

## Funding Infrastructure Improvements to Address DBP Violations in Askov, Minnesota: A Shared Funding and Assistance Plan to Ensure Future Success

The City of Askov, Minnesota is an underserved, small and disadvantaged community that has ongoing MCL violations for disinfection by-products. Askov was the highest ranked project on the state's DWSRF Intended Use Plan (IUP) that meets the grant criteria of being underserved AND small or disadvantaged. Askov's population is 364. The city is underserved due to the MCL violations. The city will trigger Minnesota's affordability threshold for disadvantage communities as described in [Minnesota Statute 446A.072](#). The affordability criteria takes the annual expenses on the drinking water system (sum of the current annual debt service, new debt service from the proposed project, and operations and maintenance) and compares that total to the city's current Median Household Income (MHI) of \$37,500. If the annual expenses exceed 1.2% of MHI, the system is considered disadvantaged.

### City of Askov Demographics:

Population: 364

Median Household Income: \$37,500

MN MHI: \$73,382



### Issues Facing the Water System

The project funded from 2020-2023 will address a Maximum Contaminant Level (MCL) violation for disinfection by-products along with other needed upgrades to maintain compliance with Safe Drinking Water Act. The total project will include engineering/administration, construction of two new deep wells, associated transmission lines and pump house, and rehabilitation of the existing treatment plant, originally designed for iron and manganese removal. The project cost will include a backup generator.

### What approach was ultimately selected to solve the problem(s)?

The city wells had high levels of Total Organic Carbon (TOC), which were leading to the disinfection by-product exceedances. The best option for the city was to look for a different water source. A deeper aquifer was available with low levels of TOC but was known to have high concentrations of radium, so it was a matter of determining the best option. Since radium treatment, which would also remove elevated levels of iron and manganese, was a more cost-effective solution than the treatment needed to address the high TOC levels, it was determined that the city would drill two deeper wells and construct a treatment plant for iron, manganese, and radium. The treatment plant is now online and providing safe and reliable drinking water to the City of Askov.

### What technical assistance was provided?

This project received funding and technical assistance from multiple agencies and programs. The Minnesota MDH is providing general administration for the Small and Disadvantaged

Communities Drinking Water (SDCDW (aka [WIIN](#))) Grant and is coordinating all project activities among the various funding agencies, along with the community of Askov and their professional representatives, including their engineering consultant.

- MDH will also monitor planning and construction activities; review grant documents and assure regulatory and technical requirements are met; provide technical assistance and oversight, and coordinate with the Minnesota Public Facilities Authority (MPFA) on additional documents for DWSRF funding. EPA Region V is also a part of the team and will be providing all documentation to ensure compliance with the SDCDW grant.
- MPFA will review financial documents award DWSRF funding and state grants; and assure DWSRF financial requirements are met.
- Minnesota Department of Employment and Economic Development is providing Community Development Block Grant (CDBG) funding and assistance with document reviews.
- The City of Askov will be responsible for overseeing their contracts with the consultant engineer, and with their construction contractor after bidding.

| Askov Project Funding Sources Summary |  |                            |                    |
|---------------------------------------|--|----------------------------|--------------------|
| SDCDW Federal (WIIN) Grant            | Community Development Block Grant (CDBG) | DWSRF (Loan/Grant Package) | Total Project Cost |
| \$640,575*                            | \$600,000**                              | \$1,089,425                | <b>\$2,330,000</b> |

### How have things turned out?

The outputs of the project include an engineering report, plans and specifications, and a contract for construction between Askov and lowest appropriate bidder.

The environmental results of the project include the water system’s return to compliance with national drinking water regulations and improving the safety and reliability of the community’s drinking water.



### Lessons Learned:

- Very small systems need outreach to know what funding and assistance is available to them, and to encourage them to reach out to the state primacy agency and technical assistance providers.