

## 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:** May 28<sup>th</sup>, 2019

**SUBJECT:** Water Supply Report

### **District-wide Conditions**

Surface and groundwater levels decreased throughout most of the District over the last week. The majority of the United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) within the District boundaries are at median levels or the upper percentile ranges 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 21.94, 20.03, and 17.65 feet, all above the fourteen feet agricultural cut-off. About two thirds of the stations are at median levels and higher in the UEC, with the remainder in the lower percentile ranges. Surface and groundwater levels decreased in most of the Lower East Coast (LEC) stations over the past week. The majority of the Biscayne aquifer monitor wells are at median levels for this time of year. Surface water levels are low in Everglades National Park and C-111 basin.

Groundwater levels decreased in most of the stations in the Lower West Coast (LWC) over the last seven days. Approximately twenty percent of the wells in the Surficial aquifer are in the upper percentile ranges, with the remainder at median levels. The majority of the Lower Tamiami aquifer wells are at median levels, with the remainder split between the upper and lower percentile ranges for this time of year. Approximately forty percent of the Sandstone aquifer monitor wells are at median levels, with the remainder split between the upper and lower percentile ranges. About sixty percent of the Mid-Hawthorn aquifer monitor wells are in the lower percentile ranges, with the remainder in the median and upper percentile ranges. **Figure 1** summarizes current water level conditions.

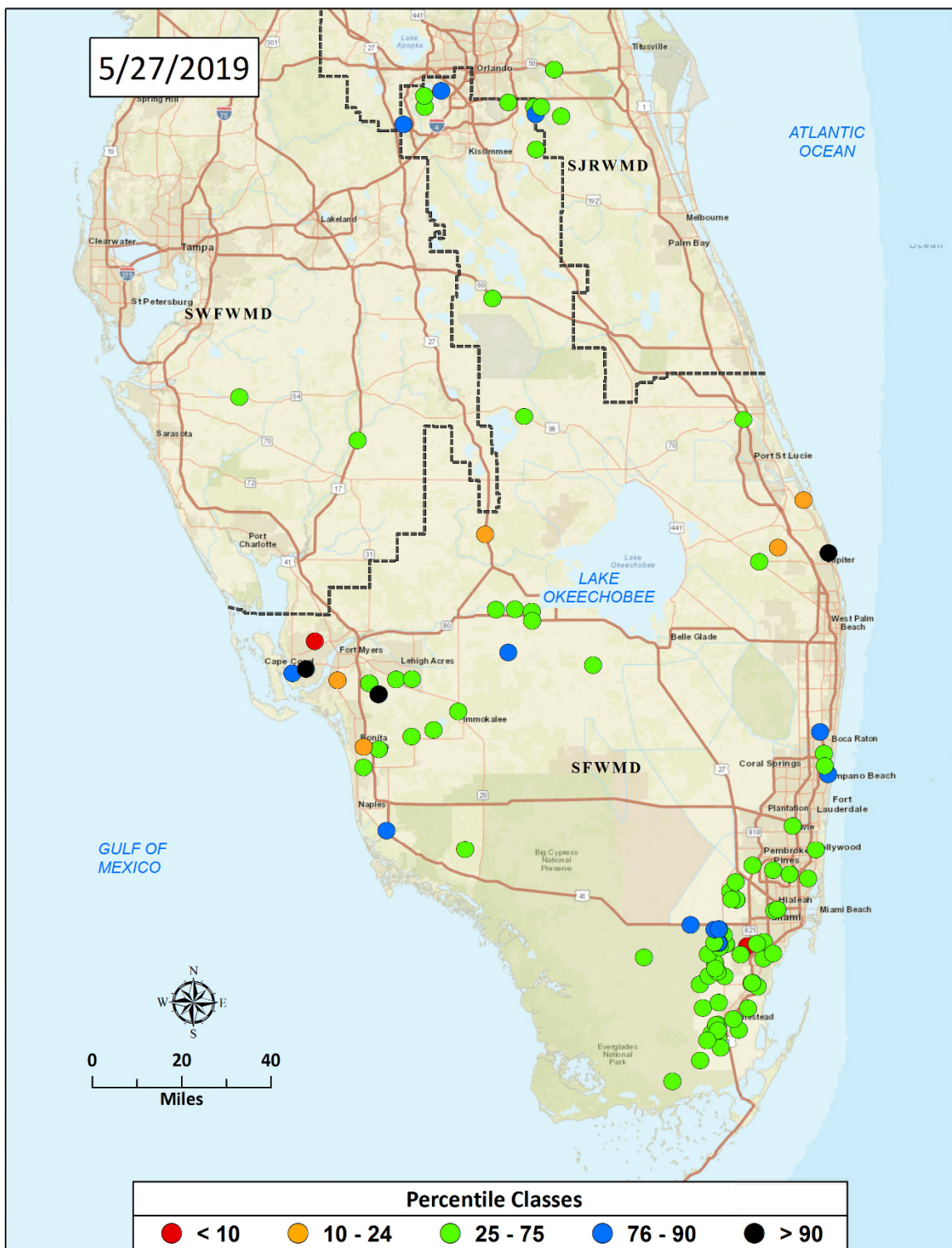


Figure 1. Real-Time Groundwater Level Map

## Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -0.80 classified as “normal to extremely wet,” and is in the “low” risk category. The LOK stage for the next two months is projected to be in the Water Shortage Management 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 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 “wet” with “low” risk to water supply. The stages in all Water Conservation Areas are above line 1 and 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 05/27/2019 (ENSO El Niño Condition):

#### **Status for week ending 05/27/2019:**

District wide, Raindar rainfall was 0.02 inches for the week. Lake stage on 5/27/2019 was 11.02 ft, NGVD, down 0.20 ft from last week. The updated May 2019 SFWMM Dynamic Position Analysis [percentile graph](#) for Lake Okeechobee show that the current lake stage is in the Beneficial Use Sub-band. The LORS2008 Tributary Hydrologic Conditions (THC) are classified as **Normal**. The PDSI indicates normal conditions 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	Water Shortage Management Band	H
	Palmer Index for LOK Tributary Conditions	-0.80 (Normal to Extremely Wet)	L
	CPC Precipitation Outlook	1 month: Normal	L
		3 months: Normal	L
	LOK Seasonal Net Inflow Outlook	2.77 ft	L
	ENSO Forecast (positive)	(Normal to Extremely Wet)	
	LOK Multi-Seasonal Net Inflow Outlook	3.46 ft (Wet)	
WCAs	ENSO Forecast (positive)		
	WCA 1: Canal Gauge (Site 1-8C)	Above Line 1 (15.70 ft)	L
	WCA 2A: Site 2-17 HW	Above Line 1 (11.93 ft)	L
LEC	WCA-3A: 3 Station Average (Site 63, 64, and 65)	Above Line 1 (9.10 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**