

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

October 30, 2018

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

TOC Representatives:

Julianne LaRock, TOC Chair, SFWMD	Lori Miller, Refuge <i>(by phone)</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 (www.sfwmd.gov/toc). A video of the meeting is available online at <http://sfwmd.igam2.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 called the meeting to order and welcomed attendees. 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. There were no requests for changes to the agenda.

1C. Approval of Meeting Summary for May 1, 2018

Donatto Surratt and Frank Powell requested minor changes to the text. With these changes, the TOC approved the meeting summary for May 1, 2018.

Associated Online Documents:

- [Final Agenda for October 30, 2018](#)
- [Draft Meeting Notes for May 1, 2018](#)

10:10 a.m. **2. Second Quarter 2018 Settlement Agreement Report** – Jonathan Madden, SFWMD

Jonathan Madden presented results for the second quarter of 2018 (April–June), including provisional results for Shark River Slough (SRS).

Refuge geometric mean total phosphorus (TP) values for April, May, and June 2018 were below the computed long-term levels. Due to low water levels in April and May 2018, samples could only be collected at 9 of the 14 monitoring stations in these months. Preliminary results for the Refuge for July–September 2018 are also below the computed long-term levels.

SRS provisional TP flow-weighted mean concentrations (FWMC) for the 12-month periods ending April, May, and June 2018 were calculated using two methods. Provisional tracking results using both methods indicate the TP FWMC for the periods ending in April (7.8 ppb) and May (8.5 ppb) were above the computed long-term limit (7.6 ppb), while the TP FWMC

for the period ending in June (7.2 ppb) was below the limit. The periods ending in April and May 2018 contain the June 2017 event, which was a major contributor in WY2017 to the FWMC into SRS. The percent of sampling events greater than 10 ppb was below the guideline for the three periods. Provisional WY2018 results show a total flow of 1,674 kac-ft to SRS using Method 1 (1,699 kac-ft using Method 2), a long-term limit of 7.6, and TP FWMC to SRS of 7.4 ppb using Method 1 (7.3 ppb using Method 2).

Taylor Slough and Coastal Basins TP FWMC values for the 12-month periods ending April, May, and June 2018 were calculated using three methods. Results for all three methods remained well below the long-term limit of 11 ppb. The percent of sampling events greater than 10 ppb was far below the guideline for the three periods. The TP FWMC level for Taylor Slough and Coastal Basins in WY2018 was about 6 ppm, which met the Consent Decree goal of 6 ppb.

Agency Technical Comments:

Donatto Surratt asked for clarification about the 35-month period shown in the presentation for the Refuge and Jon Madden explained that he typically shows 3 years (36 months), but June 2017 was excluded from the average concentration because stage in that month was below the 15.42 feet NGVD29 minimum. Garth Redfield explained that this is done to be consistent with the calculations in the Consent Decree.

Regarding the May 1, 2018, TOC determination on extraordinary natural phenomena that affected TP values for SRS in WY2017, Donatto Surratt suggested it would be helpful to have a separate document to formally memorialize the decision. Julianne LaRock and other TOC representatives remarked that this decision was documented in the TOC meeting notes for that meeting. Julianne LaRock noted that the Second Quarter 2018 Settlement Agreement Report also documents the determination in the first full paragraph on page 8. Jonathan Madden stated that future quarterly Settlement Agreement reports that include this data will also include a note about the decision. Stuart Van Horn stated that the level of documentation that was produced is appropriate, and noted that if more detailed documentation was desired, SFWMD would be looking to the federal parties to produce it.

Donatto Surratt noted that at the last meeting Jonathan Madden describe a relationship between S-200 and G-737. Data was missing at G-737 due to construction and there was discussion about whether data from S-200 could be used to backfill this gap. Donatto reviewed the data and did not find a strong correlation between TP values for the two sites. Jonathan Madden clarified that it is the flow data that is the same between the two sites, not the TP data, and there are no plans to use S-200 TP data as a surrogate for G-737. Daniel Crawford asked how long it will take to develop a flow equation at G-737 so the S-200 surrogate data will not have to be used. Jonathan Madden indicated he would need to investigate it further before being able to answer.

Bill Walker suggested the TOC conduct further analysis to investigate potential causes and effects of the October 2017 excursion in the Refuge and present it at a future TOC meeting. Julianne LaRock said more time would likely have been spent to present that type of material had there been a second excursion in the Refuge.

Associated Online Documents:

- [Final Shark River Slough TP Tracking Report, WY2017](#)
- [Provisional Shark River Slough TP Tracking Report, Second Quarter 2018](#)
- [Quality Assessment Report for Water Quality Monitoring, Second Quarter 2018](#)

- [Quality Assessment Report for Water Quality Monitoring, Second Quarter 2018 Data](#)
- [Refuge TP Compliance Table, 2007 through Second Quarter 2018](#)
- [Settlement Agreement Report, Third Quarter 2017](#) (revised with final SRS flow data)
- [Settlement Agreement Report, Second Quarter 2018](#)
- [Settlement Agreement Report, Second Quarter 2018 Presentation](#)
- [Taylor Slough and Coastal Basins Data Tracking Report, WY2017–Second Quarter 2018](#)

10:50 a.m. **3. Combined Operating Plan (COP): Project Overview and Water Quality Evaluation**

Methodology – Donna George and Jim Riley, USACE

Daniel Crawford provided a brief introduction for this agenda item, noting that the COP effort has been going on for about one year and is at the point where the team is looking at the intermediate round of alternatives. Within a few months the team will make a recommendation for the next operational plan that will have the potential to change the timing, seasonality, distribution, and volume of flows into Everglades National Park. Given the potentially significant effects on the Consent Decree calculations, the USACE wants to make sure the TOC is fully aware of the progress of these efforts. The operating plan would not be implemented until May 2020 at the earliest.

Donna George, USACE project manager for the Modified Water Deliveries (MWD) project, presented an overview of the project background, including COP scope, objectives, constraints, and modeling rounds, and key schedule dates. Jim Riley presented information about how the potential effects of COP on water quality are going to be evaluated, including development of alternative evaluation methodology for Shark River Slough and Taylor Slough and Coastal Basins. Complete details of these presentations are included in the document linked to below.

Agency Technical Comments:

Julianne LaRock asked if there would be a future update for the TOC and Donna George said they could give an update any time one was needed. Frank Powell noted that FDEP participates in the adaptive management sub-team associated with water quality and COP and has reviewed and provided comments on some of the documents produced by Bill Walker and is still reviewing the uncertainty analysis information.

Frank asked why water quality is not being considered a constraint or an objective for COP. Donna George explained that this is a foundation project and water quality was not included as an objective or constraint. For foundation projects the USACE optimizes the alternatives to provide the greatest restoration flows they can provide. During optimization and looking at the alternatives, USACE looks at water quality impacts and can either dial back operations or use adaptive management to manage the optimized alternative. As water quality gets better the USACE doesn't want to have to go back and do another update to a water control plan but wants to have the ability to push more and more water as it gets better within the system.

Frank Powell asked whether there is an opportunity to evaluate some of the operational criteria at the S-333 or S-12D structures regarding water quality such as doing a model run. Jim Riley responded that for Round 3 there will be one optimization sensitivity run for water quality. Daniel Crawford said some of the preliminary water quality evaluations for the Round 1 alternatives probably overstated the potential water quality effects of the COP alternatives, and is hopeful that as the water quality sub-team works through the Round 2 alternatives they will develop one or two recommendations for potential operational

objectives that can be used to improve conditions under an adaptive management type of framework with additional safeguards for water quality; after a plan is chosen, at least one sensitivity run will be conducted around February or March 2019.

Stuart Van Horn informed the TOC that he has been asked by the SFWMD executive director Ernie Marks, who is one of the principals to the Consent Decree, to provide some background on what the SFWMD's concerns are, moving forward, in terms of water quality. In September 2017, Ernie Marks sent a letter to Colonel Kelly emphasizing that SFWMD has a commitment to completing all the Everglades restoration projects and being able to transition those into operations so we can realize the benefits to the environment from their implementation. Modified Water Deliveries is a project that is important to SFWMD and the Park for being able to move forward with these restoration benefits and SFWMD has ongoing concerns that the impacts of implementing these projects by building infrastructure and implementing the water control plans has a likelihood to put SFWMD in jeopardy of seeing frequent exceedances of the TP limits for SRS under Appendix A of the Consent Decree. From a historical context, SFWMD and the entire team have been working through the water control plan operations for a number of years. In the earlier work, concern about compliance is one of the reasons the Appendix A sub-team was formed. There were two requirements that needed to be worked on for TP levels discharging into SRS to come down to the requisite levels: 1) the assumption that all the control programs working upstream in the Everglades Agricultural Area (EAA) would reduce TP levels so they would not cause or contribute to violations of state water quality standards in the Everglades Protection Area, and 2) the equation for Appendix A was premised so that implementation of Mod Waters in its original design and the transition into a marsh-like flow system and the elimination or diminished utilization of S-333 would carry it the rest of the way to improve the TP levels discharged to the park. As has been seen over time, the control program upstream has been working very well at reducing TP levels before they enter the Park, yet there is still a system where water is delivered to SRS under certain operational scenarios, and with higher water levels we see better concentration entering the Park and under lower water levels we see higher TP concentrations going into the Park. This is one of the reasons why in ERTS and COP the regression equations have been developed, because the water levels and TP levels in the WCAs and the southern end of the system show a strong relationship to TP levels entering the Park. So there has been a shift in our understanding of what the influences are now. It has been studied quite extensively and we have a good handle on it. In moving forward, one of the things we are not going to get out of the Mod Waters project is marsh-like flow; it will still rely heavily on using structure S-333 and the District has expressed its concerns about not attaining the second requirement mentioned above of improving TP levels going into the Park. SFWMD realizes we are on the right trajectory of moving more water south and building the necessary infrastructure and water control plans needed for that and is committed to moving forward. However, SFWMD is concerned that it may not be able to operate the constructed features because of FDEP constraints in state law and state water quality standards which adopt Appendix A. There is already a case where the S-333N structure has been permitted for construction but has not received an operations permit from FDEP because of concerns and the inability to provide reasonable assurance that the Appendix A limit will not be violated in the future. This is not because of the control programs not doing their jobs upstream, but because of the way the system is being designed south and into the Park to not provide the second part of the approach mentioned earlier. This is going to be an ongoing issue.

Frank Powell explained that although FDEP is not yet able to issue and operating permit for S-333N, it was able to issue one of the specific conditions of the permit for emergency operations when certain conditions are met. Daniel Crawford noted that the permit also includes requirements for the CEPP 356 pump station to also be constructed to ensure that adequate seepage management and flood protection be provided as a pre-condition to larger-scale operations of S-333N; this requirement would result in a longer period before S-333N can operate because S-356 will take much longer to construct than S-333N.

Associated Online Documents:

- [Modified Water Deliveries Increment 3 – COP Overview and Water Quality Evaluation Methodology Presentation](#)

11:36 a.m. **4. Public Comment**

James Moran, SFWMD governing board member, commented that Appendix A and the Consent Decree are not appropriate under today's conditions and the new CEPP flow system and cautioned that exceedances of Appendix A will be routine if there are no changes. Mr. Moran recommended dismissal of the USA lawsuit because it has become more of an obstacle than an aid to the partnership between agencies cooperating in Everglades restoration.

Drew Martin, Sierra Club, commented that with climate change, some of the events considered extraordinary today may become more common. Mr. Martin mentioned that plans have been proposed for new equestrian use and other recreational activity in the Refuge, including camping, that may impact water quality. Mr. Martin feels that the Consent Decree is important and should not be dissolved because it keeps everyone focused on water quality. Regarding the COP, Mr. Martin asked about the reasons for raising water levels in the canals.

11:48 a.m. **5. TOC Closing Business** – Julianne LaRock, SFWMD

The next TOC meeting was planned for Tuesday, January 29, 2019.

Julianne LaRock requested that TOC representatives send agenda items for the January 29 meeting in the next week or so.

11:51 a.m. Julianne LaRock adjourned the meeting.