Lower Niobrara

Natural Resources District

Water Use Reduction
Cost-Share Program

50% of Funding Provided by

The Water Sustainability Fund

Lower Niobrara
Natural Resources District

410 Walnut Street
P.O. Box 350
Butte, NE 68722-0350

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LNNRD Water Use Reduction Cost-Share Guidance

The Lower Niobrara Water Use Reduction Cost-Share Program was developed to provide assistance to LNNRD producers in attaining the equipment needed to help manage irrigation water use more effectively and efficiently. Funds in the amount of $360,000 have been awarded to LNNRD from the Water Sustainability Fund and matched with $240,000 from LNNRD and participating partners, to make this $600,000 opportunity possible. Available irrigation water management devices are flow meters, telemetry, soil moisture probes, and other irrigation management technologies. Individual device guidance is given in the following pages.

General Cost-Share Guidance

75% cost-share of the suggested retail price of the device or devices, up to a maximum of $1,500 per field practice, will be provided to applicants upon receipt of an invoice, installation inspection by LNNRD staff if needed, and Board of Directors approval. Devices must be installed according to the manufacturer's guidelines and within the boundaries of the LNNRD. Producer caps may be put in place depending on the number of applications. Installation fees and device maintenance/repairs are to be covered by the applicant.

Data from cost-shared devices may be requested and/or collected by LNNRD staff.

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Flow Meter/Telemetry Guidance

The water user shall select the proper size, pressure rating, and operating range (minimum and maximum GRM) for his or her water flow meter installation and properly install the meter in accordance with the Lower Niobrara NRD's requirements and the manufacturer's instructions.

1. All meters shall be warranted to register not less than 98% nor more than 102% of the actual volume of water passing through the meter for all rates of flow within the meter size's range of flow.
2. The meter shall be equipped with a direct reading rate-of-flow indicator showing the instantaneous flow in gallons per minute. The meter registry shall have a visual, volume-recording totalizer which shall record in acre inches.
3. The meter shall be located in such a manner as to measure the entire flow, single well or combined wells, of an irrigating system at a sufficient point downstream of all sources connecting or at the pivot riser.
4. The meter must also be installed in such a manner that there shall be a full pipe flow of water at all times while water is being pumped.
5. Minimums of unobstructed, straight pipe runs, upstream and downstream of the meter installation must meet manufacturer's instructions. Turbulent or jetting flows created by valves, elbows, check vales, and other obstructions must be able to settle down and may require straightening vanes immediately upstream of the meter. The installation of straightening vanes can be used to lessen the amount of straight pipe run required at the installation location.
6. All meters must have an anti-reverse feature and an overrun bearing assembly.
7. Meters installed with telemetry must have the ability to communicate with our Producer Connect software.

The Lower Niobrara NRD maintains a list of approved flow meters that meet the District's specifications. This list is compiled on the basis of manufacturer specifications. This is not an endorsement of the individual products or manufacturers. If a producer preferred meter is not on the list, please contact LNNRD and we will conduct a review of the manufacturers specifications and may add meters to the list that meet Lower Niobrara NRD guidelines.

75% cost-share of the suggested retail price, up to a maximum of $1,500 per flow meter and/or telemetry, will be provided to applicants upon receipt of an invoice, installation inspection by LNNRD staff, and Board of Directors approval. Producer caps may be put in place depending on the number of applications. Installation fees are to be covered by the applicant.

Currently Approved Flow Meters

McCrometer Propeller Flow Meters

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Soil Moisture Probe Guidance

The participating producer shall select a reputable person or company that can provide and service their soil moisture probe of choice.

1. Soil moisture probes must be installed and calibrated according to the manufacturer's specifications including number of probes per field.
2. Probes must provide real-time data that can be viewed via cell phone, tablet, and/or computer.
3. Probes must provide moisture readings for at least 3 root zone depths.

Alternative probes and services may be considered upon request. LNNRD will not cost-share cash and carry type probes.

75% cost-share of the suggested retail price, up to a maximum of $1,500 per field, will be provided to applicants upon receipt of an invoice, installation inspection by LNNRD staff, and Board of Directors approval. Producer caps may be put in place depending on the number of applications. Installation fees are to be covered by the applicant.

Other Irrigation Technologies Guidance

Other irrigation technologies vary and will be ranked from newer next generation technologies down to nozzle replacements. The technology must help the producer use less irrigation water or use irrigation water more efficiently. The ultimate irrigation goal should be that growing season precipitation plus irrigation water applied, with an efficiency factor, equals crop ET. Technology that helps producers determine real-time ET rates will be prioritized. This would include products from Crop X, Arable, Lindsey, Valley, Reinke, and others.

75% cost-share of the suggested retail price, up to a maximum of $1,500 per field, will be provided to applicants upon receipt of an invoice, installation inspection by LNNRD staff, and Board of Directors approval. Producer caps may be put in place depending on the number of applications. Installation fees are to be covered by the applicant.

LNNRD Board approved 11/04/2024