MEMORANDUM

TO: Jason Engle, Chief, Engineering Division (USACE)

FROM: John Mitnik, Chief District Engineer (SFWMD)

DATE: July 10, 2025

SUBJECT: System Operational Position Statement July 8, 2025 to July 14, 2025

This Position Statement is to provide operational input for the one-week period from July 8, 2025 to July 14, 2025 based on system conditions and data observed during the previous Monday to Sunday 7-day period.

Current climate conditions: District July rainfall to date is above normal (129% of normal). The rainfall forecast (issued July 9) calls for near normal rainfall for the coming 7-day period and near to below normal for the following one.

Climate and weather forecasts: The most recent CPC precipitation outlook for Jul 2025 is equal chances of below, normal and above normal rainfall (EC) for the entire District. ENSO-Neutral is likely in the Northern Hemisphere summer 2025, with about 82% chance in June-August 2025 and may continue into winter 2025-26, though confidence is lower. The 3-month window of Jul 2025 – Sep 2025 indicates a slightly increased chances (33-40%) in the likelihood of above normal rainfall for the entire District. The 3-month window of Aug 2025 – Oct 2025 shows increased chances (40-50%) of above normal rainfall for areas north of the EAA, and slightly increased chances (33-40%) of above normal for the respective remainder areas of the District. The 3-month window of Sep 2025 – Nov 2025 shows increased chances (40-50%) of above Normal rainfall for the Lake Okeechobee and south, and slightly increased chances (33-40%) of above Normal rainfall for the remainder of the District. The transition into the 2025 – 2026 Dry Season goes through the 3-month window of Oct 2025 – Dec 2025 showing equal chances of below, normal and above normal rainfall (EC) for the entire District. The outlooks for the 3-month windows from Nov 2025 – Jan 2026 to Jan 2026 – Mar 2026 indicate increased chances (40-50%) of below normal rainfall for the entire District. The transition into the 2026 wet season shows equal chances (EC) of rainfall for the state of Florida.

Hydrologic and tropical outlooks: Current climatological conditions are Normal. Current hydrological conditions are Normal. Based on conditions at the start of the month, the lake stage to enter the Water Shortage Management Band in July and enter Zone D in late August.

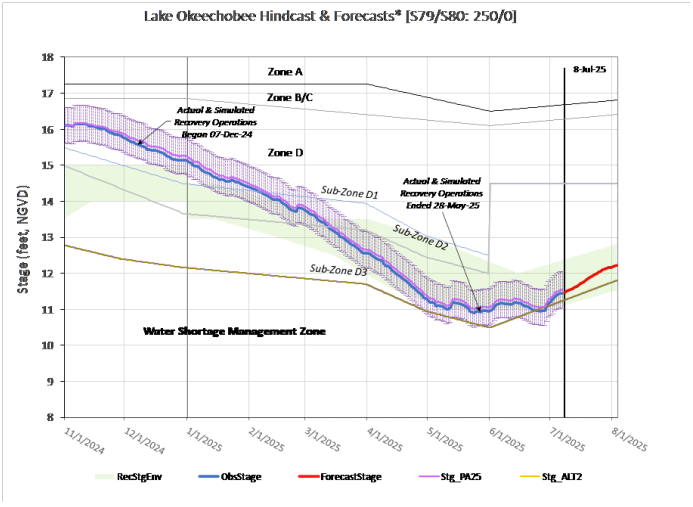
Water-supply conditions: The Lake Okeechobee seasonal net inflow outlook is Normal to Extremely Wet and at Low risk for water supply. The multi-seasonal net inflow outlook is Normal and at Moderate risk for water supply.

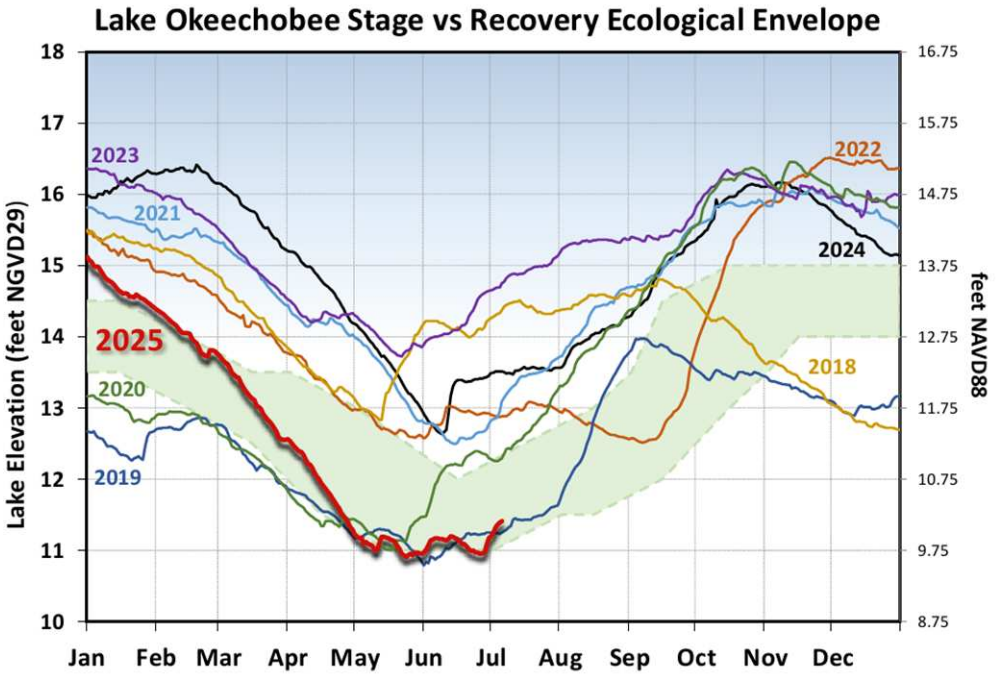
Estuary conditions: For the 7-day period, June 30 to July 6, 2025, total inflow to the Caloosahatchee Estuary averaged approximately 4,300 cfs with no flow coming from Lake Okeechobee through S-77. The mean salinities were in the optimal range (0-10) for tape grass in the upper estuary. Salinities were in the optimal range (10-25) for adult eastern oysters at Cape Coral, and in the upper stressed range (>25) at Sanibel and Shell Point. Total discharge to the St. Lucie Estuary was about 2,350 cfs with no flow coming from Lake Okeechobee and the C-44 Basin, about 450 cfs coming from the C-23 Basin, about 500 cfs coming from the C-24 Basin, about 250 cfs coming from Ten Mile Creek, and about 1,150 cfs coming from the Tidal Basin. The average salinity in the middle estuary was within the optimum (10-25) for adult eastern oysters.

Lake Okeechobee stage and ecological conditions:

On July 6 the daily average Lake Okeechobee stage was 10.10 feet NAVD88 (11.41 feet NGVD29), which placed it within the lower portion of Zone D (Zone D3 of the PA25 simulation) of the Lake Okeechobee System Operating Manual (LOSOM). Lake stage increased by 0.34 feet over the preceding 7-day period. ENSO-neutral conditions are present and are likely during the summer. The District will continue to monitor conditions in the estuaries, as well as the systemwide conditions, as the wet season progresses. With the initiation of the wet season, Normal Lake Operations have resumed pursuant to the considerations in LOSOM as informed by PA25. To maintain favorable salinity levels in the estuaries and begin to conserve water, it is recommended that flow targets for the Caloosahatchee Estuary should rely on rainy season basin flows which are expected to occur over the next week to ensure the delivery of the Minimum Flow and Level, but use Lake Okeechobee flows from S-77 to ensure S-79 flows remain above a targeted steady release of 250 cfs; flow targets for the St. Lucie Estuary and Lake Worth Lagoon should remain at 0 cfs consistent with Normal Operations within Zone D. The District will continue to monitor salinity conditions in the estuaries and water supply conditions within the Lake Okeechobee Service Area to assess whether further reductions are warranted in future operational recommendations. The USACE typically implements the releases to the estuaries over a 7-day period starting on Saturday and ending on Friday.

Forecast Modeling Based on PA25 Simulation





The current and seven prior years' annual stage hydrographs for Lake Okeechobee in comparison to the recovery envelope (light green). A shift from the normal ecological envelope to the recovery envelope occurred because the 30-day minimum lake stage (elevations exposed for at least 30 days, nonconsecutively) in the June 1 – July 31, 2023 window was >11.75 feet NAVD88 (13 feet NGVD29).

Navigation and recreation conditions: Currently, there are no planned deviation or declared water shortage impacting navigation or lockages.

STOF water supply conditions: Current Lake Okeechobee stage is sufficiently high that water supply deliveries to the Seminole Tribe of Florida (STOF) Brighton Reservation, if needed, will not be impacted. When Lake Okeechobee stage recedes below 8.75 feet NAVD88 (10 feet NGVD29) and 6.75 feet NAVD88 (8 feet NGVD29), water supply delivery is not achievable via Pump Station G-207 on the Harney Pond Canal and Pump Station G-208 on the Indian Prairie Canal, respectively, as the respective canals become disconnected from Lake Okeechobee.

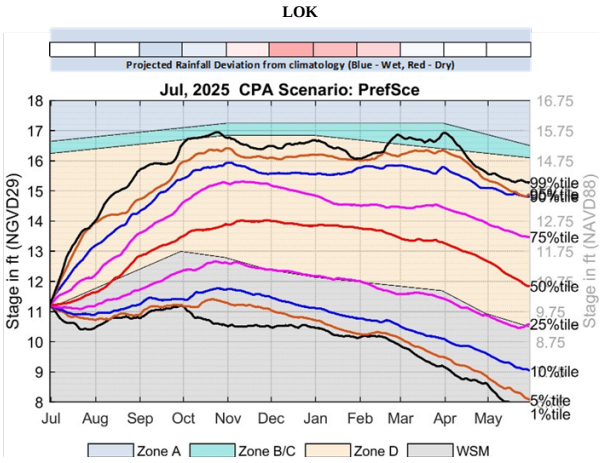
Algal Bloom conditions: The Fish and Wildlife Research Institute reported on July 2, 2025, that *Karenia brevis*, the Florida red tide dinoflagellate, was not observed in any samples collected within the District region. In the most recent non-obscured satellite image from July 5, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests moderate to high cyanobacteria potential in northern and western nearshore areas of the lake.

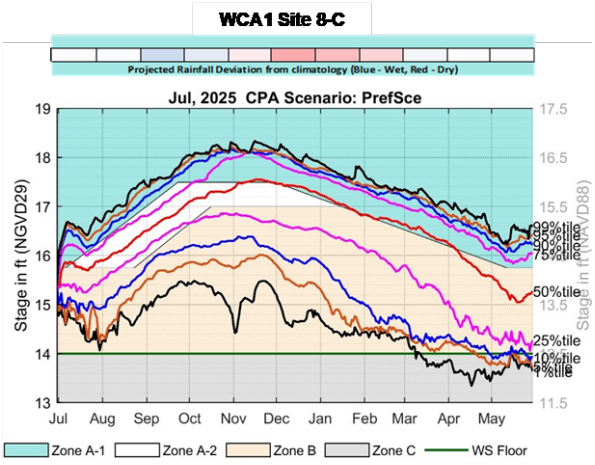
STA conditions: In STA-1E, Central Flow-way is offline for construction activities. An operational restriction is in place in the Western Flow-way for post-construction vegetation grow-in. Online treatment cells are near target stage. In STA-1W, treatment cells are near target stage. Vegetation in the Western and Eastern flow-ways is highly stressed. The 365-day PLRs for the Eastern and Northern Flow-ways are below 1.0 $g/m^2/yr$. The 365-day PLR for the Western Flow-way is high (≥ 1.0 $g/m^2/yr$). STA-2 Flow-way 3 is offline for post-drawdown vegetation grow-in. Operational restrictions are in place in Flow-ways 2 and 4 for vegetation management activities. An additional restriction is in place for inflow canal dredging in Flow-way 1. Online treatment cells are near target stage. Vegetation in Flow-ways 2 is stressed, and in 5 is highly stressed. The 365-day PLRs for flow-ways 2 are below 1.0 $g/m^2/yr$. In STA-3/4, Eastern Flow-way is under limitations for post-drawdown vegetation grow-in. Treatment cells are near or above target stage, vegetation in the Central flow-ways is highly stressed, and the 365-day PLRs for the Central and Western Flow-ways are below 1.0 $g/m^2/yr$. For the current operational period, USACE is not requesting flows south from Lake Okeechobee towards the WCAs. The District will continue to work with the USACE to manage Lake Okeechobee levels in an effort to curtail harmful discharges over this year. To help with this objective the District will move as much water south through the Stormwater Treatment Areas as possible under the current permits as regional conditions allow.

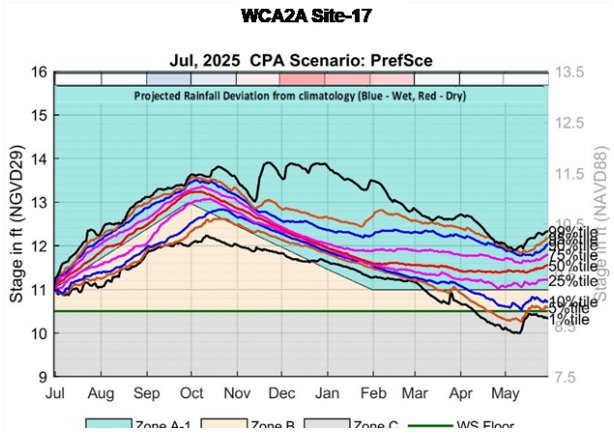
WCA conditions: On July 6 the daily average stage in WCA-1 was at 13.83 feet NAVD88 (15.30 feet NGVD29), in Zone B and 0.09 feet below regulation schedule. The daily average stage in WCA-2A was at 9.74 feet NAVD88 (11.25 feet NGVD29), in Zone A and 0.12 feet above regulation schedule. The daily average stage in WCA-3A was at 7.46 feet NAVD88 (8.98 feet NGVD29), in Zone B and 0.75 feet below regulation schedule. Over the 7-day period, June 30 to July 6, 2025, no regulatory releases were sent from Lake Okeechobee south to the STAs. No Lake regulatory releases reached the Lake Worth Lagoon through the C-51 canal during this period.

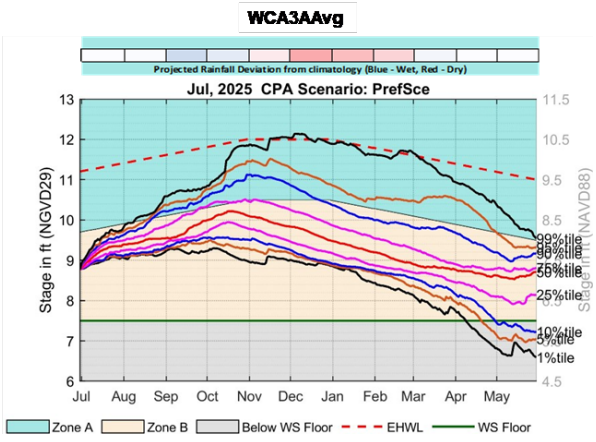
ENP conditions: Releases from WCA-3A to the ENP continue through the S-12C/D and S333 structures. Hydrologic connectivity, having diminished over the last month in Shark River and Taylor Sloughs, improved slightly compared to last week. Very dry conditions continue in WCA-1 and WCA-2A. Conditions remain relatively dry in eastern WCA-3A, but depths are increasing across WCA-3A, especially along the western boundaries. Big Cypress Basin depths remain below soil surface in the southern portion of the basin. Stages decreased in Taylor Slough last week and remain below the recent average. Salinity is above the estimated average for 1900 and within the WY2001-2016 Interquartile Range (IQR) in the eastern and central regions, and at the 75th percentile in the western region. The Tamiami Trail Flow Formula (TTFF) recommends 531 cfs of daily target releases from WCA-3A to ENP. The District recommends continuing with the current operations for the releases from WCA-3A in accordance with the Combined Operating Plan.

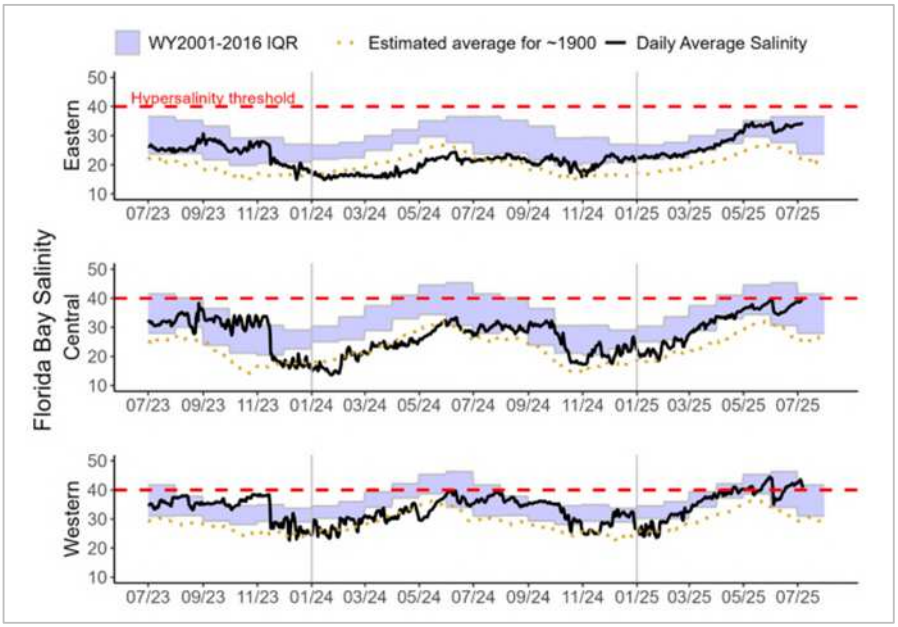
July 2025 Conditional Position Analysis (CPA) results for Lake Okeechobee, WCA-1, WCA-2A and WCA-3A under LOSOM Recovery Operations.











Eastern (top panel), Central (middle panel) and Western (bottom panel) Florida Bay daily average salinities with WY2001-2016 interquartile (25-75 percentile) ranges (IQR) and estimated historical daily average salinities. The hyper salinity threshold indicates the level at which salinities start to become harmful to seagrass.