

MEMORANDUM

TO: John Mitnik, Interim Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: October 1st, 2019

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels showed decreasing trends 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 for this time of year. These wells are completed in the Floridan and surficial aquifers. Almost all of the surface water stations 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 22.44, 20.89, and 19.77 feet, all above the fourteen feet agricultural cut-off. Forty percent of surficial aquifer stations are in the lower percentile ranges, with the remainder at median levels and higher in the UEC. Surface and groundwater levels decreased in over two-thirds of the Lower East Coast (LEC) stations over the past week. Over half of the Biscayne aquifer monitor wells are at median levels and in the upper percentile ranges for this time of year, with the remainder in the lower percentile ranges.

Groundwater levels decreased in almost all of the stations in the Lower West Coast (LWC) over the last seven days. About sixty percent of the Surficial aquifer wells are at median levels and higher, with the remainder in the lower percentile ranges. Approximately seventy percent of the Lower Tamiami aquifer wells are in the lower percentile ranges for this time of year, with the remainder at upper percentile ranges. Approximately sixty percent of the Sandstone aquifer monitor wells are in the lower percentile ranges, with the remainder at median levels. Sixty percent of the Mid-Hawthorn aquifer monitor wells are also in the lower percentile ranges, with the remainder in the median and upper percentile ranges. Overall, rainfall for the month of September has been the lowest in eighty-eight years of record, with the LWC receiving twenty-three to thirty-four percent of normal rainfall, and District-wide thirty-three percent of normal rainfall. **Figure 1** summarizes current water level conditions.

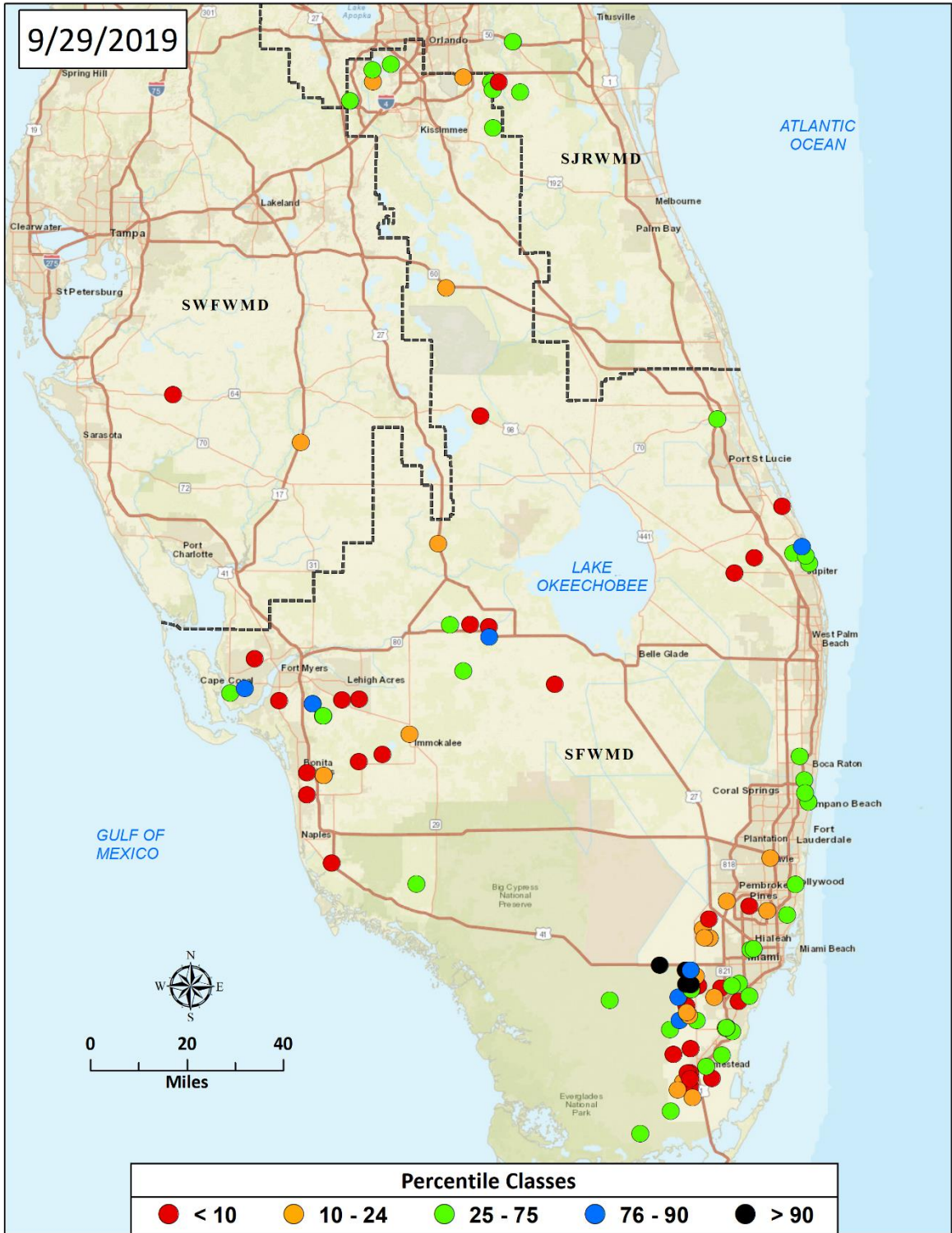


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -1.34 classified as “normal to extremely wet,” and is in the “moderate” risk category. The LOK stage for the next two months is projected to be in the Base-Flow Sub-Band, and the risk to water supply is categorized as “moderate.” 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 stage in WCA 1 is between line 1 and line 2, in the “moderate” risk category, while stages in WCA 2A and WCA 3A 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 09/30/2019 (ENSO Neutral Condition):

Status for week ending 09/30/2019:

Water Supply Risk Evaluation

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Base-Flow Sub-Band	M
	Palmer Index for LOK Tributary Conditions	-1.34 (Normal to Extremely Wet)	M
	CPC Precipitation Outlook	1 month: Above Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	1.32 ft	L
	ENSO Forecast (positive)	(Normal to Extremely Wet)	
	LOK Multi-Seasonal Net Inflow Outlook	1.42 ft (Normal)	M
ENSO Forecast (positive)			
WCAs	WCA 1: 3 Station Average (Site 1-7, Site 1-8T & Site 1-9)	Line 1- Line 2 (16.33 ft)	M
	WCA 2A: Site 2-17 HW	Above Line 1 (12.39 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64, and 65)	Above Line 1 (10.18 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