## **MEMORANDUM**

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

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

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

**DATE:** February 2, 2017

**SUBJECT:** Operational Position Statement for January 31, 2017 to February 6, 2017

This Position Statement is for the one-week period from January 31, 2017 to February 6, 2017. On January 30, Lake Okeechobee stage was 13.86 feet NGVD, in the lower third of the Low Sub-band. During last week the lake stage decreased 0.09 feet.

District rainfall for January was below normal. For next week, District rainfall is expected to be below average. Rainfall for the second week is expected to be near average.

<u>Precipitation Outlook:</u> The most recent Climate Prediction Center (CPC) precipitation outlook for February 2017 indicates equal chances of below-normal, normal and above-normal rainfall for south Florida. For the three-month windows February to April and March to May, there is a slight increase in the likelihood (~38%) of below-normal rainfall. The CPC precipitation outlook for the remainder of the 2017 calendar year 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 and the tributary hydrologic conditions falling into the Dry classification, Part C of the 2008 LORS release guidance recommends "No Releases to the WCAs".

Over the 7-day period from January 23, 2017 to January 29, 2017, a total of 7,200 acre-feet were released south from Lake Okeechobee through EAA canals and the L-8 canal. Of this volume, inflows into STAs were as follows: 100 acre-feet to STA-1E, no inflows to STA-1W, 2,900 ac-feet to STA-2 and 1,900 acre-feet to STA-3/4. No releases were made from the lake to tide via C-10A, L-8 and C-51.

At this time, the USACE is not requesting the SFWMD to implement lake regulatory releases to WCA-1, WCA-2A or WCA-3A. 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. Releases from STA-2 into WCA-2A have increased to around 300 cfs. STA 3/4 releases into north WCA-3A will continue in the range of 250 to 300 cfs on average.

2008 LORS Release Guidance (Part D): With Lake Okeechobee stage in the Low Sub-band and the tributary hydrologic conditions within the Dry classification, Part D of the 2008 LORS release guidance suggests Base Flow releases: "S-79 Up to 450 and S-80 Up to 200 cfs". Consistent with previous Governing Board direction, District staff evaluated 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 District recognizes the USACE 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. Therefore the District 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 is near the upper limit of the good range for adult oysters. In the Caloosahatchee Estuary salinity conditions for Tape Grass in the upper estuary are deteriorating and salinity remained in the good range for oysters at the Coral Bridge and Shell Point locations. At the Sanibel Causeway, salinity remained in the high fair range.