

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

August 11, 2020

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

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## TOC Representatives:

Julianne LaRock, TOC Chair, SFWMD  
John Barkett, Special Master  
Daniel Crawford, USACE

Lori Miller, Refuge  
Frank Powell, FDEP  
Donatto Surratt, ENP

**Note:** *This meeting was conducted entirely online and by phone and was recorded by a court reporter. Copies of the transcript are available for purchase; for more information, please contact Florida Court Reporting (561-689-0999). Handouts and presentations are available on the TOC website (<https://www.sfwmd.gov/our-work/toc>) and a recording of the meeting is available online at <http://sfwmd.iqm2.com/Citizens/Media.aspx>.*

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

### **1A. Welcome, Announcements, and Identification of Participants**

Julianne LaRock, SFWMD, called the meeting to order, welcomed attendees, noted the TOC representatives were connected to the meeting, and gave brief instructions on virtual meeting guidelines and software controls.

### **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 May 5, 2020**

A typo noted ahead of the meeting has been corrected in the May 5, 2020 summary. The TOC approved the summary with this change.

#### **Associated Online Documents:**

- [Final Agenda for August 11, 2020](#)
- [Draft Meeting Notes for May 5, 2020](#)

10:13 a.m. **2. First Quarter Settlement Agreement Report** – Jonathan Madden, SFWMD

Jonathan Madden, SFWMD, presented the 2020 first quarter Settlement Agreement report, which includes results of total phosphorus (TP) monitoring in the Refuge, Shark River Slough, and Taylor Slough and Coastal Basins through March 2020. Results for Shark River Slough are preliminary and were calculated using provisional flow data. Final results for Shark River Slough for water year 2020 will be presented after the United States Geological Survey (USGS) provides final flow data for the S-12 structures through September 30, 2020.

Refuge 14-station geometric mean TP values for January, February, and March 2020 were consistently below the computed long-term levels. All but one value over the past 36 months have been below or equal to the long-term level. The average TP geometric mean concentration over the 36 months ending in March 2020 was 2.7 parts per billion (ppb) below

the long-term level for that period. Preliminary geometric mean TP concentrations for April through July 2020 were considerably below their respective long-term levels; due to lower stages during these months, it was not possible to sample all 14 stations.

Shark River Slough preliminary TP flow-weighted mean concentrations (FWMC) for the 12-month periods ending in January, February, and March 2020 were calculated using two methods. Both methods indicate that FWMC for the periods ending in January and February 2020 were above the long-term limit, but the FWMC for the period ending in March 2020 was below the limit. Overall, flows to Shark River Slough during these periods were fairly low.

Taylor Slough and Coastal Basins TP FWMC values for the 12-month periods ending in January, February, and March 2020 were calculated using three methods. The FWMC of each period was below the long-term limit of 11 ppb, and the observed percent of sampling events greater than 10 ppb was far below the guideline.

**Associated Online Documents:**

- [Settlement Agreement Report, January – March 2020](#)
- [Settlement Agreement Report, January – March 2020 Presentation](#)
- [Quality Assessment Report for Water Quality Monitoring, January – March 2020](#)
- [Quality Assessment Report for Water Quality Monitoring, January – March 2020 – Water Quality Data](#)
- [Provisional Shark River Slough TP Tracking Report, First Quarter 2020](#)
- [Refuge TP Compliance Table, 2007 through First Quarter 2020](#)
- [Taylor Slough and Coastal Basins Tracking Report, First Quarter 2020](#)

10:32 a.m. **3. Shark River Slough Exceedance for Federal WY2019**

10:32 am **3A. May 5, 2020 Action Items Follow-up Discussion** – TOC Representatives and supporting technical staff

As a follow-up to the last TOC meeting, Jonathan Madden presented supplemental information on rainfall estimates for Water Conservation Area 3 (WCA-3) during Federal WY2019.

Information presented included historical rainfall data from 1958 to 2019, daily rainfall for WCA-3 during Federal WY2019, and a map showing rain gages, Thiessen polygons, and rainfall forecasting areas used by SFWMD meteorologists.

Stuart Van Horn, SFWMD, clarified that this background information was presented based on a question from the previous meeting about whether there were rainfall events that occurred that may have had an impact on stages, to look at whether or not rainfall patterns that fall on WCA-3A and the volume of water that could be contributed to SRS may have been associated with an exceedance. The context of this information when evaluating whether there were extraordinary natural phenomena is to inform whether there is something in the rainfall and how that couples with information that is available upstream in terms of concentrations.

Jed Redwine, National Park Service (NPS), noted the relatively low amount of rainfall in September 2019.

In the last meeting, there were bullet points in Jonathan Madden's presentation indicating the canal stage at S333 in WY2019 was the lowest maximum stage going back to WY2008 and

the lowest FWM average stage. Daniel Crawford did some additional checks to confirm whether those were locally isolated or regional stage levels, and agreed that Jonathan's presentation from the previous meeting accurately characterized that the stages at S333 were not local effects due to increased deliveries into eastern SRS, but were part of a regional trend covering the southern half of WCA-3A.

**Associated Online Documents:**

- [Supplemental Federal WY2019 Rainfall Estimates for WCA-3](#)

10:52 am **3B. Shark River Slough Compliance – Operational Exploration – Donatto Surratt, ENP**

Donatto Surratt presented information about WY2019 compliance for SRS. As noted in the presentation, WY2019 water levels started off low and never exceeded 9.65 feet at the headwater of S333. More than 50% of the S333 annual flow in WY2019 occurred when the headwater stage was below 9.2 ft. S-333 flow that occurs when water is below this level generally has TP concentrations that exceed 8 to 10 ppb. In WY2019, water levels during the transition from dry to wet season (April to July) remained at or below this level, and substantial water was delivered to NE SRS during this time; during most previous years, a larger portion of this water was routed to South Dade or was not discharged. TP concentrations in this water were above 10 ppb, and much of this was incorporated in the WY2019 compliance determination, leading to the exceedance of the long-term limit.

S333 tends to be the main source of flow to ENP during the dry to wet season transition from April to July, and a comparison of the data shows that S333 tends to have higher concentrations than the S12s and S356, especially during this period.

Donatto showed a brief video by Troy Hill, ENP, showing the irregular canal bottom and its thin layer of sediment, which he stated can easily be disturbed by turbulent flows and entrained in the water column. A different video by Jed Redwine, NPS, showed the turbulent flow when the structures are open and pointed out that this is exaggerated where structures are linked to a substantial bend in the source canal. This combination of turbulence and easily disturbed bottom sediment was pointed out as a prime condition to suspend sediments and increase load and concentrations going to the Park. Donatto described that preliminary results of a 2017 study suggest that the L67A canal north of S333 has very little stored organic sediments and the L29 canal west of S333 has a high level of organic sediment; he explained, therefore, a lot of the sediment in front of S333 is likely coming from L29.

Lori Miller asked for clarification on the graph on slide 3, and Donatto confirmed the graph was calculated with data from all of the compliance structures normally used for SRS, not just S333, and not just for NE SRS.

Bill Walker suggested there are other drivers such as rising stage (when WCA-3A stage is rising) that tend to increase compliance risks, and another variable may be the Lake deliveries to the water conservation areas.

Frank Powell asked about targets for CERP and CEPP for deliveries through SRS. Bob Johnson indicated the CERP target is about 1.3 million acre-feet on average per year, and with CEPP is expected to more than double. For the bottom graph on slide 8, Frank noted that the 2012 value was excused by the TOC for being due to a data error and requested that it not be labeled as an exceedance in the figure. Frank further noted that for 2014, the TOC voted that it was an exceedance, and 2017 was considered due to an extraordinary natural phenomenon.

Julianne LaRock asked whether the data was collected by grab or autosampler, and Donatto confirmed it was all grab data. Julianne asked whether the point that was made that S333 was used almost solely during the dry to wet season transition applied every year or just in WY2019; Donatto indicated there are several years where this was the case, as reflected in the data.

Regarding the sediment study mentioned on slide 13, Stuart Van Horn asked what the future investigation of looking into this more would be and wondered if the north-south airboat trails immediately north of the L29 near S333 play any role between the marsh and the canal. Donatto said a phase two of the study has been initiated to collect more sediment samples than in phase one, and another study will be conducted to sample water in a cross section in front of the S333 structure, from the bottom of the canal to the surface, during the next opening in the dry to wet season transition period; studying the sources of the sediments has not yet been done.

Donatto Surratt closed by noting that, for him, these results support that there is not substantial evidence that the exceedance was due to error or extraordinary natural phenomena.

#### **Action Item 1:**

Donatto Surratt will edit the bottom graph on slide 8 of the presentation for this agenda item so the 2012 value is not shown as an exceedance, because it was excused by the TOC for being due to a data error rather than being an exceedance in terms of compliance. *[This was completed shortly after the meeting and the online version was updated.]*

#### **Associated Online Documents:**

- [Shark River Slough Compliance and Operational Exploration #1 Presentation](#)

### 11:45 am **3C. Discussion of SRS Exceedance Federal WY2019 – TOC Representatives**

The TOC representatives concurred the results support a lack of substantial evidence that the WY2019 exceedance was due to error or extraordinary natural phenomena. Frank Powell added that the potential causation of the exceedance appears to be very localized to S333, both geographically and in seasonality.

Following this discussion, Donatto presented potential considerations that he believes may be able to ameliorate the kind of high TP levels that occurred at S333 in WY2019.

Short-term potential activities presented by Donatto included (1) shifting flows from S333 to S333N, because there is less organic matter in L67A and no 90 degree turn, so potentially less turbulence; (2) dredging upstream of S333 in the L29 to potentially reduce sediment in the system; (3) armoring the canal embankment at the headwater of S333 to potentially reduce leaching; (4) installing aprons in front of the S333 structure; (5) implementing the Combined Operation Plan (COP) adaptive management water quality strategies; and (6) slightly raising the height of the sill at S333 to reduce the energy and potentially allow more suspended matter to settle out, hopefully reducing load going through the structure. Donatto stated that utilizing physical based modeling should be considered, particularly for raising the sill and evaluating dredging influence. Given the time constraints, Donatto suggested dredging is something that should be done in the short term. Keeping in mind that the TOC does not have control over the Corps' decisions in implementing COP, the COP adaptive

management options include reducing flow through S333 when stage is below 9.2 ft, diverting a quarter of S12D flow to S12C, and reducing dry season recession rates in WCA-3A to allow stages in L29 to remain higher going into the wet season.

Long-term potential activities presented by Donatto included (1) achieving compliance with the water quality based effluent limits (WQBEL) through Restoration Strategies; (2) increasing flows to ENP to greater than 1,300 kac-ft annually; (3) improving water quality from the western basins; (4) establishing mechanisms to provide low, continuous flow volumes throughout the dry season; (5) decompartmentalizing as envisioned in CEPP and CERP; (6) modifying the L67A flow path as contemplated in CERP; and (7) improving water exchange between marsh and canal as proposed in Modified Water Deliveries and CERP.

Donatto closed the presentation by requesting that the TOC agencies have a follow-up meeting to discuss the considerations and recommended that it go to the Appendix A subteam. A dialogue focused on the path forward in which TOC Representatives described their perspectives and the position of their agencies is generally summarized as follows:

- Lori Miller indicated she feels it is the TOC's charge to make technical recommendations for solutions, would like for these items to go to a subteam for further discussion, and even if the TOC itself doesn't implement the solutions, it can still make the recommendations. She supported further discussion of options at a technical team level and would like to get the principals' discussion wrapped up within a week or two.
- Daniel Crawford also concurred and reiterated the importance of proceeding expeditiously with establishing a subteam and that it would be ideal implement something before the start of the next water year in October. Daniel emphasized that USACE is ready to move forward with follow-up discussions at a technical subteam with the aim of timely action. He clarified no further action is needed on the S333N work or the COP adaptive management plan because they are already underway and are independent of the TOC, so dredging and armoring are the only items that would need TOC principal level coordination. He further stated that the USACE currently has no plans to conduct these two activities, so would only pursue these actions in response to the exceedance if confirmed by the principals.
- Donatto Surratt indicated that he already met with his principal, who supports assigning this to a subteam and therefore is ready to move forward.
- Frank Powell said FDEP is reviewing the SFWMD request to modify the current permit for S333N, and feels it may be in the best interest of the TOC to have a better understanding of the S333N and its construction, which is ongoing; some of the considerations Donatto raised about armoring and dredging could potentially be addressed in the construction; COP adaptive management is moving forward and the chiefs report is set to be signed in September; Frank feels that there are other studies and efforts ongoing that may address long-term items and it is important to make sure these keep moving forward. Frank Powell stated that it may be best to keep the proposed activities at the principal level and seek feedback sooner rather than later.
- Julianne LaRock suggested going back to the principals to discuss this proposal and the agencies preference in evaluating these options and any possibility for consensus on the best approach. She suggested more research is needed on these proposed items, which could funnel into the design for any dredging or armoring. Julianne stated her concern that it may not be possible to do these things before October, and feels these things need

to be discussed with the principals and are likely better progressed through another process as the TOC as an entity may not be legally able or authorized to formally recommend them under the legal process. She explained that even though none of this is contemplated under Appendix C of the Consent Decree and may not be under the purview of the TOC, the TOC can go back to their agencies and principals and ask them to discuss this proposal outside the realm of the TOC; and that if the principals choose to implement any of these or other activities, the TOC does not necessarily need to get back together and weigh in on it a second time. She asked if there are any legal requirements for following up or sharing the outcome of the principals' discussion, such as by having a public meeting. She also wondered what entity or agency would be responsible for implementing things like dredging and armoring, especially in the short time before the beginning of the next water year, which would likely require emergency procurement.

- Kenny Hayman, attorney for FDEP, replied that, outside of projects that are already underway, and particularly for the short-term items such as dredging or armoring, considerations about whether they should be done, whether they can be done quickly, and whether there is funding, are “nuts and bolts” things that are outside the technical conversation. He further commented that regarding who would do the work and who would pay for it are decisions for the principals to decide, and that regarding the outcome of the principals' discussion, if they agree to move forward with a remedy, it doesn't need to be brought back to the TOC for approval.
- Special Master John Barkett observed that the language of the Consent Decree related to additional remedies to be taken in the event of a violation is followed by a “such as” clause with examples of remedies, but expressed his opinion that this does not necessarily limit the TOC to only those specific ideas mentioned in the clause – the TOC or the principals have to decide what those additional remedies will be.
- Judith Coleman, attorney for the U.S., commented that in her view the TOC is free to discuss what it wants to discuss and to recommend what it wants to recommend, and doesn't see a problem with recommending that the principals discuss these issues and that there could be a report back at the next TOC meeting with the outcome.

Julianne LaRock called for a TOC consensus on going back to the principals with the specific recommendations Donatto made, along with any other related ideas for discussion, and to follow up as soon as possible before the next TOC meeting. Daniel Crawford concurred and requested that the meeting notes reflect that the federal parties are advocating pursuing a timely solution to the WY2019 exceedance. Lori Miller concurred and would also like to see that the group is requesting a timely conversation with the principals, with a target of no more than two weeks. Frank Powell concurred with that approach and said he needs to brief the FDEP principal. Donatto would prefer to move forward with a subteam and hear other ideas for solutions in addition to his own, but he concurred with the other TOC representatives and reiterated Lori Miller's request that discussions with the principals occur within the next couple of weeks.

**Public Comments:**

Drew Martin, Sierra Club, said he appreciated the presentation and felt the TOC consensus was a good one. Melodie Naja, Everglades Foundation, supported the proposal for the TOC and subteam to discuss about solutions.

**TOC Consensus:**

TOC representatives reaffirmed their agreement that the WY2019 Shark River Slough exceedance does not appear to be due to data error or extraordinary natural phenomena and agreed to the action item below.

**Action Item 2:**

If possible, within the next two weeks the TOC representatives will ask their principals to consider proposed solutions for the WY2019 exceedance and whether and through what mechanism a team should be convened to look into these and other possible solutions.

**Associated Online Documents:**

- [Letter: Principals to the Consent Decree, Direction to TOC Representatives, February 25, 2016](#)
- [Shark River Slough Compliance and Operational Exploration #2 Presentation](#)

12:45 p.m. **4. Appendix A Subteam Update / Follow-up** – Paul Julian, FDEP

At the last meeting, the TOC representatives agreed to meet with their principals to propose using compliance calculation Method 1.5 for Shark River Slough and Method 3 for Taylor Slough and Coastal Basins, and to report the outcome at this meeting. Paul Julian noted that the subteam has not met since the last TOC meeting. Jonathan Madden provided a refresher and a more detailed explanation of the compliance calculations associated with Method 1 and 1.5 for SRS and Method 1 and 3 for Taylor Slough and Coastal Basins; an error in the details of the SRS handout was noted during the meeting and has been corrected in the online version. The TOC representatives confirmed that their principals approved and confirmed acceptance of Method 1.5 and Method 3. Julianne LaRock noted that the SFWMD principal wanted it on the record that the original equation for SRS was slightly different than Method 1.5. Julianne noted that the next challenge for the TOC with the Appendix A equation will likely be how to deal with S333N for SRS, possibly before the next quarterly TOC meeting. Daniel Crawford suggested tracking with and without S333N initially. Daniel talked about using S333N first in the queue before S333, and that TP would be sampled there. He felt it would be good to keep both of structures in the discussion and that the Appendix A subteam should discuss how to consider the CEPP South Phase I structures, noting that by the next quarter, USACE may have a construction schedule for those structures; they won't be connected directly to SRS when completed, but USACE will install temporary pumps on Tamiami Trail, similar to those installed on S355B. Daniel felt the subteam should carry forward those discussions to not only talk about S333N, but also the L29 temp pumps, with an intermediate forecast on CEPP south features. Frank Powell agreed there is a lot going on, with the L67 structures, which will be delivering into WCA-3B which has a different regulation schedule; with the temporary pumps and the whole construction timeline and potential operation of those structures; and with the construction and operation of S333N. Frank doesn't recall the TOC being briefed on the details of all of this and suggested it would be good for the subteam make it a discussion item.

**TOC Consensus:**

Method 1.5 for SRS and Method 3 for Taylor Slough and Coastal Basins were accepted as the compliance calculations for these areas.

**Action Items 3 and 4:**

Jonathan Madden will make a correction to the long-term limit calculations shown in the handout for Shark River Slough Method 1.5. *[This was completed shortly after the meeting, and the online version was updated.]*

TOC representatives or technical staff will dually track S333N and consider CEPP south for discussion at the next meeting.

**Associated Online Documents:**

- [Appendix A - Pros and Cons Regarding Alternative Compliance Methods for Shark River Slough and Taylor Slough and Coastal Basins](#)
- [Shark River Slough Method 1.5 Proposal](#)
- [Taylor Slough and Coastal Basins Method 3 Proposal](#)

**1:11 p.m. 5. Public Comment**

Gregory Munson, Gunster Law Firm representing U.S. Sugar, commented on a letter from SFWMD to the Florida State Clearinghouse on July 31, 2020, noting that in a portion of the letter focused on Appendix A it sounds like the District is asking for a revision to Appendix A, which he feels is long overdue and would be an appropriate solution. However, Mr. Munson is concerned about additional language in the letter, prefaced with the phrase “in the meantime”, that seems to indicate that, with regards to COP, engagement of the USACE with state and federal parties to reconcile the goals of Appendix A with the goals of CERP can occur after sending additional flows south under CERP, which therefore could mean after a potential violation occurs. Mr. Munson feels this is inappropriate under the Consent Decree and that Appendix A should be revised, if that is what the District meant in the letter, and revised first, and that needs to consider the timing of implementation of COP.

Drew Martin, Sierra Club Loxahatchee Group, commented that he agrees with Melodie Naja’s earlier feedback, that he feels dredging sediments from the canal should be pursued, and that disposal of the dredged material should be done in a manner that does not allow it to go back into the canal. Mr. Martin also expressed appreciation for Donatto Surratt’s presentation.

Melodie Naja, Everglades Foundation, expressed appreciation for the Appendix A subteam’s efforts and for the TOC reaching consensus on the compliance calculation methods. Ms. Naja also expressed a desire for the principals and TOC to open subteam meetings for the public.

**1:19 p.m. 6. TOC Closing Business – Julianne LaRock, SFWMD**

Julianne LaRock and TOC members recapped action items from the meeting and reviewed available dates for the next meeting. The TOC confirmed the next quarterly meeting for Tuesday, October 27, 2020.

Donatto Surratt acknowledged and thanked the contributors to the information he presented. Lori Miller asked about next steps on the principals’ pending decision about



solutions on S333 and whether a subteam should meet; Julianne proposed waiting to see what the principals say and either following up at the next meeting or beforehand if appropriate.

1:22 p.m. Julianne LaRock adjourned the meeting.

DRAFT