Landowner Incentive Program

McMullin Area Groundwater Sustainability Agency

Amended: October 31, 2023

Background:

The McMullin Area Groundwater Sustainability Agency (MAGSA) exists to seek and ultimately attain groundwater sustainability in cooperation with the other Groundwater Sustainability Agencies within the Kings Subbasin under the provisions contained in the California Sustainable Groundwater Management Act of 2014. As one of its functions under the legislation, MAGSA is required to monitor several key indicators for effects which may be considered unreasonable. One of these indicators is the loss of groundwater storage. In order to quantify the amount of groundwater storage lost from year to year, MAGSA needs to determine, with certainty, the actual quantity of groundwater being pumped from below its service area.

MAGSA has previously determined that the best way to accomplish that result would be to outfit each groundwater well within the MAGSA boundary with an electromagnetic flow meter which measures instantaneous groundwater flow coming from the well while at the same time keeping a running measure of the total groundwater produced from the groundwater well over a period of time. That is step one.

Step two is the reading, reporting and secure recording of the information provided by the flow meter on a regular, periodic basis. MAGSA has determined that the best available and most useful information necessary to assist in the accomplishment of MAGSA's ultimate goals is groundwater data collected on at least a monthly basis (on the first of each month for the prior month's extraction). The information will need to be read and reported to MAGSA, or MAGSA's designated landowner-contracted data management provider, on a continuous monthly basis.

The electromagnetic flow meters, which are specified under MAGSA Implementing Rules and Regulations (MIRR) for installation on each groundwater well, are required to be equipped with the ability to communicate with some newer evolving technology that allows for automatic reporting of the meter data to the database without the need for the landowner/well operator to manually read and report the data as described above. The savings in time and accuracy is a welcome convenience. For an additional cost, the landowner/well operator, in addition to the purchase and installation of the electromagnetic flow meter, will also purchase and install the necessary remote telemetry hardware and software, which will thereafter allow for the automatic transfer of the required readings into the landowner-subscribed secure database account without any other action on the landowner/well operator's part. That is step three.

When the landowner/well operator has arranged for the data management contractor to collect the monthly reporting information from his or her well and has installed the remote telemetry equipment for automatic reporting of the required monthly inputs, the data needs to make its way into a MAGSA-approved secure database for precise, accurate and confidential processing by MAGSA's data management contractor. MAGSA contracted for secure data management

subscription services for each landowner to provide for processing of the groundwater well information received from the landowner/well operators for each of the groundwater wells within the MAGSA boundary. The individual information for each groundwater well will be maintained separately to assure the highest level of confidentiality for the data received from it. MAGSA will only receive the aggregate of the total amounts of water periodically extracted from its groundwater supply without attribution for the raw individual well data. This is consistent with MAGSA policies requiring the highest level of confidentiality allowed by law for the data received. This is step four.

Once the information (data) has been received by the contractor, many valuable determinations can be made utilizing the data. First and foremost, it will allow for MAGSA landowner/well operators to know exactly how much total groundwater is being extracted within the MAGSA boundary (as compared to satellite-based or modeled estimates with variability of as much as 20-25% as is the current practice) and, equally as important, how much each individual landowner/well operator is pumping to meet their farming and operational needs. Information is critical. As the saying goes, "you can't manage what you don't measure."

In addition, the database allows for each landowner/well operator to access his or her "account" (much like a financial application) via a tablet or cellphone to ascertain where he or she stands relative to his or her allocation of groundwater on a near real-time basis. Lastly, the database managers will have the exact information necessary to qualify participating landowner/well operators to join the MAGSA water market once that market becomes fully established. The database manager provides all of these benefits via its monthly subscription to accomplish the data collection. That is step five.

As indicated above, the plan is clear for the outfitting of the well site, collection of data, reporting of the data and the management of the data, once processed. What else is there? Answer: time. MAGSA begins this journey toward sustainability with almost no information about actual pumping amounts. We are left with the less than accurate estimates of our effects on the basin condition. The sooner we can gain the cooperation of our landowner/well operators in effecting the data collection process, the sooner we will begin to provide the clear and accurate picture of where we are and where we need to go in this regard. Enter the incentive program…

Incentives:

In an effort to assist in the the acceleration of the acquisition and installation of the electromagnetic flow meters and the concurrent acquisition and installation of the remote telemetry to facilitate the most efficient and secure collection and transfer of the data to the database, MAGSA has applied for and received a USBR WaterSMART grant that allows for the offer of the following cash incentive to those landowner/well operators who complete all of the pre-conditions associated with each part of the process.

Well Registration

The incentive listed hereafter is conditioned upon the landowner/well operator having "registered" all of the groundwater well sites on his, her or its lands; and

Electromagnetic Meters

1. For those landowner/well operators possessing proof of purchase of a MAGSA Implementing Rules and Regulations (MIRR) - compliant electromagnetic flow meter, and upon verification of satisfactory installation thereof by MAGSA, for each groundwater well site on their lands, either currently compliant with the MIRR or having completed the same by no later than January 31, 2025, MAGSA shall provide a cash rebate for each such well site as hereinafter set forth; and

.

Remote Telemetry

For those landowner/well operators complying with the sections pertaining to **Well Registration** and E**lectromagnetic Meters** above and:

1. For those landowner/well operators possessing proof of purchase of a MIRR-compliant remote telemetry hardware configuration, and upon verification of satisfactory installation thereof by MAGSA, for each groundwater well site on their lands, having completed the same by no later than January 31, 2025, MAGSA shall provide an additional cash rebate for each such well site as hereinafter set forth; and

Subscription for Data Management Services

For those landowner/well operators complying with the sections pertaining to **Well Registration**, **Electromagnetic Meters**, and **Remote Telemetry,** and:

For those landowner/well operators possessing proof of subscription for an initial five year period to the MIRR-compliant data management service, and upon verification of satisfactory enrollment by MAGSA, for each groundwater well site on their lands, having completed the same by no later than January 31, 2025, MAGSA shall provide an additional cash rebate for each such well site as hereinafter set forth; and