

MEMORANDUM

TO: Laureen Borochaner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
DATE: May 29, 2025
SUBJECT: System Operational Position Statement May 29, 2025 to June 2, 2025

This Position Statement is to provide operational input for the one-week period from May 20, 2025 to May 26, 2025 based on system conditions and data observed during the previous Monday to Sunday 7-day period.

Current climate conditions: District May rainfall to date is above normal (130% of normal). The rainfall forecast (issued May 28) calls for below normal rainfall for the coming 7-day period and the following one.

Climate and weather forecasts: The most recent CPC precipitation outlook for Jun 2025 is slightly increased chances (33-40%) of above normal rainfall for the entire District. ENSO-neutral is favored during the Northern Hemisphere summer, with a greater than 50% chance through August-October 2025. The 3-month window of Jun 2025 – Aug 2025 indicates an increased chance (40-50%) in the likelihood of above normal rainfall for the Kissimmee River and north and slightly increased chances (33-40%) of above normal rainfall for the remainder of the District. The 3-month window of Jul 2025 – Sep 2025 and Aug 2025 – Oct 2025 show 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 windows 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 is projected to remain in Zone D and briefly enter the Water Shortage Management Band in mid-June.

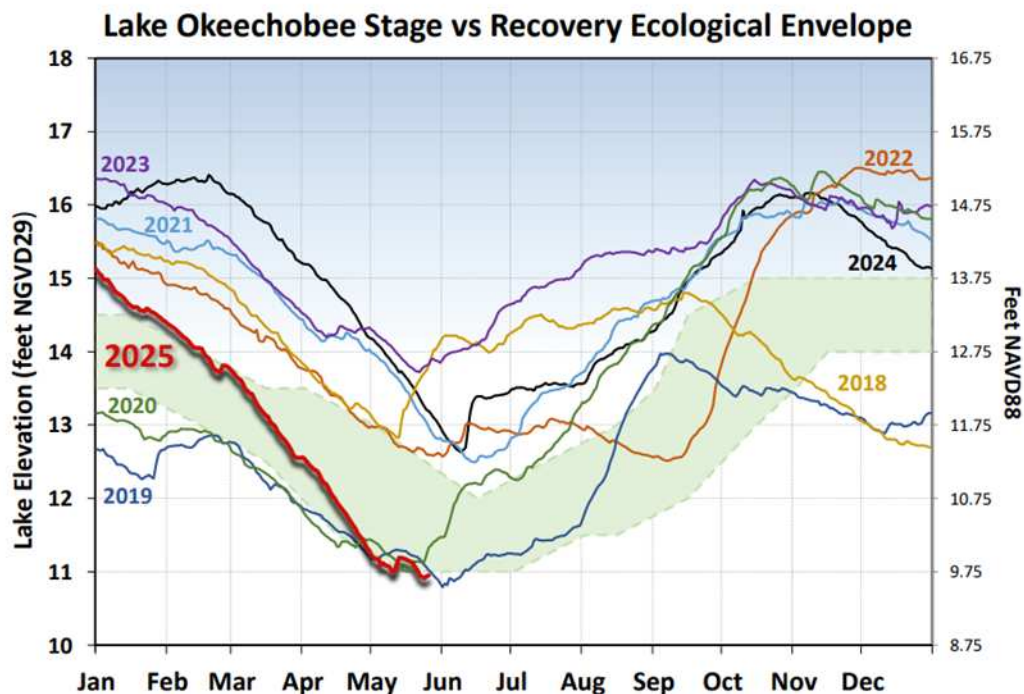
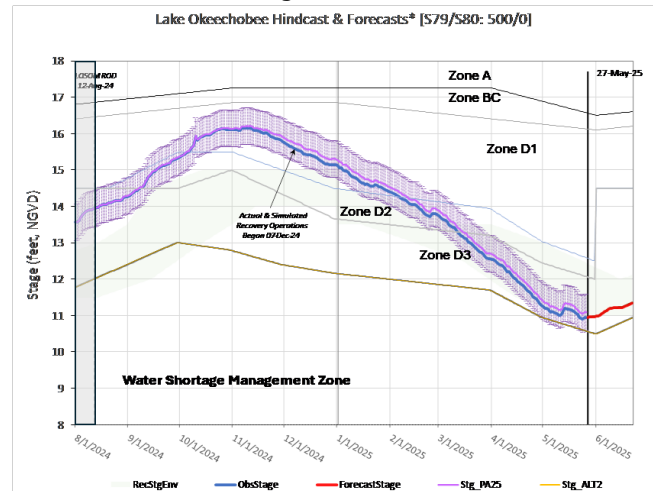
Water-supply conditions: The Lake Okeechobee seasonal net inflow outlook is Normal to Extremely Wet and at Low risk for water supply. The multi-seasonal net inflow outlook is Normal and at Moderate risk for water supply.

Estuary conditions: For the 7-day period, May 19 to May 25, 2025, total inflow to the Caloosahatchee Estuary averaged approximately 700 cfs with about 200 cfs coming from Lake Okeechobee through S-77. Salinities were in the optimal range (0-10) for tape grass at S-79 and Val I-75, and greater than the optimal range (>10) at Ft. Myers. 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 150 cfs with no flow coming from Lake Okeechobee, the C-44 Basin and C-24 Basin, about 50 cfs coming from the C-23 Basin and about 100 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 May 25 the daily average Lake Okeechobee stage was 9.62 feet NAVD88 (10.93 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 decreased by 0.21 feet over the preceding 7-day period. ENSO-neutral conditions are present and is favored 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, and the termination of Recovery Operations, Normal Lake Operations will resume 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 to ensure the delivery of the Minimum Flow and Level, but pursuant to LOSOM's PA25 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 throughout the system as the wet season progresses to assess 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.

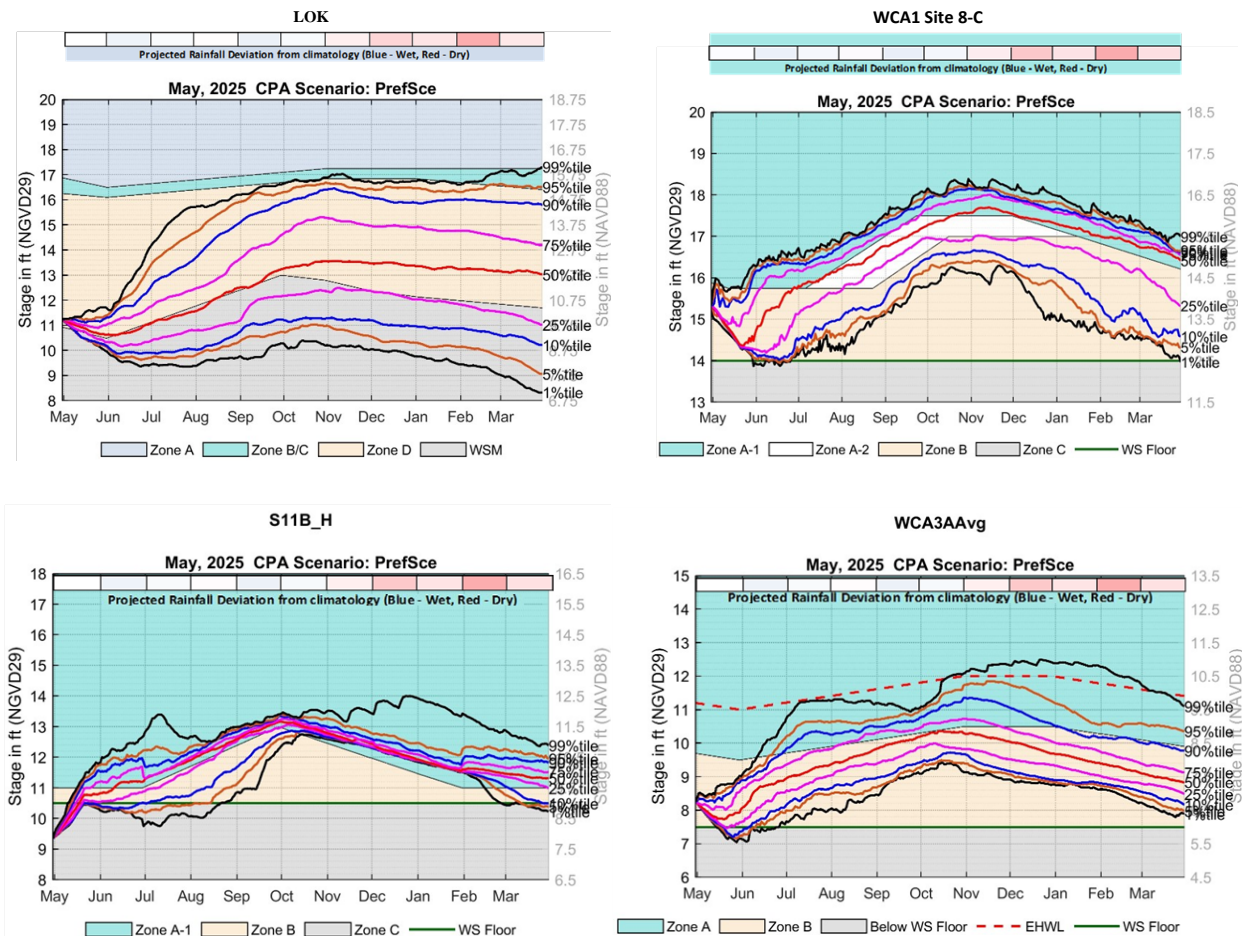
Algal Bloom conditions: The Fish and Wildlife Research Institute reported on May 23, 2025, that *Karenia brevis*, the Florida red tide dinoflagellate, was not observed in any samples collected within the District region. In the most recent non-obscured satellite image from May 25, 2025, NOAA's Harmful Algal Bloom Monitoring System suggests moderate to high cyanobacteria activity in and around Fisheating Bay, and along the northwest shoreline.

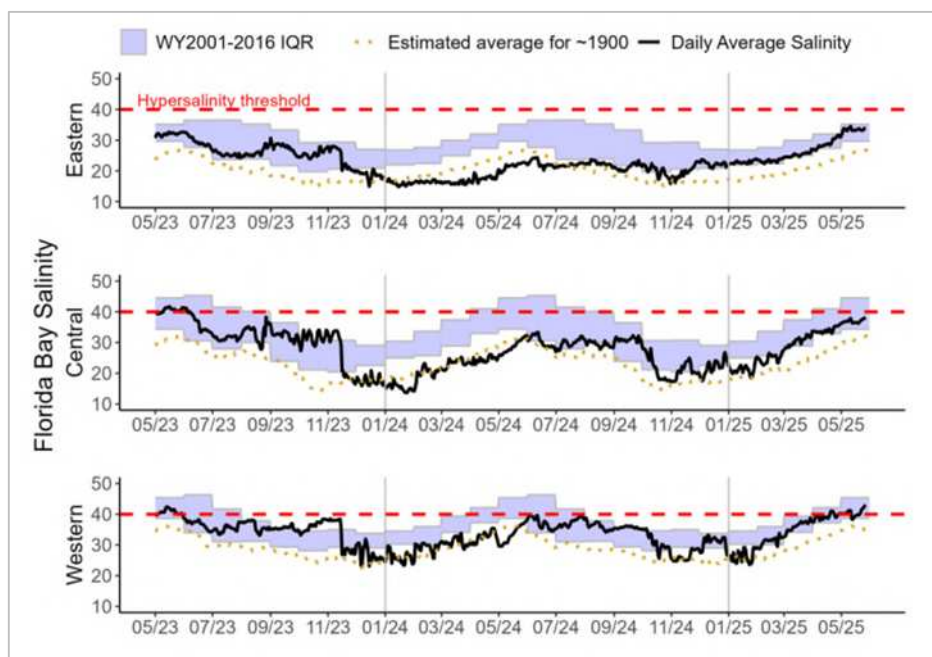
STA conditions: In STA-1E, Central Flow-way is offline for construction activities. An operational restriction is in place in the Western Flow-way for post-construction vegetation grow-in. Online treatment cells are near target stage. In STA-1W, treatment cells are near target stage. Vegetation in the Western and Eastern flow-ways is highly stressed. The 365-day PLRs for the Eastern, Western, and Northern Flow-ways are high (≥ 1.0 g/m²/yr). STA-2 Flow-way 3 is offline for a SAV recovery drawdown. 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 high (≥ 1.0 g/m²/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 high (≥ 1.0 g/m²/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 May 25 the daily average stage in WCA-1 was at 14.02 feet NAVD88 (15.62 feet NGVD29), in Zone B and 0.13 feet below regulation schedule. The daily average stage in WCA-2A was at 8.79 feet NAVD88 (10.38 feet NGVD29), and 0.12 feet below the water supply line. The daily average stage in WCA-3A was at 7.10 feet NAVD88 (8.62 feet NGVD29), in Zone B and 0.93 feet below regulation schedule. Over the 7-day period, May 19 to May 25, 2025, a total of 900 acre-feet were sent from Lake Okeechobee south to STA-2. 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. Some hydrologic connectivity was restored within the sloughs of ENP, with Shark River and Taylor Slough now showing potential for above ground stages. Dry current conditions remain in WCA-1 and WCA-2, with some recovery of depths to nearer ground surface in WCA-3A North and in Big Cypress National Preserve (BCNP). Wading bird foraging may have been extended in WCA-3A South with recent rainfall. Stages decreased in Taylor Slough last week and but remain above the recent average. Salinity increased on average in Florida Bay compared to last week and is now above the estimated average for 1900 and within the WY2001-2016 Interquartile Range (IQR) for all three regions. The Tamiami Trail Flow Formula (TTFF) recommends 381 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.

May 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 hypersalinity threshold indicates the level at which salinities start to become harmful to seagrass.