

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: January 15th, 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 for this time of year. About half 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 21.38, 18.88, and 19.57 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 about half of the Lower East Coast (LEC) stations over the past week. About sixty percent of the Biscayne aquifer monitor wells are at median levels, with the remainder mostly in the lower percentile ranges for this time of year.

Groundwater levels decreased in over half of the stations in the Lower West Coast (LWC) over the last seven days. Approximately half of the wells in the Surficial aquifer are in their median percentile ranges, with the remainder in the lower 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 seventy percent of the Sandstone aquifer monitor wells are at median levels, with the remainder also in the lower percentile ranges. About fifty 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.

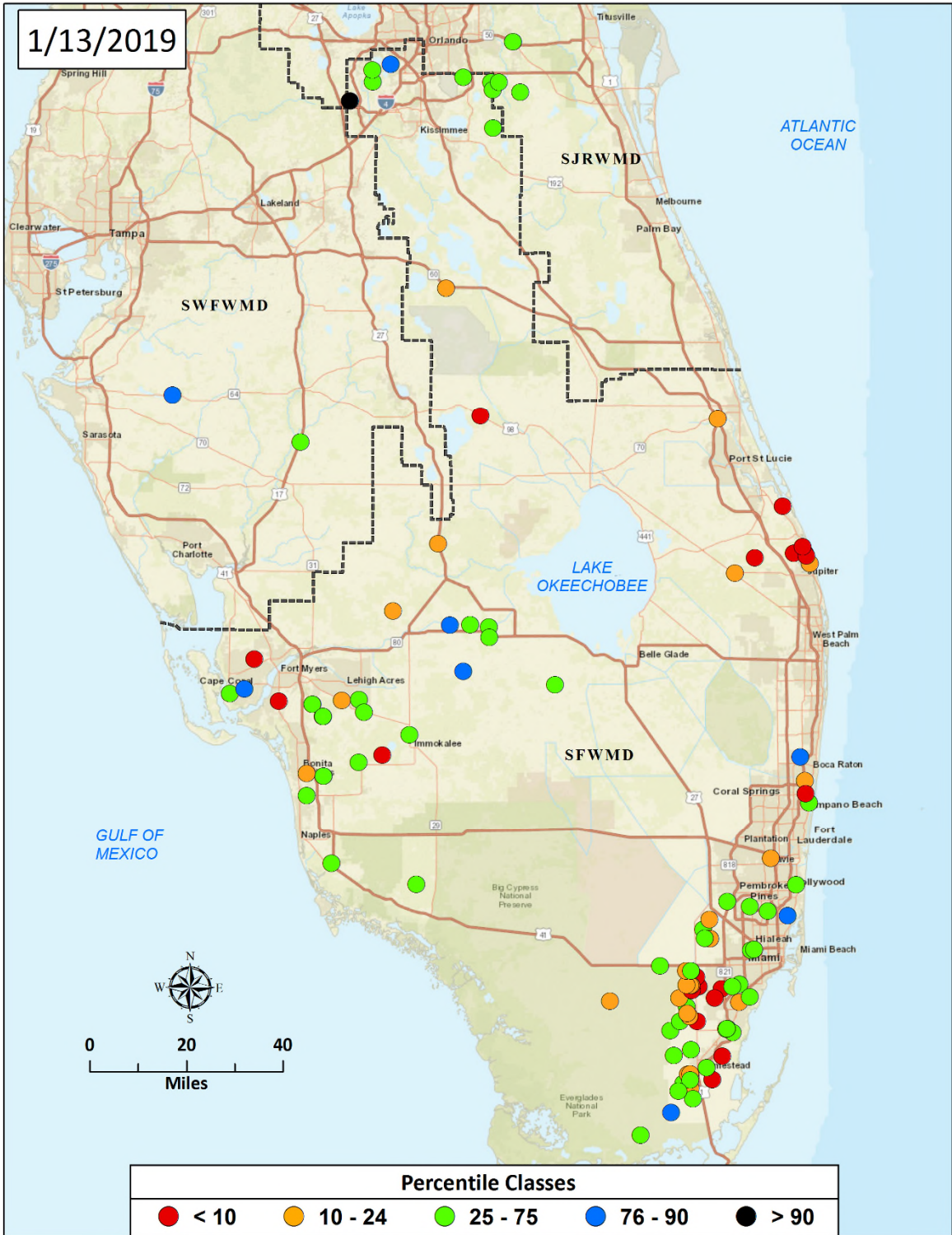


Figure 1. Real-Time Groundwater Level Map

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 “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 Water Conservation Area (WCA) 1 and WCA 3A are between Line 1 and Line 2 and are in the “moderate” risk category. The stage in WCA 2A is above line 1 and is 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 01/14/2019 (ENSO Neutral Condition):

Status for week ending 01/14/2019:

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: Normal | L |
| | | 3 months: Above Normal | L |
| | LOK Seasonal Net Inflow Outlook | 1.23 ft (Normal) | L |
| | ENSO Forecast (positive) | | |
| | LOK Multi-Seasonal Net Inflow Outlook | 3.63 ft (Wet) | L |
| ENSO Forecast (positive) | | | |
| WCAs | WCA 1: Site 1-7, Site 1-8T, & Site 1-9 Average | Line 1- Line 2 (16.08 ft) | M |
| | WCA 2A: Site 2-17 HW | Above Line 1 (11.77 ft) | L |
| | WCA-3A: 3 Station Average (Site 63, 64 and 65) | Line 1- Line 2 (9.28 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