

MEMORANDUM

TO: John Mitnik, Division Director, Operations, Engineering, and Construction

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

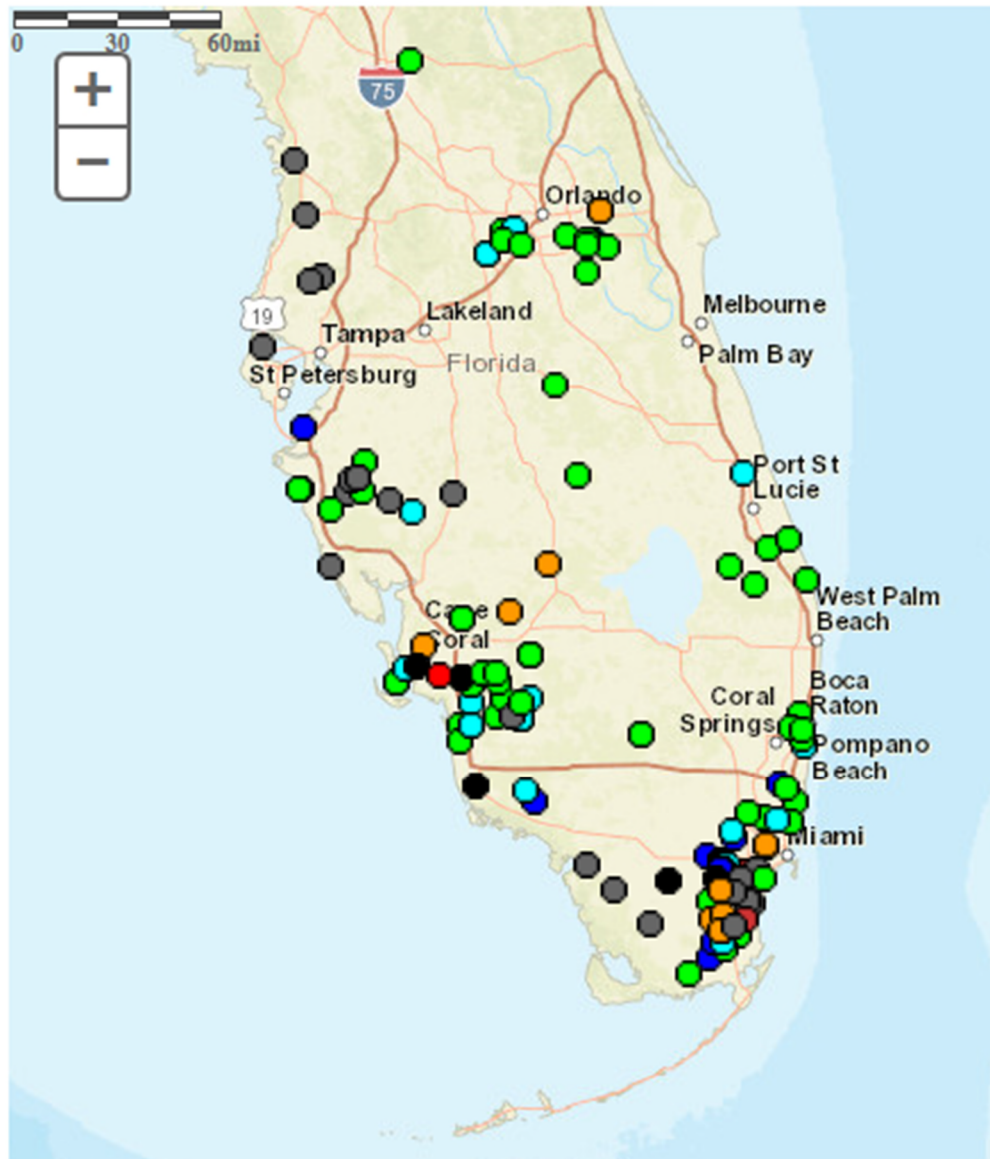
DATE: August 1, 2017

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels showed mixed trends throughout the District over the last week. The majority of United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) within the District boundaries are at median levels for this time of year. Approximately half of the surface water and groundwater stations across the KB recorded increases in water levels over the last week. Stages in the Upper East Coast (UEC) canals C-23, C-24, and C-25 are at 20.47, 19.09, and 19.17 feet, well above the fourteen feet agricultural cut-off. Approximately eighty percent of UEC surficial aquifer wells are at median levels, with the remainder in the upper 76th to 90th percentile range. Surface and groundwater levels increased in almost half of the Lower East Coast (LEC) monitoring stations over the past week. Water levels are still a little low in parts of the C-111 basin. Approximately forty percent of the USGS Biscayne aquifer monitor wells are in their upper 76th to 90th percentile range or higher at this time and forty percent are at median levels. The remainder is in the lower 10th to 24th percentile range or lower.

In the Lower West Coast (LWC), groundwater levels increased in approximately half of the monitor wells over the last seven days. The majority of the wells in the Surficial aquifer are at median levels or higher for this time of year. Over half of the Lower Tamiami aquifer wells are at median levels with the remainder in the upper 76th to 90th percentile range. The majority of the Sandstone aquifer monitor wells are at median levels for this time of year. About two thirds of the Mid-Hawthorn aquifer monitor wells are at median levels or higher, with most of the remainder in the lower 10th to 24th percentile range and lower. **Figure 1** summarizes current water level conditions.



Explanation - Percentile classes (symbol color based on most recent measurement)								Wells		Springs	
Low									Real-Time		Real-Time
									Continuous		Continuous
									Periodic Measurements		Periodic Measurements

Figure 1. [Florida Real-Time Groundwater Level Network Map](#)

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -2.99 classified as “extremely dry,” and is in the “high” risk category. The LOK stage for the next two months is projected to be in the Base Flow Sub-Band, and the risk to water supply is categorized as “moderate.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “normal” for one month and “normal” for three months, leaving both the one-month and three-month outlooks in the “low” risk category. The LOK Seasonal Net Inflow Forecast is in the “normal” range, with “low” risk to water supply. The Multi-Seasonal Net Inflow Forecast is projected as “wet” with “moderate” risk to water supply. The stages in all Water Conservation Areas are above line 1 and are in the “low” risk category. Year-Round Irrigation Rule is in effect for the LEC Service Areas. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 7/31/2017 (ENSO Neutral Condition):

Status for week ending 7/31/2017:

District wide, Raindar rainfall was 2.38 inches for the week. Lake stage on 7/31/2017 was 12.73 ft, up 0.03 ft from last week.

The updated July 15 2017 SFWMM Dynamic Position Analysis [percentile graph](#) for Lake Okeechobee show that the current lake stage is in the Base Flow Operational Sub-Band.

The LORS2008 tributary [indices](#) are classified as Normal. The PDSI indicates dry condition and the LONIN is Normal. The classification is based on the wetter of the two.

Water Supply Risk Evaluation

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Base Flow Sub Band	M
	Palmer Index for LOK Tributary Conditions	-2.99 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Normal	L
		3 months: Normal	L
	LOK Seasonal Net Inflow Outlook	2.66 ft	L
	ENSO La Nina Years	(Normal)	L
	LOK Multi-Seasonal Net Inflow Outlook	3.07 ft (Wet)	M
WCAs	WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average	Above Line 1 (16.55 ft)	L
	WCA 2A: Site 2-17 HW	Above Line 1 (13.30 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (11.33 ft)	L
LEC	Service Area 1	Year-Round Irrigation Rule in effect	L
	Service Area 2	Year-Round Irrigation Rule in effect	L
	Service Area 3	Year-Round Irrigation Rule in effect	L

Note: The water supply risk classification based on the Palmer index, as well as the LOK seasonal and multi-seasonal net inflow outlooks use slightly different classification intervals than those used by the 2008-LORS.

Figure 2. Water Supply Risk Indicators