



Evaluation Report Summary / January 2019

Public Facilities Authority: Wastewater Infrastructure Programs

Key Facts and Findings:

- The Public Facilities Authority (PFA) and the Minnesota Pollution Control Agency (MPCA) jointly administer the majority of the state’s wastewater infrastructure programs.
- PFA manages the financial component of four grant and loan programs that help local units of government construct wastewater infrastructure.
- Wastewater treatment facilities clean wastewater so that it can safely be returned to the environment.
- Clean Water State Revolving Fund loans make up the vast majority of the funding PFA has provided to support wastewater infrastructure. PFA offers these loans to local governments at or below market interest rates.
- PFA appears to be in full compliance with federal and state legal requirements governing wastewater infrastructure programs.
- Though lengthy, PFA’s process for awarding wastewater infrastructure funding is thorough and appropriate.
- State legal requirements with respect to minimum interest rates for Clean Water State Revolving Fund loans are unclear.
- PFA loans will save Minnesota communities a minimum of \$675 million in interest on wastewater infrastructure projects financed from fiscal years 1990 to 2018. PFA’s lower interest rates, along with available grant funding, have resulted in reductions in per-household wastewater costs.
- Due to inherent data-collection constraints, the state of Minnesota may not have a good understanding of the true extent of wastewater infrastructure needs.
- MPCA administers (1) the Project Priority List, which ranks near-term wastewater projects in line for PFA funding, and (2) the Wastewater Infrastructure Needs Survey (WINS), which collects information on long-term wastewater infrastructure needs.
- The cost estimates reported through WINS and the Project Priority List were often higher than the final funding amounts, but the data sources cannot be compared easily.
- If current state and federal funding trends continue for the next 20 years, PFA could satisfy more than two-thirds of Minnesota’s estimated 20-year wastewater infrastructure needs.
- Some direct appropriations made by the Legislature have circumvented the state’s established process for funding wastewater infrastructure.

Key Recommendations:

- The Legislature should clarify Minnesota statutes regarding minimum interest rates on Clean Water State Revolving Fund loans.
- MPCA should develop a method to link WINS data to Project Priority List data.
- The Legislature should exercise restraint when making direct appropriations for wastewater infrastructure projects.

The Public Facilities Authority (PFA) has done a good job administering wastewater infrastructure funding programs.

Wastewater treatment protects the environment and human health.

Report Summary

Wastewater is the used water resulting from everyday activities, such as washing dishes, doing laundry, showering, and flushing the toilet. Wastewater that is returned to the environment without being cleaned poses a threat to environmental and human health.

Wastewater treatment facilities clean wastewater so that it can be safely returned to the environment. Nearly 600 Minnesota cities, townships, and other communities operate wastewater treatment facilities large enough to require a state permit.

Wastewater travels from homes and businesses to wastewater treatment facilities through community-owned sewer systems. Many facilities discharge water into rivers and lakes. Some smaller wastewater treatment facilities partially treat wastewater before discharging it into the ground or through spray irrigation, where the water is cleaned as it seeps through the soil.

There are a number of reasons that communities may build, rehabilitate, or replace wastewater treatment infrastructure (treatment facilities and sewer pipes). They may build new infrastructure if the community lacks a municipally operated treatment system or has outgrown its current system. Communities may also need to upgrade treatment processes to meet water quality standards or to rehabilitate aging infrastructure.

The Public Facilities Authority administers four programs that help communities finance wastewater infrastructure improvements.

Since 1990, the Public Facilities Authority (PFA) has awarded more than \$4.4 billion (in 2012-adjusted dollars) in loans and grants to help Minnesota communities finance wastewater infrastructure construction projects.

The **Clean Water State Revolving Fund** allows PFA to make loans at or below market interest rates to communities for wastewater infrastructure improvements. The largest of the four programs, the revolving fund accounts for 88 percent of the dollars PFA awards. The fund is capitalized, in part, by federal grants and a required 20-percent state match.

The **Water Infrastructure Fund (WIF)** program provides grants to reduce the cost of wastewater infrastructure to households in the community. In order to qualify, the proposed wastewater infrastructure project must result in average annual per-household wastewater costs equal to at least 1.4 percent of the median household income. PFA awards WIF grants only to qualifying recipients of Clean Water State Revolving Fund loans or to communities financing their projects through the U.S. Department of Agriculture Rural Development office.

Point Source Implementation Grants (PSIG) provide funding for communities that must upgrade their wastewater treatment facilities to meet specific pollutant discharge requirements.

The **Small Community Wastewater Treatment Program** provides grants and loans to small communities without municipally owned wastewater treatment systems. Technical assistance grants fund engineering studies to help communities evaluate their options and decide whether a municipally owned treatment system is in their best interest. For communities that select a publicly owned option, PFA may award construction loans and grants to help complete the project.

PFA has successfully administered the state's wastewater infrastructure programs.

Stakeholders told us that PFA runs its programs “like a bank.” PFA is widely regarded as efficient, effective, and helpful. Among the stakeholders we spoke with—representing communities, environmental and conservation groups, legislative staff, and state and federal program partners—none had anything negative to say about PFA.

We conducted a file review to test PFA’s compliance with multiple state requirements related to awarding wastewater infrastructure funding. PFA was in full compliance with the requirements we evaluated.

The U.S. Environmental Protection Agency (EPA) distributes the Clean Water State Revolving Fund federal funding to states. In its annual program reviews, EPA has stated that PFA meets all federal program requirements. In addition, EPA has

highlighted Minnesota as an example of good management practices in its *SRF Fund Management Handbook*.¹

State law is unclear with respect to minimum interest rates on Clean Water State Revolving Fund Loans.

Minnesota statutes state that revolving fund loans must be made “at or below market interest rates, including interest-free loans.”² Minnesota rules, however, prohibit the interest rate from dropping below 1 percent.³

While we view this as a conflict, PFA contends that the agency satisfies the statutory requirement through revolving fund dollars it allocates to interest-free loan programs in other state agencies. Regardless, we recommend that the Legislature clarify the statute. If it does not specifically want PFA to make interest-free loans, it could amend the statute to permit, but not require, such loans. If the Legislature wants interest-free loans to be an option, it could specify in statute the circumstances under which they should be available.

Minnesota communities have realized significant savings through PFA’s wastewater infrastructure programs.

Through the Clean Water State Revolving Fund, PFA awards loans at or below market interest rates. While the specific rates have varied over time, PFA rates have been as much as 66 percent lower than the rates that a AAA-rated borrower would have received at market. For wastewater infrastructure projects that PFA financed from fiscal years 1990 to 2018, PFA loans will ultimately save Minnesota communities nearly \$700 million.

In addition to interest savings, PFA’s grant funding also results in savings for communities. We compared the annual project costs that communities incurred with PFA loans and grants to what those costs would have been without PFA funding. For communities that received PFA funding in Fiscal Year 2018, average project costs were

43 percent lower than they would have been for the same project financed entirely with a market-rate loan. This translates into net average annual per-household wastewater costs 12 percent lower than they would have otherwise been.

It may be impossible to accurately estimate long-term statewide wastewater infrastructure needs.

The Minnesota Pollution Control Agency (MPCA) maintains the Project Priority List, which catalogs the projects for which communities plan to seek PFA funding in the next five years. MPCA also conducts a biennial Wastewater Infrastructure Needs Survey (WINS), with which it estimates long-term statewide needs.

Both lists have limitations. The 2018 Project Priority List identified \$1.5 billion worth of wastewater projects slated for the next five years, but did not include projects for which the community does not plan to seek PFA funding.

Using WINS data, MPCA estimates that communities across Minnesota will have \$5 billion in wastewater infrastructure needs over 20 years. However, MPCA does not survey all communities that lack wastewater treatment facilities or that have facilities too small to require a state permit. Further, future wastewater infrastructure needs may be impossible to anticipate and difficult to estimate. Not all of the WINS respondents that submitted a project provided a cost estimate.

Preliminary cost estimates are often higher than the final costs for wastewater infrastructure projects. We found that for projects funded in Fiscal Year 2017, Project Priority List cost estimates, in aggregate, were much higher than the costs of the projects ultimately funded. Further, WINS estimates, overall, were higher than Project Priority List estimates for the same communities.

PFA’s wastewater infrastructure programs have resulted in significant savings for Minnesota communities.

¹ U.S. Environmental Protection Agency, *SRF Fund Management Handbook* (Washington, DC, 2018), 23 and 48.

² *Minnesota Statutes* 2018, 446A.07, subd. 7(b).

³ *Minnesota Rules*, 7380.0442, subp. 1(C), published electronically August 21, 2007.

If recent funding trends continue, PFA could fund 69 percent or more of Minnesota communities' wastewater infrastructure needs.

We were not able to successfully link specific projects in the WINS data to the corresponding Project Priority List data (let alone the final funded projects). We recommend that MPCA update the WINS questionnaire to collect Project Priority List identification numbers when applicable. This would allow MPCA to better link the available data sources and determine the extent to which WINS cost estimates are correct.

Under the right circumstances, PFA could address more than two-thirds of Minnesota's estimated long-term wastewater infrastructure needs.

If state and federal support continue at current levels and if the agency maintains a strong credit rating on the state revolving fund, PFA will be able to loan almost \$2.5 billion from the fund over the next 20 years. In addition, we expect PFA to award roughly \$1 billion in grants from its other wastewater infrastructure programs during that time. At this funding level, PFA could finance nearly 70 percent of the estimated statewide need of \$5 billion identified through the WINS survey. The

projects for which communities intend to apply for PFA funding amount to an estimated \$3.9 billion worth of wastewater infrastructure projects over 20 years. At current funding levels, PFA could finance 89 percent of the costs of these projects.

Our calculations related to PFA's funding capacity do not include direct appropriations that the Legislature makes to specific communities for wastewater infrastructure improvements. In 2017 and 2018, the Legislature made a total of 16 such appropriations, totaling \$27 million.

These awards circumvented PFA's established funding process; nearly half of the recipients would not have been eligible for awards from the state revolving fund given their low Project Priority List point totals. Since PFA and MPCA already have a comprehensive process for vetting funding recipients, we recommend that the Legislature exercise restraint when making direct appropriations for wastewater infrastructure projects.

Summary of Agencies' Responses

In a letter dated January 16, 2019, Public Facilities Authority Executive Director Jeff Freeman said, "We are pleased that the report affirms that the PFA does a good job administering wastewater infrastructure funding programs, and that these programs have resulted in significant savings for Minnesota communities." Freeman explained that the management of the Clean Water State Revolving Fund is one of the agency's most important responsibilities. He also acknowledged the role of grant funding in the state's funding framework and said that communities can best be encouraged to proceed with their projects in a timely manner if "grant assistance [is] predictable and consistent."

In a letter dated January 15, 2019, Minnesota Pollution Control Agency Commissioner Laura Bishop said that the evaluation report "does an excellent job describing the purpose and importance of the various wastewater infrastructure grant and loan programs administered by the PFA and the role the MPCA plays in cataloging and collecting data on the planned projects." Bishop said that MPCA agrees with the Office of the Legislative Auditor's recommendation to link two agency data sources related to proposed wastewater infrastructure projects. Bishop said that the agency is in the process of implementing this recommendation.

The full evaluation report, *Public Facilities Authority: Wastewater Infrastructure Programs*, is available at 651-296-4708 or: www.auditor.leg.state.mn.us/ped/2019/wastewater.htm