#### 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:** June 13, 2017

**SUBJECT:** Water Supply Report

## **District-wide Conditions**

Surface and groundwater levels generally increased throughout the District over the last week. Approximately half of United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) within the District boundaries are in the lower 10th to 24th percentile range, with the remainder at median levels. Surface 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 21.29, 19.38, and 19.39 feet. Two thirds of UEC surficial aquifer wells are in the 76<sup>th</sup> to 90<sup>th</sup> percentile range for this time of year. Surface and groundwater levels increased across the Lower East Coast (LEC) monitoring stations. Water levels are a little low in Everglades National Park, and parts of C-111 basin. The majority of the USGS Biscayne aquifer monitor wells are within their median percentile range or higher with the recent rain.

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

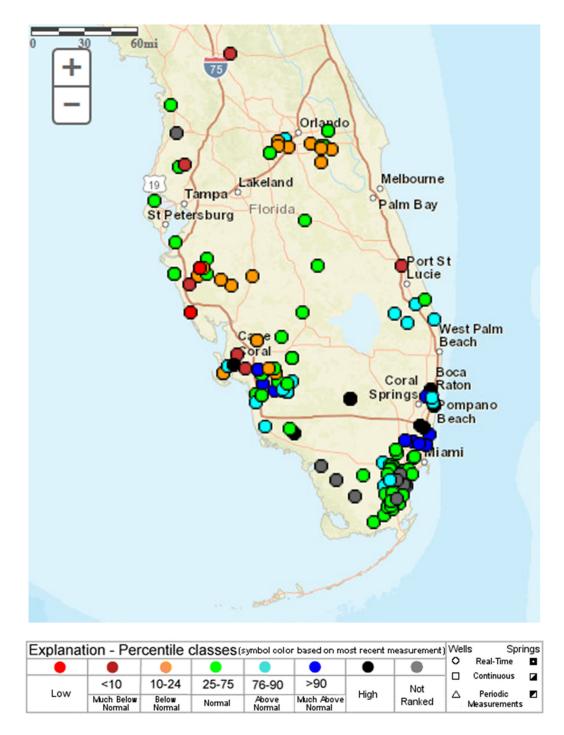


Figure 1. Florida Real-Time Groundwater Level Network Map

### Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -2.32 classified as "extremely dry," and is in the "high" risk category. The LOK stage for the next two months is projected to be in the Water Shortage Use Sub-Band, and the risk to water supply is categorized as "high." The Climate Prediction Center's (CPC) Precipitation Outlook is projected as "normal" for one month and "normal" for three months, leaving both the one month outlook and the three month outlook 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 "wet" 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 6/12/2017 (ENSO Neutral Condition):

## Status for week ending 6/12/2017:

District wide, Raindar rainfall was 7.50 inches for the week. Lake stage on 6/12/2017 was 11.77 ft, up 0.71 ft from last week.

The updated June 2017 SFWMM Dynamic Position Analysis <u>percentile graph</u> for Lake Okeechobee show that the current lake stage is in the Beneficial Use Operational Sub-Band.

The LORS2008 tributary <u>indices</u> are classified as **Very Wet**. The PDSI indicates dry condition and the LONIN is Very Wet. The classification is based on the wetter of the two.

Water Supply Risk Evaluation

Water Supply Kisk Evaluation			
Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Water Shortage Management Sub-Band	Н
	Palmer Index for LOK Tributary Conditions	-2.32 (Extremely Dry)	Н
	CPC Precipitation Outlook	1 month: Normal	L
		3 months: Normal	L
	LOK Seasonal Net Inflow Outlook ENSO La Nina Years	3.40 ft (Normal)	П
	LOK Multi-Seasonal Net Inflow Outlook	4.01 ft (Wet)	L
	ENSO La Nina Years		
WCAs	WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average	Above Line 1 (16.94 ft)	L
	WCA 2A: Site 2-17 HW	Above Line 1 (13.67 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (10.25 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