

MEMORANDUM

TO: Tommy Strowd, Director, Operations, Maintenance & Construction
Terrie Bates, Director, Water Resources

FROM: Susan Sylvester, Director, Operations and Hydro Data Management Dept.
Linda Lindstrom, Director, Restoration Sciences Dept.
Dean Powell, Deputy Director, Water Supply Management Dept.

DATE: June 16, 2011

SUBJECT: Operational Position Statement for the Period Jun 14 – Jun 21, 2011

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 have evaluated the overall status of the water management system. Detailed reports are available at the SFWMD's [Operational Planning](#) internet page.

Weather and Climate

Rainfall during the past week totaled 0.73 inches district wide. Rainfall during the past 30 days totaled 1.47 inches (25% of average). The SFWMD precipitation outlook for the next ten days is below-average with low confidence. The CPC precipitation outlook for May and for the May-June-July period shows equal chances of normal, above-normal, and below-normal rainfall.

Lake Okeechobee Stage and Regulation Schedule

The June 14, 2011 Lake Okeechobee stage reported by the USACE was 9.68 feet NGVD. The lake stage decreased about 0.18 feet during the past week; the stage is about 0.9 feet lower than it was a month ago and about 4.7 feet lower than a year ago. The current stage is about 3.4 feet lower than the historical average for this date.

The Lake Okeechobee stage fell into the Water Shortage Band of the 2008-LORS on Friday, March 18th. Due to late March rainfall, the stage rose above the Water Shortage Band on April 4th. The stage fell back into the Water Shortage band on April 29th. The current stage is 0.74 feet below the top of the Water Shortage Band. Phase 3 water shortage restrictions (45% cutbacks) remain in effect. The USACE's Water Control Plan for Lake Okeechobee and the EAA defers to the SFWMD's Water Shortage Plan for operations in the Water Shortage Band. "Operations in this band are governed by the SFWMD's Lake Okeechobee Water Shortage Management (LOWSM) Plan. The goal of this band is to manage existing water supplies contained within Lake Okeechobee in accordance with SFWMD rules and guidance." (p7-24, sec 7-08.a.).

Water Supply Risk Indicators

The risk status for the Lake Okeechobee Area remained the same as last week. Two of the five LOSA water supply risk indicators are in the "high risk" category: the 2-month projection of Lake O stage, and the Palmer Index, which changed from -2.69 to -3.04. The Lake O Multi-

Seasonal Net Inflow Forecast risk indicator is in the “medium risk” category. The CPC precipitation outlook and the Lake Okeechobee Seasonal Net Inflow Forecast both remain in the “low risk” category.

For the WCAs the risk status is the same as last week: All WCAs are in the “high” risk category. For the Lower East Coast areas, all of the water supply risk indicators remain in the “high risk” category. Water use restrictions are in effect.

Water levels in the L-8 Canal have declined to the extent that the City of West Palm Beach can no longer withdraw water to supply its public water supply utility. A Phase III Water Shortage Order has been put in effect for the City of West Palm Beach, Town of Palm Beach and Town of South Palm Beach.

Groundwater Levels

Groundwater levels continued to decrease in most areas across the District over the last week. LEC groundwater elevations continue to be well below average (about three-quarters in the lowest 10th percentile and the rest mostly in the lowest 10th to 30th percentile) for this time of year. For more detailed information, refer to the June 14, 2011 Water Supply Report posted at: <http://my.sfwmd.gov/portal/pls/portal/docs/15900958.PDF>

Everglades WCAs and STAs

Water levels in the WCAs and STAs continue to recede due to high evapotranspiration typical during this time of year. All WCA stages remain well-below desirable levels as well as below their respective regulation schedules. The WCA-1 stage is below its environmental floor elevation (14.0 ft, NGVD). WCA-2A stage is below its floor elevation (10.5 ft, NGVD) and WCA-3A stage is also below its floor (7.5 ft, NGVD). Water supply releases from WCA-1 are intermitted via S-39 to the Hillsboro Canal and no releases are being made from WCA-2A and WCA-3A. Due to the canal conveyance limitations environmental water deliveries to the STAs, WCAs or to Everglades National Park are not expected for the remainder of June. There are currently no environmental water deliveries from WCA-3A to ENP per the Shark Slough Rainfall Plan since the target flows continue to be zero. Water supply to the Seminole Tribe continues to be made from the Miami Canal via G-404.

St. Lucie Estuary

Salinity continues to rise and is above the desirable range, however conditions in the SLE are environmentally acceptable. It is recommended that the estuary should not receive inflows from the Lake. To conserve water supplies, if C-44 basin runoff occurs, it is recommended that the USACE adjust their operations, as necessary, to direct C-44 basin runoff westward to Lake Okeechobee, and not eastward through S-80 to tide.

Caloosahatchee Estuary

The Adaptive Protocols for Lake Okeechobee Operations is being used to make the flow recommendation for the Caloosahatchee Estuary. This week the Adaptive Protocol release guidance suggests no releases from Lake Okeechobee at S-77.

The detailed information regarding the Adaptive Protocol release guidance follows:

Each Tuesday the Coastal Ecosystem Division reviews the salinity conditions in the Caloosahatchee estuary and the predicted salinity for 14 days into the future at I-75 is evaluated. The criterion for when the estuary needs water depends on the two week predicted salinity at I-75 Bridge being at least 5 psu. This week the 30-day moving average salinity at the

I-75 Bridge is forecast to exceed 5 psu during part of the next two weeks. Therefore according to the salinity criterion, the estuary needs additional flow.

The lower branch of the Adaptive Protocol release guidance flowchart applies since the stage is in or below the Beneficial Use Subband of the regulation schedule. With the current Lake stage falling within the Water Shortage Band, the guidance suggests no releases.

Therefore, in accordance with the SFWMD's [Final Adaptive Protocols for Lake Okeechobee Operations](#), the SFWMD recommends that the USACE make no Lake Okeechobee releases to the Caloosahatchee Estuary for the week beginning June 17th.