

## 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:** April 10, 2018

**SUBJECT:** Water Supply Report

### **District-wide Conditions**

Surface and groundwater levels showed mixed trends throughout the District over the last week with the majority showing decreasing levels. About two thirds of the 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, with the remainder in the lower 10<sup>th</sup> to 24<sup>th</sup> percentile range. The majority of 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 21.45, 18.76, and 16.19 feet, all above the fourteen feet agricultural cut-off. About two thirds of UEC surficial aquifer wells are in the median percentile range for this time of year, with the remainder in the lower 10<sup>th</sup> to 24<sup>th</sup> percentile range and lower. Surface and groundwater levels decreased in about two thirds of the Lower East Coast (LEC) monitoring stations over the past week. The majority of the Biscayne aquifer monitor wells are at median levels for this time of year. Levels are low in Everglades National Park (ENP), Water Conservation Area 2A and the C-111 basin.

Overall, conditions are drying out in the Lower West Coast (LWC). Groundwater levels decreased in the majority of the monitor wells over the last seven days. Most of the wells in the Surficial aquifer are at median levels for this time of year. About half of the Lower Tamiami aquifer wells are in the lower 10<sup>th</sup> to 24<sup>th</sup> percentile range, with the remainder mostly at median levels. About two thirds of the Sandstone aquifer monitor wells are at median levels for this time of year, also with the remainder in the lower percentile ranges. Approximately two thirds of the Mid-Hawthorn aquifer monitor wells are at median levels, with the remainder in the lower percentile range. **Figure 1** summarizes current water level conditions.

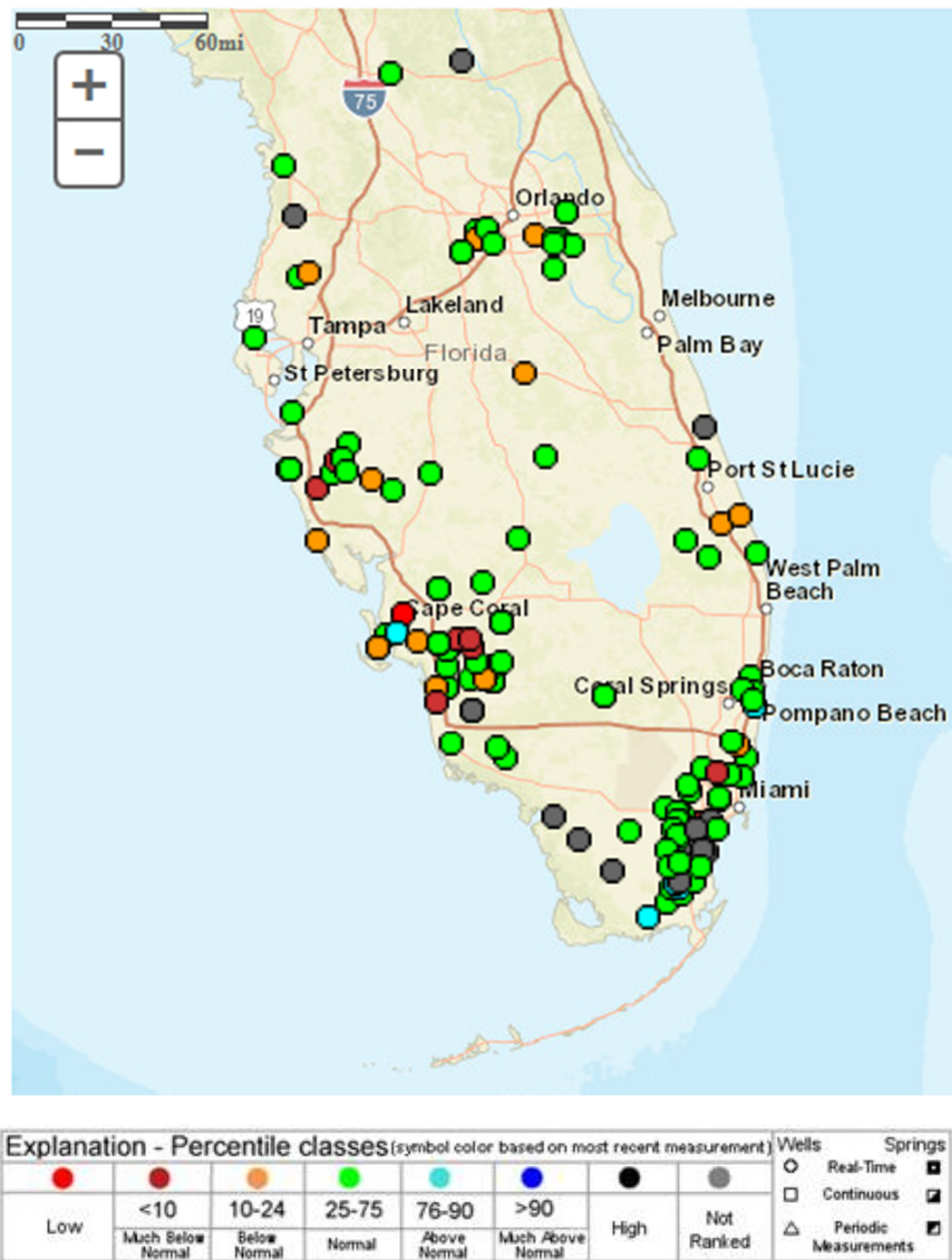


Figure 1. [Florida Real-Time Groundwater Level Network Map](#)

## Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -1.81 classified as “dry,” and is in the “moderate” risk category. The LOK stage for the next two months is projected to be in the Beneficial Use Sub-Band, and the risk to water supply is categorized as “high.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “below normal” for one month and “normal” for three months, leaving the one-month outlook in the “moderate” risk category and three-month outlook in the “low” risk category. The LOK Seasonal Net Inflow Forecast is in the “normal to extremely wet” 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 Water Conservation Areas 1 and 3A are above line 1 and are in the “low” risk category. Water Conservation Area 2A is in the “high” 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 4/9/2018 (ENSO La Nina Condition):

Status for week ending 4/9/2018:

District wide, Raindar rainfall was 0.33 inches for the week. Lake stage on 4/9/2018 was 13.58 ft, NGVD, down 0.26 ft from last week.

The updated April 2018 SFWMM Dynamic Position Analysis [percentile graph](#) for Lake Okeechobee show that the current lake stage is in the Low Operational Sub-Band.

The 2008 LORS Tributary Hydrologic Condition (THC) tributary is classified as **Dry**. The PDSI indicates dry condition and the LONIN is Dry. 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	Beneficial Use Sub Band	H
	Palmer Index for LOK Tributary Conditions	-1.81 (Dry)	M
	CPC Precipitation Outlook	1 month: Below Normal	M
		3 months: Normal	L
	LOK Seasonal Net Inflow Outlook	1.93 ft	L
	ENSO La Nina Years	(Normal to Extremely Wet)	L
	LOK Multi-Seasonal Net Inflow Outlook	2.49 ft (Normal)	M
WCAs	ENSO Conditions		
	WCA 1: Site 1-8C	Above Line 1 (15.76 ft)	L
	WCA 2A: Site S11BHW	Below Line 2 (9.60 ft)	H
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (9.07 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**