

MEMORANDUM

TO: Laureen Borochaner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
Matahel Ansar, Acting Chief, Hydrology & Hydraulics Bureau (SFWMD)
DATE: May 2, 2024
SUBJECT: Operational Position Statement April 30, 2024 to May 6, 2024

This Position Statement is to provide operational input for the one-week period from April 30, 2024 to May 6, 2024 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On April 29 Lake Okeechobee stage was 12.97 feet NAVD88 (14.28 feet NGVD29), which placed it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.37 feet over the preceding 7-day period.

District April rainfall was much, much below normal (36% of normal). The rainfall forecast (issued May 1st) calls for much below normal rainfall for the coming 7-day period and the following one.

Precipitation Outlook: The most recent CPC precipitation outlook for May 2024 is for increased chances (40-50%) of below normal rainfall. The 3-month window of May 2024 – Jul 2024 is for equal chances of below, normal, and above normal rainfall (EC) for south Florida. The 3-month window of 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 with equal chances of below, normal, and above normal (EC) for south Florida. The 3-month windows Oct 2024 – Dec2024 and Feb 2025 – Apr 2025 show outlooks for increased chances (40-50%) of below normal rainfall for Lake Okeechobee and areas north and slightly increased chances of below normal for the EAA and south. The outlooks for the 3-month windows from Nov 2024 – Jan 2025 to Jan 295 – Mar 2025 indicate increased chances (40-50%) of below normal rainfall for the entire District. The transition not the 2025 wet season shows equal chances (EC) for Florida.

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 22 to April 28, 2024, a total of 8,000 acre-feet of regulatory releases were sent from Lake Okeechobee south to STA3/4, and 100 acre-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 below regulation schedule. WCA-3A stage is below regulation schedule. For the coming operational period, USACE is 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 Normal 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 0.20 feet above elevation 12.77 feet NAVD88 (14.02 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, April 22 to April 28, 2024, total discharge to the St. Lucie Estuary was about 75 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 2,150 cfs with about 1,600 cfs coming from Lake Okeechobee through S-77. Salinities were in the optimal range (10-25) for adult eastern oysters at Cape Coral and in the upper stressed range (> 25) at Shell Point and 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.