

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: February 27, 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. Over half 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 mostly in the lower 10th to 24th 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 22.57, 20.92, and 17.94 feet, well above the fourteen feet agricultural cut-off. The majority of UEC surficial aquifer wells are in the median percentile range for this time of year. Surface and groundwater levels decreased in about two thirds of the Lower East Coast (LEC) monitoring stations over the past week. Approximately fifty percent of the Biscayne aquifer monitor wells are at median levels, forty percent are in the upper 76th to 90th percentile range, with the remainder in the lower 10th to 24th percentile range. Groundwater levels are on the low side in the Homestead area.

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. Approximately two thirds of the Lower Tamiami aquifer wells are at median levels, with most of the remainder in the lower 10th to 24th percentile range. The three quarters of the Sandstone aquifer monitor wells are at median levels for this time of year. Approximately two thirds of the Mid-Hawthorn aquifer monitor wells are at median levels or higher, with the remainder in the lower 10th to 24th percentile range. **Figure 1** summarizes current water level conditions.

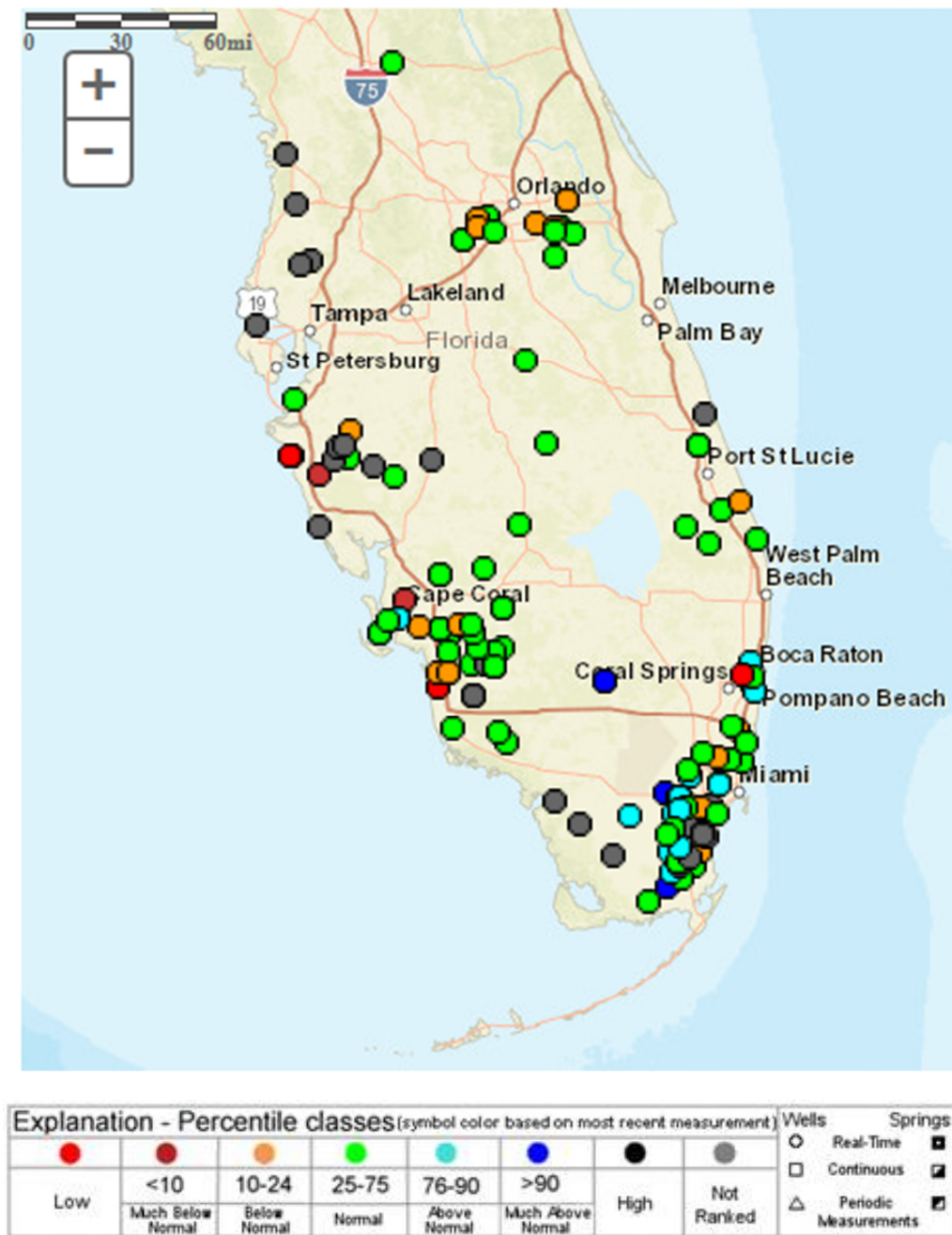


Figure 1. [Florida Real-Time Groundwater Level Network Map](#)

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -0.15 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 and three-month outlooks in the “moderate” 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 “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 2/26/2018 (ENSO La Nina Condition):

Status for week ending 2/26/2018:

District wide, Raindar rainfall was 0.11 inches for the week. Lake stage on 2/26/2018 was 14.93 ft, NGVD, down 0.11 ft from last week.

The updated February 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 **Normal**. The PDSI indicates Normal 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	Low Sub Band	M
	Palmer Index for LOK Tributary Conditions	-0.15 (Normal)	L
	CPC Precipitation Outlook	1 month: Below Normal	M
		3 months: Below Normal	M
	LOK Seasonal Net Inflow Outlook	0.65 ft	M
	ENSO La Nina Years	(Dry)	
	LOK Multi-Seasonal Net Inflow Outlook	2.40 ft (Normal)	
WCAs	ENSO La Nina Years		
	WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average	Above Line 1 (16.53 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (11.69 ft)	L
LEC	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (9.70 ft)	L
	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