AGENDA MEMORANDUM

Natural Resources Department

City Council Regular Meeting Date: August 19, 2025

To: City Council

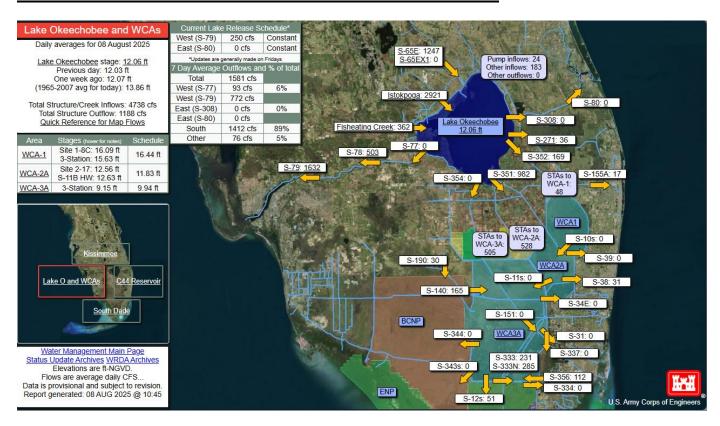
From: Holly Milbrandt, Natural Resources Director

Date: August 8, 2025

SUBJECT: Natural Resources Water Quality Updates

BACKGROUND:

CALOOSAHATCHEE RIVER & ESTUARY CONDITIONS REPORT



Click to view: August 4, 2025 Caloosahatchee Conditions Report

LAKE OKEECHOBEE RECOVERY OPERATIONS

The Corps began Lake Okeechobee recovery operations (ROs) on December 7, 2024. Recovery operations is a strategy included in LOSOM to address ecological recovery in Lake Okeechobee necessitated by prolonged high lake stages. The goal of lake ROs is to lower lake stages (referred to as a drawdown) during the winter/spring before the onset of the wet season to help expedite the reestablishment of submerged aquatic vegetation (SAV) within the lake.

Water levels in Lake O had been above the ecological envelope (i.e. too high to support seagrass growth) for Lake Okeechobee since Hurricane Ian in 2022. The last time the lake was less than 12-feet was in 2019, at which time there was more than 25,000 acres of submerged aquatic vegetation (SAV). Higher lake levels over the last 5 years have reduced the SAV to less than 5,000 acres.

The Corps concluded Recovery Operations on May 28, 2025, with Lake Okeechobee at 10.93 feet, down 5 feet from when recovery operations began. The Lake elevation was below 11.5 feet from April 26-July 11 (77 days) and exceeded the 60-day target. The Lake elevation was below 12 feet from April 15- July 23 (99 days) and exceeded the 90-day target.

CURRENT RAINFALL AND CLIMATE OUTLOOK

SFWMD rainfall for July was <u>near normal</u> at 7.04" (98% of normal). However, there was a high degree of variability across the District.

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

For the 2025 wet season to date (May 22, 2025-August 7, 2025), the SFWMD has received 18.51" of rain (97% of normal). However, there was a high degree of variability across the District, with the southeast portions of the District much below normal (64-81% of normal). https://www.sfwmd.gov/weather-radar/rainboard

The NOAA Climate Prediction Center one-month Probability Outlook for August 2025 indicates equal chances of below normal, normal, and above normal rainfall for south Florida. https://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead14/

The three-month outlook for Aug-Sep-Oct 2025 indicates a 33-40% chance of above normal rainfall south Florida and a 40-50% chance of above normal rainfall for central and north Florida. https://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead01/off01_prcp.gif

NOAA ENSO Report (updated on 8/4/2025):

- ENSO-neutral is present.
- Equatorial sea surface temperatures (SSTs) are near average across most of the Pacific Ocean.
- ENSO-neutral is most likely through the late Northern Hemisphere summer 2025 (56% chance in August-October). Thereafter, chances of La Niña conditions increase into the fall and winter 2025-26, but remain comparable to ENSO-neutral.
- https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolutionstatus-fcsts-web.pdf

ALGAE BLOOMS

Red Tide: FWC Update for August 8, 2025 https://myfwc.com/research/redtide/statewide/

Over the past week, the red tide organism, *Karenia brevis*, was not observed in samples collected statewide.

Fish kills or respiratory irritation suspected to be related to red tide were not reported over the past week in Florida.



Blue-Green Algae: DEP Weekly Update (August 1-7) https://floridadep.gov/AlgalBloomWeeklyUpdate

There were 46 reported site visits in the past seven days with 46 samples collected. Algal bloom conditions were observed by samplers at 16 of the sites.

The best available satellite imagery for Lake Okeechobee from 8/6 shows **low to high bloom potential on approximately 95% of the lake**, with the highest potential along the northwest and northeast shores of the lake.

The best available satellite imagery for the Caloosahatchee Estuary from 8/6 is partially obscured by cloud cover and shows no significant bloom potential on visible portions of the estuary.

The best available satellite imagery for the St. Lucie Estuary from 8/6 is partially obscured by cloud cover and shows no significant bloom potential on visible portions of the estuary

Red Drift Algae: No reports

Trichodesmium: No reports

Sargassum: No reports

PAST MEETING HIGHLIGHTS & UPDATES

SFWMD Governing Board Meeting

July 10, 2025 West Palm Beach, FL

https://www.sfwmd.gov/event/governing-board-meeting-32

- Executive Director's Report
 - Miller Pump Station at Picayune Strand was turned on at the end of June. This is the last pump station for the project in Collier County, allowing water that in the past has been sent to the coast to be used for habitat restoration and to provide additional flood control.
 - Southland Rock Mine Project: SFWMD is awaiting a response from contractor Philips & Jordan to the SFWMD criteria to begin review; response is due by August 27, 2025. DEP has released public notice of their "intent to issue" a permit; but granted a 45-day extension (to August 11, 2025) to the petition deadline.
 - Northern Everglades and Estuaries Protection Program (NEEPP) public workshop with DEP & FDACS is planned for September 26, 2025 along with board discussion with the other agencies on additional storage & treatment projects in the Caloosahatchee Watershed.
 - SFWMD to partner with Zoo Miami to initiate a Cape Sabal Seaside Sparrow captive breeding program as authorized by the board in December 2024.
- Approved a resolution authorizing an amendment to the Four Corners Rapid Infiltration Northern Everglades Watersheds Water Retention and Nutrient Load Reduction Project Service Agreement with ALJO Groves, LC, to modify the Scope of Work to increase project storage benefits and increase project payments. As part of NEEPP, the Four Corners Rapid Infiltration Project (ALJO Groves, LC), located in Lee County, is a publicprivate partnership supporting the Caloosahatchee River Basin Management Action Plan.

SFWMD Caloosahatchee (C-43) Reservoir Ribbon Cutting July 15, 2025

- The Caloosahatchee Reservoir is an 18-square-mile project that supports water quality in the Caloosahatchee Estuary. It will reduce harmful discharges of water from Lake Okeechobee to the Caloosahatchee Estuary during the wet season and provide beneficial freshwater to the estuary during the dry season. This project is part of the state-federal Comprehensive Everglades Restoration Plan (CERP) to restore the environment and make our water resources more resilient. It will hold approximately 170,000 acre-feet of water (55 billion gallons).
- To view the video: https://youtu.be/9 7S6yUF TM

CHNEP Technical Advisory Committee Meeting

August 7, 2025 Punta Gorda, FL

https://www.chnep.org/technical-advisory-committee

 A presentation on the City's Surface Water Management Plan Update was given to the TAC by Jordan Varble, Johnson Engineering.

UPCOMING MEETINGS & EVENTS

SFWMD Governing Board Meeting

August 14, 2025 9:00 AM

West Palm Beach, FL

https://www.sfwmd.gov/event/governing-board-meeting-32

- Briefing: New Landmark Agreement between the State of Florida and the U.S. Department of the Army to Accelerate Everglades Restoration (Staff contact, Drew Bartlett)
 - The new agreement will accelerate the Everglades Agricultural Area Reservoir's construction timeline, allow Florida to assume responsibility for the Blue Shanty Flow Way, enable Florida to manage future CERP projects through expedited permitting and an updated federal memoranda of understanding, and redirect resources to fast-track critical restoration.

Fish and Wildlife Conservation Commission Meeting

August 13-14, 2025 8:30 AM Havana, FL

https://myfwc.com/about/commission/commission-meetings/

CHNEP Management Committee Meeting

September 4, 2025 9:30 AM-2:00 PM Port Charlotte, FL https://www.chnep.org/management-committee

Harmful Algal Bloom Task Force

September 10, 2025, FWRI St. Petersburg

https://myfwc.com/research/redtide/taskforce/meeting/

2025 Southwest Florida Resiliency Summit & the Florida Resilience Conference

September 16-19, 2025 Sunseeker Resort, Charlotte Harbor, FL https://www.chnep.org/swfl-resiliency-summit

FUNDING SOURCE: N/A

RECOMMENDED ACTION: N/A