

Key Largo Wastewater Treatment District Board of Commissioners Meeting Agenda Item Summary

Meeting Date:
March 17, 2026

Agenda Item Number: P-1

Action Required:
No

Department: Commissioner's Item Sponsor: Philip Schwartz

Subject:
Summary of FKNMS WQPP Steering Committee Meetings March 4th & 5th

Summary:
Commissioner Schwartz will discuss the FKNMS WQPP Steering Committee Meeting.

Reviewed / Approved

Financial Impact

Attachments

Operations: _____
Administration: _____
Finance: _____
District Counsel: _____
District Clerk: _____
Engineering: _____

\$

Funding Source:
N/A

Budgeted:
N/A

1. WQPP Meeting Agenda
2. WQPP Research Symposium Agenda
3. WQPP Draft Meeting Minutes

Approved By:  Date: 3-12-26
General Manager

DFLORIDA KEYS NATIONAL MARINE SANCTUARY
Water Quality Protection Program Steering Committee Meeting

March 4, 2026
9:00 AM – 4:30 PM

Marathon City Hall, 9805 Overseas Highway, Marathon, FL 33050

The meeting will also be broadcast in real time for listening only:

<https://attendee.gotowebinar.com/register/4433518308908447833>; Webinar ID 993-635-123

Meeting Purpose: Convene the Water Quality Protection Program (WQPP) Steering Committee to review the status of Florida Keys water quality projects and complementary efforts, and discuss timely issues and future actions related to water quality priorities.

Meeting Materials:

- Minutes from December 17, 2025 WQPP Steering Committee meeting

Agenda

- 9:00 AM** **I. Welcome and Opening Remarks**
- Call to Order, *Lawrence Glenn, DEP / Wade Lehmann, EPA*
 - Opening Remarks – DEP and EPA
 - Steering Committee Member Introductions
 - Housekeeping
 - Review and Adopt Agenda
 - *Steering Committee Vote*
 - Approve Minutes from December 17, 2025
 - *Steering Committee Vote*
- 9:30 AM** **II. Canal Restoration Progress & Local Government Efforts, Rhonda Haag, Chief Resilience Officer, Monroe County; Peter Frezza, Environmental Resources Manager, Village of Islamorada; George Garrett, City Manager, City of Marathon**
(30 min) Update on canal restoration progress and/or other local government priorities.
- (10 min) *Steering Committee Q&A/Discussion*
- 10:10 AM** **III. Project Report: Canal Restoration, Greg Corning, Assistant Vice President, WSP**
(20 min) Update on the outcomes of EPA-funded projects to update water quality summaries, evaluate the effectiveness of gravity injection well technology for canal restoration, and potential reclassification and reranking of impaired canals to include the use of new, stand-alone, combination of or partial restoration technology implementation.
- (10 min) *Steering Committee Q&A/Discussion*
- 10:40 AM** **Break (15 minutes)**

- 10:55 AM** **IV. Beach Water Quality Monitoring**
- **Florida Healthy Beaches Program**, *Dr. Mark Roby, Director of Nursing, FDOH*
 - (20 min) Overview of the Florida Healthy Beaches Program and Beach Water Quality Monitoring in Monroe County.
 - **EPA Beach Water Quality Monitoring Presentation**, *Joel Hansel, EPA Region 4 BEACH Program Coordinator, EPA*
 - (20 min) Additional perspectives from the EPA Beach Water Quality Monitoring Program.
 - (10 min) *Steering Committee Q&A/Discussion*
- 11:45 AM** **V. Innovative Nature-based Media Filtration Technology for Meeting Nutrient Removal Targets**, *Vincent Seibold, Director of Operations, Sustainable Water Infrastructure Group, LLC*
 (20 min) Introduction to innovative nutrient removal technology to restore and protect nutrient-impaired waters from nitrogen and phosphorus pollution.
- (5 min) *Steering Committee Q&A/Discussion*
- 12:10 PM** **WQPP and Steering Committee Photo**
 (5 min) Steering Committee and other WQPP members convene for a group photo.
- 12:15 PM** **Lunch** (1 hour 20 minutes)
- 1:35 PM** **VI. Florida's Coral Reef Unified Water Quality Monitoring Database: Data Aggregation and Analysis**, *Dr. David Kochan, Associate Research Scientist, FWC*
 (20 min) Overview of a DEP-funded project to develop a unified water quality monitoring database and demonstration of interactive data portal.
- (10 min) *Steering Committee Q&A/Discussion*
- 2:05 PM** **VII. Florida Seafloor Mapping Initiative (FSMI)**, *Rick Householder, Florida Geospatial Program Director, Woolpert*
 (20 min) Overview of a statewide bathymetric data collection effort and Woolpert's Region 3 (FL Keys) assignment and resource management applications.
- (10 min) *Steering Committee Q&A/Discussion*
- 2:35 PM** **Break** (15 minutes)
- 2:50 PM** **VIII. Communications Subcommittee**, *Julie Cheon, Communications Director, NOAA FKNMS / Shelly Krueger, University of Florida/IFAS Extension Monroe County*
 (10 min) Update on the Communications Subcommittee efforts and progress.
- (10 min) *Steering Committee Q&A/Discussion*
- 3:10 PM** **IX. WQPP Report to Congress**, *Beth Smith, South Florida Program Coordinator, EPA / Karen Bohnsack, Associate Director, NOAA FKNMS*

(5 min) Overview of the status of the current WQPP Congressional Report and discussion regarding the next report cycle.

- (15 min) *Steering Committee Q&A/Discussion*

3:30 PM

X. Canal Restoration Subcommittee Discussion, George Garrett (City of Marathon)

(5 min) Proposal and discussion to reconvene the Canal Restoration Subcommittee to help expedite canal restoration progress.

- *Steering Committee Q&A/Discussion* (10 min)
 - *Potential Steering Committee Vote*

3:45 PM

XI. Public Comment (15 minutes)

4:00 PM

XII. Steering Committee Member Updates

(25 min) Open forum for members of the Steering Committee to report on recent activities or emerging topics of relevance to the Water Quality Protection Program.

4:25 PM

Wrap-Up and Review Action Items

4:30 PM

Adjourn

FLORIDA KEYS NATIONAL MARINE SANCTUARY
Water Quality Protection Program Steering Committee
March 2026 Research Symposium

March 5, 2026
9:00 AM – 4:45 PM

Marathon City Hall, 9805 Overseas Highway, Marathon, FL 33050

The presentations will also be broadcast in real time for listening only:

<https://attendee.gotowebinar.com/register/8269399917893969759>; Webinar ID 920-246-763

Meeting Purpose: Share outcomes and management recommendations from research projects and special studies of relevance to Florida Keys and south Florida water quality and marine resources.

Agenda

- 9:00 AM** **I. Welcome and Introduction (10 min)**
- Call to Order, *Wade Lehmann, EPA / Lawrence Glenn, DEP*
 - Housekeeping
- 9:10 AM** **II. Development of a Sponge Restoration Strategy for Florida Bay: Integrating Ecological Research into Adaptive Management (45 min),** *William Sharp, Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute*
- 9:55 AM** **III. [Virtual] A Land-based Sponge Nursery to Restore Habitats and Improve Water Quality in Florida Bay (30 min),** *Dr. Andia Chaves Fonnegra, Florida Atlantic University*
- 10:25 AM** **IV. Florida Keys Water Watch Sponge Restoration Aquaculture (30 min),** *Shelly Krueger, University of Florida/IFAS Extension Monroe County*
- 10:55 AM** **Break (15 min)**
- 11:10 AM** **V. Modeling Water Quality and Phytoplankton Blooms in Florida Bay and the Florida Keys (30 min),** *Dr. Mingshun Jiang, Florida Atlantic University*
- 11:40 AM** **VI. Impacts of Caloosahatchee Discharge and Hurricane Ian on Southwest Florida Shelf Water Quality, Epibenthic Life, and Microbial Communities (30 min),** *Dr. James Douglass, Florida Gulf Coast University*
- 12:10 PM** **Lunch (90 min)**
- 1:40 PM** **VII. Modeling Biscayne Bay Circulation and Microplastic Fate and Transport: Applications for Improving Canal Conditions (30 min),** *Dr. Reinaldo Garcia, Hydronia LLC / Dr. Henry Briceño, Florida International University*

- 2:10 PM** **VIII. Linking Environmental, Ecological, Anthropogenic, and Host-Specific Drivers to Stony Coral Condition on Florida’s Coral Reef (45 min)**, *Dr. Brian Walker, Nova Southeastern University*
- 2:55 PM** **Break (15 min)**
- 3:10 PM** **IX. Updates on the Hypothetical Linkages Between Toxigenic Benthic Dinoflagellates, Spinning Fish, and Sawfish Mortalities (60 min)**, *Dr. Michael Parsons, Florida Gulf Coast University / Dr. Alison Robertson, University of South Alabama*
- 4:10 PM** **X. Shallow Injection Well Research Update (30 min)**, *Dr. Rachel Housego, Pennsylvania State University*
- 4:40 PM** **Closing Remarks**
- 4:45PM** **Adjourn**

**FLORIDA KEYS NATIONAL MARINE SANCTUARY
Water Quality Protection Program Steering Committee Meeting**

December 17, 2025

DRAFT MINUTES

Steering Committee Members Present

Wade Lehmann, US Environmental Protection Agency (EPA), Region 4 (Co-Chair)
Lawrence Glenn, Florida Department of Environmental Protection (DEP) (Co-Chair)
David Burke, Florida Keys National Marine Sanctuary (FKNMS)
Heather Stewart, Florida Keys National Wildlife Refuges Complex
Yazmin Valdez, Florida Commerce
Julio Tejeda, South Florida Water Management District
Carla Fry, Florida Department of Health in Monroe County
Gil McRae, Florida Fish and Wildlife Conservation Commission
Emmy Koenig McDowell, Florida Keys Aqueduct Authority
Andrea Leal, Florida Keys Mosquito Control District
Marisa Carrozzo/Kevin Macaulay, FKNMS Sanctuary Advisory Council
Sandy Walters, Resource Environmental Solutions
Chris Bergh, The Nature Conservancy
Patience Cohn, Marine Industries Association of South Florida

Summary of Resolutions

- N/A

I. Introduction and Opening Remarks

Lawrence Glenn, Division of Ecosystem Assessment and Restoration (DEAR) Director, FDEP, called the meeting to order at 9:03 am and welcomed everyone. Wade Lehmann, Ocean and Estuarine Section Chief, EPA Region 4, and Dr. Glenn are the meeting co-chairs.

Steering Committee members in attendance introduced themselves. Attendees were provided instructions for participating in the virtual meeting. The presentations and materials associated with the meeting will be available at the steering committee page on the Water Quality Protection Program website https://gis.myfwc.com/FKNMS_WQPP/steering.htm.

Agenda and Minutes

Dr. Glenn reviewed the agenda and minutes and requested edits or a vote to approve from the Steering Committee. Marisa Carrozzo made the motion to approve the agenda; Sandy Walters seconded. The agenda was approved with notice that agenda item IV. Canal Restoration Subcommittee Discussion will need to be deferred to a future meeting as the intended speaker was unable to join today's meeting. Patience Cohn made the motion to approve the minutes from the July 2025 Steering Committee meeting; Marisa Carrozzo seconded. The minutes passed with no objections.

Welcome new SAC Representatives to the WQPP Steering Committee

Dr. Glenn welcomed new members joining the Steering Committee as representatives of the Florida Keys National Marine Sanctuary Advisory Council (SAC). Former SAC representative Kelly Cox has accepted a new position and will no longer fill this seat. Marisa Carrozzo was formerly an alternate to the Steering Committee and is now the primary member. Kevin Maccaulay has joined as an alternate/designee in the SAC liaison seat. Marisa is the Senior Coastal & Wildlife Program Manager with the National Parks Conservation Association, and she is the alternate to the South Florida Ecosystem Restoration seat on the SAC. Kevin is an environmental consultant currently advising on multiple coral projects. He has been involved in several Keys projects in the past, and also in the Caribbean and Central America. Kevin represents the Middle Keys Citizen at Large Alternate seat on the SAC.

II. Management Committee Update

Karen Bohnsack (FKNMS), Nick Parr (DEP), and Beth Smith (EPA) provided updates on behalf of the WQPP Management Committee. Karen reminded attendees that the purpose of the Management Committee is to coordinate and facilitate activities of the Steering Committee and the Technical Advisory Committee (TAC) including planning agendas, providing advice and recommendations, facilitating the congressional report, and other tasks as needed. Current members were listed; membership is stipulated in the Bylaws and includes representatives from EPA, NOAA, DEP, FWC, local government, and a knowledgeable citizen.

A few updates were provided regarding WQPP activities:

Rescheduling the in-person meeting and mini-research symposium: The committee is working to reschedule the October 2025 meeting that was cancelled due to the federal government shutdown. Two date options currently being scoped: Feb 12-13 (Thursday/Friday) or March 4-5 (Wednesday/Thursday). A Save the Date will be sent as soon as dates are finalized, and an updated draft agenda will follow in the new year.

Technical Advisory Committee reengagement: Nick Parr leads the TAC. The committee plans to reengage the TAC virtually after the mini-research symposium to develop recommendations for the Steering Committee related to the types of research projects or special studies we'd like to see to advance WQPP priorities. These recommendations can be shared with funding agencies such as EPA (South Florida Program) and DEP (grant opportunities related to resilience efforts, water quality, and Florida's Coral Reef). The TAC traditionally meets as needed and remains on standby if the Steering Committee requests direction or input. The last big TAC effort involved providing recommendations on the design of a project to investigate the impacts of Shallow Injection Wells.

WQPP Report to Congress (RTC) status and look ahead: The report text has been approved by EPA upper management and DEP and is awaiting NOAA's final input. The next steps will involve formatting by the EPA Public Affairs Office, followed by review and approval through the EPA Congressional Affairs Office, EPA Administrator, and the Office of Management and Budget (OMB) before final delivery to Congress. The timeline to complete these remaining steps is uncertain. It has taken a long time to get to this point and although there are still several steps left to go, the report is making good progress.

To ensure a more regular reporting cycle, the Management Committee has also started planning for the next congressional report, which is tentatively scheduled to cover 2025–2026, with final delivery in 2027. A Gantt chart (image below) with steps and a tentative timeline was presented. The next congressional report will be discussed again at the next meeting, at which time the Steering Committee will be asked for input on key topics or updates to include. Content should be developed over the course of the next year

with agency reviews and approvals beginning in early-mid 2027. The exact timelines may be further refined based on lessons learned during the current process.

Reporting period: January 1, 2025 (approx.) – December 31, 2026.

Report delivery: December 2027 (if not earlier)

Tentative WQPP SC Meeting

Step	2025			2026												2027											
	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
1a. ID Reporting Topics for 2027	X	X	X	X	X	X	X	X	X	X	X	X	X														
1b. Refine Template	X	X	X	X	X	X																					
2. Content Curation						X	X	X	X	X	X	X	X	X	X	X	X	X									
3. WQPP Review																X	X	X									
4. SC Round 1 Approval																		X									
5. Final Content Edits																	X	X									
6. Agency Approvals																		X	X	X	X	X	X	X	X	X	
7. Delivery to Congress																											X
1a. ID Reporting Topics for 2029																						X	X	X	X	X	X

Questions & Answers/Comments/Discussion:

- Sandy Walters: This planning is great. The congressional report should stay on the Steering Committee meeting agendas so we can continue to make progress.
- Scott Atwell: Consider sharing this Gantt chart in an external-facing document as well. This will help with accountability to these steps and the timeline.

III. WQPP Communications Subcommittee

Scott Atwell, FKNMS, provided an update on the activities of the WQPP Communications Subcommittee. The subcommittee meets before and after each Steering Committee meeting to prepare updates and follow-up on action items.

At the top of their list, the subcommittee is developing a rollout plan for the RTC once it is ready. Rollout plans are a tool the sanctuary uses and is planning accordingly since this will be a work product that reflects the WQPP and FKNMS. The rollout plan includes talking points, FAQs, a timeline with responsibilities, etc. The subcommittee is working on this now and will plan to present a draft to the Steering Committee at the next meeting. This plan will not supersede efforts by EPA or other agencies, but is a tool for collaboration and messaging consistency.

Scott presented a beta version of the new WQPP website, reminding the Steering Committee that they gave the Communications Subcommittee authority to update the website formatting during the last meeting. This update does not include any major changes to the content, but rather is a refresh to the website's look, organization, and functionality. The new design is based on the look and feel of the [EPA South Florida Program website](#). The site features a new Landing page with WQPP definition and purpose, and navigable "tiles" for different committees. The Steering Committee tile will include meeting information, members, and resolutions, with all previous meeting materials nested below. The goal is for the new website to be live soon - ideally sometime in January or ahead of when the information for the next Steering Committee meeting is posted. The beta version of the New WQPP Website is available here: https://gistest.myfwc.com/FKNMS_WQPPNew/. Comments from the Steering Committee are

welcome and can be made on a rolling basis, however please submit big picture comments about the new format/design by mid January so those can be incorporated before the website goes live.

Communications Subcommittee members and leadership: Scott Atwell, the current Chair, is retiring in a few weeks. Shelly Krueger, the Vice Chair, will take over until the new FKNMS Communications Manager is onboarded and a new Chair is decided by the members. A new Department of Health member will also join the committee.

Questions & Answers/Comments/Discussion:

- Wade Lehmann: The new website looks great.
- Marisa Carrozzo: This is fantastic and will be a great tool to enhance public engagement on water quality.
- Chris Bergh: Thanked Scott for his leadership and wished him a happy retirement.

IV. Canal Restoration Subcommittee Discussion

This topic was removed from the agenda due to scheduling conflicts. A discussion on the Canal Restoration Subcommittee will be deferred to a future WQPP Steering Committee meeting.

V. Public Comment

None.

VI. Round Robin Steering Committee Member Updates

Wade Lehmann, EPA

- Although the RTC review has taken longer than expected, it is moving forward. The timeline to completion is still TBD, but it will get done.
- The 2025 South Florida Program grant opportunity was temporarily posted before being taken down to adhere to the appropriate EPA review process. That Notice of Funding Opportunity (NOFO) is expected to be posted again in the coming weeks, at which point it will be shared on the [EPA South Florida Program website](#) and sent to the WQPP. The NOFO has been streamlined to four groupings of projects, but the type of funded work will remain similar.
- EPA Region 4 Division Director Katie Butler sends her regards and thanks to the WQPP Steering Committee.

Nick Parr, DEP (on behalf of Lawrence Glenn)

- The Tidal Restoration Project is continuing forward in the design and permitting phase, with an anticipated permit by March. Waiting to hear back from NOAA regarding the grant funding application.

David Burke, NOAA

- The RTC is currently working through the NOAA review process.
- FKNMS permitting and authorizations for nearshore construction projects is ongoing and continues to be a priority. This impacts the ability of partners to execute water quality improvement projects and the team has made good progress working through the backlog, although there is still more to do.
- Sanctuary Staffing: There are currently three open FIU affiliate positions, including a facilities maintenance supervisor in Key West, a volunteer coordinator in Key West, and a Mission: Iconic Reefs field team member in Key Largo. Bill Goodwin (science team) and Scott Atwell (Public Information Officer) are retiring in the next couple of weeks. We also welcomed new hires: Josh

Harvey has joined the upper region buoy team and Heather Bolint has joined the outreach team at the Eco Discovery Center in Key West.

- FY25 outreach highlights: 669,618 people were reached through FKNMS and partner exhibits and outreach programs, and 114 volunteers contributed 3,488 hours to the sanctuary's mission.
- The online Boater Education course developed and hosted through Eppley will be paused after December 31st due to funding and needed changes. Boater education remains an important focus and efforts are in progress to identify alternative approaches to reach this important audience.

Heather Stewart, USFWS

- USFWS is regrouping post-shutdown and reprioritizing. Looking forward to a productive 2026 focused on partnership building and new projects.

Gil McRae, FWC

- Winter time is when we've experienced the spinning fish and sawfish mortality situation during the past few years. This was worse a couple of years ago when dozens of large sawfish were lost. We had a reprieve last year and hope to experience the same this year. Thus far there has been no major influx of reports. The situation is most likely related to the seasonal availability of algal-based toxins, most likely associated with a benthic algae, although there is no smoking gun. Tom Matthews with FWC is the point of contact for more information.
- Significant work is ongoing in the coral restoration sector, with multiple agencies and NGOs involved in scaling up coral propagation to support large scale restoration. There is an \$8M appropriation in the Governor's budget to support these efforts in FY26-27. New partners are onboarding and new protocols will be coming out as well. Contact Gil McRae for more information.

Marisa Carrozzo, FKNMS Sanctuary Advisory Council (SAC)

- The SAC met last week, during which Genevieve Schave gave an excellent overview of DEP's water quality monitoring efforts in the sanctuary and Aquatic Preserves.
- The SAC recently established an Adaptive Management Working Group (AMWG) to consider resource management topics and develop recommendations. The [Adaptive Management Working Group website](#) is now live; the group will next meet on January 6th. Chris Bergh and Shelly Krueger are involved in the AMWG and can provide additional information.

Sandy Walters, Eco-Legacy Solutions

- Looking forward to the 2-day meeting in early 2026 and refocusing the WQPP's efforts.

Chris Bergh, TNC

- A new scientific publication was recently released by David Whiteall, Brian Walker and others regarding rainfall, terrestrial runoff, and water quality impacts on coral reefs. This mostly focuses on the mainland southeast Florida reefs, but we know those waters and the pollutants they contain also find their way to the sanctuary. The take away message is that rainfall drives pollution reaching the reef. In addition to the publication, they developed a cartoon podcast video about the study. Links:
 - Paper: Whitall DR, Williams GJ, Aeby GS, Davies AJ, Spring DL, Walker BK (2025) Terrestrial runoff and meteorology drive changes in coral reef water quality in southeast Florida, USA. Mar Ecol Prog Ser 774:123-141 <https://doi.org/10.3354/meps14988>
 - Cartoon podcast-style video: <https://www.facebook.com/share/v/1EZP1v2r1s/>
 - Shorter, second podcast-style video: https://youtu.be/Yv0OSv-n_i8
- There are a number of local issues to track:
 - During the SAC meeting, Monroe County Commissioner Craig Cates mentioned that the county is seeking approval to proceed with the new mooring field at Key West Harbor.

They are currently working through some concerns raised by the U.S. Navy. Once the new mooring field is established the unmanaged anchorages and moorings can also be managed, which may reduce water quality impacts associated with vessels in those locations.

- There is no news regarding the Key West Resort Utilities shallow injection well concerns that FOLKs has shared; hope to hear relevant updates on this matter in the future.
- The City of Key West water quality monitoring program is moving forward and will hopefully be in place again soon. Sandy Walters added that this will hopefully be on the agenda for the city commission in January, with the contract nearing completion and Phase 1 water quality sampling beginning in February.

Alison Higgins, City of Key West

- Confirmed that the new Key West water quality monitoring contract will be on the agenda at the January 6th commission meeting.
- Some funds are available to implement some other actions identified in the City of Key West's Water Quality Improvement Plan. Alison will convene the planning committee soon to discuss this further.

Patience Cohn, MIA SF

- MIA SF is working with the Marine Research Hub and Miami-Dade's new Office of Innovation and Economic Development on resilience projects that will hopefully have positive outcomes for the marine environment in south Florida.

Meeting Wrap-Up and Adjourn

Wade Lehmann thanked everyone for participating in the meeting and reviewed accomplishments and next steps.

The meeting adjourned at 10:10 am.