



CONSERVATION ENHANCEMENT ACTIVITY

E614A

CONSERVATION STEWARDSHIP PROGRAM

Adding telemetry to a watering facility to monitor water levels remotely

Conservation Practice 614: Watering Facility

APPLICABLE LAND USE: Farmstead, Pasture, Range, Forest, Associated Ag Land

RESOURCE CONCERN: Energy

ENHANCEMENT LIFE SPAN: 10 Years

Enhancement Description

This enhancement will conserve energy by eliminating unnecessary travel to check water for animals by installing a telemetry system in an existing watering facility. The telemetry system measures the water level in a water storage tank or trough and sends the reading by satellite or wi-fi signal to software on a computer or cell phone. The software logs the data and provides alerts if the water level indicates a problem with water flow in the watering facility.

In addition to conserving energy, the system will allow the land manager to quickly fix water delivery issues that can save water and prevent soil erosion when a failure does not stop water flow to the watering facility.

The system also protects the health of animals (livestock and wildlife) when a failure in the watering system does not deliver water to a tank or trough.

This enhancement ensures that animals receive adequate water, which is necessary for regulation of body temperature, growth, reproduction, lactation, digestion, lubrication of joints, eyesight, and as a cleansing agent.



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Criteria

- Installation of telemetry on a watering facility to monitor water levels remotely.
- Proof of subscription to monitoring software program or equivalent.

Documentation and Implementation Requirements:

Participant will:

- ☐ Prior to implementation, provide the location, either with a map or GPS coordinates, of each watering facility where a telemetry system is planned to be installed.
- ☐ Prior to implementation, work with NRCS on a water budget to ensure that the minimum water needs are provided for the planned number of livestock and wildlife.
- ☐ During implementation, keep documentation telemetry has been installed and make available upon request documentation of use annually to monitor water levels including:
 - A map or GPS coordinates of watering facilities where telemetry has been installed.
 - Photos showing the sensor installed on the watering facility.
 - Receipts and operation manuals of the system purchased.
 - Documentation of subscription to monitoring program (App) or equivalent if Wi-Fi is being used to monitor water levels.

NRCS will:

- ☐ Prior to implementation, provide and explain the implementation and documentation requirements for the practice, Watering Facility (Code 614) and enhancement E614A.
- ☐ Prior to implementation, ensure that each watering facility where this enhancement is planned meets the basic criteria in the conservation practice standard, Watering Facility (Code 614).
- ☐ Confirm that telemetry was installed on a functioning watering facility that meets the basic criteria of the NRCS conservation practice standard for Watering Facility (Code 614).



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NRCS Documentation Review:

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name _____ Contract Number _____

Total Amount Applied _____ Fiscal Year Completed _____

NRCS Technical Adequacy Signature

Date