

MEMORANDUM

TO: Laureen Borochaner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMMD)
DATE: March 21, 2024
SUBJECT: Operational Position Statement March 19, 2024 to March 25, 2024

This Position Statement is to provide operational input for the one-week period from March 19, 2024 to March 25, 2024 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On March 18 Lake Okeechobee stage was 15.75 feet NGVD, which placed it within the Intermediate Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.19 feet over the preceding 7-day period.

District March to date rainfall is below normal (81% of normal). Rainfall District forecast (issued March 20) calls for much, much above normal for the coming 7-day period, and below normal for the following period.

Precipitation Outlook: The most recent CPC precipitation outlook for March 2024 is for a substantial increase (50-60%) in the likelihood of above normal rainfall for Lake Okeechobee and areas north, and for increased chances (40-50%) of above normal rainfall for the remainder of the District. The 3-month window of Mar 2024 – May 2024 indicates a substantial increase (50-60%) in the likelihood of above normal rainfall for the Upper Kissimmee basins, increased chances (40-50%) of above normal rainfall for the Lower Kissimmee and the EAA, and slightly increased chances (33-40%) of above normal rainfall for the remaining areas south. The outlook for the 3-month window Apr 2024 – Jun 2024 shows slightly increased chances of above normal rainfall (33-40%) for Lake Okeechobee and areas north, with the remainder of the District showing equal chances of below normal, normal and above normal rainfall. All the 3-month windows from May 2024 – Jul 2024 to Nov 2024 – Jan 2025 show equal chances of below normal, normal and above normal rainfall. The 3-month windows Dec 2024 – Feb 2025 to Feb 2025 – Apr 2025 signal an increased chance of below normal rainfall for south Florida, and equal chances for Mar 2025 – Jun 2025.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within the Intermediate Sub-band, Part C of the 2008 LORS suggests “Maximum Practicable Releases to the WCAs” as long as stages in all downstream WCAs are below the maximum of the upper schedule plus 0.25 feet.

Over the 7-day period from March 11 to March 17, 2024, a total of 4,800 acre-feet of regulatory releases were sent from Lake Okeechobee south to the A-1 FEB and STA3/4. About 2,300 acre-feet of Lake regulatory releases reached the Lake Worth Lagoon through the C-51 canal and passed to the Intracoastal Canal through S-41 during this period. Stage in WCA-1 is 0.34 feet above regulation schedule (max at 17.5 feet NGVD) and 1.07 feet below max schedule + 0.25 feet. Stage in WCA-2A is 0.70 feet above regulation schedule (max at 13.0 feet NGVD) and 1.55 feet below max schedule + 0.25 feet. WCA-3A stage is 0.18 feet above regulation schedule (max at 10.5 feet NGVD), in Zone A, and 0.57 feet below max schedule + 0.25 feet. 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 Intermediate Sub-band and the Tributary Hydrologic Conditions in the Normal category, Part D of the 2008 LORS suggests “S-77 up to 4,000 cfs and S-80 up to 1,800 cfs”. In addition, Lake Okeechobee stage is 1.25 feet above elevation 14.5 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, March 11 to March 17, 2024, total discharge to the St. Lucie Estuary was about 450 cfs, with approximately 350 cfs coming from Lake Okeechobee. The 7-day average salinity in the middle estuary was in the lower stressed range (5-10) for adult eastern oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 2,650 cfs with about 1,950 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 damaging range (0-5) 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. Generally speaking, the District understands the Corps’ objective to lower lake levels while there are no harmful algal blooms on Lake Okeechobee by making maximum releases under LORS. 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 will continue to move up to 500 cfs to the Lake Worth Lagoon at S-41 near the Boynton Inlet. The District recommends USACE monitor estuary conditions for the anticipated oyster

spawning season and make any adjustments as necessary. In addition, the District recommends that the USACE limit the amount of water discharged from the Upper Kissimmee Chain of Lakes towards Lake Okeechobee. These release decisions should be reassessed every week. The USACE typically implements the releases to the estuaries over a 7-day period starting on Saturday and ending on Friday.