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

October 24, 2017

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

TOC Representatives:

Julianne LaRock, TOC Chair, SFWMD Lori Miller, Refuge John Barkett, Special Master (by phone) Frank Powell, FDEP 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.igm2.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 July 18, 2017

Daniel Crawford requested a minor change to the text, and with this change, the TOC approved the meeting summary for July 18, 2017.

Associated Online Documents:

- Final Agenda for October 24, 2017
- Draft Meeting Notes for July 18, 2017

10:10 a.m. 2. Second Quarter 2017 Settlement Agreement Report – Jonathan Madden, SFWMD

Jonathan Madden presented results for the second quarter of 2017 (April-June), including provisional results for Shark River Slough (SRS).

Refuge geometric mean total phosphorus (TP) values for the months of April, May, and June 2017 were below the long-term levels. In April 2017, water depth was too shallow (less than 10 centimeters) for samples to be collected at 7 of the 14 Refuge stations.

Provisional TP flow-weighted mean concentrations (FWMC) for SRS for the 12-month periods ending April, May, and June 2017 were calculated using two methods. Results for both methods were below the long-term limits for April and May 2017, but the values for June 2017 (12.1/12.0 ppb) were above the long-term limits (9.7/9.6 ppb). The percent of sampling TOC Meeting Notes October 24, 2017

events greater than 10 ppb was below the guideline for the three periods. Preliminary results for the Refuge for July through September 2017 are below the long-term level.

Taylor Slough and Coastal Basins flow-weighted mean TP values for the 12-month periods ending April, May, and June 2017 remained below the long-term limit for each period, and there were no sampling events greater than 10 ppb during these periods.

John Barkett asked if the District had considered whether water levels had anything to do with how close the geometric mean TP value and the long-term level for the Refuge were in June 2017 (both values were 7.9 ppb). Jon Madden explained that from July 2014 to July 2017, the Refuge geometric mean TP measured stays fairly consistent and averaged 7.2 ppb. However, as the water levels go up and down, so does the long-term level. Immediate rises in water level cause a drop in the long-term level, but often we do not see a commensurate drop in the measured TP levels. In June 2017, the water level rose rapidly and the long-term level dropped, matching the monthly geometric mean TP. Juli added that in the first week of June 2017, the District received an extraordinary amount of rainfall, which contributed to the rise in stage in June.

Jon Madden presented detail on the second quarter SRS flows and June compliance sampling event TP concentrations, which were elevated (slide 12 in the presentation). John Barkett asked whether there is an explanation for the pattern of high TP. Jon Madden explained that this pattern is attributed to times when there is significant flow during low stages. In this case, a prolonged dry period with low water levels in the marsh was followed by rapid rewetting, rising stages, and likely a first flush effect in the discharge. Provisional results for Water Year 2017 are to be presented at the January 2018 quarterly meeting, and final water year results, incorporating USGS approved flows, are anticipated by April. Based on data available at this time, it appears that levels will be approximately 2 ppb over the limit at the end of the water year.

For Taylor Slough and Coastal Basins, Jon presented TP FWMC levels of about 5 ppb, well below the limit of 11 ppb and below the Consent Decree's expectation of 6 ppb. Jon concluded his presentation with a reminder about the establishment of alternate methods 2 and 3 incorporating structures G-737 and S-328 to the calculation, noting that flows at those structures did not occur until after the last sampling event of this quarter. Regarding G-737 and S-328, Frank Powell asked what datasets are going to be used for methods 2 and 3, because there are two sampling locations (upstream and downstream). Jon explained that compliance sampling is done on the upstream side of structures; downstream sampling is just done to collect additional information. There is data being populated in DBHYDRO for flows. For G-737, it would be a combination of the S-200 pump and observing when the gates are open at G-737. Those gates have been open since June 30. At S-328, gates opened September 5 and have been adjusted a couple of times. During Hurricane Irma, the antenna for one of the stage sensors there went underwater, so data is missing for a period of 10 days, but that has been repaired. Donatto Surratt noted that there are no flow data for G-737 in DBHYDRO. Jon confirmed that the stage and gate sensors are not yet installed at G-737, so the associated DBKey is not populated in the database. The surrogate for G-737 is S-200, and can be used until G-737 sensors come online.

Donatto asked about the mechanism for being informed when G-737 flow data become populated in DBHYDRO. Jon Madden replied that the District can provide DBKeys and flow combination explanations for how the flow volumes will be computed for the next quarter.

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Agency Technical Comments:

Regarding the June SRS sampling event results, Bill Walker asked whether there are any plans to present STA performance over that period related to two questions: 1) how did the STAs respond during these events, and 2) is there a plan to reinstitute the long-term plan or bring that type of information to the TOC? Julianne LaRock responded that this sort of information is evaluated on an annual basis and included in the South Florida Environmental Report, and is likely shared at Restoration Strategies technical meetings. Jon Madden indicated that if in the end, when the final data are available, it is found that the WY2017 flow-weighted mean concentration exceeds the limit, staff will be looking at upstream and cause and effect relationships, the TOC will have discussions about it, and in the meantime, staff will be preparing for that. Bob Kadlec and Donatto Surratt observed that the science plan tech rep meetings haven't covered STA performance on a routine basis. Julianne LaRock will pass these questions and concerns to Jeremy McBryan to get a response.

Action Item #1: The District will provide information to TOC representatives to clarify access to available flow data from DBHYDRO relevant to Taylor Slough and Coastal Basins.

Associated Online Documents:

- Provisional Shark River Slough TP Tracking Report, Second Quarter 2017
- Quality Assessment Report for Water Quality Monitoring, Second Quarter 2017
- Quality Assessment Report for Water Quality Monitoring, Second Quarter 2017 Data
- Refuge TP Compliance Table, 2007 through Second Quarter 2017
- Settlement Agreement Report, Second Quarter 2017
- Settlement Agreement Report, Second Quarter 2017 Presentation
- Final Shark River Slough TP Tracking Report, Water Year 2016

10:53 a.m. **3. Water Conservation Area 1 and Everglades National Park Annual Total Phosphorus**Criteria Compliance Assessment – WY2017 – Alyssa Freitag, FDEP

Alyssa Freitag presented an overview of WY2017 compliance with Rule 62-302.540, the Phosphorus Rule. This rule in the Florida Administrative Code outlines specific criteria for achievement of TP standards within the entire Everglades Protection Area. The presentation focused on the Refuge and Everglades National Park, and included an assessment of impacted and unimpacted stations in the Refuge and an update on marsh TP trends in the Park.

In the Refuge, eight stations were found to be impacted during the original assessment for WY2008–WY2012. Since that time, three of these stations (LOXA130, LOXA137, and LOXA140) have transitioned to unimpacted. For WY2013–WY2017, the network of unimpacted stations in the Refuge, including those stations that have transitioned from impacted, met the criteria of the four provisions of the Phosphorus Rule. The network of five remaining impacted stations in the Refuge did not meet the criteria of the provisions.

In the Park, compliance with TP criteria is assessed in accordance with Appendix A using TP FWMCs at inflow structures rather than interior marsh stations. However, for informational purposes, FDEP uses portions of the Phosphorus Rule provisions on interior stations in the Park. Overall, the TP geomean for interior stations in the Park was 4 μ g/L in WY2017. For WY2005–WY2017, the average geomean for these stations was less than 10 μ g/L.

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John Barkett asked whether any follow-up action occurs beyond simply reporting the results of this assessment. Frank Powell responded that this is just a reporting mechanism for the TOC meeting to illustrate compliance with the Phosphorus Rule; results are reported in the South Florida Environmental Report in Chapter 3A and are used in Restoration Strategies discussions at a management level and at a technical level to continue coordination to transition stations from impacted to unimpacted. Frank Powell added that from a compliance standpoint, the information feeds into discussion by senior management and leadership of whether we are on the right track for restoration activities, etc.

John Barkett stated that the TOC may want to consider whether the Phosphorus Rule assessment results have any Consent Decree implications and, if so, what the implications are and whether any steps need to be taken to address them. Charles De Monaco, counsel for FDEP, noted that there is an administrative consent order that is part of the permits issued by the FDEP to the SFWMD. The second renewal is in effect and it's based on Restoration Strategies in the schedule. The TOC has had meetings on the status of Restoration Strategies and everything seems to be on schedule. You would expect to see failure of the four-part rule; as long as the projects stay on schedule, we should be achieving the water quality standard pursuant to the Florida rule, and that is tracked. John Barkett recommended that an agenda item be added to a future TOC meeting with full discussion for the benefit of the public about how the consent order works relative to the administrative order, how the TOC representatives deal with Consent Decree obligations vis a vis the administrative order, and whether the plan is to remain with the status quo, etc. This will let everyone know how these documents relate and what is done with this information.

Associated Online Documents:

Water Conservation Area 1 and Everglades National Park Annual Total Phosphorus
Criteria Compliance Assessment – WY2017 Presentation

11:15 a.m. 4. Public Comment

There were no additional requests for public comment.

11:15 a.m. 5. TOC Closing Business – Julianne LaRock, SFWMD

Julianne LaRock recapped the action item about how to find flow data in DBHYDRO for G-737 and noted that this information can probably be provided before the next TOC meeting.

It was decided that there is no need for a special meeting. The next quarterly TOC meeting was confirmed for January 23, 2018.

Julianne LaRock adjourned the meeting.