

MEMORANDUM

TO: Lauren Borocharner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)
DATE: November 17, 2022
SUBJECT: Operational Position Statement for November 15, 2022 to November 28, 2022

This Position Statement is to provide operational recommendations for the **two-week period** from November 15, 2022 to November 28, 2022 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On November 14th, Lake Okeechobee stage was 16.18 feet NGVD, which placed it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). As of November 17th the current stage places it in the Intermediate Sub-band of LORS 2008. During the next operational period Part C will suggest "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 ft. If the Tributary Hydrologic conditions remain in the Wet to Normal categories, Part D of the LORS 2008 will suggest "S-77 up to 4000 cfs and S-80 up to 1800 cfs".

District November rainfall to date is well above normal (~240% of normal) with areas in Kissimmee, Lake Okeechobee and East Caloosahatchee reporting in excess of 300% of normal. Rainfall forecast (issued November 15) calls for below normal rainfall for the coming 7-day period and near normal for the following one.

Precipitation Outlook: The most recent CPC precipitation outlooks for South Florida for November 2022 indicates slightly increased probabilities of below normal rainfall for Lake Okeechobee and north, and equal chances of below, normal and above normal for the remainder area in the south. The 3-month window of Nov 2022 – Jan 2023 calls for slightly increased chances of below normal rainfall for the most southern third of the District, and increased chances of below normal for the central and northern areas. The outlook for the 3-month windows Dec 2022 – Feb 2023 to Feb 2023 – Apr 2023 is for increased chances of below normal rainfall. All the 3-month windows from Mar 2023 – May 2023 well into the transition to the 2024 Dry Season show equal chances of below, normal and above normal rainfall.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within the Low Sub-band, the Tributary Hydrologic conditions in the Wet 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.

Over the 7-day period from November 7, 2022 to November 13, 2022 no regulatory releases from Lake Okeechobee were sent south to the STAs. No Lake regulatory releases reached the Lake Worth Lagoon through the C-51 canal. Stage in WCA-1 is below regulation schedule in Zone A2, stage in WCA-2A is above regulation schedule, and WCA-3A stage is above regulation schedule in Zone A. For the coming operational period, the USACE is requesting 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 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 3000 cfs and S-80 up to 1170 cfs". In addition, Lake Okeechobee is now above 15.5 feet NGVD, which is above the Ecological Envelope for this time of the year.

For the 7-day period November 7, 2022 to November 13, 2022 total discharge to the St. Lucie Estuary was about 2,200 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 3,300 cfs over the past week with practically no flows coming from Lake Okeechobee through S-77. Salinities were in the optimal range for adult eastern oysters at Cape Coral and Shell Point (10-25) and in the stressed range at Sanibel (>25).

To date local basin rainfall in the Caloosahatchee Watershed has been the main contributor to salinity conditions with little need for water from Lake Okeechobee. At this time the District recommends the USACE follow 2008 LORS and release a 14-day pulse with an average discharge of 1,200 cfs measured at the S-79 structure to work towards bringing Lake Okeechobee back into the Ecological Envelope. No flows from the lake to the St. Lucie Estuary are recommended at this time. The USACE typically implements the releases to the estuaries starting on Saturday and ending on Friday. The Corps should continue to track Red Tide conditions in the estuary, and should conditions change during this two week period, the Corps should look to reassess releases as needed.