

## MEMORANDUM

**TO:** John Mitnik, Assistant Executive Director

**THROUGH:** Peter Kwiatkowski, Section Administrator, Resource Evaluation

**FROM:** SFWMD Staff Water Supply Advisory Team

**DATE:** August 23, 2022

**SUBJECT:** Water Supply Report

### **District-wide Conditions**

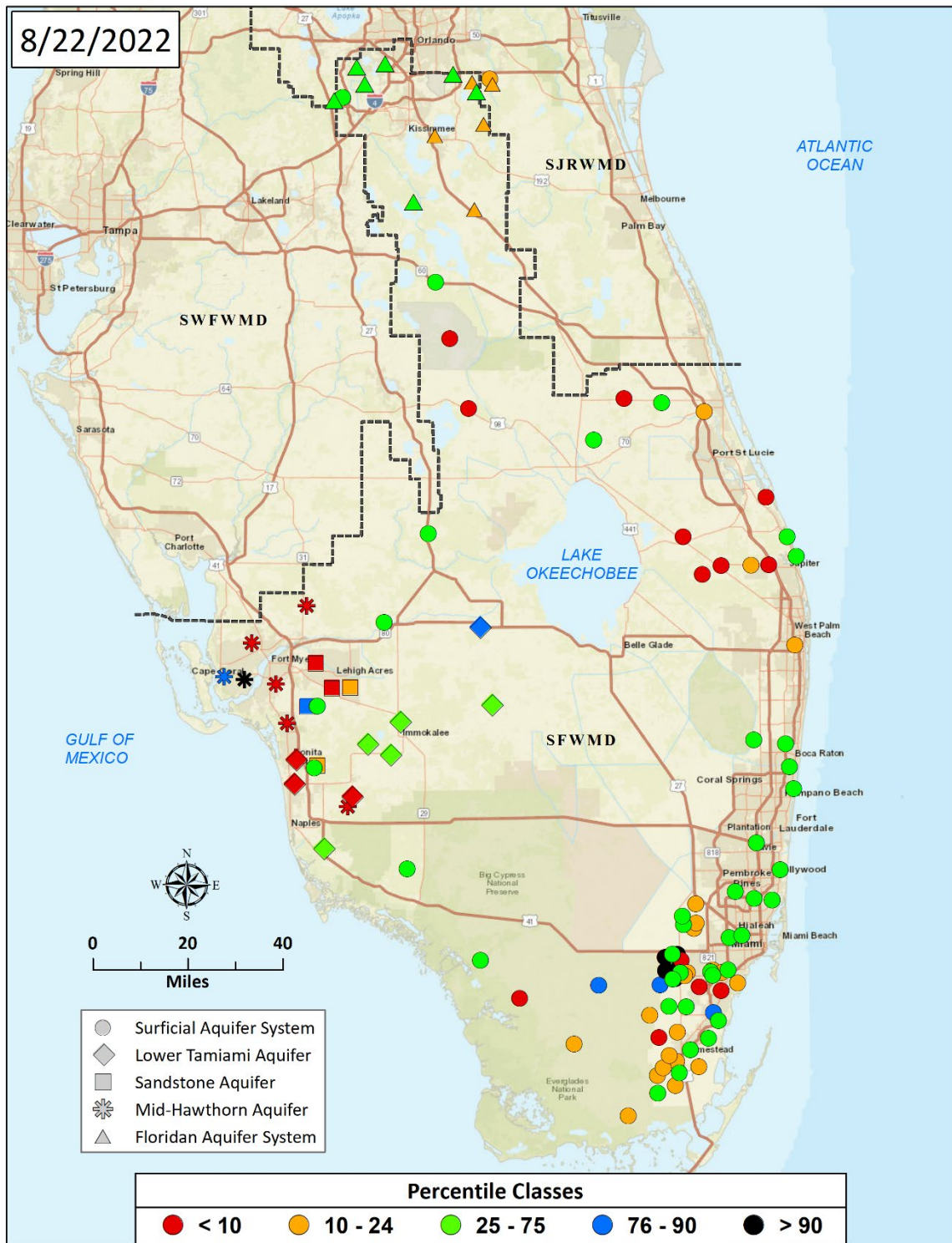
**Figure 1** shows a statistical comparison between current groundwater levels and groundwater levels for this time last year at representative wells throughout the District that collect real-time groundwater levels.

The water levels in about 40 percent of the United States Geological Survey (USGS) real-time wells in the Kissimmee Basin (KB) are in the lower percentile ranges for this time of year (Figure 1). 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 increased in about 70 percent of the Kissimmee Basin stations over the last seven days. Floridan aquifer well OSF-70R is in the “yellow” caution zone.

The Upper East Coast (UEC) groundwater stations showed mixed trends over the last week while all the surface water stations decreased. Stages in the UEC canals C-23, C-24, and C-25 are 20.96, 19.39, and 20.18 feet, all above the fourteen feet agricultural cut-off. About 60 percent of the UEC surficial aquifer stations are in the lower percentile ranges for this time of year (Figure 1), and surficial aquifer system well STL-213 is in the “yellow” caution zone.

About 60 percent of the surface and groundwater stations in the Lower East Coast (LEC) recorded decreasing trends over the past seven days. S-177 (C-111 basin) is in the “yellow” caution zone and S-176 (C-111 basin) is in the “red” caution zone. The majority the LEC surficial aquifer system stations are in the median and upper percentile ranges for this time of year (Figure 1).

In the Lower West Coast (LWC), about 85 percent of the groundwater stations decreased over the last week. About 85 percent of the surficial aquifer system wells and 60 percent of the Lower Tamiami aquifer wells are in the lower percentile ranges for this time of year (Figure 1). Sixty percent of the Sandstone aquifer wells are in the lower percentile ranges and 70 percent of the Mid-Hawthorn aquifer wells are in the lower percentile ranges (Figure 1). Mid-Hawthorn aquifer L-4820 in North Cape Coral is in the “red” caution zone.



**Figure 1.** Map showing a statistical comparison between current groundwater levels and groundwater levels for this time last year

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

The Palmer Index for Lake Okeechobee (LOK) Tributary Conditions was -4.00 on August 22, 2022 and is classified as “extremely dry,” and is in the “high” risk category for water supply. The projected LOK stage for the next two months is Base Flow, and the risk to water supply is categorized as “moderate.” The Climate Prediction Center’s (CPC) Precipitation Outlook is projected as “normal” for one month and “above normal” for three months, leaving the one-month outlook in the “low” risk category and three-month outlook in the “low” risk category. The LOK Seasonal Net Inflow Outlook is in the “normal to extremely wet” category and is in the “low” risk category. The LOK Multi-Seasonal Net Inflow Outlook is in the “dry” range with “high” 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.

**Figure 2. Water Supply Risk Indicators**

### **LORS2008 Implementation on 08/22/2022 (ENSO Condition- La Niña Watch)\*:**

Status for week ending 08/22/2022:

#### **Water Supply Risk Evaluation**

| Area        | Indicator   | Value                                | Color Coded Scoring Scheme |
|-------------|---|--------------------------------------|----------------------------|
| <b>LOK</b>  | Projected LOK Stage for the next two months       | Base Flow                            | M                          |
|             | Palmer Drought Index for LOK Tributary Conditions | -4.00<br>(Extremely Dry)             | H                          |
|             | CPC Precipitation Outlook                         | 1 month: Normal                      | L                          |
|             |   | 3 months: Above Normal               | L                          |
|             | LOK Seasonal Net Inflow Outlook                   | 1.12 ft                              | L                          |
|             | ENSO Forecast                                     | Normal to extremely wet              | L                          |
|             | LOK Multi-Seasonal Net Inflow Outlook             | 1.08 ft                              | H                          |
| <b>WCAs</b> | ENSO Forecast                                     | Dry                                  | H                          |
|             | WCA 1: Station Average (Sites 1-7, 1-8T, and 1-9) | Above Line 1 (16.40 ft)              | L                          |
|             | WCA 2A: Site 2-17                                 | Above Line 1 (12.26 ft)              | L                          |
|             | WCA-3A: 3 Station Average (Sites 63, 64, and 65)  | Above Line 1 (9.51 ft)               | L                          |
| <b>LEC</b>  | 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.

\*- Flows at S80 not reported from Aug 9, 2022 and were assumed to be zero