

Pollution Control

Projects Summary

(\$ in thousands)

Project Title	Priority Ranking	Funding Source	Project Requests for State Funds		
			2020	2022	2024
Addressing Legacy Contaminants: Superfund	1	GO	\$ 25,000	\$ 0	\$ 0
Addressing Legacy Contaminants: Closed Landfills	2	GO	\$ 121,000	\$ 0	\$ 0
Anaerobic Digestion	3	GO	\$ 100,000	\$ 0	\$ 0
Sustainable Communities and Climate Resiliency	4	GO	\$ 50,000	\$ 0	\$ 0
PAH Removal of Contamination from stormwater ponds	5	GO	\$ 2,000	\$ 0	\$ 0
Capital Assistance Program (CAP)	6	GO	\$ 40,000	\$ 0	\$ 0
Continuous Nitrate Sensor Network	7	GO	\$ 2,000	\$ 0	\$ 0
Community Electric Vehicle Infrastructure Grant Program	8	GO	\$ 12,000	\$ 0	\$ 0
Total Project Requests			\$ 352,000	\$ 0	\$ 0
General Obligation Bonds (GO) Total			\$ 352,000	\$ 0	\$ 0

Addressing Legacy Contaminants: Superfund

AT A GLANCE

2020 Request Amount: \$25,000

Priority Ranking: 1

Project Summary: The proposal is for \$25 million for the clean up of publicly-owned contaminated superfund sites across Minnesota where there is not a viable responsible party to do the work.

Project Description

The proposal is to clean up and remediate a number of publicly-owned contaminated sites across Minnesota. The Superfund program has developed a prioritized list of sites that need work to address contamination and its impact on the environment and human health. Funds received would be applied to projects based on the current prioritized list. The first five projects on the prioritized list are below.

- The Esko Groundwater Contamination Site was historically a drycleaner, creamery, and an engine repair shop. Soil and groundwater is contaminated with chlorinated solvents. The funds from the bonding request would be used to excavate contaminated soil and treat contaminated groundwater in the source area using Enhanced Reductive Dechlorination (ERD) methods.
- The Winona Groundwater Contamination Site was historically a gas station and later converted to a drycleaner. Soil, soil vapor, and groundwater is contaminated with chlorinated solvents. The funds from the bonding request would be used to treat contaminated soil and groundwater in the source area using Electrokinetic (EK)-Enhanced Amendment Delivery.
- The City of Duluth Dump #1 operated from approximately 1954 to 1959 and accepted mixed municipal solid wastes, which may have filled in portions of the wetland area. Site contaminants include VOCs, metals, PAHs, and PCBs. The funds from the bonding request would be used to excavate and consolidate the waste, as well as adding a geomembrane and a two-foot thick soil cap.
- The Perham Arsenic Site was historically used for the disposal of arsenic grasshopper bait. Arsenic contaminated groundwater is remediated by a groundwater pump and treat system. Arsenic contaminated soil remains on-site near the former burial pit. The funds from the bonding request would be used to purchase the property, demolish existing buildings to access contaminated soil, and to fully excavate remaining contaminated soil.
- The Precision Plating site was a metal plating facility that operated from 1961-2003. Soil, soil vapor, and groundwater are impacted by VOCs with TCE having the highest contaminant concentrations. Metals are present in soil and groundwater. The funds from the bonding request would be used to implement a remedial action (post-feasibility study) for cleaning up contaminated soil and groundwater at the site. The contamination plume beneath the existing site building is difficult to access and remediate.

Project Rationale

The proposal is to address contamination issues at sites that have investigated and immediate

environmental and human health concerns have been mitigated (e.g. vapor mitigation system installed in a home). However, these sites need long term solutions to address the source of the problem to be able reduce future risks to the environment and human health. Below is more information on the first five projects on the prioritized list.

- Esko Groundwater Contamination Site: The soil contamination is continuing to leach into groundwater. If the contamination is not addressed, additional private wells may require treatment, and the nearby Midway River is at risk from the groundwater plume.
- Winona Groundwater Contamination: The remaining soil and groundwater contamination in the source area poses a risk for plume migration and vapor intrusion. The contamination beneath the neighboring building is difficult to access and remediate.
- Duluth City Dump #1: Impacted groundwater, surface water, and soil/sediment remain at the site, which poses potential exposure risks. Risks associated with concentrations of methane gas are present due to the landfill gas generation from existing waste.
- Perham Arsenic Site: Arsenic contaminated soil comes into contact with the groundwater and continues to act as a source for the groundwater contamination plume, despite 20+ years of pumping and treating groundwater. The remaining contamination beneath the building is difficult to access and remediate.
- Precision Plating Site: The remaining soil and groundwater contamination in the source area poses a risk for plume migration, discharge to Shingle Creek, and vapor intrusion.

Project Timeline

FY21 and FY22

Other Considerations

N/A

Impact on Agency Operating Budgets

The capital bonding request does not require changes to the MPCA's operating budget. The Legislature authorizes a direct appropriation from the Remediation Fund for administrative costs for the Superfund Program.

Description of Previous Appropriations

Remediation Fund has been used to fund various activities at these sites including, but not limited to: Extent and magnitude investigation, vapor investigation, contaminant monitoring in potable and monitoring wells, drinking water and vapor intrusion mitigation and/or treatment systems, feasibility studies.

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Addressing Legacy Contaminants: Closed Landfills

AT A GLANCE

2020 Request Amount: \$121,000

Priority Ranking: 2

Project Summary: The proposal is for \$121 million for the clean up of contaminated old landfills in Minnesota that have entered the Closed Landfill Program.

Project Description

The proposal is to clean up and remediate sites in the Closed Landfill Program (Landfill Cleanup Act). The projects include:

- The Freeway Landfill, including the adjacent Freeway Dump, (Burnsville, Dakota County) is a qualified facility per the Landfill Cleanup Act. Recent groundwater investigations and modeling show that the landfill poses a risk to the environment (e.g. Minnesota River) and drinking water source for the cities of Burnsville and Savage– especially once the nearby quarry ceases its dewatering operation. Funds are for upgrading the landfill with a leachate collection system, engineered synthetic cover and liner, and active gas extraction system to eliminate the impacts to the environment and to protect public health and safety. The adjacent Freeway Dump will be relocated onto the newly constructed Freeway Landfill.
- The Brookston Area Landfill (Culver Township, St. Louis County) is a qualified facility per the Landfill Cleanup Act. The landfill’s cover is poor and inconsistent in quality, resulting in impacted groundwater beneath the site. The landfill poses a risk to the environment. Funds are being requested to consolidate existing waste and install a new engineered synthetic cover and passive gas system to eliminate the impacts to the environment and to protect public health and safety.

Project Rationale

The main purpose of the Closed Landfill Program (Landfill Cleanup Act) is to manage the risks associated with human exposure to landfill contaminants and landfill gas, as well as to avoid the degradation of groundwater and surface waters. Currently, 110 landfills are in the Closed Landfill Program (114 eligible). The state is required to operate and maintain these sites into perpetuity.

Project Timeline

Various

Other Considerations

N/A

Impact on Agency Operating Budgets

The capital bonding request does not impact the MPCA’s operating budget. The Legislature authorizes direct appropriations for administrative costs for the Closed Landfill Program.

Description of Previous Appropriations

Funding has been provided for various activities at these sites including, but not limited to: Extent and

magnitude investigation, contaminant monitoring in potable and monitoring wells, drinking water and vapor intrusion mitigation and/or treatment systems, feasibility studies.

Request Amount and Prior Yr State Appropriations: \$121 million requested:

Laws of 2017, 1st SS, Chapter 9 - \$11.35 million

Laws of 2012, Chapter 393 - \$2.00 million

Laws of 2011, 1st SS, Chapter 12 \$7.00 million

Laws of 2010, Chapter 189 - \$8.70 million

Laws of 2006, Chapter 258 - \$10.80 million

Laws of 2005, Chapter 20 - \$10.00 million

Laws of 2001, 1st SS, Chapter 12 - \$20.50 million

Laws of 1994, Chapter 639 - \$34.38 million

[Laws of 2008 Revenue bonds not sold - \$25.00 million]

Funds Already Committed to the Project: \$2.6 million for investigation and design.

Project Contact Person

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Anaerobic Digestion**AT A GLANCE****2020 Request Amount:** \$100,000**Priority Ranking:** 3**Project Summary:** This program would provide \$100 million in grant funds to local governments to construct regional anaerobic digestion facilities.**Project Description**

The State would provide grants to local units of government to design and construct regional anaerobic digestion facilities. Eligible projects would include anaerobic digestion facilities that utilize food waste, wastewater byproducts, and/or animal waste.

Project Rationale

Food waste, wastewater, byproducts, and animal waste need to be properly managed to ensure the protection of the environment and human health. However, looking at them as just wastes and not resources would be a mistake. The use of these materials in anaerobic digestion facilities could produce some combination of heat, electricity, biogas, and a digestate that could be utilized for compost or soil amendment. Utilizing perceived “wastes” to maximize energy production and minimizing greenhouse gas emissions is a benefit to the State.

Project Timeline

Various

Other Considerations

N/A

Impact on Agency Operating Budgets

MPCA would manage grants.

Description of Previous Appropriations

None

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Sustainable Communities and Climate Resiliency

AT A GLANCE

2020 Request Amount: \$50,000

Priority Ranking: 4

Project Summary: This program would provide \$50 million dollars in grants to build sustainable and resilient communities.

Project Description

Minnesota’s communities are placing an increased emphasis on sustainability and resiliency to ensure communities stay vibrant in the face of a changing climate. The grant program will award funds to communities to build sustainable and resilient infrastructure. Specific funding opportunities for this grant will focus on Minnesota’s water treatment systems (both stormwater and wastewater), improvements in flood protection infrastructure, and projects that improve a community’s ability to meet the needs of community members during extreme weather events. It is important to note this program would work in partnership with existing funding programs. **Potential Project Types**

- Stormwater pipe replacement projects: Funding for identifying areas where pipes are very old and undersized (possibly areas of localized flooding) and replacing them with pipes that can convey the increased amount of stormwater that we are seeing.
- Stormwater detention/treatment retrofits: Funding for projects such as large regional flood control structures placed in urbanized areas that have little or no stormwater detention currently. For example, projects to hold large storm events and prevent localized flooding of major highways and streets and will also protect existing wastewater treatment pipes.
- Stormwater pond projects: Funding for the maintenance of existing stormwater ponds to restore and possibly increase capacity to be able to hold more stormwater in the case of a large storm event. Many of the existing stormwater ponds are more than 25 years old and in need of maintenance because they have done their job and are now full of sediment and need to be cleaned out.
- Flood protection infrastructure projects: Improving or upgrading levy systems in areas that are seeing consistent threats from extreme flooding. Many communities in Minnesota are facing the threat of more frequent and longer-lasting floods.
- Energy self-sufficiency and distributed generation projects: Extended power outages sometimes accompany severe weather events and distributed power generation projects enhance the ability of a community to operate independent of the grid, enhancing resiliency.
- Green infrastructure projects: Green infrastructure projects, like green roofs, help manage stormwater and flooding concerns.

Project Rationale

The climate is changing and its impacts, such as increasingly frequent extreme weather events, are placing new burdens on communities across Minnesota. For much of Minnesota, the 2010s will finish as the wettest decade on record. Between 1990 and 2018, days with 1, 2, and 3-inch rains became more frequent by 19%, 30%, and 60%, respectively, than they were during the majority of the 20th century. At the same time, communities are facing challenges to both improve the quality of life for their residents and to attract new residents and economic development. This program will help communities realize their sustainability goals and improve the quality of life for their current and future residents.

Project Timeline

Various

Other Considerations

Impact on Agency Operating Budgets

Requires MPCA grants management.

Description of Previous Appropriations

None

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PAH Removal of Contamination from stormwater ponds**AT A GLANCE****2020 Request Amount:** \$2,000**Priority Ranking:** 5**Project Summary:** Grant funds for communities to remove PAH-contaminated sediment from stormwater ponds.**Project Description**

This project would provide financial support to communities across Minnesota to remove Polyaromatic hydrocarbon (PAH) contaminated sediment from stormwater ponds. Stormwater runoff conveys sediment, chemicals and other material to surface waters such as rivers, lakes, and streams and degrades water quality. 253 public entities (e.g., cities, towns, universities) around the state have Clean Water Act National Pollutant Discharge Elimination permits that require operation and maintenance of infrastructure such as stormwater ponds, to minimize pollutant discharges. Statewide there are more than 31,000 publically owned stormwater ponds. Sediment accumulates in these ponds and reduces treatment efficacy. To restore capacity and treatment effectiveness municipalities dredge ponds and dispose of the sediment. Polyaromatic hydrocarbon used in the watershed are transported to the ponds and accumulate in the sediment. Dredged sediments contaminated by PAHs represent a significant cost to municipalities because it cannot be reused and must be disposed of in special landfills. Previously the MPCA conducted a pilot project that provided 50% matching grants to communities dealing with this challenge. These funds would provide assistance to communities to do this work.

Project Rationale

This money would provide critical financial assistance to Minnesota communities struggling to operate and maintain stormwater ponds. The funds would supplement local money to dredge and properly dispose of PAH – contaminated sediments. This project would facilitate critical maintenance required to make progress toward Clean Water Act goals.

Project Timeline

2020

Other Considerations**Impact on Agency Operating Budgets**

MPCA will manage the grants.

Description of Previous Appropriations

\$500,000 from the clean water fund during the FY2010/2011 biennium.

Project Contact Person

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Capital Assistance Program (CAP)

AT A GLANCE

2020 Request Amount: \$40,000

Priority Ranking: 6

Project Summary: This request is for \$40 million for capital assistance grants to local governments. The grants would be used for the construction, expansion, and/or upgrade of solid waste facilities.

Project Description

The Capital Assistance Program provides funds to communities to building, expand, and/or upgrade solid waste facilities, such as transfer stations, household hazardous waste facilities, MSW processing facilities (pulls recyclables from trash), recycling and compost facilities. A number of local governments have expressed interest in funding to assist their local projects. It includes the following communities: Chisago County, City of Coon Rapids, City of Minneapolis, Clay County, Dakota/Scott Counties, Pope/Douglas Counties, Ramsey/Washington County, Todd County.

Project Rationale

The Minnesota Waste Management Act (M.S. 115A) promotes an integrated solid waste management system in a manner appropriate to the characteristics of the waste stream. Such a system protects the state’s land, air, water, and other natural resources and enhances human health.

Project Timeline

Various

Other Considerations

Impact on Agency Operating Budgets

The legislature authorizes a direct appropriation from the Environmental Fund for the administrative costs of the Solid Waste Capital Assistance Program. This request for capital bonding request does not affect our annual operating budget.

Description of Previous Appropriations

- Laws 2018, Chapter 214 \$0.75 million
- Laws 2017, 1SS, Chapter 8 \$9.25 million
- Laws 2015, 1SS, Chapter 5 \$9.28 million
- Laws 2014, Chapter 294 \$2.63 million
- Laws 2011, SS Chapter 12 \$0.55 million
- Laws 2010, Chapter 189 \$5.08 million
- Laws 2006, Chapter 258 \$4.00 million
- Laws 2005, Chapter 20 \$4.00 million
- Laws 2002, Chapter 393 \$1.15 million

Laws 2000, Chapter 492 \$2.20 million
Laws 1999, Chapter 220 \$3.00 million
Laws 1998, Chapter 404 \$3.50 million
Laws 1996, Chapter 463 \$3.00 million
Laws 1994, Chapter 643 \$3.00 million
Laws 1992, Chapter 558 \$2.00 million
Laws 1990, Chapter 610 \$7.00 million
Laws 1987, Chapter 400 \$4.00 million
Laws 1985, Chapter 15 \$11.40 million
Laws 1980, Chapter 564 \$8.80 million
Total Appropriations \$84.59 million

Project Contact Person

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Continuous Nitrate Sensor Network

AT A GLANCE

2020 Request Amount: \$2,000

Priority Ranking: 7

Project Summary: This project would upgrade existing and improve new infrastructure to establish a small real time in-stream nitrate sensor network in Minnesota.

Project Description

Installing in-stream nitrate sensors in water infrastructure would facilitate the collection of continuous real-time water quality data that are not currently available. These data would be far more complete than existing data from intermittent grab samples and would allow the state to track progress and more precisely direct investments to practices that will help meet the goals called for in Minnesota’s Nutrient Reduction Strategy. The state’s reductions are designed to work in collaboration with downstream states’ efforts. The work includes modeling, data sharing, and informing the installation of best management practices all of which would be vastly enhanced by real-time nitrate sensors.

Project Rationale

This network would provide continuous nitrate data at major basin pour points in the Minnesota and Mississippi Rivers. These data would be used to track progress, pinpoint investments to improve water quality, and allow for more public awareness about how land-use decisions impact water quality in real time. Downstream from Minnesota, Iowa and Illinois are installing nitrate sensors in the Mississippi River and tributaries and plan to make data available nationwide through a webportal to inform local and state decision makers through the Mississippi River Basin and to help states collectively track progress on nutrient reduction.

Project Timeline

2020

Other Considerations

Projects would be located on outlets of the major tributaries to the Mississippi River (MN River at Jordan, St. Croix River at Stillwater, Mississippi River at St. Anthony Falls, Mississippi River at L&D3.

Impact on Agency Operating Budgets

MPCA staff will maintain the sensors.

Description of Previous Appropriations

None

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Community Electric Vehicle Infrastructure Grant Program**AT A GLANCE****2020 Request Amount:** \$12,000**Priority Ranking:** 8**Project Summary:** This request is for \$12 million for grants for the installation of public electric vehicle (EV) charging stations at strategic publicly-owned locations in our state.**Project Description**

A more robust network of charging stations will give EV drivers the opportunity to charge their vehicles at these public areas. Access to adequate public charging opportunities provides confidence to prospective and existing EV owners by ensuring they will have adequate opportunities to charge their vehicle batteries while on the road. Strategic publicly-owned locations for charging infrastructure could be parks, municipal buildings, and other areas.

Project Rationale

The state has a goal of seeing 200,000 EVs on the road by 2030 and this project will help alleviate range anxiety by building out EV infrastructure.

Project Timeline

Various

Other Considerations**Impact on Agency Operating Budgets**

MPCA would manage the grants.

Description of Previous Appropriations

None

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