MEMORANDUM

TO: Laureen Borochaner, Chief, Engineering Division (USACE)

FROM: John Mitnik, Chief District Engineer (SFWMD)

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

DATE: April 16, 2020

SUBJECT: Operational Position Statement for April 14, 2020 to April 20, 2020

This Position Statement is for the one-week period from April 14, 2020 to April 20, 2020. On April 13, Lake Okeechobee stage was 11.47 feet NGVD, which places it within the Beneficial Use Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.20 feet during the preceding 7 days.

District April rainfall to date is below average (35% of average). District rainfall forecast (issued April 14) predicts near average rainfall for this 7-day period and near average to above average for the following period.

<u>Precipitation Outlook:</u> The most recent CPC precipitation outlook for April 2020 calls for equal chances of above-normal, normal, or below-normal rainfall for the entire District. The outlooks for the 3-month window Apr-Jun and Jun-Aug are for slightly increased chances of above-normal rainfall for the entire District. All the other the 3-month windows to the end of the 2020 wet season call for equal chances of above-normal, normal, or below-normal rainfall.

<u>2008 LORS Release Guidance (Part C):</u> With Lake Okeechobee stage within Beneficial Use Sub-band, Part C of the 2008 LORS does not suggest releases to the WCAs to manage lake stages.

Over the 7-day period from April 6 to April 12, 2020 Lake releases in the amount of 100 acre-feet entered STA-2 and 2,800 were sent to STA-3/4. No Lake releases were sent to the Lake Worth Lagoon through the C-51 canal. Stage in WCA-1 is in Zone A2 of the regulation schedule. Stage in WCA-2A is in Zone B of the regulation schedule and below Floor elevation. WCA-3A stage is in Zone E of the regulation schedule and the headwater at structure S-333 is at the floor elevation for WCA-3A (7.5 feet NGVD).

<u>2008 LORS Release Guidance (Part D):</u> With Lake Okeechobee stage in the Beneficial Use Sub-band, Part D of the 2008 LORS does not suggest releases to the St. Lucie and Caloosahatchee Estuaries to manage lake stages.

Total discharge to the St. Lucie Estuary averaged approximately 370 cfs over the past week with no releases from Lake Okeechobee. The 7-day average salinity at the US1 Bridge is borderline between the good and the fair ranges for adult oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 500 cfs over the past week with about 300 cfs coming from Lake Okeechobee. Salinity conditions are in the good range for Tape Grass at Val I-75 and fair range at Ft. Myers. Salinity conditions for adult eastern oysters are in the good range at Cape Coral and in the fair range at Shell Point and in the poor range at Sanibel.

The District, in coordination with the Florida Department of Environmental Protection (FDEP), has considered the current system conditions and the application of the SFWMD's Lake Okeechobee Adaptive Protocols (AP) because the lake stage is in the Beneficial Use Sub-band and above the Lake Okeechobee Water Shortage Management zone. The April Dynamic Position Analysis results estimate the likelihood of the lake stage falling below 11.0 feet NGVD by June 1, 2020 to be greater than 50%. The AP recommendation is for "No S-77 release to the Caloosahatchee Estuary unless GB recommends otherwise". At this time, the District recommends to continue flows of 457 cfs as measured at S-79, consistent with the recently developed Minimum Flow and Level (MFL) for the Caloosahatchee Estuary, to avoid significant harm to the Caloosahatchee Estuary. Furthermore, the District recommends that releases be reevaluated on a weekly basis in order to increase flexibility of decision making based on current conditions.