

Notes from the Quarterly Meeting of the Everglades Technical Oversight Committee (TOC)

November 5, 2019

South Florida Water Management District
3301 Gun Club Road, West Palm Beach, FL 33406

TOC Representatives:

Julianne LaRock, TOC Chair, SFWMD	Rebekah Gible, Refuge (<i>alternate for Lori Miller</i>)
John Barkett, Special Master (<i>by phone</i>)	Frank Powell, FDEP (<i>by phone</i>)
Daniel Crawford, USACE	Donatto Surratt, ENP

Note: *This meeting was recorded by a court reporter and copies are available for purchase. For more information, contact Florida Court Reporting (561-689-0999). Handouts and presentations are available on the TOC website (<https://www.sfwmd.gov/our-work/toc>). A video of the meeting is available online at <http://sfwmd.ig2.com/Citizens/Media.aspx>.*

10:00 a.m. **1. TOC Opening Business** – Julianne LaRock, SFWMD

1A. Welcome, Announcements, and Identification of Phone Participants

Julianne LaRock, SFWMD, called the meeting to order, welcomed attendees, and noted the teleconference information for the meeting has been updated. Phone participants introduced themselves.

1B. Agenda Modifications and Documents Available on the TOC Website

Julianne LaRock reviewed the agenda and the list of files recently posted on the TOC website.

1C. Approval of Meeting Summary for June 25, 2019

There were no changes requested for the June 25, 2019, meeting summary and the TOC approved it.

Donatto Surratt noted the TOC website link for the June 25, 2019, meeting video incorrectly goes to the October 2018 meeting instead. This issue has been corrected.

Associated Online Documents:

- [Final Agenda for November 5, 2019](#)
- [Draft Meeting Notes for June 25, 2019](#)

10:11 a.m. **2. Second Quarter Settlement Agreement Report** – Jonathan Madden, SFWMD

Jonathan Madden, SFWMD, presented results for the second quarter (April–June) of 2019.

Refuge geometric mean total phosphorus (TP) values for April, May, and June 2019 were below the computed long-term levels. Some sites were too dry to sample during these months. All values over the past 36 months have been below the long-term limit except the October 2017 value, which was 0.4 parts per billion (ppb) above the long-term limit. The average over the 36 months ending June 2019 was 6.9 ppb, which is below the long-term goal stated in the Consent Decree for these stations. On average, the values are 2.9 ppb below the

long-term levels during the 36-month period. Preliminary geometric mean TP concentrations for July, August and September 2019 are below their respective long-term limits.

Shark River Slough provisional TP flow-weighted mean concentrations (FWMC) for the 12-month periods ending April, May, and June 2019 were calculated using two methods. The FWMC for periods ending in April and May were slightly above the long-term limits and the FWMC for June was below the limit. The percent of sampling events greater than 10 ppb was below the guideline for all three periods.

Taylor Slough and Coastal Basins TP FWMC values for the 12-month periods ending April, May, and June 2019 were calculated using three methods. FWMCs for all three periods were below the long-term limit of 11 ppb. The five-year average TP FWMC is 5.2 ppb, which is below the expectation of 6 ppb from the Consent Decree.

Following the presentation, Donatto Surratt, ENP, inquired about incorporating visuals for S-328 and G-737 to show the influence of these structures and aid in evaluating the three calculation methods being used for Taylor Slough and Coastal Basins. Jon Madden agreed to follow-up with Mr. Surratt after the TOC meeting to discuss specifics on how to address this request.

Frank Powell, FDEP, asked why the TP data appear more scattered between March and August 2018 in the figure shown on slide 13 (*"Flow-Weighted Mean Concentrations / Inflows to ENP through Shark River Slough"*) of the presentation and asked whether the stage at S-333 during this period was above or below 9.0 ft NGVD29. Julianne LaRock noted there were lower flows during this period, and Jonathan Madden confirmed this pattern is generally associated with periods of lower flow and lower stage. In the presentation, stage has not been presented because compliance is based on flow. Stage data for previous water years were not immediately on hand during the TOC meeting, but Jonathan Madden noted stage dropped below 9.2 in January 2019 and generally declined to 8.5 ft NGVD29 by July 2019 (during Water Year 2019).

Associated Online Documents:

- [Settlement Agreement Report, April – June 2019](#)
- [Settlement Agreement Report, April – June 2019 Presentation](#)
- [Quality Assessment Report for Water Quality Monitoring, April – June 2019](#)
- [Quality Assessment Report for Water Quality Monitoring, April – June 2019 – Water Quality Data](#)
- [Provisional Shark River Slough TP Tracking Report, Second Quarter 2019 – Method 1 and 2](#)
- [Refuge TP Compliance Table, 2007 through Second Quarter 2019](#)
- [Taylor Slough and Coastal Basins Data Tracking Report, Second Quarter 2019 – Method 1, 2, and 3](#)

10:36 a.m. **3. Combined Operational Plan (COP): Water Quality Evaluation and Recommendations –**
Jim Riley, USACE

Jim Riley, USACE, presented an Update on the COP that will potentially affect water quality deliveries to SRS. The TOC was previously briefed on the COP at the October 2018 meeting, and this update described the progress on addressing potential water quality concerns for inflows to Northeast Shark River Slough. Jim Riley described COP's Preferred Plan Alternative

Q+ and its expected achievements relative to COP flow objectives of timing, volume, and location. Water quality was not considered in the formulation of the selected alternative. Modeling showed a potential increase in phosphorus concentration delivered to NESRS compared to the existing baseline condition, so adaptive management strategies were developed and modeled to address the potential increased risk to water quality delivered to NESRS and demonstrated the risk could be mitigated/decreased by 2023, assuming continuation of recent downward phosphorus trends. Total volumes to ENP were not reduced by implementation of adaptive management as any reduction were made up later. The adaptive management concepts focus on reducing the dry conditions in WCA-3A historically associated with localized effects of higher TP and shifting a portion of flow away from the S-333 and S-12D structures receiving more canal flow versus marsh flow. Full details of the update are available in the presentation file linked to farther below, under "Associated Online Documents".

Following the presentation, Jonathan Madden recognized the efforts of the federal partners in evaluating WQ conditions for Appendix A under COP, affirmed SFWMD supports enabling more flow south to areas that need it, such as Northeast SRS, Taylor Slough, and Florida Bay. SFWMD understands this had to be evaluated because, although COP does not bring a new source of water, it does increase the total volume to SRS; it moves more flow to NESRS through S-333, often during low stage conditions; and this has the potential to produce higher TP going into SRS from localized effects observed at S-333. If a technical exceedance were to occur, it should not be a cause for alarm if it is in the lower range and there are no biogeochemical impacts downstream. The challenges still ahead for USACE include getting the process more defined for implementing the adaptive management protocols for water quality and addressing the uncertainty in knowing how effective any of these measures will be in the new regime of operation in controlling phosphorus levels in SRS.

Julianne LaRock expressed concern that details of the adaptive management for water quality are not fleshed out enough to reassure that there won't be reduced flows to the park, or that flows will be delivered as desired, and looks forward to hearing further details about adaptive management protocols. Jim Riley noted the concept is to have some stage triggers and conditions to activate consideration of the adaptive management measures and that another water quality group meeting is needed to define and document this.

Julianne LaRock asked if, under the various modeling efforts, anyone had looked at how often the TP limit at SRS is going to be 7.6 ppb. Jim Riley indicated he will have to check with Bill Walker on this.

Daniel Crawford, USACE, commended Jim Riley for bringing this information to the TOC and noted that many of the COP details presented have just come together in the last few weeks and details still need to be fully worked out, but USACE wanted to be proactive and give the TOC an update now rather than waiting until the next quarterly meeting.

In relation to slide 6 of the presentation ("*Description of Preferred Plan Alt Q+*"), Frank Powell asked whether the COP model considers the upcoming Tamiami Trail elevation project with regard to the 90 days per year L-29 canal maximum stage limit. Daniel Crawford, as the COP Engineering Lead for the USACE, responded that the modeling and formulation of COP only takes into consideration the infrastructure that will be in place when COP is implemented in July/August 2020. USACE acknowledges there will need to be a subsequent water control plan update after COP that considers additional inflows as well as utilization of the newly elevated portion of Tamiami Trail, but none of those evaluations were included in the COP process.

Frank Powell asked what the water quality team discussion through implementation of COP would be like and how FDEP would be engaged with it. Jim Riley said that, as needed and depending on what the conditions warrant, there would likely be small group meetings with the water quality team (including FDEP) to determine a good way to move forward in implementing the adaptive management strategies and then they would bring their recommendations to a larger group—probably the periodic scientist group for WCA-3A.

Julianne LaRock asked how responsive the adaptive management team is expected to be and if the team would be able to make recommendations quickly. Jim Riley responded that this is the desire, depending on conditions, but approval hasn't been granted yet to implement the adaptive management. A record of decision is needed, which will be in August 2020. Currently there is limited flexibility in what USACE can do in terms of adapting its operations to water quality concerns.

Associated Online Documents:

- [Combined Operational Plan Water Quality Presentation](#)

11:10 a.m. **4. Compliance Methodologies for Shark River Slough and Taylor Slough and Coastal Basins under Appendix A, TOC Representatives**

Donatto Surratt requested this agenda item with the overall objective of reconvening the TOC Appendix A sub-team. In 2016, the sub-team set out to evaluate how to incorporate structure S-356 into the compliance methodologies; this structure recycles water from ENP back into ENP. The sub-team developed two calculation methods for this which first appeared in the TOC records in 2016. Donatto indicated there should be enough data now to choose a single metric instead of using multiple metrics indefinitely. TOC representatives have gone to their principals to discuss this and the federal and state principals were in agreement to have it discussed at the TOC, so now it's up to the TOC to determine if the sub-team can get back together and close it out.

Julianne LaRock and Frank Powell stated they would like to get more direction from their principals and report back at the next meeting. Daniel Crawford said USACE is amenable to reconvening and he would also like to give the principals the opportunity to discuss; Daniel further said it would be good to resolve this before USACE looks at changing infrastructure that will alter inflow locations, and to be able to consider this information as USACE implements the COP water control plan, as well as before updating the COP hydrologic/water quality monitoring plan.

Action Item: TOC representatives will bring the proposal for reconvening the Appendix A sub-team to the principals for guidance.

11:16 a.m. **5. Public Comment**

Drew Martin, Sierra Club, said things seemed to be going well with water quality. Mr. Martin feels there should be plans to accommodate even more water south than what it appears USACE is currently planning.

Melody Naja, Everglades Foundation, commented that COP is a positive step toward moving water from the S-12 structure to S-333 and toward seeing increased flows to NESRS. Dr. Naja is concerned about how to integrate the water control plan into the adaptive management and is interested in seeing what operations will be considered as part of adaptive

management. Dr. Naja asked if SFWMD or federal agencies have checked what happened with S-333 autosampler TP data, remarking that autosampler values in June and July were around 50 to 60 ppb. Dr. Naja also stated that water quality values for S-332D appear to have an increasing trend and asked if anyone had checked this.

11:20 a.m. **6. TOC Closing Business** – Julianne LaRock, SFWMD

The next TOC meeting was tentatively planned for Tuesday, January 14, 2020.

Julianne LaRock requested that TOC representatives send agenda items for the next meeting by December.

11:25 a.m. Julianne LaRock adjourned the meeting.