## **MEMORANDUM**

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

FROM: John Mitnik, Chief District Engineer (SFWMD)

Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)

**DATE:** October 29, 2020

**SUBJECT:** Operational Position Statement for October 27, 2020 to November 2, 2020

This Position Statement is to provide operational recommendations for the one-week period from October 27, 2020 to November 2, 2020 based on system conditions and data observed during the last 7 days. On October 26, Lake Okeechobee stage was 16.36 feet NGVD, which places it within the Intermediate Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage increased by 0.17 feet during the preceding 7 days.

October to date rainfall over the District is well above average (190% of normal). District rainfall forecast (issued October 27) predicts below-average rainfall for north and south areas and average for southeast portions of the District for the next 7-day period. The forecast for north and south for the following period remains the same, but switches to above average for the southeast.

<u>Precipitation Outlook:</u> The most recent CPC precipitation outlook for Nov 2020 calls for equal chances of above-normal, normal, and below-normal rainfall. The outlooks for the 3-month window Nov-Jan (2020-2021) is for increased chances of below-normal rainfall. The outlook for the 3-month windows from Dec-Feb (2020-2021) to Feb-Apr (2021-2021) calls for substantially increased chances of below-normal rainfall. For the windows Mar-May, Apr-Jun and May-Jul (transition to the 2021 wet season) the outlooks are for increased chances of below-normal rainfall, followed by equal chances of above-normal, and below-normal rainfall, and ending with a slightly increased of chances of above normal.

<u>2008 LORS Release Guidance (Part C):</u> With Lake Okeechobee stage within the Intermediate Sub-band and the stages in WCA-1, WCA-2A and WCA-3A above the maximum of the upper line (Zone A Line) of their respective regulation schedules by more than 0.25 feet, Part C of the 2008 LORS suggests "No releases to WCAs".

Over the 7-day period from October 19 to October 25, 2020, Lake Okeechobee releases in the amount of 1,400 acre-feet were sent primarily to STA-2, STA-3/4 and the L8-FEB. No Lake regulatory releases reached the Lake Worth Lagoon through the C-51 canal. Stage in WCA-1 is above schedule (Zone A1), stage in WCA-2A is above schedule (Zone A), and WCA-3A stage is above schedule (Zone A). For the coming operational period, the USACE is not requesting regulatory releases be sent south from Lake Okeechobee towards the WCAs. The District is currently considering operational scenarios to move water south from the Lake to help in controlling Lake stages.

<u>2008 LORS Release Guidance (Part D):</u> With Lake Okeechobee stage in the intermediate Sub-band, the Tributary Hydrologic Conditions in the Very Wet category and Lake stage not expected to rise into the High Sub-band, Part D of the 2008 LORS suggests "S-77 up to 4,000 cfs and S-80 up to 1,800 cfs".

For the 7-day period October 20 to October 26, 2020, total discharge to the St. Lucie Estuary was around 4,800 cfs with approximately 800 cfs from Lake Okeechobee. The 7-day average salinity at the US1 Bridge is in the poor range for adult oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 7,400 cfs over the past week with around 4,000 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 poor range at Cape Coral.

It is imperative to reduce estuary discharges both in magnitude and duration as soon as possible since the impacts to the St. Lucie and Caloosahatchee estuaries become more significant the longer the discharges continue. Current forecasts over the next two weeks are predicting a drying pattern over portions of the District, and the District will continue to work with the USACE to manage Lake Okeechobee levels in an effort to end harmful discharges. The USACE typically implements the releases to the estuaries over a 7-day period starting on Saturday and ending on Friday. However, in an effort to stop harmful discharges as soon as possible a daily review is warranted.