MEMORANDUM

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

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

DATE: May 12, 2022

SUBJECT: Operational Position Statement for May 10, 2022 to May 16, 2022

This Position Statement is to provide operational recommendations for the one-week period from for May 10, 2022 to May 16, 2022 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On May 9, 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 0.07 feet during the preceding 7 days.

District April rainfall to date is below normal (~73% of normal). Rainfall forecast (issued May 11) is well below normal for the coming 7-day period. Forecast for the following 7-day period is for near normal rainfall.

Precipitation Outlook: The most recent CPC precipitation outlook for South Florida for May 2022 is for equal chances of below, normal and above normal rainfall. The outlook for the 3-month window of May-Jul is for slightly increased chances of above normal rainfall. The outlooks for the 3-month windows from Jun-Aug to the beginning of the 2022-2023 dry season 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 dry category, Part C of the 2008 LORS suggests “No releases to the WCAs”.

Over the 7-day period from May 2, 2022 to May 8, 2022 deliveries from Lake Okeechobee were approximately 3,200 acre-feet to STA-2 and 1,300 to STA-3/4. No Lake regulatory releases reached the Lake Worth Lagoon through the C-51 canal. Stage in WCA-1 is below regulation schedule in Zone B, stage in WCA-2A is below regulation schedule in Zone B and approaching its floor elevation, and WCA-3A stage is below schedule in Zone B and approaching its floor elevation. 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 May 2, 2022 to May 8, 2022, total discharge to the St. Lucie Estuary was about 250 cfs with no flows coming from Lake Okeechobee. The 7-day average salinity at the US1 Bridge is in the optimal range for adult eastern oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 1,100 cfs over the past week with about 600 cfs coming from Lake Okeechobee. Salinity conditions are in the optimal range for Tape Grass at Val I-75 and at Ft. Myers. Salinity conditions for adult eastern oysters are in the optimal range at Cape Coral and in the stressed range at Shell Point and Sanibel.

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.