

HENNEPIN COUNTY  
MINNESOTA

MS4 Program – Standard  
Operating Procedures (SOP)  
Report

2024

*Stormwater Pollution Prevention Program (SWPPP) working document to be reviewed and updated annually as necessary – document last updated September 2024*

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# Introduction

Hennepin County manages over 2,200 lane miles of roadway and right-of-way throughout the County. An important part of this management includes the proper treatment and discharge of stormwater. This is governed by the Municipal Storm Sewer System permitting by the Minnesota Pollution Control Agency (MPCA).

The County monitors and inspects drainage infrastructures regularly to ensure both proper drainage and that structures are properly filtering for water quality protection purposes. Road upgrades and maintenance include analyzing water quality for best management practices and upgrading and/or repairing infrastructure when necessary.

## **What is a Municipal Separated Storm Sewer System (MS4)?**

An MS4 is a conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs and gutters, ditches, man-made channels, storm drains, etc.) that is also owned or operated by a public entity (which can include cities, townships, counties, military bases, hospitals, prison complexes, highway departments, universities, etc.).

Stormwater discharges associated with MS4s are subject to regulation under the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) MS4 Permit. The [MS4 General Permit](#) is designed to help reduce the amount of sediment and other pollution that enters surface and ground water from storm sewer systems to the maximum extent practicable. Through the MS4 General Permit, the system owner or operator is required to develop a Stormwater Pollution Prevention Program (SWPPP) that incorporates best management practices applicable to their MS4.

## **MS4 Storm Water Pollution Prevention Program (SWPPP)**

The Storm Water Pollution Prevention Program covers six minimum control measures to help reduce the discharge of pollutants from our storm sewer system, to the maximum extent practicable. The minimum control measures (MCMs) include:

- MCM 1 - Public education and outreach
- MCM 2 - Public participation/involvement
- MCM 3 - Illicit discharge detection and elimination
- MCM 4 - Construction site runoff control
- MCM 5 - Post-construction site runoff control
- MCM 6 - Pollution prevention/good housekeeping

Hennepin County follows best management practices for each of these six minimum control measures as described in this report. MS4 permits are designed to reduce water pollution from non-point sources by controlling and regulating stormwater discharge. The Minnesota Pollution Control Agency (MPCA) is responsible for revising and issuing the MS4 permits as directed by the legislature and U.S. Environmental Protection Agency (EPA).

Any public entity (including counties, cities, townships, and tribal governments) that owns a storm sewer system in an urbanized area must hold an MS4 permit. This does not include wastewater treatment, which is permitted separately.

Hennepin County is responsible for the stormwater from the county road system, including right-of-ways. This includes water exiting construction and maintenance projects as well as from day-to-day operations of the roads. The county partners with local cities and other agencies to properly direct stormwater, reduce impacts, and achieve water quality goals.

# MCM 1 – Public Education and Outreach

## **Requirements:**

Develop and implement a public education program to distribute educational materials that informs the public of the impact stormwater discharges have on water bodies and that includes actions citizens, businesses, and other local organizations can take to reduce the discharge of pollutants to stormwater.

During the permit term Hennepin County is required to distribute educational materials or equivalent outreach focused on at least two specifically selected stormwater-related issues of high priority. At least once each calendar year Hennepin County is required to distribute educational materials or equivalent outreach focused on illicit discharge recognition and reporting.

## **Standard Operating Procedures/Public Education Program:**

Hennepin County Public Works actively works to educate the public about storm water quality through many avenues, including youth outreach, volunteer monitoring programs, and working with county residents to implement stormwater BMPs on their own properties. The County also serves as the soil and water conservation district and coordinates with watersheds. The Hennepin County website also posts educational materials and the County's MS4 SWPPP for review and public comment. The target audience for the County's public education program includes Hennepin County transportation corridor users and Hennepin County employees.

Environmental staff leads most of the outreach with residents in terms of water quality and education. Several strategies have recently been implemented including:

- Hiring additional staff to work with rural residents
- Translating educational materials into additional languages
- Sending out targeted messages and postcards to increase resident participation in water quality and conservation practices
- Working with cities and the Minnesota Department of Agriculture to help locate failing septic systems and direct residents towards replacement assistance

## **Hennepin County High Priority Issues:**

- Salt and anti-icing material reduction – the 7-county metro is under a chloride TMDL as well as Shingle Creek and Nine Mile Creek
- Prioritizing non-emergency maintenance and replacement of culverts or installing BMPs where there is a lot of erosion and sediment issues
- Working with residents countywide, but especially in priority subwatersheds (Rush Creek, Lake Independence, Dance Hall Creek) to reduce non-point source pollution from private property.

Documentation of the following information is compiled annually:

- Distribution of educational materials related to high priority issue(s) and illicit discharge
- Any modifications made to the program as a result of the annual evaluation
- Activities held, including dates, to reach measurable goals
- Quantities and descriptions of educational materials distributed, including dates distributed
- A description of any coordination with and/or use of other stormwater education and outreach programs being conducted by other entities, if applicable

**BMPs and Measurable Goals:**

Established BMP categories	Measurable goals and timeframes
River Watch Volunteer Monitoring Program	Provide education to schools on water quality and track number of schools involved with the program annually
Adopt-A-Drain Program	Program is implemented and running (track number of drains adopted)
Adopt-A-Highway Program	Program is implemented and running (track number of pick-ups)
Participate in Children’s Water Fest	Track number of schools involved with the program
Distribute educational material on two high priority issues during the permit term	Document information per permit requirement
Distribute educational material on illicit discharge detection and reporting	Document information per permit requirement

Responsible Parties: Environment and Energy Department, Transportation Departments

Website Links:

- [Environmental programs and initiatives | Hennepin County](#)
- [Environmental education | Hennepin County](#)
- [Volunteer with the environment and gardening | Hennepin County](#)

Primary Contact: Karen Galles, Environment and Energy Department

# MCM 2 – Public Participation/Involvement

## Requirements:

Public Participation/Involvement program to solicit public input on the SWPPP and involve the public in activities that improve or protect water quality. Each calendar year, Hennepin County must provide a minimum of one opportunity for the public to provide input on the adequacy of the SWPPP and provide one public involvement activity that includes a pollution prevention or water quality theme.

## Standard Operating Procedures:

Hennepin County posts our MS4 SWPPP for public review and comment continuously on our MS4 website. Hennepin County has implemented volunteer programs such as Adopt a Highway, Adopt a Drain and Wetland health evaluation Program (WHEP) to protect the environment and educate the public about storm water quality and illicit discharge detection and elimination. Hennepin County provides access to the SWPPP document, Annual Reports, and other documentation that supports or describes the SWPPP for public review, upon request.

Documentation of the following information is compiled annually:

- All relevant written input submitted by persons regarding the SWPPP
- All responses from Hennepin County to written input received regarding the SWPPP, including any modifications made to the SWPPP as a result of the written input received
- Date(s) and location(s) of events held for purposes of soliciting public input on the SWPPP
- Notices provided to the public of any events scheduled for purposes of soliciting public input on the SWPPP, including any electronic correspondence (e.g., website, email distribution list, notices, etc.)
- Date(s), location(s), description of activities, and estimated number of participants for public involvement activities regarding pollution prevention

## BMPs and Measurable Goals:

Established BMP categories	Measurable goals and timeframes
Post SWPPP annually on website for public comment	To post the SWPPP annually and respond to public comments and make changes to the SWPPP as necessary (continuous)

Public involvement activity that includes a pollution prevention or water quality theme	The following activities are developed and implemented: <ul style="list-style-type: none"><li>• Volunteer water quality monitoring</li><li>• Adopt a drain program</li><li>• Household hazardous waste collection day</li></ul>
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Responsible Parties: Environment and Energy Department, Transportation Departments

Website Links:

[Water quality protection along county roads | Hennepin County](#)

Primary Contacts:

- Karen Galles, Environment and Energy Department
- Kristy Morter, Transportation Operations Department



# MCM 3 – Illicit Discharge Detection and Elimination (IDDE)

## **Requirements:**

Develop, implement and enforce a program to detect and eliminate illicit discharges into the small MS4. An illicit discharge is any discharge that is not composed entirely of stormwater. MCM 3 requires a regulatory mechanism to the extent allowable under state or local law. Regulatory mechanisms may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanisms that will be enforced by the County. The regulatory mechanism must require owners or custodians of pets to remove and properly dispose of feces on County owned land areas. Additional requirements are as follows:

- Illicit discharge inspections must be conducted during dry weather conditions
- Train all field staff annually in illicit discharge recognition and reporting
- Maintain a map of the County's MS4
- Maintain a written or mapped inventory of priority areas with higher likelihood for illicit discharges (these areas must be inspected annually)

## **Standard Operating Procedures/ Illicit Discharge Program:**

Hennepin County inspects and maintains stormwater BMP structures on an annual basis. Outfalls are inspected at least once every 5 years. While inspections are being performed, field staff also search for signs of illicit discharges. Environment and Energy staff are available to assist when remediation of identified illicit discharges require assistance with best management practices. Any identified illicit discharges are filed and submitted to the Minnesota Department of Public Safety Duty Officer. Cities handle the majority of the illicit discharges in business heavy and industrial areas. There are currently no high priority areas identified for higher likelihood for illicit discharges in Hennepin County's right of way/MS4.

Annual training is currently in place for public works field staff that are actively involved with storm sewer inspection and maintenance.

Procedure for investigating, locating, and eliminating the source of illicit discharges:

1. Dispatch or employee that receives information logs complaint and location – if possible, photos of initial sighting are added to the complaint
2. Staff is dispatched immediately to look at the discharge to try and preliminarily determine what it is and follow it upstream if source is not readily apparent. If source or pollutant cannot be determined, then samples will be collected. Photos are taken. If it is discovered that the discharge originates outside county jurisdiction, the city is notified right away. If

- source is completely within county right of way or adjacent but not on a municipal system, then staff will notify the city of the incident and results after conclusion.
3. Once source is located, staff will document and speak with the owner of the property and ask them to immediately desist with the activity causing the discharge. Environment and Energy staff are available to assist with documentation and follow-up conversations with the owner of the property.
  4. Field crew staff are notified to ensure safety if there is a hazard present.
  5. For septic cases, environmental health and septic inspectors are notified. Environment and Energy staff and DNR Conservation Officer are brought in for wetland violations.
  6. If needed, a follow up plan is made to clean up the discharge, if it leaves the county right of way into city jurisdiction, then city staff are responsible for the cleanup plan and speaking with the business, though county staff are available to help. Documentation from the city is requested to close out the complaint.
  7. Follow up checks are made as needed over the course and completion of any remediation, and inspections in the area are made to follow up and make sure it is not repeated.

Spill Response Plan: See Appendix A

This document includes procedures for responding to spills, including emergency response procedures to prevent spills from entering the small MS4. The procedures include the immediate notification of the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 or 651-649-5451, if the source of the illicit discharge is a spill or leak as defined in Minn. Stat. § 115.061.

Enforcement Response Procedures for eliminating illicit discharge once the source has been found:

1. Notify relevant authorities: municipality, DNR, PCA, septic/environmental health as appropriate
2. Document situation and extent of the discharge
3. Order that the responsible party take actions to stop the discharge immediately
4. Create a remediation plan as needed as well as a long-term discharge prevention plan
5. Follow up and ensure the plan is followed and clean up takes place
6. Put discharge area on the list to be inspected or checked on more often as needed
7. Close out paperwork and documents, distribute copies to all interested agency parties (usually cities)

Documentation of the following information is compiled annually:

- Date(s) and location(s) of IDDE inspections
- Reports of alleged illicit discharges received, including date(s) of the report(s), and any follow-up action(s) taken by the permittee
- Date(s) of discovery of all illicit discharges
- Identification of outfalls, or other areas, where illicit discharges have been discovered
- Sources (including a description and the responsible party) of illicit discharges (if known)
- Action(s) taken by Hennepin County, including date(s), to address discovered illicit discharges

- Training including subject matter covered, names and departments of individuals in attendance, and date of each event

**BMPs and Measurable Goals:**

Established BMP categories	Measurable goals and timeframes
Public and employee illicit discharge detection and elimination program	Completed standard operating procedures (SOP) to describe how to detect and eliminate illicit discharges
Household hazardous waste collection program	Track number of participants and materials collected
Hennepin County Ordinance 22	Ordinance is implemented and actively enforced
Hennepin County Regulatory Enforcement Standards for the MPCA Small MS4 General Permit	Regulatory Enforcement Standards adopted by Hennepin County Resolution 22-0391
Train all field staff on illicit discharge detection and elimination	Public Works field staff are trained annually. <b>Goal: Add the Sheriff’s Office field staff to the annual training program by 2025.</b>
Owners or custodians of pets shall remove and properly dispose of feces in County MS4	Covered in Regulatory Enforcement Standards adopted by Hennepin County Resolution 22-0391

Responsible Parties: Environment and Energy, Transportation Departments

Primary Contacts:

- Kristy Morter, Transportation Operations Department
- Karen Galles, Environment and Energy Department
- Paul Johnson, Water Resources Construction Supervisor – Transportation Project Delivery

# MCM 4 – Construction Site Stormwater Runoff Control

## Requirements:

Develop, implement, and enforce a Construction Site Stormwater Runoff Control program that reduces pollutants in stormwater runoff to the small MS4 from construction activity with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that occurs within the permittee's jurisdiction and that discharge to the permittee's MS4.

MCM 4 requires a regulatory mechanism that establishes requirements for erosion, sediment, and waste control to the extent allowable under state or local law that is at least as stringent as the MPCA's most current Construction Stormwater General Permit (MNR100001). Regulatory mechanisms may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanisms that will be enforced by the County. The regulatory mechanism must require that owners and operators of construction activity develop site plans that must be submitted to the County for review and confirmation of regulatory mechanism compliance. The regulatory mechanism(s) must require the owners and operators of construction actively to keep site plans up-to-date with regard to stormwater runoff controls. The site plan must incorporate the following erosion, sediment, and waste controls that are at least as stringent as described in general permit MNR100001:

- Erosion prevention practices
- Sediment control practices
- Dewatering and basin draining
- Inspection and maintenance
- Pollution prevention management measures
- Temporary sediment basins
- Termination conditions (Minn. R. 7090)

In addition, the permittee must implement written procedures for the following:

- Site plan reviews conducted prior to the start of construction activities, including use of a written checklist
- Conducting site inspections
- Identifying high-priority and low-priority sites for inspection
- Receipt and consideration of reports of noncompliance or other stormwater related concerns submitted by the public
- Maintain written enforcement response procedures

**Standard Operating Procedures/ Construction Site Stormwater Runoff Control Program:**

Hennepin County's construction standard operating procedures are as stringent as the MPCA's construction permit. For any county project equal to or greater than one acre in impact, Hennepin County applies for and enforces a MPCA Construction Stormwater General Permit (MNR100001/NPDES permit). Field inspectors assigned to each job site assure that regulations are met and have one of the following certifications acquired through the University of Minnesota Erosion and Stormwater Management Certification Program:

- Construction Site Management
- Construction Installer
- Design of Construction SWPPP

Training including subject matter covered, names and departments of individuals in attendance, and date of each event are documented annually.

The permits office and construction division conduct field inspections on work being conducted in Hennepin County right of way and enforces any corrective action if needed, including enforcement of Ordinance 22, Resolution 22-0391, contract documents/specifications, and permit terms and conditions. All projects with one or more acres in impact require a MPCA Construction Stormwater General Permit (MNR100001). Requirements for erosion and sediment controls and waste controls follow MPCA's Construction Stormwater (CSW) General Permit and the latest version of MnDOT's standard specifications for construction.

Hennepin County requires that permittees of construction activity, with one or more acre in subsurface impact (in county right of way), develop site plans that are submitted to the County for review and approval, prior to the start of construction activity. The site plans are required to incorporate the following erosion and sediment controls and waste controls, if applicable:

- BMPs to minimize erosion
- BMPs to minimize the discharge of sediment and other pollutants
- BMPs for dewatering activities
- Site inspections and records of rainfall events
- BMP maintenance
- Management of solid and hazardous wastes on each project site
- Final stabilization upon the completion of construction activity
- Criteria for the use of temporary sediment basins

Hennepin County uses Ordinance 22, Resolution 22-0391, permits, contracts, specifications and administration procedures to ensure construction practices comply with MPCA's NPDES Construction Permit requirements. In addition, the County requires all utility companies working in our right of way to comply with MnDOT specifications for erosion and sediment control as well as turf establishment.

Process for development/site plan reviews: See MCM 5

Procedures for receipt and consideration of reports of noncompliance on construction activity:

- Inspector directs contractor/workers to address noncompliant issues, following the County's Enforcement Response Procedures (ERPs)
- For internal projects or residents who cause non-compliance:
  - Either dispatch or assigned inspector/staff are called
  - A service request is entered stating who made the complaint and what the complaint/concern is regarding
  - Staff are dispatched out to the site
  - Written instructions for remediation and compliance are given to the foreman and supervisor is copied
  - Service request is updated and closed out once work is completed and inspected by the staff who have ordered the changes

Written procedures for conducting construction stormwater site inspections:

- Priority sites for inspection:
  - Projects with one acre or more in impact
  - Projects located in an environmentally sensitive area
- Frequency of site inspections:
  - Non-CSW permitted sites are monitored by staff during daily construction activities. Site inspections are conducted on an as needed basis.
  - CSW permitted sites are inspected weekly and within 24 hours of 0.50" rainfall event
- Inspector completes checklist to document site inspections when determining compliance
- Name(s) of individual(s) conducting site inspections is documented on the checklist

Enforcement Response Procedures (ERPs):

See ERPs section of this report

**BMPs and Measurable Goals:**

Established BMP categories	Measurable goals and timeframes
Utilize Ordinance 22, Resolution 22-0391, and permits terms and conditions to enforce right of way site runoff	Ordinance, resolution, and permit terms are implemented and enforced
Require a SWPPP for all construction projects that are equal to or greater than one acre	This has been implemented and enforced

Review site plans before permitting access through internal committees	This has been implemented and enforced
Field staff who set up erosion control will be sent to state certification training	Field staff responsible with erosion control will be current on their certification
Report and track non-compliance issues with permit holders and construction projects	Violations will be logged and tracked
Utilize and enforce MnDOT Specifications for Erosion and Sediment Controls	Include current specification in projects

Responsible Parties: Transportation – design, operations, permits, and construction

Primary Contacts:

- Paul Johnson, Water Resources Construction Supervisor – Transportation Project Delivery
- Kristy Morter, Transportation Operations Department

# MCM 5 – Post-Construction Stormwater Management

## **Requirements:**

Develop, implement, and enforce a Post-Construction Stormwater Management program that prevents or reduces water pollution after construction activity is completed, related to new development and redevelopment projects with land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, within the permittee's jurisdiction and that discharge to the permittee's small MS4.

MCM 5 requires a regulatory mechanism to the extent allowable under state or local law. Regulatory mechanisms may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanisms that the County will enforce. The regulatory mechanism must require that owners of construction activity complete the following:

- Submit site plans with post-construction stormwater management BMPs designed with accepted engineering practices to the permittee for review and confirmation that regulatory mechanism(s) requirements are met prior to the start of construction activity
- Treat the water quality volume on any project where the sum of the new impervious surface and the fully reconstructed impervious surface equals one or more acres

The regulatory mechanism(s) must include the establishment of legal mechanism(s) between the permittee and owners of structural stormwater BMPs not owned and operated by the permittee, that have been constructed to meet the MS4 permit requirements.

Additional MCM 5 requirements include the following:

- Maintain a written or mapped inventory of structural stormwater BMPs not owned or operated by the permittee that:
  - BMP includes an executed legal mechanism regarding maintenance
  - BMP was implemented on or after August 1, 2013
- Implement written procedures for site plan reviews
- Training for employees conducting site plan reviews and/or enforcement
- Written enforcement response procedures



### Standard Operating Procedures:

Hennepin County Storm Water Regulations apply for all construction activities for new development, redevelopment projects, and linear projects with land disturbance greater than or equal to one (1) acre, including projects that are less than one acre and part of a larger common plan of development or sale, that are within the County's jurisdiction and that discharge into the County's MS4 are subject to the CSW Permit and the MS4 General Permit.

Minimum requirements for permanent stormwater management/treatment are per section 15 of the current CSW Permit and section 20 of the MS4 General Permit. Hennepin County follows the MCM 5 flowchart (<https://www.pca.state.mn.us/sites/default/files/wq-strm4-92.pdf>) for meeting the MS4 permit. Requirements for erosion and sediment controls and waste controls follow CSW Permit, MS4 General Permit and the latest version of MnDOT's standard specifications for construction.

#### Process for plan review:

- Review plans and drainage report (if available) at all milestones.
- Comments are provided through red-lined plans and red-lined drainage report.
- An MS4 Plan Review checklist is filled out internally or by the design consultant if the project triggers the Hennepin County MS4.
- Coordinate with regulatory agencies to ensure that all required permits are received.
- Projects equal to or exceeding one acre in impact must obtain a CSW Permit.
- Documentation of the following information for each plan review:
  - Date of Internal Review
  - Project name
  - Project location
  - Total acreage to be disturbed
  - If it triggers the Hennepin County MS4 Permit
  - Owner and operator of the proposed construction activity
  - Stormwater related comments and supporting documentation used by the County to determine project approval or denial
  - MS4 Plan Review Checklist if required
  - All supporting documentation associated with mitigation projects authorized by the County
  - Payments received and used, if applicable
  - All legal mechanisms drafted, including date(s) of the agreement(s) and name(s) of all responsible parties involved

Hennepin County currently reviews developments through a Plat Review Committee. Note that Hennepin County does not have authority to regulate developments within the County. Cities are required by Minnesota statutes 505.021, 505.03 and 462.358 to submit plats for projects that abut county roads for review and comment. Transportation Planning provides information on the process and what should be submitted at [www.hennepin.us/platreview](http://www.hennepin.us/platreview). Plats and permits that

involve changes to the stormwater system are routed to and reviewed by the water resource group to ensure it meets Hennepin County Ordinance 22 requirements. The stormwater portion of ordinance 22 is listed below. The Permit Office is responsible for issuing right of way permits to the public and enforcing site conditions that meet or exceed stormwater regulations. The County also works closely with surrounding MS4 partners to enforce stormwater regulations.

Hennepin County Ordinance 22 includes the following requirements related to drainage:  
*The existing drainage patterns shall not be altered unless approved by Hennepin County. Watershed District approval and drainage calculations are required if the work alters existing drainage patterns. Post-construction flow rates entering Hennepin County's drainage system, overland or through pipes, shall not exceed pre-construction rates for the two, 10 and 100-year events.*

**BMPs and Measurable Goals:**

Established BMP categories	Measurable goals and timeframes
Utilize partnerships with surrounding MS4s to assist with land control out of county jurisdiction	This has been implemented and enforced
County owned post construction BMPs will be inspected and maintained through county forces or through agreements	This has been implemented and enforced
Training for staff conducting site reviews and/or enforcement	Document general subject matter, name and department of individuals in attendance, and date of each training event

Responsible Parties: Transportation – design, operations, permits, and construction

Primary Contacts:

- Drew McGovern, Water Resources Engineer – Transportation Project Delivery
- Kristy Morter, Transportation Operations Department

# MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations

## **Requirements:**

Develop and implement an operations and maintenance program that prevents or reduces the discharge of pollutants from Hennepin County owned/operated facilities and operations to the small MS4.

The permittee must maintain a written or mapped inventory of permittee owned/operated facilities that contribute pollutants to stormwater discharge. The permittee must implement BMPs that prevent or reduce pollutants in stormwater discharges from all inventoried facilities.

In addition, the permittee must implement BMPs that prevent or reduce pollutants in stormwater discharges from the following municipal operations that may contribute pollutants to stormwater discharges, where applicable:

- Waste disposal and storage, including dumpsters
- Management of temporary and permanent stockpiles of materials
- Vehicle fueling, washing, and maintenance
- Routine street and parking lot sweeping
- Emergency response
- Cleaning of maintenance equipment, building exteriors, dumpsters, and the disposal of associated waste and wastewater
- Use, storage, and disposal of significant materials
- Landscaping, park, and lawn maintenance
- Road maintenance, including pothole repair, road shoulder maintenance, pavement marking, sealing, and repaving
- Right of way maintenance, including mowing
- Application of herbicides, pesticides, and fertilizers

The permittee must implement the following BMPs at permittee owned/operated salt storage areas:

- Cover or store salt indoors
- Store salt on an impervious surface
- Implement practices to reduce exposure when transferring material from salt storage areas

Additional requirements include:

- Implementation of a written snow and ice management policy for individuals that perform winter maintenance activities for the permittee
- Annual training for all staff that perform winter maintenance activities. Training should include:
  - Importance of protecting water quality
  - BMPs to minimize the use of deicers
  - Tools and resources to assist in winter maintenance
- Maintain written procedures for the purpose of determining the TSS and TP treatment effectiveness of all permittee owned/operated ponds used for stormwater treatment
- Inspect structural stormwater BMPs annually
- At least one inspection of all ponds and outfalls, prior to permit expiration in 2025
- Implement a stormwater management training program

**Standard Operating Procedures/Operations and Maintenance Program:**

Hennepin County inspects and repairs the stormwater system annually with a target inspection rate of 20% for outfalls. Hennepin County also invests in training and technology to reduce the amount of chlorides being applied during storm events; this includes the development of an anti-icing program with dedicated routes. The county road system is also swept at least once annually with the continuation of spot sweeping throughout the County as needed.

**Facilities Inventory:** Hennepin County has developed the following inventory of County owned/operated public works facilities that may contribute pollutants to stormwater discharges:

- Medina Public Works Facility
- Osseo Shop/Truck Station
- Bloomington Shop/Truck Station
- Orono Shop/Truck Station

The Brooklyn Park Recycling Center and Transfer Station, the Bloomington South Hennepin Recycling and Problem Waste Drop-Off Center, and the Minneapolis 7<sup>th</sup> and Park Maintenance Facility are regulated/permitted separately through Facility Services under MPCA's industrial stormwater permit, therefore are not included in the MS4 inventory.

[Industrial stormwater | Minnesota Pollution Control Agency \(state.mn.us\)](https://www.mn.gov/industry/industrial-stormwater)

In addition, Hennepin Energy Recovery Center (HERC) has its own site specific Storm Water Pollution Prevention Plan (SWPPP) which the County is required to have for our National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Permit, therefore is not included in the county MS4 inventory.

Information regarding implemented BMPs for inventoried facilities is available in the [MS4 Truck Station/Shop Storm Water Plan](#).

Pond Assessment Procedures and Schedule:

Cities typically own and maintain ponds that may be constructed as part of county transportation projects. Generally, these ponds are serving a large area (primarily city), and the county right of way has a small contributing flow. Here is standard language used in county project cooperative agreements with cities:

*Storm Sewer Drainage System: After the completion of the Project, the City shall own and bear maintenance responsibilities for components of the roadway storm sewer drainage system within the County right of way, constructed as a part of this Project including but not limited to all trunk lines, ponds, and storm water treatment structures. The County shall own and bear maintenance responsibilities for catch basins and drainage inlet structures constructed as a part of this Project.*

Treatment of Ponds on Tax Forfeited Property:

We had a county attorney review if ponds on tax forfeited properties should be included in the County's MS4 inventory. Based on the review it was determined that the ponds on tax forfeited properties are *not* considered county facilities, and the County is *not* responsible for maintaining the ponds as part of its General Permit responsibilities. This conclusion is based on the fact that the ponds are not part of the County's system of storm water conveyances. Rather, the ponds were designed as part of a distinct and separate collection and conveyance system for a separate owner or entity.

Inspections and maintenance:

Hennepin County conducts annual inspections of structural stormwater BMPs. Based on inspection findings, the County determines if repair, replacement, or maintenance measures are necessary in order to ensure the structural integrity, proper function, and treatment effectiveness of structural stormwater BMPs. Necessary maintenance is completed as soon as possible to prevent or reduce the discharge of pollutants to stormwater. Maintenance activities are documented in the County's current asset management software system.

Inspections of structural stormwater BMPs are conducted annually unless the County determines either of the following conditions apply:

- 1) Complaints received or patterns of maintenance indicate a greater frequency is necessary
- 2) Maintenance or sediment removal is not required after completion of the first two annual inspections; in which case the permittee may reduce the frequency of inspections to once every two years

Hennepin County conducts quarterly inspections of the inventoried county facilities, to determine maintenance needs and proper function of BMPs. Additional information is available in the [MS4 Truck Station/Shop Storm Water Plan](#).

**Employee Training Program:**

Hennepin County has developed and implemented a stormwater management training program for employee's related to MS4/SWPPP that includes acquiring and maintaining certifications through the University of Minnesota Erosion and Stormwater Management Certification Program.

Road Operations Division has the following requirements:

- Foremen and supervisors are required to acquire certification for Construction Site Management within the first year of employment in this job classification.
- Heavy equipment operators (HEO) and lead workers are recommended to acquire certification for Construction Installer.

Asset Management Division has the following requirements:

- Engineering technicians and supervisors in the permits office are required to acquire certification for Construction Site Management within the first year of employment in this job classification.

Construction Division has the following requirements:

- Engineering technicians are required to acquire certification for Construction Site Management and/or Construction Installer within the first year of employment in this job classification.

Design Division has the following requirements:

- Engineering technicians and engineers in the Water Resources group are required to acquire certification for Design of Construction SWPPP within the first year of employment in this job classification.

In addition, there is year round on-the-job training for staff working in the field - learning from certified and/or experienced employees through hands-on training/knowledge sharing.

Documentation of the following information is compiled annually:

- Date(s) and description of findings of all conducted inspections, including if illicit discharge is detected
- Any adjustments to inspection frequency
- A description of maintenance conducted, including dates, as a result of inspection findings
- Employee stormwater management training events, including a list of topics covered, names of employees in attendance, and date of each event
- Pond sediment excavation and removal activities

**BMPs and Measurable Goals:**

Established BMP categories	Measurable goals and timeframes
Inspect and maintain the county road and bridge system	This has been implemented and is documented in our asset management software
Inspect 20% of MS4 outfalls annually	This has been implemented and is documented in our asset management software
Annual sweeping program	All county roadways are swept at least once per year
Annual equipment calibration	Calibrations conducted 2 times per year (minimum)
Formal and in-house salt application training	All new staff are sent to classes annually, refresher training is provided on a space available basis. In house training is provided as needed.
Post winter storm reports	A post storm report will be logged every time a call out is implemented
Salt application determined through foremen communications	Implemented for each storm
MS4 facility inspections are conducted quarterly	This has been implemented and documented per the permit requirements

Responsible Parties: Transportation Departments and Environment and Energy

Primary Contacts:

- Kristy Morter, Transportation Operations Department
- Andy Kraemer, Road Operations Manager – Transportation Operations Department

## Discharges to Impaired Waters

### Requirements:

If the permittee had an applicable WLA not being met for oxygen demand, nitrate, TSS, or TP, the permittee must provide a summary of the permittee's progress toward achieving those applicable WLAs with the annual report. The summary must include the following information:

- A list of all BMPs applied towards achieving applicable WLAs for oxygen demand, nitrate, TSS, and TP
- The implementation status of BMPs included in the compliance schedule at the time of final application submittal
- An updated estimate of cumulative TSS and TP load reductions

If the permittee has an applicable WLA where a reduction in pollutant loading is required for bacteria, the permittee must:

- maintain a written or mapped inventory of potential areas and sources of bacteria
- maintain a written plan to prioritize reduction activities to address the areas and sources identified in the inventory. The written plan must include BMPs the permittee will implement over the permit term, which may include, but is not limited to:
  - Water quality monitoring to determine areas of high bacteria loading
  - Installation of pet waste pick-up bags in parks and open spaces
  - Elimination of over-spray irrigation that may occur at permittee owned areas
  - Removal of organic matter via street sweeping
  - Implementation of infiltration structural stormwater BMPs
  - Management of areas that attract dense populations of waterfowl

If the permittee has an applicable WLA where a reduction in pollutant loading is required for chloride, annually, the permittee:

- must document the amount of deicer applied each winter maintenance season to all permittee owned/operated surfaces.
- must conduct an assessment of the permittee's winter maintenance operations to reduce the amount of deicing salt applied to permittee owned/operated surfaces and determine current and future opportunities to improve BMPs. The permittee must document the assessment.



**Standard Operating Procedures (SOPs):**

Hennepin County has 42 applicable WLAs where a reduction in pollutant loading is required for:

- oxygen demand, nitrate, TSS, or TP
- bacteria
- chloride

27 out of the 42 applicable WLAs are new for this permit period.

Hennepin County currently does not have an applicable WLA where a reduction in pollutant loading is required for temperature. In addition, Hennepin County does not own or maintain any Alum or Ferric Chloride Phosphorus Treatment Systems.

Inventory of potential areas and sources of bacteria include the following:

- Farmland
- Properties with septic systems: [Septic systems | Hennepin County](#)

Activities in place to reduce areas and sources of bacteria include:

- Developed enforcement standards to address pet waste
- Remove organic matter via street sweeping
- Implement infiltration structural stormwater BMPs on captical projects when deemed appropriate

**BMPs and Measurable Goals:**

Established BMP categories	Measurable goals and timeframes
Maintain a written or mapped inventory of potential areas and sources of bacteria	Inventory identified in the SOP
Provide a summary of progress toward achieving applicable WLAs with the annual report	Progress is tracked and submitted with the annual report
Reduction activities to address areas and sources of bacteria	Annual street sweeping and installation of structural stormwater BMPs
Document the amount of deicer applied each winter maintenance season	Deicer amounts are documented annually
Conduct an annual assessment of the winter maintenance operations to reduce the amount of deicing salt applied	Assessments will be conducted annually

Responsible Parties: Transportation Departments and Environment and Energy

Primary Contacts:

- Drew McGovern, Water Resources Engineer – Transportation Project Delivery
- Kristy Morter, Transportation Operations Department

# Enforcement Response Procedures (ERPs)

## **Regulatory Mechanisms:**

Hennepin County's regulatory mechanisms include contract documents and/or specifications, permits, Ordinance 22 and Resolution 22-0391.

## **Standard Operating Procedures (SOPs):**

Construction staff are generally responsible for inspection of capital projects in county right of way. Regulatory mechanisms for these projects are the project contract documents/ specifications and project specific permits and agreements.

Permits office staff are generally responsible for inspection of permitted projects in county right of way. Regulatory mechanisms for these projects are the permit terms and specifications and Ordinance 22.

Hennepin County anticipates two general types of stormwater violations:

1. Construction sites
2. Illicit discharges or connection to the county's MS4

Potential violators include construction contractors, businesses, industries, private citizens, and other governmental agencies. Reports of a stormwater violation or non-compliance may come from one of the following sources:

- Reports from county staff: illicit discharges and discharges of sediment or other pollutants from the construction sites, facilities, or other sources within the county's MS4 may be observed by county staff as they conduct normal activities such as driving to or from job sites or when inspecting other activities. Such non-compliances could include water and wind erosion, sediment tracking onto streets, poor housekeeping, incorrect location of concrete washouts, and failed or ineffective best management practices (BMPs).
- Permit compliance activities: non-compliances may be discovered through permit inspections or monitoring.
- Contractor compliance activities: a construction contractor's failure to comply with the state's construction general permit requirements such as conducting and submitting inspection reports, obtaining annual certifications, preparing and implementing Stormwater Pollution Prevention Plans (SWPPPs).

- Reports from the public: public complaints may come directly to the county or through other local, state or federal government agencies.

### **Construction Enforcement:**

When stormwater non-compliance is identified by the county, enforcement actions will be taken promptly, but no later than 7 days following identification of the non-compliance. The county will take appropriate sanctions against the applicant based on the nature and severity of the situation. Non-compliances will be classified as a minor or major violation. Major violations are generally those acts or omissions that lead to a discharge of pollutants to stormwater. Minor violations are generally instances of non-compliance that do not directly result in such a discharge. Serious discharges or an imminent threat of discharge on a project may require an immediate escalation to a higher level of enforcement. The level of enforcement response will depend upon several of the following factors:

- Severity of the violation: the duration, quality, and quantity of pollutants, and effect on public safety and the environment
- The violator's knowledge (either negligent or intentional) of the regulations being violated
- A history of violations and/or enforcement actions

The county will use a progressive enforcement practice, escalating the response when an applicant fails to respond in a timely manner. If the county identifies a deficiency in the implementation of the approved project SWPPP and the deficiency is not corrected immediately or by a date requested by the county, the project is in non-compliance. The recommended sequence of enforcement actions are as follows:

- **Verbal Warning:** This action is a verbal exchange between an inspector or the construction engineer and the alleged violator. The information exchanged will be documented by the inspector. Typically, no letter is written if the problem is corrected immediately, and the inspector or construction engineer observes the corrective action and deems it appropriate.
- **Written Warning:** A warning letter may be issued if the non-compliance continues for 7 days after the verbal warning is issued, if the non-compliance cannot be corrected while the inspector is on site, or if the non-compliance is a significant violation. The warning letter will document the reasons why the discharge is illegal and will provide a deadline for compliance. Based on the type and severity of the non-compliance, the period between the verbal and written warnings may not wait the full 7 days. Compliance is required within 7 days to avoid additional enforcement actions; however, if the situation warrants, a shorter or longer deadline may be permissible.
- **Stop Work Order:** If the verbal and written warning do not result in corrective action by the documented deadline, the county may stop work (full or partial shutdown) at the construction site. Upon successful corrective action in response to a stop work order and upon approval by the county, work may begin at the site.

### **Illicit Discharges and Connection Enforcement:**

Any discharge/connection without permission is an illegal encroachment on the county's MS4. A discharge/connection can be discovered in two ways, either through routine inspection or due to a complaint. Notification of observed illicit connections or discharges will be carried forward to the alleged illegal connector/discharger by the inspector or observer. The county will use the following progressive enforcement practice, escalating the response when a discharger fails to respond in a timely manner.

- **Verbal Warning:** When a routine inspection of the drainage system identifies an illegal connection/discharge to the county's MS4 system, the inspector documents the discharge on a IDDE inspection form or in their electronic management system, as well as notify other departments and agencies as appropriate.

If the source of the connection is evident, the observer/inspector will contact the connector/discharger directly by phone or in person to discuss elimination. The communication will include requesting any permits or other authorizations and providing a follow-up date (within 15 days). If the discharge is permitted or authorized, no further action is required. If the discharge is not authorized, it will need to be addressed or ceased within 15 days.

- **Written Warning:** If after 15 days of the verbal warning the illicit connection/discharge has not been corrected, the County Engineer, or designated representative, will issue a letter to the property owner notifying them of the illegal discharge and corrective action requirements. The letter will request that the connection/discharge be ceased or removed within 30 days. A follow-up inspection will be performed by a county staff member to ensure compliance. If the connection/discharge has not been corrected, the incident will be referred internally to the County Engineer for further review.
- **Removal of Connection/Discharge:** The county may remove the illegal connection/discharge if it has not been corrected within a suitable timeframe. If the county removes the illegal connection/discharge, the responsible party is subject to reimbursement to Hennepin County for all costs incurred. If payment is not made within 30 days after costs are incurred by the county, then the county may pursue reimbursement under any other legally authorized method.
  - **Minnesota Pollution Control Agency (MPCA):** Authority to administer the state MS4 permit in Minnesota rests with the MPCA. The MPCA has several enforcement mechanisms for violations of NPDES rules, including fines.

- **United States Environmental Protection Agency (USEPA):** Although the USEPA delegated authority for the NPDES Program to the state of Minnesota, the USEPA reserves the authority to apply fines in addition to fines issued by the MPCA.

Enforcement conducted by Hennepin County pursuant to the ERPs is documented and includes the following:

- Name of the person responsible for violating the terms and conditions of the county's Regulatory Mechanism(s)
- Date(s) and location(s) of the observed violation(s)
- Description of the violation(s), including reference(s) to relevant Regulatory Mechanism(s)
- Corrective action(s) (including completion schedule) issued by the permittee
- Date(s) and type(s) of enforcement used to compel compliance (e.g., written notice, citation, stop work order, withholding of local authorizations, etc.)
- Referrals to other regulatory organizations (if any)
- Date(s) violation(s) resolved

# Appendix A –Spill Response Plan

**Requirements:**

Emergency Notification **REQUIRED** if there is a spill of a hazardous material or more than 5 gallons of a petroleum product AND it can reach surface water or sewers, or can reach ground/soil you must call:

- Local Authorities Call 9-1-1 first, if there is a threat to life or property
- Contact PW Emergency Coordinator
  - Within Facility, Primary Contact: Patrick Kelly 612-596-0299, 612-251-4722
  - Outside Facility, Primary Contact: Kristi Bode 612-596-0258, 612-916-3982
  - Alternates: Mark Hovey 612-596-0257, 612-388-6383, Michael Tupy 612-348-4855
- Minnesota Duty Officer 1-800-422-0798 or (651) 649-5451 if public safety or environmental threat and/or state notification for reportable spills is required
- The National Response Center 1-800-424-8802 if Duty Officer states federal notification required

**The following information will be requested by the Minnesota Duty Officer:**

- Name of caller
- Date, time and location of the incident
- Telephone number for call-backs at the scene or facility
- Whether local officials (fire, police, sheriff) have been notified of incident
- EPA ID number: MNR-000-059-816

**Additional information will be requested in the following special circumstances:**

Making notification of spills/incidents	Requesting state assistance for incidents
<ul style="list-style-type: none"> <li>• Materials and quantity involved in incident</li> <li>• Incident location (physical address, intersection, etc.)</li> <li>• Responsible party of incident (property/business owner)</li> <li>• Telephone number of responsible party</li> <li>• Any surface waters or sewers impacted</li> <li>• What has happened and present situation</li> </ul>	<ul style="list-style-type: none"> <li>• Type of assistance requested (informational, specialized team assets, etc).</li> <li>• Name of requesting agency/facility</li> <li>• Materials, quantity and personnel involved in the incident</li> <li>• Whether all local, County, mutual aid resources have been utilized</li> </ul>

## Spill Response Plan:

### Step 1: Approach the Scene

- Use safety first in responding to spills. Do not endanger yourself or others by entering a hazardous environment. If there is a fire or medical attention is needed, call 911 immediately.
- Avoid exposure. Approach the spill from upwind and stay clear of spills, vapors, fumes and smoke.

### Step 2: Secure the Scene

- Isolate the spill.
- Keep people away from the scene; divert traffic and pedestrians as needed.
- If possible, stop the source of the spill.
- Eliminate any ignition sources.

### Step 3: Identify the Hazards

- Attempt to identify the spilled material.
  - Characteristics (odor, color, sheen), labels/markings, container type, activities in the area, hazard warnings, etc.

### Step 4: Assess the Situation

- Determine the appropriate first response actions and if additional response help is needed
- The response will be dictated by the size of the spill and the hazard:
  - Is there a fire, a spill, or a leak?
  - Is there a potential for it to mix with something else?
- Observe your surroundings:
  - Who/what is at risk?
  - Is an evacuation necessary?
  - What resources are required and readily available to contain the spill?

### Step 5: Report the Spill

- Report spills that may cause pollution, such as toxic, flammable, corrosive and dangerous industrial chemical spills.
  - Minnesota has a reporting threshold of greater than five-gallons for petroleum spills. Spills of any quantity of all other chemicals or materials should be reported. When in doubt, report.
- Contact the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (Metro area), if the spill of any substance or material may cause or has caused pollution of waters of the state.



### Step 6: Contain the Spill

- Always wear the appropriate personal protective equipment, such as gloves, boots, and safety glasses. Know the limitations of the personal protective equipment.
- Place booms or available materials around the perimeter of the spill to keep it from spreading.
  - If the spill is a threat to any storm water conveyance, like street gutter, storm drain or inlet, swale, ditch, storm, or river, place absorbent between the spill and storm device.
- Apply absorbent materials starting from the downhill and outside edge of the spill.

### Step 7: Clean Up the Spill

- If you have the proper training, small spills may be cleaned up according to the chemical label and your training.
  - Do not wash or hose down the spill into the street, ditch or storm drain.
  - If flammable liquid is spilled, ventilate the area and eliminate any possible sources of ignition.
  - Clean up the spills, leaks and drips quickly. Use “dry” clean-up methods, such as sweeping or shoveling. If the spill can be moved by wind, cover the material with sheeting to prevent spreading.
  - Place all clean-up waste in appropriate containers. If hazardous, ensure that material is placed in a hazardous waste container.
  - Dispose of spill material in compliance with all Federal, State and Local regulations.
- If you do not have proper training, or the spill is a large spill, leave the area and notify Emergency Responders (911). Give the operator the spill location, chemical spilled and approximate amount.

### Step 8: Complete Spill Documentation and Follow-up

- Clean and decontaminate all reusable spill cleanup equipment.
- Be sure to restock your spill response materials and personal protection equipment as soon as possible.
- Update facility spill records.

## Appendix B – Storm Sewer System Maps

### Requirements:

Storm sewer system map(s) and inventory should include the following information:

- Entire small MS4 as a goal, but at a minimum, all pipes 12 inches or greater in diameter, including stormwater flow direction in those pipes
- Outfalls, including a unique identification (ID) number, and an associated geographic coordinate
- Structural stormwater BMPs
- All receiving waters

### Standard Operating Procedures:

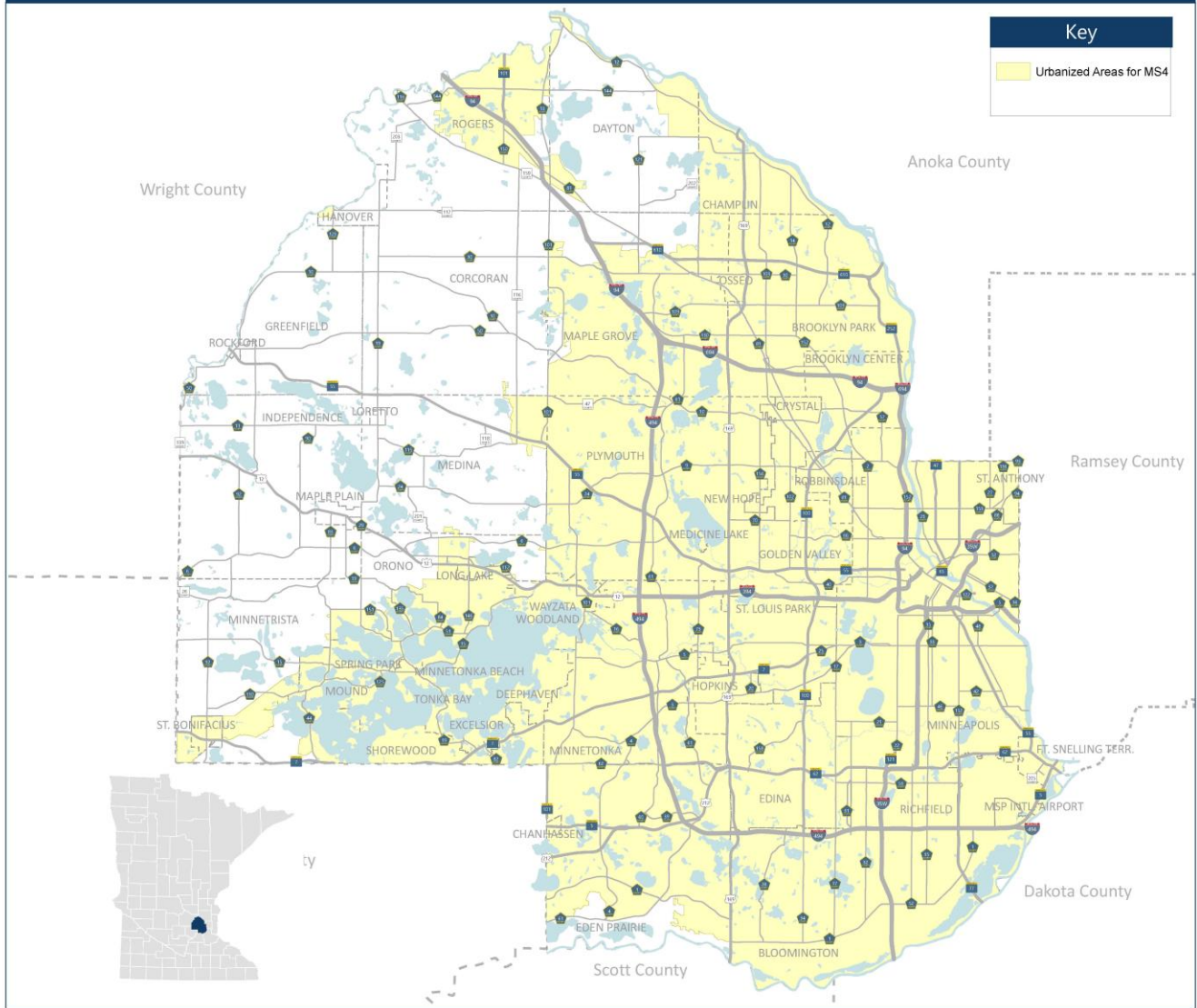
An interactive GIS map has been created for the MS4 and is located at the following link:

[MS4 Data Viewer | Transportation GIS Site \(hennepin.us\)](#)

# Hennepin County MS4 Permit Urbanized Areas

Required Permit Locations | Hennepin County Public Works

HENNEPIN COUNTY  
MINNESOTA



**Disclaimer:** This map (i) is furnished "AS IS" with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this map.

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Data sources (if applicable):

