

### SETTLEMENT AGREEMENT QUARTERLY REPORT

WY2022 Annual Shark River Slough Compliance

Chelsea Qiu, P.E., Ph.D.

Lead Engineer Compliance Assessment & Reporting Section Water Quality Bureau

**Technical Oversight Committee** 

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#### **SUMMARY**

Month		Geometric Mean TP Concentration (ppb)		Long-Term Level (ppb)		Mean Stage (ft NGVD29)		Number of Samples				
Arthur R. Marshall Loxahatchee National Wildlife Refuge												
Jul 2022	7.6	7.6		10.3		16.36		12				
Aug 2022	6.7	6.7		9.4		16.56		13				
Sept 2022	7.3	7.3		10.1		16.41		11				
12-Month	Total Flow			Long-Term Limit		Percent of Sampling Events Greater than 10 ppb						
Period Ending	(kac-ft)	FWI	MC (ppb)	(ppl	0)	Observed (	%)	Guideline (%)				
Everglades National Park – Shark River Slough												
Jul 2022	1,055.7		10.4	7.7	7	53.8		40.2				
Aug 2022	1,082.5		10.2	7.6		46.2		39.7				
Sep 2022	1066.0		10.2	7.6		50.0		40.1				
Everglades National Park — Taylor Slough and Coastal Basins												
Jul 2022	300.2		5.1	11.0		4.2		53.1				
Aug 2022	315.2		5.2	11.0		4.2		53.1				
Sep 2022	323.0		5.1	11.0		4.2		53.1				

FWMC for SRS - computed as S12s+[S333+S333N+S355A+S355B+min(S356,S335)-S334]. S334 flow is not excluded from the total flow for long-term limit calculations. FWMC for TS and CB - computed as (S332D-S332DX1-S328)+S328+G737+S18C.



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

12-Month Period	<b>Total Flow</b> (kac-ft)	Flow-Weighted Mean TP	Long-Term Limit (ppb)	Percent of Sampling Events Greater than 10 ppb		
12-Month Period		Concentration (ppb)	Effective 12/31/2006	Observed (%)	Guideline (%)	
Aug 2021 - Jul 2022	1,055.7	10.4	7.7	53.8	40.2	
Sep 2021 - Aug 2022	1,082.5	10.2	7.6	46.2	39.7	
Oct 2021 - Sep 2022	1,066.0	10.2	7.6	50.0	40.1	

**Shark River Slough Final WY2022 Result:** 

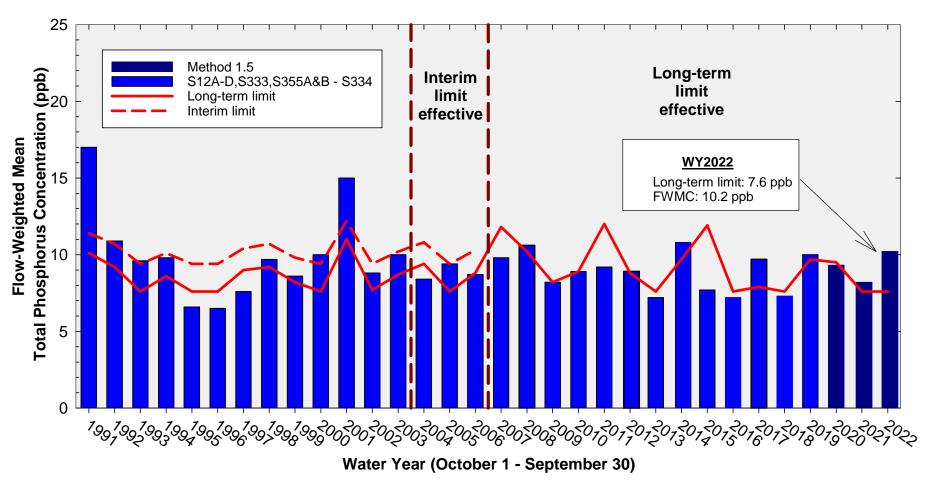
FWMC computed as S12s + [S333 + S333N + S355A + S355B + minimum of (S356, S335)

- S334] using all flow and TP grabs on bi-weekly compliance sampling dates.

S334 flow was not excluded from the flow for long-term limit calculations.



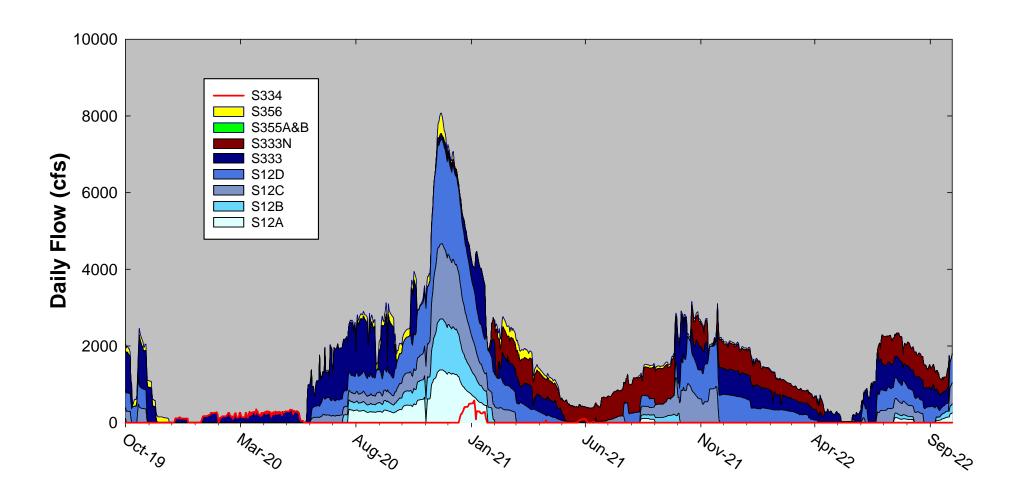
### **Annual Flow-weighted Mean Concentrations**Inflows to ENP through Shark River Slough



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

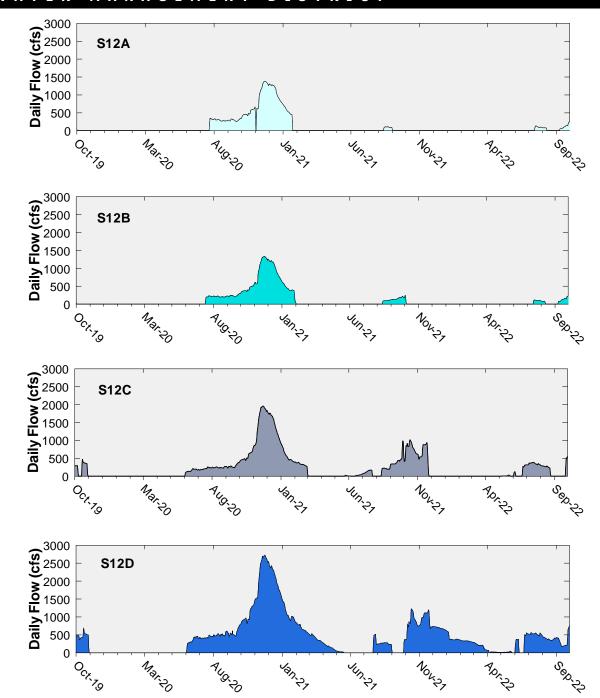


### **Shark River Slough Structure Daily Flows**



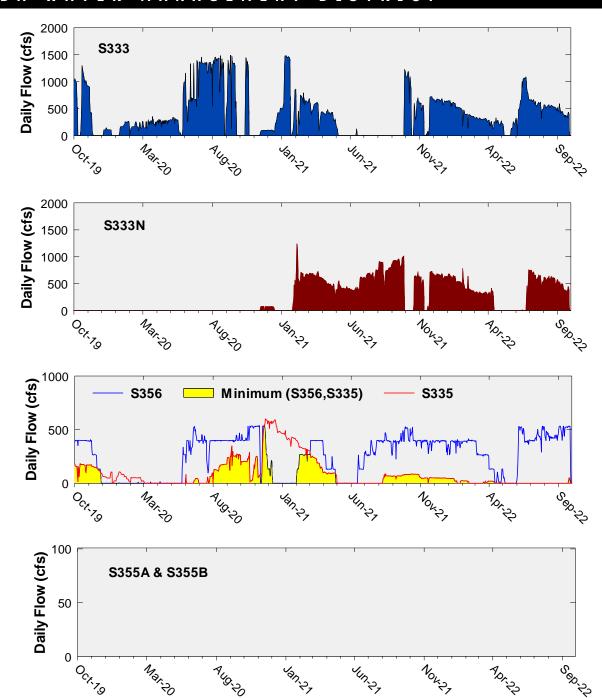


## Daily Flows at S12 Structures to Shark River Slough

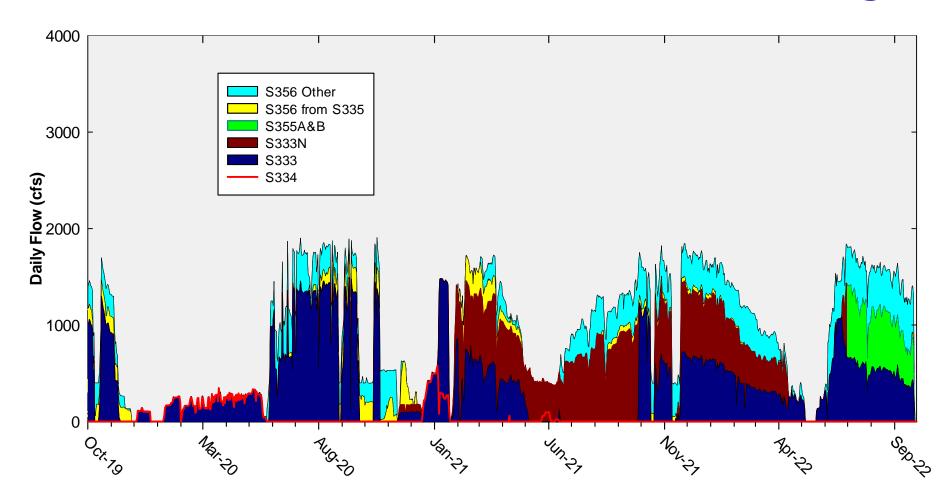


# Daily Flows at Individual Inflow Structures to Shark River Slough

(There was no flow at S355A and S355B during the period)

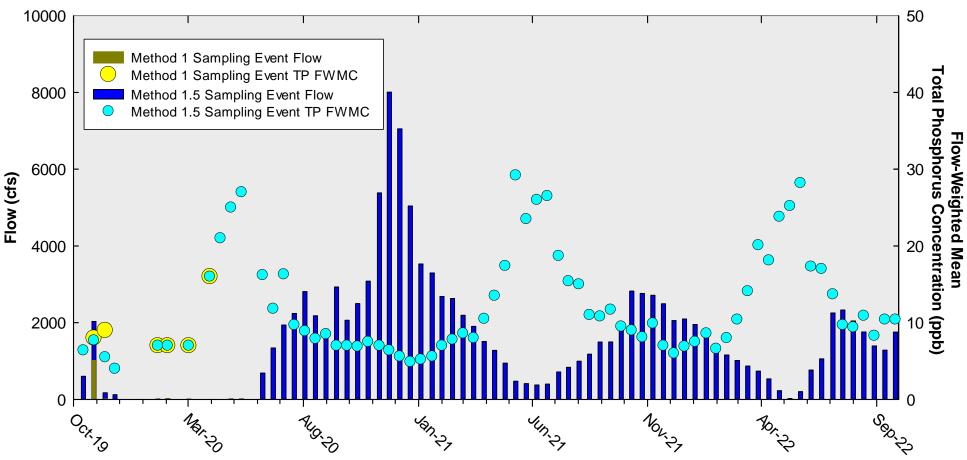


### Daily Flows Into Shark River Slough through S333&S333N, S355A&B, and S356 and Out through S334





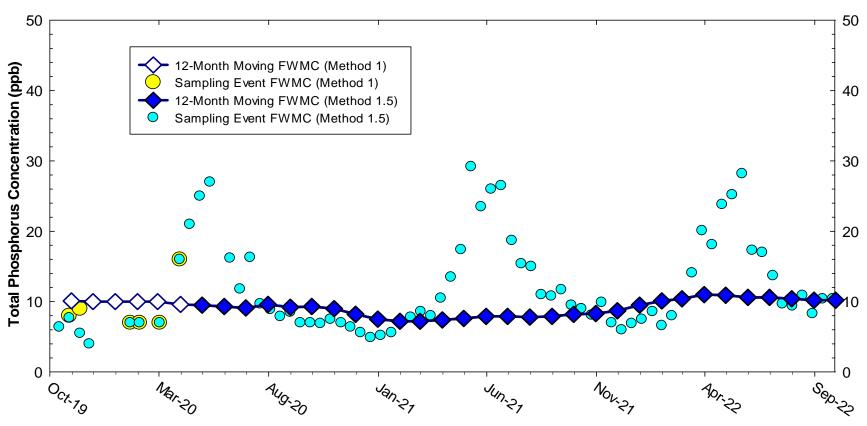
## **Shark River Slough Sampling Event Flow and FWMC**



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



### 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



### WY2020, 2021 & 2022 Stage, Flow, and TP FWMC Inflows to ENP through Shark River Slough

