MEMORANDUM

TO: Laureen Borochaner, Chief, Engineering Division (USACE)

FROM: John Mitnik, Chief District Engineer (SFWMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)

DATE: October 28, 2021

SUBJECT: Operational Position Statement for October 26, 2021 to November 1, 2021

This Position Statement is to provide operational recommendations for the one-week period from October 26, 2021 to November 1, 2021 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On October 25, Lake Okeechobee stage was 15.85 feet NGVD, which places it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.03 feet during the preceding 7 days.

October District rainfall to date is below normal (91% of normal). For the coming 7-day period, rainfall forecast (issued October 26) predicts above-normal rainfall for the western areas of the District and near to below-normal for the remainder of the District. For the second 7-day period, near normal rainfall is expected in the East and below-normal for the remainder of the District.

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 Dry category, Part C of the 2008 LORS suggests “No releases to the WCAs”.

Over the 7-day period from October 18, 2021 to October 24, 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. A volume of 100 acre-feet from Lake Okeechobee entered the A-1 FEB. Stage in WCA-1 is below regulation schedule in Zone A2, stage in WCA-2A is above schedule, and WCA-3A stage is above schedule (Zone A). For the coming operational period, the USACE is not 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 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 October 18, 2021 to October 24, 2021, total discharge to the St. Lucie Estuary was near 450 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 1,100 cfs over the past week with about 50 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 locations, 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.