

## MEMORANDUM

**TO:** Lauren Boročaner, Chief, Engineering Division (USACE)  
**FROM:** John Mitnik, Chief District Engineer (SFWMD)  
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)  
**DATE:** December 15, 2022  
**SUBJECT:** Operational Position Statement for December 13, 2022 to December 19, 2022

This Position Statement is to provide operational recommendations for the one-week period from December 13, 2022 to December 19, 2022 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On December 12, Lake Okeechobee stage was 16.41 feet NGVD, which placed it within the Intermediate Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.07 feet over the preceding 7-days period.

District December rainfall to date is much below normal (~32% of normal). Rainfall forecast (issued December 14) calls for much above average rainfall for the coming 7-day period and the following one.

Precipitation Outlook: The most recent CPC precipitation outlook for South Florida for December 2022 indicates increased probabilities of below normal rainfall. The 3-month outlooks for windows from Dec 2022 – Feb 2023 to Feb 2023 – Apr 2023 call for increased chances of below normal rainfall. The 3-month window Dec 2022 – Feb 2023 shows the possibility of substantially increased chances of below normal rainfall for the most northern portions of the SFWMD. 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 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 ft.

Over the 7-day periods from December 5, 2022 to December 11, 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 slightly above regulation schedule in Zone A1, stage in WCA-2A is above regulation schedule, and WCA-3A stage is below regulation schedule in Zone B. For the coming operational period, the 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 4000 cfs and S-80 up to 1800 cfs”. In addition, Lake Okeechobee is above 15.5 feet NGVD, which is the upper line of the Ecological Envelope for this time of the year.

For the 7-day periods December 5, 2022 to December 11, 2022 total discharge to the St. Lucie Estuary was about 500 cfs with no flow 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 1,750 cfs over the past week with about 900 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 salinity was in the optimal range (10-25) for adult eastern oysters at Cape Coral and Shell Point. Salinity was in the stressed range (>25) at Sanibel.

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. At this time the District recommends the USACE follow 2008 LORS and release a 7-day pulse with an average discharge of 2,000 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 operational period, the Corps should look to reassess releases as needed.