DEPARTMENT OF HEALTH

Private Well Protection Pilot Grant Summaries

2021 - 2023

Horizon Public Health Arsenic Grant

Horizon Public Health was awarded \$100,000 for the arsenic pilot grant. The grant was from January 2021 to December 2022. Horizon Public Health contracted water testing with RMB Environmental Laboratories to offer free water testing kits and analysis for arsenic. These kits were distributed at various Soil & Water Conservation District (SWCD) and public health offices. Horizon Public Health spent \$8,674.84 for water test kits and analysis.

Table 1 shows the number and percent of arsenic exceeding the drinking water standard of 10 μ g/L. Arsenic results ranged from less than 2 μ g/L to 242 μ g/L.

County	Number of Arsenic Results	Number of Arsenic Results Above 10 µg/L	Percent of Arsenic Results Above 10 μg/L	Highest Arsenic Result (μg/L)
Grant	85	61	71%	242
Stevens	44	22	50%	63
Traverse	62	15	24%	52.2
Total	191	98	Average: 48%	Highest: 242

Table 1: Arsenic results from Horizon Public Health pilot grant.

Households that had elevated arsenic and met the application eligibility criteria were eligible for point of use (POU) reverse osmosis water treatment. To receive 100 percent financial assistance applicants needed to have a recent arsenic result 10 μ g/L or higher and be enrolled in a existing financial assistance program to assist low income, families, and/or veterans. The list was provided in the application. Of the households that received 100 percent financial assistance, the most common programs people were enrolled in were MN Care, Medical Assistance, Extra Help/LIS for Medicare Part D, and Free/Reduced School Lunches. Other applicants were enrolled in Child and Adult Care Food Assistance, Veteran Services, and Energy Assistance.

Of the 98 households that had elevated arsenic there were 38 households that received financial assistance to install a water treatment system. Of the 38 households:

- 14 households received 100 percent financial assistance
- 24 households recieved a 75 percent cost share
- The remaining 68 households with an arsenic test over 10 μg/L did not apply for financial assistance.

In the second year of the grant, the qualifications to receive financial assistance was opened up to anyone with a recent arsenic result 10 μ g/L or higher, with treatment reimbursement not to exceed \$1,800. This group received 75 percent cost share and if they had already installed a water treatment system, they were reimbursed.

The average cost for the POU reverse osmosis was \$2,391.46. Culligan, Aquarius, and Lee Well Drilling were the water treatment providers for these units. For households seeking reimbursements for already installed POU systems, any licensed water treatment specialist was accepted.

For communication costs, Horizon spent \$2,541.68 on postcards, United States Postal Service (USPS), and newspaper ads. Horizon did outreach in multiple ways, they placed ads in the Grant County Herald, Stevens County Times and Chokio Review. They also sent out multiple rounds of postcards.

Total cost:

\$65,206.50: Amount of financial assistance paid to eligible households

\$8,674.84: Total cost for RMB lab testing kits and lab analysis

\$2,541.68: Total cost for communications

\$23,576.98: Salary, fringe, travel, and supplies

Total spent of grant funding Horizon Public Health: \$100,000

\$82,773.19: Cost of the water treatment including dollars from participants above the cost share

Olmsted Soil and Water Conservation District Nitrate Grant

Olmsted Soil and Water Conservation District was awarded \$100,000 for the nitrate pilot grant. The grant was from March 2021 to April 2023. Olmsted SWCD contracted water testing with Southeastern Minnesota Water Analysis Laboratory (SEMWAL) to offer free water testing kits and analysis for nitrate, along with arsenic and manganese. These kits were distributed at various SWCD offices, public health offices, and WIC clinics. Olmsted SWCD spent \$14,419.05 for water test kits and analysis. Table 2 shows the number and percent of nitrate exceeding the drinking water standard of 10 mg/L.

County	Number of Nitrate Results	Number of Nitrate Results Above 10 mg/L	Percent of Nitrate Results Above 10 mg/L	Highest Nitrate Result (mg/L)
Fillmore	28	2	7%	12.9
Goodhue	26	10	38%	28.8
Houston	37	7	19%	19.1
Olmsted	18	1	6%	14.7
Wabasha	63	9	14%	17.7
Winona	21	8	38%	26.5
Total	193	37	Average: 19%	Highest: 28.8

Table 2: Nitrate results from southeast Minnesota by county.

Households that received financial assistance from the grant for mitigation had nitrate concentrations ranging from 10.5 mg/L to 25.1 mg/L. Of the 37 households with nitrate above 10 mg/L there were 14 households that received financial assistance to either install a water treatment system, construct a new well, or repair a well.

- One household received a 90 percent cost share to install a POU reverse osmosis system.
- 13 households received a 50 percent cost share
- 23 households did not apply for financial assistance

To receive 90 percent financial assistance, applicants needed to have a recent nitrate result 10 mg/L or higher and be enrolled in financial assistance program to assist low income, families, and veterans. The one household that received 90 percent cost share was enrolled in WIC Nutrition Program and Medical Assistance. Olmsted reported many applicants would have received 90 percent, but never applied for financial assistance as part of the grant. Fifty percent cost share was open to applicants that were not enrolled in an income-based program but had a recent nitrate result of 10 mg/L or higher.

The mitigation specialists included four different well contractors for well drilling and repair and Culligan for water treatment.

The average total cost before financial assistance for the POU reverse osmosis was \$2,488, with a range of \$1,900 to \$3,500. The average cost to construct a new well was \$25,322.62, with a financial assistance not to exceed \$8,500. For well repair and reconstruction the cost could not exceed \$5,000. For water treatment specialist, any licensed water treatment specialist was accepted, not to exceed \$2,000.

For communications, Olmsted spent \$5,832.65 for graphic designer, Amanda Kay Designs to design their Tap-In program graphics and Open Window Productions to produce a video production how a private well user can properly collect a water sample for a private well.

Total costs:

\$49,323.10: Amount of financial assistance paid to eligible households.
\$14,419.05: Cost for SEMWAL Lab Analytical lab testing kits and lab analysis.
\$5,832.65: Cost for communications
\$30,374.87: Salary, fringe, travel, supplies
Total spent by Olmsted SWCD: \$99,949.67
\$147,198.10: Total cost of the water treatment, new well construction, and well repair including dollars from participants above the cost share.

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01/30/2024 To obtain this information in a different format, call: 651-201-4366.