

MEMORANDUM

TO: Laureen Borocharner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)
DATE: March 18, 2021
SUBJECT: Operational Position Statement for March 16, 2021 to March 22, 2021

This Position Statement is to provide operational recommendations for the one-week period from March 16, 2021 to March 22, 2021 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On March 15, Lake Okeechobee stage was 15.02 feet NGVD, which places it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.16 feet during the preceding 7 days.

March District rainfall to date is well below normal (52% of normal), with only WCA-3 and Eastern Broward County being above normal. All other basins are near below to well below normal. Upper and Lower Kissimmee are below 25% of Normal. Rainfall forecast (issued March 16) predicts overall below average rainfall for the coming 7-day period, with the Eastern portion of the District having the possibility of average to above average rainfall. Below to well below average rainfall is forecast for the following 7-day period.

Precipitation Outlook: The most recent CPC precipitation outlook for March 2021 is for substantially increased chances of below normal rainfall. The 3-month window of Mar-May is forecast to have increased chances of below-normal rainfall. The outlook for the 3-month window Apr-Jun is for slightly increased chances of below-normal rainfall. The forecast for the May-Jul window is for equal chances of above-normal, normal, and below-normal rainfall. The outlook for most of the 2021 wet season is for slightly increased chances of above normal rainfall.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within the Low Sub-band, the Tributary Hydrologic Conditions in the Normal category, and the Multi-seasonal Lake Okeechobee Net Inflow Outlook in the Normal category, Part C of the 2008 LORS suggests "Up to Maximum Practicable Releases to WCAs if desirable or with minimum Everglades Impact; otherwise no releases to the Everglades".

Over the 7-day period from March 8, 2021 to March 14, 2021, regulatory releases in the amount of 4,000 acre-feet were sent from Lake Okeechobee to the FEBs/STAs. No Lake regulatory releases were sent to the Lake Worth Lagoon through the C-51 canal. Stage in WCA-1 is above schedule (Zone A1), stage in WCA-2A is above schedule (Zone A), and WCA-3A stage is below schedule (Zone B). For the coming operational period, the USACE is 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 Low Sub-band, the Tributary Hydrologic Conditions in the Normal category, the Seasonal and the Multi-seasonal Lake Okeechobee Net Inflow Outlooks in their respective Normal categories, 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 March 8, 2021 to March 14, 2021, total discharge to the St. Lucie Estuary was around 550 cfs with about 500 cfs 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 2,150 cfs over the past week with nearly 1,450 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, Cape Coral and Sanibel. Additionally, *Karenia brevis* continue to be observed off the mouth of the Caloosahatchee Estuary.

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 while there are no harmful algae blooms on Lake Okeechobee. At this time, this involves releases that maintain appropriate salinity for oyster spawning 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 500 cfs south from Lake Okeechobee, in addition to water supply needs, for delivery to the Everglades. The District anticipates deliveries to the Everglades to increase as the dry season continues and vegetation management efforts in the Stormwater Treatment Areas continue. Given the seasonal dry forecast condition for south Florida, and current lake levels, the District, in accordance with the approved deviation to 2008 LORS, recommends USACE continue discharge to the Caloosahatchee Estuary in a steady release fashion, measured at S-79, at a non-harmful level of 2,000 cfs while continuing to monitor estuary conditions for the

anticipated oyster spawning season and make any adjustments as necessary. In addition, the District, in accordance with the approved deviation to 2008 LORS, recommends that the USACE continue discharge to the St. Lucie Estuary ramping up in a pulse release fashion, measured at S-80, at a non-harmful level of 500 cfs (7-day average) while continuing to monitor estuary conditions for the anticipated oyster spawning season and make any adjustments as necessary. This decision should be reassessed as needed based on estuarine conditions. The USACE typically implements the releases to the estuaries over a 7-day period starting on Saturday and ending on Friday.