

MEMORANDUM

TO: Lauren Borochaner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)
DATE: January 6, 2022
SUBJECT: Operational Position Statement for January 4, 2022 to January 10, 2022

This Position Statement is to provide operational recommendations for the one-week period from January 4, 2022 to January 10, 2022 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On January 3, Lake Okeechobee stage was 15.48 feet NGVD, which places it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.15 feet during the preceding 7 days.

District December rainfall was well below normal (~41% of normal). Rainfall forecast (issued January 4) predicts near-normal rainfall for the coming 7-day period the following 7-day period.

Precipitation Outlook: The most recent CPC precipitation outlooks for South Florida for January 2022 is for increased chances of below-normal rainfall. The outlooks for the 3-month windows of Jan – Mar and Feb – Apr are for substantially increased chances of below-normal rainfall. The outlooks for the 3-month windows of Mar – May and Apr – Jun show slightly increased chances of below normal rainfall. The outlook for the 3-month window May – Jul is for equal chances of above-normal, normal and below-normal rainfall. The outlooks turn to above-normal rainfall for the 1st half of the 2022 wet season.

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

Over the 7-day period from December 27, 2021 to January 2, 2022, volumes of Lake Okeechobee releases reaching the STAs were 400 acre-feet to STA-1W, 1,600 acre-feet to STA-2 and 1,500 acre-feet to the A-1 FEB. No Lake regulatory releases reached the Lake Worth Lagoon through the C-51 canal. Stage in WCA-1 is above regulation schedule in Zone A1, stage in WCA-2A is above schedule, and WCA-3A stage is below schedule (Zone B). For the coming operational period, the USACE is requesting maximum practical regulatory releases be sent south from Lake Okeechobee towards the WCAs.

2008 LORS Release Guidance (Part D): With Lake Okeechobee stage in the Low Sub-band, the Tributary Hydrologic Conditions in the near-normal category, and the Seasonal Lake Okeechobee Net Inflow Outlook in the dry category, Part D of the 2008 LORS suggests “S-79 Up to 450 cfs and S-80 Up to 200 cfs”.

For the 7-day period December 27, 2021 to January 2, 2022, total discharge to the St. Lucie Estuary was near 250 cfs with no flows coming from Lake Okeechobee. The 7-day average salinity at the US1 Bridge is in the good range for adult oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 2,100 cfs over the past week with about 1,450 cfs coming from Lake Okeechobee. Salinity conditions are in the good range for Tape Grass at Val I-75 and at Ft. Myers. Salinity conditions for adult eastern oysters are in the good range at Shell Point and Cape Coral, and in the fair range 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 and Corps should strive to move as much water out of the lake without harming natural resources and other critical resources. At this time, this involves releases that maintain appropriate salinity in the estuaries and ensuring the Stormwater Treatment Areas don't sustain long term damage from extended high-volume flows. Current District operational objectives are to continue to move water south from Lake Okeechobee for delivery to the Everglades where opportunities exist.

The District recommends USACE continue lake discharges to the Caloosahatchee Estuary in a pulse release fashion, measured at S-79, at a non-damaging level of 2,000 cfs (7-day average), while continuing to monitor estuary conditions and make any adjustments as necessary. This decision should be reassessed as needed based on lake and estuarine conditions. The USACE typically implements the releases to the estuaries over a 7-day period starting on Saturday and ending on Friday.