MEMORANDUM

TO: Luis Alejandro, Chief, Water Management Section (USACE)

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

DATE: September 21, 2017

SUBJECT: Operational Position Statement for September 19, 2017 to September 25, 2017

This Position Statement is for the one-week period from September 19, 2017 to September 25, 2017. On September 18, 2017, Lake Okeechobee stage was 15.50 feet NGVD, in the Low Sub-band. Lake stage increased by 1.59 feet during the last 7 days.

Rainfall for the month of September up to date is well above-average, due to the impact from Hurricane Irma. District current forecast indicates below-average rainfall for the coming next two weeks.

<u>Precipitation Outlook:</u> The most recent Climate Prediction Center (CPC) precipitation outlook indicates slightly increased chances of above-normal rainfall for south Florida for September 2017 and for the three-month window September-November. The outlook for the three-month windows December-February and January-March is for an increased chance (~45%) of below normal rainfall. The outlook for the remainder three-month windows in the period October 2017 to May 2018 is for equal chances of below-normal, normal and above-normal rainfall.

<u>2008 LORS Release Guidance (Part C):</u> With Lake Okeechobee stage within Low Sub-band, the Tributary Hydrologic Conditions in the Very Wet category and the Lake Okeechobee Net Inflow Multi-Seasonal Outlook in the Wet category, the release guidance for Part C of the 2008 LORS is "Up to Maximum Practicable to the WCAs if desirable or with minimum Everglades Impacts".

There were no releases south from Lake Okeechobee through the EAA canals over the 7-day period from September 11 to September 17, 2017. No releases were made from the lake to tide via C-10A, L-8 and C-51 either.

Currently WCA-1 stage is slightly below regulation schedule, while stages in WCA-2A and WCA-3A are above their respective regulation schedules. At this time, the USACE is not requesting the SFWMD implement lake regulatory releases to WCA-1, WCA-2A or WCA-3A. No releases are planned from the lake to the STAs or any of the WCAs during the coming operational period.

<u>2008 LORS Release Guidance (Part D)</u>: With Lake Okeechobee stage in the Low Sub-band and less than 1.0 feet below the Intermediate Sub-band, the Tributary Hydrologic Conditions in the Very Wet category and the Lake Okeechobee Net Inflow Seasonal Outlook in the Very Wet category, the release guidance for Part D of the 2008 LORS is "S-77 up to 4,000 cfs and S-80 up to 1,800 cfs"

Total discharge to the St. Lucie estuary averaged 8,875 cfs over the past week with 1,324 cfs (15%) coming from Lake Okeechobee. Salinities at the three monitoring stations were fresh to oligohaline due to the high inflow conditions caused by Hurricane Irma. The seven-day average salinity at the US1 Bridge is in the poor range for adult oysters. Low oxygen levels (<3 mg/L) were recorded in the North Fork.

Total inflow to the Caloosahatchee estuary averaged 15,222 cfs over the past week with 0 cfs coming from the Lake. The 30-day moving average surface salinity is 0.2 at Val I-75 and 0.2 at Ft. Myers. Salinity at Val I-75 is forecast to be 0.2 in two weeks with no flow through S-79. Salinity conditions between Val I-75 and Ft. Myers are good for tape grass. Salinity conditions are in the good range for adult oysters at Sanibel, and in the poor range at Shell Point and Cape Coral.

Lake Okeechobee stages continue to increase from the rainfall generated by Hurricane Irma. The District recommends that the Corps follows the LORS 2008 Regulation Schedule.