

MEMORANDUM

TO: Governing Board

FROM: Darlene Velez, Office Chief, Water Resources

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

DATE: August 31, 2019

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 665 (126.3 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 292 (53.4 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 390 (28.9 MGD) limited use monitoring points in the District. Some users monitor their own water use and report that data to the District. There are currently five (0.4 MGD) self-monitored points.

To date, the District has permitted 1,695 (243.1 MGD) irrigation wells which include a water use monitoring condition, of which 1,405 (214.3 MGD) wells are active, i.e., the wells have been drilled already. Of the 1,405 active wells, 1,353 (209.0 MGD) are being monitored as of July 17th, roughly 96.3% of existing active wells (97.5% of allocation) with water use permit monitoring conditions.

Of the remaining estimated 52 (5.3 MGD) active stations that currently will require water use monitoring, 17 (1.2 MGD) are diesel- or gas-powered systems requiring District telemetry, 28 (3.1 MGD) are electric systems, and seven (0.5 MGD) systems still require identification. There are 281 (48.0 MGD) proposed stations (that is, the wells are yet to be drilled); 54 (4.4 MGD) are expected to be diesel or gas, 170 (19.2 MGD) are expected to be electric, and 46 (3.6 MGD) are yet to be determined.

DSV/pf