

MEMORANDUM

TO: Laureen Borochaner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
DATE: July 25, 2024
SUBJECT: Operational Position Statement, July 23, 2024 to July 29, 2024

This Position Statement is to provide operational input for the one-week period from July 23, 2024 to July 29, 2024 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On July 21 the daily average Lake Okeechobee stage was 12.25 feet NAVD88 (13.56 feet NGVD29), which placed it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage increased by 0.03 feet over the preceding 7-day period.

District July rainfall to date is below normal (83% of normal). The rainfall forecast (issued July 24) calls for below normal rainfall for the coming 7-day period and uncertain for the following period.

Precipitation Outlook: The most recent CPC precipitation outlook for Aug 2024 is for substantial increased chances (50-60%) of above Normal rainfall for south Florida. The 3-month window of Aug 2024 - Oct 2024 shows substantial increased chances (50-60%) of above Normal rainfall for south Florida. The 3-month window of Sep 2024 - Nov 2024 indicates increased chances (40-50%) of above Normal rainfall for the entire District. The transition into the 2024 – 2025 Dry Season goes through the 3-month window of Oct 2024 – Dec 2024 with equal chances of below, normal, and above normal (EC) for south Florida. The 3-month window of Nov 2024 – Jan 2025 and Feb 2025 – April 2025 shows increased chances (40-50%) of below normal rainfall for the entire District. The 3-month windows of Dec 2024 – Feb 2025 and Jan 2025 – Mar 2025 show outlooks for substantial increased chances (50-60%) of below normal rainfall for the entire District. The transition into the 2025 wet season shows equal chances (EC) of rainfall for the state of Florida.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage in the Low Sub-band, the Tributary Hydrologic Conditions in the Normal category, and the Multi-Seasonal Lake Okeechobee Net Inflow outlook in the Normal Category, Part C of the 2008 LORS suggests “Maximum Practicable Releases to the WCAs if desirable or with minimum Everglades impact; otherwise, no releases to the WCAs”.

Over the 7-day period from July 15 to July 21, 2024, 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. Stage in WCA-1 is above regulation schedule. Stage in WCA-2A is above regulation schedule. WCA-3A stage is above regulation schedule. For the coming operational period, USACE is not requesting maximum practicable regulatory releases be sent south from Lake Okeechobee towards the WCAs.

2008 LORS Release Guidance (Part D): With Lake Okeechobee stage in the Low Sub-band, the Tributary Hydrologic Conditions in the Normal category, the Seasonal Lake Okeechobee Net Inflow outlook in the Very Wet category, and the Multi-seasonal Lake Okeechobee Net Inflow Outlook in the Normal category, Part D of the 2008 LORS suggests “S-79 up to 450 cfs and S-80 up to 200 cfs”. In addition, Lake Okeechobee stage is 0.46 feet above elevation 11.85 feet NAVD88 (13.10 feet NGVD29) which is the stage for the upper boundary of the Ecological Envelope for this time of the year.

For the 7-day period, July 15 to July 21, 2024, total discharge to the St. Lucie Estuary was about 1,100 cfs with no flows coming from Lake Okeechobee. The 7-day average salinity in the middle estuary was within the optimal range (10- 25) for adult eastern oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 3,400 cfs with about 700 cfs coming from Lake Okeechobee through S-77. Salinities were in the damaging range (< 5) for adult eastern oysters at Cape Coral, in the optimal range (10- 25) at Shell Point and in the upper stressed range (> 25) at Sanibel.

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 and as regional conditions allow. The District recommends USACE implements a non-harmful release from Lake Okeechobee to the Caloosahatchee Estuary with an average discharge of 2,000 cfs (7-day pulse) as measured at the S-79 structure, zero lake releases to the St. Lucie Estuary and zero lake releases to the Lake Worth Lagoon. The USACE should continue to track Red Tide and Blue Green Algae conditions, and should conditions change during this operational period, the USACE should look to reassess releases as needed. The USACE typically implements the releases to the estuaries over a 7-day period starting on Saturday and ending on Friday.