

Statement of Policy

Milwaukee Metropolitan Sewerage District's 2010-2020 Private Property Inflow and Infiltration Reduction Program

Introduction

Infiltration is the quantity of water entering a sewer system through such sources as defective pipes, pipe joints, connections or manhole walls. Inflow is the quantity of water entering the sewer system through connections such as area or foundation drains, connected downspouts, and catch basins. Many sources of inflow are illegal. During rain events, infiltration and inflow (“I/I”) dramatically increases the flows in the sanitary sewer system.

Infiltration and inflow increases the amount of flow in the sewer system which ultimately must be conveyed, stored or treated by the Milwaukee Metropolitan Sewerage District (“District”) at a cost to the District’s tax and rate payers. Infiltration and inflow, during significant rain events, can lead to overflows from the sewer system into area waterways and can cause property damage like basement backups. In 2008, 2009 and 2010, severe storms caused thousands of basement backups in the District’s service area causing lost possessions, destroyed appliances, and ruined living spaces at a significant cost to area residents, that in many cases cannot be recovered through insurance claims, and significant personal distress to thousands of people.

Infiltration and inflow can occur from sources on both public and private properties. Under Wisconsin law¹, the District is not authorized to “operate, maintain, rehabilitate or preserve local sewers or appurtenant local facilities” and therefore this 2010-2020 Private Property Inflow and Infiltration Reduction Program (“Program”) is not providing funding for work on local sewers that are owned and operated by the District’s member and customer communities. The District has determined that it may perform or fund work on private property to reduce I/I and thereby reduce operating costs, capital program expenditures, and reduce the risks of overflows and basement backups.

There are a variety of ways to remedy I/I on private property. These include downspout disconnection, foundation drain disconnection, lateral repair, lateral rehabilitation and improved surface water drainage.

¹ Wis. Stat. § 200.33(1)(b) states “[e]xcept as provided in sub. (2), ss. 200.21 to 200.65 do not authorize the commission to operate, maintain, rehabilitate or preserve local sewers or appurtenant local facilities constructed by a municipality....”

This Program, as described by this Policy Document, is focused on funding remedies for I/I in order to reduce the amount of flow that must be stored, conveyed and treated by the District thereby reducing the risk of basement backups. This Policy Document sets forth a framework for the Program – as the Program matures and additional information is gathered, the District anticipates that it will be necessary or desirable to modify this Policy Document, including the potential for a financial contribution by the private property owner served.

The District makes the following Legislative Findings as the rational basis for this Program.

1. Basement backups are a significant public health and safety issue.
2. Under many circumstances, removing I/I from private property is the most direct means to reduce the risk of basement backups because it removes excess flow at the source.
3. In most circumstances, basement backups are caused by sewer surcharging that is very close to the affected property. Therefore, a) I/I reduction work in the combined sewer area will help reduce the risk of basement backups in the combined sewer area, and b) separating combined sewers is likely to have a minimal effect, if any, on basement backups in the separated sewer area. Most basement backups in 2008-2010 occurred in separated sewer areas.
4. Private property I/I work can result in lower capital and operating costs to the District and the 28 municipalities it serves, along with benefits including the availability of sewer backup insurance, lower disaster recovery costs, and preventing the devaluation of properties.
5. Disconnecting foundation drains is a very effective strategy for reducing inflow. Rehabilitation or replacement of laterals (including flood grouting) is also one of the most effective strategies for reducing infiltration, especially in older communities where deteriorated laterals can contribute very large quantities of clear water to the sanitary sewer system.
6. Private property I/I work reduces the risks of combined and sanitary sewer overflows to surface water during wet weather by increasing the percentage of total flow that can be conveyed, stored and treated.
7. Deteriorated laterals are also a source of pollution to area surface and ground waters and pose public health issues other than basement backups.

8. Although privately owned, lateral sewers are a necessary part of the collection system. Although lateral replacement or rehabilitation may be a benefit to the private property owner, that benefit is incidental to the public benefits and public purpose described above.

Definitions

Account: The District will maintain a record of the funding allocated annually to each Municipality (the Funding Allocation) and the Cumulative Funding Allocation (see below) for each Municipality net of any disbursements or transfers.

Cumulative Funding Allocation (CFA): Means the amount of money allocated to a Municipality accumulated over a period of years up to the current District fiscal year, net of any disbursements or transfers.

Design, Planning and Investigation Work: Professional services to plan an I/I reduction program, to assemble bid packages, or to design rehabilitations or replacements. This includes investigation work such as house inspection, televising, dye testing and smoke testing, as well as flow monitoring work.

Design, Planning and Investigation Cap: At the beginning of the Program, the District will calculate the Design, Planning and Investigation Cap for each Municipality. This Cap will be calculated by taking 20% of the projected total allocation over ten years, assuming total allocation of \$156 million² and based on the 2011 equalized value percentages. For example, a Municipality with 4.5% of the equalized property value would be projected to receive a total of \$7,020,000 during the ten years of the Program (based on \$156 million in total allocation) and would have a calculated Design, Planning and Investigation Cap of \$1,404,000. **It is important to understand that the actual amount allocated and dispersed to the Municipality will depend on the District's annual budget process,** but to provide some level of certainty at the beginning of the Program, the Design, Planning and Investigation Cap will be based on the current spending projection.

Funding Allocation: Means the amount of money from the Program annually allocated to a Municipality in any given year of the Program. The Funding Allocation will be based, on a proportional basis, to the amount of equalized value of property in the Municipality that is

² \$156 million represents the total project cost of \$151 million for this Program, plus \$5 million for the total project cost of the Stormwater Best Management Practices Program. The District will be allowing Municipalities to transfer allocation from the Stormwater Best Management Practices Program to the Program by request to the District's Executive Director.

serviced by the District as a percentage of total equalized value in the District's total service area. **It is important to understand that the actual amount allocated and dispersed to the Municipality will depend on the District's annual budget process.**

Infiltration: Has the meaning established by sec. NR 110.03(16), Wis. Admin. Code.

Inflow: Has the meaning established by sec. NR 110.03(17), Wis. Admin. Code.

Lateral: For the purpose of this Program, this means the entire pipe which carries wastewater flow from a privately owned building to a publicly owned sewer, also known as a "building sewer". For the purpose of this Program, this definition includes the building drain and any portion of the pipe located beneath the building.

Municipality: Municipality refers to the 28 municipalities serviced by the District, either as members or customers. Milwaukee County is not considered a Municipality for the purpose of this Program.

Private Property: Property that is not owned by a governmental entity. Governmental entities include cities, villages, towns, counties, school districts, sewerage districts, park districts, federal agencies and the State of Wisconsin.

Program: The District's 2010-2020 Private Property Inflow and Infiltration Reduction Program.

Program Funding: The money provided by the District to Municipalities under this 2010-2020 Private Property Inflow and Infiltration Reduction Program.

Eligible Work

This Program provides funding for work which reduces I/I from private property sources. In order to receive funding, a Municipality must submit a Work Plan to the District and obtain approval from the District prior to beginning work. Work Plans for Design, Planning and Investigation Work may be submitted separately from, or together with, Work Plans for physical remediation work. The District expects Municipalities to prioritize work areas, where feasible, to focus on areas with sewersheds within identified metersheds that do not comply with the District's rules on Peak Flow Rate Reduction (MMSD Rules §3.201 et seq.) on areas with basement back-up issues, on areas with a history of municipal or District overflow activity, and other areas identified as sources of high I/I because of age and type of infrastructure.

Municipalities which demonstrate they have no contiguous or discrete I/I problem areas may utilize funding for I/I work across the Municipality.

The following activities on Private Property will be eligible for funding upon approval of a Work Plan.

- i. Disconnection of a foundation drain from draining to the sanitary sewer system and installation of a sump pump and piping to discharge the drainage to a yard, rain garden, or storm sewer system.
- ii. Replacement of deteriorated lateral sewers.
- iii. Rehabilitation of deteriorated lateral sewers (for example, using cured-in-place lining, flood grouting or other methodologies).
- iv. Complete disconnection of existing laterals.
- v. Installation of privately owned storm sewer laterals and/or privately owned and located storm sewers where necessary to convey stormwater that is no longer going to the sanitary sewer system.
- vi. Inspection/investigation costs, such as dye testing, smoke testing, televising and flow monitoring (subject to the Cap).
- vii. Professional services including planning, design work, preparation of bid documents, and home inspections (subject to the Cap).
- viii. Construction inspection costs (different from item vi. above) to inspect and verify the performance of contractors.
- ix. Public education and outreach work.

The following activities may be eligible for funding as determined by the District on a case-by-case basis.

- i. Facilities or practices for management of surface flooding in circumstances where surface flooding is a source of inflow. Preference will be given to solutions which employ stormwater best management practices.
- ii. Public building laterals which are part of a larger private property based project in a high priority I/I reduction area.
- iii. Any other strategies for I/I reduction where demonstrated to be effective.

The following activities are not eligible for funding.

- i. Work to remedy situations which are currently illegal (for example, disconnection of foundation drains that are not “grandfathered” under current rules).
- ii. Backflow preventers, hung plumbing, and other basement backup prevention measures that do not result in a reduction in I/I.
- iii. Municipal staff time except as described in an approved Work Plan for activities the Municipality elects to self-perform rather than contract out (see Option 3, below).
- iv. Costs to develop, promulgate or enforce ordinances relating to I/I.

Work Plans should include the following information:

- a. A map of the location of the work.
- b. A description of the work to be performed, including public information/outreach and, for construction/remediation work, a plan for provision of construction inspection.
- c. A project schedule, including approximate start and end dates.
- d. A project budget, including a proposed procurement strategy, detailing how the Municipality anticipates obtaining necessary services (public bid, three quotes, self-perform, etc.).
- e. Expected results of the work, including a strategy for quantifying the reduction in I/I.

Work Plan Execution

Upon District approval of a Work Plan, the District and the Municipality will enter into a Partnership Agreement that sets forth the specific terms and conditions of funding. The Work Plan can be implemented through a variety of procurement options:

Option 1: The Municipality can hire contractors (including consultants) to perform the work and receive reimbursement from the District. The District will reimburse costs as incurred by the Municipality and verified by the District. The District will strive to reimburse all costs within 30 days of submission of an invoice and adequate back up documentation to the District.

Under Option 1, all construction work over \$25,000 must be awarded to the lowest responsible bidder conforming to an Invitation to Bid. The selection of professional service providers must be performed in accordance with the Municipality's internal ordinances and policies.

Option 2: The District can hire contractors (including consultants) to perform the work, and the District will make direct payments to the contractors. The use of this Option 2 is at the discretion of the Municipality but may be attractive for Municipalities who do not have the internal staff to manage bidding, contracting and oversight of the work. Municipalities may be able to combine Work Plans under District-let contracts for additional cost savings. The cost of District management and oversight will be deducted from the Municipality's funding allocation.

Option 3: A Municipality can elect to have its own staff perform planning and design work and/or remediation work. The District will reimburse actual labor (hourly rate plus a benefits multiplier), material and equipment costs for self-executed work. The District will reimburse costs for training work crews on I/I reduction strategies. The District will not reimburse administrative or indirect management costs.

Option 4: The Municipality can require Private Property owners to directly contract for the work and then provide reimbursement to the property owner from funds it receives from the District. Reasonable management costs would also be eligible for reimbursement under this option.

Access

Access to Private Properties can be obtained through a voluntary Access Agreement. If the Municipality desires, the District will provide a template Access Agreement that can be customized by the Municipality. Obtaining access is the responsibility of the Municipality (except under the District-let procurement option (Option 2)) and the cost of obtaining access is eligible for reimbursement.

If a Municipality or the District identifies property owners who will not allow voluntary access, either the Municipality or the District may apply to the appropriate Court for enforcement of the District's or Municipality's rules.

Work Plan Verification

Each Partnership Agreement will set forth specific mechanisms for inspection and verification of the work by the Municipality or the District, depending on the size, scope and nature of the work

to be performed. The District expects Work Plans to provide a strategy for performing adequate construction inspection.

In addition, the District may, at its sole cost and without debit to a Municipality's Funding Allocation, perform periodic checks of construction projects to ensure that the work is proceeding according to the approved Work Plan and Partnership Agreement.

In addition, each Municipality will be required to submit a final report to the District detailing the work accomplished, barriers encountered, costs, and any available flow reduction information.

Design, Planning and Investigation

The focus of this Program is on actual remediation work to reduce I/I from private property sources. Therefore, the District will cap reimbursement of management, planning, design and inspection/investigation work. The Cap will be established as set forth in the definitions. A Municipality may select a professional service provider (engineering firm, planning firm, etc.) or it may self-perform this work.

In addition, the District has hired a team of engineers to serve as a Regional Engineering Consultant to support all of the Municipalities in planning and designing private property I/I reduction projects. Each of the District's Municipalities may obtain services from the Regional Engineering Consultant, subject to the District's budget. The cost of service obtained from the Regional Engineering Consultant will be debited against the Municipality's Account and will count toward the Design, Planning and Investigation Cap.

In order to quickly respond to basement backups, the District has entered into contracts with National Power Rodding to inspect laterals throughout the District's service area. This service is available to each Municipality. The cost of inspections performed under these contracts will be debited against the Municipality's Account and will "count" toward the Design, Planning and Investigation Cap.

As the Program develops over time and the District is able to better evaluate the need for design, planning and investigation services, the District may elect to raise the Design, Planning and Investigation Cap.

Public Education and Outreach

Public education and outreach will be critical to the success of this Program. Owners will need to understand the importance of having this work performed on their property, and will need to understand their new infrastructure – particularly where foundation drains are disconnected and sump pumps are installed.

The District intends to enter into a contract for public outreach services. The Public Outreach provider will supply each Municipality with materials that can be used with owners. The Public Outreach provider will also be able to work directly with Municipalities.

Public education and outreach performed in a specific Municipality in conjunction with I/I reduction work is eligible for reimbursement under this Program. Public education and outreach is not subject to the Design, Planning and Investigation Cap.

Rule Changes

In support of this Private Property I/I Reduction Program, the District may make changes to its rules. Should this occur the District will follow the notice and comment procedures required by Wisconsin Statutes § 200.45 and involve the Technical Advisory Team.

Funding

A. 2010-2020 Funding Allocation (FA)

The Funding Allocation is the amount of money from the Program annually allocated to a Municipality in any given year of the Program based on the Equalized Value of the Municipality's service area as a percentage of the Equalized Value of the District's total service area.

Funding that is not provided to a Municipality (either by reimbursement or through District spending on behalf of the Municipality) during the year will be carried forward to the next year, referred to as the Cumulative Funding Allocation (CFA).

Any allocation of funding that remains in a Municipality's CFA account (i.e., money that has not been disbursed to the Municipality or spent by the District on the Municipality's behalf) as of January 1, 2021 may be reallocated by the District to other capital expenditures. However, if a Municipality has been making progress under an approved Work Plan, and unforeseen

circumstances cause a delay in completion of the work, the District may extend the funding allocation to allow for completion of the work.

B. Municipality's CFA Account

A Municipality's CFA account can be debited in two ways. First, the Municipality can perform eligible work and receive a reimbursement. Second, the District may contract directly for work on behalf of the Municipality and the payments made by the District for that work is debited against the Municipality's CFA account.

C. Spending Above the Annual Funding Allocation

Municipalities may wish to spend more dollars in a given year than the Funding Allocation for that year. Pursuant to an approved Work Plan, a Municipality may spend more than its Cumulative Funding Allocation, but the Municipality will have to wait for future years for reimbursement. For example, if a Municipality has an annual expected Funding Allocation of \$500,000, and it elects to spend \$2,000,000 on private property I/I reduction in 2011; it will receive reimbursement of the \$2,000,000 over four years – receiving the first \$500,000 in 2011, and the remainder as three lump sum payments of \$500,000 per year. Such lump-sum payments will not be made until May 1 of any given year and the District will not cover financing costs.

It is important to note that no Funding Allocation for any year is guaranteed until the District's Commission passes the Budget for that year.

D. Prior Spending Eligible for Reimbursement

A Municipality may submit a Work Plan for eligible work performed since January 1, 2010. If the Work Plan is approved, the Municipality may be reimbursed for the cost of eligible work performed since January 1, 2010, up to the available dollars in the Municipality's CFA account. No such payments will be made until after May 1, 2011.

E. Cost Match

The District is not requiring any matching funds from Municipalities in order to receive funding from the District under this Program. The District encourages Municipalities to put some of their own money toward Private Property I/I reduction as well, in order to maximize the results that can be achieved through this Program.

F. District Will Pursue Identified Remediation Work

The District is concerned about funding investigation activities where the investigation identifies needed remedial work but the Municipality fails to follow up with a Work Plan to actually perform the remediation. Therefore, where District funded investigation activities identifies the need for Private Property I/I reduction work, the District expects that the Municipality will follow up with the remediation work, at least to the extent that Program funding is available to pay for the work. If a Municipality does not proceed to utilize its allocated funding to perform identified remedial work, the District may decide to self-perform such work. In that case, the Municipality's CFA will be debited by the cost of the work.

Alternatives for "Low I/I" Municipalities

Certain Municipalities serviced by the District may reach a point where identifiable Private Property sources of I/I have been remediated, and the Municipality is not able to utilize its CFA to remediate Private Property I/I. For example, Municipalities with primarily post-1970 construction may reach a point where there is no private property I/I work to be accomplished. These Municipalities will be allowed to utilize their CFA for alternative activities designed to reduce flows to the sanitary sewer system, improve water quality, and maintain I/I levels into the future.

A Municipality that wishes to use such alternatives must first demonstrate to the satisfaction of the District that:

1. I/I from all sewersheds in the Municipality is at or below the standards set forth in the District's Chapter 3 rules on Peak Flow Rate Reduction (§3.201 et seq.); and
2. The Municipality has not experienced recurring sanitary sewer overflows or basement backups whose root cause is inflow and infiltration; and
3. To the best of the Municipality's knowledge, and making reasonable assumptions, private properties in the Municipality do not have foundation drains that discharge I/I to the sanitary sewer system; and
4. To the best of the Municipality's knowledge, and making reasonable assumptions, private properties in the Municipality do not have deteriorated laterals that discharge I/I to the sanitary sewer system.

Alternative expenditures of CFA under this Program will be approved on a case-by-case basis following a written application to the District by the Municipality. Alternative expenditures that

may be approved by the District could include installation of Stormwater Best Management Practices such as pervious pavement, green roofs, rain gardens, constructed wetlands, bioswales and the like. The District will not approve any alternative expenditures that violate state law.