MEMORANDUM

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

FROM: John Mitnik, Chief District Engineer (SFWMD)

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

DATE: May 28, 2020

SUBJECT: Operational Position Statement for May 26, 2020 to June 1, 2020

This Position Statement is to provide operational recommendations for the one-week period from May 26, 2020 to June 1, 2020, based on system conditions and data observed during the last 7 days. On May 25, Lake Okeechobee stage was 11.14 feet NGVD, which places it within the Beneficial Use Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage increased by 0.14 feet during the preceding 7 days.

Overall for the month of May District rainfall to date is well above average (180% of average), with some individual basins along the lower east coast receiving more than 3 times the monthly average. District rainfall forecast (issued May 25) predicts near average rainfall for this 7-day period, and highly uncertain rains the following period.

<u>Precipitation Outlook:</u> The most recent CPC precipitation outlooks for June 2020 and the 3-month windows of Jun-Aug to Sep-Nov call for increased chances of above-normal rainfall for the entire District. The 3-month window of Oct-Dec shows slightly increased chances of above-normal rainfall for areas south of Lake Okeechobee. The 3-month window Nov-Jan has an outlook for slightly increased chances of below-normal rainfall. All the other the 3-month windows to the end of the 2020-2021 dry 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 May 18 to May 24, 2020 incidental Lake releases in the amount of 300 acre-feet made it to STA-1E and 300 acre-feet went to STA-1W. STA 3/4 received 600 acre-feet of Lake water to help improve ecosystem conditions in NW WCA-3A and to provide water supply to the Big Cypress Reservation. No Lake releases were sent to the Lake Worth Lagoon through the C-51 canal. As of May 27, 2020, stage in WCA-1 is in Zone A1 of the regulation schedule, stage in WCA-2A is in Zone A of the regulation schedule.

<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.

For the 7-day period May 19 to May 25, 2020, total discharge to the St. Lucie Estuary averaged approximately 1,100 cfs with no releases from Lake Okeechobee. The 7-day average salinity at the US1 Bridge is in the good range for adult oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 900 cfs over the past week with about 100 cfs coming from Lake Okeechobee. Salinity conditions are in the good range for Tape Grass at Val I-75 and in the poor 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 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 Mid-Month-May Dynamic Position Analysis results together with recent rainfall indicate the likelihood of the lake stage falling below 11.0 feet NGVD by June 1, 2020 to be less than 50%, and the likelihood of the lake stage being at or below 10.5 feet NGVD by June 1, 2020 to be very small. Salinity has decreased in the northern estuaries, due to significant rainfall and basin runoff. However, fair conditions for ecological indicators persist in the Caloosahatchee Estuary, likely due to comparatively less cumulative rainfall in this region. The AP recommendation is for "S-79 up to 300 cfs/S-77 environmental water supply release to supplement as needed". At this time, the District recommends a 7-day pulse release (650 cfs average) to the Caloosahatchee Estuary as measured at S-79, if needed to maintain favorable salinity conditions in the Caloosahatchee Estuary. The USACE typically implements the releases to the estuaries over a 7-day period starting on Saturday and ending on Friday. Furthermore, the District recommends that releases be reevaluated on a weekly basis in order to increase flexibility of decision making based on current conditions.