M E M O R A N D U M

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

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SUBJECT: Operational Position Statement for March 10 - 16, 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 March 10 - 16, 2015. The SFWMD recommendation to the USACE is to follow the release guidance of 2008 LORS, which currently suggests that releases of up to 3,000 cfs measured at S-79 and up to 1,170 measured at S-80 may be made. A pulse type pattern is less harmful and suggested daily discharge rates for multi-day pulses are provided in Table 1 at the end of this memorandum.

The strength and persistence of the subtropical jetstream over the last few months is consistent with El Niño, and this enhanced jetstream has contributed to above normal rains in the Kissimmee watersheds since November. The most-recent Climate Prediction Center outlook for Central and South Florida indicates a higher chance of above-normal precipitation through May.

While the lake stage remains within the Low Sub-band, the lake recession rate over the past 30-days has been very slow at 0.04 feet. Over the 7 day period from March 3 to March 9, 2015, approximately 13,600 ac-ft of Lake Okeechobee releases were sent south and treated by STA-2 and STA-3/4 prior to entering Water Conservation Area (WCA) 2A and 3A. Including flows to tide via C-51, the total southward regulatory releases from the lake were 21,500 ac-ft.

<u>2008 LORS Release Guidance (Part C):</u> Given the current Lake Okeechobee stage position, Part C of the 2008 LORS suggests “Up to Maximum Practicable to the WCAs if desirable or with minimum Everglades Impacts”.

Consistent with the LORS release guidance, the USACE is requesting the SFWMD to continue maximum practicable Lake Okeechobee regulatory releases to the WCAs. Flows through STA-2 will be discharged into WCA-2A while flows from STA-3/4 will be moved via S-8 to WCA-3A per the request of FWCC. Obtaining a more favorable recession rate in WCA-2A is desirable and so outflows both to WCA-3A and to tide remains preferable until water recessions resume.

2008 LORS Release Guidance (Part D): The outcome from Part D of the 2008 LORS release guidance is: "S-79 up to 3,000 cfs and S-80 up to 1,170 cfs". Release guidance did not change compared to the last two previous weeks.

The USACE is presently conducting a 7-day pulse release averaging 2500 cfs at S-79 and 950 cfs at S-80, which started 0700 hours on March 6, 2015 and will end 0659 hours on March 13, 2015. The current release implementation is measured at S-79 for the Caloosahatchee Estuary and S-80 for the St. Lucie Estuary, requiring that the Lake Okeechobee releases (at S-77 and S-308) be reduced to account for any local runoff into the Caloosahatchee River (C-43) between S-77 and S-79 or the St. Lucie Canal (C-44) between S-308 and S-80. This accounting is performed on a daily basis. Over the past week, flow at S-80 averaged 850 cfs with 758 cfs from the lake and flow at S-79 averaged 2332 cfs with 1810 cfs released from the lake.

Estuary scientists have indicated that there is no ecological benefit associated with further increases in releases into both the Caloosahatchee and St. Lucie Estuaries from Lake Okeechobee at this point in time. However, if the USACE determines that an increase in releases is required, it is recommended that the current releases be augmented incrementally, by low volumes to avoid abrupt and excessive changes in flow and salinity.

The releases at S-79 and S-80 should be conducted in a pulse pattern, varying in both the magnitude and duration among the pulses, to mitigate potential stratification and phytoplankton accumulation in the water column. This will also help avoid deposition of organic matter in localized areas due to a repetitive flow pattern. Suggested pulse schedules are given below in the Table 1.

SFWMD Lake Okeechobee Adaptive Protocol (AP) Release Guidance

This week the SFWMD is not applying the Lake Okeechobee Adaptive Protocol release guidance flowchart since the Lake Okeechobee stage is above the Base-flow Sub-band of the 2008 LORS. The Adaptive Protocols process is documented in the District publication Final Adaptive Protocols for Lake Okeechobee Operations (September 16th, 2010).

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.

Table 1. Schedules for 7-day pulses at S-80 and S-79

	7-day pulses at S-80							
Day	200 cfs	300 cfs	500 cfs	650 cfs	730 cfs	950 cfs	1100 cfs	1170 cfs
1	200	300	500	650	800	950	1200	1290
2	600	700	900	1100	1200	1400	1600	1800
3	300	500	800	900	1000	1200	1400	1500
4	200	300	600	800	800	1100	1200	1300
5	100	200	400	600	600	900	1000	1000
6	0	100	300	400	500	700	800	800
7	0	0	0	100	210	400	500	500
	7-day pulses at S-79							
Day	1500 cfs	1700 cfs	2000 cfs	2300 cfs	2500 cfs	2600 cfs	2900 cfs	3000 cfs
1	2000	2200	2500	2800	3000	3100	3400	3500
2	2400	2600	3100	3500	3800	3900	4200	4300
3	2100	2300	2600	3000	3300	3400	3700	3800
4	1400	1600	1900	2200	2400	2500	2800	2900
5	1200	1400	1700	2000	2200	2300	2600	2700
6	900	1100	1400	1700	1800	2000	2300	2400
7	500	700	800	900	1000	1000	1300	1400