

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: October 3, 2017

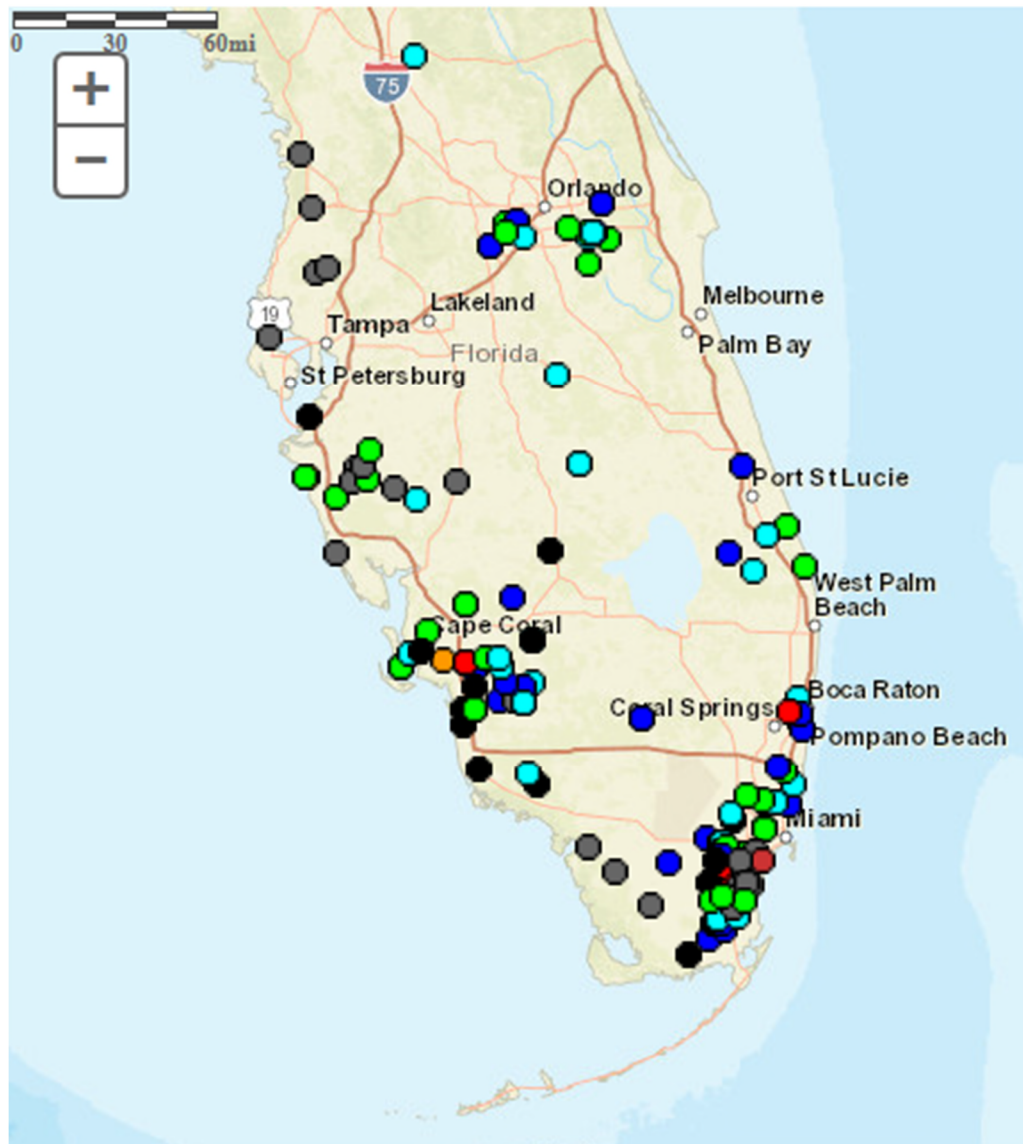
SUBJECT: Water Supply Report

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 or higher for this time of year. About two thirds of the surface water and groundwater stations across the KB recorded decreases in water levels over the last week. Stages in the Upper East Coast (UEC) canals C-23, C-24, and C-25 are at 20.52, 19.04, and 17.46 feet, well above the fourteen feet agricultural cut-off.

Approximately two thirds of UEC surficial aquifer wells are in the upper 76th to 90th percentile range or higher for this time of year, with the remainder at median levels. Surface and groundwater levels decreased in about half of the Lower East Coast (LEC) monitoring stations over the past week. About three quarters of the USGS Biscayne aquifer monitor wells are in the upper 76th to 90th percentile range and higher, with most of the remainder at median levels.

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



Explanation - Percentile classes (symbol color based on most recent measurement)							Wells	Springs
●	●	●	●	●	●	●	○ Real-Time	■
Low	<10	10-24	25-75	76-90	>90	High	□ Continuous	▣
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal	Not Ranked	△ 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 2.24 classified as “normal,” and is in the “low” risk category. The LOK stage for the next two months is projected to be in the Intermediate Sub-Band, and the risk to water supply is categorized as “low.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “above 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 “dry” range, with “moderate” risk to water supply. The Multi-Seasonal Net Inflow Forecast is projected as “dry” with “high” 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 10/2/2017 (ENSO Neutral Condition):

Status for week ending 10/2/2017:

District wide, Raindar rainfall was 2.02 inches for the week. Lake stage on 10/2/2017 was 16.47 ft, up 0.32 ft from last week.

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

The LORS2008 tributary [indices](#) are classified as **Very Wet**. The PDSI indicates wet condition and the LONIN is Very Wet. 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	Intermediate Sub Band	L
	Palmer Index for LOK Tributary Conditions	2.24 (Normal)	L
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Normal	L
	LOK Seasonal Net Inflow Outlook	0.84 ft	M
	ENSO La Nina Years	(Dry)	
	LOK Multi-Seasonal Net Inflow Outlook	0.73 ft (Dry)	H
WCAs	WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average	Above Line 1 (17.10 ft)	L
	WCA 2A: Site 2-17 HW	Above Line 1 (14.03 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (12.25 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