## **MEMORANDUM**

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

**FROM:** John Mitnik, Director, Operations, Engineering & Construction Division (SFWMD)

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

DATE: December 22, 2016

SUBJECT: Operational Position Statement for December 20, 2016 to January 2, 2017

This Position Statement is for the two-week period from December 20, 2016 to January 2, 2016. On December 19, Lake Okeechobee stage was 14.54 feet NGVD, in the lower third of the Low Sub-band. During last week the lake stage decreased 0.07 feet.

District rainfall for December up to date is below average. The Upper Kissimmee and the areas most to the southeast (WCA3, Eastern Broward and Eastern Miami-Dade) show above average rainfall, While the remainder of the areas are in the below average range. District rainfall is expected to be below average for the next two weeks.

<u>Precipitation Outlook:</u> The most recent Climate Prediction Center (CPC) precipitation outlook for January 2017 indicates a slight increased likelihood (~38%) of below-normal rainfall for south Florida. For the three-month windows January to March and February to April, the likelihood of below-normal increases to approximately 45%. The CPC outlook for the remainder of the 2017 dry season months 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 the Low Sub-band, 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".

Over the 7-day period from December 12, 2016 to December 18, 2016, a total of 21,300 acre-feet were delivered south from Lake Okeechobee through the three major EAA canals and the L-8 canal. Of this volume, inflows into STAs were as follows: 2,700 acre-feet to STA-1E, 1,500 acre-feet to STA-1W, no inflows to STA-2 and 5,400 acre-feet to STA-3/4. Releases close to 500 acre-feet were made from the lake to tide via C-10A, L-8 and C-51.

The WCA-1 stage remains below regulation schedule. The USACE continues to request the SFWMD to send Lake regulatory releases to WCA-1. These releases will be implemented if conveyance capacity in the canals and treatment capacity in the STAs are available, and if lake turbidity around structure S-352 is not high. WCA-3A stage has receded below regulation schedule. The USACE is requesting the SFWMD to send lake regulatory releases to WCA-3A. These releases will be implemented if conveyance capacity in the canals and treatment capacity in STA 2 and STA 3/4 are available. There will be no releases from the lake into the A-1 FEB for this operational period. Releases from A-1 FEB will be directed to STA-2 or STA 3/4. At this time, the USACE is not requesting the SFWMD to implement lake regulatory releases to WCA-2A. Releases from STA-1E and STA-1W into WCA-1 (~ 400 cfs) and from STA-2 into WCA-2A (~60 cfs) will continue. The USACE has indicated that the requests to the SFWMD for implementation of regulatory releases from the lake southward is applicable for the two-week period unless conditions change significantly.

2008 LORS Release Guidance (Part D): With Lake Okeechobee stage in the Low Sub-band, tributary hydrologic conditions within the Normal classification, 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 and S-80 Up to 200 cfs". Lake stage is in the Low Sub-band and LORS release guidance recommends Base Flow releases. Consistent with previous Governing Board direction, District staff evaluated SFWMD's Lake Okeechobee Adaptive Protocols (AP) this week, and determined that the predicted 30-day moving average salinity at Val-I75 within the next two weeks will be just below or at the 5 psu target.

District staff recognizes the USCAE's desire to manage the lake stage by making Base Flow releases per the LORS release guidance and therefore does not object to the continuation of releases at S-77, to supplement target flow releases at S-79.

Salinity at the US 1 Bridge location in the St. Lucie Estuary remained in the good range for adult oysters. In the Caloosahatchee Estuary, salinity conditions remain favorable for tape grass in the upper estuary. Salinity remained in the good range for oysters at the Coral Bridge location. At the Sanibel Causeway, salinity remained in the high fair range. No data has been reported at the Shell Point location since the salinity sensor is not working.