

## MEMORANDUM

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

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

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

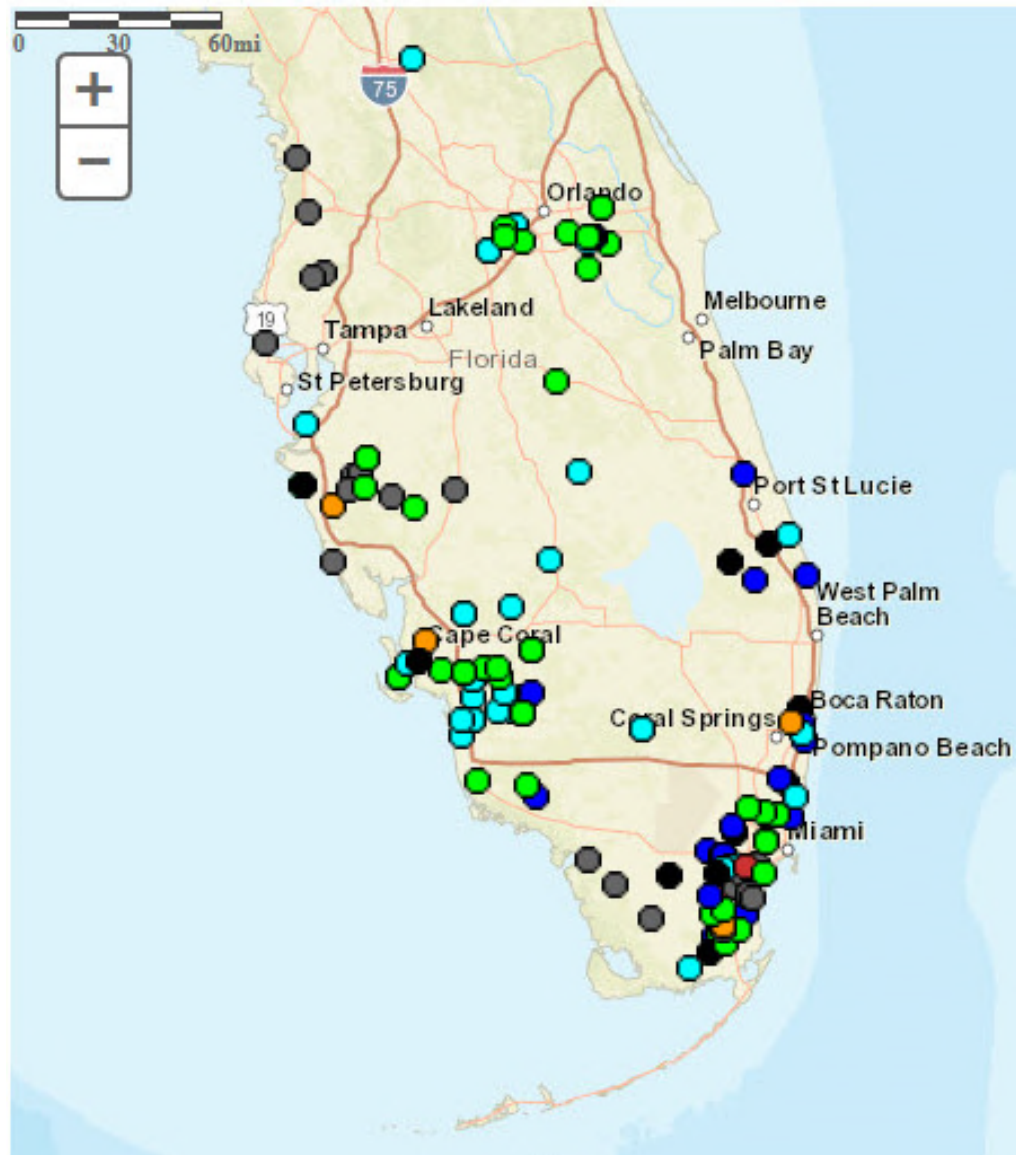
**DATE:** November 21, 2017

**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. Most 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 23.07, 21.06, and 22.29 feet, well above the fourteen feet agricultural cut-off. The majority of UEC surficial aquifer wells are in the upper 76<sup>th</sup> to 90<sup>th</sup> percentile range or higher for this time of year. Surface and groundwater levels decreased in approximately seventy five percent of the Lower East Coast (LEC) monitoring stations over the past week. About two thirds of the USGS Biscayne aquifer monitor wells are in the upper 76<sup>th</sup> to 90<sup>th</sup> percentile range or higher for this time of year.

In the Lower West Coast (LWC), groundwater levels decreased in the majority of the monitor wells over the last seven days. About three quarters of the wells in the Surficial aquifer are in the upper 76<sup>th</sup> to 90<sup>th</sup> percentile range or higher for this time of year, with the remainder at median levels. Approximately half of the Lower Tamiami aquifer wells are in the upper 76<sup>th</sup> to 90<sup>th</sup> percentile range or higher. About one third of the Sandstone aquifer monitor wells are in the upper 76<sup>th</sup> to 90<sup>th</sup> percentile range, with the remainder at median levels for this time of year. About one third of the Mid-Hawthorn aquifer monitor wells are in the upper 76<sup>th</sup> to 90<sup>th</sup> percentile range or higher, with the remainder mostly in the median 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	High	Not Ranked	Real-Time
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal			Continuous
								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 1.92 classified as “normal,” and is in the “low” risk category. The LOK stage for the next two months is projected to be in the Low Sub-Band, and the risk to water supply is categorized as “moderate.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “below normal” for one month and “below normal” for three months, leaving both the one-month outlook and three-month outlook in the “moderate” risk category. The LOK Seasonal Net Inflow Forecast is in the “normal” range, with “moderate” risk to water supply. The Multi-Seasonal Net Inflow Forecast is projected as “normal” with “low” 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 11/20/2017 (ENSO Neutral Condition):

#### **Status for week ending 11/20/2017:**

District wide, Raindar rainfall was 0.27 inches for the week. Lake stage on 11/20/2017 was 16.49 ft, down 0.19 ft from last week.

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

The 2008 LORS Tributary Hydrologic Condition (THC) tributary is classified as **Wet**. The PDSI indicates Wet condition and the LONIN is Normal. The THC classification is based on the wetter of the two [indices](#).

#### **Water Supply Risk Evaluation**

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Low Sub Band	M
	Palmer Index for LOK Tributary Conditions	1.92 (Normal)	L
	CPC Precipitation Outlook	1 month: Below Normal	M
		3 months: Below Normal	M
	LOK Seasonal Net Inflow Outlook	1.03 ft	M
	ENSO La Nina Years	(Normal)	
	LOK Multi-Seasonal Net Inflow Outlook	3.68 ft (Normal)	L
	ENSO La Nina Years		
WCAs	WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average	Above Line 1 (17.47 ft)	L
	WCA 2A: Site 2-17 HW	Above Line 1 (13.51 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (11.78 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**