

MEMORANDUM

TO: Lauren Borocharner, Chief, Engineering Division (USACE)
FROM: John Mitnik, Chief District Engineer (SFWMD)
Akin Owosina, Chief, Hydrology & Hydraulics Bureau (SFWMD)
DATE: April 8, 2021
SUBJECT: Operational Position Statement for April 6, 2021 to April 12, 2021

This Position Statement is to provide operational recommendations for the one-week period from April 6, 2021 to April 12, 2021 based on system conditions and data observed during the previous Monday to Sunday 7-day period. On April 5, Lake Okeechobee stage was 14.30 feet NGVD, which places it within the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (LORS). Lake stage decreased by 0.23 feet during the preceding 7 days.

March District rainfall was well below normal (37% of normal) falling between the historical 10 and 20th percentiles. Rainfall forecast (issued April 6) predicts below to near average rainfall for the coming 7-day period and near to above average rainfall for the following 7-day period.

Precipitation Outlook: The most recent CPC precipitation outlook for April 2021 for south Florida is for increased chances of below normal rainfall. The 3-month window of Apr-Jun is forecast to have equal chances of above-normal, normal, and below-normal rainfall. The outlooks for the 3-month windows from May-Jul to Sep-Nov is for slightly increased to increased chances of above-normal rainfall. The outlook for the remainder of the 3-month windows from Oct-Dec and into 2022 is for equal chances of above-normal, normal, and below-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 29, 2021 to April 4, 2021, regulatory releases in the amount of 5,200 acre-feet were sent from Lake Okeechobee to STA-2. Approximately 2,000 acre-feet of Lake Okeechobee water reached 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 29, 2021 to April 4, 2021, total discharge to the St. Lucie Estuary was around 620 cfs with about 280 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 1,800 cfs over the past week with nearly 1,250 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. Additionally, *Karenia brevis* was observed off the mouth of the Caloosahatchee Estuary at background to low concentrations.

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 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 600 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 recommends USACE continue to manage Lake Okeechobee water levels recognizing the anticipated start of the wet season potentially next month, while continuing to monitor estuary conditions 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.