MEMORANDUM

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

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

DATE: June 30, 2022

SUBJECT: Operational Position Statement for June 28, 2022 to July 4, 2022

This Position Statement is to provide operational recommendations for the one-week period from June 28, 2022 to July 4, 2022 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On June 27, Lake Okeechobee stage was 12.91 feet NGVD, which places it within the Base Flow Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.03 feet over the preceding 7 days period.

District June rainfall to date is above average (~121% of normal). Rainfall forecast (issued June 29th) is near to below normal for the coming 7-day period and below normal for the following 7-day period.

Precipitation Outlook: The most recent CPC precipitation outlooks for South Florida for July 2022 and for the 3-month windows of Jul-Sep to Oct-Dec are for equal chances of below, normal and above normal rainfall. The outlooks for the 3-month windows from Nov 2022- Jan 2023 to Jan 2023 – Mar 2023 are for slightly increased chances of below normal rainfall.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within the Base Flow Sub-band and 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 June 20, 2022 to June 26, 2022 no deliveries from Lake Okeechobee were sent south to the STAs. No Lake regulatory releases reached the Lake Worth Lagoon through the C-51 canal. Stage in WCA-1 is above regulation schedule in Zone A1, stage in WCA-2A is above regulation schedule in Zone A, and WCA-3A stage is above regulation schedule in Zone A. For the coming operational period, the USACE is not requesting 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 June 20, 2022 to June 26, 2022, total discharge to the St. Lucie Estuary was about 350 cfs with no flows coming from Lake Okeechobee. The 7-day average salinity in the middle estuary was within the optimal range (10-25) for adult eastern oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 2,250 cfs over the past week with about 150 cfs coming from Lake Okeechobee. Salinities were in the optimal range (0-10) for tape grass in the upper estuary. Salinities were in the optimal range (10-25) for adult eastern oysters at Shell Point, in the stressed range at Sanibel (>25) and Cape Coral (5-9).

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 continue to move water south from Lake Okeechobee for delivery to the Everglades where opportunities exist.

The District recommends USACE continue lake discharges to the Caloosahatchee Estuary in a pulse release fashion, measured at S-79, at a non-damaging level of 1,000 cfs (7-day average), while continuing to monitor estuary conditions and make any adjustments as necessary. However, the District also recommends that the Corps not deliver an active algae bloom from the Lake through S-77 during this period. 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.