

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 30th, 2019

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels showed mixed trends throughout 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. The majority 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 21.37, 18.97, and 15.51 feet, all above the fourteen feet agricultural cut-off. About half of the stations are at median levels 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 vast majority of the Biscayne aquifer monitor wells are at median levels and the upper percentile ranges 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 and the upper percentile ranges for this time of year. Approximately sixty percent of the Sandstone aquifer monitor wells are in the lower percentile ranges, with the remainder mostly at median levels. 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.

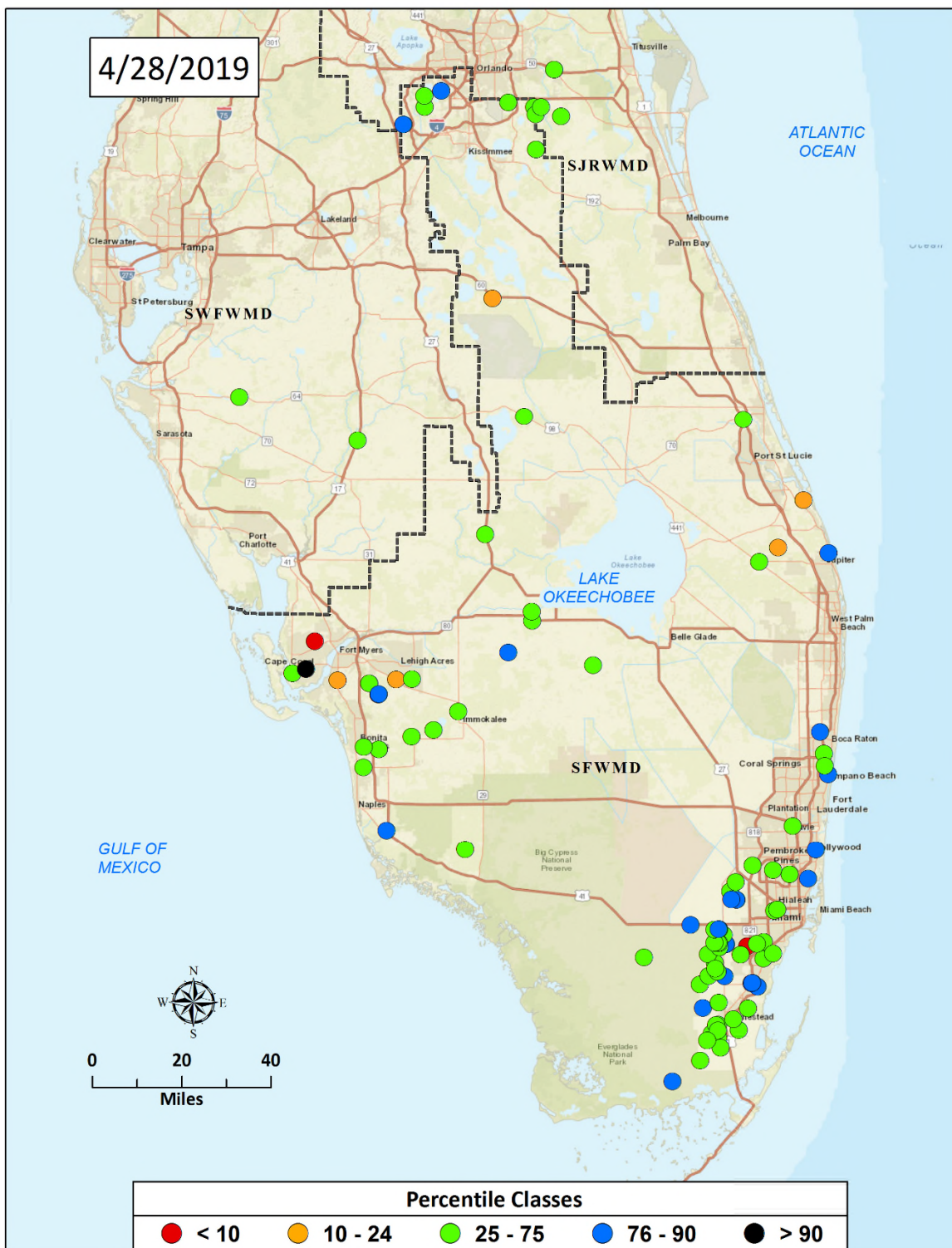


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -0.91 classified as “normal,” and is in the “low” 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 “above normal” for one month and “above 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 “normal” with “moderate” 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 04/29/2019 (ENSO El Niño Condition):

Status for week ending 04/29/2019:

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	-0.91 (Normal)	L
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	2.08 ft (Normal to Extremely Wet)	L
	ENSO Forecast (positive)		L
	LOK Multi-Seasonal Net Inflow Outlook	2.65 ft (Normal)	M
	ENSO Forecast (positive)		
WCAs	WCA 1: Site 1-8C	Above Line 1 (15.83 ft)	L
	WCA 2A: Site 2-17 HW	Above Line 1 (11.72 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64, and 65)	Above Line 1 (9.16 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