MEMORANDUM

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

FROM: John Mitnik, Chief District Engineer (SFWMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)

DATE: June 3, 2021

SUBJECT: Operational Position Statement for June 1, 2021 to June 7, 2021

This Position Statement is to provide operational recommendations for the one-week period from June 1, 2021 to June 7, 2021 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On May 31, Lake Okeechobee stage was 12.81 feet NGVD, which places it within the Base Flow Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.31 feet during the preceding 7 days.

May District rainfall was well below normal (33% of normal). Rainfall forecast (issued June 1) predicts near average rainfall for the coming 7-day period and for the second 7-day period.

Precipitation Outlook: The most recent CPC precipitation outlooks for Jun 2021 and for the 3-month window of Jun-Aug are for slightly increased chances of above normal rainfall. The 3-month window of Jul-Sep shows increased chances of above-normal rainfall. The outlooks for the 3-month widows of Aug-Oct and Sep-Nov indicate slightly increased chances of above normal rainfall. The outlook for the remainder of the 3-month windows from Oct-Dec and into 2022 is for equal chances of above-normal, normal, and below-normal rainfall.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within the Base Flow Sub-band, the Tributary Hydrologic Conditions in the Dry category, Part C of the 2008 LORS suggests “No releases to the WCAs”.

Over the 7-day period from May 24, 2021 to May 30, 2021, releases in the amount of 2,500 acre-feet were sent from Lake Okeechobee to STA-2 and 5,400 acre-feet to the A-1 FEB&STA-3/4 Complex. These releases were for purposes of urban areas water supply needs and for needed deliveries to the Everglades. No releases were sent from the Lake Okeechobee to the Lake Worth Lagoon through the C-51 canal. Stage in WCA-1 is below schedule (Zone A2), stage in WCA-2A is below schedule and below floor elevation (Zone C) by May 28th, and WCA-3A stage is below schedule (Zone B) and by May 23rd was below the floor elevation (Zone C). For the coming operational period, the USACE is not requesting maximum practical regulatory releases be sent south from Lake Okeechobee towards the WCAs.

2008 LORS Release Guidance (Part D): With Lake Okeechobee stage in the Base Flow Sub-band, Part D of the 2008 LORS suggests “S-79 up to 450 cfs and S-80 up to 200 cfs”.

For the 7-day period May 24, 2021 to May 30, 2021 total discharge to the St. Lucie Estuary was near 100 cfs with no flows coming 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 1,700 cfs over the past week with nearly 1,000 cfs coming from Lake Okeechobee. Salinity conditions are in the good range for Tape Grass at Val I-75 and at Ft. Myers. Salinity conditions for adult eastern oysters are in the good range at Shell Point and Cape Coral and in the fair range at Sanibel. Additionally, Karenia brevis was observed off the mouth of the Caloosahatchee Estuary at medium to high concentrations in Lee County, and low to medium concentrations in north Collier County.

The District will continue to work with the USACE to manage Lake Okeechobee levels in an effort to curtail harmful discharges over this year. Generally speaking, the District and Corps should strive to move as much water out of the lake without harming natural resources and other critical resources. At this time, this involves releases that maintain appropriate salinity in the estuaries and ensuring the Stormwater Treatment Areas don’t sustain long term damage from extended high volume flows. Current District operational objectives are to move approximately 700 cfs south from Lake Okeechobee, for urban areas water supply needs and for delivery to the Everglades.

The District recommends USACE continue lake discharges to the Caloosahatchee Estuary in a pulse release fashion, measured at S-79, at a non-harmful level of 1,000 cfs (7-day average), while continuing to monitor estuary conditions and make any adjustments as necessary. This decision should be reassessed as needed based on lake and estuarine conditions. The USACE typically implements the releases to the estuaries over a 7-day period starting on Saturday and ending on Friday.