Monitoring Remote Livestock Watering Systems

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Key Points

- Remote livestock watering system reliability has been identified as a barrier for livestock producers to adopt the technology.
- Alarm systems can monitor remote watering sites to make the systems more reliable.

Introduction

Livestock producers use remote watering systems to provide an alternative to watering directly out of creeks, dugouts, and springs. These systems are often far from the power grid and use batteries to power the watering system. Producers can be reluctant to adopt this technology because of a lack of trust in the technology, and the need to check the systems for battery recharge and pump functionality. Failure of these two components can leave livestock without water for extended periods of time.

Alberta Agriculture and Rural Development, with funding from the Growing Forward 2 Stewardship Program, identified existing alarm systems that could be installed on remote livestock watering sites and evaluated a small selection of the systems on remote watering sites.

Methods

Three alarm systems were chosen to install on remote watering sites. Producers using remote livestock watering systems were identified and asked to participate in the evaluation of the alarm systems. The alarm systems were installed at the remote watering sites and configured to notify the producers in the event of low water levels in the trough and/or low battery voltages. The producers were then asked to provide feedback on the effectiveness of the monitoring systems.

Results and Discussion

Initial feedback from producers has been favorable. Producers appreciate the fact that the monitoring system alerts them when problems occur. This gives the producers more confidence in their remote watering systems and allows them to reduce the frequency of site visits required to check their remote watering systems.

Alberta Agriculture and Rural Development will continue to demonstrate the monitoring systems on livestock watering systems and collect producer feedback. A factsheet is currently being developed to provide producers with information on monitoring systems for remote livestock watering sites.