

## MEMORANDUM

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

**THROUGH:** Peter Kwiatkowski, Section Administrator, Resource Evaluation

**FROM:** SFWMD Staff Water Supply Advisory Team

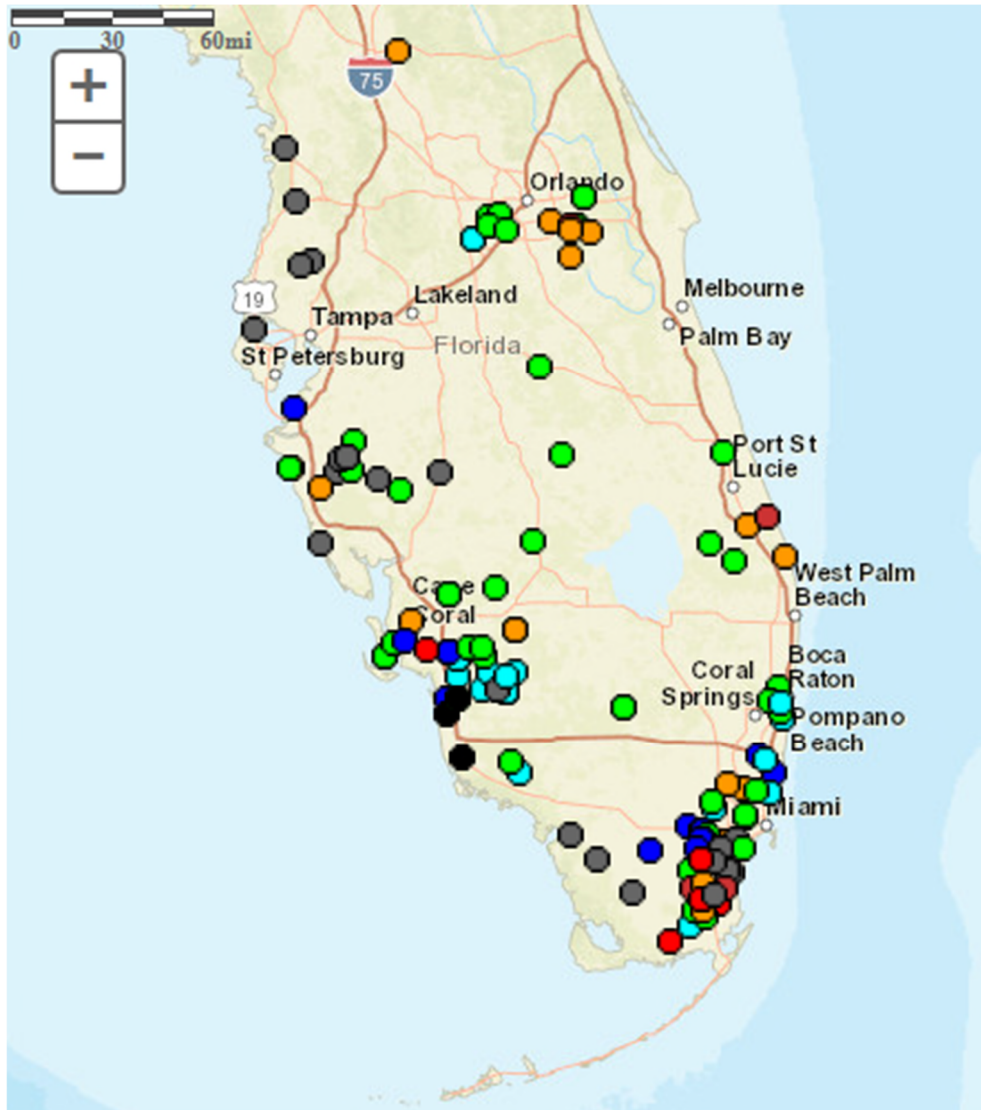
**DATE:** September 5, 2017

**SUBJECT:** Water Supply Report

### **District-wide Conditions**

Surface and groundwater levels showed mixed trends throughout the District over the last week. Over half 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, with most of the remainder in the lower 10<sup>th</sup> to 24<sup>th</sup> percentile range. The majority 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 21.83, 19.60, and 19.89 feet, well above the fourteen feet agricultural cut-off. Approximately half of UEC surficial aquifer wells are at median levels or higher for this time of year, with the remainder in the lower 10<sup>th</sup> to 24<sup>th</sup> percentile range or lower. Surface and groundwater levels decreased in most of the Lower East Coast (LEC) monitoring stations over the past week. Approximately two thirds of the USGS Biscayne aquifer monitor wells are at median levels or higher at this time, with the rest in the lower 10<sup>th</sup> to 24<sup>th</sup> percentile range and lower.

In the Lower West Coast (LWC), groundwater levels increased in about half of the monitor wells over the last seven days. The majority of the wells in the Surficial aquifer are at median levels and higher for this time of year. Most of the Lower Tamiami aquifer wells are in the upper 76<sup>th</sup> to 90<sup>th</sup> percentile range of higher, with the remainder at median levels. 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 10<sup>th</sup> to 24<sup>th</sup> percentile range. **Figure 1** summarizes current water level conditions.



Explanation - Percentile classes (symbol color based on most recent measurement)							Wells		Springs	
Low										
	<10	10-24	25-75	76-90	>90					
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal	High	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 -0.13 classified as “normal,” and is in the “low” 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 “above normal” for one month and “above 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 “normal” 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 9/4/2017 (ENSO Neutral Condition):

Status for week ending 9/5/2017:

District wide, Raindar rainfall was 1.00 inches for the week. Lake stage on 9/4/2017 was 13.65 ft, up 0.15 ft from last week.

The updated August 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 **Wet**. The PDSI indicates normal condition and the LONIN is 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	Base Flow Sub Band	M
	Palmer Index for LOK Tributary Conditions	-0.13 (Normal)	L
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	1.93 ft	L
	ENSO La Nina Years	(Normal)	L
	LOK Multi-Seasonal Net Inflow Outlook	1.93 ft (Normal)	M
ENSO La Nina Years			
WCAs	WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average	Above Line 1 (16.65 ft)	L
	WCA 2A: Site 2-17 HW	Above Line 1 (13.66 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (11.05 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**