (9.1)	47.2 (47.1)	20.8 (20.0)	
Sep 2016 - Aug 2017	871.9 (872.7)	10.1 (10.1)	8.5 (8.5)	44.5 (44.5)	20.8 (20.0)	
Oct 2016 - Sep 2017	1,010.6 (1,014.8)	9.7 (9.7)	7.9 (7.8)	41.2 (41.1)	20.8 (20.0)	

**Shark River Slough PROVISIONAL RESULTS:** 

Method 1 (left values) FWMC computed as S12s+(S333+S355A&B-S334) and

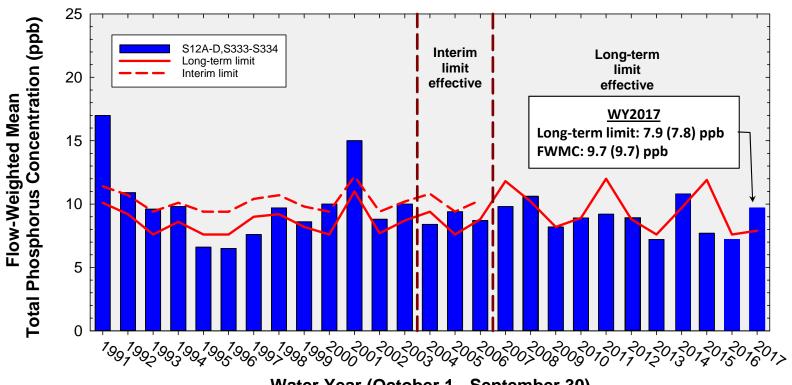
Method 2 (in parenthesis) FWMC computed as S12s+(S333+S355A&B+S356-S334) using all flow and TP grabs on bi-weekly compliance sampling dates.

Neither method excludes \$334 flow from the flow for long-term limit calculations.



#### **Annual Flow-weighted Mean Concentrations**

Inflows to ENP through Shark River Slough

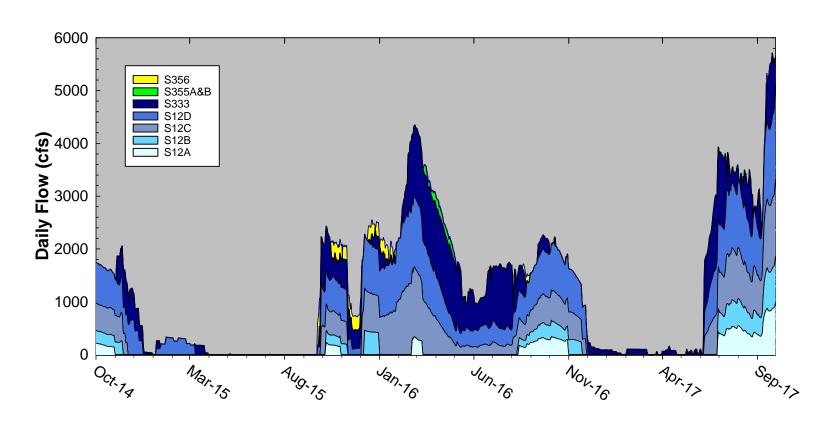


Water Year (October 1 - September 30)

Water year FWMC compared to the TP interim and long-term limits

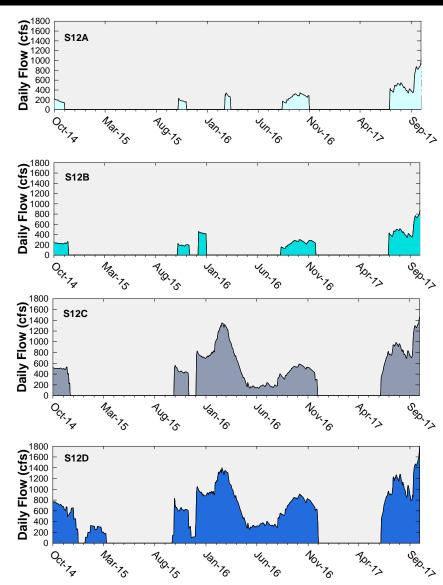


## **Shark River Slough Daily Flows**



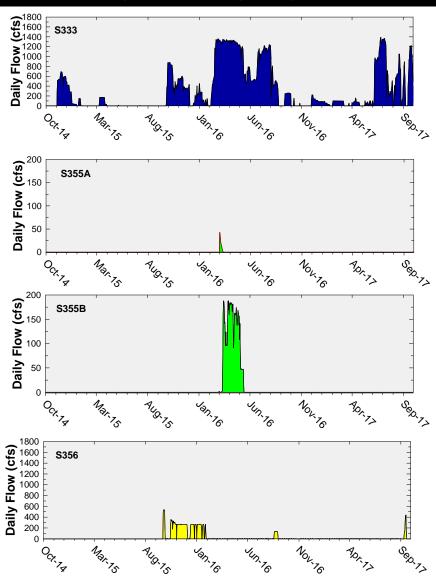


Daily Flows at S12 Structures to Shark River Slough



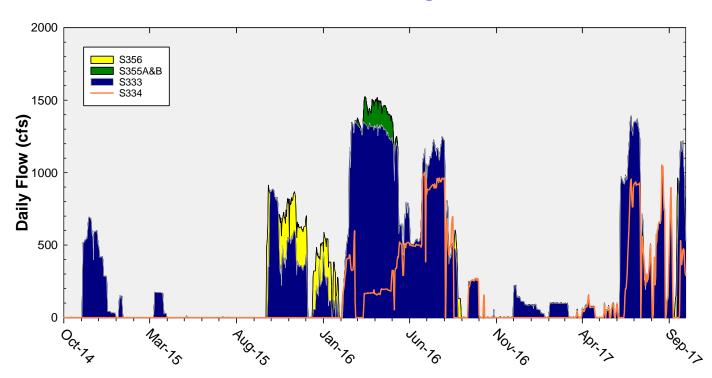


Daily Flows
at
Individual Inflow
Structures
to Shark River Slough





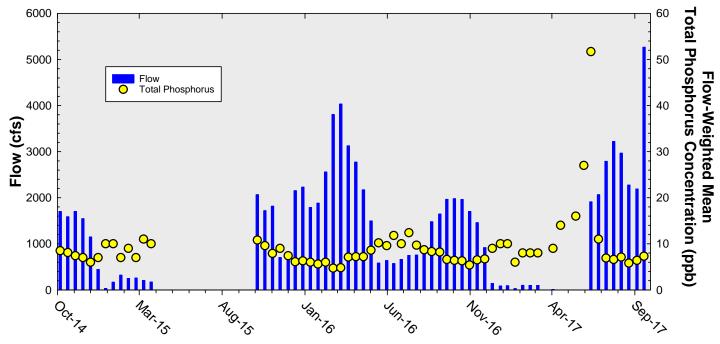
## Daily Flows Into Shark River Slough through S333, S355A&B, and S356 and Out through S334





### **Shark River Slough**

#### **Sampling Event Flow and FWMC**

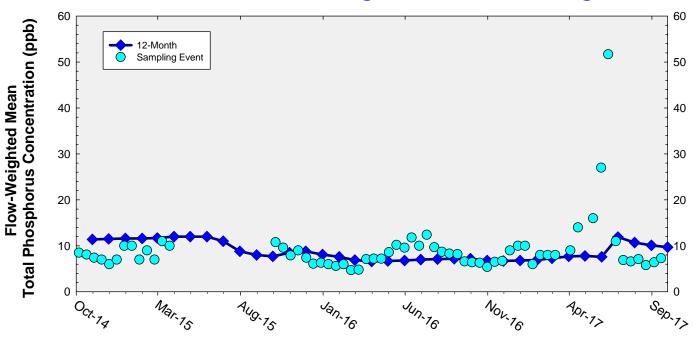


Flow at Shark River Slough structures and the corresponding TP FWMCs for individual sampling events

Note: Method 1 results illustrated



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



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

Note: Method 1 results illustrated

