City of Saint Paul's
2024 Stormwater Permit Annual Report

Minnesota Pollution Control Agency
National Pollutant Discharge Elimination System
Permit No. MN 0061263
April 2025

SAINT PAUL
MINNESOTA

Table of Contents

Background

The National Pollutant Discharge Elimination System (NPDES) program was created in 1990 by the United States Environmental Protection Agency to safeguard public waters through the regulation of the discharge of pollutants to surface waters including lakes, streams, wetlands and rivers. The Minnesota Pollution Control Agency (MPCA) is the local authority responsible for administering this program. Under this program, specific permits are issued to regulate different types of municipal, construction and industrial activities.

The MPCA issued the first Municipal Separate Storm Sewer System (MS4) NPDES Permit to the City of Saint Paul on December 1, 2000. The City's MS4 Permit was reissued on January 21, 2011, and again on July 12, 2018. The reissued permit requires submittal of a revised Stormwater Management Program (SWMP), which will be submitted to the MPCA with this Annual Report.

The Saint Paul SWMP was developed, and is administered by various City Departments that are responsible for permit activities. Included are the Public Works Department, Saint Paul Parks and Recreation Department and the Department of Safety and Inspections. These stakeholders are jointly responsible for the completion of the required permit submittals. The Department of Public Works provides program coordination. The Permit also requires public input on the development of the priorities and programs, and adoption by Council Resolution of the Annual Report.

This Report provides documentation of the activities conducted in 2024.

MS4 Permit Coordinator

Pat Murphy
Department of Public Works
651-266-6254
patrick.g.murphy@ci.stpaul.mn.us

MCM 1: Public Education & Outreach

BMP 1.1: STORMWATER PUBLIC EDUCATION AND OUTREACH ACTIVITIES

Description

The City implements public education and outreach programs in accordance with the *PUBLIC EDUCATION AND OUTREACH WORK PLAN* (included within the SWMP) to increase the awareness of stormwater pollution impacts on waters of the state to encourage changes in public behavior to reduce impacts to receiving waters.

Assessment Process for Annual Reporting

- Quantities and descriptions of educational materials distributed, and the number of visits by the public, to **stormwater** education websites.
- A summary of the education and outreach activities held, including dates of events.
- Any modifications made to the program as a result of the annual evaluation as described in Part III.C.1.b.(5).
- If the **Permittee** relied upon other organizations for some, or all, of its education and outreach program, include a summary of activities conducted by those other organizations.

2024 Activities

Public Education and Outreach activities continued utilizing a hybrid of self-serve/virtual programs. This included stenciling kits that could be checked out and virtual presentations highlighting urban non-point source pollution and related environmental issues. The Sewer Utility partnered with CRWD on the design of a water quality educational message that was installed on the back of St. Paul no parking signs. These signs will be used throughout the year for various maintenance activities and will promote keeping receiving waters clean. The Sewer Utility participated in Waterfest promoting our stormwater management programs as well as fielding any questions raised by the public. A TMDL factsheet has become part of our water quality education programs in an effort to educate the public on impaired waters within St. Paul. It is available to the public on the City's website and at various in-person public education opportunities. In 2024, the Sewer Utility created a stormwater flyer for distribution at public events that highlights the City's pet waste ordinance and promotion of proper pet waste disposal. Summaries of the Public Education and Outreach activities are within the Appendix, and within the updated Stormwater Management Program Public Education and Outreach Work Plan.

MCM 2: Public Participation & Involvement

BMP 2.1: Encourage & Solicit Input from the Public

Description

Saint Paul citizens are actively engaged in many aspects of the City's governance, being involved through commissions, district councils, volunteer organizations and electronic communications. Other public involvement techniques include workshops, web page accessibility and outreach by elected officials. The objective of this program is to make the SWMP and related documents available to the public and to provide a process for public input in the development and implementation of the SWMP.

Assessment Process for Annual Reporting

- A summary of the written public input received on the **SWMP** and the **Permittee**'s response to the input as described in Part III.C.2.
- Any modifications made to the **SWMP** as a result of the input received during the public meeting.
- The date and location of the public meeting as described in Part III.C.2.a.
- A formal resolution from the **Permittee**'s governing body adopting the annual report and the **SWMP** as required in Part III.C.2.e. The resolution must be submitted to the **Agency** no later than June 30th of each year if not available at the time of annual report submittal.

2024 Activities

The Annual Report is a coordinated effort by various City Departments. Information in the Annual Report provides documentation of the activities conducted in the previous year.

A notice of the availability of the documents for review, and public comment, was sent to all Saint Paul neighborhood organizations, to the governmental entities that have jurisdiction over activities relating to stormwater management, and to other interested parties. The City held its public meeting at Waterfest on June 1st, 2024 at Lake Phalen Park. Public Works staff offered rides on a street sweeper, showcased a catch basin cleaning truck, and participated in the event-wide water quality trivia messaging. Our stormwater management and annual reports were available for review in addition to the distribution of factsheets and flyers containing stormwater messaging. This provided the public with the opportunity to inquire and provide feedback on our stormwater management programs and activities. In addition to the public meeting, there was still opportunity for public comments via email and mail format through the Public Works Department.

Once finalized, the Annual Report and updated Stormwater Management Program are also made available on the website. All testimony presented at the public meeting, and all written comments received, are recorded and given due consideration. The public comments, response to comments and a copy of the council resolution adopting the Stormwater Permit Annual Report, and updated Stormwater Management Program, are submitted each year to the Minnesota Pollution Control Agency.

MCM 3: Illicit Discharge Detection & Elimination

BMP 3.1 PROHIBITED DISCHARGE MANAGEMENT PROGRAM

Description

The objective of this program is to effectively prohibit through ordinance or other regulatory mechanism and appropriate enforcement procedures, the introduction of non-stormwater discharges into the MS4.

Assessment Process for Annual Reporting

- The number of spills and **illicit discharge**s that occurred and a description of the response, containment, and cleanup of the spills and **illicit** discharges.
- The number of **illicit discharge** inspections and/or screening activities completed during the reporting year and a description of the response, investigation, and enforcement response procedures utilized to eliminate the **illicit discharge**s.
- Reports of alleged **illicit discharge**s received, including date(s) of the report(s), and a description of the response, investigation, and enforcement response procedures utilized to eliminate the **illicit discharge**(s).
- Sources of **illicit discharge**s, including a description and the responsible party if known.
- Identification of **outfall**s or other areas where **illicit discharge**s have been discovered and a description of the response, investigation, and enforcement response procedures utilized to eliminate the **illicit discharge**(s).
- A description of the education and outreach activities, implemented during the reporting year, to inform municipal employees, the public, and industry about reporting, responding to, and eliminating **illicit discharge**s.

2024 Activities

Spill Response

The Sewer Maintenance section of the Sewer Utility, or Saint Paul Fire Department personnel, typically serve as the first responders to a spill event. The immediate goals of this response are safety, containment of the spill, recovery of hazardous materials and collection of data for use in assessment of site impacts. Recovery efforts can take several forms, but typically fall into two broad categories: recovery for disposal, and the use of absorbents or other media to collect hazardous waste for disposal.

The life cycle of an event requires City personnel to work as a team, utilizing all available resources to protect residents, the environment and property. Outside agencies and private emergency response contractors are incorporated as needed. Spills that fall within the minimum reporting requirements are reported to the Minnesota Pollution Control Agency (MPCA) Public Safety Duty Officer. For these spills, a spill data form must be completed within 24 hours, or by the next business day. The completed forms are used to document the type of spill, as well as the response to the spill. The Sewer Utility follows the spill reporting policy, which is signed off on by employees as part of the annual policy review.

The Sewer Utility maintains a contact list summarizing all the MS4 contacts of adjacent municipalities and agencies. This aids in investigations, notifications, and response activities in multi-jurisdictional illicit discharges.

Prohibited Discharges

Pollution prevention and control is achieved through educational efforts, inspections and coordinated community outreach. These activities may include enforcement, pursuant to applicable City codes, and coordination with other regulatory agencies at the county, state and federal levels. Enforcement yields identification of the responsible party, documentation of clean-up activities, and efforts to reduce the flow of pollutants from illegal dumping and disposal. Complaints are received from the public, City staff and other government agencies. Department of Safety and Inspections and Public Works staff respond to reports of unauthorized discharges and illicit connections. The City adopted an ordinance and created a fact sheet in 2013 defining allowable discharges to the storm sewer system.

The City's Right of Way (ROW) inspectors respond to complaints resulting from utility contractors dewatering or saw cutting and construction site dewatering and tracking. Each year at the Utility Coordination Meeting, requirements and BMPs are reviewed with contractors, and a handout is provided. The ROW inspectors enforce these requirements in the field, respond to complaints and coordinate with DSI to address issues originating on private property.

In 2024, DSI sent out 38 leaf letters to properties throughout the City. This letter states that a complaint was received by the City of leaves being raked into the street. It explains how the leaves negatively impact downstream water bodies and gives information about compost sites in Ramsey County. The first letter is a warning and subsequent complaints will result in a fine to the property owner.

Discharges addressed in 2024 are within the Appendix.

Staff Training

- The Department of Public Works hosts an Annual Utility Coordination meeting to facilitate utility and street system reconstruction projects. A component of this meeting includes stormwater management items such as erosion and sediment control in the public Right-of-Way, Allowable Discharges to the Storm Sewer System, Best Management Practices, etc. Attendees are comprised of various municipal employees and utility companies.
- Various Sewer Utility personnel attend the Sewer Collection System Operators Conference conducted by the Minnesota Pollution Control Agency on an annual basis.

MCM 3: Illicit Discharge Detection & Elimination

BMP 3.2 STORM SEWER SYSTEM MAP & INVENTORY

Description

The objective of this program is to minimize pollutants in stormwater through the effective use of electronic tools for data storage, retrieval, display and analysis. An electronic inventory and map and electronic inventory is under development to support numerous stormwater management system responsibilities and activities, including operation and maintenance, design, hydrologic and hydraulic modeling, Gopher State One Call locates, capacity, condition and water quality studies, illicit discharge detection and management of spills.

Assessment Process for Annual Reporting

- A description and the date of the most recent update to the electronic storm sewer system inventory and map completed during the reporting year.

2024 Activities

Storm Drain System Infrastructure

Approximately 150 years ago, Saint Paul first constructed portions of a sewer system that today comprises 450 miles of storm sewers and over 26,000 catch basins. The system was designed to satisfy the City's obligation to provide reasonable drainage of stormwater and to prevent street flooding, which satisfied the City's responsibility to protect neighboring properties, allow for normal traffic flows, and prevent damage to streets, sidewalks and boulevards.

The Department of Public Works has a computer-based asset and infrastructure management system. This system includes both the storm and sanitary sewer networks. With various sewer system modifications occurring on an annual basis, updating of the computer-based asset and infrastructure management system occurs on an ongoing basis.

Annually a comprehensive map is updated that identifies BMP locations, and their contributing drainage areas, that Public Works operate. This map can be utilized to aid in spill response, maintenance, inspection, plan review, and locating.

Watershed and Storm Sewer Outfall Inventory

An inventory of Saint Paul's storm sewer outfalls is located in the Appendix. This inventory includes the outfall identification number, outfall name, watershed name, size of pipe and drainage area. The following information is provided in the Outfall Inventory found in the Appendix for each of the 23 watersheds in St. Paul: drainage area, land use types and distribution, population, percent impervious surface area, and the runoff coefficient. The following table shows the total number of discharge points to each water body in Saint Paul.

Discharge points to receiving waters

Receiving Water	Total Discharge Points
Bridal Veil Creek	1
Mississippi River	170
Upper Lake	8
Crosby Lake	9
Fairview North Pond	2
Lake Como	19
Loeb Lake	1
Lake Phalen	18
Beaver Lake	4
Suburban Pond	2
Little Pig's Eye Lake	1
Pig's Eye Lake	5
Battle Creek	11

Stormwater Ponds

A map showing the stormwater ponding areas in the City of Saint Paul is included in the Appendix. The Appendix also contains the tributary area and design capacity for each City ponding area and a list of ponding areas by watershed.

NPDES Permitted Facilities

Facilities in Saint Paul that are issued NPDES permits by the MPCA are identified in Appendix.

Industrial Land Use

Industrial land uses may generate higher concentrations of hydrocarbons, trace metals, or toxicants than are found in typical stormwater runoff. Maps showing the areas of industrial land use in Saint Paul is included in the Appendix.

MCM 3: Illicit Discharge Detection & Elimination

BMP 3.3 DRY WEATHER FIELD SCREENING PROGRAM

Description

The objective of this program is to develop, and as necessary continue to develop, and implement a dry weather field screening program to detect and eliminate non-stormwater discharges, including illegal dumping, to the system. The City shall inspect each outfall at least once over the five-year term of the current permit for evidence of illicit discharges.

Assessment Process for Annual Reporting

- The number of **illicit discharge** inspections and/or screening activities completed during the reporting year and a description of the response, investigation, and enforcement response procedures utilized to eliminate the **illicit discharge**s.
- Identification of **outfall**s or other areas where **illicit discharge**s have been discovered and a description of the response, investigation, and enforcement response procedures utilized to eliminate the **illicit discharge**(s).
- A description of the education and outreach activities, implemented during the reporting year, to inform municipal employees, the public, and industry about reporting, responding to, and eliminating **illicit discharge**s.

2024 Activities

Detection and Removal Screening Program

The field screening program to detect and investigate contaminated flows in the storm drain system is a part of the City's daily operations. Sewer Maintenance crews routinely inspect and clean the storm sewer system throughout the City. Inspections of flows that generate unusual odors, stains, and deposits are included in the annual outfall inspection program. In addition, Sewer Maintenance performs Gopher State One-Call utility locating for the storm sewer system, integrating visual inspection for illicit discharges

The City conducts its own stormwater quality monitoring activities via a Consultant, and also coordinates with the Capitol Region Watershed District on comprehensive stormwater quality monitoring program in Saint Paul.

The City investigates prohibited discharges as part of its regular tunnel, outfall, and pond inspection program. The City also investigates complaints and issues identified in the monitoring program. The Department of Safety and Inspections carries out enforcement on property code violations. Under Chapter 45 of City Code, the City is authorized to collect via assessment its cost of abating property-related health and safety problems when an owner has failed to perform the work following notice by the City. The City may assess property owners to recover unpaid city charges.

GIS mapping is implemented as a tool to support various activities. Information that is gained through the sewer system inspection program can be used to compile data on non-stormwater discharges, storage of hazardous materials, and activities or operations that may be potential water pollution point sources. The City will continue to investigate prohibited discharges as part of its regular tunnel, outfall and pond inspection programs, stormwater quality monitoring, and day-to-day sewer operations.

Any suspect flows are then reported to appropriate City staff for further investigation. These combined efforts result in an annual screening of more than 20% of City drainage areas.

The best avenue for a continued effective screening program in the City of Saint Paul, without duplication of services, is to continue to use current practices, and to explore the development of certain aspects of the program to improve enforcement results.

Standard Operating Procedures and Checklists

- The Parks Department uses a Spill Reporting form and instructions (See Appendix). Form is completed in the event of a spill if petroleum or hydraulic spills greater than five gallons, and other materials spill of any size. The Minnesota Duty Officer is notified, as required, in the event of a reported spill.
- The Parks Department and Public Works Department have Clean Water Policies which are distributed, reviewed, and signed by all field staff. (See Appendix).
- The Department of Public Works hosts an Annual Utility Coordination meeting to facilitate utility and street system reconstruction projects. A component of this meeting includes stormwater management items such as erosion and sediment control in the public Right-of-Way, etc. Attendees are comprised of various municipal employees and utility companies.
- The Department of Public Works developed a Dry Weather Screening written procedure, included within the Appendix of the SWMP.
- The Department of Public Works developed a IDDE Field Guide, and routinely updates and trains staff on current procedures.
- The Department of Public works partnered with Bolton & Menk to create IDDE training videos for the public and City staff. The public video was added to the Sewer Utility's website to increase awareness and detection of illicit discharges.

MCM 3: Illicit Discharge Detection & Elimination

BMP 3.4 INDUSTRIAL ACTIVITIES MANAGEMENT PROGRAM

Description

The objective of this program is to minimize the discharge of pollutants from industrial activities by administering and enforcing ordinances, exercising municipal authority over activities with high potential for stormwater pollution, and providing information to assist the MPCA in carrying out its industrial permitting program.

Assessment Process for Annual Reporting

- Number of water and land pollution complaints.
- Number of discharge incidents reported to MPCA Industrial Permit Program.
- Industrial facilities inventoried.
- Stormwater hotspots inventoried.
- Number of discharges eliminated from industrial facilities.

2024 Activities

A map of the industrial land use areas in the City is included in the Appendix. Complaints in the ROW are handled by the Public Works ROW inpectors. Those that originate on private property are referred to DSI. The City coordinates with the MPCA Industrial Stormwater Program for sites that are permitted by the MPCA. Discharges addressed in 2024 can be found in the Appendix.

MCM 4: Construction Site Erosion & Sediment Control

BMP 4.1: DEVELOPMENT & REDEVELOPMENT CONTROL PROGRAM

Description

The objective of this program is to minimize the discharge of pollutants from construction sites disturbing one acre or more by requiring erosion prevention and sediment control measures. Chapter 52 of the Saint Paul Code of Ordinances requires projects disturbing one acre or more to provide for erosion and sediment control during construction. Sites one or more acres in size are also required to obtain NPDES General Construction Permits from the Minnesota Pollution Control Agency, the Capitol Region Watershed District and the Ramsey-Washington Metro Watershed District.

This program encompasses a variety of individuals responsible for water quality concerns from construction activities. These individuals include designers of erosion control plans; staff responsible for plan review; and, field inspectors with municipal authority over contractors.

Assessment Process for Annual Reporting

- Report on number of site plans reviewed and approved.
- Report on number of site erosion and sediment control inspections recorded.
- Report on development and implementation of written procedures for site plan review and erosion and sediment control inspections.
- Report on number of non-compliance incidents that were identified and addressed by municipal inspectors.
- Report on development of citizen complaint process and number of citizen complaints received and addressed.
- Report on number of staff trained related to construction site erosion and sediment control.

2024 Activities

Program Overview

Saint Paul Code of Ordinances, Part II – Legislative Code, Title VI - Building and Housing, Chapter 52 Stormwater Runoff contains erosion and sediment control requirements, and stormwater management requirements for new developments and other land-disturbing construction activities. Construction activities and new development projects are reviewed through the City's Site Plan Review process. This review provides comments that are integrated into a final plan submittal that is subsequently routed to the City's Departments for approval. The Department of Safety and Inspections reviews projects for compliance with the erosion & sediment control requirements and water quality requirements. The Sewer Utility reviews projects for rate control, flood protection and capacity issues.

Site Plan Review

DSI and Public Works staff provide a detailed review of site plans, and track process to identify stormwater management opportunities. During 2024, City Departments reviewed 115 site plan applications, and issued final approval and permitting on 62 of them. Continued attention to erosion and sediment control plan submittals, along with increased awareness in the industry, provided for better compliance during site inspections.

Inspection and Enforcement
Ongoing site inspections are performed by DSI inspectors. In 2024, DSI inspectors conducted 331 erosion control inspections at various new and redevelopment sites.

Inspectors may issue a warning notice citation or a "Stop Work Order". Failure of the permittee to comply with the ordinance will constitute a violation and will be considered a nuisance pursuant to the laws of the State of Minnesota. If there is a demonstrated failure to comply, the City reserves the right to terminate a permit at any time. The City then has the option of proceeding with the necessary restoration of the site. This restoration would be done at the expense of the owner/permittee. Increased awareness of the ordinance, improved plan submittals, and a continued compliance-based inspection program resulted in a continued rise in compliance. Inspections were coordinated with the Capitol Region and Ramsey-Washington Metro Watershed Districts.

New public and private developments and other projects that disturb one acre or more will be inspected for erosion and sediment control. This effort will lead to a continued awareness of the problems associated with construction site sediment. This will also result in a continuing increase in the overall rate of compliance citywide. The City will continue to study options to increase compliance, and to help limit the amount of erosion and sediment loss associated with construction projects.

Standard Operating Procedures and Checklists
The standard form utilized for documenting field inspections on private projects is found in the Appendix. The form supplements a database which tracks multiple levels of information including inspections for erosion control. The City has developed the following standard operating procedures (SOPs) and checklists for Erosion and Sediment Control (ESC) on public and private construction sites:

- The City of Saint Paul utilizes standard forms for both public and private construction sites.
- Public Works Right-of-Way Division uses a form when ROW inspectors inspect Utility Installation work. (See Appendix.)
- In 2018, DSI revised the Site Plan Erosion and Sediment Control Review Procedure. City staff will continue to develop performance measures and to improve data collection, tracking and analysis. The City will also pursue means of measuring and understanding water quality impacts.
- Erosion control plans and inspections are tracked in the City's AMANDA system.
- Handouts and worksheets are distributed to all relevant applicants.
- The Department of Public Works developed an Environmental Enforcement Response Procedure for application on Public Works Construction sites included within the Appendix of the SWMP.
- The Department of Public Works developed a SWPPP Inspections standard operating procedure for application on Public Works Construction sites included within the Appendix of the SWMP.

Staff Training

- The Department of Public Works hosts an Annual Utility Coordination meeting to facilitate utility and street system reconstruction projects. A component of this meeting includes stormwater management items such as erosion and sediment

control in the public Right-of-Way, etc. Attendees are comprised of various municipal employees and utility companies.

- City of Saint Paul inspectors are trained and certified through the University of Minnesota's Erosion and Stormwater Management Certification Program. This includes Department of Public Works Street Construction inspectors, Public Works ROW inspectors, Department of Safety and Inspections Building Inspectors and Parks Environmental Services staff. The certification includes a recertification component within a 3-year period, which ensures training stays current with techniques and regulations.

MCM 4: Construction Site Erosion & Sediment Control

BMP 4.2 MUNICIPAL CONTROL PROGRAM

Description

The objective of this program is to minimize the discharge of pollutants from construction sites disturbing 1 acre or more carried out by the City by requiring erosion and sediment control measures. Sites one or more acres in size are required to get NPDES General Construction Permits from the Minnesota Pollution Control Agency, the Capitol Region Watershed District and the Ramsey-Washington Metro Watershed District.

This program encompasses a variety of individuals responsible for water quality concerns from construction activities. These individuals include designers of erosion control plans, staff responsible for plan review and field inspectors.

Assessment Process for Annual Reporting

- The number of construction stormwater complaints received and the responses to those complaints.
- The number of site inspections completed and a summary of inspection findings.
- The number of violations of the Permitee regulatory mechanism(s) for construction site stormwater runoff control and the types of enforcement response procedures utilized.
- The title of construction stormwater training attended by Permitee staff.

2024 Activities

Non-Linear, municipal site projects go through the site plan review process and are inspected by the building inspectors for erosion and sediment control. Please see the description of this program in BMP 4.1. The standard forms utilized for documenting field inspections for street reconstruction projects is intended to be handwritten in the field and included in the project file. Staff started using the forms in 2011. During 2024, Public Works Construction inspectors continued to work with internal forces and watershed district staff on erosion and sediment control compliance.

Standard Operating Procedures and Checklists

- The Department of Public Works developed an Environmental Enforcement Response Procedure for application on Public Works Construction sites included within the Appendix of the SWMP.
- The Department of Public Works developed a SWPPP Inspections standard operating procedure for application on Public Works Construction sites included within the Appendix of the SWMP.

Staff Training

- The Department of Public Works hosts an Annual Utility Coordination meeting to facilitate utility and street system reconstruction projects. A component of this meeting includes stormwater management items such as erosion and sediment control in the public Right-of-Way, etc. Attendees are comprised of various municipal employees and utility companies.
- City of Saint Paul inspectors are trained and certified through the University of Minnesota's Erosion and Stormwater Management Certification Program. This includes Department of Public Works Street Construction inspectors, Public Works ROW inspectors, Department of Safety and Inspections Building

inspectors and Parks Environmental Services staff. The certification includes a recertification component within a 3-year period, which ensures training stays current with techniques and regulations.

MCM 5: Post-Construction Stormwater Management

BMP 5.1: DEVELOPMENT & REDEVELOPMENT MITIGATION PROGRAM

Description

The objective of this program is to minimize the post-construction discharge of pollutants and stormwater runoff volume from construction projects disturbing one acre or more. Chapter 52 of the Saint Paul Code of Ordinances requires projects disturbing one acre or more to provide post-construction stormwater management. Sites one or more acres in size are also required to obtain NPDES General Construction Permits from the Minnesota Pollution Control Agency, the Capitol Region Watershed District and the Ramsey-Washington Metro Watershed District.

Projects are reviewed through the City's site plan review process, which is facilitated by the Department of Safety and Inspections. The Site Plan Review Committee is made up of staff from various departments including the Sewer Utility, Saint Paul Regional Water Services, PW Traffic Division, Zoning and Fire & Safety. Building permits are not issued until site plan review approval is formally attained.

Assessment Process for Annual Reporting

- Narrative on number of projects reviewed, number of projects approved, number and type of structural BMPs constructed or installed.

2024 Activities

Ongoing Stormwater Management

Redevelopment of existing sites provides an opportunity to lessen the impacts of urbanization on the Mississippi River and other Saint Paul water resources. During 2024, Stormwater Best Management Practices (BMPs) were installed on sites reviewed through the Site Plan Review process. BMP types that were constructed include:

- Rain gardens
- Pervious pavement
- Infiltration areas
- Stormwater ponds
- Underground infiltration/filtration and detention facilities

Plan Review

Stormwater management plans are required for all construction projects, which disturb one acre or more of land. These plans are reviewed through the Site Plan review process and approved by the Department of Safety and Inspections and the Saint Paul Public Works Sewer Utility. Sites disturbing less than one acre are also required to provide runoff rate control, if the project disturbs greater the 10,000 square feet. In addition, sites under one acre are encouraged to incorporate green infrastructure stormwater BMPs into their design as a means of satisfying other city codes, such as parking requirements. The City updated its Off-Street Parking Code in 2021 further revision is needed to address stormwater management requirements.

MCM 5: Post-Construction Stormwater Management

BMP 5.2 COMPLIANCE PROGRAM for PRIVATE SITE CONTROLS

Description

The objective of this program is to implement a program for maintenance, inspection, record keeping and reporting of private stormwater devices constructed in accordance with the City's requirements.

Assessment Process for Annual Reporting

- Narrative on development of procedures.
- Number of new listings entered for privately owned BMPs.
- Once procedures are implemented, identify percent compliance with submittal of compliance reporting documents.

2024 Activities

City ordinance requires the design to minimize the need of maintenance and to provide access for equipment and personnel. The facilities must have a plan of operation and maintenance that ensures effective removal of pollutants. The ordinance also allows the City right of entry and inspection. In 2015, the City began a comprehensive review of its stormwater policies. In 2018, the City updated its Local Surface Water Management Plan. As a part of this planning effort, various ordinances were analyzed, and revisions proposed. This will assist in future planning to meet the identified Proposed Activities and Implementation Schedule. The City coordinates with the CRWD and RWMWD in the development of a BMP database and procedures to ensure that private BMPs are maintained. The City's Local Surface Water Management Plan was adopted by City Council in 2019.

MCM 5: Post-Construction Stormwater Management

BMP 5.3 MUNICIPAL MITIGATION PROGRAM

Description

The stormwater management objective of this practice is to reduce the discharge of pollutants through the proper planning, design, and construction management of projects carried out by the City.

Assessment Process for Annual Reporting

- Inventory of new Stormwater Management Practices installed with City capital improvement projects.

2024 Activities

- ***Public Works Projects***
    - Griggs-Scheffer (Phase II Rebid): Public Works installed multiple subsurface infiltration trenches ($515,000).
    - Minnesota St: Public Works installed multiple Stormwater Manufactured Treatment Devices ($133,000).
    - Wheelock Pkwy (Phase V): Public Works installed a subsurface infiltration trench ($225,000).
    - Advanced planning and engineering on 2025 Street Reconstruction projects. (Grand Ave, Kellogg Phase II, Kellogg-Third Street Bridge, Pleasant Ave, Robert Street, University Ave, Wheelock-Grotto Phase I).
    - Bush-Desoto Pond: In 2024, Public Works completed the retrofit and stormwater quality improvements of Bush-Desoto pond (cost $840,000).
    - Flandrau-Case Pond: In 2024, Public Works awarded a contract to retrofit for stormwater quality improvements at Flandrau-Case Pond ($600,000).
    - Saint Anthony Hill Subwatershed: In 2024, Public Works initiated an updated of a detailed Hydrologic and Hydraulic Model of the 2,800+ acre Saint Anthony Hill Subwatershed. Included in the scope of work was the development of a P8 water quality model ($153,000)
    - Lake Phalen Subwatershed: In 2024, Public Works initiated a detailed Hydrologic and Hydraulic Model of the 2,950+ acre Lake Phalen Subwatershed. Included in the scope of work was the development of a P8 water quality model ($105,000)
    - Davern Subwatershed: In 2024, Public Works initiated a detailed Hydrologic and Hydraulic Model of the 1,200+ acre Davern Subwatershed. Included in the scope of work was the development of a P8 water quality model ($97,000).
    - Outfall Modeling to the Mississippi River completed in 2024 ($12,000)

- ***Parks and Recreation Projects***
    - Parks and Recreation received 1,958 hours of in-kind labor from Conservation Corps Minnesota for installation and maintenance of stormwater best management practices in Saint Paul. Funding was made possible through the Legacy Amendment.

- In partnership with surrounding watershed districts, maintained 17 acres of vegetated buffers and raingardens to stop 126 pounds of phosphorus and 5 tons of sediment from entering local freshwater ecosystems.
- Parks and Recreation installed three acres of native prairie and enhanced three acres of native prairie in Mounds Regional Park to keep water on the land to protect the water quality of the Mississippi River.
- In partnership with Great River Greening, completed 10 acres of bee lawn interseeding, 4.5 acres prairie enhancement, and initiated buckthorn removal across 25.5 acres at Crosby Farm and Hidden Falls Regional Parks to keep water on the land to protect the water quality of the Mississippi River.
- Collaborated with Capitol Region Watershed District to remove invasive and diseased trees around Como Lake and installed plants and seed guided by the 2019 Como Lake Shoreline Management Plan. Worked with the Conservation Corps around the entire perimeter (approx. 13.22ac) of Lake Como and storm damage clean up after the August storm.
- Continued work on enhancement of Swede Hollow Park with funding from the 2022 Conservation Partners Legacy Grant, including: Invasives and weedy species management, erosion control installation, and plant and seed installation. Activities were completed by City staff as well as in conjunction with Tree Trust, Urban Roots, and the GAP program.
- Collaborated with Great River Greening on lakeshore enhancement at Loeb Lake. Project tasks included invasive tree removal, seeding shoreline, converting turf to prairie, and felling trees into the water body for fish habitat over 2.8 acres.
- Converted one half acre of degraded lakeshore and turf grass to native prairie at Round Lake in partnership with Ramsey County and Ramsey Washington Metro Watershed District.
- Executed eight rain garden replanting projects including five complete re-plantings, two supplementary plantings, and one overseeding.
- Removed sediment from 13 rain gardens amounting to 46 cubic feet of sediment removed, prolonging the lifespan of each BMP
- Dedicated 268 hours to weeding, mowing, spraying invasive species, and cutting out woody volunteers in rain gardens.
- The 2024 Annual Citywide Spring Cleanup saw 1,232 volunteers cleaning up our parks and streets at 47 unique sites during a 1-time event. We were joined by the Saint Paul Fire Department, Public Works, Libraries, and many other organizations.

- ***City-Partner Collaborative Efforts***
  - Hillcrest Golf Course: Public Works, Parks, RWMWD, continued review of the Port Authority plans for comprehensive stormwater facilities to service entire 112 acre public/private redevelopment.

  - Parks and Recreation partnered with CRWD to jointly manage six rain gardens. CRWD oversaw rain garden contractors and project tasks included invasive species control, tree and shrub removal, inlet maintenance, sediment removal, replanting, and mowing.
  - Gold Line Transitway: Public Works & Metro Transit construction of stormwater facilities along the 10 mile bus rapid transit corridor.

- Phalen Creek H&H Model: Public Works and CRWD continued to develop a Hydrologic and Hydraulic Model of the 1,500 acre Phalen Creek Subwatershed. Included in the scope of work is the development of a P8 water quality model ($100,000).

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.1: STORM SEWER SYSTEM OPERATION & MAINTENANCE

Description

The objective of this program is to minimize the discharge of pollutants through proper and cost-effective operation and maintenance of the City's storm sewer system. General operations and maintenance efforts include inspections, cleaning, repairs, rehabilitation and reconstruction.

The City's stormwater system includes 450 miles of storm sewers, 28 ponding areas, 5 lift stations, numerous water quality best management practices and over 26,000 catch basins. The Sewer Maintenance section allocates substantial resources to cleaning, inspecting and maintaining the City's stormwater system. All installed stormwater facilities are maintained and operated in accordance with adopted policies and ordinances. All storm sewer pipes are cleaned and inspected in advance of various street reconstruction projects. Where defects are observed, repairs are made at the time of discovery or during the reconstruction project. The City also regularly inspects, cleans and maintains stormwater ponding areas. Storm sewer tunnels are inspected every two years.

In 1995, the City completed a ten-year sewer separation program by constructing 189 miles of storm sewer and 12 miles of sanitary sewer (some combined sewer was converted to storm sewer). In 1997, the City began a multi-year rehabilitation program for its storm and sanitary sewer system. The Sewer Utility complies with MnDOT's Standard Specifications for Construction and maintains Standard Plates and Specifications.

Assessment Process for Annual Reporting

- Report on storm sewer and tunnel repair and rehabilitation projects.
- Report on miles of storm sewers and tunnels assessed, miles of storm sewers and tunnels cleaned and amount of material removed.
- Report on development of standard operating procedures.
- Narrative of training activities including number of staff trained and types of training conducted.

2024 Activities

Kellogg Boulevard Storm Tunnel System

The Kellogg Boulevard Storm Tunnel System was originally constructed in 1879 under the 31st sewer contract awarded by the City. The tunnel system originally conveyed both sanitary sewage and stormwater runoff to the Mississippi River. Sanitary sewage was disconnected from the tunnel system when a parallel sanitary interceptor was built in 1936. The tunnel system was originally unlined with a brick invert through the St. Peter Sandstone geologic formation. A partial cast in place reinforced concrete liner was installed in 1966 to protect the sandstone walls from eroding. A rehabilitation effort was initiated to address structural deficiencies in the remaining unlined walls and ceiling of the tunnel system. The Kellogg Boulevard Storm Tunnel Rehabilitation began in the winter of 2024 with a construction cost of $520,000. Repair work on the Kellogg Boulevard Storm Tunnel System Rehabilitation includes spray grouting of the unlined tunnel walls and ceiling, and shotcreting reinforced sections of failing unlined tunnel walls.

2023-2024 Shaft and Tunnel Repair

In 2024, the Sewer Utility completed a various locations tunnel rehabilitation project. Improvements were made to the Riverview system, St. Peter system, St. Anthony system, Sheridan system, Urban system, and St. Peter-Rondo system. Construction timeframe spanned 2023-2024, construction cost was $2,300,000.

2024-2025 Shaft and Tunnel Repair

In 2024, the Sewer Utility embarked on a various locations tunnel rehabilitation project. Improvements are being made to the Kellogg Boulevard system, Washington Street system and Saint Anthony Park Storm Tunnel. Construction timeframe spans 2024-2025, estimated construction cost is $1,000,000.

Pump Stations

The City has five stormwater flood control pump stations that are located along the Mississippi River. These pump stations provide interior drainage during flood events on the Mississippi River. In 2024, a rainfall derived river flood event required the operation of these pump stations. The stormwater flood control pump stations are inspected and operated twice per year. All of the stations are connected to the City's Supervisory Control and Data Acquisition system.

Broadway Pump Station

In 2018, the Sewer Utility embarked on an upgrade to the Broadway Sanitary Pump Station, which added a stormwater flood control pump station. The stormwater flood control pump station was installed to help mitigate temporary pumping operations required during a river flood scenario. Other improvements included the installation of a natural gas back-up generator. The project was completed in 2019 at a project cost of $1.6 Million.

Jackson Pump Station

In 2024, Sewer Utility via a consultant initiated a study to make the pump station more resilient to future flooding events.

Levee System Pump Stations

In 2022, the Sewer Utility, via a consultant engineer, conducted a structural evaluation of three pump station control buildings associated with the levee system. Intent of the evaluation will be used to populate a rehabilitation plan to extend the useful life of the facilities. In 2023, the Sewer Utility analyzed the received structural evaluation and began efforts scoping out the rehabilitation priorities and schedules.

Custer Pump Station

In 2024, Sewer Utility via a consultant developed a hydraulic model to determine capacity capabilities and improvements.

Storm Sewer Inspection, Cleaning & Rehabilitation

- Como/Rose Televised Inspection: 82,700 L.F. of Storm Sewer ($144,500)
- Downtown Televised Inspection: 1,900 L.F. of Storm Sewer ($39,000)
- Mounds/English Televised Inspection: 116,500 L.F. of Storm Sewer ($314,000)
- Citywide Additional Televised Inspection: 59,000 L.F. of Storm Sewer ($130,000)

- Sewer Maintenance Televised Inspection: 6,300 L.F. of Storm Sewer ($28,300)
- Sewer Maintenance Cleaning: 17,600 L.F. of Storm Sewer ($38,000)

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.2: CATCH BASIN/MANHOLE OPERATION & MAINTENANCE

Description

The objective of this program is to minimize the discharge of pollutants through the proper operation and maintenance of the MS4 system's catch basins and manholes. Catch basins are structures located along the city's street system that provide entrance of stormwater runoff into the storm sewer system.

Assessment Process for Annual Reporting

- Report on number of catch basins and manholes cleaned and/or repaired and quantity of material removed.
- Report on implementation of the catch basin sump management program.

Catch Basins

A catch basin is an inlet to the storm drain system. A field survey of the City's catch basins using GPS equipment located all city owned catch basins. The total number of catch basins inventoried was 26,200. As part of the City's street reconstruction activities, existing catch basins within a street reconstruction project area are replaced with new catch basins. Cleaning catch basins, while ensuring proper runoff conveyance from City streets, also removes accumulated sediments, trash, and debris. Catch basins that are reported as plugged or damaged are given a priority for repair and cleaning. Sewer Maintenance has set a goal of cleaning 2,000 catch basins per year. Augmenting this effort is the street sweeping program, carried out by the Street Maintenance Division. The street sweeping program targets the pick-up of street sediment, debris and leaves prior to their reaching catch basins.

2024 Activities

- Catch Basin Maintenance ($387,900)
  - Inspected: 1,626
  - Cleaned: 2,955
  - Repaired: 251
- Manhole Maintenance ($100,600)
  - Inspected: 805
  - Cleaned: 515
  - Repaired: 68

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.3: OUTFALL OPERATION & MAINTENANCE

Description

The objective of this program is to minimize the discharge of pollutants through the proper operation and maintenance of outfalls from the MS4 system to receiving water bodies.

Assessment Process for Annual Reporting

- A brief description of all **outfall** inspection findings including any improvement projects completed at the **outfall** locations.

2024 Activities

Storm Drain Outfalls Inspection

A storm drain outfall is the point where the storm sewer system discharges to receiving waters. Outfalls are inspected on a 5-year schedule. Outfall inspections include an evaluation of the general condition of structure, determination of significant erosion and identification of any non-stormwater discharges. When indications of non-stormwater discharges are observed, they are reported to the appropriate City staff for follow-up investigation and resolution and reported to the Minnesota Duty Officer, as required. Any identified structural repairs or maintenance work is prioritized and scheduled within the constraints of available personnel, funding and coordination with other essential operations.

Storm Drain Outfalls Repair

In 2024, the Sewer Utility awarded a contract for the rehabilitation water quality improvements of 19 outfalls at Como Lake. This was completed in response to the condition assessments obtained by televised inspections and field surveys in 2023 (cost $1,140,000).

Storm Outfall Assessment

In 2024, a consultant engineer working with the Sewer Utility completed a condition survey and delineation of the drainage area for the outfalls to the Mississippi River (cost $12,000).

In 2024, the Sewer Utility awarded a contract to televised and inspect 18 outfalls discharging to Lake Phalen. This project was to obtain a condition assessments of the outfalls for potential rehabilitation and stormwater quality improvements (cost included as part of the Como-Rose televising and inspection project).

In 2025, the Sewer Utility advanced plans for televised inspection of the outfalls discharging to Beaver Lake to obtain preliminary condition assessment (5 outfalls in 2025) for future rehabilitative needs.

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.4: STORMWATER POND/STRUCTURAL POLLUTION CONTROL DEVICE OPERATION & MAINTENANCE

Description

The objective of this program is to minimize the discharge of pollutants through the proper operation and maintenance of stormwater ponds and water quality devices. Stormwater ponds, filtration/infiltration areas, and structural controls are water quality devices that manage stormwater runoff. General operations and maintenance efforts include assessment and maintenance of the functionality of stormwater ponds and water quality devices.

Assessment Process for Annual Reporting

- Report on number of stormwater ponds and structural pollution control devices inspected, assessed and cleaned, by category. Include date of inspection, date and results of assessment, antecedent weather conditions and nature of repairs.

2024 Activities

Stormwater Ponds

Saint Paul's stormwater ponding areas are constructed to collect and detain flows from storm events and in some cases to also improve water quality. These ponds are designed to reduce peak flow rates in downstream storm sewers. A map showing the stormwater ponding areas in the City of Saint Paul is found in the Appendix. The Appendix also contains the tributary area and design capacity for each of the City's ponding areas and a list of stormwater ponding areas by watershed. The City's stormwater ponding areas are inspected by Sewer Maintenance staff after major rainfall events. Routine maintenance is completed as needed based on the inspection results. Public Works developed written procedures and a schedule to evaluate pond performance. The written procedure is included within the Appendix of the SWMP.

The City implemented a program to evaluate its ponding areas for major sediment removal in 2002. This program involves an initial inspection, prioritization, survey, timber removal, sediment removal and inlet/outlet reconstruction. Major sediment removal took place in a majority of the City's ponds in the winters of 2002/2003, 2003/2004, 2013/2014, and 2017/2018. The estimated cycle for sediment removal from ponding areas is 20 years. Projects included re-installation of riprap at inlet and outlet structures and vegetation restoration by seeding and erosion control blankets. Sediment was tested and disposed of in accordance with state guidelines.

Bush-Desoto Pond

In 2024, Public Works completed the retrofit of Bush-Desoto pond. The retrofit increased the infiltration capacity and provided greater volume attenuation for significant storm events (cost $840,000).

Flandrau-Case Pond

In 2024, Public Works awarded contract to retrofit Flandrau-Case pond. The retrofit will provide an increase in infiltration capacity and provide greater volume attenuation during significant storm events (cost $600,000).

Structural Pollution Control Devices
The city constructs water quality and volume control BMPs as required by the MPCA Construction Permit and Watershed District Rules. Since 2006, the City has constructed BMPs, including infiltration trenches and rain gardens. In 2015, an inventory of constructed BMPs was developed and entered into the City's asset management system. BMPs will be added each year once as-builts are received. The BMPs are programmed to be cleaned annually, beginning in 2015. In 2024, the annual cost for self-performed maintenance of water quality and volume control BMPs was estimated to be $63,000.

As part of the Water Quality and Quantity Monitoring Program, a maintenance inspection is conducted on each of the BMPs that are monitored. This inspection includes documentation of sediment depth in the pre-treatment device, sediment depth in the infiltration gallery, depth of standing water in the infiltration gallery and observation notes.

Snelling-Midway Stormwater Reuse System
2020 was the initial year of operation for the stormwater reuse system at the Snelling-Midway Superblock. Collected and treated stormwater is utilized for irrigation in public and private areas, stormwater reuse capacity is also available for usage at future private developments adjacent to Allianz Field. Sewer Utility contracted with Capitol Region Watershed District (CRWD) for the operation of the reuse system. Annual operating expenditures were approximately $9,000. The 2024 Operation Report is included within the Appendix.

Snelling-Midway Tree Trench System
In 2024, the Sewer Utility contracted out the cleaning and televising of all tree trenches, sumps, and CDS units located at the Snelling-Midway site ($36,000).

Ford Structural Pollution Control Devices
In 2024, the Sewer Utility contracted out the cleaning of all sumps and hydrodynamic units located at the Ford site ($35,000).

Biofiltration Vegetation Maintenance
In 2024, the Sewer Utility committed to a Cooperative Maintenance program with CRWD. Through this program 8 basins throughout the City received vegetation maintenance/restoration ($45,500).

Staff Training
- City staff from multiple departments attended the Minnesota Water Resources Conference.
- City staff obtained certification for Inspection and Maintenance of Permanent Stormwater Treatment Practices.

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.5: HANDLING & DISPOSAL of REMOVED MATERIALS

Description

The objective of this stormwater management program is to minimize the discharge of pollutants through proper handling of stored and stockpiled materials such as those removed from the storm sewer system.

Assessment Process for Annual Reporting

- By categories shown in BMP Sheet 6.1.4, report estimated annual total mass (pounds) removed, characterization and destination(s) of material removed.

Program Overview

Material is collected from catch basin sumps, the storm sewer system, ponding areas and water quality BMPs. Removed substances are screened for visual or olfactory indications of contamination. Representative samples are selected for an environmental analysis. Contaminated substances are disposed of in a landfill or another site that is approved by the Minnesota Pollution Control Agency. During cleaning operations, sediment control measures are applied as needed to prevent removed material from re-entering the storm drain system.

2024 Activities

- Material removed from stormwater ponds, BMPs and catch basins by Sewer Utility: 1,718 tons ($53,000).

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.6 STREET SWEEPING PROGRAM

Description

The objective of this program is to minimize the discharge of pollutants to the storm sewer system and receiving waterbodies by removing leaf litter, sediment and debris from streets and gutters before the materials and the pollutants attached to them can be washed into storm drain inlets. The other objectives of the street sweeping program are to protect public health and safety, and to improve cleanliness and livability. The program is divided into several categories, that vary in frequency and work practices, to systematically address the approximately 744 miles of residential streets, 127 miles of arterial streets and the city's approximately 330 miles of alleys. They can be described by two general programs: Spring and Fall Citywide comprehensive sweeping programs, and general sweeping activities outside of those two major activities.

Assessment Process for Annual Reporting

- Date of Spring and Fall residential street sweeping activities
- Approximate amount of material removed by street sweeping activities

2024 Activities

Street Sweeping

The City of Saint Paul conducts a street and alley cleaning program to promote the health and welfare of its citizens and to reduce the amount of pollutants to receiving waters from stormwater discharges. Sweeping is a major operation for the Street Maintenance Division and is done during the spring, summer and fall. Elgin Pelican mechanical sweepers handle the vast majority of the sweeping. An Elgin Crosswind regenerative air sweeper is utilized downtown almost every weekday.

Residential street spring sweeping activities occurred April 16, 2024 thru May 13, 2024. The primary material swept in the spring is debris from winter months. Fall sweeping occurred October 15, 2024 thru November 21, 2024. Typically, the fall sweep is timed so that a majority of the leaves are down and enough time is allowed to sweep all Saint Paul streets before the first snow. Due to the diversity of the tree canopy, fall leaf drop occurs over an extended timeframe. To compensate for this, “touch up” sweeping continues most years through November and early December. In the interest of continued improvement to our sweeping program, workers attend training and implement best management practices where available.

In 2024, the City (in partnership with RWMWD) performed additional enhanced street sweeping activities. This enhanced street sweeping covered 113 street miles throughout the City and was targeted towards high priority areas. In 2025, the City anticipates continuing this program throughout the 2025 season.

Street Sweeping Operations

Streets and alleys are divided into classes, each of which receives a different level of service as defined below:

Class I-A & B Downtown or Loop Streets
Downtown or loop streets are within the following boundaries: Kellogg on the south, 12th on the north, Broadway on the east and Main on the west. These streets are swept approximately two times per week during the spring, summer, fall and winter as weather allows. All routine maintenance, including patching and repairing of street surfaces, is performed on an as-needed basis.

Class II - Outlying Commercial and Arterial Streets
These streets, which have business or commercial properties fronting on them, are the City's major arteries. They have heavy volumes of both vehicular and pedestrian traffic. Typical examples are University, Snelling, West 7th, East 7th, Rice, Payne, Arcade, Summit and Grand. Class II streets are typically swept or cleaned six to ten times annually on the following schedule: every two weeks in October and November for fall cleanup and every 3 to 6 weeks in April through September for Spring cleanup, litter, tree debris and sediment cleanup. Occasional winter sweeping is done if weather permits, and there are special events. All routine maintenance, including patching and repairing of street surfaces, is done on a scheduled or as-needed basis. The result of this shift in operations was less frequent sweeping between the spring and fall sweeps.

Class III - Residential Streets
In the spring, all residential streets, including oiled, paved, and intermediate streets, receive a thorough sweeping. Patching and repairing is done on a scheduled or as-needed basis. All existing paved and oiled streets are on the 8 year cycle chip seal list. No paved streets were chip sealed in 2024. Oil and sand sealing of oiled streets is no longer done. The City recycles the reclaimed chip seal rock. In the fall, streets are swept for leaf pickup. All material swept up during the fall cleanup is hauled to a State licensed disposal facility.

Class IV - Oiled and Paved Alleys
All oiled and paved alleys are swept during the late spring and summer. All routine maintenance, including patching and repairing of the alley surfaces, is performed on a scheduled or as-needed basis. All existing paved and oiled alleys are now on an 8-year cycle chip seal list. No alleys were chip sealed in 2024.

Class V and VI - Unimproved Streets and Alleys
Unimproved streets and alleys are right-of-ways that have not been developed. There are approximately 50 miles of unimproved streets and approximately 288 miles of unimproved assessed alleys in the City. Because they are City right-of-ways, the City has the responsibility to perform minimal repairs and maintenance work on them to make them passable and to reduce hazards. The maintenance and repair of these streets and alleys consists of patching, minor blading, and placing of crushed rock or other stabilized material.

Disposal
The materials collected from street sweeping are delivered to the City's Pleasant/View and Como/Western yards. The City's hauling contractor hauls the material away to have it screened and disposed of properly. The contractor composts the organic materials, which are mostly collected in the fall sweep.

Street Maintenance has a Hazardous Waste Disposal Policy in place. Any hazardous materials collected from City streets are disposed of in environmentally acceptable means. In 2001, the sweepings collected from City streets and alleys were tested and found to be within the Environmental Protection Agency's guidelines for recycling purposes, after screening out waste and debris. Highlight Farm. Approximately 7 to 10% of swept up material is disposed of in a landfill. Street Maintenance also services over 440 trash receptacles and disposes of refuse from neighborhood cleanups each year.

2024 Street Sweeping Quantities (Cubic Yards)

Season	Spring/Summer	Fall
Totals	3,800	8,120

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.7: ROADWAY DEICING MATERIALS MANAGEMENT

Description

The objective of this program is to minimize the runoff of deicing materials applied to roadways under its jurisdiction, consistent with public safety and to properly store deicing materials.

Assessment Process for Annual Reporting

- Report on quantity of deicing materials, chemicals, and sand applied.
- Report location and description of deicing materials storage facilities.
- Report number of staff attending training on use of salt.

2024 Activities

Snow and Ice Control

Minnesota weather conditions may require ice control from late September through early May. Frost forming on bridge decks is usually the first and last ice control event of the winter season. From early November through mid-April, the need for pavement treatment is determined by temperature and precipitation. Frequency of snow events through the winter season influences amounts of material used. The City's foremost objective is to maintain safe roads for all users. The consequences of icy roads are longer travel times, adverse economic impact, accidents and injuries.

Salt is the primary material used to melt snow and ice. Salt and treated salt is effective to 15°F and 0°F respectively, but factors such as darkness, continuing snow, type and quantity of precipitation, all reduce melting performance. Sand is sometimes used to enhance traction, usually when temperatures are below 0°F and snowfall amount is likely to be greater than 3 inches. Specific application rates are decided upon for each snow event and adjusted to the minimum amount necessary to achieve the desired results.

Saint Paul uses treated salt for pavement temperatures below 15°F and regular salt for temperatures from 15°F and above. Salt brine is used to pre-wet salt from the salt spreaders, making the salt more effective. The benefits of pre-wetted salt are better melting performance, less bounce, residual value and reduction in amount of salt used. All salt trucks are presently fitted with salt pre-wetting equipment. Public Works developed and adopted a formal Salt Management Plan in the fall of 2011.

Additionally, Saint Paul implements anti-ice technologies on major streets and bridges with salt brine prior to winter events. Anti-icing helps decrease the bond of snow and ice to the pavement. Anti-icing can be used as the primary tool to fight frost.

Storage of De-icing Materials

Salt and mixed piles of sand and salt are covered year-round to eliminate runoff. Storage facilities are located at the following locations:

873 N. Dale Street
310 South Victoria Street

Snow and Ice Control

Typically 3 or 4 snow emergencies are declared during per winter. It is anticipated that ice control materials used for 2025 will be similar to 2024 quantities.

2023/2024 Ice Control Material Quantities

Regular Salt (tons) 4,501

Treated Salt (tons) 1,863

Staff Training

Saint Paul Public Works is an advocate of networking and regularly attends events such as the American Public Works Association North American Snow Conference and the Fresh Water Society Road Salt Symposium. All new operators attended a Snow and Ice Control training session. The main purpose of this session was to train employees to get the most out of every application, maintaining the safest roads possible in the most economical way, while protecting the environment. The session addressed the following: abrasives, salt, pre-wetting. anti-icing, equipment calibration and material storage. The Minnesota Snow and Ice Control Handbook and Saint Paul Public Works Salt Management Plan are available to all employees and are used as a guide in our best practices. In-house plow trainings (November 4th thru 6th 2024), smart salting classes (November 4th - November 6th), and SPOT trainings (September 16th thru September 20th, 2024 & September 23rd thru September 27th, 2024) were completed. In 2024, the Department of Public Works held its annual Snow Summit Open House. This event included numerous exhibits, presentations, and displays of current Saint Paul chloride management and snow operations. In 2024, Public Works participated in a Low Salt Training Program (May 8th, 2024). The participating Divisions included Street Maintenance, Street Engineering, Sewer Utility, Parks Operations, Public Works Operation Manager, and the Public Works Director.

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.8: CITY PARKING LOT & EQUIPMENT YARD MANAGEMENT

Description

The objective of these activities is to minimize the discharge of pollutants by utilizing proper fleet and building maintenance practices, and proper operation and maintenance of parking lots and equipment and storage yards. Program categories include the following:

a.) Saint Paul Parks and Recreation – parks, recreation centers, maintenance facilities

b.) Public Works

- Dale Street Facility includes Street Maintenance, Traffic Operations and Municipal Equipment
- Sewer Maintenance
- Asphalt Plant

Assessment Process for Annual Reporting

- Narrative of training activities
- Report on development of standard operating procedure

2024 Activities

The Parks Department and the Department of Public Works have Clean Water Policies which are distributed, reviewed, and signed by all field staff. (See Appendix)

Dale Street Facility Sediment Control Structure*:* Public Works hired WSB and Associates to complete a Facility Improvements Feasibility Report for four Public Works facilities and one Parks and Recreation facility. In 2012, a large pre-fabricated sediment control and collection structure was constructed at the Public Works' Dale Street Facility. This structure is inspected and cleaned as necessary.

***Parks and Recreation Wash Stations*:** Contracted with ESD Waste2Water, Incorporated to complete site visits and provide five proposals for installation of permanent or portable equipment wash stations. Parks will seek funding for future installation.

SWPPP Development: Public Works hired a consultant to prepare a SWPPP for the Sewer Maintenance property in 2018. In 2024, Public Works advanced plans for the Dale Street Campus SWPPP. Public Works has draft SWPPPs for Como-Western and Pleasant-View.

Employee Training

Saint Paul Public Works is an advocate of networking and regularly attends events such as the American Public Works Association North American Snow Conference and the Fresh Water Society Road Salt Symposium. All new operators attended a Snow and Ice Control training session. The main purpose of this session was to train employees to get the most out of every application, maintaining the safest roads possible in the most economical way, while protecting the environment. The session addressed the following: abrasives, salt, pre-wetting. anti-icing, equipment calibration and material storage. The Minnesota Snow and Ice Control Handbook and Saint Paul Public Works Salt Management Plan are available to all employees and are used as a guide in our best practices. Plow trainings (November 4th thru 6th 2024), smart salting classes

(November 4th - November 6th), and SPOT trainings (September 16th thru September 20th, 2024 & September 23rd thru September 27th, 2024) were completed.

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.9: FIELD OPERATIONS MANAGEMENT

Description

The objective of this program is to minimize the discharge of pollutants from the operation and maintenance of City right-of-way and park property.

Assessment Process for Annual Reporting

- Narrative of training activities
- Report on development of standard operating procedures

2024 Activities

The Parks Department and the Department of Public Works have Clean Water Policies which are distributed, reviewed, and signed by all field staff. (See Appendix)

Employee Training

Saint Paul Public Works is an advocate of networking and regularly attends events such as the American Public Works Association North American Snow Conference and the Fresh Water Society Road Salt Symposium. All new operators attended a Snow and Ice Control training session. The main purpose of this session was to train employees to get the most out of every application, maintaining the safest roads possible in the most economical way, while protecting the environment. The session addressed the following: abrasives, salt, pre-wetting. anti-icing, equipment calibration and material storage. The Minnesota Snow and Ice Control Handbook and Saint Paul Public Works Salt Management Plan are available to all employees and are used as a guide in our best practices. Plow trainings (November 4th thru 6th 2024), smart salting classes (November 4th - November 6th), and SPOT trainings (September 16th thru September 20th, 2024 & September 23rd thru September 27th, 2024) were completed.

- The Department of Public Works hosts an Annual Utility Coordination meeting to facilitate utility and street system reconstruction projects. A component of this meeting includes stormwater management items such as erosion and sediment control in the public Right-of-Way, etc. Attendees are comprised of various municipal employees and utility companies.
- Various Sewer Utility personnel attend the Sewer Collection System Operators Conference conducted by the Minnesota Pollution Control Agency on an annual basis.
- Various Sewer Utility personnel attend illicit discharge detection and elimination training prepared by a consultant an annual basis.
- Various Parks personnel maintained their non-commercial pesticide application licenses to ensure proper application and management of pesticides.
- Various Parks personnel maintained their certification with the MPCA's Smart Salting for Sidewalks and Parking Lots.

MCM 6: Pollution Prevention & Good Housekeeping

BMP 6.10 STORMATER RUNOFF VOLUME REDUCTION PLAN

Description

The objective of this program is to conduct a study of how stormwater volume reduction practices will best fit into Saint Paul's overall goals of stormwater management for projects that disturb one acre or more. Volume reduction practices include infiltration, biofiltration, stormwater reuse, evapotranspiration, minimizing and disconnecting impervious surfaces.

Assessment Process for Annual Reporting

- Narrative of progress towards plan development and implementation.

2024 Activities

The City submitted its Volume Reduction Plan to the MPCA in January of 2015. This plan provided a summary of the City's volume reduction projects, identified opportunity sites and identified areas in the City where there are limitations on the construction of volume reduction BMPs.

In 2018, the City updated its Local Surface Water Management Plan. As a part of this planning effort, various ordinances were analyzed and revisions proposed. This will assist in future planning to meet the identified Proposed Activities and Implementation Schedule.

In 2024, Parks and Recreation, Public Works, Ramsey-Washington Metro Watershed District, Saint Paul Port Authority, and other partners, continued the development of planning documents and began reviewing plans for the redevelopment of Hillcrest Golf Course that will aid in the installation of water quality improvement projects. Construction of the Hillcrest redevelopment site began in 2024.

In 2024, the Sewer Utility completed the retrofit of Bush-Desoto Pond for stormwater quality benefits. This retrofit included the addition of a hydrodynamic separator to provide a level of pretreatment to the pond. The extents of the pond were extended to maximize its size and increased the volume of infiltration.

In 2024, the Sewer Utility awarded a contract for Flandrau-Case Pond stormwater quality improvements. These improvements will include the excavation of pond sediments, removal of vegetation overgrowth, and expansion of the pond area for iron enhanced filtration.

In 2024, the Sewer Utility initiated a feasibility study of Kasota pond. This study is to develop potential stormwater quality improvements to be implemented in the future.

MCM 7: Monitoring & Analysis

BMP 7.1: Cooperative Monitoring Program

Description

The objective of this program is to develop and implement a cooperative monitoring, analysis, and reporting effort with partnerships that could include: adjacent municipalities, Capitol Region Watershed District, Mississippi Watershed Management Organization, Ramsey-Washington Metro Watershed District, and Metropolitan Council Environmental Services.

Assessment Process for Annual Reporting

- Number and type of monitoring sites.
- Annual monitoring and analysis results.

History

As part of the two part application for the NPDES permit, the City of Saint Paul conducted stormwater monitoring at 5 sites for one season. From 2001 through 2004, the Cities of Saint Paul and Minneapolis and the Minneapolis Park and Recreation Board participated in a joint stormwater monitoring program, as required by the stormwater permit. Minneapolis Park Board staff conducted the monitoring program. The Stormwater Monitoring Program Manual was completed by Minneapolis Park Board staff and submitted separately to the MPCA in April of 2001. The joint monitoring agreement was submitted to the MPCA in 2002.

Sampling sites were identified in the Stormwater Monitoring Program Manual. The sampling sites were selected from the sites used in the stormwater permit application monitoring program. Five sites were chosen, representative of the following land use types: two residential sites, two industrial/commercial sites and one mixed use site. Two sites were located in Minneapolis and three were in Saint Paul. The permit required two years of mercury monitoring, which was conducted in 2002 and 2003.

Beginning In 2005, the City began a partnership with the Capitol Region Watershed District, to conduct the stormwater permit monitoring program for Saint Paul as part of CRWD's overall monitoring program. CRWD established a monitoring program in 2004 to collect stormwater data from the major subwatersheds and stormwater best management practices (BMPs).

In 2012, the City began its Stormwater Monitoring Program. Monitoring is completed at various locations including: constructed stormwater BMPs, proposed locations for stormwater BMPs, and groundwater sites. Electronic water monitoring equipment is used to collect water quantity and quality data on a continuous basis from selected sites.

2024 Activities

Monitoring Program

The City of Saint Paul collaborated with CRWD on the 2024 Stormwater Monitoring Program. Sites monitored by CRWD include: outfalls, BMPs, lakes and ponds. Many sites are full water quality monitoring stations, while other sites capture level data. CRWD publishes their current Monitoring information on their website at: www.capitolregionwd.org.

In 2024, the City, through a consultant, conducted the Stormwater Monitoring Program. Below is a list of the range of Stormwater Monitoring. Electronic water monitoring equipment was used to collect water quantity and quality data on a continuous basis from stormwater BMPs, which included:

- Water level at 6 sites
- Flow volumes at 6 sites
- Composite water quality sampling at 6 sites
- Groundwater elevation at 2 locations

Analysis of the collected data generated valuable information related to the performance of each BMP. This information included:

- Average infiltration rates measured in the BMPs exceeded the rates recommended in the Minnesota Stormwater Manual and watershed district rules for specific soil types.
- The BMPs are more effective at reducing stormwater volume and pollutant loads to downstream water bodies than is currently being recognized by the watershed districts.
- The Dynamic Method for sizing volume reduction BMPs was shown to be more accurate than the Simple Method. Allowing the use of the Dynamic Method in demonstrating compliance with watershed district rules would generate significant cost savings to the public.

A comprehensive report summarizing the City's BMP monitoring program can be found on the City's Stormwater page at https://www.stpaul.gov/departments/public-works/sewer-utility-divison/stormwater.

In 2017, the City, through a consultant, participated in the formation of the Twin Cities Water Monitoring and Data Assessment Group. The group is formed from public-sector water resources practitioners as a way to establish and promote standard practices for: water quality monitoring, data analysis and data stewardship. The City's representative has continued to participate in this group on an annual basis.

Stormwater Runoff and Water Quality Modeling

In 2010, the City completed the first phase of a program that includes stormwater modeling, a citywide volume reduction inventory and plan to address stormwater on the street reconstruction projects. The modeling includes the development of an XPSWMM and P8 models. In 2024, modeling projects were completed in support of the sewer and street projects. The citywide modeling map is found in the Appendix. These models will be used by the City in the development of future stormwater programs and projects.

Pollutant Loading Calculations

The estimation of pollutant loadings from 2024 is found in the Appendix. Historically, pollutant loading calculations were offset by one year due to analysis timelines. With improvements in data management, the timeline needed for analysis has been reduced.

MCM 8: Discharges to Impaired Waters with a TMDL

BMP 8.1: TMDL Program

Description

Stormwater runoff from Saint Paul is discharged to several surface waterbodies including the Mississippi River. Several of these have been listed on Minnesota's Impaired Waters List for having the presence of concentrations of certain pollutants identified at levels higher than Minnesota standards.

Assessment Process for Annual Reporting

- On a form provided by the **Commissioner**, an assessment of progress toward meeting each **applicable WLA**. The assessment of progress must include:
  - A list of all **BMP**s being applied to achieve each **applicable WLA**. For each **structural stormwater BMP**, the **Permittee** must provide a unique identification (ID) number and geographic coordinate. If the listed **structural stormwater BMP** was inventoried during the 2011 Phase I **MS4** permit term, the same ID number must be used.
  - **A list of all** BMP**s the** Permittee **submitted with the** TMDL **compliance schedule and the stage of implementation for each** BMP**.**
  - An updated estimate of the cumulative reductions in loading achieved for each **pollutant of concern** associated with each **applicable WLA**.
  - **An updated narrative describing any adaptive management strategies used (including projected dates) for making progress toward achieving each** applicable WLA**.**
  - **The results of the comparison(s) of estimated pollutant loading(s) to each** impaired water **in the** Permittee**'s jurisdiction and the** Permittee**'s** WLA **for that** impaired water**.**

2024 Activities

A TMDL factsheet was created and made part of the City's water quality education programs in effort to educate the public on impaired waters within St. Paul. It was also made available to the public on the City's website. The factsheet defined TMDLs, identified the impaired waters located within St. Paul, and listed possible ways residents can aid in improving water quality. A pdf version of the factsheet can be found in the Appendix.

TCMA Chloride TMDL (Como, Battle Creek, Kasota Ponds West, Mallard Marsh)

- Participation in the Adopt-a-Drain Program.
- Participation in the Storm Drain Stenciling Program.
- Membership and Participation in Watershed Partners and Clean Water MN Public Education Program.
- Public Works equipment upgrades, advancements in de-icing technologies, and training.
- Cooperative Monitoring Program.

South Metro Mississippi River TSS TMDL

- Participation in the Adopt-a-Drain Program.
- Participation in the Storm Drain Stenciling Program.

- Membership and Participation in Watershed Partners and Clean Water MN Public Education Program.
- Public Works Street Sweeping Program.
- Public Works Pond Cleaning and Sump Cleaning Programs.
- Public Works Municipal Mitigation Program (2024: Bush-Desoto Pond, Flandrau-Case Pond, Highland Bridge Site).
- Cooperative Monitoring Program.
- Development & Redevelopment Mitigation Program (2024: Highland Bridge Site Redevelopment, Hillcrest Golf Course, other Private Site Plans).

Como Lake Excess Nutrients TMDL

- Participation in the Adopt-a-Drain Program.
- Participation in the Storm Drain Stenciling Program.
- Membership and Participation in Watershed Partners and Clean Water MN Public Education Program.
- Public Works Street Sweeping Program.
- Public Works Pond Cleaning and Sump Cleaning Programs.
- Cooperative Monitoring Program.
- Participation in Como In-Lake Management Plan
- Participation in Como Park Stormwater Master Plan.

Battle Creek TSS TMDL

- Participation in the Adopt-a-Drain Program.
- Participation in the Storm Drain Stenciling Program.
- Membership and Participation in Watershed Partners and Clean Water MN Public Education Program.
- Public Works Street Sweeping Program.
- Public Works Pond Cleaning and Sump Cleaning Programs.
- Cooperative Monitoring Program.

Fish Creek E. Coli TMDL

- Participation in the Adopt-a-Drain Program.
- Participation in the Storm Drain Stenciling Program.
- Membership and Participation in Watershed Partners and Clean Water MN Public Education Program.
- Public Works Street Sweeping Program.
- Public Works Pond Cleaning and Sump Cleaning Programs.
- Cooperative Monitoring Program.

Wakefield Lake Phosphorus TMDL

- Participation in the Adopt-a-Drain Program.
- Participation in the Storm Drain Stenciling Program.
- Membership and Participation in Watershed Partners and Clean Water MN Public Education Program.
- Public Works Street Sweeping Program.
- Public Works Pond Cleaning and Sump Cleaning Programs.
- Cooperative Monitoring Program.

Lake Pepin TSS TMDL

- Participation in the Adopt-a-Drain Program.
- Participation in the Storm Drain Stenciling Program.
- Membership and Participation in Watershed Partners and Clean Water MN Public Education Program.
- Public Works Street Sweeping Program.
- Public Works Pond Cleaning and Sump Cleaning Programs.
- Public Works Municipal Mitigation Program (2024: Bush-Desoto Pond, Flandrau-Case Pond, Highland Bridge Site).
- Cooperative Monitoring Program.
- Development & Redevelopment Mitigation Program (2024: Highland Bridge Site Redevelopment, Hillcrest Golf Course, other Private Site Plans).

Appendix

Minnesota Pollution Control Agency

National Pollutant Discharge Elimination System

Permit No. MN 0061263

April 2025

SAINT PAUL
MINNESOTA

2024 Budget	2024	2025	2026	2027	2028	2029
Storm Sewer Projects						
Stormwater Quality Improvements	$1,440,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000
Storm Sewer Tunnel Rehabilitation	$3,820,000	$3,500,000	$4,000,000	$4,000,000	$4,000,000	$4,000,000
	$5,260,000	**$4,500,000**	**$5,000,000**	**$5,000,000**	**$5,000,000**	**$5,000,000**
Storm Sewer Maintenance						
Storm Sewer Inspection,Cleaning & Repair	$694,529	$708,420	$722,588	$737,040	$751,781	$766,816
Pond-Levee Inspection & Maintenance	$132,381	$135,029	$137,729	$140,484	$143,293	$146,159
Catch Basin Inspection, Cleaning & Repair	$387,910	$395,668	$403,582	$411,653	$419,886	$428,284
Manhole Inspection, Cleaning & Repair	$100,652	$102,665	$104,718	$106,813	$108,949	$111,128
BMP Cleaning	$116,394	$118,722	$121,096	$123,518	$125,989	$128,508
Ford Site Green Infrastructure District	$80,453	$355,000	$355,000	$355,000	$355,000	$355,000
Snelling Midway Green Infrastructure District	$124,000	$115,000	$115,000	$115,000	$115,000	$115,000
	$1,636,319	**$1,930,503**	**$1,959,713**	**$1,989,508**	**$2,019,898**	**$2,050,896**
Stormwater Modeling & Monitoring						
Stormwater Modeling	$221,655	$226,088	$230,610	$235,222	$239,927	$244,725
Stormwater Monitoring	$198,218	$202,182	$206,226	$210,351	$214,558	$218,849
	$419,873	**$428,270**	**$436,836**	**$445,573**	**$454,484**	**$463,574**
Street Maintenance						
Street Sweeping	$7,334,852	$7,481,549	$7,631,180	$7,783,804	$7,939,480	$8,098,269
Neighborhood Cleanups	$16,533	$40,000	$40,800	$41,616	$42,448	$43,297
	$7,351,385	**$7,521,549**	**$7,671,980**	**$7,825,420**	**$7,981,928**	**$8,141,567**
Public Education Program						
Storm drain stenciling including door hangers	$49,965	$49,815	$50,000	$50,000	$50,000	$50,000
MN Cities Stormwater Coalition	$6,320	$6,446	$6,575	$6,707	$6,841	$6,978
Cleanwater MN & Watershed Partners	$20,000	$20,000	$20,000	$20,000	$20,000	$20,000
Adopt a Drain	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Water Quality Messaging (No Parking Signs)	$3,000	$4,000	$4,000	$4,000	$4,000	$4,000
	$80,285	**$81,261**	**$81,575**	**$81,707**	**$81,841**	**$81,978**
Total Budget	**$14,747,862**	**$14,461,584**	**$15,150,105**	**$15,342,207**	**$15,538,151**	**$15,738,014**

2% used for annual inflation where projected amounts unknown

City of Saint Paul

Public Education and Outreach Work Plan

NPDES Permit MN0061263

Updated March 2025

2022 Stormwater Mural at Phalen Pavilion Park

1. Multi-lingual program for residents and businesses to increase the level of awareness about stormwater runoff impacts to receiving waters. This activity must utilize a variety of communication tools and methods to reach target audiences and inform them of strategies to reduce pollutants in stormwater runoff.

   Specific Activities:

   a. **Friends of the Mississippi River Water Quality Education Program:** is implemented annually within Saint Paul. The target audience is groups of volunteers comprised of residents or community members (businesses, neighborhood groups, organizations). Major components of the program include: storm drain stenciling, distribution of door hangers, litter clean-up events, educational programs and workshops.

      Various stormwater runoff impact topics are presented through the Program including: pet waste disposal, leaves/grass impacts, litter/trash impacts, proper disposal of hazardous wastes, proper application of fertilizers, car washing techniques, salt application, etc.

      2018 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 1,113 volunteers and completed 1,976 volunteer hours on water quality improvement activities including: stenciling 2,224 storm drains, distributing 5,738 door hangers, coordinating 2 litter clean-up outings, 31 classroom educational presentations, 2 community education workshops, and 1 storm drain mural project.

      2019 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 1,259 volunteers and completed 2,426 volunteer hours on water quality improvement activities including: stenciling 2,521 storm drains, distributing 7,686 door hangers, coordinating 3 litter clean-up outings, 29 classroom educational presentations, 2 community education workshops, and 1 storm drain mural project.

      2020 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 125 volunteers to carry out 337 volunteer hours on water quality improvement activities that included: stenciling 1,013 storm drains, distributing 1,199 door hangers, coordinating 1 litter clean-up outing, 12 classroom presentations, 1 special event (Children's Water Festival virtually), and 1 storm drain mural project. FMR incorporated a TMDL fact sheet into their educational programs and at public events.

      2021 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 643 volunteers to carry out 1,168 volunteer

hours on water quality improvement activities that included: stenciling 1,368 storm drains, distributing 2,220 door hangers, coordinating 12 litter clean-up outings, 11 classroom presentations, 7 field trips, 670 virtual engagements with online curriculum, and 1 storm drain mural project. Updated the door hanger that is distributed during stenciling events.

2022 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 666 volunteers to carry out 918 volunteer hours on water quality improvement activities including: stenciling 1,265 storm drains, distributing door hangers, coordinating 4 litter clean-up outings, 7 educational programs, 2 community education workshops, and 1 storm drain mural project. FMR also incorporated TMDL fact sheets into their educational programs and at public events.

2023 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 475 volunteers to carry out 929 volunteer hours on water quality improvement activities that included: stenciling 1,498 storm drains, distributing 2,537 door hangers, coordinating 4 litter clean-up outings, 4 classroom presentations, 2 rain barrel workshops, and 1 storm drain mural project. Updated the door hanger that is distributed during stenciling events.

2024 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 646 volunteers to carry out 1359 volunteer hours on water quality improvement activities that included: stenciling 1,632 storm drains, distributing 3,514 door hangers, coordinating 6 litter clean-up outings, 4 classroom presentations, 2 community educational workshops, and 3 paddling excursions on the Mississippi River.

2025 Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program seeks to: engage 550 volunteers to carry out 1,000 volunteer hours on water quality improvement activities including: stenciling 1,500 storm drains, distributing 3,000 door hangers, coordinating 2-3 litter clean-up outings, 5-10 educational programs, 2 community education workshops, and 1 storm drain mural project. FMR also plans to incorporate TMDL fact sheets into their educational programs and at public events.

Responsible Municipal Staff: Stormwater Permit Coordinator

b. **Adopt-a-Drain Program:** is implemented annually within Saint Paul. The target audience are individual property occupants within Saint Paul. Major components of the program include: marketing of the Program, distribution of door hangers, distribution of welcome packets/signs, and collection of data.

Various stormwater runoff impact topics are presented through the Program including: pet waste disposal, leaves/grass impacts, litter/trash impacts, proper disposal of hazardous wastes, salt application, etc.

2018 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: distributed 9,600 door hangers, encouraged adoption of 561 storm drains, delivered signs and welcome packets, and continued management of the Adopt-a-Drain website.

2019 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior with an emphasis in the Battle Creek subwatershed. To accomplish these goals, the Program: distributed 2,400 door hangers, encouraged adoption of 851 storm drains, delivered signs and welcome packets, and continued management of the Adopt-a-Drain website.

2020 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in the Summit-University neighborhoods. To accomplish these goals, the Program: mailed 5,999 postcards, encouraged adoption of 565 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2021 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in the Woodlawn-Jefferson, Wheelock Pkwy and Jefferson-W. Seventh neighborhoods. To accomplish these goals, the Program: delivered 2,000 door hangers, encouraged adoption of 375 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website. Updated the door hanger that is distributed in targeted promotion areas.

2022 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 319 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2023 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 406 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2024 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish

these goals, the Program: mailed postcards, encouraged adoption of 441 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2025 Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in various neighborhoods. To accomplish these goals, the Program seeks to: distribute door hangers, encourage adoption of storm drains, deliver signs and welcome packets, and continue management of the Adopt-a-Drain website.

Responsible Municipal Staff: Stormwater Permit Coordinator

c. **Watershed Partners and Clean Water Minnesota:** is a collaborative outreach project and coalition providing resources to member organizations to aid in water quality education. The City of Saint Paul is member of this organization, and annually contributes financial resources to the coalition. The target audience is residents and community stakeholders of the member organizations including watershed districts, cities, counties, higher education, etc.

   Various stormwater runoff impact topics are presented through the Program including: lawn care techniques, urban agriculture, native planting/restoration, environmental health, etc. Additionally, the organization sponsors the clean water exhibits at the Minnesota State Fair.

   Annual Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program seeks to: create monthly blog posts with timely and consistent messages to encourage behaviors that improve water quality, generate photographs that feature local residents taking action to protect lakes and rivers, enhance a metro wide Adopt-a-Drain online registration system, conduct monthly meetings with partner activities and presentations, and develop and implement clean water exhibits at the Minnesota State Fair.

   Responsible Municipal Staff: Stormwater Permit Coordinator

d. **No-Parking Sign Water Quality Message:** In 2022 a Water Quality message was included in the printing of temporary No-Parking Signs. The temporary No-Parking Signs are used citywide to prevent parking during programmed street sweeping, snow removal and street repair activities. The message advocates for keeping storm drains clear to prevent localized flooding and to promote knowledge of impacts to water quality in the Mississippi River.

   Annual Measurable Goals of the No-Parking Sign Water Quality Message include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior.

Responsible Municipal Staff: Stormwater Permit Coordinator

2. Educate the public, businesses, and commercial applicators on the proper application of pesticides, herbicides, and fertilizers and the benefits of retaining grass clippings and leaf litter on lawn surfaces.

   Specific Activities:

   a. **Friends of the Mississippi River Water Quality Education Program:** is implemented annually within Saint Paul. The target audience is groups of volunteers comprised of residents or community members (businesses, neighborhood groups, organizations). Major components of the program include: storm drain stenciling, distribution of door hangers, litter clean-up events, educational programs and workshops.

      Various stormwater runoff impact topics are presented through the Program including: pet waste disposal, leaves/grass impacts, litter/trash impacts, proper disposal of hazardous wastes, proper application of fertilizers, car washing techniques, salt application, etc.

      2018 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 1,113 volunteers and completed 1,976 volunteer hours on water quality improvement activities including: stenciling 2,224 storm drains, distributing 5,738 door hangers, coordinating 2 litter clean-up outings, 31 classroom educational presentations, 2 community education workshops, and 1 storm drain mural project.

      2019 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 1,259 volunteers and completed 2,426 volunteer hours on water quality improvement activities including: stenciling 2,521 storm drains, distributing 7,686 door hangers, coordinating 3 litter clean-up outings, 29 classroom educational presentations, 2 community education workshops, and 1 storm drain mural project.

      2020 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 125 volunteers to carry out 337 volunteer hours on water quality improvement activities that included: stenciling 1,013 storm drains, distributing 1,199 door hangers, coordinating 1 litter clean-up outing, 12 classroom presentations, 1 special event (Children's Water Festival virtually), and 1 storm drain mural project. FMR incorporated a TMDL fact sheet into their educational programs and at public events.

      2021 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish

these goals, the Program: engaged 643 volunteers to carry out 1,168 volunteer hours on water quality improvement activities that included: stenciling 1,368 storm drains, distributing 2,220 door hangers, coordinating 12 litter clean-up outings, 11 classroom presentations, 7 field trips, 670 virtual engagements with online curriculum, and 1 storm drain mural project. Updated the door hanger that is distributed during stenciling events.

2022 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 666 volunteers to carry out 918 volunteer hours on water quality improvement activities including: stenciling 1,265 storm drains, distributing door hangers, coordinating 4 litter clean-up outings, 7 educational programs, 2 community education workshops, and 1 storm drain mural project. FMR also incorporated TMDL fact sheets into their educational programs and at public events.

2023 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 475 volunteers to carry out 929 volunteer hours on water quality improvement activities that included: stenciling 1,498 storm drains, distributing 2,537 door hangers, coordinating 4 litter clean-up outings, 4 classroom presentations, 2 rain barrel workshops, and 1 storm drain mural project. Updated the door hanger that is distributed during stenciling events.

2024 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 646 volunteers to carry out 1359 volunteer hours on water quality improvement activities that included: stenciling 1,632 storm drains, distributing 3,514 door hangers, coordinating 6 litter clean-up outings, 4 classroom presentations, 2 community educational workshops, and 3 paddling excursions on the Mississippi River.

2025 Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program seeks to: engage 550 volunteers to carry out 1,000 volunteer hours on water quality improvement activities including: stenciling 1,500 storm drains, distributing 3,000 door hangers, coordinating 2-3 litter clean-up outings, 5-10 educational programs, 2 community education workshops, and 1 storm drain mural project. FMR also plans to incorporate TMDL fact sheets into their educational programs and at public events.

Responsible Municipal Staff: Stormwater Permit Coordinator

b. **Adopt-a-Drain Program:** is implemented annually within Saint Paul. The target audience are individual property occupants within Saint Paul. Major components

of the program include: marketing of the Program, distribution of door hangers, distribution of welcome packets/signs, and collection of data.

Various stormwater runoff impact topics are presented through the Program including: pet waste disposal, leaves/grass impacts, litter/trash impacts, proper disposal of hazardous wastes, salt application, etc.

2018 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: distributed 9,600 door hangers, encouraged adoption of 561 storm drains, delivered signs and welcome packets, and continued management of the Adopt-a-Drain website.

2019 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior with an emphasis in the Battle Creek subwatershed. To accomplish these goals, the Program: distributed 2,400 door hangers, encouraged adoption of 851 storm drains, delivered signs and welcome packets, and continued management of the Adopt-a-Drain website.

2020 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in the Summit-University neighborhoods. To accomplish these goals, the Program: mailed 5,999 postcards, encouraged adoption of 565 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2021 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in the Woodlawn-Jefferson, Wheelock Pkwy and Jefferson-W. Seventh neighborhoods. To accomplish these goals, the Program: delivered 2,000 door hangers, encouraged adoption of 375 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website. Updated the door hanger that is distributed in targeted promotion areas.

2022 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 319 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2023 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 406 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2024 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 441 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2025 Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in various neighborhoods. To accomplish these goals, the Program seeks to: distribute door hangers, encourage adoption of storm drains, deliver signs and welcome packets, and continue management of the Adopt-a-Drain website.

Responsible Municipal Staff: Stormwater Permit Coordinator

c. **Watershed Partners and Clean Water Minnesota:** is a collaborative outreach project and coalition providing resources to member organizations to aid in water quality education. The City of Saint Paul is member of this organization, and annually contributes financial resources to the coalition. The target audience is residents and community stakeholders of the member organizations including watershed districts, cities, counties, higher education, etc.

   Various stormwater runoff impact topics are presented through the Program including: lawn care techniques, urban agriculture, native planting/restoration, environmental health, etc. Additionally, the organization sponsors the clean water exhibits at the Minnesota State Fair.

   Annual Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program seeks to: create monthly blog posts with timely and consistent messages to encourage behaviors that improve water quality, generate photographs that feature local residents taking action to protect lakes and rivers, enhance a metro wide Adopt-a-Drain online registration system, conduct monthly meetings with partner activities and presentations, and develop and implement clean water exhibits at the Minnesota State Fair.

   Responsible Municipal Staff: Stormwater Permit Coordinator

d. **No-Parking Sign Water Quality Message:** In 2022 a Water Quality message was included in the printing of temporary No-Parking Signs. The temporary No-Parking Signs are used citywide to prevent parking during programmed street sweeping, snow removal and street repair activities. The message advocates for keeping storm drains clear to prevent localized flooding and to promote knowledge of impacts to water quality in the Mississippi River.

Annual Measurable Goals of the No-Parking Sign Water Quality Message include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior.

Responsible Municipal Staff: Stormwater Permit Coordinator

e. **Pesticide and Fertilizer Applicator Licensing**: The Department of Safety and Inspections maintains a City Ordinance (Chapter 377) and Licensing system for pesticide and fertilizer applicators.

Responsible Municipal Staff: Water Resources Coordinator

3. Educate the public on proper pet waste disposal.

Specific Activities:

a. **Friends of the Mississippi River Water Quality Education Program:** is implemented annually within Saint Paul. The target audience is groups of volunteers comprised of residents or community members (businesses, neighborhood groups, organizations). Major components of the program include: storm drain stenciling, distribution of door hangers, litter clean-up events, educational programs and workshops.

Various stormwater runoff impact topics are presented through the Program including: pet waste disposal, leaves/grass impacts, litter/trash impacts, proper disposal of hazardous wastes, proper application of fertilizers, car washing techniques, salt application, etc.

2018 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 1,113 volunteers and completed 1,976 volunteer hours on water quality improvement activities including: stenciling 2,224 storm drains, distributing 5,738 door hangers, coordinating 2 litter clean-up outings, 31 classroom educational presentations, 2 community education workshops, and 1 storm drain mural project.

2019 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 1,259 volunteers and completed 2,426 volunteer hours on water quality improvement activities including: stenciling 2,521 storm drains, distributing 7,686 door hangers, coordinating 3 litter clean-up outings, 29 classroom educational presentations, 2 community education workshops, and 1 storm drain mural project.

2020 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 125 volunteers to carry out 337 volunteer

hours on water quality improvement activities that included: stenciling 1,013 storm drains, distributing 1,199 door hangers, coordinating 1 litter clean-up outing, 12 classroom presentations, 1 special event (Children's Water Festival virtually), and 1 storm drain mural project. FMR incorporated a TMDL fact sheet into their educational programs and at public events.

2021 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 643 volunteers to carry out 1,168 volunteer hours on water quality improvement activities that included: stenciling 1,368 storm drains, distributing 2,220 door hangers, coordinating 12 litter clean-up outings, 11 classroom presentations, 7 field trips, 670 virtual engagements with online curriculum, and 1 storm drain mural project. Updated the door hanger that is distributed during stenciling events.

2022 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 666 volunteers to carry out 918 volunteer hours on water quality improvement activities including: stenciling 1,265 storm drains, distributing door hangers, coordinating 4 litter clean-up outings, 7 educational programs, 2 community education workshops, and 1 storm drain mural project. FMR also incorporated TMDL fact sheets into their educational programs and at public events.

2023 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 475 volunteers to carry out 929 volunteer hours on water quality improvement activities that included: stenciling 1,498 storm drains, distributing 2,537 door hangers, coordinating 4 litter clean-up outings, 4 classroom presentations, 2 rain barrel workshops, and 1 storm drain mural project. Updated the door hanger that is distributed during stenciling events.

2024 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 646 volunteers to carry out 1359 volunteer hours on water quality improvement activities that included: stenciling 1,632 storm drains, distributing 3,514 door hangers, coordinating 6 litter clean-up outings, 4 classroom presentations, 2 community educational workshops, and 3 paddling excursions on the Mississippi River.

2025 Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program seeks to: engage 550 volunteers to carry out 1,000 volunteer hours on water quality improvement activities including: stenciling 1,500 storm drains, distributing 3,000 door hangers, coordinating 2-3 litter clean-up outings, 5-10 educational programs, 2 community education workshops, and 1

storm drain mural project. FMR also plans to incorporate TMDL fact sheets into their educational programs and at public events.

Responsible Municipal Staff: Stormwater Permit Coordinator

b. **Adopt-a-Drain Program:** is implemented annually within Saint Paul. The target audience are individual property occupants within Saint Paul. Major components of the program include: marketing of the Program, distribution of door hangers, distribution of welcome packets/signs, and collection of data.

   Various stormwater runoff impact topics are presented through the Program including: pet waste disposal, leaves/grass impacts, litter/trash impacts, proper disposal of hazardous wastes, salt application, etc.

   2018 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: distributed 9,600 door hangers, encouraged adoption of 561 storm drains, delivered signs and welcome packets, and continued management of the Adopt-a-Drain website.

   2019 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior with an emphasis in the Battle Creek subwatershed. To accomplish these goals, the Program: distributed 2,400 door hangers, encouraged adoption of 851 storm drains, delivered signs and welcome packets, and continued management of the Adopt-a-Drain website.

   2020 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in the Summit-University neighborhoods. To accomplish these goals, the Program: mailed 5,999 postcards, encouraged adoption of 565 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

   2021 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in the Woodlawn-Jefferson, Wheelock Pkwy and Jefferson-W. Seventh neighborhoods. To accomplish these goals, the Program: delivered 2,000 door hangers, encouraged adoption of 375 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website. Updated the door hanger that is distributed in targeted promotion areas.

   2022 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 319 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2023 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 406 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2024 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 441 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2025 Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in various neighborhoods. To accomplish these goals, the Program seeks to: distribute door hangers, encourage adoption of storm drains, deliver signs and welcome packets, and continue management of the Adopt-a-Drain website.

Responsible Municipal Staff: Stormwater Permit Coordinator

c. **Watershed Partners and Clean Water Minnesota:** is a collaborative outreach project and coalition providing resources to member organizations to aid in water quality education. The City of Saint Paul is member of this organization, and annually contributes financial resources to the coalition. The target audience is residents and community stakeholders of the member organizations including watershed districts, cities, counties, higher education, etc.

   Various stormwater runoff impact topics are presented through the Program including: lawn care techniques, urban agriculture, native planting/restoration, environmental health, etc. Additionally, the organization sponsors the clean water exhibits at the Minnesota State Fair.

   2018 Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program seeks to: create monthly blog posts with timely and consistent messages to encourage behaviors that improve water quality, generate photographs that feature local residents taking action to protect lakes and rivers, enhance a metro wide Adopt-a-Drain online registration system, conduct monthly meetings with partner activities and presentations, and develop and implement clean water exhibits at the Minnesota State Fair.

   Responsible Municipal Staff: Stormwater Permit Coordinator

d. **No-Parking Sign Water Quality Message:** In 2022 a Water Quality message was included in the printing of temporary No-Parking Signs. The temporary No-

Parking Signs are used citywide to prevent parking during programmed street sweeping, snow removal and street repair activities. The message advocates for keeping storm drains clear to prevent localized flooding and to promote knowledge of impacts to water quality in the Mississippi River.

Annual Measurable Goals of the No-Parking Sign Water Quality Message include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior.

Responsible Municipal Staff: Stormwater Permit Coordinator

4. Educate the public and commercial applicators on the proper management and application of de-icing and anti-icing compounds for winter maintenance.

   Specific Activities:

   a. **Friends of the Mississippi River Water Quality Education Program:** is implemented annually within Saint Paul. The target audience is groups of volunteers comprised of residents or community members (businesses, neighborhood groups, organizations). Major components of the program include: storm drain stenciling, distribution of door hangers, litter clean-up events, educational programs and workshops.

      Various stormwater runoff impact topics are presented through the Program including: pet waste disposal, leaves/grass impacts, litter/trash impacts, proper disposal of hazardous wastes, proper application of fertilizers, car washing techniques, salt application, etc.

      2018 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 1,113 volunteers and completed 1,976 volunteer hours on water quality improvement activities including: stenciling 2,224 storm drains, distributing 5,738 door hangers, coordinating 2 litter clean-up outings, 31 classroom educational presentations, 2 community education workshops, and 1 storm drain mural project.

      2019 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 1,259 volunteers and completed 2,426 volunteer hours on water quality improvement activities including: stenciling 2,521 storm drains, distributing 7,686 door hangers, coordinating 3 litter clean-up outings, 29 classroom educational presentations, 2 community education workshops, and 1 storm drain mural project.

      2020 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 125 volunteers to carry out 337 volunteer hours

on water quality improvement activities that included: stenciling 1,013 storm drains, distributing 1,199 door hangers, coordinating 1 litter clean-up outing, 12 classroom presentations, 1 special event (Children's Water Festival virtually), and 1 storm drain mural project. FMR incorporated a TMDL fact sheet into their educational programs and at public events.

2021 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 643 volunteers to carry out 1,168 volunteer hours on water quality improvement activities that included: stenciling 1,368 storm drains, distributing 2,220 door hangers, coordinating 12 litter clean-up outings, 11 classroom presentations, 7 field trips, 670 virtual engagements with online curriculum, and 1 storm drain mural project. Updated the door hanger that is distributed during stenciling events.

2022 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 666 volunteers to carry out 918 volunteer hours on water quality improvement activities including: stenciling 1,265 storm drains, distributing door hangers, coordinating 4 litter clean-up outings, 7 educational programs, 2 community education workshops, and 1 storm drain mural project. FMR also incorporated TMDL fact sheets into their educational programs and at public events.

2023 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 475 volunteers to carry out 929 volunteer hours on water quality improvement activities that included: stenciling 1,498 storm drains, distributing 2,537 door hangers, coordinating 4 litter clean-up outings, 4 classroom presentations, 2 rain barrel workshops, and 1 storm drain mural project. Updated the door hanger that is distributed during stenciling events. In 2023, the City of Saint Paul conducted its inaugural Snow summit. This included exhibits on the City's snow equipment and winter operation activities, our water quality programs, and educational presentations.

2024 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: engaged 646 volunteers to carry out 1359 volunteer hours on water quality improvement activities that included: stenciling 1,632 storm drains, distributing 3,514 door hangers, coordinating 6 litter clean-up outings, 4 classroom presentations, 2 community educational workshops, and 3 paddling excursions on the Mississippi River.

2025 Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program seeks to: engage 550 volunteers to carry out 1,000

volunteer hours on water quality improvement activities including: stenciling 1,500 storm drains, distributing 3,000 door hangers, coordinating 2-3 litter clean-up outings, 5-10 educational programs, 2 community education workshops, and 1 storm drain mural project. FMR also plans to incorporate TMDL fact sheets into their educational programs and at public events.

Responsible Municipal Staff: Stormwater Permit Coordinator

b. **Adopt-a-Drain Program:** is implemented annually within Saint Paul. The target audience are individual property occupants within Saint Paul. Major components of the program include: marketing of the Program, distribution of door hangers, distribution of welcome packets/signs, and collection of data.

Various stormwater runoff impact topics are presented through the Program including: pet waste disposal, leaves/grass impacts, litter/trash impacts, proper disposal of hazardous wastes, salt application, etc.

2018 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program: distributed 9,600 door hangers, encouraged adoption of 561 storm drains, delivered signs and welcome packets, and continued management of the Adopt-a-Drain website.

2019 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior with an emphasis in the Battle Creek subwatershed. To accomplish these goals, the Program: distributed 2,400 door hangers, encouraged adoption of 851 storm drains, delivered signs and welcome packets, and continued management of the Adopt-a-Drain website.

2020 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in the Summit-University neighborhoods. To accomplish these goals, the Program: mailed 5,999 postcards, encouraged adoption of 565 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2021 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in the Woodlawn-Jefferson, Wheelock Pkwy and Jefferson-W. Seventh neighborhoods. To accomplish these goals, the Program: delivered 2,000 door hangers, encouraged adoption of 375 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website. Updated the door hanger that is distributed in targeted promotion areas.

2022 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish

these goals, the Program: mailed postcards, encouraged adoption of 319 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2023 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 406 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2024 Measurable Goals of the Program included: increased awareness, increased understanding, acquired skills, and/or desired changes in St. Paul. To accomplish these goals, the Program: mailed postcards, encouraged adoption of 441 storm drains, delivered signs and welcome packets, and continued managing the Adopt-a-Drain website.

2025 Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior focusing in various neighborhoods. To accomplish these goals, the Program seeks to: distribute door hangers, encourage adoption of storm drains, deliver signs and welcome packets, and continue management of the Adopt-a-Drain website.

Responsible Municipal Staff: Stormwater Permit Coordinator

c. **Watershed Partners and Clean Water Minnesota:** is a collaborative outreach project and coalition providing resources to member organizations to aid in water quality education. The City of Saint Paul is member of this organization, and annually contributes financial resources to the coalition. The target audience is residents and community stakeholders of the member organizations including watershed districts, cities, counties, higher education, etc.

   Various stormwater runoff impact topics are presented through the Program including: lawn care techniques, urban agriculture, native planting/restoration, environmental health, etc. Additionally, the organization sponsors the clean water exhibits at the Minnesota State Fair.

   Annual Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program seeks to: create monthly blog posts with timely and consistent messages to encourage behaviors that improve water quality, generate photographs that feature local residents taking action to protect lakes and rivers, enhance a metro wide Adopt-a-Drain online registration system, conduct monthly meetings with partner activities and presentations, and develop and implement clean water exhibits at the Minnesota State Fair.

   Responsible Municipal Staff: Stormwater Permit Coordinator

d. **No-Parking Sign Water Quality Message:** In 2022 a Water Quality message was included in the printing of temporary No-Parking Signs. The temporary No-Parking Signs are used citywide to prevent parking during programmed street sweeping, snow removal and street repair activities. The message advocates for keeping storm drains clear to prevent localized flooding and to promote knowledge of impacts to water quality in the Mississippi River.

   Annual Measurable Goals of the No-Parking Sign Water Quality Message include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior.

   Responsible Municipal Staff: Stormwater Permit Coordinator

5. Educate developers and contractors on construction site and post-construction stormwater management BMP design, construction, and maintenance methods.

   Specific Activities:

   a. **Utility Coordination Meeting:** is held annually to present information related to various utility and street improvement projects occurring within the City limits. The target audience for this meeting is contractors, city staff, and utility companies.

      Various stormwater runoff impact topics are presented at this Meeting including illicit discharges and erosion and sediment control measures. Also made available at this meeting is a document detailing Erosion and Sediment Control for Utility Projects in the Right-of-Way.

      Annual Measurable Goals of the meeting include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the meeting seeks to: inform contractors and utility companies of erosion and sediment control requirements the City has in place.

      Responsible Municipal Staff: Right-of-Way Engineer, Water Resource Coordinator

   b. **Chapter 52- Stormwater Runoff Ordinance:** is enforced for development projects occurring in the City. The target audience for this Ordinance is developers and city staff.

      Various stormwater runoff impact topics are presented within this Ordinance including: temporary erosion and sediment control devices and maintenance, permanent stormwater BMPs, rate control, etc. The Ordinance is applied by the City's Site Plan Committee at the time a development seeks City approvals. The Site Plan Committee uses the review as a forum to educate about temporary and permanent stormwater controls.

Annual Measurable Goals of the Ordinance include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Ordinance seeks to: inform contractors, developers, and city staffs of various Stormwater Runoff requirements the City has in place.

Responsible Municipal Staff: Sewer Utility Regulatory & Records Engineer, Water Resource Coordinator

6. Educate the public about impaired waters within the jurisdiction and the TMDLs developed to address the impairments.

   Specific Activities:

   a. **Friends of the Mississippi River Water Quality Education Program:** in 2020 a TMDL Fact Sheet was prepared summarizing TMDLs, causes, locations, solutions. The Fact Sheet is available on the City's website and is promoted at various public events by Water Quality Education consultants.

      Annual measurable goals of the fact sheet include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior.

   b. **Watershed Partners and Clean Water Minnesota:** is a collaborative outreach project and coalition providing resources to member organizations to aid in water quality education. The City of Saint Paul is member of this organization, and annually contributes financial resources to the coalition. The target audience is residents and community stakeholders of the member organizations including watershed districts, cities, counties, higher education, etc.

      Various stormwater runoff impact topics are presented through the Program including: lawn care techniques, urban agriculture, native planting/restoration, environmental health, etc. Additionally, the organization sponsors the clean water exhibits at the Minnesota State Fair.

      Annual Measurable Goals of the Program include: increased awareness, increased understanding, acquired skills, and/or desired changes in behavior. To accomplish these goals, the Program seeks to: create monthly blog posts with timely and consistent messages to encourage behaviors that improve water quality, generate photographs that feature local residents taking action to protect lakes and rivers, enhance a metro wide Adopt-a-Drain online registration system, conduct monthly meetings with partner activities and presentations, and develop and implement clean water exhibits at the Minnesota State Fair.

      Responsible Municipal Staff: Stormwater Permit Coordinator

WATERSHED
PARTNERS

Metro Watershed Partners

2024 Annual Program Report

Metro Watershed Partners is a coalition of more than seventy public, private and non-profit organizations in the Twin Cities metro area. Through collaborative education and outreach, the Metro Watershed Partners promote a public understanding that inspires people to act to protect water in their watershed. Since 1996, partners have cooperated through educational projects, networking, and resource sharing.

MINNESOTA WATER
LET'S KEEP IT CLEAN

Table of Contents

Metro Watershed Partners 2024 Report

Introduction

Metro Watershed Partners is a coalition of more than seventy public, private and non-profit organizations in the Twin Cities metro area. Through collaborative education and outreach, the Metro Watershed Partners promote a public understanding that inspires people to act to protect water in their watershed. Since 1996, partners have cooperated through educational projects, networking, and resource sharing.

WATERSHED PARTNERS

The mission of the Metro Watershed Partners is two-fold:

- to provide and promote collaborative watershed education programs with consistent messages to the general public, local government staff and elected officials, and
- to provide WSP members a place and means to share information, generate ideas, and coordinate and support collaborative watershed education programs.

In 2024, members contributed $187,000 to support monthly meetings, exhibit checkout, administrative functions, state fair outreach, Adopt-a-Drain, and the Clean Water Minnesota outreach campaign.

Leadership

The work of **Metro Watershed Partners** is guided by a steering committee that includes stormwater education professionals from watershed organizations, nonprofits and government agencies. In 2024, our steering committee members were:

Angie Hong, Washington Conservation District
Ann Zawistoski, Hamline University, Center for Global Environmental Education
Jessica Miller, Dragons Wynd Entomology Outreach
Kris Meyer, Freshwater
Kristin Seaman, City of Woodbury
Lauren Letsche, City of Columbia Heights
Nick Voss, Vadnais Lake Area Watershed Management Organization
Sofie Wicklund, Hamline University, Center for Global Environmental Education
Tracy Fredin, Hamline University, Center for Global Environmental Education

Nick Voss and Lauren Letsche left the steering committee in 2024 due to job changes. We are so thankful for their service and leadership in the group.

Metro Watershed Partners Activities and Accomplishments

Networking and Sharing Information

The Watershed Partners hold monthly meetings that give members an opportunity to network, share information, generate ideas, and form partnerships. These meetings feature presentations by experts in the fields of education, legislation, marketing, and watershed management.

In 2024, The Watershed Partners held 10 meetings, 6 of which were held virtually via Zoom with an average of 30 members attending each meeting. While our Zoom meetings tend to have a higher attendance, we plan to continue to meet in a variety of formats, both in-person and online to facilitate networking and provide a forum in which the most people can participate. The Zoom format allows us to record and share the presentations to those who were not able to attend and can be found on our YouTube playlist. We were thrilled to be able to once again come together in person in December for our annual year-end potluck, which was graciously hosted by the Mississippi Watershed Management Organization.

Our monthly meetings are a valued part of the Watershed Partners program that facilitates watershed education in Minnesota. We will continue offering these monthly gatherings in 2025, both virtually and in person.

On the annual boat ride on the Mississippi River in June

2024 Watershed Partner Meetings - Topics and Presenters

Links to the meeting recordings are provided when available

Month	Topic	Presenters	Attendance
January	Long-Term Care of Natural Landscapes and Clean Water Planting Projects	Angie Hong, Washington Conservation District Jennifer Ehlert, Metro Blooms	33
February	Legislative Update	Aaron Klemz, MCEA Carly Griffith, MCEA	34
March	Strategic Planning and Conversations (in person at CRWD)	Ann Zawistoski, Hamline University, Break-out meetings of subcommittees	19
April	Artists in Residence	Kyle Axtell, South Washington Watershed District Britta Dornfeld, Environmental Initiative	25
May	AmeriCorps Members Mini Presentations	AmeriCorps Members: Hannah Peterson, Becka Krasky, Lori Maxfield, Thomas Hayden, Phil Davies, Angela Hugunin	29
June	June Boat Ride (in person on Magnolia Blossom River Boat)	Madeline Hayden, Minnesota Aquatic Invasive Species Research Center Colleen O'Connor Toberman, Friends of the Mississippi River Hiro Hayashi, Fishing For All	45
September	Middle Rice Creek Restoration Tour	Matt Kocian, Rice Creek Watershed District	11
October	Chloride Engagement Campaigns	Jessica Wilson, City of Edina	30
November	Community Engagement Discussions	Tara Jebens-Singh, Many Faces, Many Stories	41
December	End of Year Potluck with Lighting Round: Outreach Projects (in person at MWMO)		35

Mobilize

The Metro Watershed Partners listserv is a forum for watershed educators and other industry professionals throughout the state to share information and resources. In 2024, the Metro Watershed Partners listserv provided 315 members with an effective tool to promote watershed education, share information about professional programs, and exchange information with other watershed educators, legislators, and government agencies.

Our listserv is hosted by Mobilize.io, an online interactive communications platform for discussions, chat, events, files, and networking that is accessible online, via email, and mobile app.

The listserv can be found at:
https://watershedpartners.mobilize.io

Messages can posted online to a feed or sent via email:
watershed-partners@groups.mobilize.io

This is a private forum and anyone who would like to be added to the Mobilize group should send an email request to swicklund02@hamline.edu.

Exhibit Checkouts

The Metro Watershed Partners offers multiple exhibits that can be checked out for free by partners and volunteer groups. Some have a general watershed and nonpoint source pollution focus, including Tables 2 and 3 (pictured below) and the Eutrophication exhibit-in-a-box. We also offer an Adopt-a-Drain tabletop exhibit and bean bag toss game. In 2023, we designed and created a smaller bean bag toss that fits perfectly on a table.

In 2024, our exhibits were used for at least 13 community events in the Twin Cities area. In addition to exhibits, you may request free Adopt-a-Drain handouts for your event, and swag items (hats, water bottles, tote bags, etc) are available for purchase.

View more info about exhibit checkouts at cleanwatermn.org/partners/exhibit-check-out/

Adopt-a-Drain Exhibit-in-a-Box

Eutrophication Exhibit-in-a-Box

Table 2: "What is your Watershed Address?"

A map of the Minneapolis/St. Paul metropolitan area and the state of Minnesota with puzzle pieces to lift and reveal the name of the watershed in which one lives. Graphic panels give more information and depict the larger watersheds of the entire United States. Fits on a 6-foot table.

Table 3: “Your Street Flows to the River”

Exemplifies how everyday activities in our own yards and driveways can impact the entire watershed. Many people are unaware that the water that flows into the storm drains in their street goes directly to the lakes and rivers of their community and carries with it the pollutants that cause the lakes and streams to become fouled. Fits on a 6-foot table.

Bean Bag Toss

Full-size (4’ x 2’)

Tabletop (2’ x 1’)

Clean Water MN Update

Clean Water MN is the collaborative outreach project of the Metro Watershed Partners. Working together, we provide resources, training, and support to partners as they work to inspire residents in the Twin Cities metro area to keep water clean and healthy.

Cleanwatermn.org features seasonally-appropriate stories about metro area residents taking action at home and in their lives to keep Minnesota water clean and healthy. The stories are designed for partners to use in their own communications—via websites, Facebook, Twitter, and newsletters. Each story also includes a suite of professional photographs, accessible to partners online for use in their own stories and publications.

The cleanwatermn.org website also features informational pages, calls to action, information about the partnership, educational resources, and a list of our partners. While the stories on the website are no longer updated as often as previously, we believe that the information provided there is evergreen and we will continue maintaining the site. In fact, the Clean Water MN website continues to be visited, having received 7,000 views in 2024. We encourage our partners to continue to share the resources and information on that site with their residents.

As the social media landscape has evolved, the needs of the Metro Watershed Partners have shifted as well. Platforms are now prioritizing native video and image content and deprioritizing links to external content. In response, we plan to continue investing in a robust digital resource library in 2025 which will facilitate the curation and sharing of high quality images, videos, and other materials. We hope to transform the Cleanwatermn.org site to become a portal to many varied types of resources for learning and sharing.

Top 5 Pages on Clean Water MN by number of views in 2024

Page	Number of views
Home Page - Clean Water Minnesota	1,523
Choose clean lakes for safer swimming - Clean Water Minnesota	886
Is my lake safe? Learn what to look for to answer this question.	819
Using Sidewalk Salt Responsibly - Clean Water Minnesota	614
Resources Archive - Clean Water Minnesota	558

Adopt-a-Drain

Activities & Accomplishments in 2024

Adopt-a-Drain continues to expand throughout greater Minnesota, with the Sauk River and St. Louis Watersheds joining Adopt-a-Drain and Little Canada joining the Metro Watershed Partners. Statewide this year 2,115 new participants signed up to adopt over 3,950 additional storm drains.

In the Metro Watershed areas, we continue to see a steady growth in the program year over year, with an 15% increase in participants in 2024. Over 102,000 lbs of debris were cleaned up by MSW Adopt-a-Drain participants this year, with 2,622 members reporting their work, for a reporting rate of 26%. Participants spent a combined total of 4,155 hours, or 173 days, keeping their streets and storm drains clean.

We had many reasons to celebrate in October of this year. That month marked our 10 year anniversary of the Adopt-a-Drain program. We had our 24,000th drain adopted in MN, and received the Water Environment Federation's Public Communication and Outreach Award!

2024 Adopt-a-Drain metrics for Metro Watershed Partners

Debris Type Removed	Amount (lbs)
Brown Leaves	59,264.5
Grass and Green Leaves	5,582.3
Sediment and dirt	32,361.2
Trash	4,978.9
Pet Waste	11.9
Salt	513.8
Total	**102,712.5**

Monthly Breakdown of Storm Drain adoptions and cleanings

Month	New Participants	Drains Adopted	Debris collected (lbs)	Time spent (hrs)	Number of Drains Cleaned
January	34	57	20,905.80	665.0	620
February	26	40	2,773.28	92.5	205
March	42	94	3,516.28	92.9	202
April	111	254	14,971.54	241.8	535
May	88	139	6,912.91	468.8	385
June	75	132	8,982.80	135.4	344
July	78	179	10,193.32	1396.2	361
August	432	623	8,499.59	149.3	360
September	218	383	5,426.35	116.5	352
October	112	166	8,952.73	145.4	303
November	95	125	32,152.72	552.6	946
December	17	29	7,310.78	98.4	174
TOTALS	**1,328**	**2,221**	**130,598.1**	**4,154.6**	**4,787**

2024 Adopt-a-Drain National Program Survey

In 2024, we once again conducted research of adopt-a-drain programs throughout the United States. We found around 250 active programs at the city, watershed, county, and state levels. More than half of those programs (140+) are part of Adopt-a-Drain network, showing just how far-reaching the work of the Watershed Partners is. Adopt-a-Drain partners are now in 12 states (MN, WA, CA, UT, MI, MO, LA, GA, FL, VT, MA, NJ) with plans underway to onboard new states over the next year.

We also looked at the success of the adopt a drain programs around the country by comparing the number of drains adopted with that city's population. We're happy to report that cities within the Watershed Partners often ranked at the top by that metric.

Numbers in the charts below were retrieved from the program's website as of December, 2024. Cities that are Metro Watershed Partners members are highlighted in blue. Cities that are members of the Adopt-a-Drain.org program are marked with an asterisk.

Large-sized cities of over 100,000 people:

Rank	City	Population	Number of Adopted Drains	Adopted drains per 1,000 people
1	**Minneapolis, MN***	**429,954**	**7606**	**17.7**
2	**Saint Paul, MN***	**311,527**	**4037**	**13.0**
3	San Francisco, CA	808,000	6765	8.4
4	Grand Rapids, MI	197,416	1658	8.4
5	**Rochester, MN***	**121,395**	**785**	**6.5**

Medium-sized cities of between 10,000-100,000 people:

Rank	City	Population	Number of Adopted Drains	Adopted drains per 1,000 people
1	**Columbia Heights, MN***	**21,973**	**341**	**15.5**
2	Red Wing, MN*	16,547	245	14.8
3	Berkeley Heights, NJ*	13,292	189	14.2
4	Newcastle, WA*	12,100	151	12.5
5	**White Bear Lake, MN***	**24,883**	**283**	**11.4**

Small cities of under 10,000 people:

Rank	City	Population	Number of Adopted Drains	Adopted drains per 1,000 people
1	New London, MN*	1,252	37	29.6
2	Lake Crystal, MN*	2,539	44	17.3
3	**Lauderdale, MN***	**2,271**	**38**	**16.7**
4	Spicer, MN*	1,112	12	10.8
5 (tie)	**Circle Pines***	**5,025**	**54**	**10.7**
5 (tie)	Duvall, WA*	8,034	86	10.7

Minnesota Twins Game

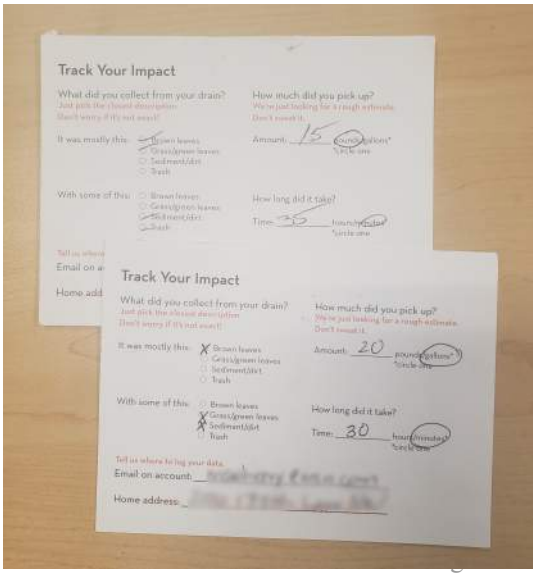
On Saturday, May 4th, 2024, we held an appreciation event at the Minnesota Twins game for the Metro Watershed Partners and our Adopt-a-Drain participants. Around 500 people attended, buying reduced rate tickets in our section in the home run porch. We were able to participate in a pre-game parade around the field and free Adopt-a-Drain hats were provided to everyone in our section. Watershed Partner members and teachers who had participated in the Adopt-a-Drain K12 program that year were provided free tickets to the game.

Lining up for the parade around the field and walking the field before the game.

End of year reporting postcards

Throughout the year, Adopt-a-Drain participants are encouraged to stay engaged and report their work via timely newsletter reminders and automated email reminders that send on a schedule chosen by the participant (monthly, quarterly, or twice per year).

In November, we sent a postcard to all participants who had not yet reported their work online, and received an additional 640 responses from Minnesota participants.



Social Media Promotion in 2024

In 2024, our Social Media team focused on posting high-quality and consistent content across all of our social media platforms. We implemented strategic tactics to gain followers, increase engagement and reach a large audience on all of our Adopt-a-Drain social media accounts. At the end of 2024, we had 2,357 Instagram followers and 1,764 Facebook followers, an increase of 6% and 14.8% respectively over 2024. The content focused on spotlighting awesome drain adopters who help keep their local waterways and communities clean.

For Earth Day, we created a social media campaign that encouraged people to report their drain cleanings by offering free t-shirts for any current drain adopter who cleaned their drain and reported it or signed up for the program and reported a cleaning during Earth week (April 20 to April 30). This led to 561 people reporting their cleanings and 350 of those people requested to be sent a t-shirt. Amount collected = 11,395 lbs.

In 2025 we will continue to focus on posting high-quality and consistent content as we strive to educate and engage our current audience and simultaneously continue to reach new audiences.

Social Media Impressions in 2024

Adopt-a-Drain's social media reached a large number of people this year. On Facebook our posts reached over 100,000 people, while our Instagram posts reached over 69,000 people. The posts following the chart were some of our top posts by number of views. Adopt-a-Drain social media accounts don't only focus on the Adopt-a-Drain program; they also share quality content about water stewardship and other environmental actions that followers can take outside of storm drain cleaning alone.

Month	Facebook	Instagram
January	7,314	6,027
February	3,958	4,902
March	3,607	6,122
April	10,412	4,285
May	7,165	4,859
June	10,465	5,710
July	17,648	5,991
August	11,899	6,986
September	8,424	5,760
October	11,668	6,979
November	4,740	5,723
December	3,373	5,889
TOTAL	**100,673**	**69,233**

Other Social Media Post Highlights in 2024

Adopt-a-Drain MN
Published by Camille Fredin
· October 1, 2024 ·

We can't "be-leaf" it's already October! 🍁 While leaves might be "natural" debris they become pollution when large quantities hit the water and break down becoming food for algae. So get ready to "Sweep up! Rake up! Pick Up!"
So far AAD participants in MN have kept over 765,000 pounds of debris from local storm drains! Help us track our impact by reporting what you collect after your drain cleaning at mn.adopt-a-drain.org.

Adopt-a-Drain MN
Published by Camille Fredin
· April 22, 2024 ·

Happy #EarthDay to the over 12,700 participants in the Adopt-a-Drain MN program! 🌎 Join thousands of drain adopters in the Twin Cities area today and help do your part to keep your local waterways clean.

Bonus for this years Earth Day: We're offering free t-shirts for anyone who cleans their drain and reports it OR signs up for the program and reports a cleaning during Earth week (April 20 to April 30).

Follow these easy steps:
1. Log into your account at adopt-a-drain.org
2. Click on "track impact"
3. Enter your best guess of the total amount you've collected from all of your drains since you last reported.

#AdoptaDrain #EarthDay2024

Adopt-a-Drain Brand Standards and Marketing Materials User Guide

Remember to check out the guide we've developed to help partners promote Adopt-a-Drain in their communities. Access the most up-to-date guide at: https://ms4.adopt-a-drain.org/marketing-guide

In this guide, you will find concise guidelines for using the Adopt-a-Drain brand, as well as a visual resource that guides you through accessing and utilizing the most up-to-date print and digital resources to promote the Adopt-a-Drain program in your community. We continue to refine and update print and digital assets, so take a minute to peruse this guide to find out about promotional resources you might not know about. For example, you can now download design files that will allow you to order Adopt-a-Drain merchandise such as hats, water bottles and tote bags directly from the vendor.

Access and download the standard marketing materials in Google Drive.

Education and Outreach at the Minnesota State Fair

The Minnesota State Fair in 2024 saw over 1.9 million total visitors over the 12 day running time, slightly higher attendance levels than what was seen in 2023. The Eco Experience building saw an estimated 218,000 visitors. The Metro Watershed Partner's Adopt-a-Drain exhibit was also very busy; we took over 3,300 photos of visitors in the Adopt-a-Drain photo booth during the course of the fair. The exhibit included many hands-on activities that introduced visitors to information about nonpoint source pollution and actions they could take to protect their waterways.

This year, Wisconsin residents could adopt a drain for the first time at the Minnesota State Fair; in addition we were able to sign up visitors from participating communities in Michigan and Washington. The Adopt-a-Drain exhibit also had a surprise

visit from Minnesota Lieutenant Governor Peggy Flanagan.

Over the twelve days of the fair, 744 Minnesotans in 108 different cities signed up to adopt storm drains. 740 of these new participants signed up on a kiosk at the Eco Experience building and received a drawstring backpack, an informational packet and a small yard sign that reads “We protect Minnesota lakes, rivers, and wetlands.”

We had 31 volunteers sign up to help our staff run the Adopt-a-Drain exhibit. Many of those volunteers came from our outreach to the Watershed Partners and Water Stewards. Our staff and volunteers had the opportunity to chat with current participants in the program, answer their questions, and talk about how their actions help protect our waterways. Many, many thanks to everyone who volunteered to help for making the exhibit a great success! We look forward to returning to the Great Minnesota Get-Together in 2025!

State Fair 2024 Summary

Day	Adopt-a-Drain New Participants	Drains Adopted	Photobooth photos taken
Thursday 8/22	44	44	339
Friday 8/23	62	77	296
Saturday 8/24	80	83	291
Sunday 8/25	45	50	206
Monday 8/26	26	50	153
Tuesday 8/27	48	60	253
Wednesday 8/28	68	94	296
Thursday 8/29	47	60	160
Friday 8/30	76	103	372
Saturday 8/31	73	88	319
Sunday 9/1	105	126	350
Monday 9/2	66	98	283
TOTAL	**740**	**933**	**3,318**

New participants signed up at the State Fair from across our Watershed Partners member areas. The chart below shows the number of new drains adopted for member cities, counties and watersheds.

New Drains Adopted at the State Fair by City, County & Watershed

City	Drains Adopted
Andover	10
Blaine	15
Bloomington	19
Circle Pines	2
Columbia Heights	4
Crystal	6
Eden Prairie	17
Edina	17
Fridley	2
Hastings	3
Hopkins	4
Lakeville	9
Minneapolis	250
Minnetonka	11
Mound	1
New Brighton	5
Richfield	29
Rochester	4
Roseville	22
Saint Cloud	4
Saint Louis Park	14
Saint Paul	148
Shoreview	5
Wayzata	2
White Bear Lake	4
White Bear Township	1
Woodbury	20

Watershed	Drains Adopted
Bassett Creek	50
Browns Creek	1
Capitol Region	134
Comfort Lake Forest Lake	1
Coon Creek	29
Eagan-Inver Grove Heights	11
Elm Creek	23
Lower Mississippi River	38
Minnehaha Creek	170
Mississippi	126
Nine Mile Creek	33
Ramsey Washington	50
Riley-Purg-Bluff Creek	22
Shingle Creek	23
South Washington	20
Vadnais Lake Area	4
Vermillion River	18
West Mississippi	10
County	**Drains Adopted**
Anoka County	52
Carver County	9
Hennepin County	472
Washington County	46

2024 Financial Report

Partners contributed $186,999 to the Watershed Partners in support of meetings, state fair outreach, administration, exhibit development (including maintenance and checkout), Adopt-a-Drain, and the Clean Water MN website and public outreach campaign. While our revenue was slightly lower than projected, we remain in good financial standing. We shifted some of the planned work on the digital resource library to 2025 t o meet our budget. We plan to continue that work in 2025 along with supporting our new Chloride initiative. We will not be raising our dues, but do hope to add new member cities to the Metro Watershed Group in 2025.

Supporting Members of the Metro Watershed Partners in 2024

Andover
Anoka Conservation District
Bassett Creek WMC
Blaine
Bloomington
Brown's Creek Watershed District
Capitol Region Watershed District
Carver County
Circle Pines
Columbia Heights
Coon Creek Watershed District
Crystal
Eagan-Inver Grove Heights WMO
East Metro Water Resources
Eden Prairie
Edina
Elm Creek WMC
Excelsior
Fridley
Hastings
Hennepin County
Hopkins
Lakeville
Lauderdale
Little Canada
Lower Mississippi River WMO
Middle St. Croix WMO
Minneapolis
Minnehaha Creek Watershed District
Minnetonka
Mississippi WMO
Mound
New Brighton
Nine Mile Creek Watershed District
Pioneer-Sarah Creek WC
Ramsey-Washington Metro Watershed District
Rice Creek Watershed District
Richfield
Riley Purgatory Bluff Creek Watershed District
Rochester
Rosemount
Roseville
Saint Louis Park
Saint Paul
Shingle Creek WMC
Shoreview
South Washington Watershed District
Vadnais Lake Area WMO
Vermillion River Watershed JPO
Washington Conservation District
Wayzata
West Mississippi WMC
White Bear Lake
White Bear Township
Woodbury

Watershed Partners 2024 Accounting

	IN-KIND	CASH	TOTAL
REVENUE			
2023 Funds rollover		$14,241.28	$14,241.28
2024 Membership		$186,999.00	$186,999.00
Total revenue		$201,240.28	$201,240.28
EXPENSE			
1. Watershed Partners Coordination			
Principle Investigator	$2,500.00	$8,481.43	$10,981.43
Program Coordination	$9,000.00	$18,000.00	$27,000.00
Steering Committee	$32,400.00		$32,400.00
Mobilize annual membership		$588.00	$588.00
Technology maintenance	$1,400.00	$1,375.42	$2,775.42
Meeting expenses		$3,268.13	$3,268.13
Postage and printing		$100.00	$100.00
Subtotal	$45,300.00	$30,269.43	$75,569.43
2. Watershed Exhibit Implementation			
Exhibit coordination	$4,500.00	$4,728.00	$9,228.00
State fair expenses	$2,700.00	$25,394.00	$28,094.00
Storage and check-out	$5,000.00		$5,000.00
Subtotal	$12,200.00	$30,122.00	$42,322.00
3. Clean Water MN			
Web hosting and maintenance		$1,400.00	$1,400.00
Earth Month Campaign and MN Twins Event		$7,619.77	$7,619.77
Image and video digital resource library		$6,000.00	$6,000.00
Media curation		$4,000.00	$4,000.00
Subtotal	$0.00	$19,019.77	$19,019.77
4. Adopt-a-Drain			
Site license	$6,900.00	$30,000.00	$36,900.00
Program coordination		$29,000.00	$29,000.00
Program implementation		$17,000.00	$17,000.00

	IN-KIND	CASH	TOTAL
Social media and communications		$9,000.00	$9,000.00
Promo merch		$0.00	$0.00
End of year mailing		$2,202.30	$2,202.30
Website work and graphic design		$7,000.00	$7,000.00
Subtotal	$6,900.00	$94,202.30	$101,102.30
TOTAL	**$64,400.00**	**$173,613.50**	**$238,013.50**
ADMINISTRATION FEE		**$17,361.35**	**$17,361.35**
TOTAL (INCL. ADMIN)	**$64,400.00**	**$190,974.85**	**$255,374.85**

2024 Rollover: $10,265.43

Watershed Partners Projected 2025 Budget

	IN-KIND	CASH	TOTAL
REVENUE			
2024 Funds rollover		$10,265.43	$10,265.43
2024 Membership		$190,000.00	$190,000.00
Total revenue		$200,265.43	$200,265.43
EXPENSE			
1. Watershed Partners Coordination			
Principle Investigator	$2,500.00	$8,481.43	$10,981.43
Program Coordination	$9,000.00	$18,000.00	$27,000.00
Steering Committee	$32,400.00		$32,400.00
Mobilize annual membership		$588.00	$588.00
Technology maintenance	$1,400.00	$1,000.00	$2,400.00
Meeting expenses		$3,000.00	$3,000.00
Postage and printing		$150.00	$150.00
Subtotal	$45,300.00	$31,219.43	$76,519.43
2. Watershed Exhibit Implementation			
Exhibit coordination	$4,500.00	$4,728.00	$9,228.00
State fair expenses	$2,700.00	$27,000.00	$29,700.00
Storage and check-out	$5,000.00		$5,000.00
Subtotal	$12,200.00	$31,728.00	$43,928.00
3. Clean Water MN			
Web hosting and maintenance		$2,500.00	$2,500.00
Photo and video resource library		$10,000.00	$10,000.00
Media curation		$4,000.00	$4,000.00
Earth Month Campaign and Event		$6,000.00	$6,000.00
Subtotal	$0.00	$20,000.00	$20,000.00
4. Adopt-a-Drain			
Site license	$6,000.00	$30,000.00	$36,000.00
Program coordination		$29,000.00	$29,000.00
Program implementation		$17,000.00	$17,000.00

	IN-KIND	CASH	TOTAL
Social media and communications		$9,000.00	$9,000.00
Promo merch		$0.00	$0.00
End of year mailing		$2,500.00	$2,500.00
Website work and graphic design		$7,000.00	$7,000.00
Subtotal	$6,000.00	$94,500.00	$100,500.00
TOTAL	**$63,500.00**	**$177,447.43**	**$240,947.43**
ADMINISTRATION FEE		**$17,744.74**	**$17,744.74**
TOTAL (INCL. ADMIN)	**$63,500.00**	**$195,192.17**	**$258,692.17**

2025 Projected Rollover: $5,073.26

ADOPT A STORM DRAIN

2024 St. Paul Annual Report

We're Making a Difference!

234	441	2,330	4,009
participants 2024	drains adopted 2024	participants TOTAL	drains adopted TOTAL

Drain Cleaning & Collection Data

523, or 22.4%, of St. Paul participants, reported cleaning 973 drains in 2024.

St. Paul participants collected 30,440.9 lbs of debris from their adopted storm drains in 2024.

Debris Type	Amount (lbs)
Brown Leaves	19,191.9
Grass and Green Leaves	1,728.5
Sediment and dirt	8,696.9
Trash	794.9
Pet Waste	0.0
Recyclables	0.0
Salt	28.8

Month	New Participants	Drains Adopted	Debris collected (lbs)	Time spent (hrs)
January	5	8	6,007.7	183.0
February	5	6	386.4	18.3
March	10	18	1,039.3	24.1
April	16	37	1,843.2	44.4
May	14	35	1,079.4	32.0
June	10	15	2,127.5	30.0
July	8	23	2,275.5	32.8
August	83	136	1,622.7	25.7
September	42	82	859.7	26.5
October	15	23	1,683.6	21.4
November	16	45	8,250.6	149.3
December	10	13	3,265.3	43.2
TOTALS	**234**	**441**	**30,440.9**	**630.5**

Participant Types

Participant type	Number of participants in 2024	Total number of participants	Percent of participants in 2024	Percent of total participants
Individual	221	2252	94.4%	96.7%
School or Classroom	11	42	4.7%	1.8%
Community Organization	2	20	0.9%	0.9%
Business	0	17	0.0%	0.7%

How Participants heard about Adopt-a-Drain

Referral Type	Number of participants in 2024	Number of participants total	Percent of participants in 2024	Percent of total participants
Other	104	225	44.4%	9.7%
Friend, family or neighbor	58	140	24.8%	6.0%
Family's teacher or school	22	34	9.4%	1.5%
My city or watershed district	16	57	6.8%	2.4%
Yard sign	11	41	4.7%	1.8%
Social media (Facebook, Next Door)	8	62	3.4%	2.7%
News outlet	2	13	0.9%	0.6%
Door hanger or flyer	0	13	0.0%	0.6%

98 participants from St. Paul signed up at the Adopt-a-Drain booth at the 2024 MN State Fair

Watersheds

2024 Data

Watershed	Drains adopted	Drains cleaned	Debris collected (lbs)	Time spent (hours)
Capitol Region	371	815	27,486.9	554.3
Ramsey-Washington Metro	47	107	1,831.6	56.5
Lower Mississippi River	22	29	391.8	14.1
Rice Creek	1	22	730.6	5.6

Subwatersheds

2024 Data

(subwatershed continued on next page)

Sub-watershed	Drains adopted	Drains cleaned	Debris collected (lbs)	Time spent (hours)
Mississippi River	76	161	5,636.0	86.9
East Kittsondale routes to Mississippi River	65	101	3,206.0	63.4
Trout Brook	35	78	1,459.7	42.3
St. Anthony Hill towards the Mississippi River	34	91	1,856.5	64.8
Davern St and routes to Mississippi River	32	62	4,829.9	72.3
St. Anthony Park towards the Mississippi River	31	99	2,758.1	39.3
Crosby Lake	28	32	505.6	11.9
City of St. Paul-Mississippi River	22	29	391.8	14.1
St. Paul Beltline pipe to the Mississippi River	19	41	465.3	14.5
Lake Phalen	17	40	575.6	27.2
Phalen Creek	16	18	504.6	10.4
Como Lake	16	97	4,191.6	98.5

Subwatersheds *(continued)*

2024 Data

Sub-watershed	Drains adopted	Drains cleaned	Debris collected (lbs)	Time spent (hours)
Como Lake	16	97	4,191.6	98.5
West Kittsondale routes to Mississippi River	13	47	2,198.7	42.1
Downtown Subwatershed routes to Mississippi River	11	13	310.2	7.3
Hidden Falls	6	1	2.4	0.1
Goodrich- Western routes to Mississippi River	5	16	488.4	13.2
Battle Creek	4	12	236.0	9.4
Urban Subwatershed towards the Mississippi River	3	9	223.2	3.3
West Seventh towards the MIssissippi River	3	12	117.6	4.6
Wakefield Lake	2	2	6.0	0.2
Blufflands	2	4	306.4	2.6
Mississippi River Bottomlands	1	7	121.5	1.4
Beaver Lake	0	1	50.0	1.0

Mailings and Signs

Sample welcome packet pictured below, including: yard sign and stake, welcome card with safety tips and instructions, and customized welcome letter.

In addition, 98 participants from St. Paul signed up at the MN State Fair and received a “We Protect Minnesota lakes, rivers, and wetlands” sign.

Sign	Packets Mailed
Lake Phalen	4
Mississippi River	20
Como Lake	5

** Some participants opt out of receiving a yard sign, so the number of packets sent is lower than the total number of new signups this year.*

ADOPT A STORM DRAIN

Annual Report
2024 St. Paul

MINNESOTA STATE SUMMARY

2,115 participants 2024

3,952 drains adopted 2024

13,892 participants TOTAL

24,955 drains adopted TOTAL

3,809, or 27.4%, of Minnesota participants, reported cleaning 6,908 drains in 2024.

Minnesota participants collected 133,605.8 lbs of debris from their adopted storm drains in 2024.

Debris Type	Amount (lbs)
Brown Leaves	73,026.0
Grass and Green Leaves	7,242.3
Sediment and dirt	45,004.8
Trash	7,520.2
Pet Waste	12.9
Recyclables	0.0
Salt	799.6

Month	New Participants	Drains Adopted	Debris collected (lbs)	Time spent (hrs)
January	47	101	21,211.2	893.5
February	38	65	2,785.7	123.4
March	97	185	3,529.3	135.7
April	188	448	15,053.8	337.2
May	121	228	6,920.3	513.9
June	147	301	9,051.4	178.2
July	105	291	10,219.1	1,658.3
August	650	898	8,520.4	179.1
September	335	635	5,540.9	157.3
October	193	356	8,973.2	191.0
November	135	314	32,394.0	708.1
December	59	130	9,406.5	206.0
TOTALS	**2,115**	**3,952**	**133,605.8**	**5,281.4**

Protecting, restoring and enhancing the metro Mississippi River and its watershed since 1993.

106 W. Water St., Ste. 600 | St. Paul MN 55107-2032
(651) 222-2193 | fmr.org | info@fmr.org

Final Report 2024

Friends of the Mississippi River (FMR) engages people to protect, restore and enhance the Mississippi River and its watershed in the Twin Cities region. We strive to create positive changes that improve water quality, provide habitat for wildlife, develop education and recreation opportunities, and inspire widespread commitment to this natural wonder that flows through our community. We work to produce replicable models for community engagement and regularly measure and refine our goals and benchmarks to ensure that we are achieving tangible improvements in the river's health and vitality and demonstrating a benefit to our community.

The water quality education project is designed to meet the following three objectives:

1. To involve St. Paul residents and community members in hands-on learning experiences about urban runoff pollution and ways to prevent it.
2. To facilitate school service-learning initiatives using storm drain stenciling, litter cleanups and outings, and/or habitat restoration as key components to the programs.
3. To stencil storm drains with the message "Keep 'em Clean—Drains to River," and distribute educational door-hangers to residents and businesses in the stenciled neighborhoods.

As of November 30th, 2024, we have:

- Facilitated 37 staffed stenciling outings, trash-pickups and stenciling DIY kits. 12 of these outings were with youth or school groups and an additional 3 with college and college aged groups.
- Engaged **646** volunteers through stenciling outings, trash-pickups and DIY stenciling kit pick-ups in Saint Paul; **345** of these volunteers were associated with school, youth, or college groups.
- Led volunteers in stenciling 1632 storm drains and distributed 3514 educational flyers, for a total of 1358.5 volunteer hours including trash pick-ups.
- Engaged 25 youth in the Environmental Stewardship Institute (ESI) career development program in Saint Paul and nine youth through the school-year ESI Council leadership and career development program.
- Engaged 23 youth at the Right Track Career Exploration Day..
- Engaged 15 adults at Highland Path Senior Residence.
- Engaged youth in 3 classroom programs focused on the Mississippi River and watershed protection in St. Paul schools, at High School of the Recording Arts, School of Northern Lights, and Harding High School.
- Interacted with over **495 community** members at five tabling events, having substantive conversations about how to protect water quality and why clean water is so important.

- Led large-scale stenciling outings in St. Paul with thirty-three University of St. Thomas students on October 2, 2024 and forty-nine volunteers from Spearmint Energy on October 8, 2024, forty-two attendees from Great River School on May 23, 2024, thirty-three at School of Northern Lights on May 30, 2024, fifty-two volunteers from Service Learning Camps on July 23, 2024, and 86 volunteers from St. Anthony Park Elementary on June 5, 2024.
- We also coordinated large-scale park clean-ups including with youth from our ESI program at Hidden Falls Regional Park, employees from So Good For You in neighborhoods around Hamline Park, and employees from Xcel Energy at Trout Brook Nature Sanctuary.
- Engaged in over 2000 education hours with storm drain stenciling kits, outings, outreach programs, community events tabling, and our water quality classroom/youth group education and career development programs.

Storm Drain Stenciling Outings, DIY Stenciling Pick Up & Trash Pick Ups

Storm Drain Stenciling:
In 2024, the stenciling kits have continued to be a popular mode of engagement. Small community groups, friend groups, corporate groups and schools have utilized this option to check out a do it yourself (DIY) stenciling kit for up to two weeks. Due to frequent rainfall in the Spring and Early to Mid-Summer, we did extend the check out durations of multiple DIY kits to give them the opportunity to stencil. These DIY kits include all the materials to stencil storm drains, maps, and background information on pollution and why it is essential to keep storm drains clean. FMR coordinates availability and maintains materials in stenciling kits.

We also continue to offer in-person outings led by one to three FMR staff members, working with schools, corporate groups, and community members. Between April 2024-October 2024, twenty-one groups opted to schedule a staffed stenciling outing, which included a 15-30-minute presentation from an FMR staff member about the top 8 pollutants that get into the river through storm drains and what people can do to protect clean water. Frequent rainfall also led to some cancellations in stenciling opportunities if rescheduling wasn't an option for the volunteers. If there was not thunder or lightning, we offered to transition to a trash-pick up instead. Six groups checked out DIY kits in 2024, and 25 staffed outings for a total of 31 saint paul stenciling outings. We had 489 attendees and 938.5 volunteer hours. Outings ranged from small neighborhood and family groups using one or two stenciling kits to larger school, corporate, and youth groups utilizing as many as eight to thirteen kits on a single outing.

Our ability to offer stenciling outings was somewhat restricted this year due to staff transitions and some short-term position vacancies during 2024, including in our Volunteer Assistant, and Stewardship and Education Program Director roles. Even with these constraints, we're proud that our volunteers were able to stencil 134 more drains than volunteers stenciled in 2023 (1498 drains in 2023 and 1632 drains in 2024) and volunteers distributed 977 more door hangers than last year (2,537 in 2023 and 3,514 door hangers in 2024). We are confident that we laid a good foundation this year for further meaningful engagement in 2025.

Here are links to images from three 2024 stenciling events:

Stenciling outing with High School for Recording (October 10, 2024) Arts
https://flic.kr/s/aHBqjBNa2u

Stenciling outing with School of Northern Lights (May 30, 2024)
https://flic.kr/s/aHBqjBtA6y

Stenciling with Great River School (May 23, 2024)
https://flic.kr/s/aHBqjBrGuE

Litter pick-up events:
In 2024, FMR coordinated a total of six clean-up events. Five were on-land litter pick-ups with corporate, community, and youth groups in Saint Paul, at Cherokee Regional Park, Hidden Falls Regional Park, Hamline Park, Indian Mounds Regional Park (with permission from Wakan Tipi Awanyankapi), and an on-water cleanup from Bohemian Flats to Hidden Falls in addition to integrating neighborhood litter pick-up into each stenciling event. We have also promoted several initiatives to encourage people to pick up trash on their own. In coordination with public works, parks, or other agencies/organizations, FMR provides gloves, bags, and trash grabbers, as well as notifying parks staff when we will be leaving trash bags at a park. FMR gives an orientation about the river and water quality at each of these events. Trash bags and gloves are also provided in each DIY stenciling kit, to allow for independent litter pick ups.

Here are links to images from three of our 2024 litter clean-up events:

River Clean-up at Cherokee Regional Park with SEA Life (June 6, 2024)
https://flic.kr/s/aHBqjBu6yk

Neighborhood Clean-up at Hamline Park with So Good So You (June 12, 2024)
https://flic.kr/s/aHBqjBuQsF

Cleanup at Indian Mounds with Murata Vios (July 19, 2024)
https://flic.kr/s/aHBqjBAVKY

On-Water River Gorge Cleanup:
In addition to our on-land neighborhood and river clean-ups, we organized and led an on-water cleanup of the Mississippi in the river gorge. Forty-three volunteers paddled along the river and gathered trash for five hours. The event was in partnership with Paddlebridge, Inland Sea Kayakers, and the National Park Service. Staff educated volunteers about water quality issues along a stretch of the river that runs through St. Paul. Attendees experienced locking through the Lock and Dam and witnessed the amount of trash in and along the riverbed while being able to make a positive difference.

On-Water River Gorge Cleanup (August 3, 2024)

https://flic.kr/s/aHBqjBCtgr

Best of 2024 Stenciling and Cleanups
https://flic.kr/s/aHBqjBRcZo

Additional Events and Educational Programming

Educational Tabling and Community Outreach:
In 2024, we continued to participate in public water-centered experiences and community public events. We tabled at community events to educate the public about stormwater pollution issues, local impaired waters and total maximum daily loads for pollutants. Our tabling materials varied depending on the event and target audience age, materials included water quality demonstration jars of common city storm drain pollutants, laminated images of common pollutants, informational flyers, and hands-on drawing or crafting activities. In addition to educating visitors on stormwater pollutants and water quality, we share information on our stenciling and trash pick up program as opportunities for volunteering. FMR staff members tabled at five events and festivals including: At the Lake Phalen WaterFest (327 participants), Spirit of Water: A Celebration with Mississippi River (70 participants), Saint Paul Festival of Rights (48 participants), Mount Zion Temple (11 participants), and the 2nd Annual Snow Summit (39 participants).

In addition to tabling and taking part in events, team members also offered educational presentations. In March, the Stewardship and Education Director and Volunteer Manager presented on water quality education and stewardship opportunities to Highland Path Senior Residence community members (15 participants).

Not included in the metrics is programming that happened outside of the program timeline. On January 31st, two conservation ecologists on staff and the volunteer manager tabled at Pollinator and Pints with Monarch Joint Venture (74 participants). Upcoming events for 2024 are also not included, such as an educational tabling event at Capitol Hill Magnet School's open house. FMR staff will bring pollution jars and will work with the school to create interactive demonstrations measuring native plant root lengths.

"Plants, Pints, and Pollinators" Community Educational Workshops:
We opted to host two "Native Plants, Raingardens and Lawn Care" workshops focused on reducing runoff and preventing water pollution through watershed-friendly landscaping and home care. For 2024, we hosted two Plants, Pints, and Pollinator workshops on August 13 and September 12 with Angie Hong, who is the coordinator for Minnesota's East Metro Water Education Program and manages the popular @mnnature_awesomeness account, with over 35,600 followers. Angie gave an engaging presentation about what to plant, how to get started, where to buy native plants in Minnesota and western Wisconsin and where to find additional support for planting projects. The attendees learned about native gardens, bee lawns, prairies and flowering trees and shrubs, when and how to create and care for a natural garden themselves. Angie shared how anybody who has access to a piece of property, from a sidewalk median to a large piece of waterfront property, are vital in creating pockets of habitat and connected corridors

for pollinators and other wildlife and how we can do our part to improve water quality. In addition to FMR and Angie Hong providing resources and information on gardens and water quality, Blue Thumb and Metro Blooms tabled at our event to share information about their gardening workshops, online learning opportunities, grants for gardeners and more. Upon signing in, those attending were given a raffle ticket, and at the end, participants had the chance to win prizes related to gardening and taking care of the outdoors. Blue Thumb, Metro Blooms, FMR, and Angie Hong provided attendees with resources and printed materials to take home. After the presentation, attendees were given time to ask questions, participate in learning activities with Blue Thumb and Metro Blooms, and collect printed resources. The Plants, Pints, and Pollinators events were extremely successful, with 59 people attending the first event on August 13th and 68 people attending the second event on September 12th. These numbers only account for those who signed up and attended officially, we had even more people who were at Dual Citizen Brewing, not knowing that an event was going to happen, who stayed to watch and learn.

Plants, Pints, and Pollinators at Dual Citizen Brewing (September 12, 2024)
https://flic.kr/s/aHBqjBHWGK

Classroom and K-12 Education Outreach and Engagement
In 2024, we were able to provide the following programs for youth K-12 in St. Paul:

- 11 stenciling outings, serving 289 volunteers and resulting in 552.5 volunteer hours.
- 1 cleanup with Environmental Stewardship Institute Fellows and Assistants on Harriet Island, 22 volunteers and 22 volunteer hours.
- 3 classroom visits in St. Paul schools.
- 1 outreach event at Right Track Career Exploration Day engaging 23 high school students.
- Engaged 9 ESI Council students, including opportunities to present their work at the end of the year.
- Summer educational activities for 25 ESI Fellows, for a total of 2,332 education hours, including team building through activities and reflection, getting comfortable and increasing confidence on the water, pursuing research projects, and participating in a clean-up by the river.

A webpage on the Friends of the Mississippi Website has been created to reach interested partners and educators. We have been targeting schools that are interested in building partnerships and educational programming with us. Educational units include classes around water quality improvement and/or who participate in teacher workshops, and hope to support our career development internships for youth interested in our Environmental Stewardship Institute. A database of organizations and individuals has been developed and is being expanded. FMR has and will continue to build on the volunteer base established in past years. Outreach (via mail and e-mail, online posting, tabling and social media) is done with schools, neighborhood councils, service groups, corporations and other groups.

Qualified FMR staff offered 30- to 120-min educational experiences to school and community groups before, after or independent of scheduled service outings. These experiences provide opportunities to explore water quality and related topics in greater depth through age-appropriate hands-on activities, demonstrations, and discussions.

The Stewardship and Education team gained a new team member in August, Kassidy Swanson, joining as a Climate Impact Corps member. In their role, they are furthering the work of the team's youth education program, helping bring FMR's classroom lessons to K-12 groups in the Twin Cities metro area and supporting our curriculum development. We are in conversation with metro area schools and are engaging them in learning more about how they can be part of youth-led initiatives to protect water quality through our 2025 ESI program. This is a long-term project to develop the next generation of water stewards in St. Paul.

At Harding High School, FMR's Youth Program Manager, Sovatha Oum, and Kassidy Swanson have continued to build relationships with the school and students through program planning with Mr. Sintang Has's earth club students. Students were engaged on topics including engaging with the outdoors and environment, tree identification, and water quality. Oum discussed with forty-five 9-12th graders, learning what their interests are for future activities and programming. Natalie Warren, the Stewardship and Education Director at the time, provided water quality education to thirty students at the School of Northern Lights in February of 2024. In May, Oum presented on water quality education and stenciling opportunities to nine students, for two hours, at High School of Recording Arts (HSRA). Oum and Swanson met three times with HSRA staff to plan biweekly programming for the winter and spring 2024-2025 school year. At the Right Track Career Exploration Day in March, Oum engaged 23 high school students about the ESI program, the work at FMR on water quality, and career pathways in the environmental field.

Outside of the classroom, we engaged youth at the Metro Children's Water Festival on Minnesota State Fairgrounds for educational programming. FMR staff presented to 8 school groups, totaling to 233 4th grade students from schools across the Twin Cities, including from Saint Paul. Children were taught about the Mississippi river, the local watershed, storm drain systems, common water pollutants and their impacts, and ways they can make a positive difference where they live. Students were engaged by finding storm drains near the education station, inspecting prop jars and images of common pollutants, and through the speaker asking them questions and answering their questions to bring them into the lecture topic.

We continue to offer lessons and activities varying by grade level for teachers to access free online. Examples include this video about the top pollutants that get into the river through Twin Cities storm drains. All of our work ties back to understanding the concept of watersheds and the relationship between human activity, land use, and water quality.

Environmental Stewardship Institute and Advisory Council Overview
The Environmental Stewardship Institute summer intensive program and school-year youth advisory council are extensions of our career pathways program for high school-aged youth. In 2024, we engaged 25 youth in our ESI summer program. For the ESI summer fellowship, youth

commit to at least 60 hours throughout the summer and complete independent and group projects which they present at the end of the summer.

We also support 9 high school youth who commit to 80 hours during the school year. During the school year, the ESI Council focused on invasive species, learning from and working with FMR Staff on the Land Use & Planning team to discuss Carp Policy in the Mississippi River and communicating with the legislators. We continue to work with Right Track to support the development of these programs and engage more youth in St. Paul.

> **Article, ESI Youth Council efforts aid major legislative win, By Naomi Nickel, June 14, 2024:**
> https://fmr.org/updates/stewardship-education/esi-youth-council-efforts-aid-major-legislative-win/esi
>
> **Article, Reconnecting with the river: FMR's 2024 summer youth program, By Naomi Nickel, September 12, 2024**
> https://fmr.org/updates/stewardship-education/reconnecting-river-fmr-2024-summer-youth-program/ESI

Experiential Learning Paddle on the Mississippi River ESI Council
The 2023-2024 Environmental Stewardship Institute (ESI) Youth Advisory Council kayaked from Bohemian Flats to Hidden Falls at the end of May. The youth celebrated their year of work and advocating on the Mississippi River, learning about kayaking and the infrastructure of the river with MN Valley interns. Staff from the Minnesota Valley National Wildlife Refuge and National Wildlife Refuge System and Paddle Bridge guided the trip.

> **Photos of 2023-2024 Environmental Stewardship Institute Council:**
> https://flic.kr/s/aHBqjBsGGP

Experiential Learning Paddle on the Mississippi River ESI Summer Program
This year, on-water programming was a centerstone in the ESI youths summer experience, with FMR leading three on-water events for the youth, supporting them in building on their outdoor recreation skills while pairing the experience with outdoor and place-based education. For one of these on-water events, youth participants in FMR's Environmental Stewardship Institute paddled from Hidden Falls to Harriet Island, using the land and water as a dynamic classroom to learn about water issues in St. Paul. Originally, our goal was to lock through Lock and Dam No. 1 and then paddle to Hidden Falls, but unfortunately we were not able to lock through due to high water, so we took out on Longfellow Beach instead.

ESI students and partners were given an orientation with Wilderness Inquiry at Bohemian Flats and additional information by a National Parks Ranger. Students and experts were placed into canoes together, they paddled upstream to see the lock, then down to Longfellow beach. An expert gave an overview of the dam discourse in the Twin Cities. FMR staff, water experts, and organizational partners spoke with the students throughout the paddle, pausing at specific locations along the river that exemplify issues like land use and planning, water quality, invasive

species and river infrastructure. Youth continued to grow their outdoor skills through guided recreational activities, witnessed threats to water quality and learned from stakeholders about water issues. During lunch at Longfellow Beach, water experts continued conversation about the river and took questions from the youth.

This outdoor opportunity enhanced their understanding of water issues in St. Paul through an embodied experience that took them out of the classroom and into the world to engage first-hand with the environment At the end of the paddle, the experts, partners, FMR staff, and ESI students circled together and engaged in reflecting on their experience. Each participant shared a short reflection on the day and what it meant to them. The experts repeated who they were and what programs they were here with. ESI students asked the guests thoughtful questions about their experiences, professions, and water knowledge. The time on the river with the experts helped the students feel more comfortable with the professionals, opening up the opportunity for questions and networking. On an additional paddle, students learned from experts, educators, and leaders from Wakan Tipi Awanyankapi, who shared about the history of the land to its current state, and how students can be a better advocate to preserve the water quality of the Mississippi. This programming pilots new and innovative ways to engage the public in both outdoor recreation and water education and can be replicated for other audiences—school field trips, government groups, summer camps—interested in the intersection of outdoor recreation and environmental education.

Photos from 2024 Experiential Learning Paddle on the Mississippi River:
https://flic.kr/s/aHBqjBTrj6

Photos of 2024 Environmental Stewardship Institute Summer Program:
https://flic.kr/s/aHBqjBH3NQ

Rice Creek Watershed District Article: "Connecting People to Water: RCWD and FMR's "On the Water" Paddling Day
https://www.ricecreek.org/connecting-people-to-water-rcwd-and-fmrs-on-the-water-paddling-day

2024 Classroom Teacher Testimonial

- "Through all these programs, FMR has had engaging, inspiring, and knowledgeable staff who connect naturally with our diverse student population. FMR has found ways to make content accessible for our multilingual learners as well as our students in special education (which includes students with severe physical disabilities). FMR has always been flexible and responsive to the needs and interests of our school." - Testimonial from a teacher at Dowling Elementary.

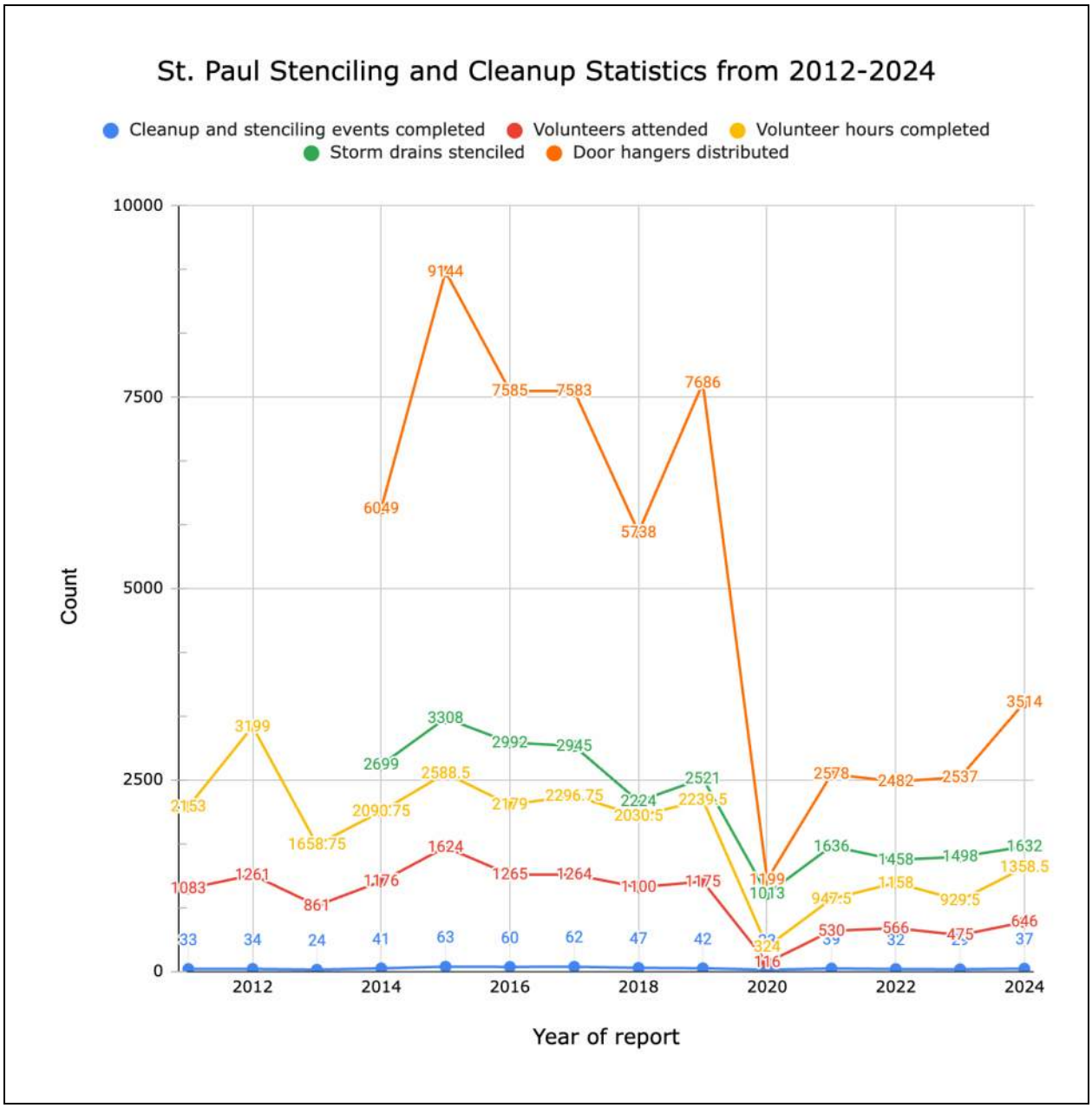
2024 Stenciling Survey Results and Testimonials

100% of volunteers that filled out our stenciling survey rated their overall educational experience with FMR as “excellent”.

We asked participants to please share any stenciling and FMR stories. Here are a few responses from our 2024 season:

- “Stenciled drains educate more of the public than other efforts. I have adopted drains and encourage others to adopt the drain near them. The stencil is a lasting reminder!” - Quote from an adult that checked out a DIY kit. They heard about this program because they saw stenciled drains and wanted them in their neighborhood.
- “On our way home after our stenciling event, our group kept noticing trash on the sides of the road and around storm drains and said they had the urge to go pick it up! It certainly raised their awareness of the importance of keeping our storm drains cleared off and clean.” - Quote from a volunteer in a college group
- “Stenciling was a great time! Plenty to keep our group busy and feeling productive and it felt great to see how much we accomplished in such a short time. Would definitely do it again. Thank you so much to our gracious and knowledgeable hosts!” - Quote from a volunteer in a mostly adult group
- “After our time stenciling, our group continued to be quick to point out not only trash along our way, but also the water conditions or lakes/ponds we passed. They really grew in their water awareness after the experience with FMR!” - Quote from a volunteer in a group with mostly 9th-12th graders.

Figure 1. St. Paul Stenciling Statistics 2012–2024.



CITY OF SAINT PAUL
Mayor Christopher B. Coleman

390 City Hall
15 West Kellogg Boulevard
Saint Paul, MN 55102

Telephone: 651-266-8510
Facsimile: 651-228-8513

Fact Sheet

Chapter 51. Allowable Discharges to the Storm Sewer System

What is the focus of the new ordinance?

This ordinance is intended to prevent pollution from entering the City's storm sewer system, which discharges directly to our lakes and the Mississippi River. The ordinance formally defines what is allowed and prohibited.

Prohibitions include, but are not limited to:

- Motor oil, paint, solvents, or other liquids poured into a catch basin;
- Grass, leaves, or landscape material intentionally disposed in the street or waters;
- Sanitary connections to the storm system; or,
- Wash water, concrete wash out to the street or other improper disposal of waste.

Why is the ordinance needed?

The Minnesota Pollution Control Agency regulates Saint Paul's stormwater under the federal Clean Water Act. This serves to protect water quality in lakes and rivers. Under this permit, the City is obligated to enact regulatory controls to prevent pollutants from entering the storm sewer system.

What is the City currently doing to address this and how will this help?

- The City educates citizens on how to prevent pollution going into the storm sewer system by working with volunteer groups to stencil "don't pollute, drains to river" graphics on city storm drains and distribute multi-lingual door hangers.
- The City addresses municipal maintenance operations by implementing policies and procedures to avoid improper behaviors leading to stormwater pollution.
- Improper discharges to the storm sewer system are currently addressed on a complaint basis.

Several existing ordinances indirectly address pollution prohibitions, but lack specificity. The new ordinance clarifies and strengthens pollution prevention controls. It better positions the City to take enforcement steps, if necessary. Public Works and DSI jointly share enforcement responsibilities.

How does this ordinance affect citizens, businesses, or other constituents?

It is difficult to generalize due to the range of potential circumstances and impacts of prohibited discharges – from raking leaves into the street to dumping oil into a storm drain.

This ordinance will primarily be used to respond to public complaints. Awareness and education about the new ordinance, and avoiding water quality impacts, will be stressed. Enforcement in the form of abatement letters may be taken, depending on the circumstance and threat to water quality.

DEPARTMENT OF PUBLIC WORKS
Policy and Procedures
FOR FIELD STAFF
Water Protection
Effective Date: November 1, 2017, Revision Date:

POLICY STATEMENT:
As stewards of the environment, employees will take all precautionary measures to protect local water resources. The Department of Public Works is committed to maintaining compliance with applicable environmental laws and regulations and to continually improve operations to prevent pollution of waterways that can harm local ecosystems and public health. This policy applies to any intentional act or unintentional act resulting from poor or neglectful work practices.

PROCEDURES (AND/OR REQUIREMENTS, EXPECTATIONS):

1. No dirt, silt, vegetation, organic material, debris, or other foreign materials will be deposited into any river, lake, stream, pond, or into any sewer system that leads to such water.

2. Employees will not blow, broom, sweep, whip, or shovel anything including dirt, silt, sand, debris, weeds, or other organic material into such body of water.

3. While performing work near such water, all debris will be picked up and removed from the site to be properly disposed of. In the event that an employee is not sure of proper disposal, the Supervisor should be called immediately.

4. No dirt, grass, organic material, debris or other foreign materials shall be intentionally deposited onto streets or other impervious surfaces without a plan for its immediate removal. This includes anything that may enter the sewer system. Exception: Sand/salt/deicers approved for controlling snow and ice when used appropriately.

5. When sweeping streets or edging curbs, a plan is required to immediately remove all dirt and debris deposited into the street. This may mean coordinating the clean up with other street sweepers prior to the start of the job. If rain is expected, work should be delayed.

Policy Approval:

_____
Kathy Lantry, Public Works Director

Next Review: November 1, 2021

SAINT PAUL PARKS AND RECREATION

POLICY

DEPARTMENT

NUMBER: DIV. 4.4.2
PLACEMENT: Physical Resource Management
EFECTIVE DATE: 03/2010
UPDATED: 03/10

SUBJECT: Water Protection Policy

PURPOSE: To protect natural water bodies through the use of best management practices by all employees working near rivers, streams, lakes, ponds, and/or near storm sewers and impervious surfaces that lead to such water.

SCOPE: All Parks and Recreation employees.

POLICY STATEMENT:
As stewards of the environment, employees will take all precautionary measures to protect local water resources. The Department is committed to maintaining compliance with applicable environmental laws and regulations and to continually improve operations to prevent pollution of waterways that can harm local ecosystems and public health. This policy applies to any intentional act or unintentional act resulting from poor or neglectful work practices.

PROCEDURES (AND/OR REQUIREMENTS, EXPECTATIONS):

1. No dirt, silt, vegetation, organic material, debris, or other foreign materials will be deposited into any river, lake, stream, pond, or into any sewer system that leads to such water.

2. Employees will not blow, broom, sweep, whip, or shovel anything including dirt, silt, sand, debris, weeds, or other organic material into such body of water.

3. While performing work near such water, all debris will be picked up and removed from the site to be properly disposed of. In the event that an employee is not sure of proper disposal, the Supervisor should be called immediately.

4. No dirt, grass, organic material, debris or other foreign materials shall be intentionally deposited onto streets or other impervious surfaces without a plan for its immediate removal. This includes anything that may enter the sewer system. Exception: Sand/salt/deicers approved for controlling snow and ice when used appropriately.

5. When sweeping boulevards or edging curbs, a plan is required to immediately remove all dirt and debris deposited into the street. This may mean coordinating the clean up with Public Works or other street sweepers prior to the start of the job. If rain is expected, work should be delayed.

SAINT PAUL PARKS AND RECREATION
POLICY
DEPARTMENT

REQUIRED ITEMS AND/OR RELATED INFORMATION:

SECTION MANAGER'S RESPONSIBILITIES	SUPERVISOR'S RESPONSIBILITIES	EMPLOYEE'S RESPONSIBILITIES
Ensure all employees under his/her jurisdiction are aware of this policy and procedures.	Advise all employees of this policy and procedures.	Adhere to the policy.
Ensure that supervisors in his/her section enforce this policy and procedures.	Ensure that employees follow this policy and procedures.	Follow the procedures.
	Issue warnings or initiate disciplinary action as needed to ensure employee compliance.	Ask for additional training if needed.

Owner: Karin Misiewicz, Parks Supervisor **Next Review Date:** 02/11

G:\Div\A-ADMINISTRATION\POLICY\Division-wide Policies\4.0 Physical Resource Management\DIV. 4.4.2 Water Protection Policy.doc

SPILL REPORTING FORM

City of Saint Paul - Department of Parks and Recreation

INSTRUCTIONS

EMPLOYEE: Form should be filled out as completely as possible, on the same day as the spill occurred, by the individual involved in the spill. Describe all the events in as much detail as possible, especially the cleanup activities. If you have any questions regarding this form, contact your supervisor, or Environmental Services staff (651-632-5111). When completed, return form to your supervisor.

SUPERVISOR: Please return form as soon as possible to Adam Robbins, Como Central Service Facility.

Date of Spill:_____ Name (PRINT):_____

Time of spill:_____ Supervisor:_____

Section:_____ Phone number to reach you:_____

What was spilled?:_____

How much was spilled?:_____

Did the spill flow into a sewer? If yes, what type of sewer (sanitary, storm or unknown)?

_____

What type of surface did the spill occur on (soil, concrete, etc)?:

_____

Location of Spill (Be specific- address, intersection, exact location):

_____

_____

Describe what was happening when the spill occurred:

_____

_____

_____

What caused the spill (overfill, broken line, etc)? Be specific:

_____

Describe how the spill was cleaned up:

_____

_____

How were the spill cleanup materials disposed of?:

_____

List the names of other employees involved in the spill or cleanup:

_____

Was the MN Duty Officer called (651-649-5451)? _____

If yes: Who called?_____ Date_____Time_____

Duty Officer Report #:_____PCA Spill #_____

Employee Signature:_____

Spill Kit Instructions

Stop source of spill, if it can be safely done. If not, immediately call the Minnesota Duty Officer.

Contain spill. Wear gloves. Your first priority is to protect the spill from flowing into a storm sewer or drain. Use the 3" x 4' socks to create a barrier between the spill storm sewers/drains. Use the pillows to absorb pools of contained material (up to a half gallon per pillow). Small spills can be cleaned up with the absorbent pads.

Contact your supervisor or Environmental Services staff as soon as it is safe/practical to do so. If neither are available, contact the MN Duty Officer.

Complete a spill report form for all spills, **regardless of size**. The Minnesota Duty Officer must be notified for:

Petroleum (gasoline, diesel, hydraulic fluid, oil) spills of unknown amounts or over 5 gallons
Non-petroleum (antifreeze, pesticides, etc) spills of any amount

Phone Numbers
Environmental Services – (651) 632-5111
MN Duty Officer – (651) 649-5451

Disposal of used materials:
Used socks, pads and pillows should be placed in yellow hazardous waste bags found in the spill kit. Materials used to soak up petroleum spills should be disposed of in the 55 gallon barrel marked "Used Oil Sorbents" in the fuel shed at the Como Central Service Facility. For instructions on how to dispose of materials used to clean up non-petroleum substances, contact your supervisor or Environmental Services staff.

Replace used spill kit items promptly. All materials found in your spill kit are available from the Storeroom at the Como Central Service Facility.

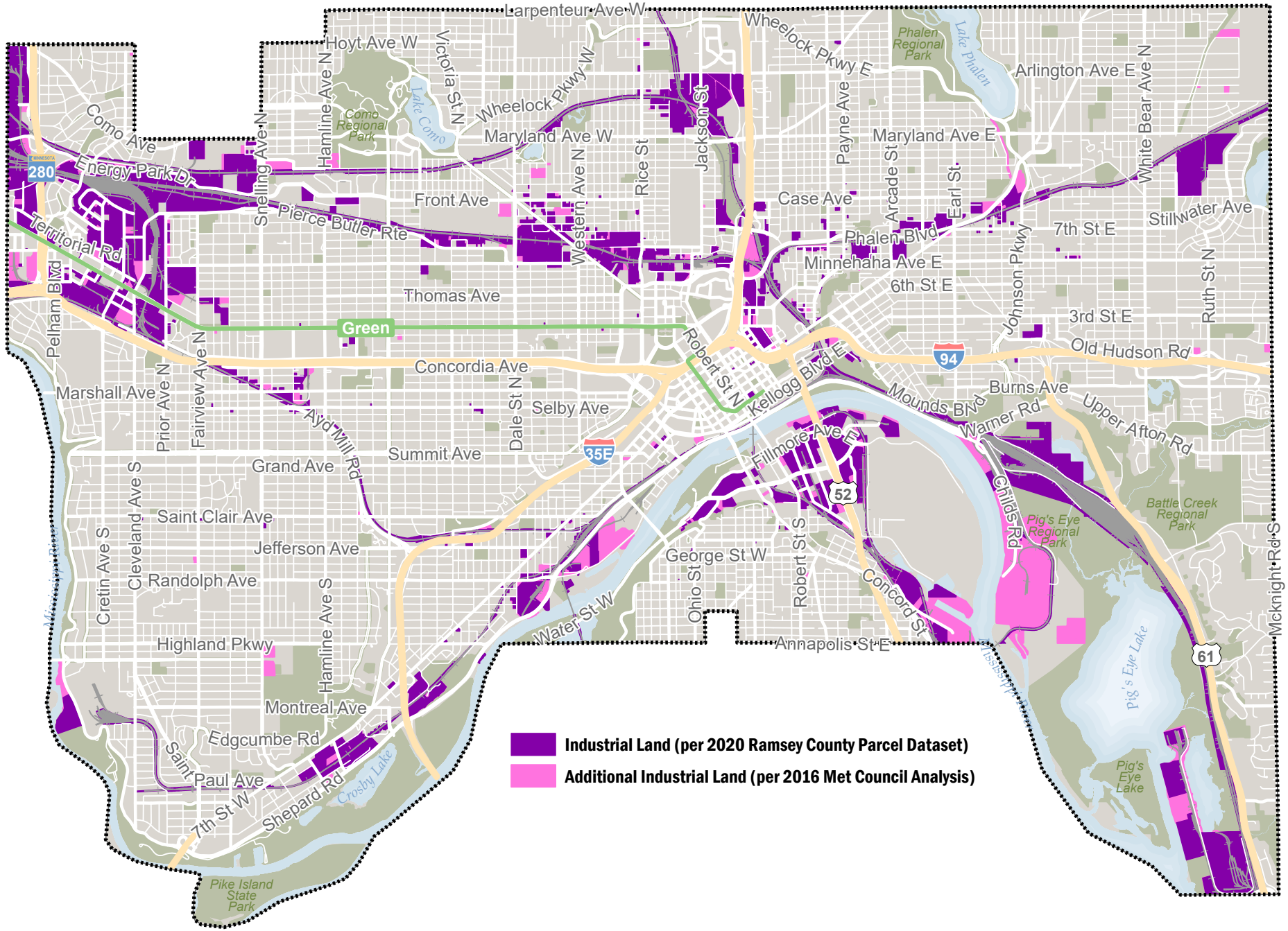
FACILITY SPILL KIT INVENTORY	**qty**	**type**
kit absorbs ~8 gallons	30	17"x19" pads
	3	3"x4' socks
	4	2"x10"x10" pillows
	4	Hazardous Waste Bags
	2	Pair Nitrile Gloves
	4	Spill Reporting Forms

VEHICLE SPILL KIT INVENTORY	**qty**	**type**
kit absorbs ~5 gallons	10	17"x19" pads
	2	3"x4' socks
	2	Hazardous Waste Bags
	1	Pair Nitrile Gloves
	4	Spill Reporting Forms

G:\Div\A-OPERATIONS\Environmental Services\Leaks-Spills-Clean Ups\spill kits.xls

Industrial Land Use in Saint Paul

February 24th, 2020



Date: 2/24/2020 9:24 AM Document Path: K:\GIS\Data and Research Requests\2020\2020-02-24 Industrial Land Use for Patrick Murphy\4 - GIS\2020-02-24 Industrial Land Use.aprx

0 0.5 1 2 Miles

List of Industrial Stormwater Permit Holders

Obtained from MPCA Industrial Stormwater Permit database on 11/30/2020

Site Permit #	Site Address	Facility Name	Does MPCA consider Site No Exposure	Owner Name
MNR05384T	51 Maryland Ave E	Elliott Auto Supply Co. Inc	No	ELLIOTT AUTO SUPPLY CO., INC.,
MNR0538JV	1061 Red Rock Rd	Gavilon Grain, LLC	No	Gavilon Grain LLC
MNR0538N3	51 State St	Pier Foundry	No	Pier Foundry & Pattern Shop
MNR0538P4	515 Eaton St	Signature Flight Support STP	No	Signature Flight Support
MNR0538PH	701 Eaton St	Hubbard Broadcasting Hanger	No	Hubbard Broadcasting Inc
MNR0538TV	1303 Red Rock Rd	Upper River Services - Pig's Eye	No	Upper River Services Inc
MNR0538TX	40 State St	Upper River Services - State Street	No	Upper River Services
MNR0538VB	719 Eaton St	Minnesota Jet Inc	No	Northern States Power a MN Corp dba Xcel
MNR05396V	954 Minnehaha Ave W	St. Paul Brass & Aluminum Foundry	No	Saint Paul Brass & Aluminum Foundry
MNR0539Q8	867 Forest St	Northern Iron & Machine	No	Northern Iron of St Paul LLC
MNR0539QD	754 Rice St	Ace Auto Parts & Salvage Co., Inc.	No	Ace Auto Parts
MNR0539WR	690 Bayfield St	3M Aviation	No	3M Company
MNR0539XY	1678 Red Rock Rd	Gerdau - Saint Paul Mill	No	Gerdau Corporation
MNR053B2J	795 Barge Channel Rd	St Paul Alter River Terminal	No	Alter Trucking and Terminal Corporation
MNR053B32	801 Barge Channel Rd	Alter Metal Recycling - St. Paul	No	Alter Metal Recycling
MNR053B4B	644 Bayfield St	MAC - STP Downtown Airport	No	Metropolitian Airports Commission
MNR053B8Z	701 Barge Channel Rd	Hawkins - Terminal 2	No	Hawkins Inc
MNR053B94	1125 Childs Rd	Hawkins - Terminal I	No	Hawkins Inc
MNR053B96	309 Como Ave	Advanced Disposal Services - Vasko Solid Waste	No	Advanced Disposal Services
MNR053B97	198 Minnehaha Ave E	Apex Auto Salvage	No	Apex Auto Salvage
MNR053BDW	1425 Red Rock Rd	Hawkins Water Treatment Group - Red Rock	No	Hawkins Inc
MNR053BF3	1701 Pierce Butler Rte	Midway Hub	No	BNSF Railway Co
MNR053BJL	875 Prior Ave N	E-Z Recycling	No	E-Z Recycling
MNR053BK9	1999 Shepard Rd Ste A	Johnson Brothers Liquor Co	No	Johnson Brothers Liquor Company
MNR053BKC	1031 Childs Rd	Northern Metal Recycling - Dock	No	Northern Metals Recycling
MNR053BKF	521 Barge Channel Rd	Northern Metal Recycling - St Paul	No	Northern Metals Recycling
MNR053BRV	318 Water St W	Twin City Refuse & Recycling Inc	No	Twin City Refuse Recycling & Transfer
MNR053BRW	2370 Highway 36 E	TA Schifsky Sons Inc	No	TA Schifsky Sons Inc
MNR053BSQ	268 Water St W	J & L Wire Cloth Co Inc	No	J&L Wire Cloth Co Inc
MNR053BSY	780 Barge Channel Rd	GERDAU - St Paul Raw Materials	No	Gerdau Ameristeel
MNR053BWL	1359 Red Rock Rd	Barton Enterprises Inc / Commercial Asphalt Co	No	Tiller Corporation
MNR053C2P	1000 Shop Rd	St. Paul Yard	No	CP
MNR053C2X	1305 Pierce Butler Rte	Pierce Recycling and Transfer Facility	No	Veit
MNR053C35	106 Arlington Ave E	Action Auto Parts of St Paul, Inc.	No	Action Auto Parts of St Paul, Inc.
MNR053C3X	403 Fillmore Ave E	Americraft Carton, Inc	No	Americraft Carton Inc
MNR053C5K	2229 Childs Rd	Westway Feed Products LLC	No	BWC Terminals LLC
MNR053C5X	508 Cleveland Ave N	Minnesota Commercial Railway Co	No	Minnesota Commercial Railway Company
MNR053C77	2160 Pigs Eye Lake Rd	Hoffman Pigs Eye Maintenance Facility	No	Union Pacific Railroad Company
MNR053C79	500 Block Of Eaton St	Eaton Maintenance Facility	No	Union Pacific Railroad Company

List of Industrial Stormwater Permit Holders

Obtained from MPCA Industrial Stormwater Permit database on 11/30/2020

Site Permit #	Site Address	Facility Name	Does MPCA consider Site No Exposure	Owner Name
MNR053C7Q	2165 Pigs Eye Lake Rd	Environmental Wood Supply	No	City Of Saint Paul Parks And Recreation
MNR053C7S	76 Kellogg Blvd W	District Energy St Paul/St Paul Cogeneration L	No	District Energy Saint Paul Inc
MNR053C8P	858 Transfer Rd	Lubrication Technoloiges Inc	No	Lube-Tech & Partners LLC
MNR053CBY	206 Airport Rd	Army Aviation Support - Holman Field	No	Minnesota Army National Guard, Minnesota Department of Military Affairs
MNR053CJ3	2209 Childs Rd	Flint Hills Resources Pine Bend LLC - St Paul	No	Flint Hills Resources Pine Bend, LLC - St. Paul
MNR053CNY	515 Cleveland Ave N	Metro Transit - Overhaul Base	No	Metro Transit
MNR053CP7	820 L Orient St	Metro Transit - East Metro Garage	No	Metro Transit
MNR053CQY	2576 Doswell Ave	Metro Metals Corp	No	Metro Metals Corp
MNR053CSG	1303 Red Rock Rd	AMG Resources Corp.	No	AMG Resources Corp.
MNR053CSY	228 Sycamore St W	Atlas U Pull	No	ATLAS UPULL LLC
MNR053CV2	270 Airport Rd	St. Paul Flight Center	No	St Paul Flight Center
MNR053D66	90 Fish Hatchery Rd	Dayton's Bluff Yard	No	BNSF Railway Co
MNR053DJC	2313 Wycliff St	Precision Coatings Inc	No	Precision Coatings, Inc.
MNR053DNV	711 Eaton St	Best Jets International	No	Best Jets International
MNR053DW2	1 Ridder Cir	First Transit, Inc. #55872	No	First Transit, Inc.
MNR053DYX	80 Arlington Ave East Suite B & C	First Student, Inc. #11762A	No	First Student Inc
MNR053F2D	340 Broadway St	Metro Transit - Green Line Operation and Maintenance	No	Metro Transit
MNR053F6B	637 Barge Channel Rd	Ingredient Transport	No	Ingredient Transport
MNRNE359L	2020 7th St W	Custom Rock Formliner	Yes	customer rock
MNRNE37SH	5000 Township Pkwy Ste A	Med-Tech Center	Yes	MedTech Center
MNRNE37ZB	1319 Pierce Butler Rte	Twin City Metalfab, Inc.	Yes	Twin City Metal Fab Inc
MNRNE37ZP	223 Plato Blvd E	Tursso Companies, Inc	Yes	Tursso Companies, Inc
MNRNE3845	410 Fillmore Ave E	3M - Building 76	Yes	3M company
MNRNE385Q	2020 Energy Park Dr	Larkin Industries, Inc.	Yes	Larkin Industries Inc
MNRNE38FV	300 Atwater St	Northern Screw Machine Co., Inc	Yes	Northern Screw Machine Co., Inc
MNRNE38HB	3560 Hoffman Rd E	ANDREWS KNITTING MILLS BUILDING LIMITEDPARTNERSHIP	Yes	Andrews Knitting Mills Inc
MNRNE38HM	314 Eva St	USPS St. Paul Vehicle Maintenance Facility	Yes	United States Postal Service
MNRNE38Q5	1835 Energy Park Dr	minnesota wire	Yes	Minnesota Wire
MNRNE38YF	878 Stryker Ave	Palindrome	Yes	Palindrome, Inc.
MNRNE3929	355 State St	Viking Drill & Tool Inc	Yes	Viking Drill & Tool Inc
MNRNE399W	1966 Benson Ave	Amidon Graphics	Yes	Paul S Amidon & Associates Inc
MNRNE39HN	1457 Iglehart Ave	Loes Enterprises Inc	Yes	Loes Enterprises
MNRNE39LD	155 Randolph Ave	Former High Bridge Coal Generating Facility	Yes	Northern States Power Company d/b/a Xcel Energy
MNRNE39RP	888 Minnehaha Ave E	3M - IMP, Saint Paul Building 27	Yes	3M company
MNRNE39RR	42 Water St W	Kindeva Drug Delivery L.P.	Yes	Kindeva Drug Delivery LP

List of Industrial Stormwater Permit Holders

Obtained from MPCA Industrial Stormwater Permit database on 11/30/2020

Site Permit #	Site Address	Facility Name	Does MPCA consider Site No Exposure	Owner Name
MNRNE39WL	1927 Case Ave E	3M - Saint Paul Distribution Center	Yes	Ras Properties LLC
MNRNE39Y8	431 Griggs St N	Rayven Inc.	Yes	Rayven Inc
MNRNE3BHP	1605 Iglehart Ave	Co-operative Plating Co	Yes	Co-operative Plating Co
MNRNE3BLL	1220 Energy Park Dr	Demmer Investments IV, Inc. dba Quality Tool	Yes	Demmer Investments IV dba Quality Tool
MNRNE3BT2	650 Pelham Blvd Ste 100	NOVUS @ LLC	Yes	Colliers International
MNRNE3CDW	1050 Westgate Dr	Impressions Inc.	Yes	Impressions Inc.
MNRNE3CHV	139 Eva St	Rexam BCNA	Yes	Rexam Beverage Can Co
MNRNE3CT7	1280 Energy Park Dr	GLS Companies	Yes	GLS Companies
MNRNE3CWV	432 Front Ave	AAA Metal Finishing, Inc.	Yes	AAA Metal Finishing, Inc.
MNRNE3CYW	181 Florida St	Aero Systems Engineering, Inc.-Florida Street	Yes	Apex Holdings LLC
MNRNE3D2B	2575 University Ave W Ste 180	Synovis Life Technologies Inc	Yes	Synovis Life Technologies
MNRNE3DQF	860 Vandalia St	Tech Dump - Vandalia	Yes	Tech Dump
MNRNE3DVY	550 Wheeler St N	Huot Manufacturing	Yes	Bondhus Corporation, Bondhus LLC
MNRNE3DX4	845 Minnehaha Ave E	The Vomela Companies	Yes	The Vomela Companies
MNRNE3DY6	124 Eva Street	Pier Foundry & Pattern Shop, Inc.	Yes	Pier Foundry & Pattern Shop
MNRNE3DYH	1225 Old Highway 8 NW	Cardiovascular Systems INC.	Yes	CSI
MNRNE3F2F	645 Olive St	Ideal Printers Inc	Yes	Ideal Printers Inc
MNRNE3F4C	821 Vandalia St	AGGRESSIVE INDUSTRIES INC	Yes	Aggressive Industries Inc
MNRNE3F6J	930 Duluth St	Ray Anderson & Sons/ Anderson's Dumpster Box Service/	Yes	Ray Anderson & Sons

2024 Discharges Addressed

Date	Discharge	Action
January 2024	Complaint of sump pump discharging to street (350 Mississippi River Blvd).	Sent to DSI to address and enforce.
January 2024	Complaint of colored dye spilling from private property onto ground near Willow Reserve.	Sent to DSI to address and enforce.
February 2024	Complaint of soil erosion into storm sewer (621 Maryland)	Sent to DSI to address and enforce.
April 2024	Complaint of significant sediment tracking onto street near 249 Robie.	Sent to DSI to address and enforce.
April 2024	Received call from Xcel on a downed transformer on Parks property with oil reaching the street catch basin (1115 Beulah).	Notifed Parks and ROW. Xcel is to send along Duty Officer report and summary of actions.
April 2024	Complaint of used cooking oil being dumped into alley between Payne and Edgerton (879 Payne).	Sent to ROW to address and enforce.
June 2024	Complaint regarding discharge of chlorinated pool water to storm drain (420 Summit).	Sent to DSI to address and enforce.
June 2024	Complaint regarding discharge of chlorinated pool water to storm drain (1921 Pinehurst).	Sent to DSI to address and enforce.
June 2024	Complaint of Cemstone truck washing cement into storm drain (2340 Gordon).	Notified contact at Cemstone to stop and clean up discharge.
July 2024	Complaint of herbicide/fertilizer dumped in street (1795 Hillcrest).	Sent to ROW to investigate.
July 2024	Complaint of greywater/sewage from RV being dumped into catch basin (1016 Albemarle).	Sent to ROW, DSI, and Police to address and enforce.
July 2024	Complaint of car wash discharging soapy water to storm drain system (1635 White Bear).	Routed to Ramsey County to address and enforce.
July 2024	Complaint of concrete washout being discharged into storm drain (Ford Site).	Notified DSI to address and enforce through Ryan Co. on-site.
July 2024	Complaint of sediment discharge to the storm drain (Snelling and Saunders).	Notified MPCA that the complaint should be routed to MNDOT.
August 2024	Complaint of concrete washout being discharged into Snelling.	Sent to ROW to investigate.

August 2024	Complaint of lack of erosion control contributing to sediment running off into Lake Phalen (boat ramp).	Notified contact with City of Maplewood to address and enforce.
August 2024	Sewer maintenance discovered contractor discharging sediment laden water from pond dredging activities (80 Arlington).	Stopped work and notified DSI to address and enforce.
August 2024	Complaint of contractor dumping cement/slurry into storn drain (Fisk/Hague).	Late notification from Ramsey County. Sent to DSI to inform company identified.
August 2024	Sewer maintenance discovered contractor washing asphalt remover chemical into ROW and City catch basins (481 Burgess)	Sewer maintenance recovered spill and sent to DSI for enforcement.
August 2024	Complaint of transmission fuel being leaked into catch basin (Robert and 7th St).	Sewer maintenance cleaned and sent to ROW for enforcement.
October 2024	Complaint of oil being dumped on private property (1030 Fremont).	Sent to DSI to address and enforce.
October 2024	Complaint of unstabilized stockpile (Ford site on University behind Capitol).	Sent to DSI to address and enforce.
October 2024	Complaint Cemstone truck washed out truck into street (1946 Dayton).	Contacted Cemstone to address and remedy.
November 2024	Complaint of motor oil discharged to street (1552 White Bear Ave).	Sent to ROW and Street maintenance to investigate and clean up.
November 2024	Contractor broke pipe and were discharging mixture of water and bentonite to storm sewer (365 Winthrop).	Sent to ROW to investigate and enforce.

BRAUN INTERTEC
The Science You Build On.

SAINT PAUL

CITY OF ST. PAUL
ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) FIELD GUIDE SUMMARY

December 2, 2020

BRAUN INTERTEC
The Science You Build On.

City SWPPP Responsibilities

- Public education and outreach,
- Public participation/involvement,
- Illicit discharge detection and elimination,
- Construction site runoff control,
- Post-construction runoff control,
- Pollution prevention/good housekeeping for municipal operations, and
- Monitoring.

City Code

- The City of St. Paul has a Code of Ordinances (Title VI, Building and Housing), and Chapter 51 (Allowable Discharges to the Storm Sewer System) defines pollutants to the City storm system and allows enforcement of illicit connections or discharges.

City of St. Paul Enforcement and Elimination of Illicit Discharges

Type of property	Responsible
Private property	Department of Safety and Inspections (DSI)
Within City Right-Of-Way	Department of Public Works Right-Of-Way Division and Police Department
City park property	Department of Parks and Recreation

Examples of illicit non-stormwater discharges

- Sanitary sewer spills
- Sanitary wastewater illegally connected to or dumped into the storm sewer system
- Truck washing
- Discharges from residential laundry or carpet washwaters
- Effluent from septic tanks
- Pavement saw cutting slurry discharges
- Construction debris or sediment run-off
- Auto and household toxics such as used motor oil
- Liquid fertilizers and pesticides
- Spills from roadways
- Paint waste

Example photos of illicit discharges

Discharge of Oil

BRAUN INTERTEC
The Science You Build On.

Example photos of illicit discharges

Discharge of Paint

BRAUN INTERTEC
The Science You Build On.

Example photos of illicit discharges

Discharge of Drilling Mud

8

BRAUN INTERTEC
The Science You Build On.

Example photos of illicit discharges

Discharge of Glycol

9

BRAUN INTERTEC
The Science You Build On.

Example photos of illicit discharges

Sanitary Discharge, Private Storm Drain

10

Example photos of illicit discharges

Tack Emulsion, Seal Coating

Example photos of illicit discharges

Sanitary Discharge, Urban Outfall

Example photos of illicit discharges

Sanitary Discharge to Storm Drain from RV [13]

Examples of prohibited non-stormwater discharges

- Combined sewer overflow
- Noncontact cooling water
- Sewage
- Wash water
- Scrubber water
- Spills
- Oil
- Hazardous substances
- Fill
- Commercial equipment/vehicle cleaning, and
- Maintenance wastewaters

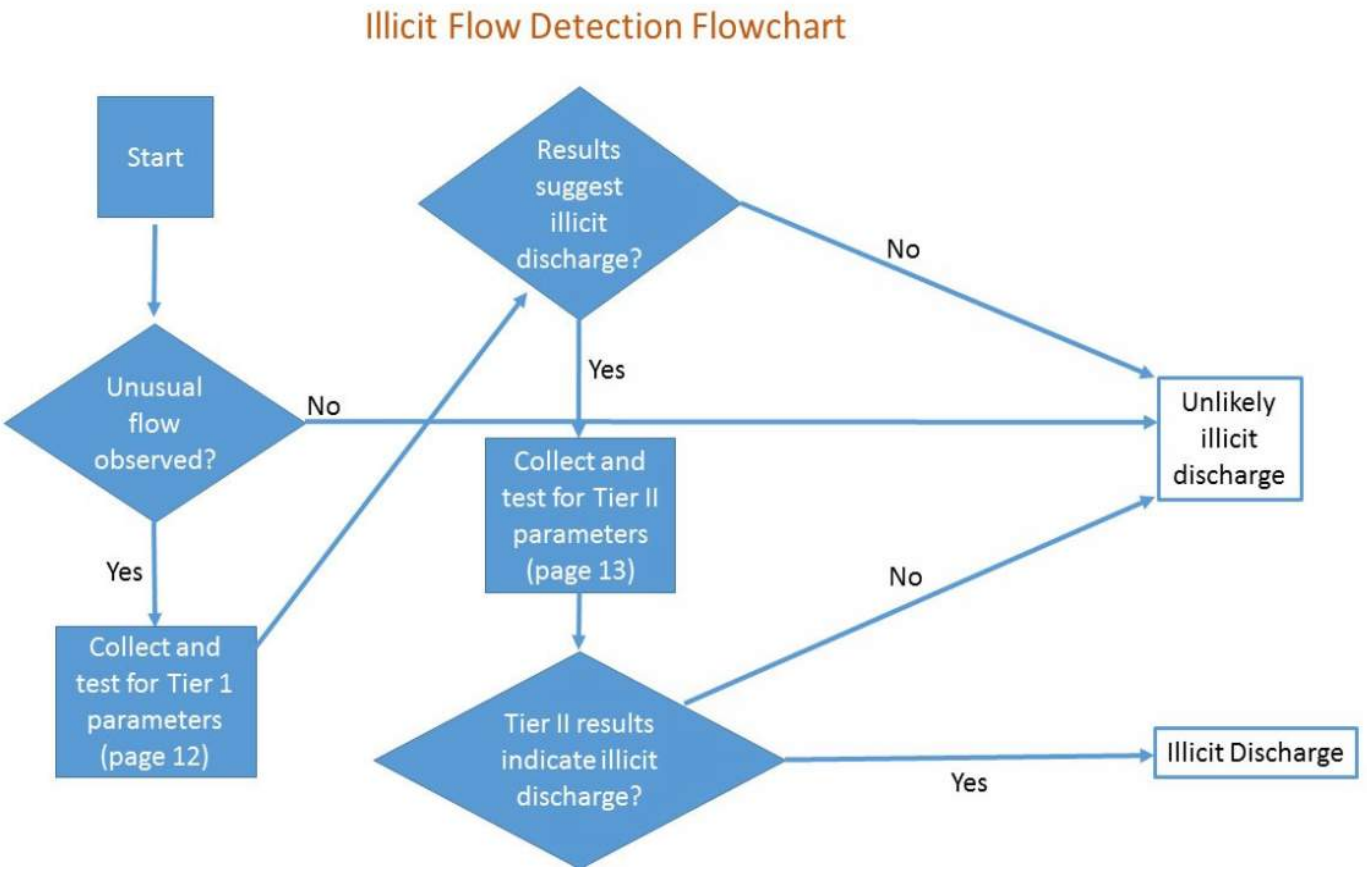
Examples of allowable non-stormwater discharges

- Non-stormwater that is authorized by an MPCA NPDES point source permit;
- Fire-fighting activities and fire suppression systems;
- Water line flushing or other potable water sources;
- Landscape irrigation or lawn watering;
- Diverted stream flows;
- Groundwater;
- Foundation or footing drains;

Examples of allowable non-stormwater discharges (cont.)

- Air conditioning condensation;
- Springs;
- Non-commercial washing of vehicles;
- Natural riparian habitat and wetland flows;
- Street wash water discharges;
- Activities undertaken by the city, or by written authority of the city, deemed necessary to protect public health, welfare, or safety; and
- Any other water source not containing a pollutant.

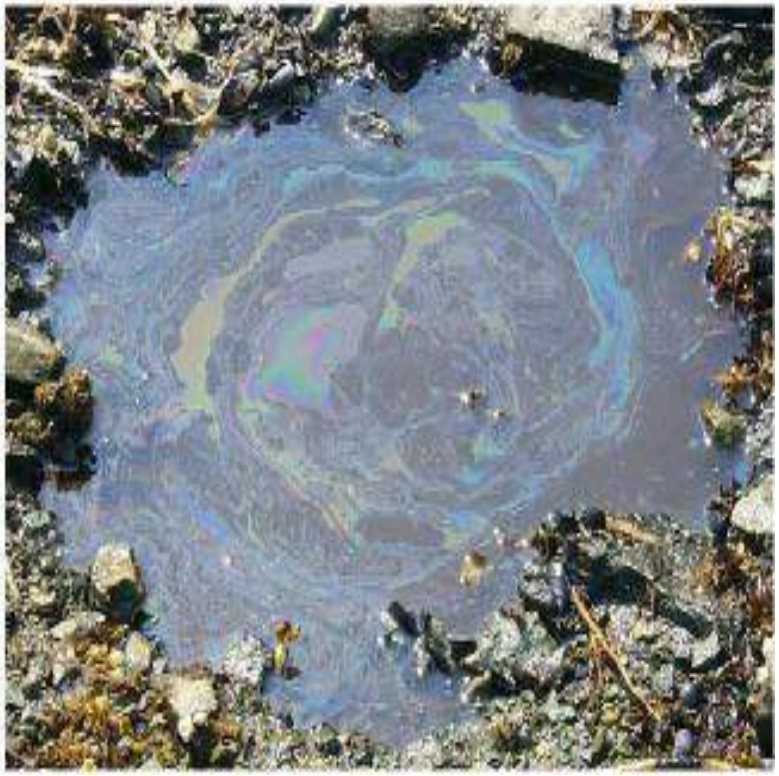
Illicit discharge investigations



Physical Indicators

- Flow
- Color
- Odor
- Turbidity
- Sewage, Sheens & Surface Scum

Natural Sheen vs. Synthetic Sheen



Foam and Suds Examples

Low Severity, Naturally Occurring Suds

High Severity Suds

Biological Indicators

Fish Kill

Biological Indicators

Algae Bloom

Biological Indicators

Iron Bacteria on Bulkhead

Chemical Indicators

- Water temperature
- Tier I chemical parameters
- Tier II chemical parameters

Tier I Chemical Parameters

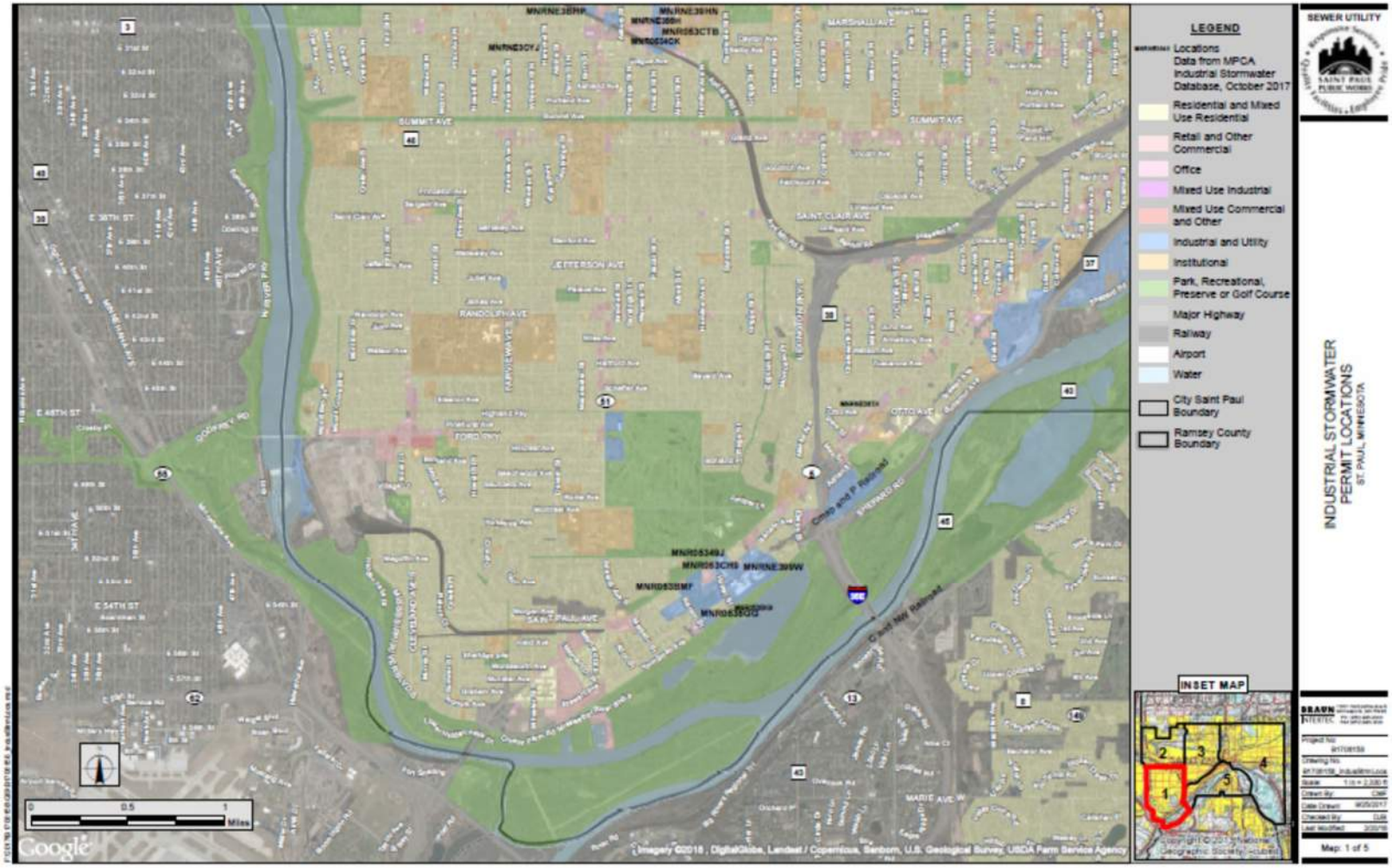
- Ammonia
- Boron
- Potassium
- Fluoride
- GRO, DRO, VOCs
- pH
- Temperature

Tier II Chemical Parameters

- Bacteria (fecal coliform)
- Dissolved oxygen
- Conductivity
- Iron bacteria
- RCRA metals
- Surfactants
- Hardness

IDDE Maps of Industrial Sites in St. Paul

- Maps showing sites that have permitted Industrial Stormwater permits
- Table listing sorted by address


LEGEND
Locations
Data from MPCA Industrial Stormwater Database, October 2017
Residential and Mixed Use Residential
Retail and Other Commercial
Office
Mixed Use Industrial
Mixed Use Commercial and Other
Industrial and Utility
Institutional
Park, Recreational, Preserve or Golf Course
Major Highway
Railway
Airport
Water
City Saint Paul Boundary
Ramsey County Boundary
INSET MAP
SEWER UTILITY
INDUSTRIAL STORMWATER PERMIT LOCATIONS
ST. PAUL, MINNESOTA
Map: 1 of 5
Google

List of Industrial Stormwater Permit Holders

Obtained from MPCA Industrial Stormwater Permit database on 11/30/2020

Site Permit #	Site Address	Facility Name	Does MPCA consider Site No Exposure	Owner Name
MNR05384T	51 Maryland Ave E	Elliott Auto Supply Co. Inc	No	ELLIOTT AUTO SUPPLY CO., INC.,
MNR0538JV	1061 Red Rock Rd	Gavilon Grain, LLC	No	Gavilon Grain LLC
MNR0538N3	51 State St	Pier Foundry	No	Pier Foundry & Pattern Shop
MNR0538P4	515 Eaton St	Signature Flight Support STP	No	Signature Flight Support
MNR0538PH	701 Eaton St	Hubbard Broadcasting Hanger	No	Hubbard Broadcasting Inc
MNR0538TV	1303 Red Rock Rd	Upper River Services - Pig's Eye	No	Upper River Services Inc
MNR0538TX	40 State St	Upper River Services - State Street	No	Upper River Services
MNR0538VB	719 Eaton St	Minnesota Jet Inc	No	Northern States Power a MN Corp dba Xcel
MNR05396V	954 Minnehaha Ave W	St. Paul Brass & Aluminum Foundry	No	Saint Paul Brass & Aluminum Foundry
MNR0539Q8	867 Forest St	Northern Iron & Machine	No	Northern Iron of St Paul LLC
MNR0539QD	754 Rice St	Ace Auto Parts & Salvage Co., Inc.	No	Ace Auto Parts
MNR0539WR	690 Bayfield St	3M Aviation	No	3M Company
MNR0539XY	1678 Red Rock Rd	Gerdau - Saint Paul Mill	No	Gerdau Corporation
MNR05382J	795 Barge Channel Rd	St Paul Alter River Terminal	No	Alter Trucking and Terminal Corporation
MNR05383Z	801 Barge Channel Rd	Alter Metal Recycling - St. Paul	No	Alter Metal Recycling
MNR05384B	644 Bayfield St	MAC - STP Downtown Airport	No	Metropolitan Airports Commission
MNR05388Z	701 Barge Channel Rd	Hawkins - Terminal 2	No	Hawkins Inc
MNR05389Y	1125 Childs Rd	Hawkins - Terminal I	No	Hawkins Inc
MNR05389G	309 Como Ave	Advanced Disposal Services - Vasko Solid Waste	No	Advanced Disposal Services
MNR05389Z	198 Minnehaha Ave E	Apex Auto Salvage	No	Apex Auto Salvage
MNR0538DW	1425 Red Rock Rd	Hawkins Water Treatment Group - Red Rock	No	Hawkins Inc
MNR0538F3	1701 Pierce Butler Rte	Midway Hub	No	BNSF Railway Co
MNR0538JL	875 Prior Ave N	E-Z Recycling	No	E-Z Recycling
MNR0538K9	1999 Shepard Rd Ste A	Johnson Brothers Liquor Co	No	Johnson Brothers Liquor Company
MNR0538KC	1031 Childs Rd	Northern Metal Recycling - Dock	No	Northern Metals Recycling
MNR0538KF	521 Barge Channel Rd	Northern Metal Recycling - St Paul	No	Northern Metals Recycling
MNR0538RV	318 Water St W	Twin City Refuse & Recycling Inc	No	Twin City Refuse Recycling & Transfer
MNR0538RW	2370 Highway 36 E	TA Schifsky Sons Inc	No	TA Schifsky Sons Inc
MNR0538SQ	268 Water St W	J & L Wire Cloth Co Inc	No	J&L Wire Cloth Co Inc
MNR0538SY	780 Barge Channel Rd	GERDAU - St Paul Raw Materials	No	Gerdau Ameristeel
MNR0538WL	1359 Red Rock Rd	Barton Enterprises Inc / Commercial Asphalt Co	No	Tiller Corporation
MNR053C2P	1000 Shop Rd	St. Paul Yard	No	CP
MNR053C2X	1305 Pierce Butler Rte	Pierce Recycling and Transfer Facility	No	Veit
MNR053C35	106 Arlington Ave E	Action Auto Parts of St Paul, Inc.	No	Action Auto Parts of St Paul, Inc.
MNR053C3X	403 Fillmore Ave E	Americraft Carton, Inc	No	Americraft Carton Inc
MNR053C5K	2229 Childs Rd	Westway Feed Products LLC	No	BWC Terminals LLC
MNR053C5X	508 Cleveland Ave N	Minnesota Commercial Railway Co	No	Minnesota Commercial Railway Company
MNR053C77	2160 Pigs Eye Lake Rd	Hoffman Pigs Eye Maintenance Facility	No	Union Pacific Railroad Company
MNR053C79	500 Block Of Eaton St	Eaton Maintenance Facility	No	Union Pacific Railroad Company

BRAUN INTERTEC
The Science You Build On.

Summary

- City is required and has made commitment to minimize IDDE
- If you suspect IDDE, notify your supervisor
- Use logic and IDDE protocols to investigate potential IDDEs
- Be safe!

Controlling Right-of-Way Impacts to Waters

Utility Coordination Meeting-
Andrew Hogg

SAINT PAUL
MINNESOTA

STPAUL.GOV

2024 UTILITY COORDINATION MEETING

Water Quality Ordinance

Chapter 51.
Allowable Discharges to the Storm Sewer System

This Ordinance shall be in full force and effect thirty days (30 days) from and after its passage, approval, and publication.

At a meeting of the City Council on 2/13/2013, this Ordinance was Passed.

Yea: 7 Councilmember Bostrom, Councilmember Brendmoen, Councilmember Carter III, City Council President Lantry, Councilmember Stark, Councilmember Thune, and Councilmember Tolbert

Nay: 0

Vote Attested by Council Secretary Trudy Moloney **Date** 2/13/2013

Approved by the Mayor Chris Coleman **Date** 2/20/2013

Focus of Local Control

- Keep pollution out of the storm sewer system
  - Curb and gutter
  - Catch basins
  - Pipes
- Broadly prohibits “non-stormwater”
- Specific requirement of Clean Water Act

Sec. 51.03: Non-stormwater discharges

- No person shall cause any non-stormwater discharges to enter the city's municipal separate storm sewer system, or to any surface waters within the city

CITY OF SAINT PAUL
Melvin Carter III, Mayor

Public Works
Right-of-Way Division

Telephone 651-266-6151
Facsimile: 651-266-9765
Email: PW-ROWpermits@ci.stpaul.mn.us

EROSION AND SEDIMENT CONTROL FOR UTILITY PROJECTS IN THE RIGHT-OF-WAY

It is essential to prevent dirt, debris, oils and other waste from entering storm drains or water resources.
(See official Public Works Right-of-Way Erosion Control Policy, dated 2/23/2015)

Erosion and sediment control devices are REQUIRED for any utility construction or grading project that will result in significant land disturbing activity in the public right-of-way.

- Inlet protection and perimeter control must be installed BEFORE any land disturbance begins.
- Temporary land stabilization practices should be installed:
  - Daily for temporary stockpiles on or near street (including plastic cover); *and*,
  - Within 7 days after work is completed over all disturbed areas not on or near the street (including temporary seeding of spoil piles though seeding and mulching).
- Refer to the Mn/DOT Pocketbook Guide (2017) for guidance to preventing pollutants from leaving construction sites: https://www.erosion.umn.edu/resource-links/pocketbook-guide

PUBLIC WORKS – STANDARD PLATES for TEMPORARY SEDIMENT CONTROL
https://www.stpaul.gov/departments/public-works/standard-plates/sewers-appurtenances

TEMPORARY SEEDING AND MULCHING, OR PLASTIC COVER

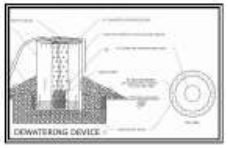
Temporary seeding and mulching quickly protects the soil from erosion until establishment of permanent stabilization. Applicable areas include any topsoil stockpiles and any areas disturbed by grading activities.

For areas that must be stabilized each day (located on or near the street) plastic cover should be used instead.

STORM DRAIN INLET PROTECTION

Storm drain inlet protection prevents sediment from entering a storm drain by surrounding or covering the inlet with a filtering material. This allows sediment-laden runoff to pond and settle before entering the storm drain.

Filter types are shown in Public Works standard plates 2400A, 2401, and 2402. Protection(s) must be removed upon completion of work.



DEWATERING TREATMENT

Site-specific devices, including flocculant pipes or socks, can be used to reduce sediment in pumped discharge. Refer to Public Works standard plate 2403 for controlling dewatering activities.

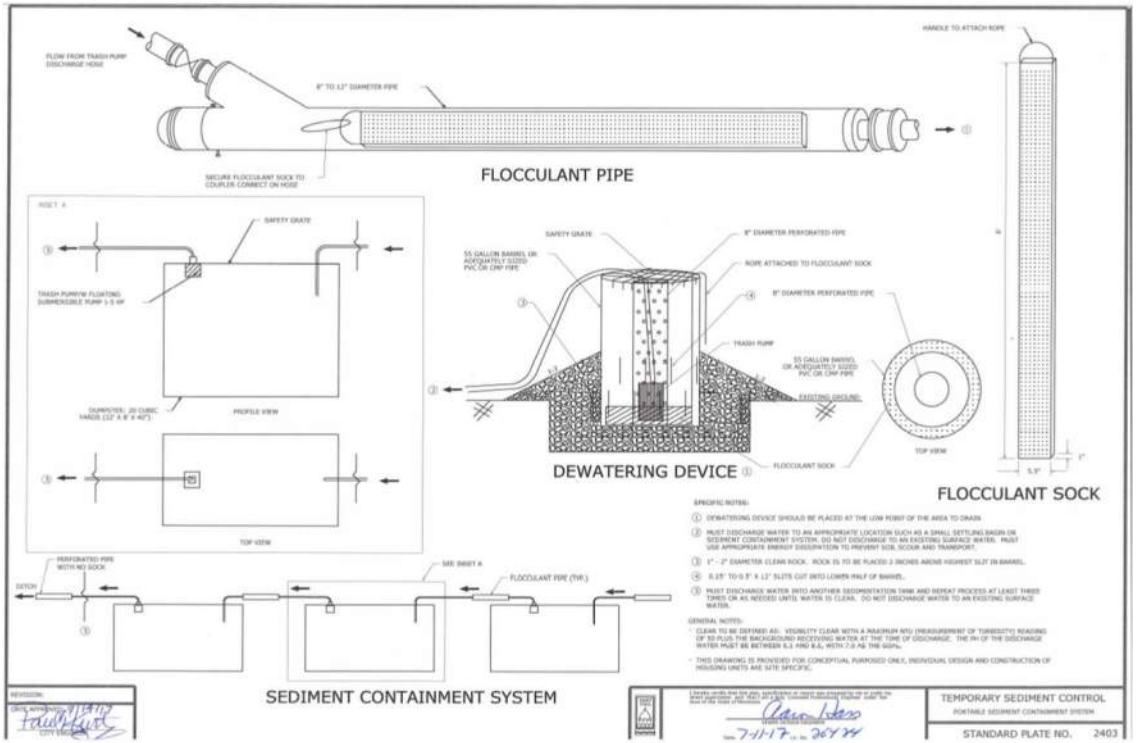
Clear discharge is defined as a maximum NTU reading of 50 plus the background receiving water at the time of discharge.

DAILY AND AS-NEEDED STREET SWEEPING

Street sweeping is used to clean the pavement and curb-line area on a regular basis to remove tracked sediment, debris, and other pollutants from paved surfaces.

Rev. 2020

Plate 2403


FLOCCULANT PIPE
DEWATERING DEVICE
FLOCCULANT SOCK
SEDIMENT CONTAINMENT SYSTEM
TEMPORARY SEDIMENT CONTROL
STANDARD PLATE NO. 2403

DEPARTMENT OF PUBLIC WORKS

CITY OF SAINT PAUL

Eriks Ludins, ROW Manager

899 North Dale Street
Saint Paul, MN 55103-1512.
ROW Division - Permits
Facsimile 651-266-9765
Telephone 651-266-6151 *www.stpaul.gov*
Email: pw-rowpermits@ci.stpaul.mn.us

Right-of-Way CITY PLAN REVIEW Submittal Form
(this is NOT a PERMIT Application)

1) Submit this Application Form & Engineer Grade 'D' Drawings in PDF format to PW-ROWpermits@ci.stpaul.mn.us
2) Each page of Excavation Plans Shall Be Signed by a Minnesota Certified Civil Engineer.
3) When Approved, an Approval Letter and if needed, a Review List with Conditions will be emailed to the Applicant.
4) Following PLAN Approval, you may request a ROW PERMIT. Refer to the PLAN NUMBER assigned when requesting a permit.

(please print & check items affected) **Do Not** Combine **Excavations & Obstructions** on the same application, **Submit Separately**

PLAN TYPE: ☐ Excavation (Buried Work) or ☐ Obstruction (Aerial, Pulling in Existing Ducts)

Applicants Nam

Email Address:

Company Name

Billing Address:

Company Job/Il

ALL APPLICANTS MUST BE REGISTERED WITH THE ROW DIVISION PRIOR TO PLAN or PERMIT APPROVAL

DESCRIPTION OF WORK: Construction of fiber via directional bore along Energy Park from Lexington Pkwy N westerly 4896'

Describe Project: Bore 500' of Duct & Fiber On X St-Y St to Z St, or Place 1000' of Aerial Cable in alley N of M St-N St to O St, or Install (3) poles on A St, or Pull 100' of Fiber in existing conduit ACR State St-Fillmore to Plato for Service at 10 River Park Plaza.
(What work is being done, Linear Ft or Qty, and Where is it being done)

LOCATION:
Address Energy Park Drive **From Street** Lexington Pkwy N **To Street** Snelling Ave
or Cross St _____ **or Corner (NWC, SWC, etc)** _____

EXCAVATION INFORMATION (Mark all that apply):
Excavation Linear Length (ft) in ROW 4,896

Installation: Poles ☐ Conduit ☑ Fiber ☑ Metallic Cable ☐ MH/Hand Holes ☑ Small Cell on New Pole ☐

Placement Method: Directional Bore ☑ Open Trench ☐ Saw Cut ☐ Dig ☐

OBSTRUCTION INFORMATION (Mark all that apply):
Obstruction Linear Length (ft) in ROW _____

Pull thru Existing Ducts ☐ Aerial Placement: New ☐ or Over-Lash ☐

FORECAST CONSTRUCTION SCHEDULE: Start Date: 10/02/2020 Complete Date: 06/30/2021

By signing this application, I (the applicant/company) hereby acknowledge that I must adhere to all provisions of City of Saint Paul Ordinance Numbers 116, 135 and any other applicable ordinances. The applicant shall also comply with the regulations of all other governmental agencies for the protection of the public.

APPLICANTS SIGNATURE: _____ **DATE:** _____

Outreach

CITY OF SAINT PAUL
Melvin Carter, Mayor

375 Jackson Street Suite 220
Saint Paul, MN 55101-1806

Telephone: 651-266-8989

November 18, 2020

WATER QUALITY COMPLAINT

To whom it may concern:

It has come to our attention that persons acting on behalf of . may have improperly conducted activities including discharging unauthorized liquid material into the city's municipal storm sewer system along Energy Park Drive, between Lexington Pkwy N and Snelling Ave.

A complaint was received by the Capital Region Watershed District and forward to city staff on November 3, 2020, regarding allegations of illicit wastewater drainage into the municipal storm sewer generated from nearby utility boring.

Local regulations prohibit non-stormwater discharges to enter the city's municipal storm sewer system (Saint Paul Legislative Code 51.03a). This regulation implements federal Clean Water Act protections.

CITY OF SAINT PAUL
Melvin Carter III, Mayor

Public Works
Right-of Way Division

Telephone: 651-266-6151
Facsimile: 651-266-9765
Email: PW-ROWpermits@ci.stpaul.mn.us

The Most Livable City in America

EROSION AND SEDIMENT CONTROL FOR UTILITY PROJECTS IN THE RIGHT-OF-WAY

It is essential to prevent dirt, debris, oils and other waste from entering storm drains or water resources. (See official Public Works Right-of-Way Erosion Control Policy, dated 2/23/2015.)

Erosion and sediment control devices are **REQUIRED** for any utility construction or grading project that will result in significant land disturbing activity in the public right-of-way.

- Inlet protection and perimeter control must be installed **BEFORE** any land disturbance begins.
- Temporary land stabilization practices should be installed:
  - Daily for temporary stockpiles on or near street (including plastic cover); *and*,
  - Within 7 days after work is completed over all disturbed areas not on or near the street (including temporary seeding of spoil piles though seeding and mulching).
- Refer to the Mn/DOT Pocketbook Guide (2017) for guidance to preventing pollutants from leaving construction sites: https://www.erosion.umn.edu/resource-links/pocketbook-guide

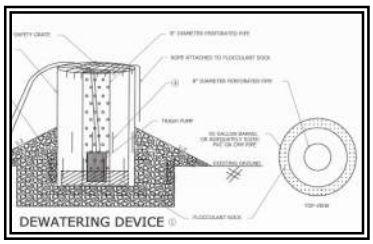
PUBLIC WORKS – STANDARD PLATES for TEMPORARY SEDIMENT CONTROL
https://www.stpaul.gov/departments/public-works/standard-plates/sewers-appurtenances

TEMPORARY SEEDING AND MULCHING, OR PLASTIC COVER
Temporary seeding and mulching quickly protects the soil from erosion until establishment of permanent stabilization. Applicable areas include any topsoil stockpiles and any areas disturbed by grading activities.

For areas that must be stabilized each day (located on or near the street) plastic cover should be used instead.

STORM DRAIN INLET PROTECTION
Storm drain inlet protection prevents sediment from entering a storm drain by surrounding or covering the inlet with a filtering material. This allows sediment-laden runoff to pond and settle before entering the storm drain.

Filter types are shown in Public Works standard plates 2400A, 2401, and 2402. Protection(s) must be removed upon completion of work.



DEWATERING TREATMENT
Site-specific devices, including flocculant pipes or socks, can be used to reduce sediment in pumped discharge. Refer to Public Works standard plate 2403 for controlling dewatering activities.

Clear discharge is defined as a maximum NTU reading of 50 plus the background receiving water at the time of discharge.

DAILY AND AS-NEEDED STREET SWEEPING
Street sweeping is used to clean the pavement and curb-line area on a regular basis to remove tracked sediment, debris, and other pollutants from paved surfaces.

CITY OF SAINT PAUL
Christopher B. Coleman, Mayor

Public Works
Right-of-Way Division

Telephone: 651-487-7250
Fax: 651-487-7245

ROW Erosion and Sediment Control Worksheet

Project: **Project File No.**:

Property Address:

Inspection Date: **Re-inspection Date**:

Inspection Type: **Size of Site**:

Inspection Results

Sewer Inlet Protection:

Comments:

Street Condition:

Comments:

Silt Fence/Sediment Control:

Comments:

Stock Pile On or Near Street:

Comments:

Stock Pile Not On or Near Street:

Comments:

Corrective Action:

Comments:

Staff Procedure - Review Checklist for Site Plan Erosion Control
revised 2018

Project Name and/or Address:_____ Site Plan Review Date:_____

1. Does this project result in moving 50 cubic yards or more or will building permit be issued?
   Unless grading activity is included in a general building permit, a grading permit shall be required for the placement, removal or movement of more than fifty (50) cubic yards of fill
   ☐ Yes – Continue ☐ No – Stop

2. Does this project disturb greater than 10,000 square feet?
   Grading activities in excess of ten thousand (10,000) square feet require site plan review in accordance with section 61.402(a) of the Saint Paul Legislative Code.
   ☐ Yes – Continue ☐ No – Complete erosion control review per §33.03(g)3

3. Does this project disturb greater than 1-acre?
   If yes, MPCA Construction Stormwater Permit required; verify watershed permit.
   ☐ Yes – Continue per §52.04 ☐ No – Complete erosion control review per §61.402(c)(11)

Document on this form, or other form as appropriate, the adequacy of erosion and sediment control. Use the minimal criteria below as a starting point for beginning the standard procedure.

Indicate plan sheets containing erosion control methods:

	CRITERIA	OK	Issue	N/A	Comment
	Rock construction entrance identified on plans				
	Perimeter protection				
	Inlet protection for catch basins				
	Street sweeping note on plans				
	Stabilization shown for disturbed areas				
	Other items as scope of work requires				

Supplemental Plan Information
Disturbed area:
Permanent runoff control practice(s):

Staff Notes for site plan revision/approval:

Procedure

1. Review plan in accordance with grading §33.03(g)3, site plan review and approval §61.402(c)(11) and/or stormwater pollution control plan §52.04. (MPCA "Manual for Protecting Water Quality in Urban Areas")
2. Document plan review comments in Site Plan Review Committee conditional approval letter.
3. Document plan review decision in Site Plan Review approval letter. State if MPCA Construction Stormwater Permit is required; if so, approval contingent on obtaining permit card, verified at https://cf.pca.state.mn.us/water/stormwater/csw/search.cfm

DEPARTMENT OF SAFETY AND INSPECTIONS
Ricardo X. Cervantes, Director

CITY OF SAINT PAUL
Christopher B. Coleman, Mayor

375 Jackson Street, Suite 220
Saint Paul, Minnesota 55101-1806

Telephone: *651-266-9090*
Facsimile: *651-266-9124*
Web: *www.stpaul.gov/dsi*

Standard Operating Procedures for Erosion and Sediment Control Complaint

1) Someone sees an erosion and sediment control issue (dirt on street, etc).
   - They should call the City Complaints Office: 651-266-8989

2) Complaint is passed on from Complaints Office to Senior Building Inspector (651-266-9021)

3) Building Inspector follows up on complaint using DSI Erosion and Sediment Control Worksheet

4) If Building Inspector determines source is from the Public Right-of-Way (ROW) or from City Construction Projects the complaint will be forwarded to the Public Works Inspectors –
   - For Private Utility Construction in ROW: 651-487-7250 (General Number for ROW Permit Section)
   - For City Construction Projects: 651-266-6081 (Street Engineering Construction Division)

Public Works Inspector will inspect and follow up accordingly

5) First Inspection
   - DSI Erosion and Sediment Control Worksheet completed
   - If site is non-compliant: Building Inspector issues immediate verbal order, if possible, or issues a written order if no one is on site, to address situation, sets a compliance date based on the nature of the complaint, and notes details of non-compliance in Worksheet

6) Second Inspection
   - Building Inspector Conducts 2nd inspection of site after compliance date
   - 2nd DSI Erosion and Sediment Control Worksheet completed
   - If continued non-compliance: Building Inspector issues written orders, sets a new compliance date based on the nature of the complaint, and notes details of non-compliance in Worksheet

7) Third Inspection
   - Building Inspector Conducts 3rd inspection of site after compliance date
   - 3rd DSI Erosion and Sediment Control Worksheet completed
   - If continued non-compliance, proceed with stopping construction work at the site, or submitting the violation to the City Attorney for potential prosecution, or pursue abatement if sediment crosses boundary of the site and project is greater than 1 acre.

DEPARTMENT OF SAFETY AND INSPECTIONS
Bob Kessler, Director

CITY OF SAINT PAUL
Christopher B. Coleman, Mayor

375 Jackson Street, Suite 220
Saint Paul, Minnesota 55101-1806

Telephone: *651-266-9090*
Facsimile: *651-266-9124*
Web: *www.stpaul.gov/dsi*

Erosion and Sediment Control Worksheet

Property Address:

Inspector:

Permit # (if applicable):

Inspection Date:

Re-inspection Date:

Inspection Type:

Size of Site:

Inspection Results

Sewer Inlet Protection:

Comments:

Street Condition:

Comments:

Rock Entrance:

Comments:

Concrete Washout Area:

Comments:

Silt Fence/Sediment Control:

Comments:

Stock Pile Erosion Control:

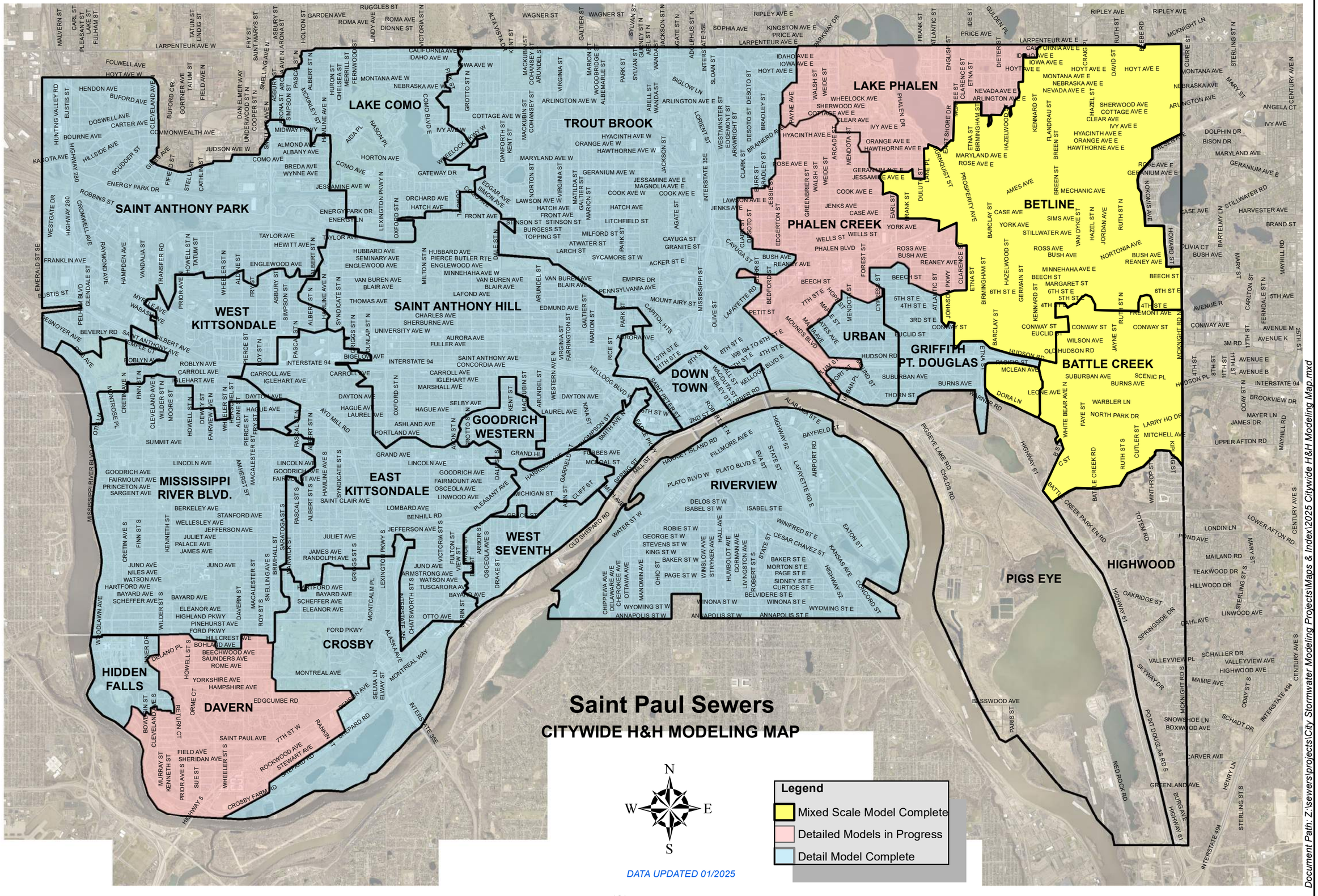
Comments:

Site Erosion Control:

Comments:

Corrective Action:

Comments:


LAKE COMO
TROUT BROOK
LAKE PHALEN
PHALEN CREEK
BETLINE
SAINT ANTHONY PARK
WEST KITTSONDALE
SAINT ANTHONY HILL
DOWN TOWN
URBAN
GRIFFITH
PT. DOUGLAS
BATTLE CREEK
GOODRICH WESTERN
EAST KITTSONDALE
MISSISSIPPI RIVER BLVD.
WEST SEVENTH
RIVERVIEW
CROSBY
HIDDEN FALLS
DAVERN
PIGS EYE
HIGHWOOD
Saint Paul Sewers
CITYWIDE H&H MODELING MAP
N
W
E
S
Legend
Mixed Scale Model Complete
Detailed Models in Progress
Detail Model Complete
DATA UPDATED 01/2025
Document Path: Z:\sewers\projects\City Stormwater Modeling Projects\Maps & Index\2025 Citywide H&H Modeling Map.mxd

Saint Paul Sewers

CITYWIDE P8 MODELING MAP

P8	MODELS	DONE	BY:
1.	SYLVAN-ACKER POND:		TKDA
2.	BARGE CHANNEL PONDS:		TKDA
3.	FLANDRAU-HOYT;		BARR
4.	FLANDRAU-CASE;		BARR
5.	BIRMINGHAM-YORK:		BARR
6.	HAZEL-NOKOMIS:		BARR
7.	HAZEL-ROSS:		BARR
8.	BIRMINGHAM-MINNEHAHA:		BARR
9.	ETNA-THIRD:		BARR
10.	WILDVIEW-LENNOX:		CITY
11.	HIGHWOOD OAK BLUFF:		CITY
12.	CROSBY BUSINESS PARK:		STANTEC
13.	CROSBY OUTLET:		STANTEC

Legend

- Pond P8 Model Done
- P8 Detail Model Complete

N W E S

DATA UPDATED 04/2023

Document Path: Z:\sewers\projects\City Stormwater Modeling Projects\Maps & Index\Citywide P8 Modeling Map.mxd

Outfall Inventory

Outfall	Location	Watershed	Pipe Size	Acres
	Bridal Veil Creek			
005	South of Buford	Bridal Veil	42"	
	Mississippi River			
010	Eustis	St. Anthony Park	tunnel	2467
020	Lotus	Miss. River Blvd.	tunnel	31
030	Marshall	Miss. River Blvd.	tunnel	121
040	West Kittsondale	West Kittsondale	tunnel	977
050	Otis	Miss. River Blvd.	tunnel	14
060	Portland Ave	Miss. River Blvd.	tunnel	508
070	Summit	Miss. River Blvd.	16" cast iron	30
080	Goodrich	Miss. River Blvd.	tunnel	456
090	Princeton	Miss. River Blvd.	tunnel	150
095	Berkeley	Miss. River Blvd.	24"	
100	Jefferson	Miss. River Blvd.	tunnel	139
110	Randolph	Miss. River Blvd.	tunnel	39
115	Hartford	Miss. River Blvd.	tunnel	580
120	Scheffer	Miss. River Blvd.	tunnel	8
130	Highland Parkway	Miss. River Blvd.	tunnel	165
135	Hidden Falls	Hidden Falls	48"	269
140	Sheridan	Davern	tunnel	145
145	West 7th	Davern	30"	30
150	Davern	Davern	tunnel	963
151	Watergate Marina	Crosby	21"	

Outfall Inventory

Outfall	Location	Watershed	Pipe Size	Acres
156	Elway	Crosby	60"	
158	Elway	Crosby	90"	820
160	Otto	E. Kittsondale	tunnel	177
170	Bay	E. Kittsondale	tunnel	1699
180	Sumac	West 7th	tunnel	8
190	Drake	West 7th	tunnel	158
195	Fountain Cave	West 7th	42"	39
200	Richmond	West 7th	20"	142
201	Richmond	West 7th	42"	
206	Western	West 7th	30"	98
210	Smith -1992	Good/West	tunnel	424
220	Sherman	Downtown	48"	41
230	Chestnut	Downtown	27"	82
240	Eagle	Downtown	3'x5' brick	77
~~250~~	~~Ontario~~ abandoned	~~Downtown~~	~~24"~~	
260	Market	Downtown	24"	
270	St. Peter	St. Anthony Hill	tunnel	2653
280	Cedar	Downtown	tunnel	
290	Minnesota	Downtown	tunnel	115
295	Robert	Downtown	tunnel	5
300	Jackson	Downtown	36"	27
310	Sibley	Downtown	48"	10
~~315~~	~~Wacouta~~	~~Downtown~~	~~12"~~	~~10~~

Outfall Inventory

Outfall	Location	Watershed	Pipe Size	Acres
320	Broadway	Downtown	7'x8' concrete	115
325	Troutbrook	Troutbrook	dual 10'	4025
330	Plum	Phalen Creek	tunnel	1406
340	Urban	Urban	48" brick	328
343	Warner and Childs	Pig's Eye	24"	
346	Warner and Childs	Pig's Eye	18"	
350	Beltline (RWMWD's)	Beltline	9'	3524
~~352~~	~~off Child's Road~~	~~Pig's Eye~~	~~12"~~	
~~354~~	~~off Child's Road~~	~~Pig's Eye~~	~~12"~~	
~~356~~	~~off Child's Road~~	~~Pig's Eye~~	~~12"~~	
360	Battle Creek	Pig's Eye	36"	
365	Wyoming	Riverview	30" culvert	8
380	Page and Barge Ch Rd	Riverview	42"	69
385	Robie and Witham	Riverview	54"	
390	Robie and Kansas	Riverview	42"	264
400	Airport	Riverview	12"	
405	Chester St	Riverview	tunnel	326
407	Eva St	Riverview	36"	
410	Custer St	Riverview	tunnel	188
420	Moses St	Riverview	5'6"	95
430	Belle	Riverview	2-36"x40"	37
440	Riverview	Riverview	2-77"x121"	801
460	Chippewa and Baker	Riverview	16"	71

Outfall Inventory

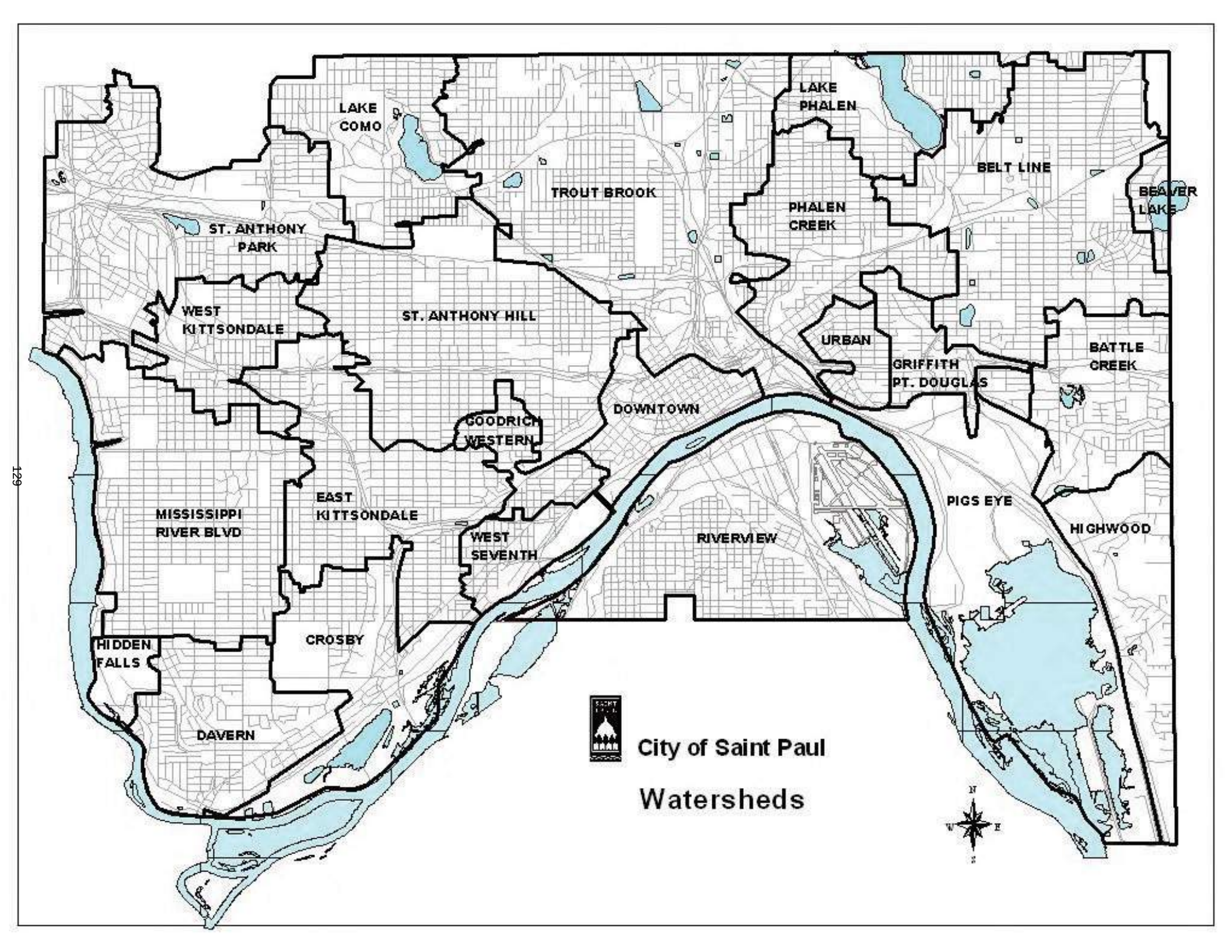
Outfall	Location	Watershed	Pipe Size	Acres
	Upper Lake			
152	Springfield	Crosby	15"	
	Crosby Lake			
153	Rankin	Crosby	27"	
154	Homer	Crosby	30"	
155	Leland	Crosby	30"	
	Fairview North Pond			
500	Tatum & Pierce Butler	St. Anthony Park	6'	
510	Pierce Butler & Aldine	St. Anthony Park	54"	
	Lake Como			
520	Arlington & Chelsea	Como	60"	310
530	Chatsworth North	Como	36"	201
540	Milton North	Como	36"	79
550	Parkview East	Como	18"	17
560	Ivy East	Como	18"	24
570	Wheelock Pkwy East	Como	24"	23
580	Rose East	Como	36"	30
590	Victoria South	Como	30"	49
600	Chatsworth South	Como	24"	75
610	Horton West	Como	15"	311
620	Park West	Como	36"	50

Outfall Inventory

Outfall	Location	Watershed	Pipe Size	Acres
	Loeb Lake			
630	Jessamine	Troutbrook	36"	
	Lake Phalen			
680	Arlington West	Phalen	72"	380
690	Blomquist South	Phalen	36"	71
700	Arlington East	Phalen	42"	209
710	between Hoyt & Neb.	Phalen	42"	69
720	Larpenteur East	Phalen	84"	17
	Beaver Lake			
726	Lacrosse	Beaver	15"	
728	Ames	Beaver	15"	
730	Rose North	Beaver	42"	67
740	McKnight North	Beaver	21"	22
	Suburban Pond			
---	Suburban & VanDyke (RWMWD's)	Battle Creek	102"	
750	Suburban & WB Ave	Battle Creek	27"	
760	Suburban & Hazel	Battle Creek	54"	
	Little Pig's Eye Lake			
770	near fish hatchery	Griffith/Pt. Douglas	72"	
	Pig's Eye Lake			
780	Burlington	Highwood	66"	
784	Winthrop @ Lower Afton	Highwood	30"	

Outfall Inventory

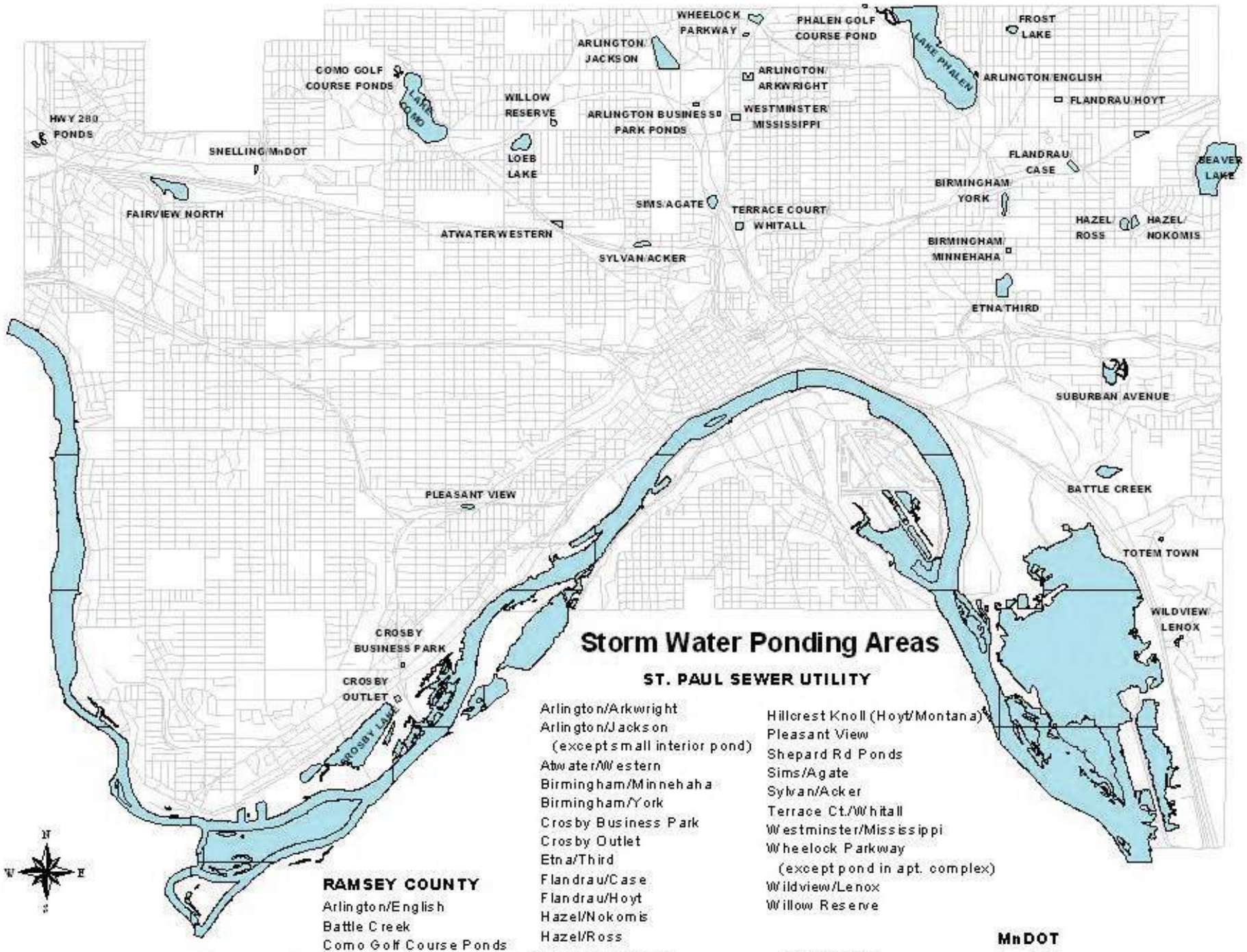
Outfall	Location	Watershed	Pipe Size	Acres
786	Morningside @ Lower Afton	Highwood	18"	
790	Springside Drive	Highwood	33"	
791	Highwood	Highwood	48"	
	Battle Creek			
~~800~~	~~N. Park Drive & Faye~~	~~Battle Creek~~	~~33"~~	
808	Sandralee	Battle Creek	24"	
810	Ruth	Battle Creek	42"&73-1/2" arch	
812	Warren	Battle Creek	18"	
814	Cutler	Battle Creek	24"	
816	Nelson	Battle Creek	24"	
818	Winthrop & Larry Ho	Battle Creek	30"	
820	Winthrop & N. Park Dr	Battle Creek	36"	
825	Michael N	Battle Creek	33"	
826	Michael S	Battle Creek	30"	
830	McKnight & N. Park Dr	Battle Creek	36"	
836	A Street	Battle Creek	18"	


LAKE COMO
LAKE PHALEN
TROUT BROOK
BELT LINE
BEAVER LAKE
PHALEN CREEK
ST. ANTHONY PARK
WEST KITTSONDALE
ST. ANTHONY HILL
URBAN
BATTLE CREEK
GRIFFITH
PT. DOUGLAS
DOWNTOWN
GOODRICH
WESTERN
MISSISSIPPI RIVER BLVD
EAST KITTSONDALE
WEST SEVENTH
RIVERVIEW
PIGS EYE
HIGHWOOD
CROSBY
HIDDEN FALLS
DAVERN
City of Saint Paul
Watersheds
N
W
E

129

Watershed Inventory

Watershed	WS#	Area (acres)	Population (2000 Census)	Percent Impervious	Runoff Coefficient
Beaver Lake	1	278	2,070	31	0.33
Belt Line	2	2,882	30,994	56	0.55
Lake Phalen	3	995	7,626	41	0.42
Trout Brook	4	3,959	37,665	63	0.62
Lake Como	5	1,240	9,753	47	0.47
St. Anthony Park	6	2,467	13,140	70	0.68
Phalen Creek	7	1,406	18,418	64	0.62
St. Anthony Hill	8	2,542	36,410	66	0.64
Griffith/Pt. Douglas	9	458	5,264	63	0.61
W. Kittsondale	10	847	7,732	69	0.67
Urban	11	339	4,491	58	0.57
Battle Creek	12	1,089	8,201	54	0.54
Downtown	13	669	6,097	78	0.75
E. Kittsondale	14	1,870	18,353	64	0.62
Mississippi River Blvd.	15	2,373	27,251	59	0.58
Goodrich/Western	16	424	5,010	64	0.63
Pigs Eye	17	2,995	913	39	0.40
Riverview	18	2,658	14,860	58	0.57
Highwood	19	1,139	5,216	50	0.50
W. Seventh	20	450	2,543	61	0.60
Crosby	21	1,446	8,804	45	0.45
Davern	22	1,277	6,628	56	0.55
Hidden Falls	23	237	1,263	56	0.55
Total		34,040	278,706		



Storm Water Ponding Areas

ST. PAUL SEWER UTILITY

Arlington/Arkwright
Arlington/Jackson
(except small interior pond)
Atwater/Western
Birmingham/Minnehaha
Birmingham/York
Crosby Business Park
Crosby Outlet
Etna/Third
Flandrau/Case
Flandrau/Hoyt
Hazel/Nokomis
Hazel/Ross
Hillcrest Knoll (Hoyt/Montana)
Pleasant View
Shepard Rd Ponds
Sims/Agate
Sylvan/Acker
Terrace Ct./Whitall
Westminster/Mississippi
Wheelock Parkway
(except pond in apt. complex)
Wildview/Lenox
Willow Reserve

RAMSEY COUNTY

Arlington/English
Battle Creek
Como Golf Course Ponds
Surburban Avenue
Totem Town

ST. PAUL PARKS

Phalen Golf Course Pond

RAILROAD

Fairview/North

MnDOT

Hwy. 280
Snelling/MnDOT

City of Saint Paul

Storm Water Ponding Area Inventory

Ponding Area	Drainage Area (acres)	Population 2000 Census	Pond Area (acres)	Storage Capacity (Acre-feet
Arlington/Arkwright	302.3	4001	5	20.4
Arlington/Jackson	699.4	6562	14.5	75.6
Atwater/Western	127.3	1230	2.7	13.3
Birmingham/Minnehaha	41.0	457	0.9	2.5
Birmingham/York	146.5	2050	2.2	9.5
Crosby Business Park	39.6	198	1	5.52
Crosby Outlet	866.0	6295	5.5	40.6
Etna/Third	244.0	2457	4.7	25.1
Flandrau/Case	95.2	1331	0.7	3
Flandrau/Hoyt	479.5	4582	1.9	20.8
Hazel/Nokomis	73.0	511	2.3	6.3
Hazel/Ross	67.8	949	4	3.8
Pleasant View	164.5	2053	2.3	14.5
Sims/Agate	174.6	1357	5.3	12.8
Sylvan/Acker	376.9	3617	2.1	11.7
Terrace Ct./Whitall	4.7	28	0.5	0.5
Westminister/Mississippi	123.4	1912	2.2	10.1
Wheelock Parkway	19.0	265	1.3	1.7
Wildview/Lenox	19.3	111	0.73	2.2
Willow Reserve	372.1	3669	20.3	42.6
Total	4436.2	43633.6		

Drainage area only includes area in St. Paul.

Storage capacity is for a 100 year storm in acre-feet.

Storm Water Ponding Areas by Watershed Area

Beaver Lake	None
Belt Line	Birmingham/Minnehaha Birmingham/York Etna/Third Flandrau/Hoyt Flandrau/Case Hazel/Nokomis Hazel/Ross Hillcrest Knoll (Hoyt/Montana)
Lake Phalen	Arlington/English Phalen Golf Course Pond
Trout Brook	Arlington/Jackson Arlington/Arkwright Atwater/Western Sims/Agate Sylvan/Acker Terrace Ct./Whitall Westminster/Mississippi Wheelock Parkway Willow Reserve
Lake Como	Como Golf Course Ponds
St. Anthony Park	Fairvew/North Highway 280 Snelling/MnDOT
Phalen Creek	None
St. Anthony Hill	None
Griffith/ Pt. Douglas	None
W. Kittsondale	None
Urban	None
Battle Creek	Battle Creek Surburban Avenue
Downtown	None

E. Kittsondale	Pleasant View
Mississippi River Blvd.	None
Goodrich/ Western	None
Pigs Eye	None
Riverview	None
Highwood	Totem Town Wildview/Lenox
W. Seventh	None
Crosby	Crosby Business Park Crosby Outlet
Davern	None
Hidden Falls	None

Capitol Region Watershed District
595 Aldine Street • Saint Paul, MN 55104
T: 651-644-8888 • F: 651-644-8894 • capitolregionwd.org

DATE: April 18th, 2025
TO: Pat Murphy, PE, City of St. Paul Sewer Utility
FROM: Forrest Kelley, PE, Facility Management Division Manager
RE: Snelling-Midway Superblock Rainwater Reuse System Annual Report

---

Background

Capitol Region Watershed District (CRWD) and City of St. Paul have partnered to operate and maintain the rainwater reuse system installed as part of construction of Allianz Field and the surrounding 35- acre redevelopment of the former Midway Shopping Center and Metro Transit Bus Barn property, termed the Snelling-Midway Superblock. This memorandum serves to summarize the activities conducted during operation of the system in 2024 and satisfy Parts 4.A. and 5.C. of the Cooperative Agreement for Maintenance of Green Infrastructure at Snelling-Midway.

2024 Operation

Since 2019 CRWD has contracted with Harris Companies to complete all tasks associated with operating the rainwater treatment, delivery, and monitoring components of the rainwater pump station within the underground Vault 200 structure, the pumping system within structure 251, and the outlot distribution pipes to the private parcels. Operation and maintenance of the irrigation system outside of the vault is the responsibility of the private landowners. Currently, all landscape irrigation at the superblock is managed by the Head Groundskeeper at MN United FC. The system currently irrigates approximately 2.55-acres including the Great Lawn, tree trenches, and other landscaped areas surrounding the exterior of Allianz Field. The source water is collected from 3.9-acres of stadium rooftop.

The rainwater reuse system startup activities were completed April 5, 2024, and the irrigation lines were blown out for system shut down for the season on November 19, 2024, resulting in a total irrigation season of 228 days. The table below provides annual costs to operate the system, total rainwater used, and the volume and cost of domestic water used for irrigation. Maintenance costs for 2024 totaled $9,100.28. This does not include CRWD or City staff time to administer the contracts and direct work.

Performance

Flow data, environmental monitoring, and alarm information collected by the Rainwater Management Systems (RMS) controller is pushed to the City's Supervisory Control and Data Acquisition (SCADA) system. In April of 2021, data streams for Inlet Flow Meter, Irrigation Flow Meter, Drain Flow Meter, Recirculation Flow Meter, City Water Flow Meter, Outlot Flow Meter, and Inlet and Supply Pressure were added to the Opti RTC dashboard. According to data provided on the Opti dashboard, total water use for irrigation in 2024 was 1,716,261 gallons, with 604,748 gallons of domestic water use, resulting in approximately 1,111,513 gallons of treated rainwater use, or 65% of the total irrigation. Annual water use is displayed in the table below.

Year	2020	2021	2022	2023	2024
Total Irrigation Used (gal)	1,093,185	3,985,567	3,498,146	2,770,182	1,716,261
Rainwater Used (gal)	693,302	1,206,071	599,596	651,350	1,111,513
Potable Water Used (gal)	399,883	2,779,496	2,898,550	2,118,832	604,748
Potable Water Cost ($4.52/100 cubic feet)	$2,416	$16,796	$17,515	$12,804	$3,654
Percent supplied by rainwater	63.42%	30.26%	17.14%	23.51%	64.76%
Operation and Maintenance Costs (USD)	$44,495	$37,784	$35,461	$37,152	$9,100
			Total O&M Costs		**$163,992**
			Total Water Costs		**$53,186**

The volume of 1,716,261 gallons of irrigation corresponds to 24.79 inches of irrigation over the 2.55- acre area for the 2024 operational period. This is an average of 0.76 inches per week. Additionally, the University of Minnesota rain gauge recorded 28.17 inches of rainfall from April 5th, 2024, through November 19th, 2024. While September and August were drier than normal, 2024 annual precipitation was just above average at 32.16-inches of rain (0.50-inches above 30-yr normal).

Treated rainwater usage is limited to the broadcast and drip irrigation systems. No private development occurred to provide additional demand for treated rainwater. The MLS stadium does not use treated rainwater. The system treated and reused over 1,111,500 gallons, and there are not believed to be any storage capacity issues at this time. Reused water is anticipated to be available for future private redevelopment in the Snelling-Midway Superblock. The low flow rate and pressure issues downstream of the treatment skid appear to have been resolved based on the use data from September and October of 2024 showing 86% of water demand being met by the rainwater pumps, and 65% of 2024 irrigation demands being met by treated rainwater.

In August of 2024, Harris Companies conducted pressure testing of the purple pipe distribution system. No pressure drops were detected during the 1-hour static 120-psi pressure test. Dynamic pressures were also recorded at five connection points and are provided in the attached marked up plan sheet.

Issues

In late 2023, stainless steel valves were installed just above the pumps in the vertical riser pipes so that water can be completely drained, and rigid foam insulation was added to the hatch to reduce the potential for freezing conditions. This retrofit work eliminated the need to remove and reinstall the submersible pumps in Tank A and resulted in significant cost savings compared to last year.

Three items were identified as needing repair during 2024 operations. One of the two UV disinfection units has failed and needs to be diagnosed for repair, a booster pump shaft seal is leaking and needs to be replaced ($695 part), and the oxygen sensor for the atmospheric gas meter needs to be replaced and calibrated ($46 part).

Recommendations for 2025

System start-up is scheduled for April 18th, 2025. Recommendations for system operation in 2025 are below:

1. Complete maintenance and repair of the UV disinfection, booster pump seal, and oxygen sensor.
2. Continue to operate without the Ozone injection and recirculation system to direct more flow to irrigation booster pumps.
3. Continue to operate without the bag and carbon filters installed to reduce flow restrictions.
4. Complete hydrovac removal of sediment within MH 251 (City to coordinate contractor).

Next Steps

Invoices for 2024 were $28,000 less than 2023($37,152.00), totaling $9,100. The recently executed cooperative maintenance agreement between CRWD and St. Paul extends the terms for 5-years with an annual budget of $50,000, and no changes are expected at this time.

enc: Purple Pipe Pressure Test Result
Harris 2024 Service Summaries and Invoices
Sage Accounting Output - 2024 Harris Paid Invoices
2024 Water Balance Spreadsheet

BRAUN INTERTEC

The Science You Build On.

SAINT PAUL

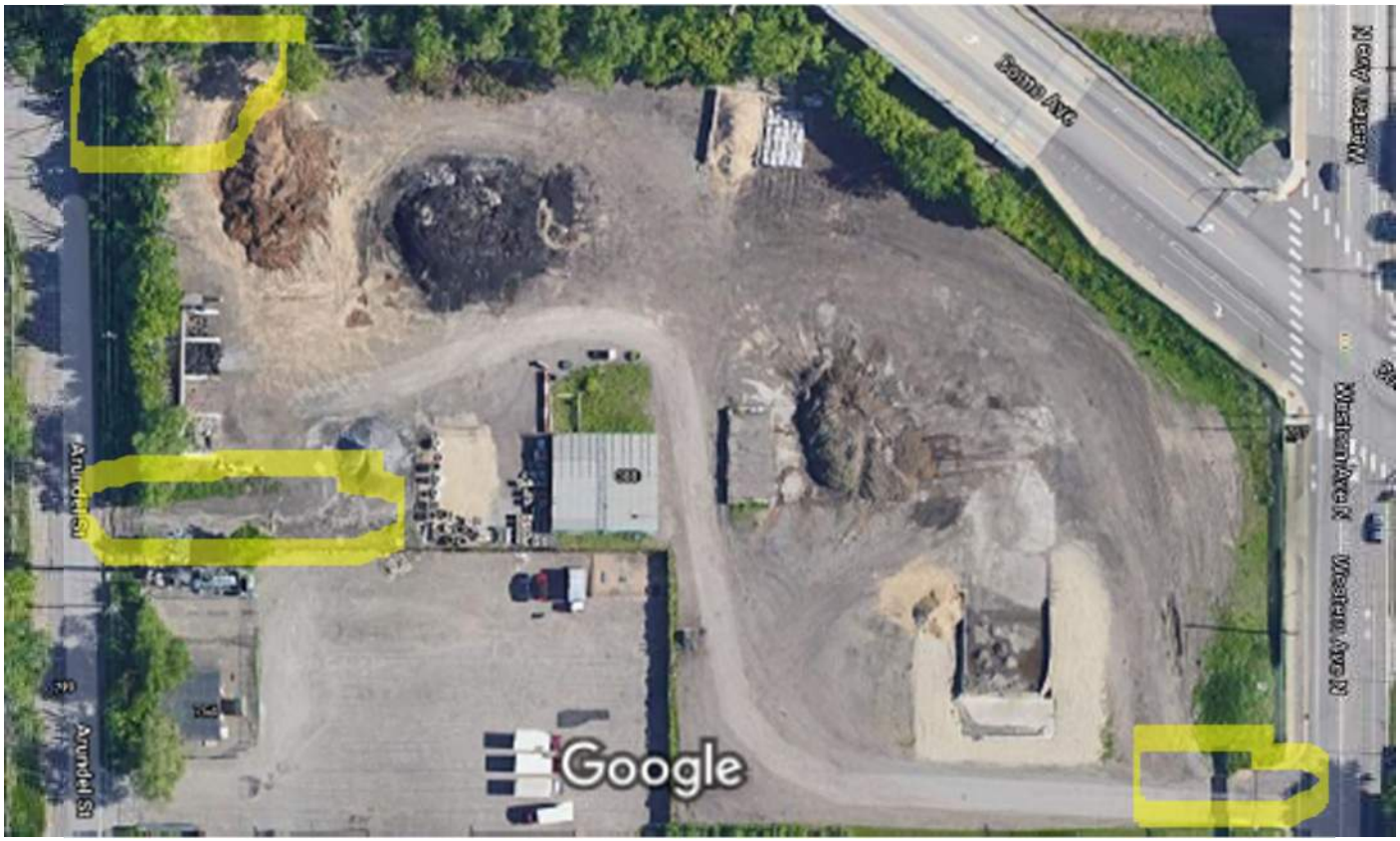
CITY OF ST. PAUL
COMO AND WESTERN FACILITY STORMWATER MANAGEMENT PLAN

December, 2020

Goal of the Como and Western Stormwater Management Plan

- To develop and maintain an ongoing effort to manage the stormwater quality responsibly related to stormwater runoff from the property

Facility Air Photo



BRAUN INTERTEC
The Science You Build On.

Materials Currently Exposed to Stormwater at the Facility

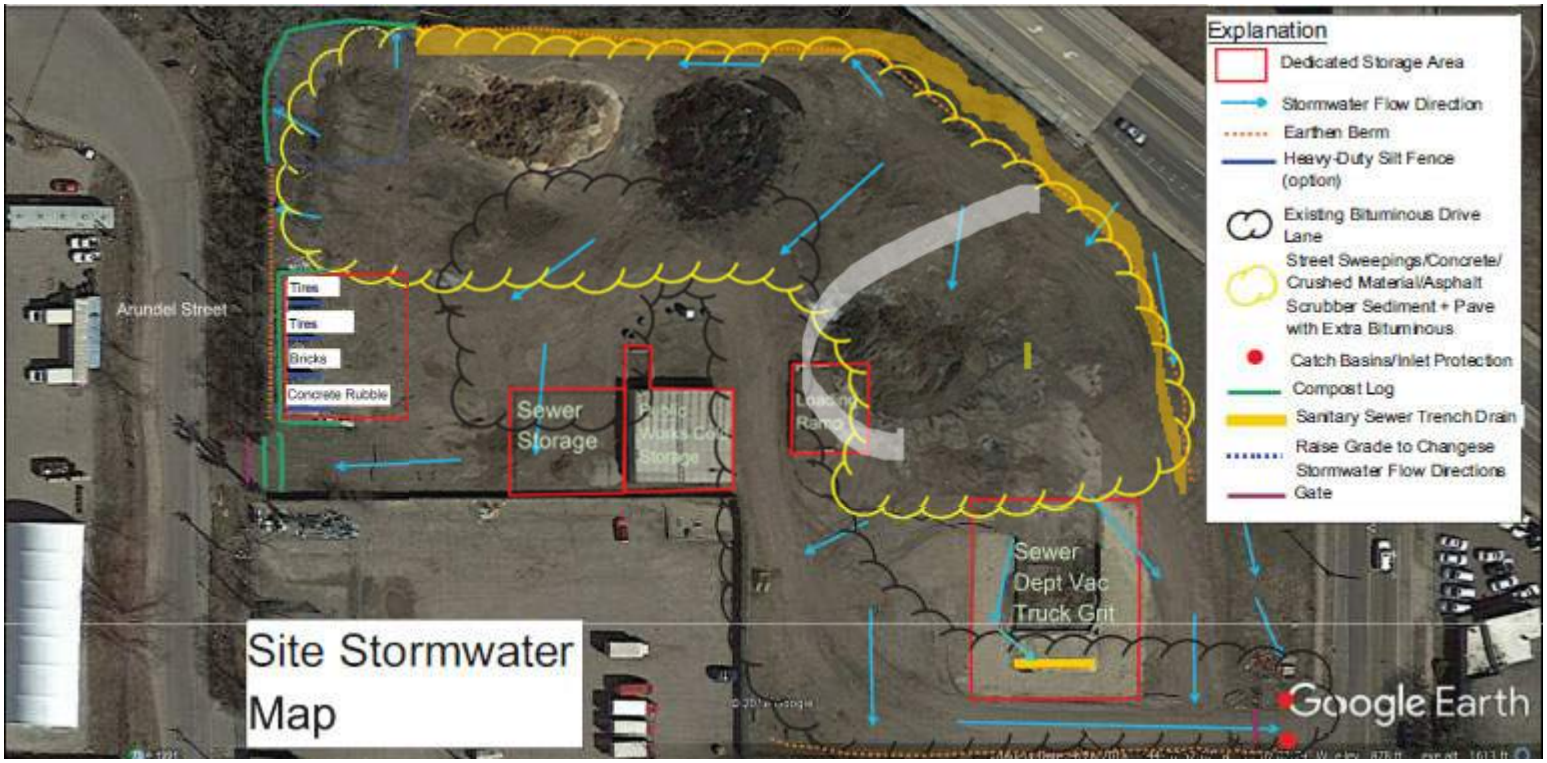
- Street sweepings
- Sewer Department vac truck grit
- Asphalt plant scrubber sediment
- Bituminous millings
- Brush
- Concrete rubble
- Bricks
- Black dirt
- Sand
- Tires
- Roadway solid wastes collected by the Street Department awaiting off-site recycling or disposal

Existing On-site Stormwater Facilities

- Trench drain and berm for vac truck sediment dewatering
- Two storm drains near exit to Western Avenue
- Concrete block bins on west end

BRAUN INTERTEC
The Science You Build On.

Facility Stormwater Plan



Como and Western Site Stormwater Improvement Plan

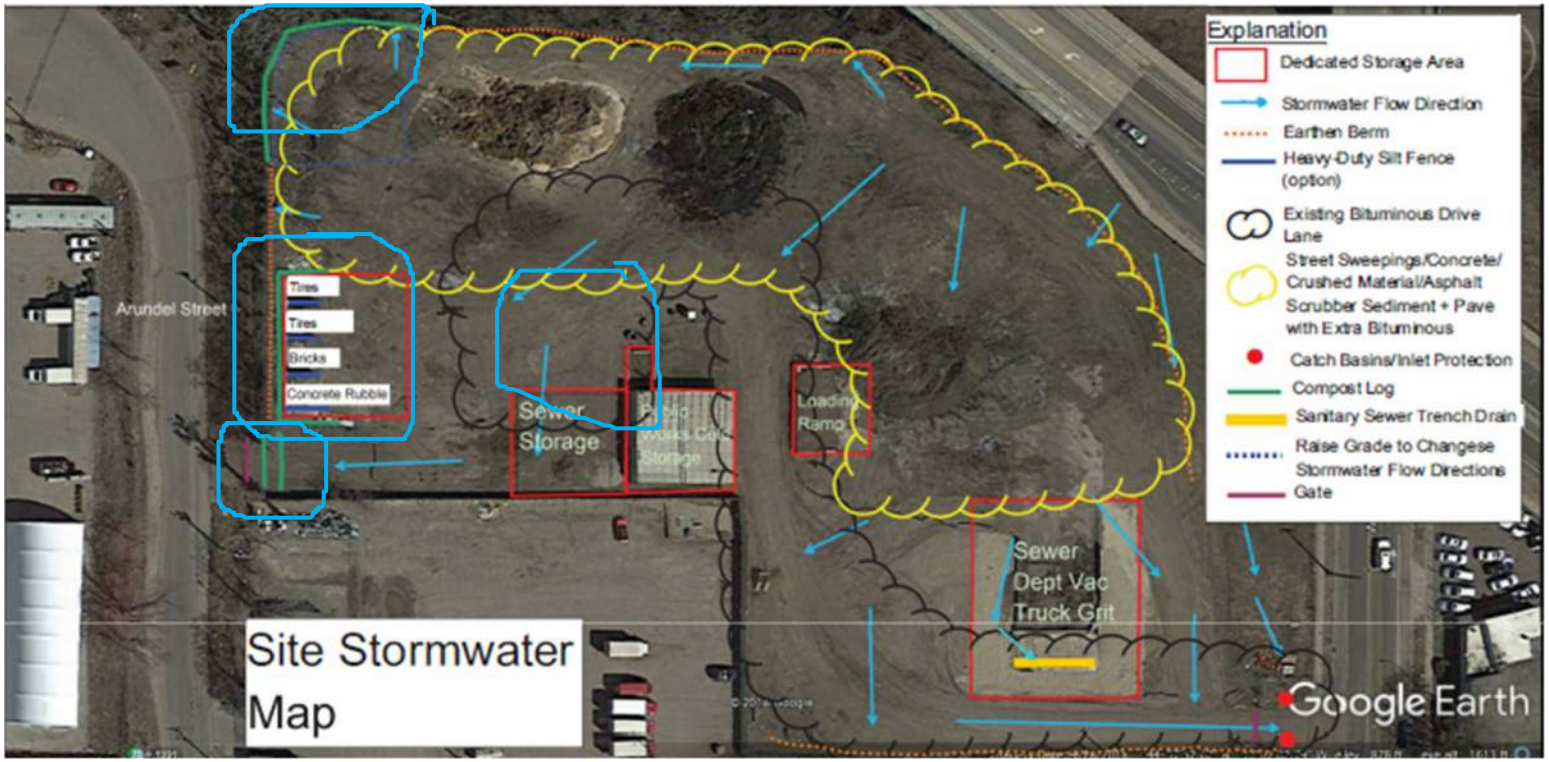
The purpose of the improvement plan is to describe site improvements that need to be made in order to affect changes that will minimize sediment transport from the site thereby improving the quality of stormwater that leaves the site. Several actions are recommended.

Recommended Facility Stormwater Best Management Practices

Structural BMPs

- Install biologs at west gate
- Install biologs around concrete bins
- Install new concrete bin for storage of roadway solid wastes
- Raise grade in NW portion of site
- Expand bituminous paved areas of site

BRAUN INTERTEC
The Science You Build On.



BRAUN INTERTEC
The Science You Build On.

Recommended Facility Stormwater Best Management Practices (continued)

Non-structural BMPs

- Perform monthly site stormwater inspections and document
- Sweep paved surfaces weekly during spring through fall months
- Jet and vactor site on-site storm sewer catch basins weekly
- Minimize storage of asphalt scrubber sediment
- Keep black dirt pile covered
- Evaluation of stormwater storage BMP needs for new wastes that may come to the site

Facility Stormwater Best Management Practices

- Como and Western Stormwater Management Policy
- Como and Western Stormwater Inspection Plan and Checklist
- Como and Western Site Stormwater Improvement Plan

Como and Western Stormwater Quality Management Policy

- Policy Statement:

The Saint Paul Sewer Utility uses the Como and Western facility to stockpile and dewater sediment obtained from cleaning City storm mains and structures. Accumulated sediment is dewatered at the facility and then trucked for off-site disposal once the facility has reached its holding capacity.

- Reason for the Policy:

This policy has been implemented to standardize how:

- Vector trucks are dumped.
- The site is maintained.
- Stockpiled material is dried
- Sediment transport from the site by stormwater is minimized.

Como and Western Site Stormwater Inspection Plan and Checklist

The City of St. Paul Public Works Department uses the Como & Western site to store various materials including: street sweepings, concrete, bricks, bituminous, brush, and storm sewer sediment. The purpose of the Como and Western storm water management plan is to employ practices that will minimize sediment transport from the site thereby improving the quality of stormwater that leaves the site.

BRAUN INTERTEC

The Science You Build On.

SAINT PAUL

CITY OF ST. PAUL
419 BURGESS STREET FACILITY STORMWATER MANAGEMENT PLAN

December, 2020

Goal of the 419 Burgess Stormwater Management Plan

- To develop and maintain an ongoing effort to manage the stormwater quality responsibly related to stormwater runoff from the property

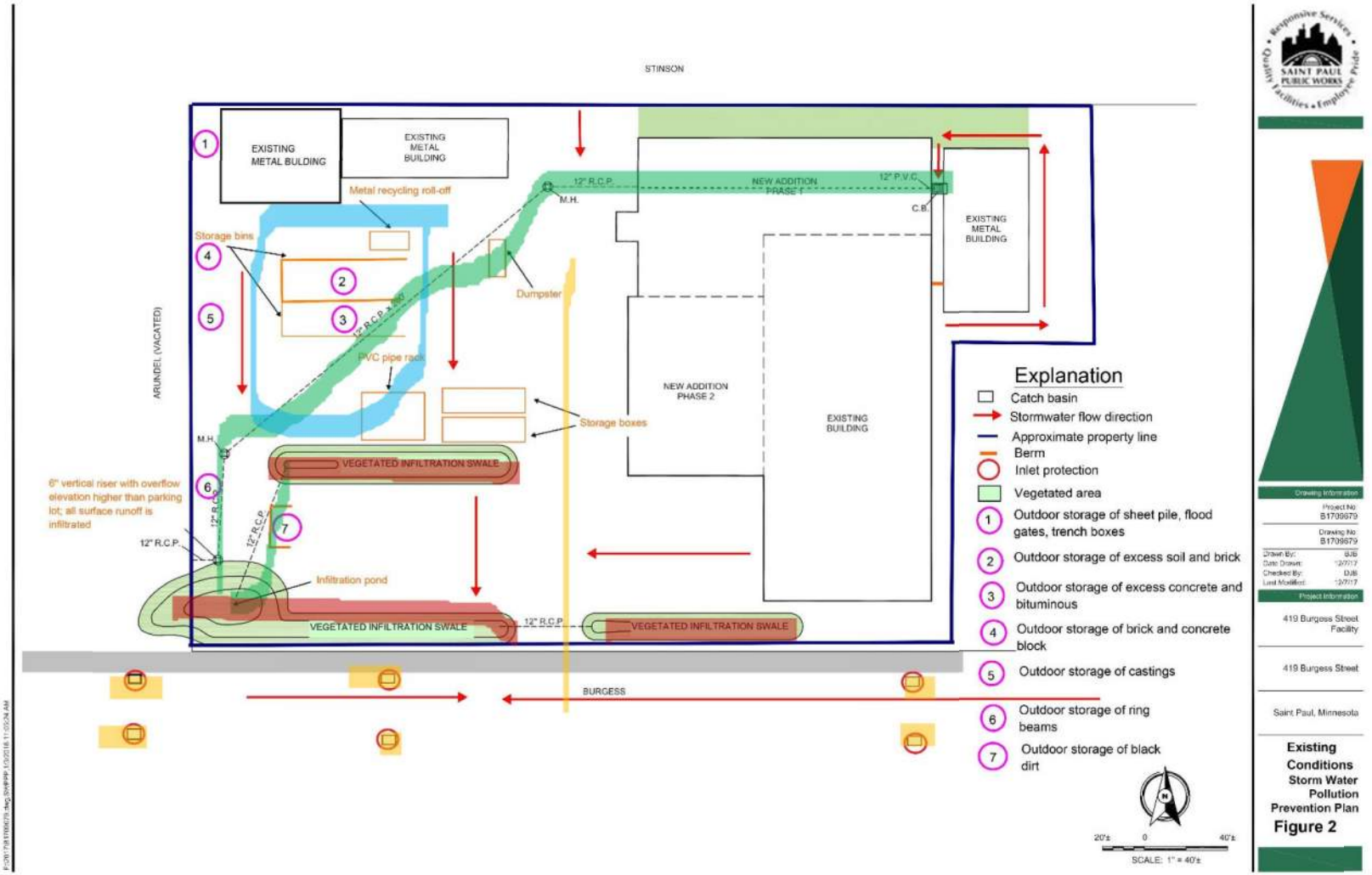
Materials Currently Exposed to Stormwater at the Facility

- Sheet pile, flood gates, trench boxes
- Excess soil and occasional brick
- Excess concrete and bituminous
- Clay, brick and concrete block
- Metal castings
- Ring beams
- Excess black dirt

Existing On-site Stormwater Facilities

- Three vegetated infiltration swales
- Soil, brick and concrete storage bins

BRAUN INTERTEC



Facility Stormwater Best Management Practices

Structural BMPs

- Weekly maintenance of the inlet protection of the 6 catch basins along Burgess Street.

Non-structural BMPs

- Keep dumpster lids closed when not adding waste
- Perform monthly site stormwater inspections and document
- Sweep paved surfaces weekly during spring through fall months
- Sweep up concrete waste from poured catch basin bottoms promptly
- Jet and vactor site 12” storm sewer annually
- Keep black dirt pile covered

Facility Stormwater Best Management Practices

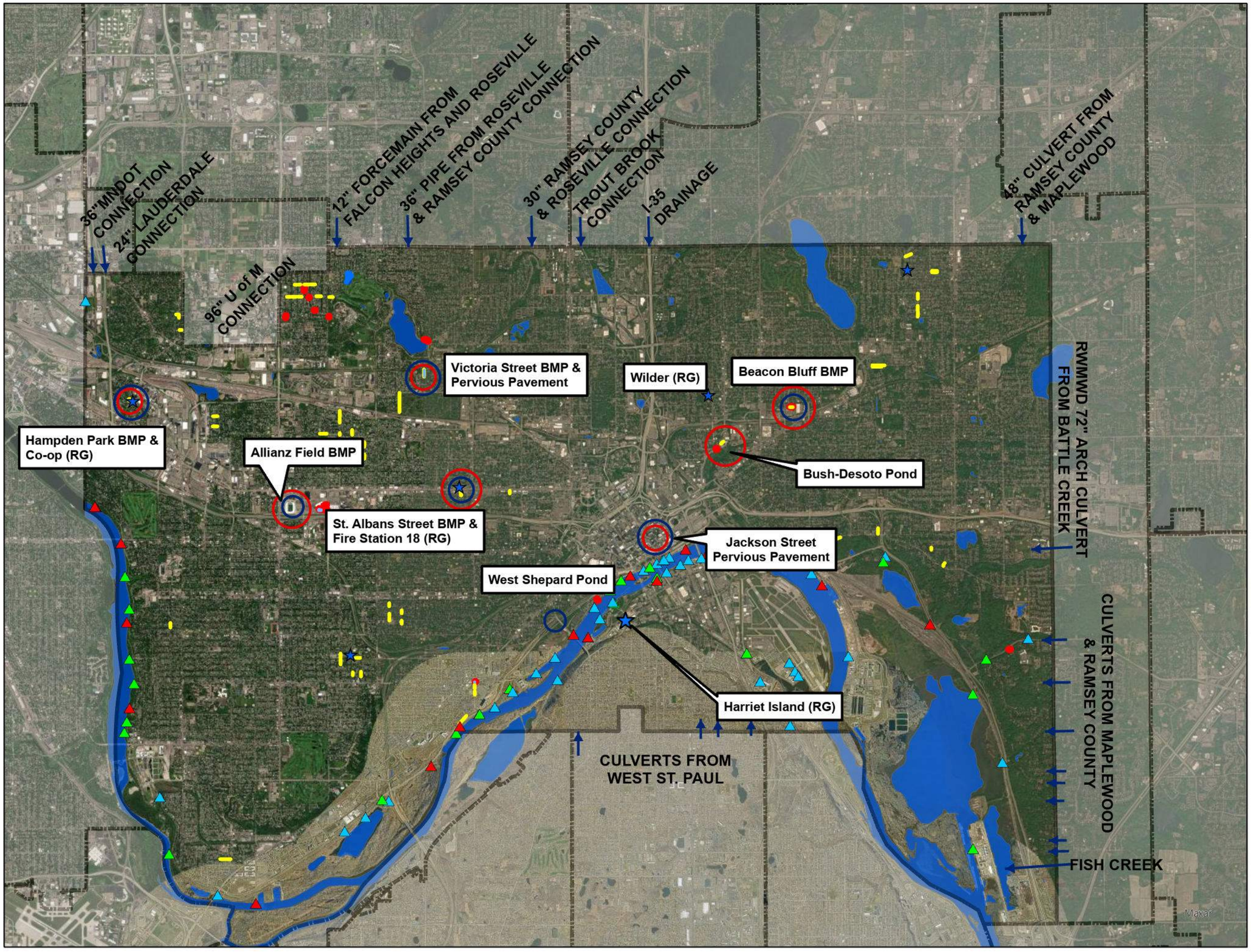
- City of St. Paul Stormwater Management Policy
- 419 Burgess Street Weekly Inspection

City of St. Paul

2024 Water Quantity & Quality Monitoring Program

SAINT PAUL
MINNESOTA

2024 Monitoring Site Locations



N
W E
S

0 2,500 5,000 10,000
Feet

Legend

- Raingarden/Infiltration Basin
- Infiltration Trench
- Pervious Pavement
- Capitol Region Watershed District
- Lower Mississippi River WMO
- Mississippi WMO
- Ramsey/Washington/Metro WD
- 2024 Monitoring Locations
- 2025 Proposed Monitoring Locations
- Rain Gauge Locations

Outfalls

- 30" - 48"
- 50" - 72"
- > 72"

wsb

12. City-wide Loading Assessment

12.1. 2024 Pollutant Loading Calculations

Monitoring major outfalls within the City of Saint Paul was completed by the Capitol Region Watershed District (CRWD) in 2024. Annual and seasonal pollutant loads were estimated for each subwatershed within the city for the loading parameters identified in the City's MS4 permit which include chloride (Cl), Total Kjeldahl Nitrogen (TKN), Total Phosphorus (TP), Nitrate Plus Nitrite (NO3 +NO2), Total Suspended Solids (TSS), and Volatile Suspended Solids (VSS). The subwatersheds within the City are included in **Table 12-1** below.

Monitoring data collected by CRWD from the following subwatersheds was utilized for this assessment: East Kittsondale, St. Anthony Park, and Trout Brook. Monitoring of each subwatershed was completed at or near the outfall. The stations were configured to collect continuous flow measurements, and water quality, in accordance with the City's MS4 Permit.

Table 12-1 Watershed Inventory

Watershed	Area [acre]	Runoff Coefficient [.]	Rainfall Station
Battle Creek	1106	0.54	Trout Brook
Beaver Lake	192	0.33	Trout Brook
Belt Line	3014	0.55	Trout Brook
Crosby	1679	0.45	Hampden Park Co-op
Davern	1302	0.55	Hampden Park Co-op
Downtown	550	0.75	CWRD Office
East Kittsondale	1872	0.62	CWRD Office
Fish Creek	46	0.52	Trout Brook
Goodrich/Western	424	0.63	CWRD Office
Griffith/Pt. Douglas	460	0.61	Trout Brook
Hidden Falls	313	0.55	Hampden Park Co-op
Highwood	1123	0.50	Trout Brook
Lake Como	1294	0.47	Hampden Park Co-op
Lake Phalen	1013	0.42	Trout Brook
Mississippi River Blvd.	2391	0.58	Hampden Park Co-op
MRWMO	135	0.70	Hampden Park Co-op
Phalen Creek	1405	0.62	Trout Brook
Pigs Eye	3001	0.40	Trout Brook
Riverview	1017	0.57	Trout Brook
St. Anthony Hill	2651	0.64	CWRD Office
St. Anthony Park	2481	0.68	Hampden Park Co-op
Trout Brook	3963	0.62	Trout Brook
Urban	327	0.57	Trout Brook
West Kittsondale	1042	0.67	Hampden Park Co-op
West Seventh	451	0.60	CWRD Office

Monitored Subwatershed

Annual and seasonal city-wide flow-weighted averages were calculated for each of the loading pollutants from the monitored outfall data. TKN, TP, TSS and VSS loads were generated by CRWD in the WISKI data management program. This allowed for the extraction of baseflow and the associated load from the event load for those parameters. Cl and NO_2+NO_3 loads were calculated for the event-based volume (baseflow volume extracted), although the base flow loading for those parameters was not extracted. The following formula was used to calculate the annual/seasonal flow weighted mean concentrations (**Table 12-2**):

$$C = \frac{\sum(F_i \times C_i)}{\sum(F_i)}$$

C = annual/seasonal flow weighted mean concentration [mg/L]*
F_i = the event-based flow for an individual event [cf]
C_i = the pollutant concentration for an individual event [mg/L]

*As described above, the flow-weighted mean concentration for TKN, TP, TSS, and VSS, was calculated from loads generated in the WISKI program, which extracted baseflow loading (not reflected in the formula above)

Table 12-2: City-wide Annual and Seasonal Flow-weighted Mean Concentrations

Parameter	Cl	TKN	TP	NO_2+NO_3	TSS	VSS
Units	[mg/L]	[mg/L]	[mg/L]	[mg/L]	[mg/L]	[mg/L]
Annual	279.2	2.0	0.40	0.62	201.0	47.7
Q1 (Jan-Mar)	824.1	2.4	0.35	0.76	228.6	44.7
Q2 (Apr-Jun)	242.7	2.0	0.35	0.60	218.0	52.5
Q3 (Jul-Sep)	224.8	1.8	0.37	0.59	189.5	40.5
Q4 (Oct-Dec)	331.9	2.0	0.61	0.70	167.4	50.3

Based on these calculated flow-weighted mean concentrations, the Simple Method was used to calculate each subwatershed's pollutant loading. Loads for the four monitored subwatersheds were generated using actual monitored loads. The Simple Method is shown below:

$$L = 2.72\left(\frac{PP_jR_v}{12}\right)(CA)$$

L = pollutant loading for the year/season [lb]
P = rainfall depth for the year/season [in]
P_j = correction factor for storms that produce no runoff [.]
R_v = runoff coefficient [.]
C = flow-weighted mean concentration [mg/L]
A = area of the watershed [acre]

Values used in loading calculations:
R_v and A = Table 1
C = Table 2
P = Table 3
P_j = 0.85

The annual/seasonal precipitation totals for four different rainfall monitoring locations in St. Paul are provided in **Section 3** the **Table 3-1**. Each subwatershed was assigned precipitation data from the nearest precipitation monitoring site (see **Table 12-1** for assignments). The rainfall data was used as an input to the Simple Method for load calculations, as described above. Rain data outside the seasonal monitoring period was supplemented with data from the University of Minnesota – St. Paul.

The annual and seasonal pollutant loads for each of the City's subwatersheds are presented in **Tables 12-3 – 12-7**. Loads for the five monitored sites are actual totals calculated for each station. Those sites are highlighted blue.

Table 12-3. Annual Pollutant Loadings (lbs)

Subwatershed	Cl	TKN	Total P	NO2+NO3	TSS	VSS
Battle Creek	1055249	7392	1509	2339	759797	180218
Beaver Lake	111949	784	160	248	80605	19119
Belt Line	2928950	20516	4189	6491	2108894	500214
Crosby	1359752	9525	1945	3013	979045	232222
Davern	1288754	9027	1843	2856	927925	220097
Downtown	819358	5739	1172	1816	589952	139932
East Kittsondale	190398	4532	863	747	308190	118153
Fish Creek	42264	296	60	94	30431	7218
Goodrich/Western	530587	3717	759	1176	382031	90615
Griffith/Pt. Douglas	495785	3473	709	1099	356974	84672
Hidden Falls	309816	2170	443	687	223073	52911
Highwood	992101	6949	1419	2199	714329	169434
Lake Como	1094532	7667	1565	2426	788082	186927
Lake Phalen	751735	5266	1075	1666	541262	128383
Mississippi River Blvd.	2495767	17482	3569	5531	1796995	426234
MRWMO	170070	1191	243	377	122453	29045
Phalen Creek	226734	4292	781	844	361245	119124
Pigs Eye	2120957	14857	3033	4700	1527126	362223
Riverview	1024240	7175	1465	2270	737470	174923
St. Anthony Hill	3370075	23606	4820	7469	2426512	575551
St. Anthony Park	311400	7306	1203	1859	558390	219637
Trout Brook	89389	4067	993	670	285181	91275
Urban	329328	2307	471	730	237122	56244
West Kittsondale	1256432	8801	1797	2784	904653	214577
West Seventh	537499	3765	769	1191	387009	91796

Table 12-4: Q1 (Jan-Mar) Pollutant Loading (lbs)

Subwatershed	Cl	TKN	Total P	NO2+NO3	TSS	VSS
Battle Creek	312924	922	132	287	86797	16969
Beaver Lake	33197	98	14	30	9208	1800
Belt Line	868551	2558	367	797	240915	47099
Crosby	395870	1166	167	363	109805	21467
Davern	375200	1105	158	344	104072	20346
Downtown	109374	322	46	100	30338	5931
East Kittsondale	171790	1622	215	239	73959	30143
Fish Creek	12533	37	5	11	3476	680
Goodrich/Western	70827	209	30	65	19646	3841
Griffith/Pt. Douglas	147020	433	62	135	40780	7972
Hidden Falls	90198	266	38	83	25019	4891
Highwood	294198	866	124	270	81603	15954
Lake Como	318656	939	135	292	88387	17280
Lake Phalen	222920	657	94	205	61833	12088
Mississippi River Blvd.	726603	2140	307	667	201542	39402
MRWMO	49513	146	21	45	13734	2685
Phalen Creek	184841	1157	230	292	112173	32210
Pigs Eye	628949	1852	266	577	174455	34106
Riverview	303728	895	128	279	84247	16470
St. Anthony Hill	449864	1325	190	413	124782	24395
St. Anthony Park	194500	1164	139	422	64688	17522
Trout Brook	21816	668	124	63	45075	12920
Urban	97659	288	41	90	27088	5296
West Kittsondale	365790	1077	155	336	101461	19836
West Seventh	71750	211	30	66	19902	3891

Table 12-5: Q2 (Apr-Jun) Pollutant Loading (lbs)

Subwatershed	Cl	TKN	Total P	NO2+NO3	TSS	VSS
Battle Creek	449989	3738	656	1112	404083	97233
Beaver Lake	47738	397	70	118	42868	10315
Belt Line	1248991	10374	1820	3086	1121573	269880
Crosby	546653	4540	797	1351	490885	118120
Davern	518110	4303	755	1280	465254	111952
Downtown	398577	3311	581	985	357915	86124
East Kittsondale	10927	1772	325	277	134710	55330
Fish Creek	18022	150	26	45	16184	3894
Goodrich/Western	258104	2144	376	638	231773	55771
Griffith/Pt. Douglas	211418	1756	308	522	189849	45683
Hidden Falls	124553	1035	182	308	111847	26913
Highwood	423061	3514	616	1045	379902	91414
Lake Como	440028	3655	641	1087	395138	95080
Lake Phalen	320562	2663	467	792	287859	69266
Mississippi River Blvd.	1003358	8334	1462	2479	900998	216804
MRWMO	68372	568	100	169	61397	14774
Phalen Creek	7719	861	150	191	62654	25113
Pigs Eye	904439	7512	1318	2234	812171	195430
Riverview	436766	3628	636	1079	392209	94376
St. Anthony Hill	1639373	13616	2389	4050	1472129	354233
St. Anthony Park	42770	1996	320	462	204440	71069
Trout Brook	20711	1084	269	169	77410	25208
Urban	140435	1166	205	347	126108	30345
West Kittsondale	505115	4195	736	1248	453585	109144
West Seventh	261466	2172	381	646	234792	56497

Table 12-6: Q3 (Jul-Sep) Pollutant Loading

Subwatershed	Cl	TKN	Total P	NO2+NO3	TSS	VSS
Battle Creek	256608	2030	422	671	216359	46178
Beaver Lake	27223	215	45	71	22953	4899
Belt Line	712242	5635	1171	1862	600525	128173
Crosby	394658	3122	649	1032	332755	71021
Davern	374051	2959	615	978	315380	67313
Downtown	198137	1568	326	518	167059	35656
East Kittsondale	5317	980	182	188	81703	28833
Fish Creek	10277	81	17	27	8665	1849
Goodrich/Western	128306	1015	211	336	108181	23090
Griffith/Pt. Douglas	120562	954	198	315	101651	21696
Hidden Falls	89922	711	148	235	75817	16182
Highwood	241252	1909	397	631	203411	43415
Lake Como	317680	2513	522	831	267851	57169
Lake Phalen	182802	1446	301	478	154129	32896
Mississippi River Blvd.	724377	5731	1191	1894	610757	130357
MRWMO	49362	391	81	129	41619	8883
Phalen Creek	6253	2050	346	268	176292	56646
Pigs Eye	515760	4081	848	1349	434862	92815
Riverview	249068	1971	409	651	210001	44822
St. Anthony Hill	814950	6448	1340	2131	687123	146656
St. Anthony Park	51793	3969	704	892	278316	51793
Trout Brook	35340	2008	482	377	125182	39235
Urban	80084	634	132	209	67522	14412
West Kittsondale	364670	2885	599	954	307470	65625
West Seventh	129978	1028	214	340	109590	23390

Table 12-7: Q4 (Oct-Dec) Pollutant Loading (lbs)

Subwatershed	Cl	TKN	Total P	NO2+NO3	TSS	VSS
Battle Creek	181007	1098	335	381	91331	27450
Beaver Lake	19203	116	35	40	9689	2912
Belt Line	502403	3047	928	1057	253497	76190
Crosby	185991	1128	344	391	93845	28206
Davern	176280	1069	326	371	88945	26733
Downtown	124754	757	231	262	62947	18919
East Kittsondale	2364	158	141	43	17818	3846
Fish Creek	7249	44	13	15	3658	1099
Goodrich/Western	80786	490	149	170	40762	12251
Griffith/Pt. Douglas	85042	516	157	179	42910	12897
Hidden Falls	42378	257	78	89	21382	6427
Highwood	170175	1032	314	358	85865	25807
Lake Como	149713	908	277	315	75541	22704
Lake Phalen	269860	1637	499	568	136163	40924
Mississippi River Blvd.	341378	2071	631	718	172249	51770
MRWMO	23263	141	43	49	11738	3528
Phalen Creek	27921	225	55	93	10126	5155
Pigs Eye	363808	2207	672	765	183566	55172
Riverview	175688	1066	325	369	88647	26643
St. Anthony Hill	513120	3112	948	1079	258904	77815
St. Anthony Park	22338	177	40	84	10946	22338
Trout Brook	11522	307	118	61	37514	13912
Urban	56490	343	104	119	28503	8567
West Kittsondale	171859	1042	318	361	86715	26062
West Seventh	81838	496	151	172	41293	12411

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

TMDL Annual Report Form

Municipal Separate Storm Sewer Systems (MS4) Program

Doc Type: Annual Report

Form Information

This form is to be completed annually by MS4s in order to track the completed BMP activities and to calculate the cumulative loading reduction for specific pollutants of concern associated with each applicable WLA. Navigate through this form using the tabs at the bottom of the page. All information is collected in accordance with Part III.E of the MS4 Permit.

Green Tabs (REQUIRED): user-input worksheet
Blue Tabs (hidden*): optional user-input worksheet
Yellow Tabs (hidden*): reference worksheet

*Reveal hidden spreadsheet tabs by navigating to Home->Cells->Format->Hide & Unhide->Unhide Sheet

Please refer to the Guidance for Completing the TMDL Reporting Form in the Minnesota Stormwater Manual for additional assistance and instructions. Sections of the guidance are hyperlinked throughout this spreadsheet.

User Information

Date Updated: 4/8/2024

Permittee: St. Paul

Permit ID: MN0061263

Contact Name: Huong Hoang

Contact Phone: 651-266-6231

Contact email: huong.hoang@ci.stpaul.mn.us

Mailing address: 25 W 4th St, St. Paul, MN 55102

Reporting Year	Data Entry Date	Entered by	Notes
2019	4/10/2020	St. Paul Sewers	
2020	3/1/2021	St. Paul Sewers	
2021	4/1/2022	St. Paul Sewers	
2022	4/27/2023	St. Paul Sewers	
2023	4/12/2024	St. Paul Sewers	
2024	4/8/2025	St. Paul Sewers	

BMP - Activities Completed Spreadsheet

For MPCA use only			Required		Optional	Required						Optional		Required: Place an "X" in a cell if the BMP applies to the TMDL shown in the column					
Entry ID	Permittee	MS4 ID	Reporting year	BMP/Activity	BMP Description	Location and ID information Needed?	BMP ID	y-coord (lat, e.g. 44.9866)	x-coord (long, e.g. -93.2581)	Coordinate system (e.g. lat-long, UTM)	Who owns this BMP/activity?	If applicable, name other owner(s)	Year when BMP was implemented	Note(s)	Como Lake: Excess Nutrients TMDL Como Lake - Phosphorus	South Metro Mississippi River TMDL (Metro) South Metro Mississippi River TMDL (Metro) - TSS	Twin Cities Metro Area Chloride TMDL Battle Creek; Como Lake; Kasota Ponds North; Kasota Ponds West; Mallard Marsh -	Ramsey-Washington Metro Watershed District TMDL Battle Creek -TSS	Ramsey-Washington Metro Watershed District TMDL Fish Creek - E. coli	Ramsey-Washington Metro Watershed District TMDL Wakefield Lake - Phosphorus
MN0061263-1	St. Paul	MN0061263																		
MN0061263-2	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1501994	44.9387	-93.1441	Lat-long	Permittee (you)	NA	2006	Chatsworth-Goodrich Trench at Lincoln and Oxford		X				
MN0061263-3	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1501991	44.9371	-93.144	Lat-long	Permittee (you)	NA	2006	Chatsworth-Goodrich Trench at Fairmount and Oxford (North)		X				
MN0061263-4	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1501991	44.9364	-93.144	Lat-long	Permittee (you)	NA	2006	Chatsworth-Goodrich Trench at Fairmount and Oxford (South)		X				
MN0061263-5	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1501997	44.9377	-93.1415	Lat-long	Permittee (you)	NA	2006	Chatsworth-Goodrich Trench at Chatsworth and Goodrich		X				
MN0061263-6	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1501995	44.936	-93.1415	Lat-long	Permittee (you)	NA	2006	Chatsworth-Goodrich Trench at Chatsworth and Osceola		X				
MN0061263-7	St. Paul	MN0061263	2019	Infiltrator	Bioretention with no underdrain (rain garden)	Complete columns H through K	1502184	44.9317	-93.014	Lat-long	Permittee (you)	NA	2006	Londin Lane-Burlington Road Reconstruction		X				
MN0061263-8	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502009	44.9641	-93.1578	Lat-long	Permittee (you)	NA	2007	Hubbard/Griggs Trench at Hamline and Englewood		X				
MN0061263-9	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502012	44.9641	-93.1542	Lat-long	Permittee (you)	NA	2007	Hubbard/Griggs Trench at Syndicate and Englewood		X				
MN0061263-10	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502020	44.9643	-93.1517	Lat-long	Permittee (you)	NA	2007	Hubbard/Griggs Trench at Griggs and Englewood		X				
MN0061263-11	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502014	44.9661	-93.1542	Lat-long	Permittee (you)	NA	2007	Hubbard/Griggs Trench at Syndicate and Hubbard		X				
MN0061263-12	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502015	44.9668	-93.1542	Lat-long	Permittee (you)	NA	2007	Hubbard/Griggs Trench at Syndicate and Hewitt		X				
MN0061263-13	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502015	44.9672	-93.1543	Lat-long	Permittee (you)	NA	2007	Hubbard/Griggs Trench at Syndicate and Taylor		X				
MN0061263-14	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502027	44.9285	-93.1517	Lat-long	Permittee (you)	NA	2007	Jefferson/Griggs Trench at Palace and Griggs		X				
MN0061263-15	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502030	44.9283	-93.1503	Lat-long	Permittee (you)	NA	2007	Jefferson/Griggs Trench at Palace and Edgecumbe		X				
MN0061263-16	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502025	44.9301	-93.1543	Lat-long	Permittee (you)	NA	2007	Jefferson/Griggs Trench at Syndicate and Juliet		X				
MN0061263-17	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502026	44.9311	-93.1543	Lat-long	Permittee (you)	NA	2007	Jefferson/Griggs Trench at Syndicate and Wellesley		X				
MN0061263-18	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1432139	44.9904	-93.035	Lat-long	Permittee (you)	NA	2007	White Bear/Burns Trench at Christie and Idaho		X				
MN0061263-19	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1432139	44.9467	-93.0303	Lat-long	Permittee (you)	NA	2007	White Bear/Burns Trench at Kennard and Louise				X		
MN0061263-20	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1432136	44.9445	-93.0277	Lat-long	Permittee (you)	NA	2007	White Bear/Burns Trench at Flandrau and Upper Afton				X		
MN0061263-21	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502120	44.9465	-93.0557	Lat-long	Permittee (you)	NA	2008	Earl/McLean Trench at Mounds and Earl		X				
MN0061263-22	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502117	44.9461	-93.0533	Lat-long	Permittee (you)	NA	2008	Middle Trench on Mounds (Earl/McLean)		X				
MN0061263-23	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502118	44.9482	-93.0501	Lat-long	Permittee (you)	NA	2008	Easternmost Trench on Mounds (Earl/McLean)		X				
MN0061263-24	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502116	44.9473	-93.0543	Lat-long	Permittee (you)	NA	2008	Earl/McLean Trench at Frank and Thom		X				
MN0061263-25	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502121	44.9493	-93.0414	Lat-long	Permittee (you)	NA	2008	Earl/McLean Trench at Elma and Burns		X				
MN0061263-26	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502115	44.9843	-93.0329	Lat-long	Permittee (you)	NA	2008	Ivy/Kennard Trench at Germain and Sherwood		X				
MN0061263-27	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502111	44.9825	-93.0329	Lat-long	Permittee (you)	NA	2008	Ivy/Kennard Trench at Germain and Cottage		X				
MN0061263-28	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502111	44.9816	-93.0329	Lat-long	Permittee (you)	NA	2008	Ivy/Kennard Trench at Germain and Ivy		X				
MN0061263-29	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502099	44.9215	-93.1287	Lat-long	Permittee (you)	NA	2008	Seventh/Bay Trench at Bay and Butternut		X				
MN0061263-30	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502192	44.9819	-93.1884	Lat-long	Permittee (you)	NA	2009	Knapp/Raymond Trench on Carter		X				
MN0061263-31	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502199	44.9816	-93.1888	Lat-long	Permittee (you)	NA	2009	Knapp/Raymond Trench in Alley		X				
MN0061263-32	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502195	44.9797	-93.1877	Lat-long	Permittee (you)	NA	2009	Knapp/Raymond Trench on Knapp		X				
MN0061263-33	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502536	44.9357	-93.19	Lat-long	Permittee (you)	NA	2009	Cretin/Goodrich Trench at Sargent and Finn		X				
MN0061263-34	St. Paul	MN0061263	2019	Filter	Bioretention with underdrain (rain garden)	Complete columns H through K	1502546	44.978	-93.1359	Lat-long	Permittee (you)	NA	2009	Victoria/Arlington Trench at Como Lake Dr and Maryland	X					
MN0061263-35	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502548	44.9626	-93.0741	Lat-long	Permittee (you)	NA	2009	Payne Trench at Payne and Minnehaha		X				
MN0061263-36	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1216132	44.9552	-93.1289	Lat-long	Permittee (you)	NA	2010	St Albans Trench Aurora to University		X				
MN0061263-37	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1216137	44.9554	-93.1187	Lat-long	Permittee (you)	NA	2010	Arundel Trench Aurora to University		X				
MN0061263-38	St. Paul	MN0061263	2019	Infiltrator	Infiltration basin	Complete columns H through K	1216123	44.9731	-93.1365	Lat-long	Permittee (you)	NA	2010	Front/Victoria Trench at Victoria and Orchard	X					
MN0061263-39	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502554	44.9698	-93.1415	Lat-long	Permittee (you)	NA	2010	Front/Victoria Trench at Chatsworth and Front	X					
MN0061263-40	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502554	44.9688	-93.1416	Lat-long	Permittee (you)	NA	2010	Front/Victoria Trench at Chatsworth and Burgess	X					
MN0061263-41	St. Paul	MN0061263	2019	Infiltrator	Underground infiltration	Complete columns H through K	1718554	44.9732	-93.1385	Lat-long	Permittee (you)	NA	2010	Infiltration Manhole on Colne Street	X					
MN0061263-42	St. Paul	MN0061263	2019	Infiltrator	Underground infiltration	Complete columns H through K	1718552	44.9735	-93.1395	Lat-long	Permittee (you)	NA	2010	Infiltration Manhole on Ryde Street	X					
MN0061263-43	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1227690	44.9678	-93.0599	Lat-long	Permittee (you)	NA	2010	Beacon/Bluff Infiltration system at Wells/Duchess		X				
MN0061263-44	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502575	44.961	-93.1543	Lat-long	Permittee (you)	NA	2011	Blair/Griggs Trench at Syndicate and Blair		X				
MN0061263-45	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502576	44.96	-93.1517	Lat-long	Permittee (you)	NA	2011	Blair/Griggs Trench at Griggs and Lafond		X				
MN0061263-46	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502577	44.96	-93.1492	Lat-long	Permittee (you)	NA	2011	Blair/Griggs Trench at Dunlap and Lafond		X				
MN0061263-47	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502578	44.9624	-93.1492	Lat-long	Permittee (you)	NA	2011	Blair/Griggs Trench at Dunlap and Van Buren		X				
MN0061263-48	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502657	44.9668	-93.1804	Lat-long	Permittee (you)	NA	2012	Hewitt/Tatum Trench at Tatum and Hewitt		X				
MN0061263-49	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502656	44.9652	-93.1804	Lat-long	Permittee (you)	NA	2012	Hewitt/Tatum Trench at Tatum and Pennock		X				
MN0061263-50	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502658	44.9008	-93.1792	Lat-long	Permittee (you)	NA	2012	Madison/Benson Trench at Sue and Wordsworth		X				
MN0061263-51	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502658	44.9008	-93.178	Lat-long	Permittee (you)	NA	2012	Madison/Benson Trench at Edgecumbe and Wordsworth		X				
MN0061263-52	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502660	44.9879	-93.0295	Lat-long	Permittee (you)	NA	2012	Hillcrest Knoll Park and Dale Street stormwater improvement at Hillcrest Knoll Park		X				
MN0061263-53	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1502661	44.9694	-93.1985	Lat-long	Permittee (you)	NA	2013	Hampden Park Trench		X				
MN0061263-54	St. Paul	MN0061263	2019	Filter	Iron enhanced filter	Complete columns H through K	1615136	44.9761	-93.0929	Lat-long	Permittee (you)	NA	2014	Trout Brook Nature Sanctuary (South of Maryland)		X				
MN0061263-55	St. Paul	MN0061263	2019	Filter	Iron enhanced filter	Complete columns H through K	1615151	44.9741	-93.0931	Lat-long	Permittee (you)	NA	2014	Trout Brook Nature Sanctuary (at Magnolia Ave)		X				
MN0061263-56	St. Paul	MN0061263	2019	Filter	Iron enhanced filter	Complete columns H through K	1615153	44.9711	-93.0922	Lat-long	Permittee (you)	NA	2014	Trout Brook Nature Sanctuary (at Jenks Ave)		X				
MN0061263-57	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1613993	44.9483	-93.1165	Lat-long	Permittee (you)	NA	2014	Western Ave Trench at Western and Marshall		X				
MN0061263-58	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1718556	44.9124	-93.1678	Lat-long	Permittee (you)	NA	2014	Montreal Ave Trench at Montreal and Snelling		X				
MN0061263-59	St. Paul	MN0061263	2019	Infiltrator	Bioretention with no underdrain (rain garden)	Complete columns H through K	1718548	44.9771	-93.145	Lat-long	Permittee (you)	NA	2015	Como-Chatsworth Filtration Basin (East) at Horton and Churchill	X					
MN0061263-60	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1718548	44.9772	-93.1446	Lat-long	Permittee (you)	NA	2015	Como-Chatsworth Filtration Basin (West) at Como and Churchill	X					
MN0061263-61	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1718536	44.9746727	-93.137728	Lat-long	Permittee (you)	NA	2016	Como-Chatsworth Phase II Trench	X					
MN0061263-62	St. Paul	MN0061263	2019	Manufactured_device	SAFL Baffle	No ID information needed	1705329	44.9579816	-93.0916384	Lat-long	Permittee (you)	NA	2016	University Ave Trench at 12th St		X				
MN0061263-63	St. Paul	MN0061263	2019	Manufactured_device	SAFL Baffle	No ID information needed	1718561	44.976571	-93.190874	Lat-long	Permittee (you)	NA	2016	Raymond Ave Phase III Trench at Priscilla		X				
MN0061263-64	St. Paul	MN0061263	2019	Manufactured_device	SAFL Baffle	No ID information needed	1718564	44.973888	-93.1465827	Lat-long	Permittee (you)	NA	2016	McMurray Field at Lexington and Jessamine	X					
MN0061263-65	St. Paul	MN0061263	2019	Manufactured_device	SAFL Baffle	No ID information needed	1806449	44.9795891	93.1931973	Lat-long	Permittee (you)	NA	2017	Como 2017 Trench at Hillside		X				
MN0061263-66	St. Paul	MN0061263	2019	Manufactured_device	SAFL Baffle	No ID information needed	1802711	44.9756049	-93.1356788	Lat-long	Permittee (you)	NA	2017	Como Park HS at Rose	X					
MN0061263-67	St. Paul	MN0061263	2019	Manufactured_device	Gross pollutant trap	No ID information needed	1806439	44.9775139	-93.1354225	Lat-long	Permittee (you)	NA	2017	Wheelock Parkway-CDS structure at Victoria	X					
MN0061263-68	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1806440	44.9805571	-93.130087	Lat-long	Permittee (you)	NA	2017	Wheelock Parkway Trench at Alameda	X					
MN0061263-69	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1806453	44.9419077	-93.0202492	Lat-long	Permittee (you)	NA	2017	Battle Creek Trench at Upper Afton				X		
MN0061263-70	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1806457	44.9900725	-93.0479802	Lat-long	Permittee (you)	NA	2017	Idaho-Atlantic at Atlantic		X				
MN0061263-71	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1806458	44.9900539	-93.0473107	Lat-long	Permittee (you)	NA	2017	Idaho-Atlantic at Chamber		X				
MN0061263-72	St. Paul	MN0061263	2019	Manufactured_device	SAFL Baffle	No ID information needed	1910955	44.9537302	-93.04947254	Lat-long	Permittee (you)	NA	2018	Jackson St at 12 St		X				
MN0061263-73	St. Paul	MN0061263	2019	Manufactured_device	SAFL Baffle	No ID information needed	1910963	44.9306828	-93.1959043	Lat-long	Permittee (you)	NA	2018	Woodlawn-Jefferson at Woodlawn		X				
MN0061263-74	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1910966	44.9828368	-93.1962685	Lat-long	Permittee (you)	NA	2018	Como Ave at Luther		X				
MN0061263-75	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1910973	44.9829326	-93.1185004	Lat-long	Permittee (you)	NA	2018	Wheelock Parkway at Arundel		X				
MN0061263-76	St. Paul	MN0061263	2019	Infiltrator	Infiltration trench	Complete columns H through K	1910989	44.9604272	-93.0461671	Lat-long	Permittee (you)	NA	2018	Marxwrt St at Sieth		X				
MN0061263-77	St. Paul	MN0061263	2019	Infiltrator	Bioretention with no underdrain (rain garden)	Complete columns H through K	1620389	44.9188322	-93.1349173	Lat-long	Permittee (you)	NA	2018	Stewart Rain Garden at Otto		X				
MN0061263-78	St. Paul	MN0061263	2019	Swale_or_strip	Dry swale	Complete columns H through K	884052	44.9739	-93.0411	Lat-long	Permittee (you)	NA	2009	Vegetated Swale on Magnolia (Mechanic to Barclay)		X				
MN0061263-79	St. Paul	MN0061263	2019	Swale_or_strip	Dry swale	Complete columns H through K	884050	44.9703	-93.0525	Lat-long	Permittee (you)	NA	2009	Vegetated Swale on Case (Frank to Duluth)		X				
MN0061263-80	St. Paul	MN0061263	2019	Manufactured_device	Gross pollutant trap	No ID information needed	1613674	44.9879	-93.0295	Lat-long	Permittee (you)	NA	2012	Dale Street Stormwater Improvement- Vortech Structure		X				
MN0061263-81	St. Paul	MN0061263	2020	Manufactured_device	Hydrodynamic separator	No ID information needed	2009457	44.920	-93.109	Lat-long	Permittee (you)	NA	2020	Cherokee Heights Stormwater Management and Ravine Stabilization (2 CDS units)		x				
MN0061263-82	St. Paul	MN0061263	2020	Infiltrator	Infiltration trench	Complete columns H through K	2009461	44.953	-93.177	Lat-long	Permittee (you)	NA	2020	Fairview Street Project		x				
MN0061263-83	St. Paul	MN0061263	2020	Infiltrator	Infiltration trench	Complete columns H through K	2009460	44.989	-93.114	Lat-long	Permittee (you)	NA	2020	Wheelock Parkway Sreet Project		x				
MN0061263-84	St. Paul	MN0061263	2020	Infiltrator	Tree trench/tree box/planter	Complete columns H through K	Multiple	44.964	-93.206	Lat-long	Permittee (you)	NA	2020	Weyerhauser Development (multiple tree trenches)		x				
MN0061263-85	St. Paul	MN0061263	2020	Filter	Bioretention with underdrain (rain garden)	Complete columns H through K	2019677	44.941	-93.154	Lat-long	Permittee (you)	NA	2020	Summit Bridge		x				
MN0061263-86	St. Paul	MN0061263	2021	Infiltrator	Infiltration trench	Complete columns H through K	2106010	44.924	-93.150	Lat-long	Permittee (you)	NA	2021	Griggs-Scheffer Phase I /Watsonl		X				
MN0061263-87	St. Paul	MN0061263	2021	Infiltrator	Infiltreation trench	Complete columns H through K	2106006	44.922	-93.150	Lat-long	Permittee (you)	NA	2021	Griggs-Scheffer Phase I (Bayard)		X				
MN0061263-88	St. Paul	MN0061263	2021	Infiltrator	Infiltration trench	Complete columns H through K	2106023	44.959	-93.082	Lat-long	Permittee (you)	NA	2021	Tedesco-Payne		X				
MN0061263-89	St. Paul	MN0061263	2021	Filter	Media filter	Complete columns H through K	Multiple	44.953	-93.165	Lat-long	Permittee (you)	NA	2020	Snelling-Midway (multiple tree trenches)		X				
MN0061263-90	St. Paul	MN0061263	2021	Stormwater_reuse	Underground vault	No ID information needed	NA	44.954	-93.165	Lat-long	Permittee (you)	NA	2020	Snelling-Midway Reuse System		X				
MN0061263-91	St. Paul	MN0061263	2021	Supplemental_public_education_outreach	Publications	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Adopt-a-Drain Education Program	X	X	X	X	X	X
MN0061263-92	St. Paul	MN0061263	2021	Supplemental_public_education_outreach	Publications	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Water Quality Education Program	X	X	X	X	X	X
MN0061263-93	St. Paul	MN0061263	2021	Supplemental_public_education_outreach	Publications	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Watershed Partners and Clean Water MN	X	X	X	X	X	X
MN0061263-94	St. Paul	MN0061263	2021	Supplemental_employee_education_training	Staff training	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Annual Utility Coordination Meeting Training	X	X	X	X	X	X
MN0061263-95	St. Paul	MN0061263	2021	Manufactured_device	Sump	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Catch Basin/ Manhole Operation and Maintenance	X	X		X		X
MN0061263-96	St. Paul	MN0061263	2021	Manufactured_device	Water quality inlet	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Outfall Operation and Maintenance	X	X		X		X
MN0061263-97	St. Paul	MN0061263	2021	Manufactured_device	Sump	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Stormwater Pond/Structural Pollution Control Device Operation and Maintenance	X	X		X		X
MN0061263-98	St. Paul	MN0061263	2021	Manufactured_device	Sump	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Handling and Disposal of Removed Materials	X	X		X		X
MN0061263-99	St. Paul	MN0061263	2021	Enhanced_road_salt_management	Salt storage	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Roadway Deicing Materials Management			X			
MN0061263-100	St. Paul	MN0061263	2021	Enhanced_road_salt_management	Winter maintenance education	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Snow Operations Plan			X			
MN0061263-101	St. Paul	MN0061263	2021	Enhanced_road_salt_management	Winter maintenance education	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Snow and Ice Control Annual Training			X			
MN0061263-102	St. Paul	MN0061263	2021	Supplemental_street_sweeping	Street sweeping	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Street Sweesine Proaram	X	X	X	X	X	X
MN0061263-103	St. Paul	MN0061263	2021	Supplemental_public_education_outreach	Publications	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Public Education Program	X	X	X	X	X	X
MN0061263-104	St. Paul	MN0061263	2021	BMP_improvement_enhancement_retrofitting	BMP improvement	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Stormwater Runoff Volume Reduction	X	X		X		X
MN0061263-105	St. Paul	MN0061263	2021	BMP_improvement_enhancement_retrofitting	BMP maintenance	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2018	Pond Cleanings Completed in 2002, 2003, 2017		X				
MN0061263-106	St. Paul	MN0061263	2022	Infiltrator	Infiltration trench	Complete columns H through K	2204985	44.956	-93.182	Lat-long	Permittee (you)	NA	2022	Prior Ave Street Project		X				
MN0061263-107	St. Paul	MN0061263	2022	Filter	Iron enhanced filter	Complete columns H through K	805013	44.990	-93.083	Lat-long	Permittee (you)	NA	2016	Wheelock Pkwy (Edgemont) IESF		X				
MN0061263-108	St. Paul	MN0061263	2022	Supplemental_public_education_outreach	Publications	No ID information needed	NA	NA	NA	NA	Permittee (you)	NA	2012	Cooperative Monitoring Program	X	X	X	X	X	X
MN0061263-109	St. Paul	MN0061263	2022	Filter	Permeable pavement with underdrain	Complete columns H through K	807334	44.962	-93.166	Lat-long	Permittee (you)	NA	2012	Hamline Midway Permeable Pavement (Permeable Alley)		X				
MN0061263-110	St. Paul	MN0061263	2022	Filter	Bioretention with underdrain (rain garden)	Complete columns H through K	814208	44.967	-93.197	Lat-long	Permittee (you)	NA	2016	Raymond Ave Reconstruction (Rain Gardens)		X				
MN0061263-111	St. Paul	MN0061263	2023	Infiltrator	Infiltration trench	Complete columns H through K	808158	44.985	-93.071	Lat-long	Permittee (you)	NA	2023	Wheelock Pkwy Phase V (infiltration trench)		X				
MN0061263-112	St. Paul	MN0061263	2023	Infiltrator	Infiltration trench	Complete columns H through K	811829	44.921	-93.154	Lat-long	Permittee (you)	NA	2023	Griggs-Scheffer T1 (infiltration trench)		X				

Entry ID	Permittee	MS4 ID	Reporting year	BMP/Activity	BMP Description	Location and ID Information Needed?	BMP ID	y-coord (lat, e.g. 44.9866)	x-coord (long, e.g. -93.2581)	Coordinate system (e.g. lat-long, UTM)	Who owns this BMP/activity?	If applicable, name other owner(s)	Year when BMP was implemented	Note(s)	Como Lake - Phosphorus	South Metro Mississippi River TMDL (Metro) - TSS	Battle Creek; Como Lake; Kasota Ponds North; Kasota Ponds West; Mallard Marsh -	Battle Creek -TSS	Fish Creek - E. coli	Wakefield Lake - Phosphorus
MN0061263-113	St. Paul	MN0061263	2023	Infiltrator	Infiltration trench	Complete columns H through K	804431	44.915	-93.153	Lat-long	Permittee (you)	NA	2023	Griggs-Scheffer T2 (infiltration trench)		X				
MN0061263-114	St. Paul	MN0061263	2023	Infiltrator	Infiltration trench	Complete columns H through K	813433	44.914	-93.154	Lat-long	Permittee (you)	NA	2023	Griggs-Scheffer T3 (infiltration trench)		X				
MN0061263-115	St. Paul	MN0061263	2023	Infiltrator	Infiltration trench	Complete columns H through K	803744	44.918	-93.152	Lat-long	Permittee (you)	NA	2023	Griggs-Scheffer T4 (infiltration trench)		X				
MN0061263-116	St. Paul	MN0061263	2023	Infiltrator	Infiltration trench	Complete columns H through K	811054	44.919	-93.152	Lat-long	Permittee (you)	NA	2023	Griggs-Scheffer T5 (infiltration trench)		X				
MN0061263-117	St. Paul	MN0061263	2023	Filter	Media filter	Complete columns H through K	813157	44.946	-93.092	Lat-long	Permittee (you)	NA	2023	Minnesota St I BMP1 (modular wetland)		X				
MN0061263-118	St. Paul	MN0061263	2023	Filter	Media filter	Complete columns H through K	812545	44.947	-93.092	Lat-long	Permittee (you)	NA	2023	Minnesota St I BMP2 (modular wetland)		X				
MN0061263-119	St. Paul	MN0061263	2023	Filter	Media filter	Complete columns H through K	476350	44.907	-93.179	Lat-long	Permittee (you)	NA	2023	Edcumbe Rd (filtration trench)		X				
MN0061263-120	St. Paul	MN0061263	2023	Filter	Media filter	Complete columns H through K	812393	44.945	-93.09	Lat-long	Permittee (you)	NA	2023	Kellogg Blvd Phase I (4 filterra boxes)		X				
MN0061263-121	St. Paul	MN0061263	2024	Filter	Media filter	Complete columns H through K	813903	44.948	-93.093	Lat-long	Permittee (you)	NA	2022	Highland Bridge Site (5 biofiltration basins, 16 hydrodynamic separators, 5 stormtraps with cartridge filters, 3 stormwater ponds/channel) Totals for BMP removals are included however, the totals will be an overestimate until full development of the site is reached at a time TBD.		X				
MN0061263-122	St. Paul	MN0061263	2024	Filter	Media filter	Complete columns H through K	813903	44.948	-93.093	Lat-long	Permittee (you)	NA	2024	Minnesota St Phase II (2 modular wetlands)		X				
MN0061263-123																				
MN0061263-124																				
MN0061263-125																				
MN0061263-126																				
MN0061263-127																				
MN0061263-128																				
MN0061263-129																				
MN0061263-130																				
MN0061263-131																				
MN0061263-132																				
MN0061263-133																				
MN0061263-134																				
MN0061263-135																				
MN0061263-136																				
MN0061263-137																				
MN0061263-138																				
MN0061263-139																				
MN0061263-140																				
MN0061263-141																				
MN0061263-142																				
MN0061263-143																				
MN0061263-144																				
MN0061263-145																				
MN0061263-146																				
MN0061263-147																				
MN0061263-148																				
MN0061263-149																				
MN0061263-150																				
MN0061263-151																				
MN0061263-152																				
MN0061263-153																				
MN0061263-154																				
MN0061263-155																				
MN0061263-156																				
MN0061263-157																				
MN0061263-158																				
MN0061263-159																				
MN0061263-160																				
MN0061263-161																				
MN0061263-162																				
MN0061263-163																				
MN0061263-164																				
MN0061263-165																				
MN0061263-166																				
MN0061263-167																				
MN0061263-168																				
MN0061263-169																				
MN0061263-170																				
MN0061263-171																				
MN0061263-172																				
MN0061263-173																				
MN0061263-174																				
MN0061263-175																				
MN0061263-176																				
MN0061263-177																				
MN0061263-178																				
MN0061263-179																				
MN0061263-180																				
MN0061263-181																				
MN0061263-182																				
MN0061263-183																				
MN0061263-184																				
MN0061263-185																				
MN0061263-186																				
MN0061263-187																				
MN0061263-188																				
MN0061263-189																				
MN0061263-190																				
MN0061263-191																				
MN0061263-192																				
MN0061263-193																				
MN0061263-194																				
MN0061263-195																				
MN0061263-196																				
MN0061263-197																				
MN0061263-198																				
MN0061263-199																				
MN0061263-200																				
MN0061263-201																				
MN0061263-202																				
MN0061263-203																				
MN0061263-204																				
MN0061263-205																				
MN0061263-206																				
MN0061263-207																				
MN0061263-208																				
MN0061263-209																				
MN0061263-210																				
MN0061263-211																				
MN0061263-212																				
MN0061263-213																				
MN0061263-214																				
MN0061263-215																				
MN0061263-216																				
MN0061263-217																				
MN0061263-218																				
MN0061263-219																				
MN0061263-220																				
MN0061263-221																				
MN0061263-222																				
MN0061263-223																				
MN0061263-224																				
MN0061263-225																				
MN0061263-226																				
MN0061263-227																				

Cumulative Reductions Spreadsheet

Category 1: Summary of quantitative reductions (Annual Pollutant Load Reduction).											Optional	
Permittee	**MS4 ID**	**TMDL project**	Units	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	Calculation method	Notes
St. Paul	**MN0061263**	Como Lake - Phosphorus	pounds reduced	30	30	30	30	30	30			
St. Paul	**MN0061263**	South Metro Mississippi River TMDL (Metro) - TSS	pounds reduced	247,689	247,705	262,072	262,937	333,971.6	333972.5			
St. Paul	**MN0061263**	Battle Creek; Como Lake; Kasota Ponds North; Kasota Ponds West; Mallard Marsh - Chloride	pounds reduced	0	0	0	0	0	0			
St. Paul	**MN0061263**	Battle Creek -TSS	pounds reduced	4,497	4,497	4,497	4,497	4497	4497			
St. Paul	**MN0061263**	Fish Creek - E. coli	pounds reduced	0	0	0	0	0	0			
St. Paul	**MN0061263**	Wakefield Lake - Phosphorus	pounds reduced	0	0	0	0	0	0			

Category 2: Summary of qualitative reductions (# of BMPs).									Optional
Permittee	**MS4 ID**	**TMDL project**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	Notes
St. Paul	**MN0061263**	Como Lake - Phosphorus	11	11	11	11	11	11		
St. Paul	**MN0061263**	South Metro Mississippi River TMDL (Metro) - TSS	12	11	11	11	11	11		
St. Paul	**MN0061263**	Battle Creek; Como Lake; Kasota Ponds North; Kasota Ponds West;	9	9	9	9	9	9		
St. Paul	**MN0061263**	Battle Creek -TSS	11	11	11	11	11	11		
St. Paul	**MN0061263**	Fish Creek - E. coli	6	6	6	6	6	6		
St. Paul	**MN0061263**	Wakefield Lake - Phosphorus	11	11	11	11	11	11		

Non-implemented activities (BMP Inventory)

Permittee	MS4 ID	BMP description	Status	Reporting year	Notes (Optional)	Place an "X" in a cell if the activity applies to the TMDL shown in the column: Como Lake - Phosphorus	South Metro Mississippi River TMDL (Metro) - TSS	Battle Creek; Como Lake; Kasota Ponds North; Kasota Ponds West; Mallard Marsh - Chloride	Battle Creek - TSS	Fish Creek - E. coli	Wakefield Lake - Phosphorus
St. Paul	**MN0061263**	**Minnesota St Phase II**	Under construction	2025	Filtration		X				
St. Paul	**MN0061263**	**Kellogg Blvd Phase II**	Under construction	2025	Filtration		X				
St. Paul	**MN0061263**	**Kellogg/Third St Bridge**	Under construction	2027	Filtration		X				
St. Paul	**MN0061263**	**Grand Ave**	Under construction	2025	Infiltration Trench		X				
St. Paul	**MN0061263**	**Wheelock/Grotto Phase I**	Under construction	2025	Infiltration Trench		X				
St. Paul	**MN0061263**	**Flandrau/Case**	Funded	2025	Iron Enhanced Filtration		X				
St. Paul	**MN0061263**	**Pleasant Ave**	Under construction	2025	Infiltration Trench		X				
St. Paul	**MN0061263**	**Shepard Ponds**	Planned	TBD - Based on funding	CDS Structures/Infiltration Pond		X				
St. Paul	**MN0061263**	**Ford Site**	Under construction	TBD - Based on development	CDS Structures/Filtration Basins/Filtration Cartridges		X				
St. Paul	**MN0061263**	**Gold Line**	Under construction	TBD - Based on	Infiltration/Filtration		X		X		
St. Paul	**MN0061263**	**EB Kellogg Bridge**	Planned	2026	MTD		X				
St. Paul	**MN0061263**	**Hillcrest Site**	Under construction	TBD - Based on development	CDS Structures/Filtration Basins/Filtration Cartridges		X				
St. Paul	**MN0061263**	**Como Regional Park Stormwater BMP**	Planned	TBD - Based on development	CDS Structures/Infiltration Trenches	X	X				
St. Paul	**MN0061263**	**West Side Flats Greenway**	Planned	TBD - Based on development	CDS Structures/Fitration Basins		X				
St. Paul	**MN0061263**	**Robert St**	Under construction	2026	MTDs		X				
St. Paul	**MN0061263**										
St. Paul	**MN0061263**										
St. Paul	**MN0061263**										
St. Paul	**MN0061263**										

Compliance Schedule PART III.D.1.f.-g.

Is your MS4 currently meeting its WLA for any approved TMDLs?

☑ **NO** (Complete Table 1, Strategies for continued BMP implementation beyond the term of this permit, and Table 2 below)

☐

Go to: Table 1 | **Go to:** Strategies… | **Go to:** Table 2

Table 1

Fill in the following table with your Interim Milestones, BMP IDs, and Implementation Dates. Replace "TMDL Project Name & Pollutant" Columns with each TMDL Project Name and the corresponding pollutant. Then put an "X" in the boxes for the TMDL that corresponds with each BMP. PART II.D.6.f.(1)-(2)

NOTE:
It is recommended to assign each Interim Milestone (BMP) a BMP ID. You will be required to report on the status of each Interim Milestone and include a BMP ID for all structural BMPs as part of the MS4 Annual Report (see Part III.E.), so including those ID numbers at the time of application may be useful in tracking implementation efforts. If a pond that will be included in the pond inventory (Part III.C.2.) is to be applied toward a WLA, use the same ID for both the pond inventory and TMDL tracking. Non-structural BMPs are not required to have an ID, but it may be useful to assign it an ID for internal MS4 recordkeeping.

MPCA recommends the Implementation Dates align with the submittal of MS4 Annual Reports. Dates selected may not reflect the actual date a BMP is implemented, but shall indicate a BMP will be implemented on that date or before for that reporting year.

For the Status Column- If it is is already in the BMP-Activities completed tab, note the Entry-ID. If the BMP has not been added to the BMPs-Activities Completed tab, but it has been completed, add it to the BMP-Activities completed tab and note the new Entry-ID on this tab. If it has been entered on the Category 3 BMPs tab, enter the row number. See the first few Interim Milestones as examples. Highlighted yellow cells need entries.

Interim Milestone (Best Management Practice)	BMP ID	Implementation Date	Status	Twin Cities Metro Area Chloride TMDL-Battle Creek Chloride	Twin Cities Metro Area Chloride TMDL-Como Lake Chloride	Twin Cities Metro Area Chloride TMDL- Kasota Ponds North Chloride	Twin Cities Metro Area Chloride TMDL- Kasota Ponds West Chloride	Twin Cities Metro Area Chloride TMDL- Mallard Marsh Chloride	South Metro Mississippi River TMDL- Mississippi River TSS	Como Lake: Excess Nutrients TMDL- Phosphorus	RWMWD TMDL- Battle Creek TSS	RWMWD TMDL- Fish Creek E. Coli	RWMWD TMDL- Wakefield Lake Phosphorus
Adopt-a-Drain Education Program	BMP 1.1 Public Education	Annually	MN0061263-91	x	x	x	x	x	x	x	x	x	x
FMR Water Quality Education Program	BMP 1.2 Storm Drain Stenciling	Annually	MN0061263-92	x	x	x	x	x	x	x	x	x	x
Watershed Partners & Clean Water MN	BMP 1.1 Public Education	Annually	MN0061263-93	x	x	x	x	x	x	x	x	x	x
Annual Utility Coordination Meeting Training	BMP 4.2 Municipal Control	Annually	MN0061263-94						x		x		
Catch Basin/ Manhole Operation and Maintenance	BMP 6.2 Catch Basin/ Manhole Operation and Maintenance	Annually	MN0061263-95						x	x	x	x	x
Outfall Operation and Maintenance	BMP 6.3 Outfall Operation and Maintenance	Annually	MN0061263-96						x	x	x		x
Stormwater Pond/Structural Pollution Control Device Operation and Maintenance	BMP 6.4 Stormwater Pond/Structural Pollution Control Device Operation and Maintenance	Annually	MN0061263-97						x	x	x	x	x
Handling and Disposal of Removed Materials	BMP 6.5 Handling and Disposal of Removed Materials	Annually	MN0061263-98	x	x	x	x	x	x	x	x		x
Roadway Deicing Materials Management	BMP 6.7 Roadway Deicing Materials Management	Annually	MN0061263-99	x	x	x	x	x	x		x		
Snow Operations Plan	BMP 6.7 Roadway Deicing Materials Management	Annually	MN0061263-100	x	x	x	x	x	x		x		
Snow and Ice Control Annual Training	BMP 6.7 Roadway Deicing Materials Management	Annually	MN0061263-101	x	x	x	x	x	x		x		
Street Sweeping Program	BMP 6.6 Street Sweeping Program	Annually	MN0061263-102	x	x	x	x	x	x	x	x	x	x
Cooperative Monitoring Program	BMP 7.1 Cooperative Monitoring Program	Annually	MN0061263-108	x	x	x	x	x	x	x	x	x	x
Storm Water Pond Cleaning 2002	BMP 6.4 Stormwater Pond/Structural Pollution Control Device Operation and Maintenance, Project 02-S-0001	6/30/2019	MN0061263-105						x				
Storm Water Pond Cleaning 2003	BMP 6.4 Stormwater Pond/Structural Pollution Control Device Operation and Maintenance, Project 03-S-1927	6/30/2019	MN0061263-105						x				
Chatsworth-Goodrich Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 06-P-8136	6/30/2019	MN0061263-2						x				
Londin Lane-Burlington Road Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 06-P-1280	6/30/2019	MN0061263-7						x				
White Bear-Burns Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 07-P-8141	6/30/2019	MN0061263-18						x		x		
Griggs-Jefferson Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 07-P-8140	6/30/2019	MN0061263-14						x				
Hubbard-Griggs Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 07-P-8139	6/30/2019	MN0061263-8						x				
Payne Avenue Reconstruction (Rain Garden)	BMP 5.3 Municipal Mitigation Program, Project 08-P-1321	6/30/2019	MN0061263-35						x				
Earl-McLean Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 08-P-8144	6/30/2019	MN0061263-24						x				
Ivy-Kennard Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 08-P-8145	6/30/2019	MN0061263-26						x				
Seventh-Bay Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 08-P-8137	6/30/2019	MN0061263-29						x				
Magnolia-Earl Reconstruction (Rain Garden)	BMP 5.3 Municipal Mitigation Program, Project 09-P-8146	6/30/2019	MN0061263-78						x				
Cretin-Goodrich Reconstruction (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 09-P-8147	6/30/2019	MN0061263-33						x				
Knapp-Raymond Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 09-P-8142	6/30/2019	MN0061263-30						x				
Payne Avenue Reconstruction (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 09-P-1321	6/30/2019	MN0061263-88						x				
Victoria-Arlington Reconstruction (Rain Garden)	BMP 5.3 Municipal Mitigation Program, Project 09-P-1331	6/30/2019	MN0061263-34						x	x			
Beacon-Bluff Ordinance Permit	BMP 5.3 Municipal Mitigation Program, Ordinance Permit	6/30/2019	MN0061263-43						x				
Arundel Stormwater Improvements (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 10-S-1983	6/30/2019	MN0061263-37						x				
Saint Albans Stormwater Improvements	BMP 5.3 Municipal Mitigation Program, Project 10-S-1983	6/30/2019	MN0061263-36						x				
Front-Victoria Reconstruction (Infiltration Structures)	BMP 5.3 Municipal Mitigation Program, Project 10-P-8149	6/30/2019	MN0061263-38						x	x			
Front-Victoria Reconstruction (Permeable Pavers)	BMP 5.3 Municipal Mitigation Program, Project 10-P-8149	6/30/2019	MN0061263--38						x	x			
Front-Victoria Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 10-P-8149	6/30/2019	MN0061263-39						x	x			
Blair-Griggs Reconstruction (InfiltrationTrenches)	BMP 5.3 Municipal Mitigation Program, Project 11-P-8156	6/30/2019	MN0061263-45						x				
Dale Street (Vortech Structure)	BMP 6.8 City Parking Lot & Equipment Yard Management, Project 12-S-2003	6/30/2019	MN0061263-80						x				
Hillcrest Knoll Stormwater Improvements (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 12-S-2003	6/30/2019	MN0061263-52						x				
Hamline Midway Permeable Pavement (PermeableAlley)	BMP 5.3 Municipal Mitigation Program, Project 12-P-1372	6/30/2019	MN0061263-109						x				
Hewitt-Tatum Reconstruction (Infiltration Structures)	BMP 5.3 Municipal Mitigation Program, Project 12-P-8153	6/30/2019	MN0061263-48						x				
Madison-Benson Reconstruction (Tree Trenches)	BMP 5.3 Municipal Mitigation Program, Project 12-P-8162	6/30/2019	MN0061263-50						x				
Raymond Avenue Phase I Reconstruction (Rain Gardens)	BMP 5.3 Municipal Mitigation Program, Project 13-T-1319	6/30/2019	MN0061263-110						x				
Hampden Park Stormwater Improvements	BMP 5.3 Municipal Mitigation Program, Project 13-S-2006	6/30/2019	MN0061263-53						x				
Trout Brook Nature Sanctuary (IESF Ponds)	BMP 5.3 Municipal Mitigation Program, PW, Parks, CRWD	6/30/2019	MN0061263-54						x				
Montreal Avenue Reconstruction (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 14-P-1373	6/30/2019	MN0061263-58						x				
Western Avenue Reconstruction (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 14-P-1390	6/30/2019	MN0061263-57						x				
Como-Chatsworth Phase I Reconstruction (Filtration Trench)	BMP 5.3 Municipal Mitigation Program, Project 15-P-8165	6/30/2019	MN0061263-59						x	x			
Como-Chatsworth Phase II Reconstruction (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 16-P-1419	6/30/2019	MN0061263-61						x	x			
Jackson Street Reconstruction BMPs (Permeable Bikepath & Rain Gardens)	BMP 5.3 Municipal Mitigation Program, Project 16-P-1409	6/30/2019	MN0061263-72						x				
Wheelock Parkway Reconstruction (IESF Pond Modification)	BMP 5.3 Municipal Mitigation Program, Project 16-P-1410	6/30/2019	MN0061263-107						x				
Raymond Avenue Phase III Reconstruction (SAFL Baffle)	BMP 5.3 Municipal Mitigation Program, Project 16-P-1411	6/30/2019	MN0061263-63						x				
University Avenue Reconstruction (SAFL Baffle)	BMP 5.3 Municipal Mitigation Program Project 16-P-1416	6/30/2019	MN0061263-62						x				
Wheelock Parkway Reconstruction (CDS)	BMP 5.3 Municipal Mitigation Program, Project 17-P-1432	6/30/2019	MN0061263-67						x	x			
Wheelock Parkway Reconstruction (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 17-P-1432	6/30/2019	MN0061263-68						x	x			
Battle Creek Road Reconstruction (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 17-P-1424	6/30/2019	MN0061263-69						x		x		
Como Avenue Reconstruction (SAFL Baffle)	BMP 5.3 Municipal Mitigation Program, Project 17-P-8171	6/30/2019	MN0061263-66						x				
Idaho-Atlantic Reconstruction (Infiltration Trenches)	BMP 5.3 Municipal Mitigation Program, Project 17-P-8164	6/30/2019	MN0061263-70						x				
Jackson Street Reconstruction (SAFL Baffle)	BMP 5.3 Municipal Mitigation Program, Project 17-P-1431	6/30/2019	MN0061263-72						x				
Storm Water Pond Cleaning 2017	BMP 6.4 Stormwater Pond/Structural Pollution Control Device Operation and Maintenance, Project 17-S-2040	6/30/2019	MN0061263-105						x				
Como Sr. High School (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, PW-SPPS-CRWD	6/30/2019	MN0061263-65						x	x			
McMurray Field Transportation Improvements (SAFL Baffle)	BMP 5.3 Municipal Mitigation Program, Parks Sponsored	6/30/2019	MN0061263-64						x	x			
Victoria Park Ordinance Permit (Sumped Manholes)	BMP 5.3 Municipal Mitigation Program, Ordinance Permit	6/30/2019	MN0061263-77						x				
Stewart Avenue Construction (Rain Garden)	BMP 5.3 Municipal Mitigation Program, Parks Sponsored	6/30/2019	MN0061263-77						x				
Como Avenue Reconstruction (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 18-P-8172	6/30/2019	MN0061263-74						x				
Wheelock Parkway Reconstruction (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Project 18-P-8174	6/30/2019	MN0061263-83						x				
Woodlawn-Jefferson Reconstruction (SAFL Baffle)	BMP 5.3 Municipal Mitigation Program, Project 18-P-8166	6/30/2019	MN0061263-73						x				
Cherokee Heights (2 CDS Units)	BMP 5.3 Municipal Mitigation Program, Project 18-S-2047	6/30/2019	MN0061263-81						x				
Cherokee Heights Ravine Stabilization	BMP 5.3 Municipal Mitigation Program, Project 18-S-2048	6/30/2020	MN0061263-81						x				
Water Quality Improvements associated with Future Street Reconstruction	BMP 5.3 Municipal Mitigation Program, Future Projects PW	Annually	MN0061263-104						x	x	x		
Public Education Plan	BMP 1.1 Public Education, Revised with new SWMP	Annually	MN0061263-92	x	x	x	x	x	x	x	x	x	x
Stormwater Runoff Volume Reduction Plan	BMP 5.3 Municipal Mitigation Program, Future Projects PW & Parks	6/30/2021	MN0061263-104						x	x	x	x	x
Flandrau-Case Stormwater Improvements (Enhanced Filtration)	BMP 5.3 Municipal Mitigation Program, Future Project PW	6/30/2020	Cat 3-Row 9						x				
Como Regional Park Stormwater BMPs	BMP 5.3 Municipal Mitigation Program, Future Project PW-Parks-CRWD	6/30/2021	Cat 3-Row 17						x	x			
McMurray Field Stormwater Improvements (Infiltration Trench)	BMP 5.3 Municipal Mitigation Program, Future Project PW-Parks-CRWD	6/30/2022	MN0061263-64						x	x			
Snelling-Midway Stormwater Improvements (Tree Trenches, Reuse)	BMP 5.1 Development & Redevelopment Mitigation Program, Current Ordinance Permit	6/30/2020	MN0061263-89,90						x				
West Side Flats Greenway	BMP 5.1 Development & Redevelopment Mitigation Program, Future Ordinance Permit	6/30/2021	Cat 3-Row18						x				
Ford Redevelopment	BMP 5.1 Development & Redevelopment Mitigation Program, Future Ordinance Permit	6/30/2021	Cat 3-Row 13						x				

Strategies for continued BMP implementation beyond the term of this permit. PART II.D.6.f.(3)

Continue to comply with CSW, MS4, and Watershed District Rules for municipal and private development projects.
Continue to update and implement City's Volume Reduction Inventory.
Continue to implement other MS4 requirements including: Public Education, Public Involvement, IDDE, Construction Stormwater, Post-construction Stormwater, Good Housekeeping for Municipal Operations, and Monitoring Activities.

Table 2

Target dates the applicable WLA(s) will be achieved. PART II.D.6.f.(4)

TMDL Project	Target Date to Achieve WLA
Twin Cities Metro Area Chloride TMDL-Battle Creek Chloride	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2041 estimate
Twin Cities Metro Area Chloride TMDL-Como Lake Chloride	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2041 estimate
Twin Cities Metro Area Chloride TMDL- Kasota Ponds North Chloride	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2041 estimate
Twin Cities Metro Area Chloride TMDL- Kasota Ponds West Chloride	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2041 estimate
Twin Cities Metro Area Chloride TMDL- Mallard Marsh Chloride	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2041 estimate
South Metro Mississippi River TMDL- Mississippi River TSS	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2030 per MPCA Sediment Reduction Strategy
Como Lake: Excess Nutrients TMDL- Phosphorus	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2043 estimate per Roseville and Falcon Heights target dates
RWMWD TMDL- Battle Creek TSS	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2026 estimate per RWMWD WRAPS
RWMWD TMDL- Fish Creek E. Coli	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2026 estimate per RWMWD WRAPS
RWMWD TMDL- Wakefield Lake Phosphorus	WLA is categorical, and requires the collective implementation of BMPs in other MS4s. 2020 estimate per RWMWD WRAPS

Provide an up-dated narrative describing any adaptive management strategies used (including projected dates) for making progress toward achieving each applicable WLA

City Street Construction: The City of Saint Paul proposes to install multiple BMPs throughout the year in 2025. These BMPs will be combined with various pretreatment structures to reduce the loading of TSS into the Mississippi River.
Flandrau Case Pond: The Sewer Utility has awaded the contract for retrofitting Flandrau-Case Pond. Construction is anticipated to begin in 2025.
Ford Site: The City of Saint Paul has accepted the majority of the stormwater management system at the Ford Redevelopment Site. Calculations on the effectiveness of TSS and Phosphorus removal for full buildout. BMPs for entire site are installed but land development yet to be fully completed.
Hillcrest Site: The City of Saint Paul will also be working with RWMWD and SPPA on the design/installation of a major stormwater management system at the Hillcrest Golf Course Site. Calculations on the effectiveness of TSS and Phosphorus removal throughout the site will be determined qualitatively and quantitatively and reported on in the future.