

MEMORANDUM

TO: Laureen Borocharner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)
DATE: December 16, 2021
SUBJECT: Operational Position Statement for December 14, 2021 to December 27, 2021

This Position Statement is to provide operational recommendations for the two-week period from December 14, 2021 to December 27, 2021 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On December 13, Lake Okeechobee stage was 15.80 feet NGVD, which places it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.07 feet during the preceding 7 days.

District December rainfall to date is well below normal (~18% of normal). Rainfall forecast (issued December 14) predicts above-normal rainfall for the coming 7-day period and below-normal for the following 7-day period.

Precipitation Outlook: The most recent CPC precipitation outlooks for south Florida for December 2021 and for the 3-month window Dec 2021 – Feb 2022 is for substantially increased chances of below-normal rainfall. The 3-month windows of Jan 2022 – Mar 2022 and Feb 2022 – Apr 2022 indicate increased chances of below-normal rainfall. The 3-month windows of Mar 2022 - May 2022 and Apr 2022 – Jun 2022 show slightly increased chances of below-normal rainfall. The outlook for the 3-month May 2022 – Jul 2022 window transitioning into the wet season calls for equal chances of above-normal, normal and below-normal. 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 6, 2021 to December 12, 2021, no Lake Okeechobee regulatory releases were directed to the STAs. 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 6, 2021 to December 12, 2021, total discharge to the St. Lucie Estuary was near 350 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 2,250 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.