

SETTLEMENT AGREEMENT REPORT

WY2020 Annual Shark River Slough Compliance

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Technical Oversight Committee May 4, 2021

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 2020	6.2	6.2		11.6		16.15		12				
Aug 2020	6.8	6.8		9.3		16.57		14				
Sep 2020	7.8	7.8		7.2		17.19		14				
12-Month	Total Flow		Month TP	Long-Ter		Percent of Sampling Events Greater than 10 ppb						
Period Ending	(kac-ft)	FWI	MC (ppb)	(ppl	0)	Guideline	:	Observed				
Everglades National Park – Shark River Slough												
Jul 2020	656.8		9.6	9.7		50.4		40.0				
Aug 2020	690.7		9.2	9.5		49.4		33.3				
Sep 2020	692.7		9.3	9.5		49.3		35.0				
Everglades National Park — Taylor Slough and Coastal Basins												
Jul 2020	291.6		5.3	11.	0	53.1		2.1				
Aug 2020	297.5		5.3	11.0		53.1		2.1				
Sep 2020	318.5		5.3	11.	0	53.1		2.1				

SRS - Method 1.5 computed as S12s+[S333+S355A+S355B+minimum(S356,S335)-S334] S334 flow is not excluded from the total flow for long-term limit calculations.

TS and CB - Method 3 computed as (S332D-S332DX1–S328)+S328+G737+S18C.



Shark River Slough TP Concentration Compliance Tracking

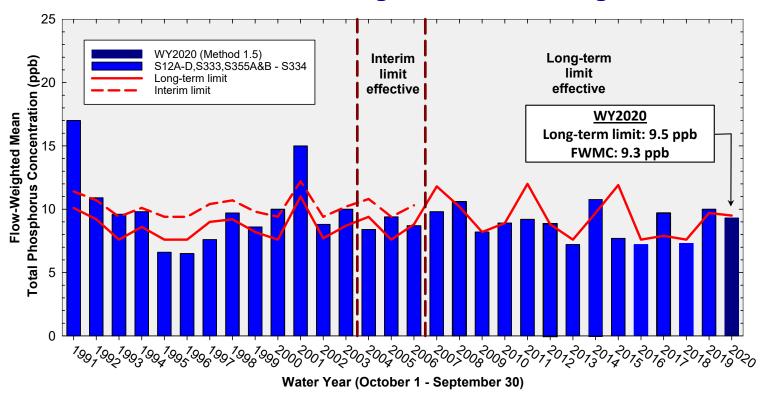
12-Month Period	Total Flow (kac-ft)	Flow-Weighted Mean TP Concentration	Long-Term Limit (ppb) Effective	Percent of Sampling Events Greater than 10 ppb	
		(ppb)	12/31/2006	Guideline	Observed
Aug 2019 - Jul 2020	656.8	9.6	9.7	50.4	40.0
Sep 2019 - Aug 2020	690.7	9.2	9.5	49.4	33.3
Oct 2019 - Sep 2020	692.7	9.3	9.5	49.3	35.0

Method 1.5 FWMC computed as S12s+(S333+S355A&B + minimum (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.



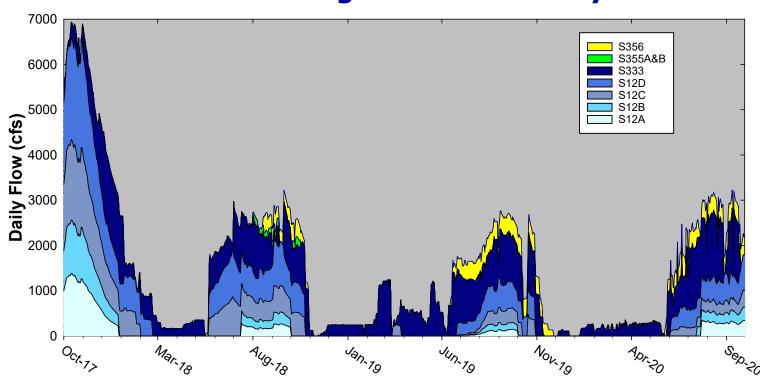
Annual Flow-weighted Mean ConcentrationsInflows to ENP through Shark River Slough



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

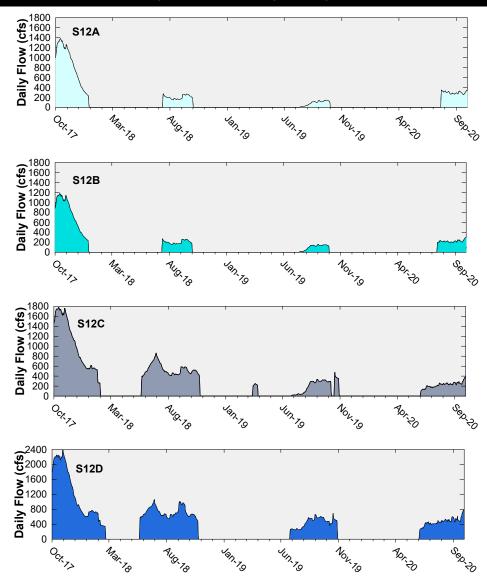


Shark River Slough Structure Daily Flows



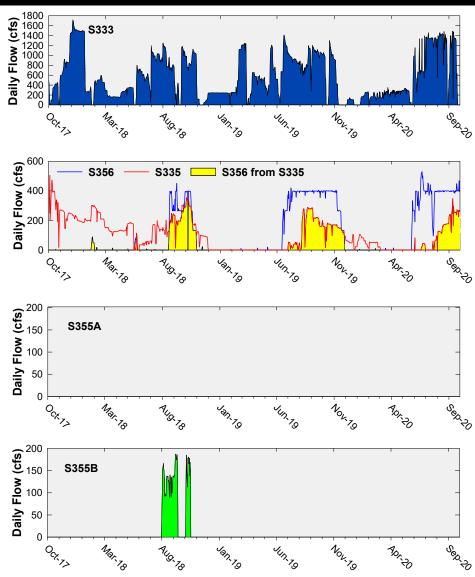


Daily Flows at S12 Structures to Shark River Slough



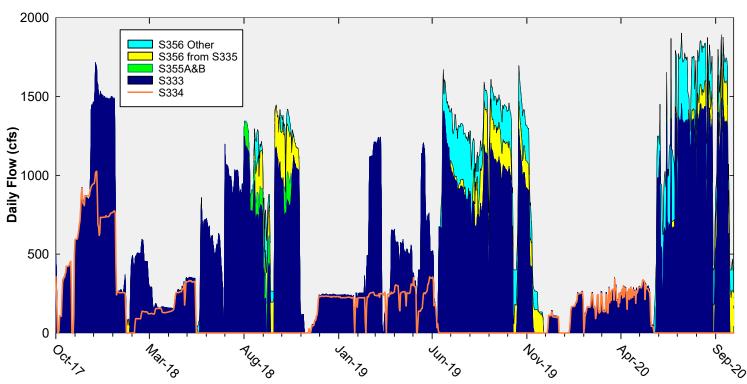


Daily Flows
at
Individual Inflow
Structures
to Shark River Slough



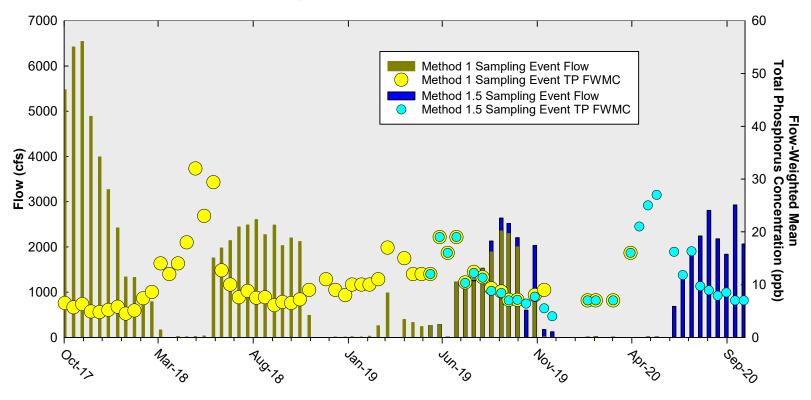


Daily Flows Into Shark River Slough through S333, S355A&B, and S356 and Out through S334





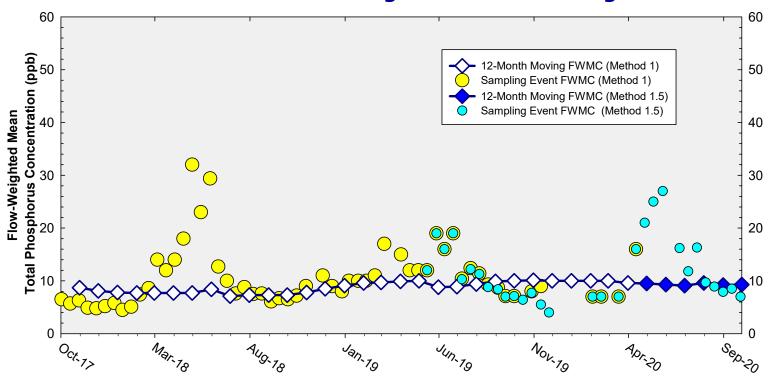
Shark River Slough Sampling Event Flow and FWMC



Flow 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



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

