

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: April 6th , 2021

SUBJECT: Water Supply Report

District-wide Conditions

Surface and groundwater levels showed generally decreasing trends throughout the District over the last week. About two thirds 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, with the remainder in the lower percentile ranges. The wells in the northern portion of the KB are completed in the Floridan aquifer and the wells in southern KB are completed in the surficial aquifer system. The majority of the surface and groundwater stations throughout 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 22.25, 19.52, and 19.89 feet, all above the fourteen feet agricultural cut-off. About half of the surficial aquifer stations are at median levels, with the remainder in the lower percentile ranges. Surface and groundwater levels decreased in most of the Lower East Coast (LEC) stations during the past week. Over half of the Biscayne aquifer wells in the upper percentile ranges for this time of year. The remainder is mostly at median levels. Groundwater levels are on the low side in the Homestead area and Everglades National Park.

Groundwater levels decreased in the majority of the stations on the Lower West Coast (LWC) over the last seven days. About half of the Surficial aquifer wells are at median levels for this time of year, with the remainder split between the upper and lower percentile ranges. Approximately half of the Lower Tamiami aquifer wells are in the upper percentile ranges, with most of the remainder at median levels. About two thirds of Sandstone aquifer monitor wells are in the lower percentile ranges for this time of year, with the remainder at median levels. Approximately two thirds of the Mid-Hawthorn aquifer monitor wells are also in in the lower percentile ranges, with the remainder in the upper percentile ranges. **Figure 1** summarizes current conditions.

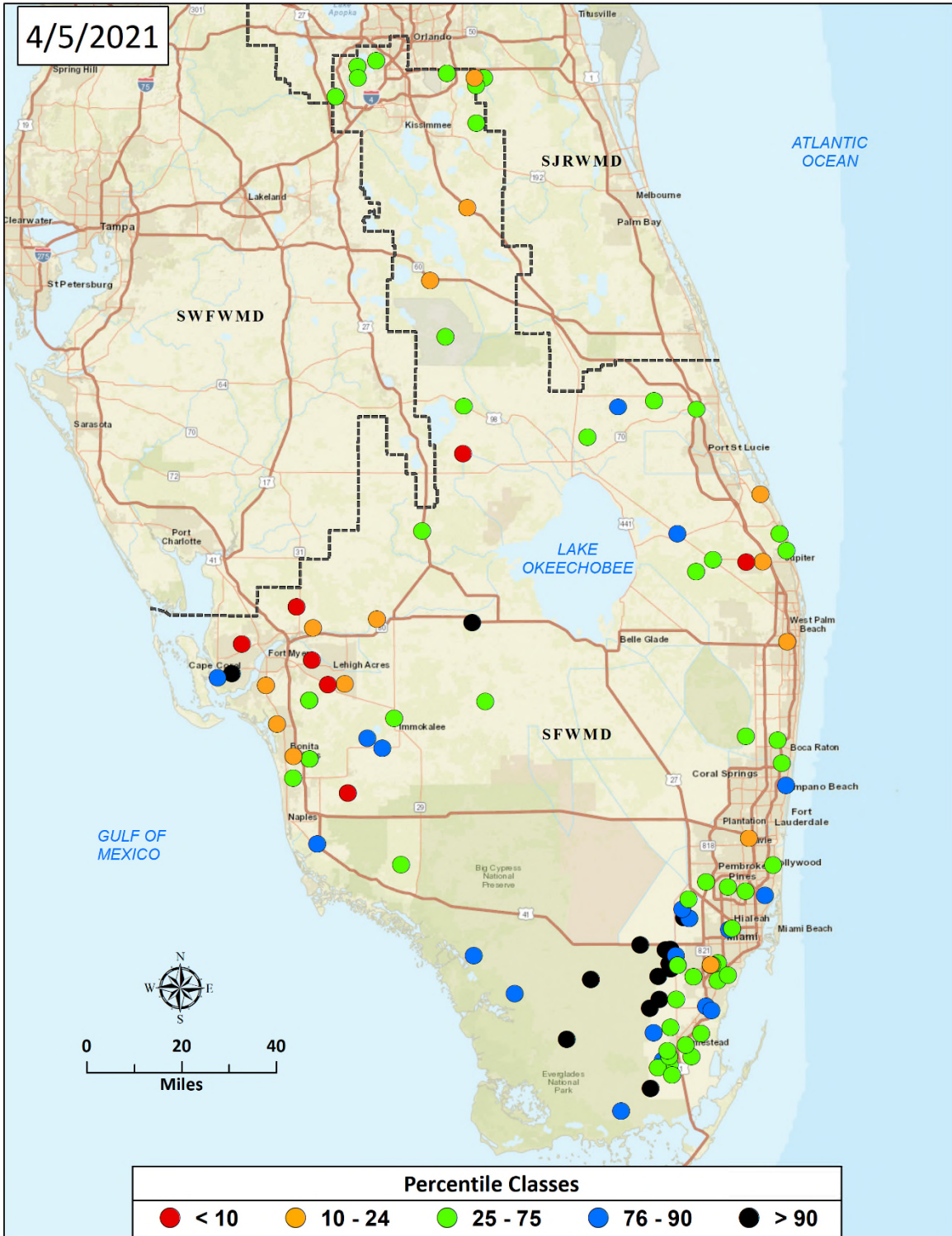


Figure 1. Real-Time Groundwater Level Map

Water Supply Technical Input to LORS2008

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions is -1.19 classified as “dry,” and is in the “moderate” risk category for water supply. 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 “below normal” for one month and “normal” for three months, leaving the one-month outlook in the “moderate” risk category and three-month outlook in the “low” risk category. The LOK Seasonal Net Inflow Forecast is in the “normal” category and is in the “low” risk category. The Multi-Seasonal Net Inflow Forecast is in the “normal” range with “moderate” risk to water supply. The stages in WCA 1, WCA 2A and WCA 3A are all above line 1 and are in the “low” risk category. Year-Round Irrigation Rule is in effect for the LEC Service Areas. All Service Areas are in the “low” risk category for water supply. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 4/5/2021 (ENSO Condition- La Nina):

Status for week ending 4/5/2021:

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 Drought Index for LOK Tributary Conditions | -1.19 (Dry) | M |
| | CPC Precipitation Outlook | 1 month: Below Normal | M |
| | | 3 months: Normal | L |
| | LOK Seasonal Net Inflow Outlook | 1.78 ft | L |
| | ENSO Forecast | Normal | L |
| | LOK Multi-Seasonal Net Inflow Outlook | 2.32 ft | M |
| Normal | | M | |
| WCAs | WCA 1: 3 Station Average (Site 1-7, 1-8T and 1-9) | Above Line 1 (16.26 ft) | L |
| | WCA 2A: Site S-11B HW | Above Line 1 (11.42 ft) | L |
| | WCA-3A: 3 Station Average (Site 63, 64 and 65) | Above Line 1 (9.39 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