URNRD Moisture Probe Program

Annual Report

DNR Contract 1108

The URNRD was awarded a $86,400 grant by the Natural Resources Commission in December 2018 and executed a contract with the Department of Natural Resources in February 2019. The funds are to be used to incentivize the use of soil moisture probes within the URNRD to help reduce irrigation applications and preserve groundwater. This report includes the time period of project inception through the end of March.

Project Progress

Almost immediately after the grant award was announced, the URNRD advertised the availability of cost-share funds to reduce the cost of soil moisture probes. Notice was placed in four area newspapers and on the URNRD website. URNRD staff also contacted dealers of probes so they could make their customers aware of the program. When publicizing the program, we noted that it was made possible by the Water Sustainability Fund.

After a contract between URNRD and DNR was executed in early February, we began accepting applications for probe cost share. The financial arrangement under the program has participants paying the full cost of the probes, being reimbursed by the URNRD for half the costs and the URNRD then requesting reimbursement for 60% of that amount paid to the participant by the URNRD. WSF funds. Reimbursement from the WSF would be sought for 60 percent of the cost. For example, if a probe cost $1,700, the irrigator would pay the full amount to the vendor. After

doing so, the URNRD will pay the irrigator $850 The URNRD will then request reimbursement from the state of $510 (60% of $850).

The following rules were established for the program:

- Maximum cost for each probe in 2019 is $1,300.
- Applications are accepted until all funds have been obligated on a first-come, first-serve basis.
- Cost share can be applied to all probe-related services so long as the cost of the probe is included.
- Participants cannot receive cost share from NRCS on the same probes cost-shared by the URNRD.
- Probes must be used within Perkins, Chase or Dundy Counties, the three counties that comprise the URNRD.
- Participants must make data from the probes available to the URNRD if requested.
- Each participant can receive cost share for up to three probes.

Since we began accepting applications in early to mid February 24, applications to receive cost share for 57 probes on approximately 7,410 acres have been received. Contracts have been sent to all applicants allowing them to participate once the contracts are executed. The URNRD has reimbursed two participants for half the cost of six probes. When applying for the grant, we anticipated cost-sharing 80 probes for each year of the two-year project. At the current rate applications are being received, we believe this estimate will be relatively accurate. Should this number of probes be cost-shared in 2019 on approximately 10,400 acres, we anticipate reduced water usage over the upcoming irrigation season of about 1,730 acre feet assuming average water use reductions of 2"/acre from use of probes.

Upcoming Activities

Applications will be accepted over the spring until all available funds under the program are obligated. Based on experience, we expect most reimbursement requests will be made over the late summer and into the fall and winter for probes used during the 2019 irrigation season. Beginning in February 2020, we expect to begin accepting applications for cost share on probes used in 2020.

This summer, the URNRD will keep in touch with farmers using the variety of probes on the market to monitor their experiences using the probes. In previous years, most comments have been positive, and we relay those positive experiences about use of probes preventing over-watering to other farmers considering probes in hopes that it encourages them to use the technology. Low commodity prices made us speculate that interest in probes may wane because of their cost but this is not occurring thus far. I believe this is due to the belief that use of probes can reduce water-pumping costs and that cost savings is potentially greater than the cost of the probes so long as cost share is available.

Thank you for funding the program and feel free to contact me with any questions.

Nate Jenkins, URNRD