

MEMORANDUM

TO: Tommy Strowd, Director, Operations, Maintenance & Construction Division
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FROM: Susan Sylvester, Chief, Water Control Operations Bureau
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DATE: December 6, 2012

SUBJECT: Operational Position Statement for the Week of December 4-10, 2012

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. 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's [Operational Planning](#) internet page.

Recommendation to the USACE

This week the SFWMD recommendation to the USACE is to follow the 2008 Lake Okeechobee Regulation Schedule (2008 LORS) release guidance, which suggests baseflow releases up to 200 cfs at S-80 and up to 450 cfs at S-79. Further details are provided below, which include a suggested pulse-release pattern from SFWMD scientists.

Weather and Climate

Rainfall during the past week totaled 0.11 inches district wide (through 7 am December 4th). 0.05 inches fell directly over Lake Okeechobee during the past 7-days. District-wide rainfall for November totaled 0.29 inches, which was 88% below average. November 2012 was the driest November since 1944 and was among the driest three Novembers in the SFWMD's 81-year rainfall record.

The SFWMD short-term weather forecast indicates locally heavy rains near the coasts Thursday. Lighter showers and associated reduced rainfall amounts are expected as the weekend progresses. Three-day totals are likely to be less than 0.25 inches District-wide. The 15-Nov Climate Prediction Center (CPC) outlook shows equal chances (33%) of below-normal, normal, and above-normal rainfall for December. For the December-April period, the current outlook (15-Nov) also shows equal chances (33%) of below-normal, normal, and above-normal rainfall. The CPC's precipitation outlooks reflect the expectation that El Nino conditions will not likely develop and contribute to above-average dry season rainfall.

Current Conditions and Operations

The December 4, 2012 Lake Okeechobee stage (reported by the USACE on Dec 3rd) was 15.20 feet NGVD, 0.16 feet lower than it was last week. The Lake is 0.61 feet lower than it was a month ago and is 1.34 feet higher than it was a year ago. The current stage is about 0.30 feet higher than the historical average for this date. The stage is currently receding within the bottom third of the Low Sub-band of the 2008 Lake Okeechobee Regulation Schedule (2008 LORS) and is 0.6 feet above the top of the Baseflow Sub-band.

The 2008 LORS release guidance (Part C) suggests no releases to the WCAs; such releases are not desirable due to relatively high stages in the WCAs. WCA-2A and WCA-3A stages are receding at faster-than-typical rates, but the stages remain above their respective regulation schedules. The regulation stage for WCA-3A is likely to fall below the top of the WCA-3A regulation schedule before the end of December.

The Lake Okeechobee stage continues to recede and is within the bottom third of the Low Subband. Because of persistent and forecast dry conditions the 2008 LORS release guidance currently suggests baseflow release rates instead of the higher release rates that are characteristic of the Low Subband. Correspondingly the SFWMD's Lake Okeechobee Adaptive Protocol (AP) release guidance flowchart suggests no releases (estuary salinity for Val-I75 is forecast to remain below the 5 psu threshold for at least the next 2 weeks).

It is important to recognize that the AP was developed primarily to guide the water supply balance between Caloosahatchee Estuary, permitted water users, and other water supply purposes of the water control system. The water supply balance achieved by following the AP release guidance was evaluated by the Water Resources Advisory Commission and the SFWMD Governing Board, leading to board acceptance in September, 2010. Final Adaptive Protocols for Lake Okeechobee Operations (September 16, 2010).

However, the current situation is unusual. The Lake stage is relatively high, and the AP release guidance suggests no releases only because the estuary salinity is well-below the 5 psu threshold. Furthermore, the November Lake Okeechobee stage projections indicate less than a 10% chance of the Lake stage falling below elevation 11.0 feet, NGVD, before 1-Jun-2013. So there is relatively low risk of a Lake O MFL exceedance or a water shortage.

While the 2008 LORS release guidance suggests 450 cfs, a flow rate of 450 cfs or more (up to 650 cfs) for the next week can moderate the increasing salinity in the Caloosahatchee Estuary. Therefore the SFWMD estuarine scientists, at the request of the USACE, have prepared seven-day pulse schedules for both 450 and 650 cfs average rates at S-79.

Day	450 cfs	650 cfs
1	1000	1450
2	1200	1700
3	600	900
4	350	500
5	0	0
6	0	0
7	0	0

Note that the AP release guidance flowchart was designed primarily to guide release recommendations for circumstances when the Lake stage is within the Baseflow Subband or lower. The USACE's Water Control Plan (WCP) for Lake Okeechobee and the EAA recognizes that the SFWMD may allocate water to the environment through its "Adaptive Protocols" or other SFWMD authorities. The WCP provides guidance as to releases, including Adaptive Protocol recommendations, in the various Lake schedule subbands.

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 under the Operational Planning topic.