## **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 8, 2016

SUBJECT: Operational Position Statement for November 29, 2016 to December 5, 2016

This Position Statement is for the one-week period from December 6, 2016 to December 12, 2016. On December 5, Lake Okeechobee stage was 14.69 feet NGVD, in the lower third of the Low Sub-band. During last week the lake stage decreased 0.11 feet.

District rainfall for December up to date is well below average. District rainfall is forecast to be average for the next two weeks.

<u>Precipitation Outlook:</u> The most recent Climate Prediction Center (CPC) precipitation outlook for December indicates an increased likelihood (~45%) of below-normal rainfall for south Florida. For the three-month window December to February, the likelihood of below-normal increases to approximately 55% for most of the District, with the exception of the southern tip where the likelihood of below normal is 45%. For the January-March window, the likelihood of below-normal rainfall is 45% for the entire District. The CPC outlook for the remainder of the 2017 dry season months is for moderate chances of below-normal rainfall to 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 November 28, 2016 to December 4, 2016, a total of 28,700 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: 1,500 acre-feet to STA-1E, 1,500 acre-feet to STA-1W, 1,200 acre-feet to STA-2 and 3,300 acre-feet to STA-3/4. No releases from the lake went to tide via C-10A, L-8 and C-51.

The WCA-1 stage has receded below Zone A2 of the regulation schedule. The USACE continues to request the SFWMD 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 Zone D of the 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 the 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 and from STA-2 into WCA-2A will continue.

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". The District has applied 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 needs water, and there is less than 50% chance of the lake stage falling below 11.0 feet NGVD, the AP recommendation is for "S-79 up to 450 cfs (or up to 650 cfs) with S-77 base flow release to supplement as needed". The estuary needs water when the 30-day moving average salinity at I-75 bridge is projected to exceed 5 practical salinity units (psu) within two weeks, even after accounting for the next two weeks expected runoff.

The District recognizes the USCAE desire to manage the lake stage by making Base Flow releases per the LORS release guidance as well as the beneficial impact that releases will have on the estuary salinity and therefore recommends continuation of releases at S-77, consistent with the SFWMD's AP release guidance, 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 Shell Point and the Coral Bridge locations. At the Sanibel Causeway, salinity increased into the high fair range.