The Central Nebraska Public Power and Irrigation District recently received confirmation that it has received grant funds to implement the second year of its E-67 Canal telemetry project.

The Nebraska Environmental Trust provided $65,460 in funding for year two of the three-year project. The grant will enable Central to add 25 sites to the 26 sites equipped with telemetry components in 2015 through the assistance of a $61,380 Trust grant.

The telemetry project, officially known as the “Centralized Water Use Database for Irrigation Water Management in the CNPPID,” gathers water use and environmental data to achieve improved water management, conservation and water quality by irrigation customers in the E-67 area.

The telemetry equipment employs an automated communications process to gather data from remote points and transmit the data to receivers for monitoring. The equipment consists of UHF radio transmitters, digitized flow meters, automated rain gauges and solar panels. The system also includes two automated weather stations in the E-67 area that measure climatic data necessary to determine crop-water use.

A nearby base station collects the data and sends it to a server where it is processed into a graphical data base format that can be accessed by producers using desktop computers, tablets or smartphones. Producers use the near real-time data to make irrigation management decisions that help sustain water supplies and protect water quality.

In addition to the Nebraska Environmental Trust and Central, other project partners include McCrometer, Inc., which provided discounted equipment and the weather stations, and Nebraska Extension at the University of Nebraska-Lincoln, which will provide educational services to producers on the advantages and economic value of precision irrigation.

Central intends to complete equipment installation on the remaining 35 sites in the E-67 area in 2017 (for a total of 86 sites) pending confirmation of a third year of funding from the Trust. The E-67 irrigation system consists of 18 miles of underground pipeline and 3 miles of membraned-lined canal. It provides surface water deliveries to more than 5,700 acres of farm ground in Gosper County, southeast of Johnson Lake.

The Nebraska Environmental Trust uses revenue from the Nebraska Lottery to provide grants for programs and projects that preserve, protect and restore the state’s natural resources.

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