MEMORANDUM

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

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

DATE: June 16, 2022

SUBJECT: Operational Position Statement for June 14, 2022 to June 20, 2022

This Position Statement is to provide operational recommendations for the one-week period from for June 14, 2022 to June 20, 2022 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On June 13, Lake Okeechobee stage was 13.02 feet NGVD, which places it within the Base Flow Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage increased by 0.27 feet over the preceding 7 days period.

District June rainfall to date is well above average (~181% of normal). Rainfall forecast (issued June 14th) is below to well below normal for the coming 7-day period and below normal for the following 7-day period.

Precipitation Outlook: The most recent CPC precipitation outlook for South Florida for June 2022 is for substantially increased chances (80-90%) of above normal rainfall for most of the District area, and for large chances (70-80%) of above normal for the region north of Lake Okeechobee. The outlooks for the 3-month windows from Jun-Aug to the beginning of the 2022-2023 dry season (Dec 2022- Feb 2023) are for equal chances of below, normal and above 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 near category and the Multi-seasonal Lake Okeechobee Net Inflow Outlook in the wet category, Part C of the 2008 LORS suggests “Maximum Practicable Releases to the WCAs if desirable or with minimum Everglades Impact”. Otherwise, no releases.

Over the 7-day period from June 6, 2022 to June 12, 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 below schedule in Zone B. For the coming operational period, the USACE is requesting maximum practicable 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 6, 2022 to June 12, 2022, total discharge to the St. Lucie Estuary was about 1,550 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 5,700 cfs over the past week with no flow 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 and in the stressed range at Cape Coral (<10) and Sanibel (>25).

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. 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.