## **MEMORANDUM**

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

**FROM:** John Mitnik, Chief District Engineer (SFWMD)

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

**DATE:** January 4, 2018

**SUBJECT:** Operational Position Statement for January 2, 2018 to January 8, 2018

This Position Statement is for the one-week period from January 2, 2018 to January 8, 2018. On January 1, 2018, Lake Okeechobee stage was 15.49 feet NGVD, in the Low Sub-band. Lake stage decreased by 0.13 feet during the preceding 7 days.

District wide rainfall for December up-to-date was well below average (57%), with most of the rainfall concentrated on a single rainfall event (December 8 and 9, 2017). District forecast (issued January 2) indicates below-average rainfall for the coming week and the following week.

<u>Precipitation Outlook:</u> The most recent Climate Prediction Center (CPC) precipitation outlook for January indicates slightly increased chances of below-normal for the area south of Lake Okeechobee, and equal chances of below-normal, normal and above-normal rainfall for the remainder of the District. The outlooks for the three-month windows January-March and February-April increase to a more severe condition, both windows with ~55% chance of below-normal for the entire District. The March-May window shows ~ 45% below-normal for the area north of the lake and slight chances of below-normal for the area south of the lake. The forecast transitions to equal chances of below-normal, normal and above-normal rainfall for the April-June window.

<u>2008 LORS Release Guidance (Part C):</u> With Lake Okeechobee stage within the Low Sub-band, the Tributary Hydrologic conditions in the Normal category and the Multi-seasonal outlook in the Normal category, Part C of the 2008 LORS release guidance recommends "Up to Maximum Practicable to the WCAs if desirable or with minimum Everglades impacts. Otherwise no releases to the WCAs".

There were no releases south from Lake Okeechobee through the EAA canals to the STAs/WCAs over the 7-day period from December 25, 2017 to December 31, 2017. No releases were made from Lake Okeechobee to tide via C-10A, L-8 and C-51. Stage in WCA-1 remains above its regulation schedule. Stage in WCA-2A remains above its regulation schedule, but below the temporary deviation schedule. It is recommended to manage WCA-2A to produce recession rates similar to those of the temporary deviation schedule. Stage in WCA-3A is about to cross from Zone A to Zone E1of the regulation schedule. For the coming operational period, the USACE is requesting the SFWMD to not implement releases from the lake south to the WCAs. The District and USACE will continue to evaluate the capacity to send lake water to the WCAs.

2008 LORS Release Guidance (Part D): With Lake Okeechobee stage is in the Low Sub-band, the Tributary Hydrologic Conditions are in the Normal category, and with the lake net inflow seasonal outlook in the Dry category, Part D of the 2008 LORS release guidance suggests Base Flow releases: "S-79 Up to 450 cfs and S-80 up to 200 cfs".

Total discharge to the St. Lucie Estuary averaged 475 cfs over the past week with about 130 cfs (27%) coming from Lake Okeechobee. Salinities increased throughout the St. Lucie Estuary. The 7-day average salinity at the US1 Bridge is in the good range for adult oysters.

Total inflow to Caloosahatchee Estuary averaged 2,200 cfs over the past week with 1,500 cfs (68%) coming from the Lake. Salinity conditions between Val I-75 and Ft. Myers remain good for tape grass. Salinity conditions are in the good range for adult oysters at Shell Point and in the fair range at Cape Coral.

The District has considered the application of the SFWMD's Lake Okeechobee Adaptive Protocols (AP) this week since the lake stage is in the Low Sub-band and the LORS release guidance is recommending Base Flow releases. Given that the estuary does not need water, the AP recommendation is for "No S-77 releases to the Caloosahatchee

Estuary ...". The District recognizes the USACE desire to manage the lake stage by making Base Flow releases per the LORS release guidance and therefore recommends continuation of releases at S-77 to supplement the target release at S-79.