

MEMORANDUM

TO: Laureen Borochaner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)
DATE: June 15, 2023
SUBJECT: Operational Position Statement June 13, 2023 to June 19, 2023

This Position Statement is to provide operational input for the one-week period from June 13, 2023 to June 19, 2023 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On June 12 Lake Okeechobee stage was 14.04 feet NGVD, which placed it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage increased by 0.06 feet over the preceding 7-day period.

District June rainfall to date is normal (~101% of normal). Rainfall District forecast (issued June 14) calls for below normal rainfall for the coming 7-day period and above normal for the following one.

Precipitation Outlook: The most recent CPC precipitation outlooks for South Florida for June 2023 is for increased chances of above normal rainfall. The 3-month window of Jun-Aug shows slightly increased chances of above normal rainfall. The 3-month windows of Jul-Sep to Sep-Nov indicate equal chances of below normal, normal and above normal rainfall for south Florida. The 3-month windows from Oct-Dec to Jan-Mar (2024) indicate slightly above normal rainfall for the transition and the first half of the 2023-2024 dry season, with the caveat that the 3-month window Nov 2023 – Jan 2024 shows equal chances of below normal, normal and above normal rainfall for Lake Okeechobee and areas south of the lake.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within the Low Sub-band and the Tributary Hydrologic conditions in the Near Normal category, and the Multi-Seasonal Lake Okeechobee Net Inflow outlook in the Wet 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 June 5 to June 11, 2023, no regulatory releases were sent from Lake Okeechobee south to 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, and WCA-3A stage is below regulation schedule in Zone B. 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 Near 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 Wet Category, Part D of the 2008 LORS suggests “S-79 up to 3,000 cfs and S-80 up to 1,170 cfs”. In addition, Lake Okeechobee stage is above elevation 12.80 feet NGVD which is the stage for the upper line of the Ecological Envelope for this time of the year.

For the 7-day period June 5 to June 11, 2023, total discharge to the St. Lucie Estuary was about 900 cfs with no releases 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 3,900 cfs with about 150 cfs coming from Lake Okeechobee through S-77. Salinities in the upper estuary were within the optimal range (0-10) for tape grass. The 7-day average salinities were in the optimal range for adult eastern oysters at Shell Point (10-25), in the lower stressed range at Cape Coral (5-10), and in the upper stressed range at Sanibel (>25).

Since the end of November, both local basin runoff in the Caloosahatchee Watershed and lake releases through S-77 have maintained salinity in the Caloosahatchee Estuary. The District recommends USACE implement a non-harmful release to the Caloosahatchee Estuary with an average discharge of 2,000 cfs (7-day pulse) as measured at the S-79 structure and zero lake releases to the St. Lucie Estuary. The District will continue to implement maximum practicable regulatory releases south from Lake Okeechobee towards the WCAs. The USACE typically implements the releases to the estuaries starting on Saturday and ending on Friday. The Corps should continue to track Red Tide and Blue Green Algae conditions, and should conditions change during this operational period, the Corps should look to reassess releases as needed.