

March 17, 2025

Nebraska Department of Natural Resources
301 Centennial Mall South
Lincoln, NE 68509

Re: WSF 2025 Annual Report #10073

This letter provides the second annual progress report for the Water Sustainability Fund (WSF) Grant #10073 for the Metropolitan Utilities District's (District) Water Conservation and Peak Demand Management project. The grant was awarded to the District on July 19th, 2023. The Grant application which describes the project, its tasks, and its original timeline can be found online at:

https://nrc.nebraska.gov/sites/default/files/doc/2023_10073_MUD_Water_Conservation_and_Peak_Demand_Management.pdf

1.) Current year project progress (April 1st, 2024, to March 14th, 2025):

▪ **Measurement and Monitoring:**

One thousand leak loggers were purchased and installed to actively monitor and identify system leaks. The implementation of leak logger has resulted in the quick identification significant leaks, resulting in long term water savings.

The District has developed a dashboard for customer water usage which will show average day, maximum day, and peak hours demands across the District's three primary pressure zones (e.g., Zone 1, Zone 2, and Zone 3).

▪ **Community Outreach and Education:**

The District developed a Community Water Management Plan in March 2024 outlining long-term water efficiency and short-term emergency plans to provide adequate water supply to meet customer needs. The plan identifies triggers and actions for varying levels of water demand urgency ranging from "0 – Normal Operations" to "5 – Water Quality Emergency."

A Water Conservation Education and Public Outreach Plan was developed in December 2024 to promote wise use of water resources and support long term conservation measures. The public education and outreach initiatives in the plan include water conservation tips and videos on the District's website, conservation messages in bill inserts, messages on social media accounts, and partnerships with local non-profit



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groups. The District also provides a \$75 rebate to customers who install rain shutoff devices or smart landscape irrigation controllers.

▪ **Quantification of Benefits and Results:**

Since the District began installing leak loggers, a total of 138 leaks have been detected. The estimated water and financial savings from early leak detection include:

- \$570,000 in savings for water remain repairs.
- 69,465,600 gallons of water saved through early leak detection in 57 water mains, 40 service lines, 37, hydrants, and 4 indoor plumbing failures.
- \$69,465 (\$1000/mg) saved from prevented water loss

2) Anticipated following years project work (April 2024 to March of 2025):

▪ **Measurement and Monitoring:**

We expect to install more endpoint devices on the 4-inch and larger meters. More leak loggers are also expected to be procured by the end of this period.

The District's Measurement Department evaluated options for expanding AMI metering and selected the Itron Temetra system. Implementation of the new system and new endpoints is expected in 2026.

▪ **Hydraulic Modeling – Scenario Analysis & Assessment:**

The District plans to continue to refine new customer usage patterns and peak flow analysis using AMI endpoint data collected by the monitoring devices to monitor and project long term usage trends.

3) Forecast or projected cash flow for remainder of the project:


The total project budget is \$500,975, with WSF contributing \$250,000, and the District funding the remaining amount.

One thousand Leak loggers purchased for \$1075 each for a total of \$1,075,000. The payment to Ecologic's also included \$40,000 for a set up charge for a total of amount \$1,115,000.

The NeDNR WSF has reimbursed MUD \$250,000, so all the funds have been spent. MUD is planning to continue the other tasks outlined in the application and complete the work in 2028.

The District appreciates the Nebraska Department of Natural Resources' continued support for measures that conserve water and manage peak water demands.

Sincerely,



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