

(\$ in thousands)

Project Title	Rank	Fund	Project Requests for State Funds			Gov's Rec	Gov's Planning Estimates	
			2024	2026	2028	2024	2026	2028
Back-up Wells for Community Water Systems Grant Program	1	GO	27,125	0	0	0	0	0
		GF	1,344	0	0	0	0	0
Emergency Electrical Power for Community Water Systems Grant Program	2	GO	9,410	0	0	0	0	0
		GF	1,344	0	0	0	0	0
Flood Protection for Community Water Systems Grant Program	3	GO	2,660	0	0	0	0	0
		GF	2,732	0	0	0	0	0
Total Project Requests			44,615	0	0	0	0	0
General Obligation Bonds (GO) Total			39,195	0	0	0	0	0
General Fund Cash (GF) Total			5,420	0	0	0	0	0

<https://www.health.state.mn.us/>

AT A GLANCE

The Minnesota Department of Health uses the best scientific data and methods available to prevent illness and injury, propose strategies to improve the availability and quality of health care, and help ensure the conditions in which all people can be healthy.

- Manage annual budgetary resources of \$863 million.
- Secure \$406 million annually of federal funding to support critical public health activities
- Provide guidance and oversight for over \$264 million per year in outgoing grants to more than 500 unique grantees across the state.
- Maintain a highly skilled workforce of 1,655 staff that includes doctors, nurses, health educators, biologists, chemists, epidemiologists, and engineers.
- Meet rigorous standards set by the Public Health Accreditation Board.

PURPOSE

The Minnesota Department of Health (MDH) mission is to protect, maintain, and improve the health of all Minnesotans. MDH is the state's lead public health agency, responsible for operating programs that prevent infectious and chronic diseases, while promoting and ensuring clean water and air, safe food, quality health care and healthy living. The department works to improve the health of all communities in the state by incorporating the best evidence and health equity considerations into our decisions or activities.

MDH carries out its mission in close partnership with local public health departments, tribal governments, the federal government, health care delivery organizations in acute and long term care, and many health-related organizations. In meeting its responsibilities, the department also recognizes the strong connection between overall population health and a wide range of government policies from economic development to education to transportation.

STRATEGIES

The MDH vision is one of health equity, meaning a state in which all communities are thriving and all people have what they need to be healthy. While Minnesota ranks as one of the healthiest states in the nation, significant disparities in health outcomes persist because the opportunity to be healthy is not equally available everywhere for everyone in the state. That is why MDH has made advancing health equity a major priority. Improving the health of those experiencing the greatest inequities will result in improved health outcomes for all.

Our key strategies for protecting, maintaining, and improving Minnesotans' health include:

- Maintaining a nation-leading position in disease investigation and response, environmental health protection, and laboratory science.
- Reinforcing our partnerships with the state's local public health organizations to ensure a strong public health infrastructure in all corners of the state.
- Working with cross-sector partners in health care and beyond to change policies and practices at the community level to support greater opportunities for promoting health and reducing risks, both to improve the health of the population and to reduce future health care costs.

The Department of Health is primarily governed by the following statutes:

M.S. 144 (<https://www.revisor.mn.gov/statutes/?id=144>)

M.S. 145 (<https://www.revisor.mn.gov/statutes/?id=145>)

M.S. 145A (<https://www.revisor.mn.gov/statutes/?id=145A>)

M.S. 62J (<https://www.revisor.mn.gov/statutes/?id=62j>)

Each budget activity narrative lists additional relevant statutes.

AT A GLANCE

Eighty percent of Minnesotans rely on a community water system to provide abundant, safe water in their home. While Minnesota has an outstanding national record of compliance with the federal Safe Drinking Water Act, hundreds of small community water systems lack resilient infrastructure that would ensure safe drinking water despite a disruption. Disruptive events include heavy precipitation and flooding, winds, drought, contamination, and loss of electrical power. To increase resiliency, several preemptive measures can be taken to build infrastructure resiliency and improve water safety. Essential needs identified are having more than one source water well, installing backup power supplies to provide redundancy, and well improvements needed due to floodplains locations.

Factors Impacting Facilities or Capital Programs

Community water systems are managed, operated, and owned by municipalities and small businesses and are all required to have water operators that are certified by Minnesota Department of Health (MDH). The level of their certification depends on the complexity of the water system that they serve. The operations of these community water systems are strictly regulated by state and federal drinking water regulations and MDH provides close regulatory oversight and technical assistance for all aspects of system operation.

Self-Assessment of Agency Facilities and Assets

More than one-half of Minnesota's community water systems serve populations less than 3,300 and another third serve populations less than 10,000. Small community water systems face the same threats and challenges as larger systems but have fewer available technical and financial resources with which to address them. MDH has partnered with the Minnesota Rural Water Association to provide technical assistance for these smaller systems to develop asset management plans. While larger infrastructure projects can be implemented through a combination of loans and grants through the Minnesota Drinking Water Revolving Fund, it is not a cost-effective source of funding for projects equal to or less than about \$100,000 or with population sizes equal to or less than 10,000 due to the federal administrative requirements.

Agency Process for Determining Capital Requests

A reliable source of safe drinking water is an essential condition for healthy communities and a healthy economy. MDH partners with about 1,000 community water systems statewide to develop and implement resiliency plans as recommended by US EPA and the Ten States Standards. Through this collaboration, it is evident that there is a gap in funding the modest capital investments that will provide resiliency in the event of a disruption to their power supply, well, or a flooding event.

Major Capital Projects Authorized in 2022 and 2023

N/A

Back-up Wells for Community Water Systems Grant Program

AT A GLANCE

2024 Request Amount: \$28,469

Priority Ranking: 1

Project Summary: \$27.125 million in grants to construct back-up wells for the 151 small community water systems (CWSs) serving populations less than 10,001 that currently only have one well as the sole source of their drinking water. An alternative source of water in the form of a back-up well ensures that if one well is eliminated, there will still be uninterrupted safe water supplying residents and businesses in the community. \$1.344 million is from the general fund for grant administration.

Project Description

MDH requests funding for infrastructure projects to improve the safety and resiliency of community water systems in Minnesota. These projects will protect public health and safety by ensuring a dependable supply of safe drinking water for all consumers, including residents and businesses. Creating resilient drinking water infrastructure includes planning for loss of water supply from a well failure due to flooding, contamination, or drought. Providing a secondary source of water acts as an emergency water source to meet community capacity.

The resiliency of CWS is the ability of the system to recover from and reduce the impacts of a disruptive environmental event while maintaining key functions. Disruptive events include flooding, drought, and contamination. Creating redundancy of source water supply is a proactive measure that provides reliability to water systems if one of the wells fails or becomes contaminated. There are 151 CWSs with only one well. These systems are mainly very small and serve populations less than 500. This project creates a grant program administered by MDH to provide funding to construct a second back up well for the CWSs that currently have only one well.

Project Rationale

The resiliency of a CWS is the ability of the system to prevent, recover from, and/or reduce the impacts of a disruptive event while maintaining essential functions. Common disruptive events that are anticipated to increase in Minnesota include heavy precipitation and flooding, drought, and groundwater contamination. Climate impacts and environmental changes are affecting our watersheds and water supply systems. To increase resiliency, several preemptive measures can be taken to build infrastructure redundancy, improve water safety and reliability, and maintain the aquifers that serve as sources of our drinking water.

Creating resilient drinking water infrastructure includes planning for loss of water supply from a well

failure due to flooding, contamination, or drought. Providing a secondary source of water acts as an emergency water source to meet community capacity. Drilling a second well in a different location, aquifer, or different location in the same aquifer provides another safeguard to ensure continuous service. When a well fails, communities can be without water until the well or pump is repaired, or in some cases until a new well is drilled. The loss of water supply can be from one day to two weeks. MDH estimates there are one or two of these failures each year. These failures result in business and school closures, employees being absent from work, and additional other costs to the community.

The United States Environmental Protection Agency requires public water systems with a population over 3,300 and recommends for all systems to assess the resiliency of their systems and to develop long term plans to resolve gaps. Needs identified include redundancy to water supplies, such as having more than one source water well and installing backup power sufficient to meet drinking water capacity. Financial capacity of small systems is limited by relatively small customer bases making the costs of improvements a heavy burden.

All CWSs are recommended by MDH to have more than one well for their water source. The Recommended Standards for Water Works states “a minimum of two sources of groundwater shall be provided, unless otherwise specified.” Also, to ensure drinking water system capacity, “security shall be an integral part of drinking water system design.” And “design shall identify and evaluate single points of failure that could render a system unable to meet its design basis.” And “Redundancy and enhanced security features should be considered to eliminate single points of failure when possible, or to protect them when they cannot reasonably be eliminated.”

Project Timeline

Due to continuing supply chain challenges, this project is expected to take six years.

Other Considerations

Financial Considerations:

Small CWSs face similar threats and challenges as larger systems but have fewer available technical and financial resources with which to address them. Small CWSs often utilize the Drinking Water State Revolving Fund for larger projects like treatment plants and watermain replacement but for many small water systems, it is not cost effective to apply for DWSRF funding, which can include costly federal requirements.

Equity and Inclusion:

Many smaller water systems lack large customer bases to shoulder the costs of new infrastructure and adopting current technologies. Matching grants to very small systems help level the economic playing field. Priority points for grants will be awarded in part for disadvantaged communities. Minnesota’s population needs safe places to live that are not frequently threatened by contamination of the water supply, drought, or flooding.

Impact on Children and Families:

Children and families rely on the dependable delivery of safe drinking water, especially since children

are typically more susceptible to drinking water contaminants than adults. Safeguarding our sources and securing resiliency for all water systems is an important foundation for protecting and improving the health of children and families. Engineering enduring resiliency and reliability measures ensures daily water needs may be met. As precipitation patterns change affecting water availability, utilizing flood plain mapping, source water redundancy, and emergency electric power can better ensure availability of water supplies.

Impact on Agency Operating Budgets

\$1,344,000 is from the general fund for program administration.

Description of Previous Appropriations

N/A

Project Contact Person

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Governor's Recommendation

The Governor does not recommend capital funding for this request.

(\$ in thousands)

Back-up Wells for Community Water Systems Grant Program

PROJECT FUNDING SOURCES

Funding Source	Prior Years	FY 2024	FY 2026	FY 2028
State Funds Appropriated and Requested				
General Obligation Bonds	\$ 0	\$ 27,125	\$ 0	\$ 0
General Fund Cash	\$ 0	\$ 1,344	\$ 0	\$ 0
State Funds Pending				
Non-State Funds Already Committed				
Non-State Funds Pending				
TOTAL	\$ 0	\$ 28,469	\$ 0	\$ 0

TOTAL PROJECT COSTS

Cost Category	Prior Years	FY 2024	FY 2026	FY 2028
Property Acquisition	\$ 0	\$ 0	\$ 0	\$ 0
Predesign Fees	\$ 0	\$ 0	\$ 0	\$ 0
Design Fees	\$ 0	\$ 0	\$ 0	\$ 0
Project Management	\$ 0	\$ 1,344	\$ 0	\$ 0
Construction	\$ 0	\$ 27,125	\$ 0	\$ 0
Relocation Expenses	\$ 0	\$ 0	\$ 0	\$ 0
One Percent for Art	\$ 0	\$ 0	\$ 0	\$ 0
Occupancy Costs	\$ 0	\$ 0	\$ 0	\$ 0
Inflationary Adjustment	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL	\$ 0	\$ 28,469	\$ 0	\$ 0

IMPACT ON STATE OPERATING COSTS

Cost Category	FY 2024	FY 2026	FY 2028
IT Costs	\$ 0	\$ 0	\$ 0
Operating Budget Impact (\$)	\$ 336	\$ 672	\$ 336
Operating Budget Impact (FTE)	0.0	0.0	0.0

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
General Fund	\$ 27,125	100 %

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
User Financing	\$ 0	0 %

STATUTORY REQUIREMENTS

The following requirements will apply to projects after adoption of the bonding bill.

Is this project exempt from legislative review under M.S. 16B.335 subd. 1a?	No
Predesign Review (M.S. 16B.335 subd. 3):	
Does this request include funding for predesign?	No
Has the predesign been submitted to the Department of Administration?	N/A
Has the predesign been approved by the Department of Administration?	N/A
Will the project design meet the Sustainable Building Guidelines under M.S. 16B.325?	Yes
Will the project designs meet applicable requirements and guidelines for energy conservation and alternative energy sources (M.S. 16B.335 subd. 4 and 16B.32)?	N/A
Have Information Technology Review Preconditions been met (M.S. 16B.335 subd. 5 & 6)?	N/A
Will the project comply with the targeted group purchasing requirement (M.S. 16C.16 subd. 13)?	Yes
Will the project meet public ownership requirements (M.S. 16A.695)?	Yes
Will a use agreement be required (M.S. 16A.695 subd. 2)?	No
Will program funding be reviewed and ensured (M.S. 16A.695 subd. 5)?	N/A
Will the matching funds requirements be met (M.S. 16A.86 subd. 4)?	N/A
Will the project be fully encumbered prior to the Cancellation Deadline (M.S. 16A.642): December 31, 2028?	Yes
M.S. 16A.502 and M.S. 16B.31 (2): Full Funding Required	Yes
M.S. 473.4485: Guideway Project	
Is this a Guideway Project?	No
Is the required information included in this request?	N/A

Emergency Electrical Power for Community Water Systems Grant Program

AT A GLANCE

2024 Request Amount:	\$10,754
Priority Ranking:	2
Project Summary:	\$9.41 million in grants to provide emergency electrical power for 341 small community water systems (CWSs) that currently would be unable to supply water if there was a loss of power from the electric utility. Alternate emergency electrical power ensures that there will still be uninterrupted safe water supplying residents and businesses in the community and is one component in an overall resiliency plan. \$1.344 million is from the general fund for grant administration.

Project Description

MDH requests funding for infrastructure projects to improve the safety and resiliency of CWSs in Minnesota. These projects will protect public health and safety by ensuring a dependable supply of safe drinking water for all consumers, including residents and businesses.

Resiliency is generally defined as the ability to reduce the impact of and recover rapidly from disruptive events, so that an acceptable level of service is maintained and the impacts on public health and safety and the economy are minimized. To increase resiliency, several preemptive measures can be taken to build infrastructure resiliency and improve water safety. Creating resilient drinking water infrastructure includes planning for loss of power from a centralized utility due to volatile storm events with high winds, ice storms, and other disruptions to the power grid. Providing a secondary source of power acts is one component to meet community capacity needs for water supply. There are 341 small CWSs that currently lack any emergency electrical power supplies. This project creates a grant program administered by MDH to provide funding to provide emergency electrical power supplies for the CWSs that do not have one.

Project Rationale

The resiliency of a public drinking water system (PWS) is the ability of the system to prevent, recover from, and/or reduce the impacts of a disruptive event while maintaining essential functions. Common disruptive events that are anticipated to increase in Minnesota include volatile storms with heavy precipitation and high winds, ice storms, and other disruptions to the power grid. Climate impacts and environmental changes are affecting our water supply systems. To increase resiliency, several preemptive measures can be taken to build infrastructure redundancy, maintain water safety, and ensure that community have a reliable supply of safe water. An often-unrecognized consequence of loss of power and the resulting lack of water is the inability to supply water for fire suppression.

The Safe Drinking Water Act requires states to have an adequate plan for providing safe drinking water under emergency circumstances, such as “earthquakes, floods, hurricanes, and other natural disasters, as appropriate” (42 U.S.C. §300g-2(a)(5)). The United States Environmental Protection Agency requires public water systems with a population over 3,300 and recommends for all systems to assess the resiliency of their systems and to develop long term plans to resolve gaps. Needs identified include redundancy to water supplies, such as installing backup power sufficient to meet drinking water capacity. The financial capacity of small systems is limited by relatively small customer bases, making the costs of improvements a heavy burden. Many of the smallest systems are privately owned and lack access to low interest loans or grants that larger systems have.

Adequate and reliable emergency electrical power is essential for all drinking water utilities to manage risk and provide resiliency. Provision of power to the primary components of drinking water facilities is key to maintaining effective operation of the system, protecting both public health and the environment. Lack of backup power for water systems can result in pressure losses in the distribution system which allows contaminants to enter the pipes that carry water from the plant to homes and businesses. Discovery of a loss of pressure interrupts the supply of water for drinking, cooking, bathing, and fire protection. Loss of pressure requires a drinking water advisory such as a “boil water” or “do not drink” order due to the possibility of contamination of the system. Loss of power at a water treatment plant may result in untreated water being used to supply the system and resulting in unsafe water. Effective water system operation includes meeting average daily capacity requirements, preventing pressure losses that allow contaminants to seep into the distribution pipes, and providing adequate volume for fire protection.

All CWSs are recommended by MDH to have more than one well for their water source. The Recommended Standards for Water Works states, “Dedicated standby power shall be provided so that water may be treated and/or pumped to the distribution system during power outages to meet the average day demand” and “To ensure continuous service when the primary power has been interrupted, a standby power supply shall be provided through a dedicated portable or in-place auxiliary power supply of adequate capacity and connectivity.”

The most common impact of an interruption to power in Minnesota is a loss of pressure in the distribution system which may allow contamination. Not all loss of pressure events are reported to MDH although CWSs are instructed to do so. Most small systems do not report short duration power loss even though these may result in low or no pressure. The system may not have the staffing or capability to determine when the pressure drops. Pressure drops have the potential to allow for groundwater intrusion or backflow leading to contamination of the water supply. MDH tracks pressure loss that leads to notifying the public that there is a “boil water advisory” in place. Between 15 and 20 loss of pressure events are reported to MDH each year and about 5 of these are directly due to power loss.

Most systems without emergency electrical power are small or very small systems (serving populations less than 3,300). The financial capacity of small systems is limited by relatively small customer bases, making the costs of improvements a heavy burden. 341 community public water supplies in Minnesota do not have emergency electrical power backup systems. Power backup can be

achieved through emergency electrical generators, fuel source, concrete pad, and electrical connections to the facility. Emergency electrical generators begin at \$20,000 for a small capacity system and up to \$100,000 for a mid-size system. Emergency electrical power supplies for the 341 CWSs will cost \$9,410,000.

Project Timeline

Due to continuing supply chain challenges, this project is expected to take six years.

Other Considerations

Equity and Inclusion:

MDH strives to improve, maintain, and protect the health of all Minnesotans. Small community water systems face the same challenges as larger systems but have fewer available technical and financial resources with which to address them. Small CWSs often utilize the Drinking Water State Revolving Fund for larger projects like treatment plants and watermain replacement but for many small water systems, it is not cost effective to apply for DWSRF funding, which can include costly federal requirements.

Many smaller, rural systems lack large customer bases to shoulder the costs of new infrastructure and adopting current technologies. Matching grants to very small systems help level the economic playing field. Priority points for grants will be awarded, in part, for disadvantaged communities. Minnesota's population needs safe places to live that are not frequently threatened by contamination of the water supply, lack of backup power generation, or flooding.

Impact on Children and Families:

Children and families rely on the dependable delivery of safe drinking water. Safeguarding our sources and securing resiliency for all water systems is an important foundation for protecting and improving the health of children and families, and for keeping our communities vibrant. Providing emergency electrical power, source redundancy, and system security measures ensures daily water needs may be met. Children are typically more susceptible to drinking water contaminants than adults and providing safe drinking water protects the health and wellbeing of children and families. As climate change affects precipitation patterns and water availability, flood plain mapping, source water redundancy and emergency electrical power can better ensure availability of water supplies.

Impact on Agency Operating Budgets

\$1,344,000 is from the general fund for program administration.

Description of Previous Appropriations

N/A

Project Contact Person

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Governor's Recommendation

The Governor does not recommend capital funding for this request.

(\$ in thousands)

Emergency Electrical Power for Community Water Systems Grant Program

PROJECT FUNDING SOURCES				
Funding Source	Prior Years	FY 2024	FY 2026	FY 2028
State Funds Appropriated and Requested				
General Obligation Bonds	\$ 0	\$ 9,410	\$ 0	\$ 0
General Fund Cash	\$ 0	\$ 1,344	\$ 0	\$ 0
State Funds Pending				
Non-State Funds Already Committed				
Non-State Funds Pending				
TOTAL	\$ 0	\$ 10,754	\$ 0	\$ 0

TOTAL PROJECT COSTS				
Cost Category	Prior Years	FY 2024	FY 2026	FY 2028
Property Acquisition	\$ 0	\$ 0	\$ 0	\$ 0
Predesign Fees	\$ 0	\$ 0	\$ 0	\$ 0
Design Fees	\$ 0	\$ 0	\$ 0	\$ 0
Project Management	\$ 0	\$ 1,344	\$ 0	\$ 0
Construction	\$ 0	\$ 9,410	\$ 0	\$ 0
Relocation Expenses	\$ 0	\$ 0	\$ 0	\$ 0
One Percent for Art	\$ 0	\$ 0	\$ 0	\$ 0
Occupancy Costs	\$ 0	\$ 0	\$ 0	\$ 0
Inflationary Adjustment	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL	\$ 0	\$ 10,754	\$ 0	\$ 0

IMPACT ON STATE OPERATING COSTS			
Cost Category	FY 2024	FY 2026	FY 2028
IT Costs	\$ 0	\$ 0	\$ 0
Operating Budget Impact (\$)	\$ 336	\$ 672	\$ 336
Operating Budget Impact (FTE)	0.0	0.0	0.0

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS		
	Amount	Percent of Total
General Fund	\$ 9,410	100 %

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
User Financing	\$ 0	0 %

STATUTORY REQUIREMENTS

The following requirements will apply to projects after adoption of the bonding bill.

Is this project exempt from legislative review under M.S. 16B.335 subd. 1a?	No
Predesign Review (M.S. 16B.335 subd. 3):	
Does this request include funding for predesign?	No
Has the predesign been submitted to the Department of Administration?	N/A
Has the predesign been approved by the Department of Administration?	N/A
Will the project design meet the Sustainable Building Guidelines under M.S. 16B.325?	Yes
Will the project designs meet applicable requirements and guidelines for energy conservation and alternative energy sources (M.S. 16B.335 subd. 4 and 16B.32)?	N/A
Have Information Technology Review Preconditions been met (M.S. 16B.335 subd. 5 & 6)?	N/A
Will the project comply with the targeted group purchasing requirement (M.S. 16C.16 subd. 13)?	Yes
Will the project meet public ownership requirements (M.S. 16A.695)?	Yes
Will a use agreement be required (M.S. 16A.695 subd. 2)?	No
Will program funding be reviewed and ensured (M.S. 16A.695 subd. 5)?	N/A
Will the matching funds requirements be met (M.S. 16A.86 subd. 4)?	N/A
Will the project be fully encumbered prior to the Cancellation Deadline (M.S. 16A.642): December 31, 2028?	Yes
M.S. 16A.502 and M.S. 16B.31 (2): Full Funding Required	Yes
M.S. 473.4485: Guideway Project	
Is this a Guideway Project?	No
Is the required information included in this request?	N/A

Flood Protection for Community Water Systems Grant Program

AT A GLANCE

2024 Request Amount: \$5,392

Priority Ranking: 3

Project Summary: This project provides \$1.1 million for MDH to contract for a hardening assessment of 206 known wells in a floodplain and identify hardening alternatives for 60 additional wells that are vulnerable to potential contamination from flood waters. \$2.66 million in grant funding will be used to provide well hardening and other structural improvements. \$1.632 million is from the general fund for grant administration.

Project Description

MDH requests funding for infrastructure projects to improve the safety and resiliency of CWSs in Minnesota. Resiliency is generally defined as the ability to reduce the impact of and recover rapidly from disruptive events, so that an acceptable level of service is maintained and the impacts on public health and safety and the economy are minimized. To increase resiliency, several preemptive measures can be taken to build infrastructure resiliency and improve water safety. Source water protection includes addressing wells that are in floodplains to harden them against increasing volatile, high volume precipitation events. Protecting a well from floods prevents contamination that occurs when flood water enters the well or prevents the well from being used. Proactive measures to protect the well ensure that there will still be uninterrupted safe water supplying residents and businesses in the community.

Creating resilient drinking water infrastructure includes building structural protections such as berms or diversions, constructing improvements that prevent flood waters from entering the well seals or vents, other protective barriers, or relocation of a well. Flooding can occur due to volatile storm events with high winds, ice storms, and spring flooding due to snow melt. Structural improvements that physically protect the well are one component to ensure that community capacity needs for water supply are not disrupted. There are 206 small CWSs that have a well in a known flood plain subject to potential contamination from flood waters. Additional flood analysis will result in an estimated additional 60 wells to address. This project creates a grant program administered by MDH to provide funding to analyze new data on floodplains and community water wells and to construct engineering improvements that will protect the identified wells from flood waters.

Project Rationale

The resiliency of a public drinking water system (PWS) is the ability of the system to prevent, recover from, and/or reduce the impacts of a disruptive event while maintaining essential functions. Climate impacts and environmental changes are affecting our water supply systems. Common disruptive events that are anticipated to increase in Minnesota include volatile storms with heavy precipitation,

wide variations in snow melt volume and timing, and overall increases in flooding. To increase resiliency, several preemptive measures can be taken to build infrastructure redundancy, maintain water safety, and ensure that community have a reliable supply of safe water.

The Safe Drinking Water Act requires states to have an adequate plan for providing safe drinking water under emergency circumstances, such as “earthquakes, floods, hurricanes, and other natural disasters, as appropriate” (42 U.S.C. §300g-2(a)(5)). The United States Environmental Protection Agency requires public water systems with a population over 3,300 and recommends for all systems to assess the resiliency of their systems and to develop long term plans to resolve gaps. Needs identified include redundancy to water supplies that will ensure water is sufficient to meet drinking water capacity. The financial capacity of small systems is limited by relatively small customer bases, making the costs of improvements a heavy burden. Many of the smallest systems are privately owned and lack access to low interest loans or grants that larger systems have.

Through a contract, wells determined to be in the 100-year flood plain will be analyzed to determine if the location requires protective measures be implemented to protect from contamination or the inability for use during a flood event. The identified wells will be prioritized by offering grants to the CWSs with predicted to be affected by the highest volume events so that the most vulnerable systems are addressed first.

The analysis will also identify the most cost-effective measures to be taken. MDH will offer grants to systems to implement the recommendations from the analysis. Construction of remediation measures may include site work around well heads and pump houses, improved well construction to prevent flood water entering the well seals or vents, berms, diversions, or other protective barriers. Relocating a well may be necessary in rare situations. These infrastructure investments will ensure safe water continues to flow to homes and businesses despite Minnesota continuing to experience increases in the number of flooding events.

Project Timeline

Due to continuing supply chain challenges, this project is expected to take six years.

Other Considerations

Impact on Children and Families:

Children and families rely on the dependable delivery of safe drinking water. Safeguarding our sources and securing resiliency for all water systems is an important foundation for protecting and improving the health of children and families, and for keeping our communities vibrant. Providing emergency power, source redundancy, and well hardening measures ensures daily water needs may be met. Children are typically more susceptible to drinking water contaminants than adults and providing safe drinking water protects the health and wellbeing of children and families. As climate change affects precipitation patterns and water availability, flood plain mapping, source water redundancy and emergency power can better ensure availability of water supplies.

Impact on Agency Operating Budgets

\$1,100,000 in FY2024 is from the general fund for hardening alternatives assessment contract and

\$1,632,000 is for program administration.

Description of Previous Appropriations

N/A

Project Contact Person

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Governor's Recommendation

The Governor does not recommend capital funding for this request.

(\$ in thousands)

Flood Protection for Community Water Systems Grant Program

PROJECT FUNDING SOURCES

Funding Source	Prior Years	FY 2024	FY 2026	FY 2028
State Funds Appropriated and Requested				
General Obligation Bonds	\$ 0	\$ 2,660	\$ 0	\$ 0
General Fund Cash	\$ 0	\$ 2,732	\$ 0	\$ 0
State Funds Pending				
Non-State Funds Already Committed				
Non-State Funds Pending				
TOTAL	\$ 0	\$ 5,392	\$ 0	\$ 0

TOTAL PROJECT COSTS

Cost Category	Prior Years	FY 2024	FY 2026	FY 2028
Property Acquisition	\$ 0	\$ 0	\$ 0	\$ 0
Predesign Fees	\$ 0	\$ 0	\$ 0	\$ 0
Design Fees	\$ 0	\$ 0	\$ 0	\$ 0
Project Management	\$ 0	\$ 2,732	\$ 0	\$ 0
Construction	\$ 0	\$ 2,660	\$ 0	\$ 0
Relocation Expenses	\$ 0	\$ 0	\$ 0	\$ 0
One Percent for Art	\$ 0	\$ 0	\$ 0	\$ 0
Occupancy Costs	\$ 0	\$ 0	\$ 0	\$ 0
Inflationary Adjustment	\$ 0	\$ 0	\$ 0	\$ 0
TOTAL	\$ 0	\$ 5,392	\$ 0	\$ 0

IMPACT ON STATE OPERATING COSTS

Cost Category	FY 2024	FY 2026	FY 2028
IT Costs	\$ 0	\$ 0	\$ 0
Operating Budget Impact (\$)	\$ 408	\$ 816	\$ 408
Operating Budget Impact (FTE)	0.0	0.0	0.0

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
General Fund	\$ 2,660	100 %

SOURCE OF FUNDS FOR DEBT SERVICE PAYMENTS

	Amount	Percent of Total
User Financing	\$ 0	0 %

STATUTORY REQUIREMENTS

The following requirements will apply to projects after adoption of the bonding bill.

Is this project exempt from legislative review under M.S. 16B.335 subd. 1a?	No
Predesign Review (M.S. 16B.335 subd. 3):	
Does this request include funding for predesign?	No
Has the predesign been submitted to the Department of Administration?	N/A
Has the predesign been approved by the Department of Administration?	N/A
Will the project design meet the Sustainable Building Guidelines under M.S. 16B.325?	Yes
Will the project designs meet applicable requirements and guidelines for energy conservation and alternative energy sources (M.S. 16B.335 subd. 4 and 16B.32)?	N/A
Have Information Technology Review Preconditions been met (M.S. 16B.335 subd. 5 & 6)?	N/A
Will the project comply with the targeted group purchasing requirement (M.S. 16C.16 subd. 13)?	Yes
Will the project meet public ownership requirements (M.S. 16A.695)?	Yes
Will a use agreement be required (M.S. 16A.695 subd. 2)?	No
Will program funding be reviewed and ensured (M.S. 16A.695 subd. 5)?	N/A
Will the matching funds requirements be met (M.S. 16A.86 subd. 4)?	N/A
Will the project be fully encumbered prior to the Cancellation Deadline (M.S. 16A.642): December 31, 2028?	Yes
M.S. 16A.502 and M.S. 16B.31 (2): Full Funding Required	Yes
M.S. 473.4485: Guideway Project	
Is this a Guideway Project?	No
Is the required information included in this request?	N/A