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

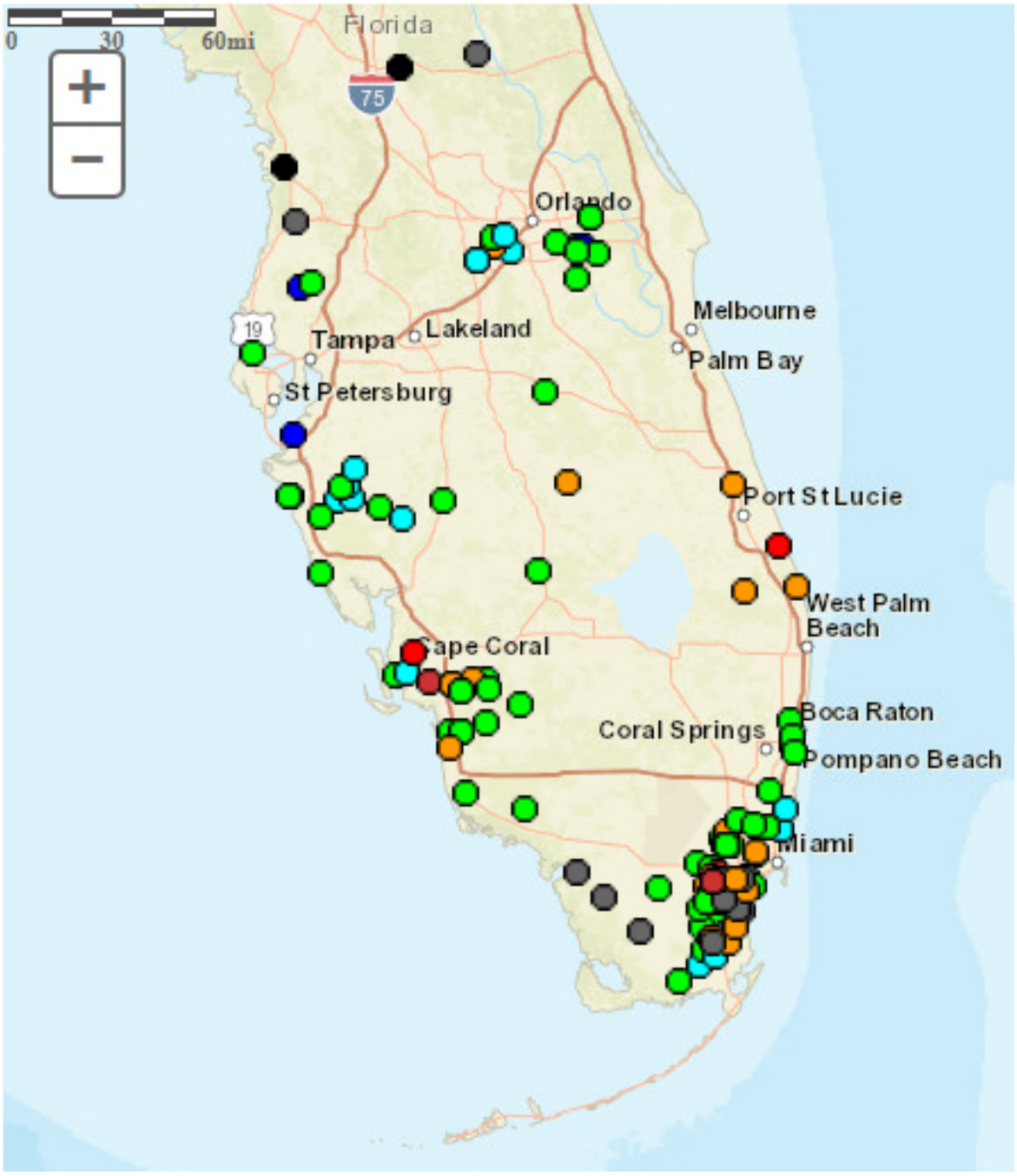
DATE: January 8th, 2019

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 medians levels for this time of year. About three quarters of 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 21.66, 19.07, and 19.83 feet, all above the fourteen feet agricultural cut-off. UEC surficial aquifer wells are generally in their lower percentile ranges. Groundwater levels are low for this time of year across this planning region. Surface and groundwater levels decreased in the majority of the Lower East Coast (LEC) stations over the past week. About two thirds of the Biscayne aquifer monitor wells are at median levels, with the remainder in the lower percentile ranges for this time of year.

Groundwater levels decreased in the majority of the stations in the Lower West Coast (LWC) over the last seven days. The majority of the wells in the Surficial aquifer are in their median percentile ranges. About sixty percent of the Lower Tamiami aquifer wells are at median levels for this time of year, with the remainder in the lower percentile ranges. Approximately half of the Sandstone aquifer monitor wells are at median levels, with the remainder also in the lower percentile ranges. About sixty percent of the Mid-Hawthorn aquifer monitor wells are in the lower percentile ranges, with the remainder at median levels. Some monitor wells in the Mid Hawthorn aquifer in the Cape Coral and Fort Myers areas have reached or are near historical lows for January. **Figure 1** summarizes current water level conditions.



Explanation - Percentile classes (symbol color based on most recent measurement)							
Low	<10	10-24	25-75	76-90	>90	High	Not Ranked
	Much Below Normal	Below Normal	Normal	Above Normal	Much Above Normal		

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 -2.07 classified as "extremely dry," and is in the "high" risk category (latest available datum is December 15th due to partial closure of the U.S. government). 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 "near 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" 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 between Line 1 and Line 2 and are in the "moderate" 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 01/07/2019 (ENSO Neutral Condition):

Status for week ending 01/07/2019:

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	-2.07* (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Near Normal	L
		3 months: Above Normal	L
	LOK Seasonal Net Inflow Outlook	1.39 ft (Normal)	L
	ENSO Forecast (positive)		
	LOK Multi-Seasonal Net Inflow Outlook	3.76 ft (Wet)	L
	ENSO Forecast (positive)		
WCAs	WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average	Line 1- Line 2 (16.16 ft)	M
	WCA 2A: Site 2-17 HW	Line 1- Line 2 (11.88 ft)	M
	WCA-3A: 3 Station Average (Site 63, 64 and 65)	Line 1- Line 2 (9.38 ft)	M
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.

*PDSI - using December 15th value as current data is unavailable due to partial closure of the U.S government

Figure 2. Water Supply Risk Indicators