

MEMORANDUM

TO: John Mitnik, Assistant Executive Director

THROUGH: Peter Kwiatkowski, Section Administrator, Resource Evaluation

FROM: SFWMD Staff Water Supply Advisory Team

DATE: May 16, 2023

SUBJECT: Water Supply Report

District-wide Conditions

About 80 percent the United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) are in the median and upper percentile ranges for this time of year. The wells in the Upper KB are mostly completed in the Floridan aquifer and the wells in the Lower KB are surficial aquifer system wells. Surface and groundwater levels decreased in all but one of the KB stations over the last seven days.

Upper East Coast (UEC) surface and groundwater levels decreased during the last week. Stages in UEC canals C-23, C-24, and C-25 are 22.37, 20.07, and 20.42 feet, all above the fourteen feet agricultural cut-off. All the UEC wells are in the median and upper percentile ranges for this time of year.

Ninety percent of the surface and groundwater stations in the Lower East Coast recorded decreases over the past seven days. All the LEC surficial aquifer system stations are in the median and upper percentile ranges for this time of year.

Groundwater levels decreased in all the Lower West Coast (LWC) stations over the last week. Approximately 80 percent of the surficial aquifer system wells are in the median and upper percentile ranges for this time of year. About half of the Lower Tamiami aquifer wells are in the median and upper percentile ranges for this time of year. About 85 percent of the Sandstone aquifer wells are in the lower percentile ranges. Approximately 60 percent of the Mid-Hawthorn aquifer wells are in the median and upper percentile ranges for this time of year.

Figure 1 shows a statistical comparison between current groundwater levels and long-term historical monthly average groundwater levels at representative wells throughout the District.

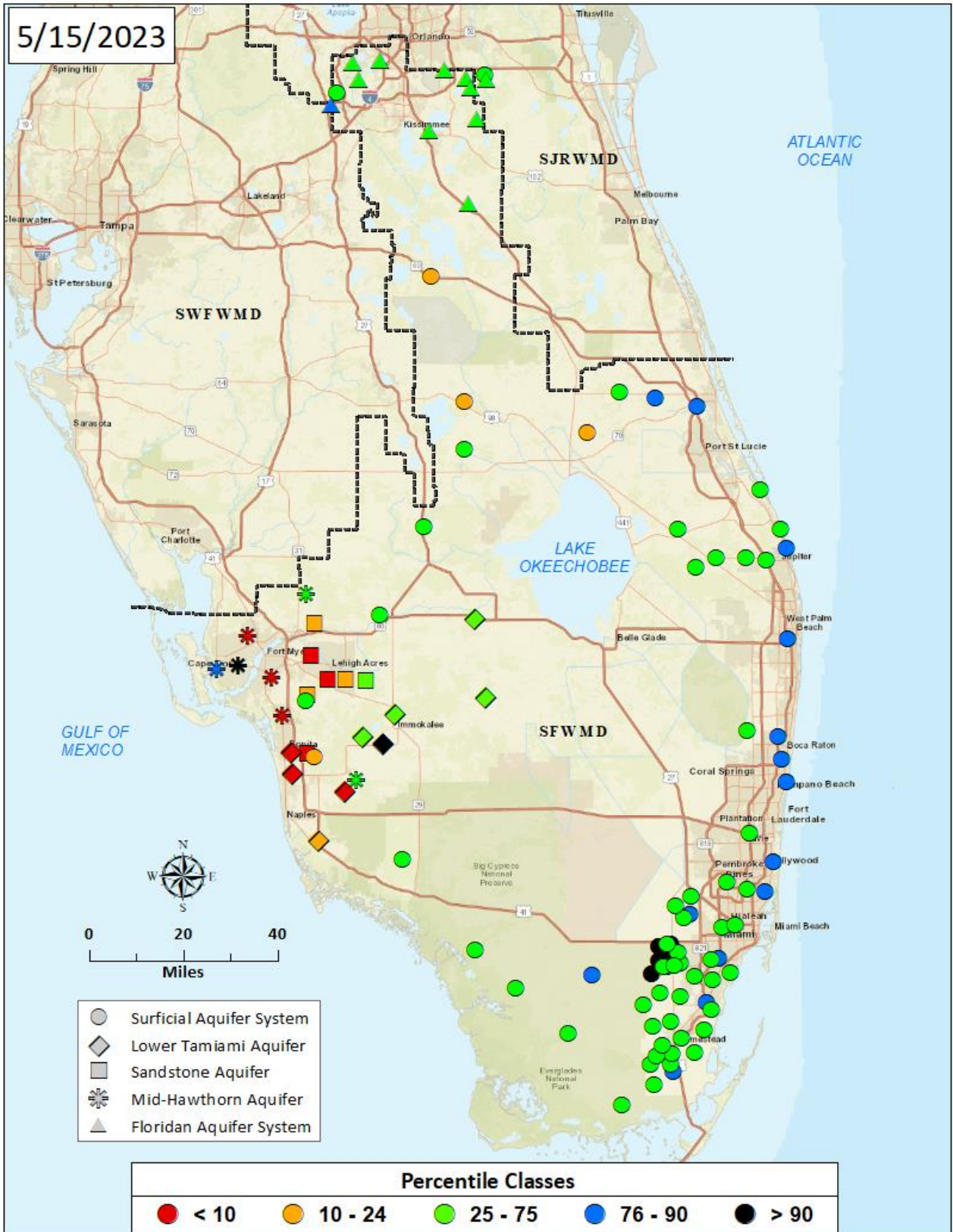


Figure 1. Current Groundwater Level Conditions

Water Supply Technical Input to LORS2008

The projected LOK stage for the next two months is Low Sub-Band, and the risk to water supply is categorized as “low”. The Palmer Drought Index for Lake Okeechobee (LOK) Tributary Conditions was -2.29 which is classified as “Extremely Dry” and is in the “high” risk category for water supply. The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “above normal” for both one month and three months, leaving both in the “low” risk category. The LOK Seasonal Net Inflow Outlook is “normal to extremely wet” and is in the “low” risk for water supply. The LOK Multi-Seasonal Net Inflow Outlook is in the “wet” range with “low” risk to water supply. The stages in WCA 1, WCA-2, and WCA-3 are all above line 1 and are in the “low” risk category. The Year-Round Irrigation Rule is in effect for the three LEC Service Areas. All three LEC Service Areas are in the “low” risk category for water supply. **Figure 2** summarizes the water supply risk indicators.

LORS2008 Implementation on 05/15/2023 (ENSO Condition- Neutral Watch):
Status for week ending 05/15/2023*:

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 Drought Index for LOK Tributary Conditions | -2.29 (Extremely Dry) | H |
| | CPC Precipitation Outlook | 1 month: Above Normal | L |
| | | 3 months: Above Normal | L |
| | LOK Seasonal Net Inflow Outlook | 2.48 ft | L |
| | ENSO Forecast | Normal to Extremely Wet | L |
| | LOK Multi-Seasonal Net Inflow Outlook | 3.35 ft | L |
| Wet | | L | |
| WCAs | WCA 1: 3 Station Average (Site 1-8C) | Above Line 1 (15.72 ft) | L |
| | WCA 2A: Site S-11B | Above Line 1 (11.80 ft) | L |
| | WCA-3A: 3 Station Average (Sites 63, 64, and 65) | Above Line 1 (8.97 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.

*- S351, S352, and S354 flow data for May 13th is not available from the USACE Daily Reports and was substituted with alternative data sources from SFWMD DBHYDRO. Lake Okeechobee stage data for May 13th is not available from the USACE Daily Reports and was substituted with 4-Gauge average from SFWMD.

Figure 2. Water Supply Risk Indicators