



AGENDA MEMORANDUM

*Natural Resources
Department*

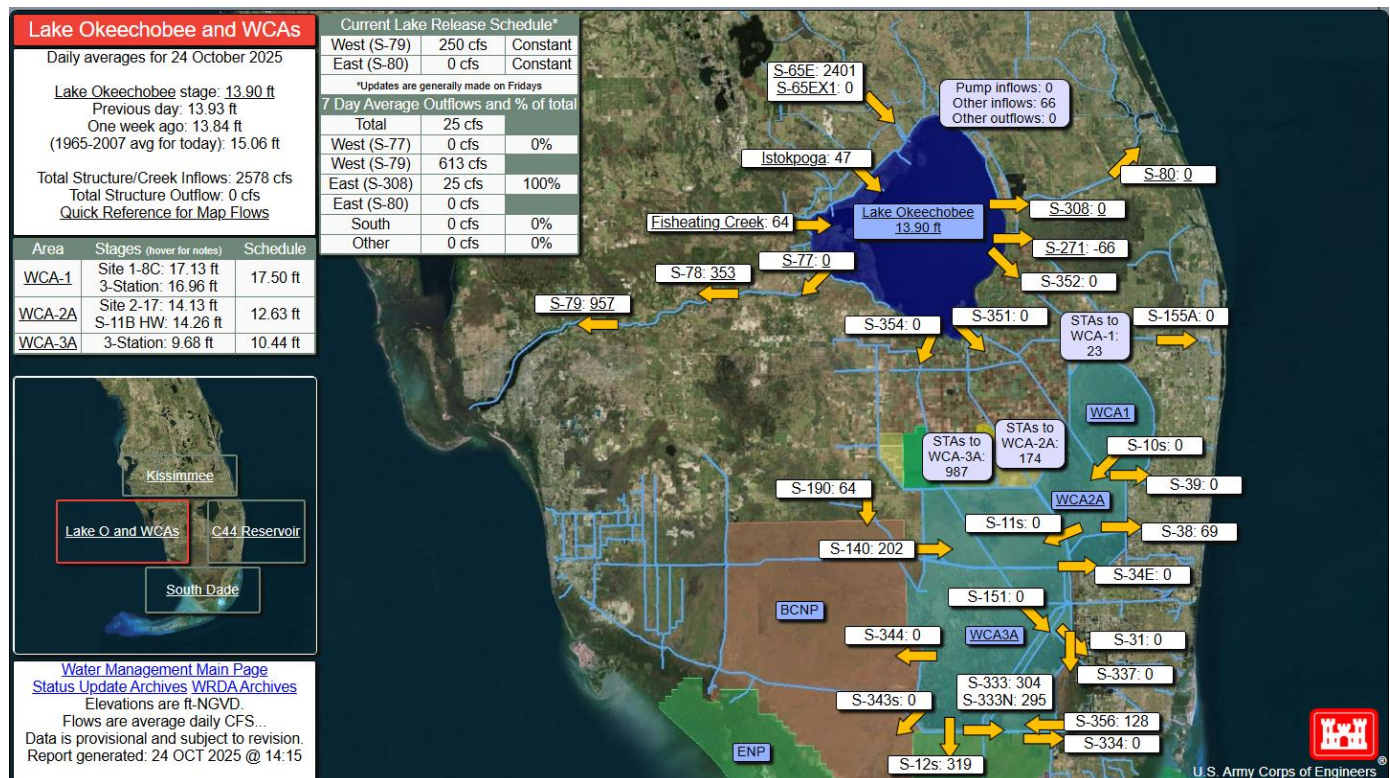
City Council Regular Meeting Date: November 2, 2025

To: City Council
From: Holly Milbrandt, Natural Resources Director
Date: October 24, 2025

SUBJECT: Natural Resources Water Quality Updates

BACKGROUND:

CALOOSAHAATCHEE RIVER & ESTUARY CONDITIONS REPORT



Click to view: [October 21, 2025 Caloosahatchee Conditions Report](#)

CURRENT RAINFALL AND CLIMATE OUTLOOK

SFWMD rainfall for October to date was below normal at 0.30" (32% of normal). However, there was a high degree of variability across the District, with severely below average rainfall for regions north of Lake Okeechobee and the East Coast, and above or near average rainfall for regions just south and west of Lake Okeechobee and the Florida Keys.

<https://www.sfwmd.gov/weather-radar/rainboard>

For the 2025 wet season (May 22, 2025-October 10, 2025), the SFWMD received 35.06" of rain (103% of normal). Rainfall varied some across the District, with regions north of the lake being slightly wetter and regions south of the lake slightly drier (excepting the Florida Keys).

<https://www.sfwmd.gov/weather-radar/rainboard>

The NOAA Climate Prediction Center one-month Probability Outlook for November 2025 indicates equal chances of above normal, normal, and below normal rainfall for south Florida.

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead14/

The three-month outlook for Nov-Dec-Jan 2025 indicates equal chances of above normal, normal, and below normal rainfall for areas south of Lake Okeechobee and a 33-40% of below normal rainfall for south and central Florida north of Lake Okeechobee.

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead01/off01_prpc.gif

NOAA ENSO Report (updated on 10/20/2025):

- La Niña conditions are present.
- Equatorial sea surface temperatures (SSTs) are mostly below average across most of the Pacific Ocean. Atmospheric anomalies over the tropical Pacific Ocean are consistent with La Niña.
- La Niña conditions are present and favored to persist through December 2025 - February 2026, with a transition to ENSO-neutral likely in January-March 2026 (55% chance).
- https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.pdf

ALGAE BLOOMS

Red Tide: FWC Update for October 24, 2025

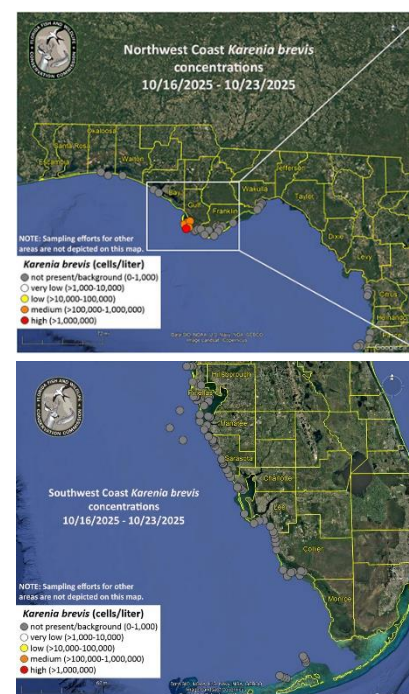
<https://myfwc.com/research/redtide/statewide/>

Over the past week, the red tide organism, *Karenia brevis*, was observed in six samples collected along Florida's Gulf Coast.

In Northwest Florida over the past week, *K. brevis* was observed at medium to high concentrations in Gulf County.

In Southwest Florida over the past week, *K. brevis* was observed at background concentrations in one sample collected offshore of Sarasota County.

Fish kills suspected to be related to red tide were reported in Northwest Florida. Respiratory irritation was not reported.



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Blue-Green Algae: DEP Weekly Update (October 17-23)

<https://floridadep.gov/AlgalBloomWeeklyUpdate>

There were 17 reported site visits in the past seven days with 17 samples collected. Algal bloom conditions were observed by samplers at 9 of the sites.

The satellite imagery for Lake Okeechobee from 10/23 is partially obscured by cloud cover and shows low to medium bloom potential on approximately 40% of the lake. The highest bloom potential is in southwest portion of the lake.

The best available satellite imagery for the Caloosahatchee River from 10/22 is partially obscured by cloud cover and shows scattered low bloom potential on visible portions of the upper estuary.

The best available satellite imagery for St. Lucie River from 10/22 is partially obscured by cloud cover and shows highly scattered low bloom potential.

Red Drift Algae: Since early October, periodic deposits of red drift algae have been reported on Sanibel's beaches. Deposits ranged from light to heavy and have generally been more prevalent on the beaches from Tarpon Bay to Blind Pass. Beach patrol reports from Officer Royka noted algae deposits on 10/1, 10/2, 10/3, 10/8, 10/9, 10/10, 10/11, 10/22, & 10/23.

Trichodesmium: No reports

Sargassum: No reports

PAST MEETING HIGHLIGHTS & UPDATES

CHNEP Southwest Florida Resiliency Summit

September 16-17, 2025

Port Charlotte, FL

<https://www.chnep.org/swfl-resiliency-summit>

- Presentations from the 2025 Summit are posted & available for viewing

POSTPONED - USACE Jacksonville District-Integrated Delivery Schedule (IDS) 101 and Listening Sessions

~~October 7 & 14, 2025~~ NEW DATE-TBD

3:00 PM

Virtual

<https://www.saj.usace.army.mil/Media/News-Releases/Article/4317290/us-army-corps-of-engineers-to-hold-an-integrated-delivery-schedule-101-and-stak/>

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SFWMD Governing Board Meeting

October 9, 2025

West Palm Beach, FL

<https://www.sfwmd.gov/event/governing-board-meeting-39>

- Comprehensive Everglades Restoration Plan Biological Control Implementation Project
 - SFWMD has achieved a 42.6% reduction in herbicide use over the past 6 years
- Caloosahatchee Watershed Storage Initiative Contracts
 - This initiative focuses on storage of high amounts of runoff, especially in the West Basin of the Caloosahatchee Watershed. Three proposals were received, evaluated, and selected. Each of the three proposals intends to use private lands to build and operate storage projects in Hendry and Glades counties which aim to store over 11,000 acre-feet annually for ten years. One project is in the West Basin, one in the East, and one spanning both.
- C-43 Reservoir Lawsuit
 - In May 2023, the District terminated the Contractor and filed a breach of contract suit to recover damages. The case is a multi-million-dollar complex construction dispute that the parties are vigorously litigating. This case is set for trial beginning February 2026.
- Everglades Agricultural Area A-2 Reservoir Pump Station S-623 Project
 - Pursuant to the new landmark agreement between the State of Florida and the U.S. Army Corps to accelerate the restoration of America's Everglades, the Governing Board authorized a contract with Harry Pepper & Associates, Inc. for the CEPP EAA A-2 Reservoir S-623 Pump Station Project in the amount of \$389,861,240.
- Northern Everglades and Estuaries Protection Program Briefing
 - The Northern Everglades and Estuaries Protection Program (NEEPP) promotes a comprehensive approach to restore and protect surface water. Comprised of the Lake Okeechobee Watershed, Caloosahatchee River Watershed, and St. Lucie River Watershed, the NEEPP uses a combination of research, monitoring, source controls and construction projects to reduce nutrients and increase water storage opportunities in the three watersheds. Water quality improvements in the Northern Everglades watersheds are a shared responsibility between the Florida Department of Environmental Protection, Florida Department of Agriculture and Consumer Services, and the District.

UPCOMING MEETINGS & EVENTS

SFWMD Tour: C-43 Water Quality Treatment and Testing Project

October 29, 2025

9:30 AM

SFWMD Boma property, Labelle, FL

By Invitation Only

- Natural Resources staff (Milbrandt & Dettmar) will be attending this tour organized by the SFWMD. The District has been using this property to evaluate nitrogen removal technologies with a focus on the use of wetland plants. Earlier this year, using the results from the Phase I Mesocosm Study, they completed the planting of the Phase II Test Cells to evaluate the use of select plants to remove nitrogen.



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Florida Fish and Wildlife Conservation Commission Meeting

November 5-6, 2025

8:30 AM

Belle Glade, FL

<https://myfwc.com/about/commission/commission-meetings/november-2025/>

- Lake Okeechobee Update - Staff will provide an update on Lake Okeechobee's recent recovery efforts, fisheries and wildlife status, and habitat restoration and enhancement.
- Proposed Final Rule – Nonnative Prohibited Reptiles - Staff will present proposed changes to rules related to nonnative Prohibited reptiles. The proposed rules would provide alternative ways to construct outdoor enclosures for green iguanas used for exhibition or research, and for wild-caught green iguanas collected for sales. These changes would allow the use of dig barriers or closed-mesh wire for walls and floors to provide permittees with feasible and secure caging alternatives to current regulations. The proposed changes would also clarify requirements for transport of Prohibited reptiles, emergency preparedness plans, and develops rules related to collection and transport of wild-caught green iguanas.

SFWMD Governing Board Meeting

November 13, 2025

9:00 AM

West Palm Beach, FL

<https://www.sfwmd.gov/event/governing-board-meeting-36>

C&SF Water Management: Local Engagement and Collaboration - Seasonal Assessment Point - Dry Season

December 2, 2025

12:30 PM

Virtual

- As part of the Lake Okeechobee System Operations Manual (LOSOM) implementation and to continue the model of seasonal assessments in the Combined Operations Plan (COP), the Central and Southern Florida (C&SF) system operating agencies, will be hosting a Seasonal Assessment Point on Tuesday, Dec 2, 2025. The Seasonal Assessment Point will cover both the northern and southern regions of the C&SF system with the intent to identify the desired outcomes for the 2025/2026 dry season. A part of the workshop will be focused on a review of the system-wide conditions over the past several seasons (a look back) and climate projections (a look forward). The workshop discussion will help assess operational goals and strategies for the dry season across the south Florida system – which in turn will set the trajectory that can be reviewed at each subsequent monthly meeting for the north and south regions. Each stakeholder will have an opportunity to provide data, assessments, and desired outcomes/goals for the dry season – which can be provided in writing or verbally during the meeting.

FUNDING SOURCE: N/A

RECOMMENDED ACTION: N/A

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