

## **Water Sustainability Fund Progress Report**

**March 18, 2025**

**Water Use Reduction - LNNRD**

**Application #10093**

**Progress up to March 31, 2025**

**Project Start Date:** September 18, 2024

### **Timeline & Key Activities:**

- **October 24, 2024:** Water Use Reduction Cost-Share Guidelines mailed to all directors.
- **November 4, 2024:** LNNRD Board of Directors approved the Water Use Reduction Cost-Share Guidelines.
- **November 15, 2024:** Water Use Reduction Cost-Share Application was finalized and published on the LNNRD website.
- **November 19, 20, 22, 2024:** Water Use Reduction Cost-Share Brochures mailed to all households within the LNNRD District.
- **November 27, 2024:** Promoted Water Use Reduction Cost-Share on a local radio show.
- **December 1, 2024:** Began accepting applications for the Cost-Share Program.
- **February 24, 2025:** Promoted Water Use Reduction Cost-Share during the Nitrogen Certification Class in Butte.

### **Applications Received (as of March 31, 2025):**

- **Total Applications Received: 16**
- **Total Requested Funding: \$20,700.00**
  - **12 Flowmeter Applications**
  - **4 Soil Moisture Probe Applications**



# Lower Niobrara Natural Resources District

## LOWER NIOBRARA WATER REDUCTION COST-SHARE PROGRAM

COST-SHARE ASSISTANCE APPLICATION, PAYMENT CLAIM AND AGREEMENT

<b>IN ACCORDANCE WITH THE LNNRD'S WATER REDUCTION RULES AND REGULATIONS:</b>	DATE :	LANDOWNER/ TENANT:	
	SSN OR TIN:	ADDRESS:	
TELEPHONE NUMBER (AREA CODE):	CITY:	STATE:	ZIP CODE:

I (we) the undersigned, do hereby request cost-share assistance to help defray the cost of installing an irrigation flow meter. It is understood and agreed that:

1. The cost-share rate at which the NRD will cover approved irrigation water management devices shall be set at 75% or \$1500.00/field practice. Approved irrigation water management devices are flow meters, telemetry, soil moisture probes, and other management technologies.
2. The Landowner/Tenant will be responsible for all maintenance and upkeep of each approved irrigation water management device; all incurred expenses for required parts will be the responsibility of the Landowner/Tenant
3. The undersigned is responsible for reporting to the NRD any malfunctions or removal of the cost-shared flow meter. All work associated with the flow meter installation must be completed within 9 months of NRD approval date.
4. Any flow meter purchased as part of the NRD cost-share program shall be installed to meet all specifications of the manufacturer.
5. Meters must have a totalizer that reads in Acre-Inches and be installed with an anti-reverse mechanism and an overrun bearing.
6. NRD personnel shall be allowed access to the flow meter site for periodic inspection and verification of irrigation totals derived from the flow meter.
7. The undersigned shall be responsible for any costs of labor associated with the installation of the flow meter.
8. The Landowner/Tenant shall provide the LNNRD with a certificate of installation prior to the issuance of cost-share funding.
9. Cost-share will be based on an approved list of infield technologies provided to each applicant by the NRD and be applied towards purchase of a flow meter, flow conditioners, straightening vanes, check valves and canopy covers. Cost-share will be provided to a maximum \$1,500.00/field practice.
10. An approved application is required prior to installation, submittal of receipts by landowner/tenant indicates certification of true and proper charges for work done and paid and that no discounts or reduced cost were, or will be, received after submittal of receipt

APPLICANT REQUEST				
INFIELD TECHNOLOGY REQUEST	MANUFACTURER	TECHNOLOGY	ESTIMATED COST	
<input type="checkbox"/> FLOW METER	MAKE: _____ MODEL: _____	<input type="checkbox"/> FLOW METER	\$	_____
<input type="checkbox"/> TELEMETRY	MAKE: _____ MODEL: _____	<input type="checkbox"/> TELEMETRY	\$	_____
<input type="checkbox"/> SOIL MOISTURE PROBE	MAKE: _____ MODEL: _____	<input type="checkbox"/> SOIL MOISTURE PROBE	\$	_____
<input type="checkbox"/> OTHER TECHNOLOGIES	MAKE: _____ MODEL: _____	<input type="checkbox"/> OTHER TECHNOLOGIES	\$	_____
		<b>TOTAL ESTIMATED COST:</b>	\$	_____
LOCATION OF PRACTICE:	¼ SEC. _____	TWP. _____	RNG. _____	COUNTY _____
COST-SHARE ISSUED (NRD USE ONLY)				
REIMBURSABLE ITEM	COST	AWARDED	INSTALLATION LOCATION DETAILED DESCRIPTION	WELL #
<input type="checkbox"/> FLOW METER	\$ _____	\$ _____		
<input type="checkbox"/> TELEMETRY	\$ _____	\$ _____		
<input type="checkbox"/> SOIL MOISTURE PROBE	\$ _____	\$ _____		
<input type="checkbox"/> OTHER TECHNOLOGIES	\$ _____	\$ _____		
<b>TOTAL IN FIELD PRACTICE</b>	<b>\$ _____</b>	<b>\$ _____</b>		

I certify that the items for which payment is claimed will be furnished under authority of the law and that the charges are reasonable, proper, and correct and no part of the claim has been paid. I further certify that I am the owner or tenant of the above described property and agree that if any or all cost-shared items shall be removed, altered, or modified so as to lessen their effectiveness without consent of the Natural Resources District for a period of ten years after the date of receiving payment, that a portion of the claimed amount shall be refunded to the Lower Niobrara Natural Resources District. If title to this land is transferred to another party, it shall be my responsibility to advise the new owner that this agreement is in force and to obtain such new owner's acceptance of the responsibilities herein.

SIGNATURE OF LANDOWNER/TENANT: \_\_\_\_\_

DATE: \_\_\_\_\_

**LNNRD OFFICE USE ONLY**

<b>INSPECTION DATE:</b>			<b>SIGNATURE OF INSPECTING FIELD TECH OR AUTHORIZED REPRESENTATIVE:</b>		
<b>INSPECTION NOTES:</b>			<b>DATE RECEIVED</b>		<b>DOCUMENTATION RECEIVED</b>
					<input type="checkbox"/> COMPLETED APPLICATION <input type="checkbox"/> COST DOCUMENTS/RECEIPTS <input type="checkbox"/> W-9 <input type="checkbox"/> APPLICATION APPROVAL <input type="checkbox"/> OTHER
			<b>DATE APPROVED</b>		



# **Lower Niobrara Natural Resources District**

## **Water Use Reduction Cost-Share Program**

**50% of Funding Provided by  
The Water Sustainability Fund**



## **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.



## 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



## **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