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 5, 2017

SUBJECT: Operational Position Statement for January 3, 2017 to January 9, 2017

This Position Statement is for the one-week period from January 3, 2017 to January 9, 2017. On January 2, Lake Okeechobee stage was 14.26 feet NGVD, in the lower third of the Low Sub-band. During last week the lake stage decreased 0.15 feet.

District rainfall for December, 2016, was about 1.0 inches, 57% of average, or 0.76 inches below-average. All basins received below-average rainfall except Eastern Broward and Eastern Miami-Dade, which received above-average rainfall. District rainfall is expected to be near 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 (~40%) of below-normal rainfall for south Florida. For the three-month windows January to March through March to May, the likelihood of below-normal increases to approximately 45%. The CPC precipitation 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 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 14-day period from December 19, 2016 to January 1, 2017, a total of 50,600 acre-feet were released south from Lake Okeechobee through the three major EAA canals and the L-8 canal. Of this volume, inflows into STAs were as follows: 4,200 acre-feet to STA-1E, 2,800 acre-feet to STA-1W, no inflows to STA-2 and 9,300 acre-feet to STA-3/4. No releases were made from the lake to tide via C-10A, L-8 and C-51.

The WCA-1 stage remains below regulation schedule. The SFWMD continues to release Lake Okeechobee water to WCA-1 via S-5A & STA-1W and S-319 & STA-1E to maintain WCA-1 stages to facilitate vegetation management. The SFWMD continues to release Lake Okeechobee water to WCA-3A. These releases will continue if conveyance capacity in the canals and treatment capacity in the STAs are available, if lake turbidity is not high, and if rainfall forecasts for the coming week do not materialize. WCA-2A stage remains above regulation schedule, and WCA-3A stage remains below regulation schedule. At this time, the USACE is not requesting the SFWMD to implement lake regulatory releases to 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-1E and STA-1W into WCA-1 (~400 cfs) and from STA-2 into WCA-2A (~60 cfs) will continue.

<u>2008 LORS Release Guidance (Part D)</u>: 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 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. 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 remained in 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 location. At the Sanibel Causeway, salinity remained in the high fair range. At the Shell Point location salinity was in the upper portion of the good range.