

MEMORANDUM

TO: Lauren Borocharner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMMD)
DATE: November 18, 2021
SUBJECT: Operational Position Statement for November 16, 2021 to November 29, 2021

This Position Statement is to provide operational recommendations for the two-week period from November 16, 2021 to November 29, 2021 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On November 15, Lake Okeechobee stage was 16.03 feet NGVD, which places it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage increased by 0.01 feet during the preceding 7 days.

District November rainfall to date is well above normal (248% of normal). Rainfall forecast (issued November 16) predicts well above-normal rainfall for the coming 7-day period and near-normal rainfall is expected for the second 7-day period.

Precipitation Outlook: The most recent CPC precipitation outlooks for south Florida for November 2021 is for slight chances of below-normal rainfall. The outlooks for the 3-month windows from Nov 2021 – Jan 2022 to Feb 2022 - Apr 2022 are for increased chances of below-normal rainfall. The 3-month windows of Mar 2022 – May 2022 indicate equal chances of below-normal and above-normal rainfall. The outlooks for the 3-month windows transitioning to and the first half of the 2022 wet season call for increased chances of 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 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 November 8, 2021 to November 14, 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 if desirable or with minimum impact; otherwise no releases.

2008 LORS Release Guidance (Part D): With Lake Okeechobee stage in the Low Sub-band, the Tributary Hydrologic Conditions in the Wet category, and the Multi-Seasonal Lake Okeechobee Net Inflow Outlook in the normal 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 November 8, 2021 to November 14, 2021, total discharge to the St. Lucie Estuary was near 600 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 3,050 cfs over the past week with about 225 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 Sanibel and in the fair range at Cape Coral.

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.