MEMORANDUM

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

FROM: John Mitnik, Chief District Engineer (SFWMD)

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

DATE: March 15, 2018

SUBJECT: Operational Position Statement for March 13, 2018 to March 19, 2018

This Position Statement is for the one-week period from March 13, 2018 to March 19, 2018. On March 12, 2018, Lake Okeechobee stage was 14.50 feet NGVD, in the Low Sub-band. Lake stage decreased by 0.18 feet during the preceding 7 days.

District rainfall to date for March is well below average (43% of normal). District forecast (issued March 13) predicts well below average rainfall for the coming week and below average for week two.

<u>Precipitation Outlook:</u> The most recent Climate Prediction Center (CPC) precipitation outlook indicates increased chances of below-normal rainfall (~45%) for the District for the month of March, and the 3-month windows of March-May, and April-June. The outlook is for equal chances of below-normal, normal and above-normal rainfall for all the future 3-month windows starting with the May-July window.

2008 LORS Release Guidance (Part C): 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".

Over the 7-day period from March 5, 2018 to March 11, 2018, STA 1E received 1,500 acre-feet of Lake Okeechobee regulatory releases, STA 2 received 2,200 acre-feet and STA 3/4 received 3,900 acre-feet. A volume of 1,300 acre-feet were released from the lake into the A-1 FEB. There were 3,600 acre-feet regulatory releases from the lake to tide through the C-51 canal. Stage in WCA-1 is slightly above regulation schedule. Marsh stage in WCA-2A remains above regulation schedule, but below the temporary deviation schedule, while canal stage (S11B-HW) is below regulation schedule. Stage in WCA-3A is below Zone E1 of the regulation schedule. For the coming operational period, the USACE is requesting the SFWMD implement maximum practicable releases from the lake south to all the WCAs.

<u>2008 LORS Release Guidance (Part D):</u> With Lake Okeechobee stage within the Low Sub-band, the Tributary Hydrologic Conditions in the Normal category, and the lake net inflow seasonal outlook in the Normal 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 around 150 cfs over the past week with no releases coming from Lake Okeechobee. The 7-day average salinity at the US1 Bridge is in the good range for adult oysters. Total inflow to Caloosahatchee Estuary averaged approximately 750 cfs over the past week with approximately 350 cfs (47%) coming from the Lake. Salinity conditions between Val I-75 and Ft. Myers remain good for tape grass. Salinity is in the good range for adult oysters at Cape Coral and in the fair range at Shell Point.

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 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 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.