

**Florida's Coral Reef Coordination Team (FCRCT)**  
**March 14, 2023**  
**Meeting Summary**

**1. Welcome and Introductions**

Wes Brooks, FCRCT Chair, called the hybrid meeting to order at 1:06PM and noted the focus of the meeting would be on current water quality monitoring and what our agencies are focusing on. Erik Stabenau, FCRCT Vice Chair, provided some remarks. Allyn Childress, OERI, provided some administrative items. Adam Gelber, OERI, said he appreciated everyone working on this important issue.

**Wes Brooks, Chair, recognized the members that were in attendance:**

VOTING MEMBERS	ATTENDANCE
<b>Wes Brooks</b> , PhD, Chair Florida's Chief Resilience Officer	In Person
<b>Erik Stabenau</b> , Vice Chair NPS South Florida Natural Resources Center (SFNRC)	In Person
<b>Christian (Chris) Eggleston</b> , Project Leader USFWS, Florida Keys National Wildlife Refuge Complex	Virtual
<b>Sarah Fangman</b> , Superintendent Florida Keys National Marine Sanctuary	Virtual
<b>Wade Lehmann</b> USEPA, Oceans and Estuarine Management Section	Virtual
<b>Gil McRae</b> , Director FWC's Fish and Wildlife Research Institute	Virtual
<b>Nicole (Nikki) Morgan</b> , PhD FDEP - Division of Environmental Assessment and Restoration	Virtual
<b>Christopher "CJ" Sweetman</b> , PhD, Federal Fisheries Section Leader FWC-Division of Marine Fisheries Management	Virtual
<b>Joanna Walczak</b> FDEP Office of Resilience and Coastal Protection	In Person
<b>Dana Wusinich-Mendez</b> NOAA's Coral Reef Conservation Program	Virtual
NON-VOTING MEMBERS	
<b>Cassandra Armstrong</b> , Section Administrator SFWMD - Coastal Ecosystems	Absent (1)
<b>Angela Delaney</b> , Manager Broward County's Marine Resources Environmental Program	In Person
<b>Deb Drum</b> , Director Palm Beach County ERM	Virtual (Katelyn Armstrong)
<b>Laura Eldredge</b> , Chief of the Restoration and Enhancement Section Miami-Dade County DERM	In Person
<b>Ian Enochs</b> , PhD, Coral Program Lead NOAA-Atlantic Oceanic & Meteorological Laboratory	Virtual
<b>Elizabeth Kelly</b> , PhD, Coordinator Martin County Environmental Programs	In Person
<b>Christina (Chris) Kellogg</b> , PhD USGS - St. Pete Coastal and Marine Science Center	Virtual
<b>Shelly Krueger</b> Monroe County, SeaGrant, UF/IFAS Extension	N/A (Appointed following meeting)

<b>Gina Ralph</b> , PhD, Lead Scientist U.S. Army Corps of Engineers	Virtual
<b>Adam Gelber</b> , Director USDOI Office of Everglades Restoration Initiatives (OERI)	In Person

## 2. Meeting Summary Approval

The summary from the February kick-off meeting was presented for approval. Angela Delaney made a motion and Joanna Walczak seconded. Meeting summary approved.

## 3. Overview of the South Florida Ecosystem Restoration Effort

Allyn Childress introduced the first video prepared by Bob Johnson, DOI/OERI, on the hydrologic evolution of the South Florida Ecosystem and ongoing restoration initiatives. Jennifer Reynolds, South Florida Water Management District (SFWMD), noted the second video was shown to the South Florida Ecosystem Restoration Task Force (Task Force) at their last meeting. The video was prepared by the US Army Corps of Engineers (USACE) and the SFWMD and it shows the momentum in Everglades restoration.

Bob Johnson provided an overview on RECOVER (Restoration Coordination & VERification) which provides essential support to the Comprehensive Everglades Restoration Plan (CERP) in meeting its goals and purposes. RECOVER is a multi-agency team that conducts scientific and technical evaluations and assessments for improving CERP's ability to restore, preserve, and protect the South Florida Ecosystem while providing for the region's other water related needs. RECOVER is organized into five geographical regions which provide a system for organizing similar landscapes for identification of threats and restoration options. Ecosystem indicators should be able to track responses on a series of indicators over space and time such as periphyton and crocodilians. He reviewed the current scope of RECOVER's Monitoring and Assessment Plan (MAP) and the projects covered by the agreements between the USACE and the SFWMD. He highlighted eight that are closely related to the work being done by this team. Although they do not have any specific water quality indicators in CERP, water quality is extensively monitored and reviewed. Although the program has been underway since about 2000, many of the major projects have just started. The RECOVER report card for the 2012-2017 period shows that overall, the system is still not in a stable state. The Systemwide Ecological Indicators which are included in the Task Force's Biennial Report shows that a smaller set of indicators are still in the red. There is a lag between the work they are doing on the ground and the time it is taking for the ecosystem to recover.

Joanna Walczak asked whether the juvenile pink shrimp would be put back on the table. Bob noted the pink shrimp monitoring experienced a significant drop in funding and has been off the table since 2011.

Gina Ralph explained that RECOVER's mission is to assess systemwide response to CERP. Back in 2011 there was a significant drop in funding for monitoring and the RECOVER team went through a prioritization effort. One of the criteria used to evaluate and look at what would be dropped looked at whether there was a CERP project in the area that could affect change in that indicator. RECOVER is starting an evaluation of its current MAP and as part of that evaluation they have asked all the agencies to complete a monitoring inventory survey to understand what type of monitoring is out there, what type of data is being collected, and how they can leverage those opportunities to collaborate across

agencies to make the MAP more robust for both RECOVER and the Science Plan for all of South Florida Ecosystem restoration, both CERP and non-CERP.

Wes Brooks noted the two major deliverables for this team include a consensus framework for water quality monitoring along Florida's Coral Reef and recommendations for ecological indicators for consideration by the Science Coordination Group (SCG). He noted the importance in the timing of this team given that the next major increment of Everglades restoration will send 25 - 30% more water per year flowing down through the southern end of the system. Right now, they are not well positioned to understand the effects that additional flow will have. This team's recommendations can shape what the monitoring efforts look like.

Gil McRae noted that the Water Resources Development Act (WRDA) defined the South Florida Ecosystem and asked whether they had a legal confirmation that the reef tract is part of that south Florida definition. Wes Brooks said the Task Force authorization includes the Florida Keys and the nearshore coastal waters. There is a recognition that the reef is included within the South Florida Ecosystem.

Bob Johnson added that there is a sequence in the Integrated Delivery Schedule (IDS) for project completions. The southern coastal systems are tied to projects like the Central Everglades Planning Project (CEPP) Everglades Agricultural Area (EAA) Reservoir. The only modeling that has been done is included in the 2020 Report to Congress. We didn't see an improvement in freshwater flows through the Everglades into the southern coastal systems by 2026. The first bump will come with the Lake Okeechobee System Operating Manual (LOSOM), but the actual benefits will come in the later phases of CERP. From DOI's perspective, the project that has the largest volume of water across Tamiami Trail is the Southern Everglades Study which will kick-off in 2023 and will likely be put in a WRDA bill around 2028. Significant increases in freshwater flow are coming. It would be helpful for this group to identify the indicators that would be needed to connect the terrestrial, coastal, and marine systems.

Jennifer Reynolds said that the Combined Operational Plan (COP) has allowed them to deliver more water because of the work that has been done between operations and infrastructure. That is only going to improve as they bring more projects online. The CEPP will help them to redistribute and store water to make it available during dry times. The only way to increase water deliveries going forward is to extend hydroperiods so that when it is wet, they can store the water that is available rather than disposing of it to the coasts. Bob Johnson added that under the COP, they have seen the highest sustained flows over the last three years than they have seen in their recorded time and now they are just waiting for the ecology to catch up.

Wes Brooks said the water is here, more is coming, and they need to be better positioned to understand what the impacts will be on the coastal system. They are not adding new water to the overall system, they are changing the distribution and timing of that water. Right now, much of that water is ending up near the reef in a harmful fashion.

Gina Ralph said the Project Delivery Team (PDT) met that morning and they did announce that the LOSOM Environmental Impact Statement (EIS) will be delayed due to ongoing coordination with the National Marine Fisheries Service (NMFS). Consultation is changing from informal to formal consultation and the NMFS will have 135 days to provide the biological opinion on LOSOM.

Jennifer Reynolds explained the big change in LOSOM is the prioritization of sending water south and trying to reduce harmful discharges to the St. Lucie and Caloosahatchee estuaries. That means promoting more flow south and flows to the estuaries at potentially longer durations over the calendar year but at lower volumes and lower intensity. Also, delivering more beneficial dry season flows to the Caloosahatchee. Unfortunately, one of the negative consequences of doing that is the Lake Okeechobee water levels take a hit on the high end. The ecology of Lake Okeechobee is one of the concerns that highlights the need for additional storage so that they can mitigate those effects.

#### **4. Current Water Quality Monitoring Efforts**

Allyn Childress noted that at the Feb 14<sup>th</sup> kick-off meeting, they requested input from members regarding water quality monitoring programs. The information was received and divided into three types of programs in a Water Quality Comparison Matrix. She provided a brief overview of the information received to date.

Joanna Walczak provided a presentation specific to coral reef water quality monitoring noting that it was not inclusive of everything being done on water quality in the South Florida Ecosystem. Historically, they stopped talking about water quality once it left the inland. They have been able to recognize the impacts of these discharges. She provided an in-depth review of the Florida Keys National Marine Sanctuary Water Quality Monitoring Project which is one of the longest standing status and trends monitoring program funded by the US Environmental Protection Agency (EPA) for more than 25 years. They looked at all the programs sampling water quality in south Florida that relate to the coral reef system, and they realized that they needed help. Florida's Department of Environmental Protection (FDEP) hired the Florida Fish and Wildlife Conservation Commission (FWC), the National Oceanic and Atmospheric Administration (NOAA), and the University of South Florida to collate these datasets to determine which were comparable. Most of these programs cannot be compared apples to apples because of either the sampling methodology or the analysis methodology so they developed a list of criteria to help narrow down the scope of what could be compared. The product was the water quality comparison matrix that was reviewed by this team as homework. Of all the programs reviewed, they found only five met all the criteria. The ultimate long-term goal is to integrate the information into a decision support tool that would allow them to understand the ecological patterns that are happening. Joanna reviewed some of the research that FDEP is currently funding that will help their conversations.

#### **5. Discussion**

The team had an extensive discussion on the water quality monitoring matrix, local and regional water quality monitoring, authority-based monitoring needs, some of the pathways by which water quality could influence coral health, and how to incorporate data that is not directly collected on the reefs but could influence the reefs such as water quality monitoring associated with coastal construction. The FDEP will provide an updated chart and team members will have more time (2-4 weeks) to review the information and provide corrections and additions.

Joanna Walczak suggested that those things needing a deeper dive could be worked on by a subgroup and brought back to the broader group. Volunteers included Wes, Erik, someone from Joanna's team, Elizabeth, Laura, and someone from Ian Enoch's team. The names of other volunteers to work on this subgroup should be sent to Allyn Childress.

**Public Comment**

None

**Next Steps, Assignments, and Closing Comments**

Wes reminded everyone of the tentative meetings scheduled for June 28<sup>th</sup> (virtual), Sep 7<sup>th</sup> (in-person), Nov 29<sup>th</sup> (virtual). All are scheduled from 1-4pm. These may change and he would keep everyone updated. An update of this team's activities will be provided to the Task Force at its June 1<sup>st</sup> meeting.

**Adjourn**

Note: The video recording and handouts from the meeting are available at:

[March 15, 2023 - Florida's Coral Reef Coordination Team Meeting — Everglades Restoration Initiatives](#)