

MEMORANDUM

TO: Representatives of the Technical Oversight Committee (TOC)
Julianne LaRock, South Florida Water Management District (SFWMD)
Donatto Surratt, Everglades National Park (NPS)
Lori Miller, A.R.M. Loxahatchee National Wildlife Refuge (FWS)
Daniel Crawford, Jacksonville District, Army Corp of Engineers (USACE)
Edward Smith, Florida Department of Environmental Protection (FDEP)

FROM: Principals to the Consent Decree

Drew Bartlett, Executive Director, SFWMD

Pedro Ramos, Superintendent, ENP

Kathleen Burchett, Area II Refuge Supervisor, FWS

Colonel James Booth, District Commander, Jacksonville, USACE

Adam Blalock, Deputy Secretary, FDEP


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DATE: November 2023

SUBJECT: Principals' Concurrence with S-333 Working Group "Phase 1" Recommendations

The Consent Decree Principals provided a memorandum to the TOC representatives in October 2020 expressing Principal concurrence with the TOC that the WY2019 Shark River Slough (SRS) exceedance "was caused by a localized phenomenon of phosphorus release and transport related to patterns of stage and flow and less related to phosphorus coming from the EAA.". The S-333 Working Group (WG) was subsequently created by the Principals following the WY2019 (SRS) exceedance and was tasked with researching the localized phenomenon and developing a consensus recommendation for solutions to minimize TP transport.

The WG developed an outline of research projects consisting of two sequential phases focused on sediment characterization upstream of S333 and hydrodynamic influences of sediment transport. Based on information obtained through the WG Phase I studies, an initial level of understanding was gained on TP levels in both the canal sediments and surface water column near the S333 structure. Accordingly, an initial set of solutions was recommended by the WG as follows:

- **Engineering and Maintenance Solution:** Remove canal sediments in the eastern and southern reaches of the L-29 and L-67A canals, respectively (1,500 feet upstream of the S-333 complex), and in the S333 complex intake bay, and implement a series of low sill weirs to reduce canal bedload transport of TP laden sediments.
- **Monitoring:** Implement a monitoring and assessment plan to evaluate the effectiveness of the dredging and low sill weir solutions and for optimization for future actions.
- **Initiate an Innovative Technologies Study** to identify a solution to further target TP reduction in the surface water column.
- **Further Study:** Advancing the Phase I study to Phase II as initially envisioned to distinguish nutrient sources.

These recommendations by the WG serve as the present method for addressing current and potential future SRS exceedances that occur as a result of the localized drivers in the headwaters of the S333 structure. The Principals concur with the above-mentioned WG recommendations and have begun to develop actions to implement some of the recommendations.

Initial Actions

- **Engineering and Maintenance Solution:** The agency that will be executing the Engineering and Maintenance Solution is SFWMD. Design for the removal of canal sediments and implementation of low sill weirs has commenced, building upon activities in progress. The District estimates completion in federal water year 2025 which is based on expedited permitting and conducive construction conditions.
- **Monitoring:** Monitoring will commence following the implementation of the sediment removal and/or the low-sill weirs, whichever comes first. Monitoring will occur for up to five years. Analysis of the monitoring data will occur annually and be reported back to the Principals. Reports will include whether optimization of the initial solution is warranted, optimization of the monitoring plan if needed, and recommendations to continue or discontinue the monitoring. FDEP will fund the monitoring which will be executed by SFWMD in coordination with the members of the S-333 Working Group.

Ongoing Actions to be continued by the S-333 Working Group

- Once sufficient information from the monitoring and assessment plan is obtained, the WG will review this information and determine if an Innovative Technologies Study is still warranted. If it is, the WG will include this recommendation in the annual monitoring and assessment report to be submitted to the Principals. At that time, a determination will be made by the Principals to authorize implementation of the Innovative Technologies Study
- Once sufficient information from the monitoring and assessment plan is obtained, the WG will review this information and determine if Phase II is still warranted. If it is, the WG will work together to develop the scope and schedule for the Phase II studies to further evaluate regional drivers to elevated TP in the L-67A and L-29 canals. A determination will be made by the Principals to authorize implementation of any additional recommendations that the WG may have following completion of the Phase II studies.