

## 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:** March 19<sup>th</sup>, 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 and higher 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 22.42, 20.11, and 19.86 feet, all above the fourteen feet agricultural cut-off. Most stations are at median levels in the UEC. 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.

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

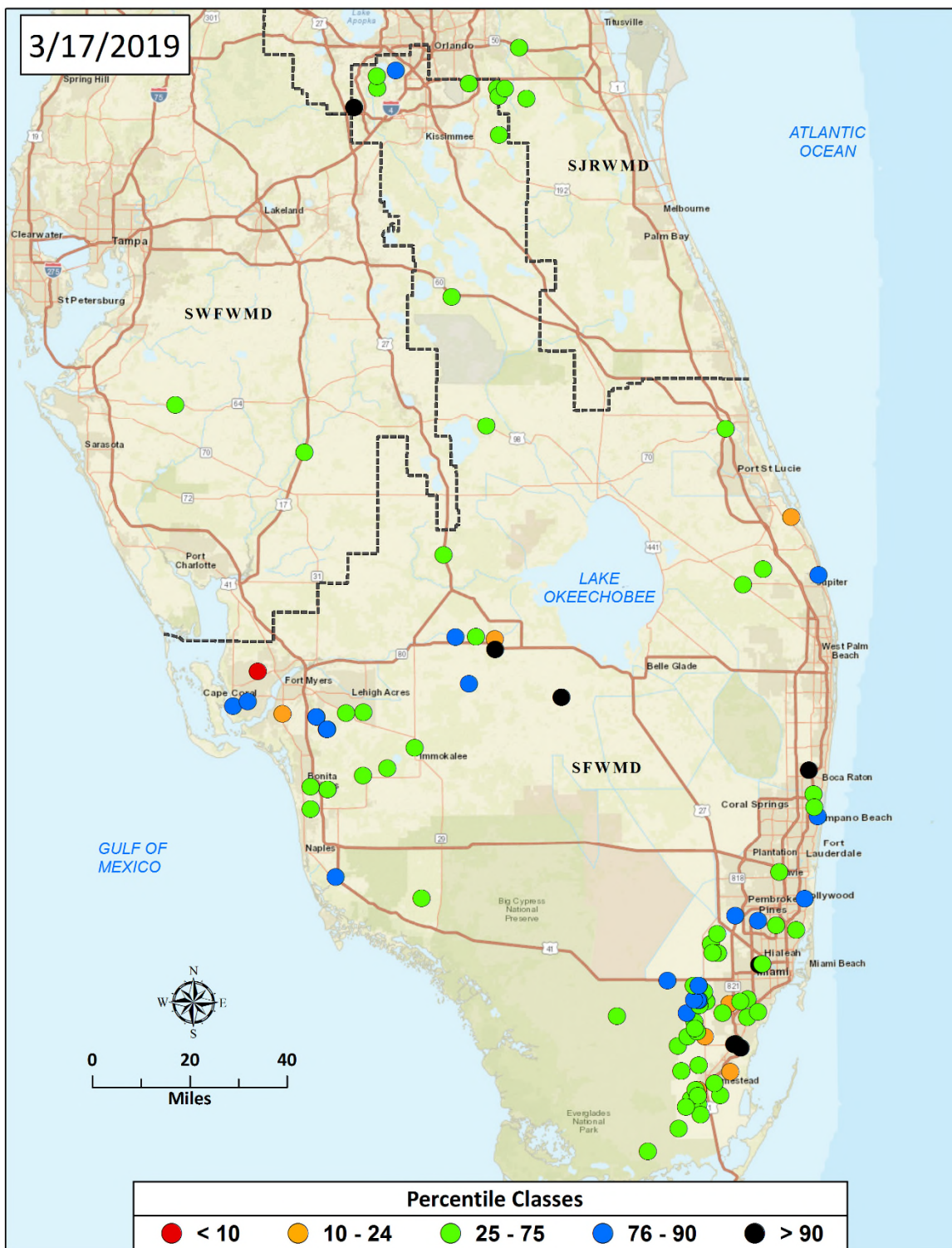


Figure 1. Real-Time Groundwater Level Map

## **Water Supply Technical Input to LORS2008**

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -0.78 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 “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 03/18/2019 (ENSO El Niño Condition):**

#### **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      | -0.78<br>(Normal)                    | L                          |
|                          | CPC Precipitation Outlook                      | 1 month: Normal                      | L                          |
|                          |  | 3 months: Above Normal               | L                          |
|                          | LOK Seasonal Net Inflow Outlook                | 1.41 ft                              | L                          |
|                          | ENSO Forecast (positive)                       | (Normal to Extremely Wet)            |                            |
|                          | LOK Multi-Seasonal Net Inflow Outlook          | 2.81 ft (Normal)                     | M                          |
| ENSO Forecast (positive) |  |                                      |                            |
| WCAs                     | WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average | Above Line 1 (16.34 ft)              | L                          |
|                          | WCA 2A: Site 2-17 HW                           | Above Line 1 (12.08 ft)              | L                          |
|                          | WCA-3A: 3 Station Average (Site 63, 64 and 65) | Above Line 1 (9.54 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**