

MEMORANDUM

TO: Laureen Borochaner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
DATE: April 10, 2024
SUBJECT: Operational Position Statement April 9, 2024 to April 15, 2024

This Position Statement is to provide operational input for the one-week period from April 9, 2024 to April 15, 2024 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On April 8 Lake Okeechobee stage was 15.05 feet NGVD, which placed it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.17 feet over the preceding 7-day period.

District April rainfall to date is much below normal (43% of normal). The rainfall forecast (issued April 9) calls for much below normal rainfall for the coming 7-day period and for the following period.

Precipitation Outlook: The most recent CPC precipitation outlook for April 2024 is for equal chances of below, normal and above normal rainfall (EC) for areas south of Lake Okeechobee, while the outlook for areas north of the lake is for slightly increased chances (33-40%) of above Normal rainfall. The 3-month window of Apr 2024 – Jun 2024 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 May 2024 – Jul 2024 shows slightly increased chances (33-40%) of above Normal rainfall for Lake Okeechobee and north, and equal chances (EC) of below normal, normal and above normal for the remainder of the District. The Jun 2024 - Aug 2024 shows slightly increased chances (33-40%) of above Normal rainfall for the Kissimmee River and north, and equal chances (EC) for the remainder of the District. The 3-month windows of Jul 2024 – Sep 2024 and Aug 2024 – Oct 2024 show increased chances (40-50%) of above normal rainfall for areas north of Lake Okeechobee and north of the EAA respectively, and slightly increased chances of above normal for the respective remainder areas of the District. The transition into the 2024 – 2025 Dry Season goes through the 3-month window of Sep 2024 – Nov 2024 showing equal chances of below, normal and above normal (EC) for south Florida. The heart of the 2024 – 2025 dry season, has an outlook for increased chances of below normal rainfall for the entire District.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within 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 “Up to Maximum Practicable to the WCAs if desirable or with minimum Everglades impact; otherwise, no Releases to WCAs”.

Over the 7-day period from April 1 to April 7, 2024, a total of 8,800 acre-feet of regulatory releases were sent from Lake Okeechobee south to STA3/4, and 100 ace-feet were sent to STA 5/6. 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 within the Low Sub-band, the Tributary Hydrologic Conditions in the Normal category, the Seasonal Lake Okeechobee Net Inflow outlook in the 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 0.67 feet above elevation 14.38 feet NGVD which is the stage for the upper boundary of the Ecological Envelope for this time of the year.

For the 7-day period, April 1 to April 7, 2024, total discharge to the St. Lucie Estuary was about 100 cfs, with no flows coming from Lake Okeechobee. The 7-day average salinity in the middle estuary was in the optimal range (10-25) for adult eastern oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 525 cfs with about 275 cfs coming from Lake Okeechobee through S-77. Salinities in the upper estuary were within the optimal range (0-10) for tape grass. Salinities were in the lower stressed range (5-10) 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. The District anticipates delivering between 400 and 1,000 cfs south from Lake Okeechobee, in addition to water supply needs, for delivery to the Everglades. 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 typically implements the releases to the estuaries starting on Saturday and ending on Friday. 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.