

## MEMORANDUM

**TO:** Jeff Kivett, Director, Operations, Engineering & Construction Division  
Terrie Bates, Director, Water Resources Division

**FROM:** Akin Owosina, Chief, Hydraulics & Hydrology Bureau  
John Mitnik, Chief, Engineering & Construction Bureau  
Susan Gray, Chief, Applied Science Bureau  
Dean Powell, Chief, Water Supply Bureau

**DATE:** June 25, 2015

**SUBJECT:** Operational Position Statement for June 23 – June 29, 2015

The U.S. Army Corps of Engineers (USACE) is responsible for managing Lake Okeechobee water levels and makes operational decisions about whether to retain water or release water based on their regulation schedule release guidance (2008 LORS). The USACE makes this decision taking into account the best available science and data provided by its staff and a variety of partners, which includes the South Florida Water Management District (SFWMD).

The SFWMD team has discussed the system-wide environmental conditions, the water supply conditions, and has evaluated the overall status of the water management system. Detailed reports are available at the SFWMD Operational Planning internet page.

This Position Statement is for the period from June 23 through June 29, 2015. Lake Okeechobee is currently in the Beneficial Use Sub-band and correspondingly Part C and Part D of the 2008 LORS do not call for releases to the WCAs and the estuaries, respectively, to manage lake stages. The SFWMD governing board directed staff to use the SFWMD's Lake Okeechobee Adaptive Protocols release guidance as the basis for S-77 release recommendations to the USACE when the lake stage is within or below the Base Flow Sub-band. The SFWMD recommendation is to follow the Lake Okeechobee Adaptive Protocols (AP) release guidance when the Lake is in the Beneficial Use Sub-band, which calls for no lake releases at S-77 because the Caloosahatchee Estuary does not "need" freshwater per the salinity criterion. Specifically, the 30-day average salinity is forecasted not to exceed the 5 practical salinity units (psu) criterion at the Val-I75 site within the next two weeks.

The most recent Climate Prediction Center (CPC) outlook for Central and South Florida indicates equal chances (EC) of below, normal and above-normal for the month of July. The three-month window July to September is also for equal chances (EC) of below, normal and above-normal, and so is the remainder of the wet season outlook. June 2015 SFWMD rainfall so far is below average, with all basins but one reporting below average rainfall for the period. Upper Kissimmee is 102% of average. The largest deficit is for East Broward County basin with only 18% of average. Rainfall for the next two weeks is expected to be below average.

Over the 7-day period from June 16 to June 22, 2015, approximately 3,900 ac-ft of Lake Okeechobee releases were sent south and treated by STA 1E and STA-3/4. These releases were not regulatory, but to supply water to the STAs and to the Big Cypress Reservation.

2008 LORS Release Guidance (Part C): The Lake Okeechobee stage is currently within the Beneficial Use Sub-band and Part C of the 2008 LORS does not suggest releases to the WCAs to manage lake stages.

Consistent with the LORS release guidance, the USACE is requesting the SFWMD not to implement maximum practicable Lake Okeechobee regulatory releases to the WCAs.

2008 LORS Release Guidance (Part D): The Lake Okeechobee stage is currently within the Beneficial Use Sub-band and Part D of the 2008 LORS does not suggest releases to the St. Lucie and Caloosahatchee Estuaries to manage lake stages.

Currently, no regulatory releases from Lake Okeechobee to the St. Lucie and Caloosahatchee Estuaries have occurred since the Lake Okeechobee stage was in the Beneficial Use sub-band at the time of last week's recommendation. Over the past week, flows through S-80 averaged about 30 cfs with no lake contribution, while flow at S-79 averaged 556 cfs with no contribution from the lake through S-77.

SFWMD Lake scientists report that that from an ecological point of view current lake conditions are near optimal for this time of year.

For the Caloosahatchee Estuary, SFWMD estuary scientists reported salinity conditions are mostly within the preferred ranges for tape grass in the upper estuary and for oysters at the Cape Coral and Shell Point locations, but slightly into the fair range for the Sanibel location. From an ecological point of view, inflows up to 450 cfs through S-79 will help maintain favorable conditions in the Caloosahatchee Estuary. For the St. Lucie Estuary, salinity at the US1 Bridge is within the preferred range for oysters and no freshwater releases from the lake to the St. Lucie estuary are necessary.

#### SFWMD Lake Okeechobee Adaptive Protocol (AP) Release Guidance

This week the SFWMD's Lake Okeechobee Adaptive Protocol (AP) release guidance flowchart is applicable since the Lake Okeechobee stage is within the Beneficial Use Sub-band of the 2008 LORS. The Adaptive Protocols process is documented in the District publication Final Adaptive Protocols for Lake Okeechobee Operations (September 16<sup>th</sup>, 2010).

This week the Lake Okeechobee AP release guidance suggests no releases from Lake Okeechobee at S-77. This week's outcome is based on the current and forecasted salinity at the Val-I75 site being below the 5 psu threshold. The specific salinity criterion in the AP release guidance states "Estuary 'needs' water when the 30-day moving average salinity at I-75 bridge is projected to exceed 5 psu within 2 weeks." If the dry conditions continue and the 14-day salinity forecast shows the 30-day moving average staying below 5 psu, then the AP guidance will continue to suggest no releases at S-77.

For additional information pertaining to operations history and past recommendations, refer to the archives of LORS-2008 Release Guidance outcomes and operational position statements at [www.sfwmd.gov](http://www.sfwmd.gov) under the Operational Planning topic.