Suwannee River Water Management District
Minutes of
Upper and Middle Suwannee River MFL Peer Review Virtual Meeting (Meeting 2)

GoTo Webinar Link: https://attendee.gotowebinar.com/register/1478816081833187670

Wednesday, April 19, 2023
1:00 p.m.

Meeting participants that chose to identify themselves are listed below.

Peer Review Panel
Marty Hamel, Peer Review Panelist
Gregg Jones, Peer Review Panel Chair
Adam Munson, Peer Review Panelist

District Staff and Representatives

Amy Brown	Louis Mantini
Sean King	Chelsea Dinon

Call to Order
The meeting was called to order at 1:02 p.m.

Summary of Discussion
Gregg Jones summarized the RTF data set and his question and concern around the lack of groundwater level data from Floridan aquifer wells prior to 1976 for both the Upper and Middle Suwannee segments. The process used hindcasted data to correspond with the flow records from the two gauges on the Middle and Upper Suwannee River. Prior to 1976, groundwater withdrawal records were used. One concern Gregg Jones has is the uncertainty and probability of error associated with the hindcasted data used in the RTF.

- Marty Hamel would like to see the percent change and what that adjustment was. He'd also like to see a sensitivity analysis incorporated to show how much adjustment occurred and how the adjustment impacted the RTF.
- Adam Munson acknowledged the evolution of techniques used (ie simple linear regression has moved to multiple permutation), which is better and likely reduces the uncertainty

Gregg Jones' second comment was centered in concern that stakeholders reviewing the MFL report will not understand the whole MFL process and steps involved in development and establishment of MFLs. The current report does not define whether the current MFL is being met. The District is not required at this point to assess status of the current MFL. The goal of this peer review is to determine if the work outlined in the Upper and Middle Suwannee MFL Report is technically sound to move forward to the next steps. Gregg Jones proposes a 1-page summary at the beginning of the MFL document that details the MFL process, including current status assessment and need for a recovery strategy if the proposed MFLs are not being met or will not be met in the next 20 years.

Gregg Jones' third comment focused on the availability of water during high flows. He thinks it's important the District make it clear when the District would take water from the Suwannee River. He questions how extracting water during the high flows would affect the flow duration curve for the high flows.

- Adam Munson said the thought is there in the report but is not direct or too vague and needs much more elaboration.

Marty Hamel addressed the knowledge gap that is fish passage. He stated he cannot find any literature reference that dictates the depth and width for fish passage. He said the velocity is the most important of all metrics but isn't included in this analysis. Gulf Sturgeon do not have the burst swimming capabilities like salmon, so they may not be able to pass shoals or shallower areas in high velocities. There have not been any studies that address the critical swim speed (the speed the fish is capable of reaching before reaching exhaustion) of adult sturgeon, but juvenile Atlantic sturgeon critical swim speed is 0.21m/s. Marty Hamel may have suggestions for the District in how to account for this gap during future meetings.

Marty Hamel's second comment focused on the spawning seasons. Unpublished research suggests distinct genetic stock produced from fall and spring sturgeon spawning in the Suwannee River. He emphasizes the importance of ensuring flows being protective during BOTH spawning periods as they are both important and distinct. Studies have shown recruitment success has been related to high flows in September and December. Protecting flows for a month or two after could be important to recruitment success, which isn't accounted for in this assessment. The District did use the best available data as this is also a knowledge gap, but it's suggested that the District evaluate what flows are needed during these time periods.

- Adam Munson mentioned the biological uncertainty of the sturgeon spawning. Knowing the exact seasonality of sturgeon spawning is very important, but this is a knowledge gap.
- Sean King, MFL Office Chief, said the District initially used 2-month blocks, but after discussions with Sturgeon experts, a month was added to each of the seasons for fish passage to pad the spawning season as the experts noted earlier migrations in the spring and later migrations in the fall.

Marty Hamel suggested, in the future, the District may want to further investigate sturgeon holding areas as they are ambiguous and vaguely described as far as habitat descriptions. He suspects the areas are low velocity, deep water areas, but this is a knowledge gap in the field.

Louis Mantini and Marty Hamel discussed the value of providing more information such as the input characteristics used in SEFA, like depth, velocity, and habitat. This is a topic that can be discussed in more detail in future meetings.

Discussion of peer reviewer report logistics
The draft consensus report is due mid-May and final report is due June 15.
Gregg Jones requested each peer reviewer fill out the peer review forms now and draft their summary memorandums. He's requesting summary memorandums by May 10th. These documents need to be submitted to District staff, and posted on the website in order to be compliant with the Sunshine Law.

The WebBoard can be used while remaining compliant with the Sunshine Law. There will be set time periods (i.e. 1:00p.m. to 3:00 p.m.) on certain days (i.e. Monday, Wednesday, Friday). These days and times will need to be noticed as a public meeting. Peer reviewers will be able to login and interact with each other in real time during the noticed days and times.

Next Public meeting scheduled for Tuesday, May 2nd from 1:00-3:00pm.

Meeting adjourned at 2:15 p.m.