

MEMORANDUM

TO: Luis Alejandro, Chief, Water Management Section (USACE)

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

DATE: April 12, 2018

SUBJECT: Operational Position Statement for April 10, 2018 to April 16, 2018

This Position Statement is for the one-week period from April 10, 2018 to April 16, 2018. On April 9, 2018, Lake Okeechobee stage was 13.58 feet NGVD, in the Low Sub-band. Lake stage decreased by 0.26 feet during the preceding 7 days.

District rainfall to date for April is below average (57% of normal). District forecast (issued April 10) predicts above average rainfall for the coming week and below average for the following week.

Precipitation Outlook: The most recent Climate Prediction Center (CPC) precipitation outlook indicates increased chances of below-normal rainfall (~45%) for the District for the month of April. The outlook for all the future 3-month windows is for equal chances of below-normal, normal and above-normal rainfall.

2008 LORS Release Guidance (Part C): With Lake Okeechobee stage within the Low Sub-band, the Tributary Hydrologic conditions in the Dry category, Part C of the 2008 LORS release guidance recommends “No releases to the WCAs”.

Over the 7-day period from April 2, 2018 to April 8, 2018, STA-1E received 1,800 acre-feet of Lake Okeechobee releases, STA 1W received 1,100 acre-feet, STA 2 received 4,000 acre-feet, STA 3/4 received 1,500 acre-feet and the A-1 FEB received 3,000 acre-feet. There were no regulatory releases from the lake to tide through the C-51 canal. Stage at gauge 1-8C in WCA-1 is in Zone B of the regulation schedule. Stage in WCA-2A at gauge S-11B headwater is below the water supply floor elevation. Stage in WCA-3A is in Zone E. For the coming operational period, the USACE is requesting the SFWMD make no regulatory releases from the lake south to the WCAs.

2008 LORS Release Guidance (Part D): With Lake Okeechobee stage within the Low Sub-band, the Tributary Hydrologic Conditions in the Dry category, Part D of the 2008 LORS release guidance suggests Base Flow releases: “S-79 Up to 450 cfs and S-80 up to 200 cfs”.

Total discharge to the St. Lucie Estuary averaged around 200 cfs over the past week with no releases coming from Lake Okeechobee. The 7-day average salinity at the US1 Bridge is in the fair range for adult oysters. Total inflow to Caloosahatchee Estuary averaged approximately 750 cfs over the past week with approximately 500 cfs (67%) coming from the Lake. Salinity conditions between Val I-75 and Ft. Myers remain good for tape grass. Salinity is in the good range for adult oysters at Cape Coral and in the fair range at Shell Point.

The District has considered the application of the SFWMD’s Lake Okeechobee Adaptive Protocols (AP) this week since the lake stage is in the Low Sub-band and the LORS release guidance is recommending Base Flow releases. Given that the estuary needs water and there is less than 50% chance of the lake stage falling below 11.0 feet NGVD, the AP recommendation is for “S-79 up to 450 cfs (or up to 650 cfs) with S-77 base flow release to supplement as needed”. The District recognizes the USACE desire to manage the lake stage by making Base Flow releases per the LORS release guidance, as well as the beneficial impact that releases will have on the estuary salinity and therefore recommends continuation of releases at S-77, consistent with the SFWMD’s AP release guidance, to supplement target flow releases at S-79.