Water Resources Advisory Commission

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Phosphorus Limits for Everglades National Park

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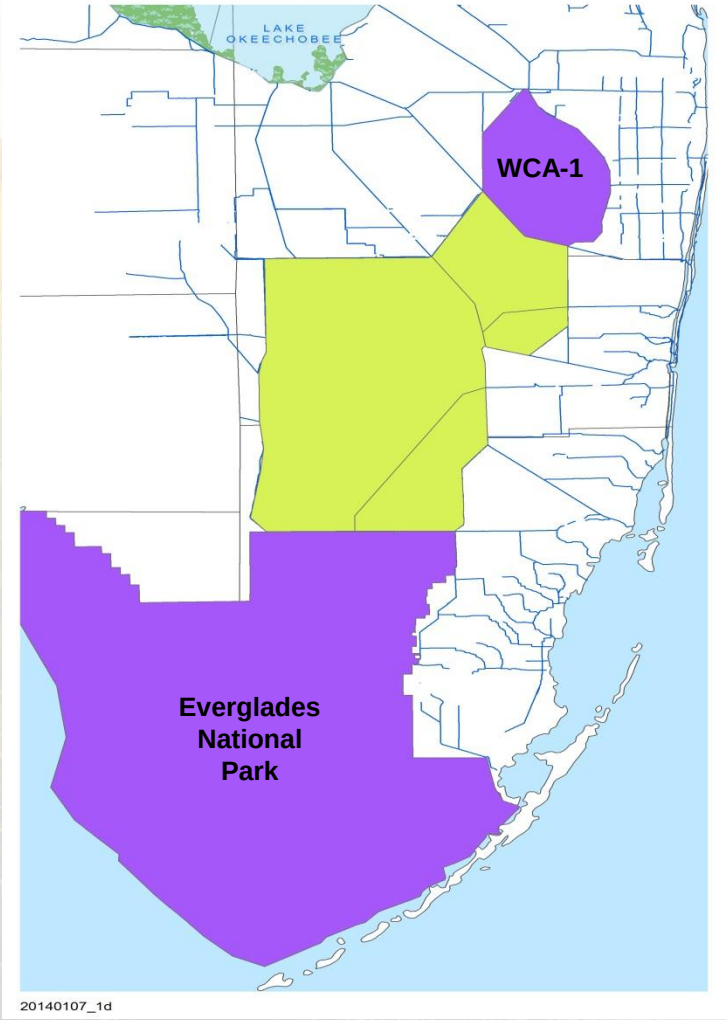
Everglades Protection Area Settlement Agreement

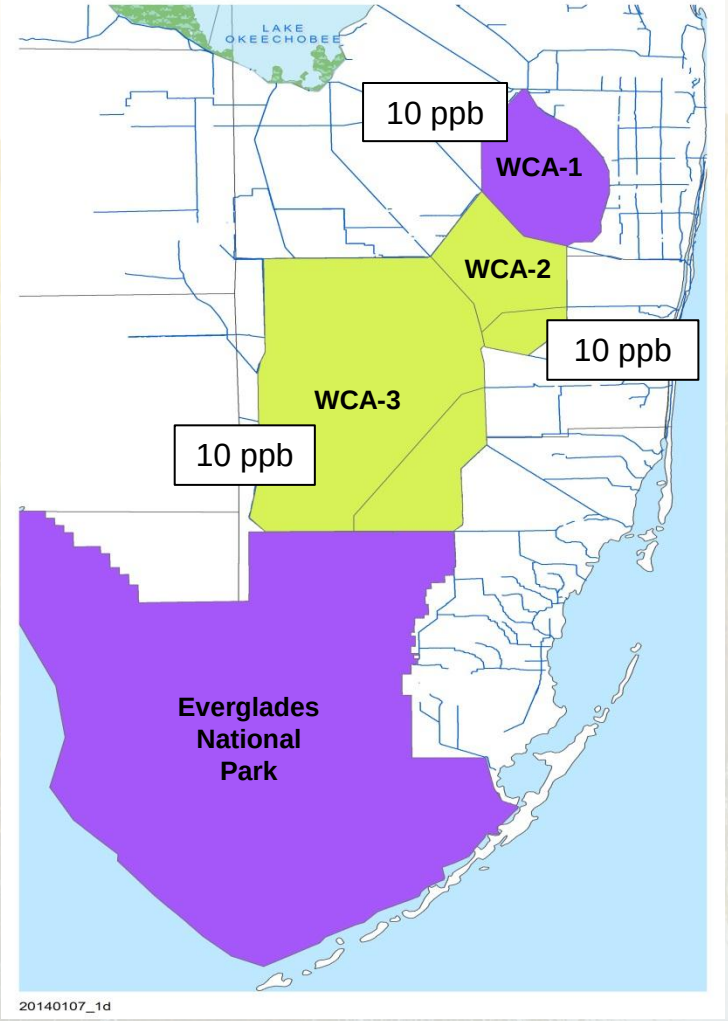
- United States vs. South Florida Water Management District, et al
  - The “USA lawsuit”, Case No. 88-1886-CIV-Hoeveler (S.D. Fla.)
- Settlement Agreement and Consent Order entered into in 1992
- Established phosphorus limits for
  - WCA-1 (Loxahatchee National Wildlife Refuge)
  - Everglades National Park



Everglades Protection Area State Phosphorus Rule

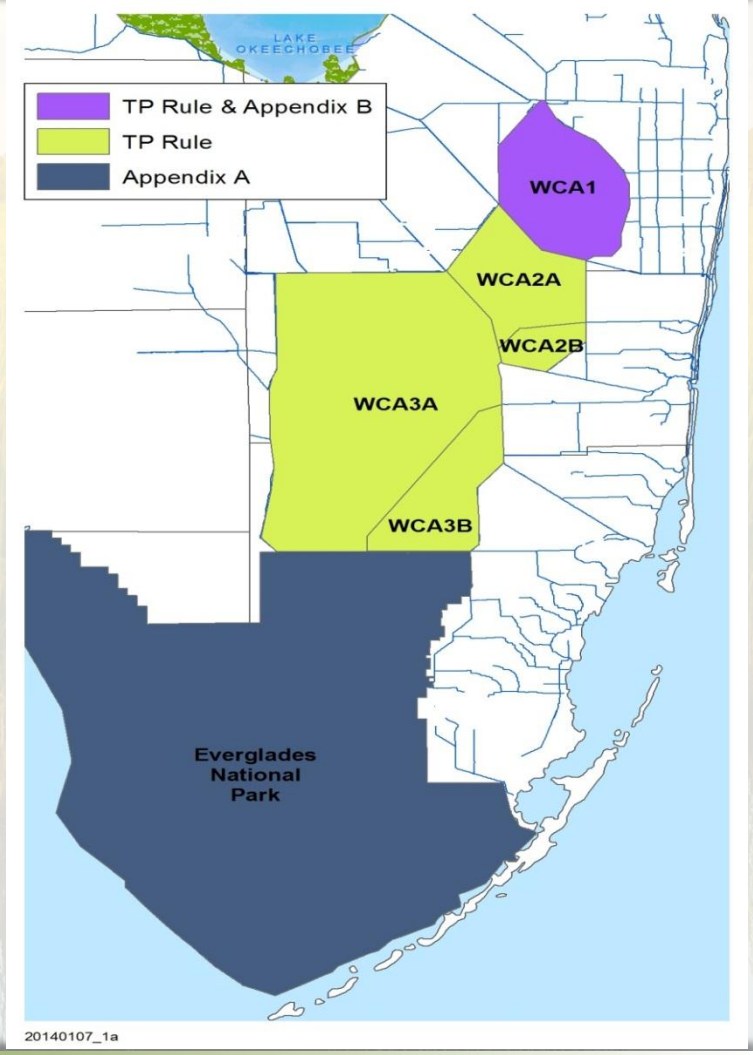
- Settlement Agreement required research program to support establishment of numeric phosphorus criterion

- FDEP used the results of this program to establish State Phosphorus rule
  - Adopted in 2004
  - 10 ppb geometric mean (4-part test)



State & Settlement Agreement Phosphorus Requirements

- WCA-1 (Refuge)
  - State Phosphorus Rule (10 ppb), and
  - Settlement Agreement Appendix B
- WCA-2 & WCA-3
  - State Phosphorus Rule (10 ppb)
  - Settlement Agreement does not apply
- Everglades National Park
  - Settlement Agreement Appendix A (Appendix A limit also adopted in state phosphorus rule)



Settlement Agreement
Appendix A - Phosphorus Requirements

- Shark River Slough (SRS)
  - Long-term Limit: Concentration varies with flow
  - Flow-weighted mean concentration at inflows
- Taylor Slough & Coastal Basins (TSCB)
  - Long-term Limit: Concentration is fixed
  - Flow-weighted mean concentration at inflows

Shark River Slough
Appendix A – Compliance Limit Equation

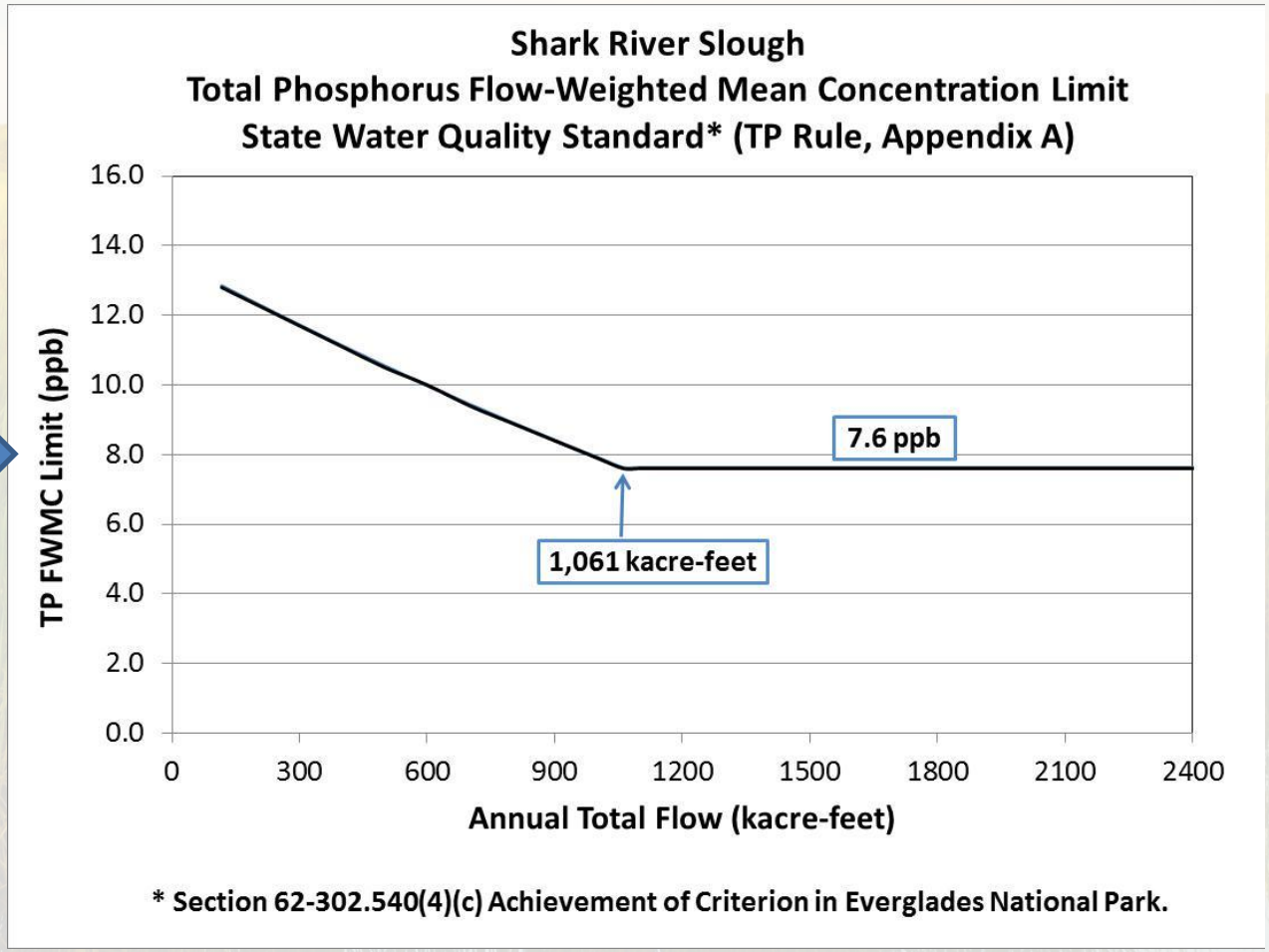
***Interim Limits**
(2003 - 2006)

Dry Year	Wet Year
(117 Kac-ft/yr)	(1061 Kac-ft/yr)
13.8 ppb	8.7 ppb

***Long Term Limits**
(from 2007)

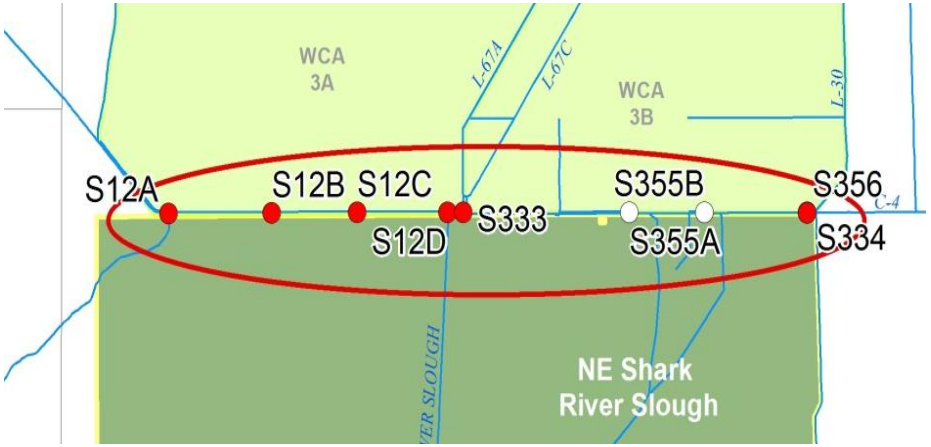
Dry Year	Wet Year
(117 Kac-ft/yr)	(1061 Kac-ft/yr)
12.8 ppb	7.6 ppb

*As flow increases, TP Limit decreases



Shark River Slough
Appendix A - Annual Compliance Evaluation

- Long-term TP Limit (LTL):
  - Calculated (Limit equation) from the combined structures total annual inflow, and any subsequent future inflow points from the WCA's
- TP Flow Weighted Mean Concentration (FWMC):
  - Flow-weighted composite across all inflow structures and any subsequent future inflow points from the WCA's



- Compliance based on comparing LTL to the annual Water Year (October 1 – September 30) FWMC of inflows to Shark River Slough

Taylor Slough & Coastal Basins
Appendix A - Annual Compliance Evaluation

- Long-term TP Limit (LTL):
  - A fixed limit of 11 ppb annually
  - Not flow based
- TP Flow Weighted Mean Concentration (FWMC):
  - Composited across structures S-332D and S-18C, plus any new release points from this basin established in the future

- Compliance based on comparing LTL to the annual Water Year (October 1 – September 30) FWMC of all inflows to Taylor Slough (S-332D) and Coastal Basins (S-18C)

Questions?