

Water Quality in the Combined Operation Plan



Everglades Protection Area Related Numeric Nutrient Criteria

Total Phosphorus Rule

(62-302.540 FAC)

Long-Term Target: 10 μg/L

Federal Consent Decree

Appendix A (Shark River Slough)

Long-Term Target: 8 µg/L

Appendix A (Taylor Slough & Coastal Basins)

Long-Term Target: 6 µg/L

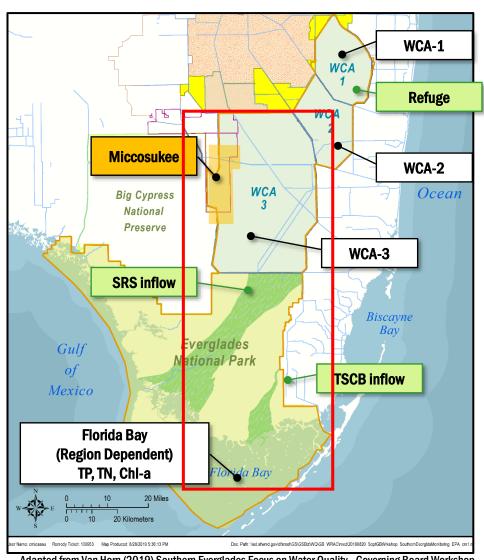
Appendix B (Refuge)

Long-Term Target: 7 μg/L

Federal Consent Decree Modified June 1995

Miccosukee WQ Standard
Adopted December 1997

State WQ Standards TP Rule (EPA) - July 2004 Florida Bay (Estuary NNC) – July 2012



Adapted from Van Horn (2019) Southern Everglades Focus on Water Quality. Governing Board Workshop 9/11/2019. West Palm Beach, FL



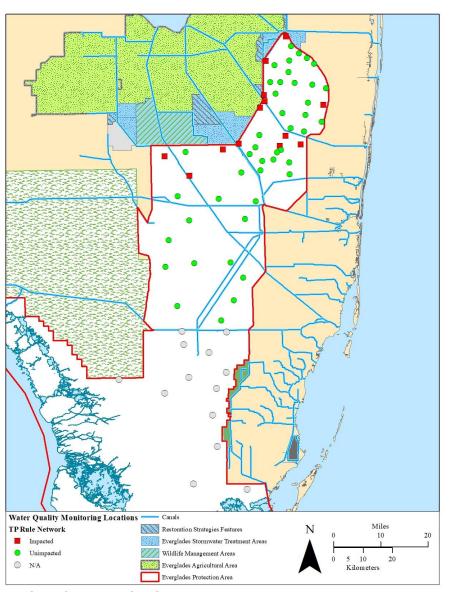
Total Phosphorus Rule

(62-302.540 FAC)

- "4-Part Test"
- Impacted and unimpacted networks within each region (i.e. WCA-1, 2 and 3) separately. The parts of the achievement test are:

Time	Applied to	Limit (µg/L)
5-Year Average	All Stations GM	≤10
3 of 5 Years	All Stations GM	≤10
Annual	All Stations GM	≤11
Annual	Individual GM	≤15

GM = Geometric Mean



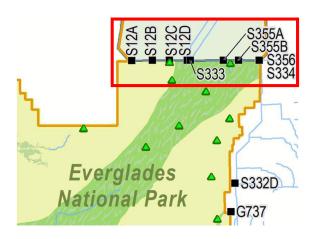
See Chapter 3A South Florida Environmental Report

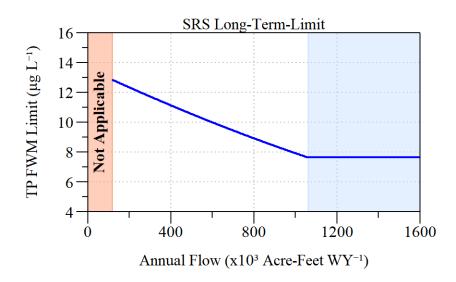


Federal Consent Decree

Flow-weighted-mean inflow concentration based on total inflow to Shark River Slough.

 S-12 (A-D), S-333 and any additional inflow from the WCAs established in the future.



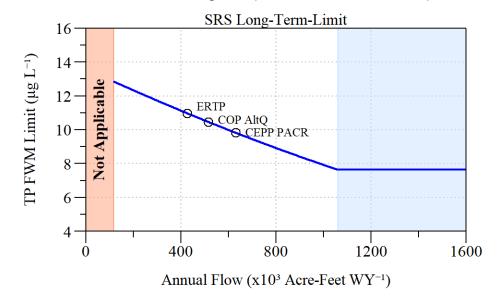


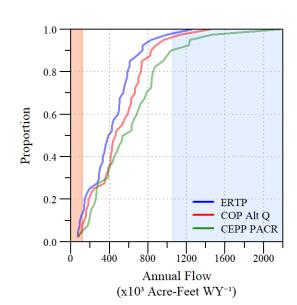


Mean \pm SE (range) annual modelled discharge to Everglades National Park via S12s, S333, S355s and S365 during the 40 year modelled planning period (Fed WY 1966 – 2005). Structures associated with the Blue shanty flow way included in the Central Everglades Planning Project estimates.

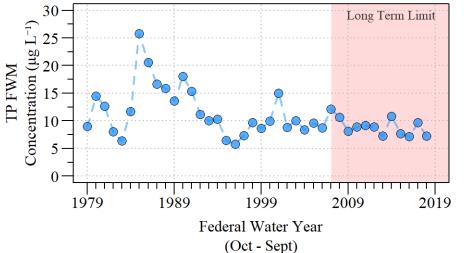
Restoration Project	Discharge (x 10 ³ Acre-Feet WY ⁻¹)
Everglades Restoration Transition Plan (ERTP)	$427 \pm 41 \ (73 - 1,255)$
Combined Operational Plan Alt Q (COP)	$515 \pm 47 \ (78 - 1,442)$
Central Everglades Planning Project (CEPP)*	$630 \pm 66 (66 - 2,167)$

^{*} Post Authorization Change C240 (includes most recent EAA Reservoir).



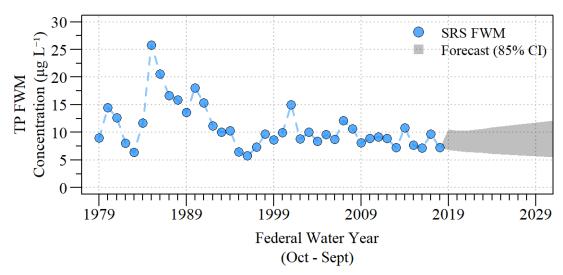






Shark River Slough inflow flow-weighted mean total phosphorus (TP) concentration from October 1978 to September 2018 including \$12s, \$333 and \$355s.

What can we expect for the short-term with respect to SRS FWM?



Forecasted projection based on autoregressive integrated moving average (ARIMA) model using the period of WY2007 – WY2018 for model development.



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