

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

MEMORANDUM

TO: Governing Board

FROM: Darlene Velez, Chief, Office of Water Resources

THRU: Tom Mirti, Deputy Executive Director, Water and Land Resources

DATE: July 31, 2020

RE: Agricultural Water Use Monitoring Report

BACKGROUND

In September 2012, the District began a program of water use monitoring for agricultural water use reporting on wells of 8" diameter or greater. Where possible, agricultural water use is estimated using monthly power consumption records provided by the electrical power provider. Estimation by power use is the most cost-effective method of water use reporting. To date, farmer agreements authorizing the District to receive power usage reports directly from the cooperatives are in effect on 707 (133.3 MGD) monitoring points.

Not all withdrawal points are suitable for estimation using power consumption. Diesel-powered pumps and complex interconnected irrigation systems still require direct methods of monitoring. The District employs telemetry to conduct water use monitoring on diesel-power systems. There are currently 270 (49.2 MGD) telemetry systems installed by the District for this purpose.

Some withdrawal points have very limited use and are monitored by individual site visits, typically less than 0.05 MGD each. There are currently 496 (34.8 MGD) limited use monitoring points in the District. Some users monitor their water use and report that data to the District. There are currently two (0.3 MGD) self-monitored points.

To date, the District has permitted 1,762 (251.2 MGD) irrigation wells which include a water use monitoring condition, of which 1,520 (222.8 MGD) wells are active, i.e., the wells have been drilled already. Of the 1,520 active wells, 1,478 (217.6 MGD) are being monitored as of July 13, roughly 97.2% of existing active wells (97.7% of allocation) with water use permit monitoring conditions.

Of the remaining estimated 42 (5.2 MGD) active stations that currently will require water use monitoring, nine (0.5 MGD) are diesel- or gas-powered systems requiring District telemetry, 29 (4.0 MGD) are electric systems, and four (0.7 MGD) systems still require identification. There are 232 (28.4 MGD) proposed stations (that is, the wells are yet to be drilled); 45 (4.5 MGD) are expected to be diesel or gas, 149 (20.6 MGD) are expected to be electric, and 38 (3.3 MGD) are yet to be determined.

Since April 2017, the District has consistently had over 94% of active wells and permitted allocation being monitored. The attached figures show the progress made on these efforts since 2016 for the number of wells monitored (Figure 1), total permitted allocation monitored (Figure 2), and percent of active wells monitored (Figure 3).