M E M O R A N D U M

TO: John Mitnik, Division Director, Operations, Engineering, and Construction

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: July 31, 2018

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 and medians levels or in their upper percentile ranges for this time of year. The majority of the surface water 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 20.84, 18.76, and 17.71 feet, all above the fourteen feet agricultural cut-off. Most of the UEC surficial aquifer wells are also in their upper percentile ranges for this time of year. Surface and groundwater levels increased in most of the Lower East Coast (LEC) stations over the past week. Approximately seventy five percent of the Biscayne aquifer monitor wells are at median levels or higher at this time, with the remainder in the lower percentile ranges.

Overall, conditions have remained fairly stable in the Lower West Coast (LWC). Groundwater levels decreased in about two thirds of the stations over the last seven days. Approximately fifty of the wells in the Surficial aquifer are in the upper percentile ranges for this time of year, with the remainder at median levels. About thirty percent of the Lower Tamiami aquifer wells are in the lower percentile ranges, and seventy percent are at levels median levels and higher. Approximately half of the Sandstone aquifer monitor wells are at median levels for this time of year, with the remainder split between the upper and lower percentile ranges. About one third of the Mid-Hawthorn aquifer monitor wells are at median levels, with the remainder also split between the upper and lower percentile ranges. **Figure 1** summarizes current water level conditions.

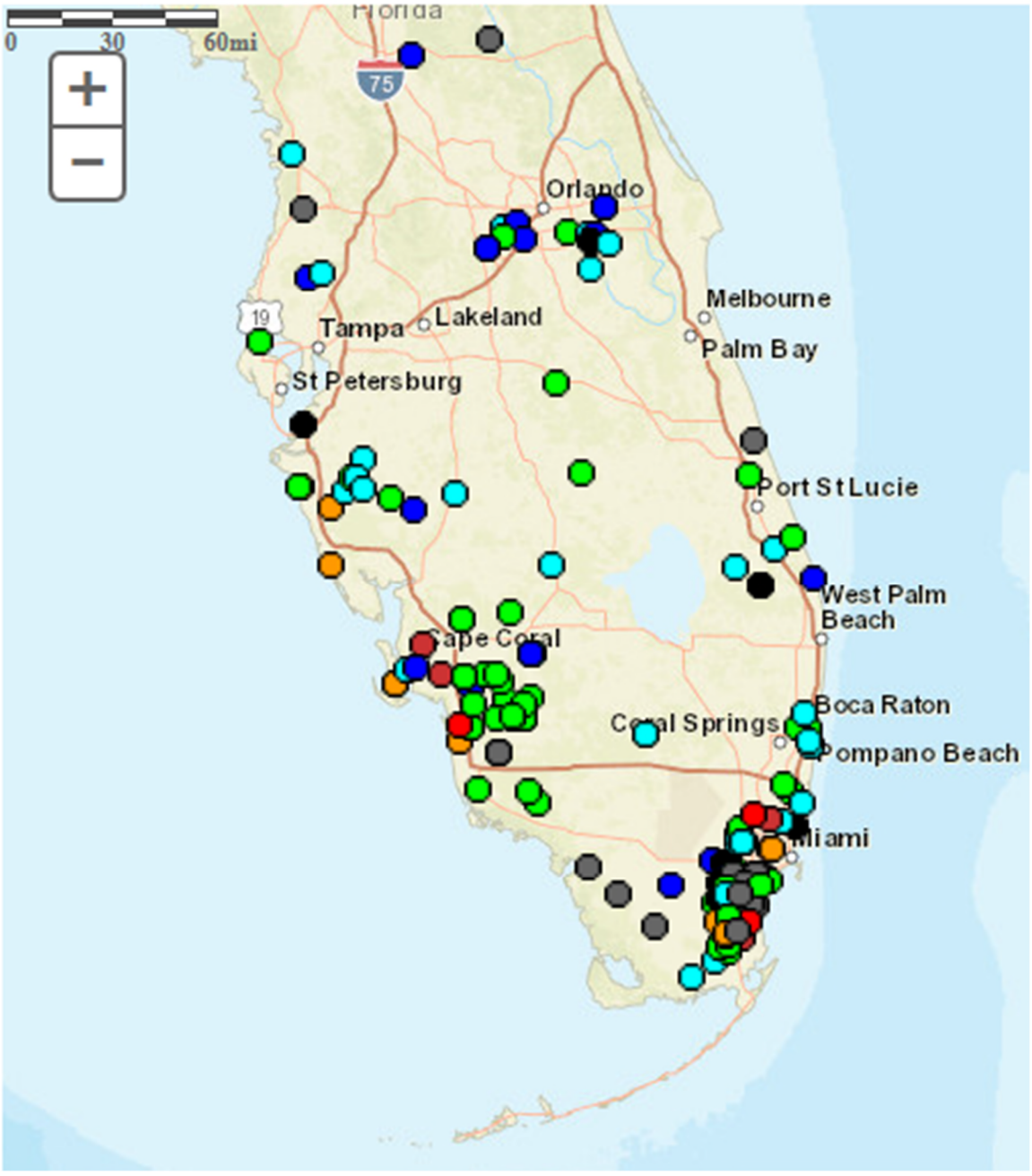

Figure 1. [Florida Real-Time Groundwater Level Network Map]

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is 1.66 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 Low flow Sub-Band, and the risk to water supply is categorized as "low." 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 Water Conservation Areas 1, 2A and 3A 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 7/30/2018 (ENSO Neutral Condition):

Water Supply Risk Evaluation

Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Low Sub Band	L
	Palmer Index for LOK Tributary Conditions	1.66 (Normal to Extremely Wet)	L
	CPC Precipitation Outlook	1 month: Normal	L
		3 months: Normal	L
	LOK Seasonal Net Inflow Outlook	2.93 ft (Normal to Extremely Wet)	L
	ENSO Years		
	LOK Multi-Seasonal Net Inflow Outlook	3.69 ft (Wet)	L
	ENSO Conditions		
WCAs	WCA 1: Station Average (Site 1-7, Site 1-8T, Site 1-9)	Above Line 1 (16.27 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (13.57 ft)	L
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Above Line 1 (10.60 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