

## MEMORANDUM

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

**FROM:** Akin Owosina, Chief, Hydraulics & Hydrology Bureau  
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**DATE:** July 30, 2015

**SUBJECT:** Operational Position Statement for July 28 – August 3, 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 July 28 through August 3, 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 or the estuaries 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. Correspondingly, with the Lake in the Beneficial Use Sub-band the SFWMD staff recommendation is to follow the Lake Okeechobee AP release guidance, 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 projected 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 increased (0-7%) likelihood of below normal rainfall for the month of August for most of the District region and an increased (7-17%) likelihood of below normal rainfall for Florida Bay and the Keys. The outlook for three-month window August to October is for equal chances (EC) of below, normal and above-normal. The CPC rainfall outlook for the 2015-2016 dry season signals a substantial increase in the likelihood above-normal conditions. The July 2015 SFWMD rainfall to date is below normal. Rainfall for the next two weeks is expected to be near-average.

Over the 7-day period from July 21 to July 27, 2015, approximately 1,000 acre-feet were delivered from Lake Okeechobee to STA-1W and STA-3/4. These deliveries were mostly water supply for the STAs.

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 not requesting the SFWMD 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, no flows entered the St. Lucie Estuary through S-80. Flow at S-79 averaged 1,598 cfs with no contribution from the lake through S-77. The control structure for the C-44 Canal (St. Lucie) is S-308 instead of S-80. Stages in the C-44 canal are kept near the optimum by leaving the gates at S-308 open all the time.

SFWMD Lake scientists report that from an ecological point of view the current lake stage is below optimal for this time of the year, despite the observed stage increase for last week.

Currently, there are no ecological benefits associated with additional releases from Lake Okeechobee to the estuaries. In the St. Lucie Estuary, salinity was in the good range for adult oysters. In the Caloosahatchee Estuary, salinity is in the good range for adult oysters at Cape Coral, Shell Point and Sanibel. Salinities were also in the good range for tape grass in the upper-Calooahatchee Estuary, and are forecast to remain so over the next two weeks, even with no flow through S-79.

#### 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 forecast 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.