

MEMORANDUM

TO: Laureen Borocharner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)
DATE: April 14, 2022
SUBJECT: Operational Position Statement for April 12, 2022 to April 18, 2022

This Position Statement is to provide operational recommendations for the one-week period from for April 12, 2022 to April 18, 2022 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On April 11, Lake Okeechobee stage was 13.53 feet NGVD, which places it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.22 feet during the preceding 7 days. By the time of writing of this document, the Lake Okeechobee stage has already entered the Base Flow Sub-band.

District April rainfall to date is near normal (~105% of normal). Rainfall forecast (issued April 12) near normal rainfall for the coming 7-day period. The following 7-day period is forecasted to have below normal rainfall.

Precipitation Outlook: The most recent CPC precipitation outlooks for South Florida for April 2022 is for equal chances of below, normal and above-normal rainfall. The outlooks for the 3-month windows from Apr-Jun to Sep-Nov and into year 2023 are for an extended period with equal chances of below, normal and above-normal rainfall.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within the Low 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 April 4, 2022 to April 10, 2022 deliveries from Lake Okeechobee were 1,000 acre-feet to STA-1E, 600 acre-feet to STA-1W, and approximately 800 acre-feet to STA-2. 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, and WCA-3A stage is below schedule (Zone B). 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 Low Sub-band and the Tributary Hydrologic Conditions in the dry category, 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 April 4, 2022 to April 10, 2022, total discharge to the St. Lucie Estuary was about 600 cfs with no flows coming from Lake Okeechobee. The 7-day average salinity at the US1 Bridge is in the good range for adult eastern oysters. Total inflow to the Caloosahatchee Estuary averaged approximately 1,850 cfs over the past week with about 1,200 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.

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 1,500 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.