



2023 Stormwater Pollution Prevention Plan Annual Report

May 12, 2025

Ramsey County is identified as a small Municipal Separate Storm Sewer System (MS4) and has developed a Stormwater Pollution Prevention Program (SWPPP) to manage its stormwater runoff. Although Ramsey County is geographically the smallest county in Minnesota, it is the most densely populated and has been almost fully developed. The county owns and operates over 300 miles of roadway with a stormwater conveyance system that includes curbs, gutters, ditches, and storm drains draining into the many water bodies. Ramsey County also owns other facilities that connect into the MS4 that are covered under this SWPPP including parks, golf courses, yard waste sites, household hazardous waste collection sites, libraries, and other county-owned buildings.

The EPA's Phase II Rule of the National Pollutant Discharge and Elimination System (NPDES) requires MS4s in urbanized areas to apply for an MS4 permit. The goal of the MS4 permit is to restore and maintain the chemical, physical, and biological integrity of Waters of the State through management and treatment of urban stormwater runoff. Each MS4 must develop and implement its own SWPPP, which must be designed to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP), protect water quality, and satisfy the applicable water quality requirements of the Clean Water Act. Best Management Practices (BMPs) must be developed by each MS4 to meet the MEP standards for each of the six Minimum Control Measures (MCM).

Stormwater runoff refers to water that runs off land surfaces after a rainfall or snowmelt event. Stormwater runoff is carried off the land and into the storm sewer systems and eventually into surface waters. The addition of streets, parking lots, driveways, and sidewalks decreases the amount of pervious area, areas where water soaks into the ground, and increases the amount of runoff. The runoff picks up pollutants including pesticides, fertilizers, oils, grease, metals, pathogens, salt, sediment, litter, and other debris as the water flows over the impervious surfaces. These pollutants are transported through the storm sewer system and enter water resources. This contributes to water quality degradation by changing natural hydrologic patterns, accelerating stream flows, destroying aquatic habitats, and elevating pollutant concentrations and loadings. Degradation in water quality can prevent recreational use of water bodies, contaminate drinking water supplies, and disturb aquatic wildlife habitat.

The MPCA issued an updated MS4 permit in 2020. Ramsey County was required to apply for the new permit and update the county's SWPPP to bring it into compliance with the new permit requirements. This year (2022) was the first year where Ramsey County operated under the new SWPPP. Ramsey County is required to perform annual evaluations of its SWPPP. This annual report fulfills that requirement.

Most components of Ramsey County's program are fully compliant with the new permit, but some remain to be updated. The compliance schedule for these is listed in this report.

Any questions regarding this report or the county SWPPP may be directed to the Ramsey County Public Works Department-Environmental Services Division at 651-266-7100 or email to stormwater@co.ramsey.mn.us

16.1 **MCM 1: Public Education and Outreach.** [Minn. R. 7090]

16.2 *Ramsey County must revise our current program, as necessary, and continue to implement, a public education program to distribute educational materials or equivalent outreach that informs the public of the impact stormwater discharges have on waterbodies and that includes actions citizens, businesses, and other local organizations can take to reduce the discharge of pollutants to stormwater. The permittee may use existing materials if they are appropriate for the message the permittee chooses to deliver, or the permittee may develop its own educational materials. The permittee may partner with other MS4 permittees, community groups, watershed management organizations, or other groups to implement its education and outreach program. The permittee must incorporate Section 16 requirements into their program. [Minn. R. 7090]*

16.3 *During the permit term, the permittee must distribute educational materials or equivalent outreach focused on at least two (2) specifically selected stormwater-related issues of high priority to the permittee (e.g., specific TMDL reduction targets, changing local business practices, promoting adoption of residential BMPs, lake improvements through lake associations, household chemicals, yard waste, etc.). The topics must be different from those described in items 16.4 through 16.6. [Minn. R. 7090]*

BMP Description:

Ramsey County has selected household chemicals and yard waste as two of our priority education topics. Our Public Health Department distributes information about our Household Hazardous Waste and Yard Waste collection sites through multiple communication channels including the county website, brochures, newsletters, posters, utility bill inserts, billboards, transit system advertisements, online banner and mobile ads, and social media.

Performance Criteria:

Determine the population exposed to the issues based on:

- Total number of brochures, newsletters, and utility bill inserts distributed to the public

Table 1 – Educational Materials Distribution	
Type	Total
Yard Waste Collection Flyers	137,535
Recycling Guides	231,693
Household Hazardous Waste Collection Flyers	722,439
Green Ramsey Newsletter	62,684
Haz Waste Quarterly e-Newsletter	24,325
Total	1,178,676

- Number of impressions through the advertising on various media types

Table 2 – Education Materials Through Other Media - Impressions			
Media Type	2021	2022	2023
Billboards (static and digital)	6,282,797	6,282,797	Not tracked
Transit	9,713,540	9,713,540	Not tracked
Online Banner & Mobile Ads	1,902,853	1,902,853	12,778,875
Radio/Television (Traditional media)	41,786,078	41,786,078	8,363,962
Skyway & Public Space Ads	2,025,000	2,025,000	Not tracked
Twitter (YW & HHW Topics)	58,087	48,160	7,997
Social Media Influencers	N/A	N/A	536,657
Facebook & Instagram (YW & HHW)	N/A	38,009	29,752
Total	61,768,355	61,798,459	21,717,243

- Number of “hits” on county websites related to stormwater quality, illicit discharge, construction, and residential waste

Table 3 – Educational Materials - Website Hits			
Page	2021 hits	2022 hits	2023 hits
Stormwater Main	488	869	544
Illicit Discharge	105	158	185
Report Illicit Discharge	140	127	114
RCPW Construction	4,631	41,372	9,234
RC Public Health Household Hazardous Waste	67,966	97,802	94,010
RC Public Health Yard Waste	164,874	159,102	178,708
RC Public Health Electronics Recycling	N/A	16,276	36,382
RC Public Health – Source Separated Organic Waste	21,791	34,306	45,067
RC Public Health A to Z Waste Disposal Guide	65,550	1,363,794	52,045
Total	325,545	1,713,806	416,289

- Number of subscribers for updates on Ramsey County construction projects

Table 4 – Educational Materials – Construction Page Update Subscribers			
Year	2021	2022	2023
# Subscribers	24,198	35,099	51,309

- 16.4 *At least once each calendar year, the permittee must distribute educational materials or equivalent outreach focused on illicit discharge recognition and reporting illicit discharges to the permittee. [Minn. R. 7090]*

BMP Description:

Communicate to residents the importance of identifying and reporting illicit discharges to Ramsey County. Information is provided to residents via the county illicit discharge website and through brochures distributed at the county libraries and at the annual public forum for our SWPPP.

BMPs yet to be implemented (expected completion):

- Expand brochure distribution to public information locations at other county buildings, municipal buildings, and Saint Paul public libraries (Completed January 2022)
- Work with the Ramsey County Public Health Department’s Communications Division to include advertising via social media (Completed Spring 2022)

Performance Criteria:

- Annual number of brochures distributed to the public

Table 5. Educational Materials. IDDE Brochure Distribution			
Site	2021	2022	2023
Ramsey County Libraries (7)	302	169	148
St Paul Libraries (13)**	N/A	272	310
Total	302	441	458

**St Paul Library distribution began in 2022

- Annual number of web visits to the county illicit discharge web page

See Table 3

- Annual number of illicit discharges recorded by Ramsey County

Table 6. Educational Materials. Public Reported Illicit Discharges			
Year	2021	2022	2023
# Public Reported	2	10	7
Total Reports	2	18	10

- Estimated social media “impressions” (BMP not yet implemented)

Table 7. Educational Materials. Illicit Discharge Social Media Outreach		
Year	2022	2023
Total Posts	16	7
# Impressions	8528	2163
Total Engagements (Likes, Shares ,Clicks)	88	15

16.8 *The permittee must document the following information:*

- a description of all specific stormwater-related issues identified by the permittee in item 16.3;*
- all information required under the permittee's education and outreach plan in item 16.7;*
- activities held, including dates, to reach each target audience;*
- quantities and descriptions of educational materials distributed, including dates distributed; and*
- estimated audience (e.g., number of participants, viewers, readers, listeners, etc.) for each completed education and outreach activity. [Minn. R. 7090]*

BMP Description:

Ramsey County collects data related to our education and outreach program throughout the year. Most events and outreach sessions have date and attendance data recorded. Some events are ongoing throughout the year and are tracked by volume and weight collected. Our waste collection serves an additional purpose of preventing illicit discharges covered under MCM 3. We intend to expand the data collection to incorporate as much of our program as possible. A summary of the data collected is listed below.

Performance Criteria

- Household Hazardous Waste Program
 - Total operating hours and household participation at Ramsey County’s year-round and satellite collection sites (11 Sites)

Table 8. Public Education & Outreach. HHW Program Participation			
Year	Operating Hours	Total Households	Lbs / household*
2019	1,974	27,021	
2020	1,971	32,590	
2021	1,923	30,577	
2022	1,910	27,716	48.2
2023	1,910	26,505	48.3

*lbs/household not reported prior to 2022

- Total amount (lbs) of material collected at the collection events and at the county's 24-hr waste oil collection site.

Table 9. Public Education & Outreach. HHW Program Collection Amounts (lbs)					
Waste Item	2019	2020	2021	2022	2023
Aerosols	53,068	39,547	43,961	42,343	47,333
Antifreeze	26,048	32,408	37,230	29,032	28,654
Batteries – Lead Acid	48,497	67,531	63,990	55,957	67,195
Batteries – Non-rechargeable	6,527	17,118	21,406	26,237	20,983
Batteries - Rechargeable	10,956	8,712	5,652	7,894	7,069
Compressed gas cylinders	38,810	18,565	28,114	25,616	32,854
Corrosive (acids & bases)	10,540	26,388	10,665	14,698	9,196
Flammable solvents – shipped & reused	118,365	130,445	123,158	93,398	110,159
Flammables (liquid & solid)	133,371	150,237	60,435	52,112	52,113
Fluorescent & HID lamps	86,720	64,899	42,754	42,861	37,489
Latex driveway sealer	11,020	10,943	9,860	6,380	7,540
Latex paint – shipped & reused	637,094	739,166	673,259	546,597	506,151
Lead paint chips	1,349	3,227	2,214	580	1,185
Mercury	357	3,751	1,013	1,930	142
Oil based paint – shipped & reused	154,218	179,002	168,981	141,827	127,528
Other	10,583	18,822	21,651	26,497	15,221
Pesticides	67,005	71,090	69,389	58,397	59,881
Used motor oil – shipped & reused	133,741	146,878	143,614	122,953	146,234
Used motor oil filters	4,979	4,444	4,386	3,898	3,688
Total HHW	1,553,248	1,733,173	1,531,732	1,299,208	1,280,614

Table 10. Public Education & Outreach. 24-hr Waste Oil Facility Collection Amounts					
Waste Item	2019	2020	2021	2022**	2023
Used Oil Volume (gallons)*	41,437	22,811	29,767	7,441	7,233
Used Oil Filters (lbs.)	14,523	20,250	19,750	25,000	24,500
Antifreeze (gallons)	1,865	1,150	1,315	935	1845

*Used oil volume is a combination of public collection and the Public Works Vehicle Maintenance Dept

**2022 Used oil volume was low. Missing invoices.

- Total amount (lbs) of pharmaceuticals collected at the Ramsey County Sheriff's Patrol Station

Table 11. Public Education & Outreach. Pharmaceutical Collection		
Year	Residents #	Amount Collected (lbs)
2019	>5,000	10,020
2020	>5,000	10,220
2021	>6,800	13,040
2022	>3,400	6,500
2023	>1,000	2,080

- Environmental justice / underserved community outreach
 - Participation at HHW collection events at sites located near Hmong and Latinx communities
- NOTE: Individual satellite site data was not available. Ramsey County tracks outreach regarding yard waste and HHW to underserved communities.

Table 12. Public Education and Outreach. Environmental Justice Outreach		
Type	Target Audience	Total
Recycling Guide	Spanish speaking	930
HHW Flyers	Spanish speaking	7,260
HHW Flyers	Hmong Speaking	Not tracked in 2023

- Yard Waste Site Program
 - Total volume of yard waste and brush collected at the county yard waste sites
 - Total volume of compost produced
 - Total number of visitors participating in the source separated organics program
 - Total weight of source separated organics collected

Table 13. Public Education and Outreach. Yard Waste Site Usage					
Waste Type	2019	2020	2021	2022	2023
Volume Yard Waste / Brush (yd ³)	288,880*	266,062*	256,463*	107,451*	213,964*
Total Operating Hours/Site	>1,428	>1,428	>1,428	>1,428	>1,428
Volume Compost Produced (yd ³)	3,425	5,144	2,577	2,577	4,546
Source Separated Organics Participation (visits)	86,611	N/A	114,339	105,487	90,248
Source Separated Organics Collected (tons)	409.82	832.84	3,033	895.05	1,011.24

*Estimated volume – leaf/grass was reported in tons, used 350lbs/yd³ conversion

- Total number of Master Gardener interactions with the public at county yard waste sites
 - i. Interactions not tracked. Selected topics were:
 1. Organics (food waste and non-recyclable paper products) Recycling
 2. Protect Our Water: Reduce Runoff Rainwater; Reduce Garden Chemicals; Plant Rain Gardens
 3. Reduce Waste: Compost or Recycle Organics, Properly Prune, Leave Grass Clippings on lawn
 4. Grow Your Own Food: For Exercise, Good Health, and a Better Budget
 5. Reduce Chemicals: Reduce Chemicals in Your Yard and Home and properly dispose any leftovers
- VSQG Program (Very Small Quantity Hazardous Waste Generator)
 - Total number of hazardous waste generator training sessions and attendance

Table 14. Public Education & Outreach. Hazardous Waste Generator Training					
	2019	2020	2021	2022	2023
# of Licensed Permittees				1783	1742
# of Newly Licensed Permittees				65	0
# of Training Sessions	25	1	2	1	1
# of Total Attendees	684	75	119	165	165

- Ramsey County waste and recycling hotline
 - Total volume of calls organized by topic

Table 15. Public Education & Outreach. 633-EASY Hotline Participation					
Call Topic	2019	2020	2021	2022	2023
Yard Waste	>17,200	26,293	5,400	>2,400	>2,400
HHW				>1,500	>1,500
Recycling & Electronics Disposal				>4,200	>4,200

- Soil and Water Conservation Division
 - Conservation forums held (date, topic, and attendance)

Table 16. Public Education & Outreach. Conservation Forums		
Month	Topic	Attendance
January	AIS in Review	10
August	Restoration Walk	15
November	Weather: Past, Present, Future	25

- Rain garden and shoreline projects consulted and installed

Table 17. Public Education & Outreach. Rain Garden, Shoreline, and Erosion Control Projects			
Year	Site Visits	Construction Designs	Installed Projects
2019	352	Not tracked	42
2020	260	Not tracked	56
2021	332	Not tracked	80
2022	256	103	70
2023	260	116	55

- Tamarack Nature Center
 - Annual visitors
 - Water quality education and interpretive programs participants

Table 18. Public Education & Outreach. Tamarack Nature Center Programs					
	2019	2020	2021	2022	2023
Annual Visitors	173,228	N/A ¹	115,000	10,682	143,790
Water Quality Education & Interpretive Programs participants	2,229	N/A ¹	30,557 ²	2,593	25,808

¹Covid restrictions required cancelling WQ programs and prevented collecting visitor data.

²Data for 2021 included all programs, not just WQ programs.

- Public Works Department

- Date and participation in the ROW Permits office annual utility meeting

Table 19. Public Education & Outreach. ROW Permits Annual Meeting					
Year / Date	2019	2020	2021	3/23/2022	2023
Attendance	50-60 (Est)	50-60 (Est)	50-60 (Est)	50-60 (Est)	51

- Date and attendance at pre-construction and weekly construction meetings

Table 20. Public Education & Outreach. Construction Project Meetings				
Project	Pre-con date	Pre-con attendance	# of Weekly Meetings	Average weekly mtg attendance
Lex. Shepard to West 7 th St	4/24/2023	18	26	6 to 11
Old Highway 8 Co. Rd D to 5 th Ave	4/6/2023	27	29	4 to 11
Hodgson Gramsie to Bridge	7/11/2023	25	15	5 to 16
Lexington Ave	3/15/2023	20	21	10 to 20
Old Snelling & CR E	5/24/2023	25	18	10 to 18
2023 Overlays	6/22/2023	15	11	4 to 6
South Shore Blvd	4/10/2023	18	14	10 to 15

17.1	MCM 2: Public Participation/Involvement. [Minn. R. 7090]
17.2	<i>New permittees must develop and implement, and existing permittees must revise their current program, as necessary, and continue to implement, a Public Participation/Involvement program to solicit public input on the SWPPP and involve the public in activities that improve or protect water quality. The permittee must incorporate Section 17 requirements into their program. [Minn. R. 7090]</i>
17.3	<i>Each calendar year, the permittee must provide a minimum of one (1) opportunity for the public to provide input on the adequacy of the SWPPP. The permittee may conduct a public meeting(s) to satisfy this requirement, provided appropriate local public notice requirements are followed and the public is given the opportunity to review and comment on the SWPPP. [Minn. R. 7090]</i>

BMP Description:

- Annual public forum typically held at the Phalen WaterFest hosted by Ramsey-Washington Metro Watershed District
- Provide a review and comment period on Ramsey County's stormwater management website. An email link is available for the public to submit SWPPP and other stormwater-related comments

Performance Criteria:

- Number of visits and comments at the Ramsey County MS4 booth at Phalen WaterFest

Table 21. Public Participation/Involvement. WaterFest Booth 6/3/2023				
Activity/Interaction	SWPPP Related Interaction	Kids Activity Participation	IDDE Related Interaction	IDDE Brochures Taken
Total # at WaterFest	7	35	5	6

- Number of comments provided via the Ramsey County stormwater email account

Table 22. Public Participation/Involvement. Stormwater Email SWPPP Comments					
Year	2019	2020	2021	2022	2023
Comments	1	1	5	0	0

- Dates of public notices via newspaper, the county website, and the county social media accounts

Table 23. Public Participation/Involvement. Public Notices for Annual SWPPP Forum (WaterFest)	
Media Type	Publication Date(s)
Ramsey County Website	N/A
St Paul Pioneer Press	4/30/2023, 5/14/2023, 5/28/2023
Ramsey County Facebook Page	5/8/2023, 5/18/2023
Ramsey County Twitter Account	6/1/2023

- 17.4 *The permittee must provide access to the SWPPP Document, annual reports, and other documentation that supports or describes the SWPPP (e.g., regulatory mechanism(s), etc.) for public review, upon request. All public data requests are subject to the Minnesota Government Data Practices Act, Minn. Stat. 13. [Minn. Stat. 13]*

BMP Description

- Ramsey County posts the SWPPP document, annual reports and ordinances on our county website
- The SWPPP document and annual MS4 and SWPPP reports are available at the Public Works Department main desk (1425 Paul Kirkwold Drive, Arden Hills, MN 55112) when conditions allow
- Physical copies of our ordinances may be obtained by contacting the department responsible for regulating the ordinance
- Ramsey County Stormwater Website: <https://www.ramseycounty.us/residents/environment/stormwater-management>
- Illicit Discharge web page and ordinance: <https://www.ramseycounty.us/residents/environment/stormwater-management/illicit-discharge>
- Right of Way permit program and ordinance: <https://www.ramseycounty.us/business/licenses-permits-inspections/permits>
- Hazardous waste program: <https://www.ramseycounty.us/business/recycling-waste/hazardous-waste>

Performance Criteria

- Records the dates of document posting on the county stormwater website for public review and comment

Table 24. Public Participation/Involvement. Posting of MS4 Annual Reports on Ramsey County Website	
Report Type	Publication Date
MPCA MS4 Annual Report	N/A
Ramsey County SWPPP Annual Report	N/A

- 17.7 *The permittee must document the following information: a. all relevant written input submitted by persons regarding the SWPPP; b. all responses from the permittee to written input received regarding the SWPPP, including any modifications made to the SWPPP as a result of the written input received; c. date(s), location(s), and estimated number of participants at events held for purposes of compliance with item 17.3; d. notices provided to the public of any events scheduled to meet item 17.3, including any electronic correspondence (e.g., website, e-mail distribution lists, notices, etc.); and e. date(s), location(s), description of activities, and estimated number of participants at events held for the purpose of compliance with item 17.6. [Minn. R. 7090]*

BMP Description

- a) Ramsey County will record any comments submitted via our public forum and stormwater management website.
- b) Ramsey County will keep a record of any responses provided to relevant questions and comments on our MS4 program
- c) All event data will be recorded for our public forum
- d) Public notices and web postings will be collected for our public forum announcement
- e) Ramsey County will collect relevant data for our HHW collection events

Performance Criteria

- a) Report the number and type of comments submitted via both available options
- b) Include relevant comments/questions and answers in the SWPPP annual report
- c) Event data is reported in item 17.3
- d) Public notice data is reported in item 17.3
- e) Household Hazardous waste program participation is reported in item 16.8

Table 25. Public Participation/Involvement. Listing of SWPPP Comment Types and Responses

NOTE: Ramsey County did not receive any relevant comments related to our SWPPP and MS4 Program in 2023

18.1 MCM 3: Illicit Discharge Detection and Elimination (IDDE). [Minn. R. 7090]

18.2 *New permittees must develop, implement, and enforce, and existing permittees must revise their current program as necessary, and continue to implement and enforce, a program to detect and eliminate illicit discharges into the MS4. The permittee must incorporate Section 18 requirements into their program. [Minn. R. 7090]*

BMP Description:

Ramsey County has had an Illicit Discharge Detection and Elimination program in place for several years. The program includes outfall inspections, hazardous waste generator permitting, illicit discharge education, public reporting options, and employee training.

Performance Criteria:

The program is evaluated based on the data addressed later in this MCM.

18.3 *The permittee must maintain a map of the permittee's MS4, as required in Section 14. [Minn. R. 7090]*

BMP Description:

Ramsey County maintains a map of the MS4 as required in Section 14. We also maintain a map of reported illicit discharges to use as data in item 18.10. A map of historical illicit discharge events is in Figure 1.

18.7 *The permittee must incorporate illicit discharge detection into all inspection and maintenance activities conducted in items 21.9, 21.10, and 21.11. Where feasible, the permittee must conduct illicit discharge inspections during dry-weather conditions (e.g., periods of 72 or more hours of no precipitation). [Minn. R. 7090]*

BMP Description

- The Ramsey County personnel responsible for conducting inspections the items listed in 21.9, 21.10, and 21.10 are trained in Illicit Discharge Detection and Elimination
- Illicit discharges are addressed in both our basin/pond inspection protocol and our outfall inspection protocol
- All asset inspections through ArcGIS Collector currently include a category for presence of illicit discharges.

BMPs to be Implemented

- Ramsey County will add an illicit discharge category to our basin/pond inspection forms.
- **BMP Implementation Progress –COMPLETE**
- Implementation timeline – Completed in 2023

Responsible Staff

Environmental Services Supervisor – Ramsey County Public Works

Environmental Resource Specialist– Ramsey County Public Works

Environmental Resource Specialist – Ramsey County Parks and Recreation

- 18.8 *At least once each calendar year, the permittee must train all field staff in illicit discharge recognition (including conditions which could cause illicit discharges), and reporting illicit discharges for further investigation. Field staff includes, but is not limited to, police, fire department, public works, and parks staff. Training for this specific requirement may include, but is not limited to, videos, in-person presentations, webinars, training documents, and/or emails. [Minn. R. 7090]*

BMP Description

- New field personnel in Ramsey County's Public Works and Parks and Recreation Departments are trained in IDDE during their orientation

BMPs to be Implemented

- Illicit discharge training will expand to include other appropriate field personnel including Sheriff's Department deputies and Public Health Department field staff
- The county's illicit discharge field staff training is planned to transition to a training module hosted by Ramsey County's internal Learning and Development Center. This will automate the initial and renewal training and provide reliable training data for our SWPPP reporting. Some staff with limited internet access on the job will need to continue in-person training.
 - Move the IDDE training to Ramsey County's internal learning and development center providing an automated system for assigning new and refresher training.
 - Implementation timeline – During 2022 / within one year of MS4 Permit coverage approval
- ***BMP Implementation Progress –COMPLETE:***
 - ***The annual illicit discharge training has been fully moved to Ramsey County's Learning Module System on our internal website. The program has successfully been expanded to include field personnel in all county departments.***

Responsible Staff

Safety Coordinator – Ramsey County Public Works
 Environmental Services Supervisor – Ramsey County Public Works
 Environmental Resource Specialist– Ramsey County Public Works
 Environmental Health Supervisor – Ramsey County Public Health
 Training Sergeant – Ramsey County Sheriff

8.9	<p><i>The permittee must ensure that individuals receive training commensurate with their responsibilities as they relate to the permittee's IDDE program. Individuals includes, but is not limited to, individuals responsible for investigating, locating, eliminating illicit discharges, and/or enforcement. The permittee must ensure that previously trained individuals attend a refresher-training every three (3) calendar years following the initial training. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County Public Works Environmental Services Division is primarily responsible for investigating and enforcing violations of our Illicit Discharge ordinance. New staff are required to review material in our Illicit Discharge and Outfall Inspection Policies as part of their orientation. Environmental Services Division personnel are also encouraged to seek out and attend related training such as MS1108 – Illicit Discharge Management through the University of Minnesota's Erosion and Stormwater Management Certification Program. <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> We will adjust our program to ensure that Environmental Services Division staff attend one illicit discharge related refresher training every three years if available. <ul style="list-style-type: none"> Implementation timeline – During 2022 to be fully implemented within one year of MS4 coverage approval Implementation progress – In Progress: One staff person will complete this training prior to the end of the permit cycle
18.10	<p><i>The permittee must maintain a written or mapped inventory of priority areas the permittee identifies as having a higher likelihood for illicit discharges. At a minimum, the permittee must evaluate the following for potential inclusion in the inventory: a. land uses associated with business/industrial activities; b. areas where illicit discharges have been identified in the past; and c. areas with storage of significant materials that could result in an illicit discharge. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County currently maintains an inventory of the locations with reported illicit discharges and businesses with industrial stormwater (MN ISW) permits for the purpose of identifying priority areas for inspection under our illicit discharge ordinance <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Ramsey County will add hazardous waste generators regulated by our Public Health Department under our hazardous waste ordinance to our illicit discharge inventory <ul style="list-style-type: none"> Implementation timeline – by the end of 2021 Implementation Progress: COMPLETE - Hazardous waste generators regulated by the Public Health Department were added to the illicit discharge priority areas inventory in 2022. The inspectors from the public health department were added to the annual IDDE training schedule. We will work to identify any properties with stockpiles or other materials at risk for illicit discharges that discharge directly into our MS4 and are not covered by the MN ISW permit or by our Hazardous Waste Management (HWM) ordinance. <ul style="list-style-type: none"> Implementation timeline – Ongoing

18.11	<p><i>To the extent allowable under state or local law, the permittee must conduct additional illicit discharge inspections in areas identified in item 18.10. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Our Public Health Department inspects businesses regulated under our Hazardous Waste Management Ordinance Resolution #2008-082 through the Hazardous Waste Generator Program (HWG). Permittees determined to be high risk are inspected one time per year. Other permittees are inspected on a longer cycle depending on their risk level. <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Locations identified with repeated illicit discharge reports within a 5-year cycle will be inspected annually until they avoid a reported discharge for a full cycle <ul style="list-style-type: none"> Implementation timeline – By the end of 2021 Implementation progress – COMPLETE: <ul style="list-style-type: none"> <i>There were 4 priority areas identified due to the seriousness of frequency of prior illicit discharges. One was determined to be under the jurisdiction of another MS4. The remaining 3 are monitored at least annually.</i> Locations with a MN ISW Permit not covered under Ramsey County’s HSW Ordinance will be mapped and inspected once initially at their discharge point to Ramsey County’s MS4. <ul style="list-style-type: none"> Implementation timeline – Within one year of permit coverage Implementation progress – COMPLETE: <ul style="list-style-type: none"> <i>ISW permittees were evaluated in 2022. All permittees on county roads were already regulated under the county’s Haz Waste Generator permit and will continue to be monitored under the permit.</i>
18.12	<p><i>The permittee must implement written procedures for investigating, locating, and eliminating the source of illicit discharges. At a minimum, the written procedures must include: a. a timeframe in which the permittee will investigate a reported illicit discharge; b. use of visual inspections to detect and track the source of an illicit discharge; c. tools available to the permittee to investigate and locate an illicit discharge (e.g., mobile cameras, collecting and analyzing water samples, smoke testing, dye testing, etc.); d. cleanup methods available to the permittee to remove an illicit discharge or spill; and e. name or position title of responsible person(s) for investigating, locating, and eliminating an illicit discharge. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County has drafted an Illicit Discharge Detection and Elimination Policy that is currently used as a guide for illicit discharge investigations <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Update our IDDE Policy to conform with the new MS4 permit requirements and formalize it with approval by all responsible Ramsey County Departments <ul style="list-style-type: none"> Implementation timeline – By the end of 2021 Implementation progress – Partially complete: <ul style="list-style-type: none"> <i>The procedures in draft policy are actively being utilized.</i> <i>The draft is under evaluation in 2023.</i> <p><u>Responsible Staff</u> Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works</p>

18.13	<p><i>The permittee must implement written procedures for responding to spills, including emergency response procedures to prevent spills from entering the MS4. The written procedures must also include the immediate notification of the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (Metro area), if the source of the illicit discharge is a spill or leak as defined in Minn. Stat. 115.061. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County Public Works has an existing spill response procedure <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Review current Public Works spill response procedure for compliance with the new permit rules Expand the adoption of a standard spill response and emergency response procedure to other relevant county departments Implementation timeline – Summer 2022 Implementation progress – INCOMPLETE: <ul style="list-style-type: none"> <i>The current spill response procedure needs to be evaluated before deciding whether it is feasible to expand the procedure to the rest of the county.</i> <p><u>Responsible Staff</u></p> <p>Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works</p>
18.15	<p><i>The permittee must document the following information: a. date(s) and location(s) of IDDE inspections conducted in accordance with items 18.7 and 18.11; b. reports of alleged illicit discharges received, including date(s) of the report(s), and any follow-up action(s) taken by the permittee; c. date(s) of discovery of all illicit discharges; d. identification of outfalls, or other areas, where illicit discharges have been discovered; e. sources (including a description and the responsible party) of illicit discharges (if known); and f. action(s) taken by the permittee, including date(s), to address discovered illicit discharges. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County Public Works Environmental Services Division maintains records of all reported illicit discharges under the IDDE Program which includes the data required in this permit item <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Collect any data related to illicit discharges reported by inspections conducted under our HWG permit program Implementation timeline – Summer 2022 Implementation progress – COMPLETE: <ul style="list-style-type: none"> <i>HWG inspectors have been integrated into the annual IDDE training program. Any illicit discharges observed and reported during inspections will be included in the IDDE data tracking.</i>
18.16	<p><i>For each training in item 18.8 and 18.9, the permittee must document:</i></p> <ul style="list-style-type: none"> <i>general subject matter covered; b. names and departments of individuals in attendance; and c. date of each event. [Minn. R. 7090]</i> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County collects this data related to new hires of the Public Works and Parks and Recreation Departments and for attendees at the Public Works annual staff meeting.

BMPs to be Implemented

- Once the updates to our training program described in Items 18.8 & 18.9 have been implemented, the collection will be automated by our training system
- Implementation timeline – During 2022 to be fully implemented within one year of MS4 coverage approval
- **Implementation progress – COMPLETE:**
 - **Personnel data collected for the IDDE training program includes names, title, department, and dates of training assignment and completion.**

- 18.18 *The permittee must conduct an annual assessment of the IDDE program to evaluate program compliance, the status of achieving the measurable requirements in Section 18, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., trainings, inventory, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]*

BMP Description

- Ramsey County collects the data required by this item and reports the results in our MS4 SWPPP Annual Report on our stormwater web page: <https://www.ramseycounty.us/residents/environment/stormwater-management>

Performance Criteria

- 18.10 - Illicit Discharge Priority Areas
 - # of priority areas identified by our IDDE Program
 - # of newly added priority areas
 - # of new HWG permittees

Table 26. Illicit Discharge Detection and Elimination. IDDE Program Priority Areas		
Year	2022	2023
Total # of Priority Areas	1787	1746
# of New Priority Areas	65	0
# of New HWG Permittees	65	0

- 18.11 – Illicit Discharge Inspections
 - # of outfall inspections performed
 - # of HWG permittees inspected
 - # of other high priority areas inspected

Table 27. Illicit Discharge Detection and Elimination. Illicit Discharge Inspections					
Year	2019	2020	2021	2022	2023
Outfall Inspections / %	584 / 30.0%	545 / 26.3%	356 / 23.9%	322 / 24.0%	332 / 23.9%
HWG Permittee Inspections / Permittees				788 / 1783	827/1742
Other High Priority Areas Inspected				4	2

NOTE: % outfalls inspected will vary as Ramsey County refines the inventory each year.

- 18.13 – Spill Response
 - # of reported spills impacting the Ramsey County MS4

Table 28. Illicit Discharge Detection and Elimination. Ramsey County MS4 Reported Spills					
Year	2019	2020	2021	2022	2023
Spills	4	2	1	2	No data

- 18.15 – Reported Illicit Discharges
 - # of reported illicit discharge categorized by reporter type
 - Ramsey County inspectors
 - Ramsey County staff
 - Other partner agencies / municipalities
 - Public via in person, phone, email, and web reporting portal

Table 29. Illicit Discharge Detection and Elimination. Reported Illicit Discharges					
Year	2019	2020	2021	2022	2023
Reported by IDDE inspectors	2	1	0	2	1
Reported by other county staff	3	2	0	4	2
Reported by other MS4s	1	4	0	2	0
Reported by Public	In person	0	0	0	0
	By phone	0	0	2	1
	By stormwater email	0	0	0	0
	Via IDDE web portal	5	6	8	6
Total reported illicit discharges	11	13	2	18	10

- 18.16 – Staff IDDE training by department
 - # of new staff trained
 - # of staff receiving renewal training

Table 30. Illicit Discharge Detection and Elimination. Illicit Discharge Training		
Year	2022	2023
Staff receiving first time training	N/A	N/A
Staff receiving renewal training	N/A	N/A
Total staff trained	84	174
Total staff assigned training	163	229
% Staff Trained	51.5%	76.0%

NOTE: Prior to 2022, Illicit Discharge Training was completed at the Public Works Spring meeting. Attendance was inconsistently reported and included both office and field staff. The data would not have matched the current SWPPP. In 2022, the program was moved to Ramsey County's online Learning Management System (LMS) and expanded to the Parks and Recreation and Public Health Departments. There were some system problems limiting the number of staff assigned the training. In 2023, the program was fully expanded to include the Sheriff's and Property Management Departments. This reporting was also modified to record total staff trained, assigned, and the percent completing the training. It wasn't feasible to track new vs. renewal training.



	<ul style="list-style-type: none">• 18.17 – Enforcement Actions<ul style="list-style-type: none">○ # of enforcement actions w/ resolutions (if known)<ul style="list-style-type: none">▪ Verbal warning = 2▪ Notice of violation and other escalated response under ERP = 0▪ Referral to other agencies / municipalities = 5 <p><u>Responsible Staff</u> Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works</p>
19.1	MCM 4: Construction Site Stormwater Runoff Control. [Minn. R. 7090]
19.2	<p><i>New permittees must develop, implement, and enforce, and existing permittees must revise their current program, as necessary, and continue to implement and enforce, a Construction Site Stormwater Runoff Control program. The program must address 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, within the permittee's jurisdiction and that discharge to the permittee's MS4. The permittee must incorporate Section 19 requirements into their program. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none">• Ramsey County is exempt from this provision
19.3	<p><i>To the extent allowable under state or local law, the permittee must develop, implement, and enforce a regulatory mechanism(s) that establishes requirements for erosion, sediment, and waste controls that is at least as stringent as the Agency's most current Construction Stormwater General Permit (MNR100001), herein referred to as the CSW Permit. A regulatory mechanism(s) for the purposes of the General Permit may consist of contract language, an ordinance, permits, standards, written policies, operational plans, legal agreements, or any other mechanism, that will be enforced by the permittee. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none">• Ramsey County construction projects in excess of one acre are covered under NPDES Phase II permit which is enforced by the MPCA.• Additional regulatory coverage is provided by city and watershed level local government units (LGUs).• All Ramsey County projects are conducted in compliance with NPDES stormwater regulations pertaining to erosion, sediment, and waste controls• Ramsey County's Right-of-Way (ROW) ordinance includes specific provisions requiring permittees to follow erosion and sediment control standards comparable to those required under the NPDES Construction Stormwater Permit. The ROW permit imposes these standards on all projects in county ROW regardless of the disturbance size.

19.4	<p><i>When the CSW Permit is reissued, the permittee must revise their regulatory mechanism(s), if necessary, within 12 months of the issuance date of that permit, to be at least as stringent as the requirements for erosion, sediment, and waste controls described in the CSW Permit. [Minn. R. 7090]</i></p>
	<p><u>BMP Description</u></p> <ul style="list-style-type: none"> A new Minnesota CSW Permit is expected to be reissued in 2023. Ramsey County will review the permit for new erosion, sediment, and pollution control requirements and update our Right-of-Way Permit accordingly. <p><u>Responsible Staff</u> Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works Utility and Utility and Right of Way Coordinator– Ramsey County Public Works</p>
19.6	<p><i>The permittee must implement written procedures for site plan reviews conducted by the permittee prior to the start of all construction activity, to ensure compliance with requirements of the regulatory mechanism(s). At a minimum, the procedures must include: a. written notification to owners and operators proposing construction activity, including projects less than one acre that are part of a larger common plan of development or sale, of the need to apply for and obtain coverage under the CSW Permit; and b. use of a written checklist, consistent with the requirements of the regulatory mechanism(s), to document the adequacy of each site plan required in item 19.5. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County has a Site Plan Review Checklist for ROW Permit applications that includes verifying if an applicant project is required to have a NPDES CSW Permit and a place to record the permit number Ramsey County uses a separate SWPPP review checklist when reviewing internal construction plans for completeness <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Ramsey County has drafted a Site Plan Review SOP. It will include guidance on ROW Permit applications on whether a full site plan review is needed. For example, many ROW Permit applications do not include excavations or ground disturbance and would not be subject to a full review. <ul style="list-style-type: none"> Implementation timeline – 2022 Implementation progress - Mostly COMPLETE <ul style="list-style-type: none"> Ramsey County has a plan review process for ROW Permit applications. Major projects are run through a review process that includes confirming that the proposed discharge rates do not exceed existing rates to avoid impact to the county MS4 and reviewing the development plan SWPPPs for thoroughness. Ramsey County is in the process of converting our ROW Permitting process to a fully automated electronic system. It is anticipated that the application form will include space to report the size of the project and a directive to apply for a state Construction Stormwater(CSW) Permit if the project is eligible for coverage <ul style="list-style-type: none"> Implementation timeline – 2024-2025 Implementation progress – INCOMPLETE <ul style="list-style-type: none"> The ROW Permitting system has an electronic permitting system in development which will include the project size and any applicable outside permits that will be required. Full implementation is planned for 2024 -2025 <p><u>Responsible Staff</u> Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works Utility and Right of Way Coordinator– Ramsey County Public Works</p>



	<p>Utility and Right of Way Inspector– Ramsey County Public Works Construction Engineer – Ramsey County Public Works Construction Technician – Ramsey County Public Works Environmental Resource Specialist – Ramsey County Parks and Recreation</p>
19.8	<p><i>The permittee must maintain written procedures for identifying high-priority and low-priority sites for inspection. At a minimum, the written procedures must include: a. a detailed explanation describing how sites will be categorized as either high-priority or low-priority; b. a frequency at which the permittee will conduct inspections for high-priority sites; c. a frequency at which the permittee will conduct inspections for low-priority sites; and d. the name(s) of individual(s) or position title(s) responsible for conducting site inspections. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> • Ramsey County construction projects <ul style="list-style-type: none"> ○ Construction site inspections are performed by the contractor’s Erosion Control Supervisor on the schedule required by the NPDES CSW Permit ○ Oversight of the contractor’s compliance with the CSW Permit is conducted by county staff or a consulting company inspector hired under contract ○ Our Construction Site Inspection SOP includes criteria for increasing county oversight over our construction contractors • Ramsey County ROW permitted projects <ul style="list-style-type: none"> ○ Most projects under the county’ ROW Permit are very short term lasting only one or two days ○ Our Construction Site Inspection SOP includes the following ROW permit inspection goals: <ul style="list-style-type: none"> ▪ Inspection of all permitted projects at least once ▪ Larger projects to be inspected weekly ▪ Follow-up inspections of every project to evaluate stabilization/vegetation success <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> • Expand the county’s Construction Site Inspection SOP guidance for identifying high priority sites under our ROW Permit <ul style="list-style-type: none"> ○ Implementation timeline – early 2022 ○ IMPLEMENTATION PROGRESS – Partially complete <ul style="list-style-type: none"> ▪ The ROW Permit office identifies permit applications that require additional review. They also track more problematic permittees during work in the County ROW. <p><u>Responsible Staff</u></p> <p>Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works Utility and Right of Way Coordinator– Ramsey County Public Works Utility and Right of Way Inspector– Ramsey County Public Works</p>
19.9	<p>The permittee must implement a written checklist to document each site inspection when determining compliance with the permittee’s regulatory mechanism(s). At a minimum, the checklist must include the permittee’s inspection findings on the following areas, as applicable to each site: a. stabilization of exposed soils (including stockpiles); b. stabilization of ditch and swale bottoms; c. sediment control BMPs on all downgradient perimeters of the project and upgradient of buffer zones; d. storm drain inlet protection; e. energy dissipation at pipe outlets; f. vehicle tracking BMPs; g. preservation of a 50 foot natural buffer or redundant sediment controls where stormwater flows to a surface water within 50 feet of disturbed soils; h. owner/operator of construction activity self-inspection records; i. containment for all liquid and solid wastes generated</p>

	<p>by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds, and other construction materials); and j. BMPs maintained and functional. [Minn. R. 7090]</p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County's Construction Site Inspection SOP includes an inspection form with a checklist that is used to audit our contractor's compliance with CSW Permit regulations. This form may be used by both Ramsey County personnel and consultants working under an inspection contract. <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Review Ramsey County's inspection form checklist for compliance with current MS4 and CSW Permit requirements <ul style="list-style-type: none"> Implementation timeline – By the end of 2021 Implementation progress - Complete Use of an inspection checklist will be expanded to include projects contracted under other county departments. <ul style="list-style-type: none"> Implementation timeline – 2022 Implementation progress – INCOMPLETE <ul style="list-style-type: none"> Expansion to departments outside Public Works was not completed Ramsey County's ROW Permit program is transitioning to a fully electronic system with automated inspection forms. We will review the proposed forms to include the required items listed above. <ul style="list-style-type: none"> Implementation timeline – 2024-2025 Implementation progress – INCOMPLETE <ul style="list-style-type: none"> Conversion of ROW permitting to an electronic system is in progress. <p><u>Responsible Staff</u></p> <p>Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works Utility and Right of Way Coordinator– Ramsey County Public Works Utility and Right of Way Inspector– Ramsey County Public Works</p>
19.10	<p><i>The permittee must implement written procedures for receipt and consideration of reports of noncompliance or other stormwater related information on construction activity submitted by the public to the permittee. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County provides many different methods for the public to report problems and receive information related to our construction projects and ROW permittees <ul style="list-style-type: none"> The public may contact our Public Works department via our general phone number (651-266-7100) and via three email addresses: <ul style="list-style-type: none"> askpw@co.ramsey.mn.us Stormwater@co.ramsey.mn.us pothole@co.ramsey.mn.us The Ramsey County Website includes reporting forms that direct the messages to the email addresses. Ramsey County's construction projects have their own pages accessed via our website that include project the contact information for our project managers Ramsey County Parks and Recreation Department's website includes a web portal directing the public comments to an email address: parks@co.ramsey.mn.us

	<p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Update our Construction Site Runoff Control Policy to include guidance on receiving complaints on county projects and ROW Permittees <ul style="list-style-type: none"> Implementation timeline – 2022 Implementation progress - INCOMPLETE <ul style="list-style-type: none"> The construction site policy will be revised and adopted prior to the end of the current permit cycle. Ramsey County is currently converting to a web-based asset management program. The system will include the ability to open tickets and track the response time and methods. This data will be used to assess compliance with this item. <ul style="list-style-type: none"> Implementation timeline – 2024-2025 Implementation progress – INCOMPLETE <ul style="list-style-type: none"> County-wide integration of the asset management program is expected with a phased implementation beginning in 2024. <p><u>Responsible Staff</u> Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works Utility and Right of Way Coordinator– Ramsey County Public Works Highway Maintenance Supervisor– Ramsey County Public Works Highway Maintenance General Supervisor – Ramsey County Public Works Construction Engineer – Ramsey County Public Works Construction Technician – Ramsey County Public Works Environmental Resource Specialist – Ramsey County Parks and Recreation</p>
19.13	<p><i>For each site plan review conducted by the permittee, the permittee must document the following: a. project name; b. location; c. total acreage to be disturbed; d. owner and operator of the proposed construction activity; e. proof of notification to obtain coverage under the CSW Permit, as required in item 19.6, or proof of coverage under the CSW Permit; and f. any stormwater related comments and supporting completed checklist, as required in item 19.6, used by the permittee to determine project approval or denial. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County’s ROW Permit site plan review form includes the necessary data required by this item Ramsey County’s project SWPPP review checklist includes the data required by this item <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Ramsey County will make sure the site plan review check list is included in the transition to the fully electronic permitting system <ul style="list-style-type: none"> Implementation timeline – 2024-2025 Implementation progress – PENDING <ul style="list-style-type: none"> The transition to an electronic permitting system is expected in 2024-2025 <p><u>Responsible Staff</u> Utility and Right of Way Coordinator– Ramsey County Public Works Utility and Right of Way Inspector– Ramsey County Public Works Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works</p>

19.15	<p><i>The permittee must document any enforcement conducted pursuant to the ERPs in item 19.12, including verbal warnings. At a minimum, the permittee must document the following: a. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); b. date(s) and location(s) of the observed violation(s); c. description of the violation(s); d. corrective action(s) (including completion schedule) issued by the permittee; e. referrals to other regulatory organizations (if any); and f. date(s) violation(s) resolved. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none">• Ramsey County’s ROW Permit Office currently records violation data on their permit inspection forms. They will retain data related to enforcement results and referrals to other regulatory organizations. Verbal warnings are not documented in the current system. <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none">• Incorporate the ROW Permit violation data related to site inspections into the new electronic permit format• Add verbal warning data to the electronic system<ul style="list-style-type: none">○ Implementation Timeline – 2024-2025○ Implementation progress – In progress<ul style="list-style-type: none">▪ The transition to an electronic permitting system is expected in 2024-2025 <p><u>Responsible Staff</u></p> <p>Utility and Right of Way Coordinator– Ramsey County Public Works</p> <p>Utility and Right of Way Inspector– Ramsey County Public Works</p>
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- 19.16 *The permittee must conduct an annual assessment of the Construction Site Stormwater Runoff Control program to evaluate program compliance, the status of achieving the measurable requirements in Section 19, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., inventory, trainings, site plan reviews, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]*

BMP Description

- Ramsey County collects the data required by this item and reports the results in the MS4 SWPPP Annual Report on our stormwater web page: <https://www.ramseycounty.us/residents/environment/stormwater-management>

Performance Criteria

- 19.2 & 19.3 – Construction Stormwater Program and Regulatory Mechanism
 - # of ROW permits issued = 802
 - # of project inspections by Ramsey County Parks Soil and Water Conservation Division = 384
 - # of NPDES CSW permitted county construction projects = 8
 - # of non CSW permitted county construction projects = 5
- 19.6 - Site Plan Review
 - # of ROW permit applications identified for site plan review = 73
 - # of site plan reviews of county construction and maintenance projects = 8
- 19.8 – Site Prioritization
 - # of ROW permitted projects identified for expanded oversight = 7
 - # of county construction projects identified for expanded oversight = 0
- 19.9 – Site inspections
 - # of CSW site inspections performed on
 - ROW permittees = 901
 - Ramsey County construction projects = 345
 - Ramsey County maintenance projects = 68
 - # of CSW site inspections performed under contract by the Parks Soil and Water Conservation Division
 - 384 (Rice Creek Watershed District, Shoreview, Arden Hills)
- 19.10 – Receipt of noncompliance and other stormwater related questions
 - # of complaints received on
 - County construction and maintenance projects = 0
 - County ROW Permittees = 7
- 19.14 – Employee CSW training
 - # of employees trained by course, date, job title, and department – See *Figure 2*
- 19.15 – CSW enforcement response
 - # of violation directives and their results from ROW Permit inspections

Table 31. 2022 ROW Permit Violations

Date	Project Type	Violation	Directive Type	Resolved?
1/8/23	Watermain	Perimeter control, excessive sediment	Verbal	Y
1/12/23	Watermain	Excessive sediment	Verbal	Y
3/7/23	Construction access	Inadequate construction exit	Phone	Y
4/24/23	Watermain	Poor ditch grading & stabilization	Verbal	Y
4/27/23	Watermain	Excessive sediment	Email	Y

6/2/23	Watermain	Excessive sediment	Verbal	Y
8/1/23	Watermain	Excessive sediment	Verbal	Y
9/20/23	Construction access	Excessive tracking, construction exit	Verbal	Y
10/5/23	Trench	No inlet protection	Verbal	Y
12/27/23	Repair valve	Dewatering with no filter or inlet protection	Verbal	Y

- # of contracted inspections by Parks Soil and Water Conservation division resulting in compliance directives = 52

20.1	MCM 5: Post-Construction Stormwater Management. [Minn. R. 7090]
20.2	<p><i>New permittees must develop, implement, and enforce, and existing permittees must revise their current program, as necessary, and continue to implement and enforce, a Post-Construction Stormwater Management program that prevents or reduces water pollution after construction activity is completed. The program must address construction activity 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 MS4. The permittee must incorporate Section 20 requirements into their program. [Minn. R. 7090]</i></p>
	<p><u>BMP Description¹</u></p> <ul style="list-style-type: none"> • Ramsey County has drafted a Post-Construction Stormwater Management policy to comply with this section of the permit. The policy includes the following goals: <ul style="list-style-type: none"> ○ Meeting the post-construction standards established by regulated MS4 water management organizations as required for the implementation of development, redevelopment, or linear projects, including alternative compliance sequencing, if necessary. ○ Identifying all components of its MS4 system, as defined by construction, easement, or ownership records and agreements, and compiling pertinent BMP design, easement, and maintenance agreement information. <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> • Review the Post-Construction Stormwater Management policy for any potential updates related to the new MS4 permit. <ul style="list-style-type: none"> ○ Implementation timeline – Early 2022 ○ Implementation progress – INCOMPLETE <ul style="list-style-type: none"> ▪ Review of the post-construction policy has not been completed <p>¹This report is only listing the BMP that directly applies to the implementation schedule</p> <p><u>Responsible Staff</u></p> <p>Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist / MS4 Coordinator – Ramsey County Public Works Highway Maintenance Supervisor – Ramsey County Public Works Highway Maintenance General Supervisor – Ramsey County Public Works Construction Engineer – Ramsey County Public Works Construction Technician – Ramsey County Public Works Landscape Architect – Ramsey County Parks and Recreation Director of Operations – Parks, Trails Aquatics – Ramsey County Parks and Recreation Environmental Resource Specialist – Ramsey County Parks and Recreation Building Services Manager – Ramsey County Property Management Director of Building Operations – Ramsey County Property Management</p>

20.23 *The permittee must conduct an annual assessment of the Post-Construction Stormwater Management program to evaluate program compliance, the status of achieving the measurable requirements in Section 20, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., inventory, trainings, site plan reviews, inspections, enforcement, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]*

BMP Description

- Ramsey County collects the data required by this item and reports the results in our MS4 SWPPP Annual Report on our stormwater web page: <https://www.ramseycounty.us/residents/environment/stormwater-management>

Performance Criteria

- 20.4 – Site plan reviews
 - # of ROW permit applications submitting engineer’s plans for site plan reviews = 73
- 20.5 – ROW permit applications
 - # of ROW permit applications needing permits from other regulated MS4s or from the MPCA CSW program = Data incomplete. This data was dependent on adopting a new web-based application system which has been delayed.
- 20.7 - Volume reduction
 - # and list of Ramsey County construction and maintenance projects requiring permits from other regulated MS4s for volume reduction practices = 9
 - Projects are listed in *Figure 3*
- 20.9 – Volume reduction sequencing
 - List of Ramsey County construction and maintenance projects requiring sequencing for volume reduction practices due to design and installation restrictions
 - Projects are listed in *Figure 3*
- 20.11 – Off-site treatment
 - List Ramsey County construction and maintenance projects requiring off-site treatment options
 - Projects are listed in *Figure 3*
- 20.14 – Stormwater funds
 - List of Ramsey County construction and maintenance projects that complied with other regulated MS4 permit requirements by paying into a stormwater fund or equivalent program.
 - Projects are listed in *Figure 3*
- 20.15 – Maintenance and cooperative agreements
 - List of Ramsey County construction and maintenance projects requiring maintenance agreements from other regulated MS4’s permit programs.
 - Projects are listed in *Figure 3*
- 20.17 – Permitting site plan review
 - # of Ramsey County construction and maintenance projects requiring review of volume reduction practices in preparation for applying for a permit from another regulated MS4. = 5 (Future projects)
- 20.20 – Permit application site plan review
 - List the Ramsey County construction and maintenance projects going through the permit review process for another regulated MS4
 - Projects are listed in *Figure 3*
- 20.21 – Site Plan review training
 - The training data for this item is reported in the performance criteria for *Item 19.14* under *Item 19.16*.

21.1	MCM 6: Pollution Prevention/Good Housekeeping for Municipal Operations. [Minn. R. 7090]
21.3	<p><i>The permittee must maintain a written or mapped inventory of permittee owned/operated facilities that contribute pollutants to stormwater discharges. The permittee must implement BMPs that prevent or reduce pollutants in stormwater discharges from all inventoried facilities. Facilities to be inventoried may include, but is not limited to:</i></p> <ul style="list-style-type: none"> <i>a. composting;</i> <i>b. equipment storage and maintenance;</i> <i>c. hazardous waste disposal;</i> <i>d. hazardous waste handling and transfer;</i> <i>e. landfills;</i> <i>f. solid waste handling and transfer;</i> <i>g. parks;</i> <i>h. pesticide storage;</i> <i>i. public parking lots;</i> <i>j. public golf courses;</i> <i>k. public swimming pools;</i> <i>l. public works yards;</i> <i>m. recycling;</i> <i>n. salt storage;</i> <i>o. snow storage;</i> <i>p. vehicle storage and maintenance (e.g., fueling and washing) yards; and</i> <i>q. materials storage yards.</i> [Minn. R. 7090] <p><u>BMP Description</u></p> <p>Ramsey County currently maintains an inventory on most of the facilities listed in the permit. Some remaining items are addressed below</p> <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> • Complete inventory and locations of salt and snow storage areas at all county facilities and add the locations to each facility's SWPPP. <ul style="list-style-type: none"> ○ Implementation timeline – late 2021 ○ Implementation status = PARTIALLY COMPLETE • Complete inventory and locations of pesticide storage and use at all county facilities. <ul style="list-style-type: none"> ○ Implementation timeline – late 2021 ○ Implementation status = INCOMPLETE • Consolidate the locations of all items into one master GIS MS4 map to be managed by Public Works Environmental Services Division. <ul style="list-style-type: none"> ○ Implementation timeline – late 2021 ○ Implementation status = PARTIALLY COMPLETE <p>Responsible Staff</p> <p>Environmental Services Supervisor – Ramsey County Public Works</p> <p>Environmental Resource Specialist– Ramsey County Public Works</p>

- 21.4 *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:*
- a. waste disposal and storage, including dumpsters;*
 - b. management of temporary and permanent stockpiles of materials such as street sweepings, snow, sand and sediment removal piles (e.g., effective sediment controls at the base of stockpiles on the downgradient perimeter);*
 - c. vehicle fueling, washing, and maintenance;*
 - d. routine street and parking lot sweeping;*
 - e. emergency response;*
 - f. cleaning of maintenance equipment, building exteriors, dumpsters, and the disposal of associated waste and wastewater;*
 - g. use, storage, and disposal of significant materials;*
 - h. landscaping, park, and lawn maintenance;*
 - i. road maintenance, including pothole repair, road shoulder maintenance, pavement marking, sealing, and repaving;*
 - j. right-of-way maintenance, including mowing; and*
 - k. application of herbicides, pesticides, and fertilizers. [Minn. R. 7090]*

BMP Description

- *Items a-c* – Ramsey County facility SWPPPs address these items. Public Works facilities and county yard waste sites are inspected regularly by trained personnel.
- *Item d* – Sweeping of county roads occurs twice per year with special emphasis on roadways adjacent to lakes or drainage areas. Ramsey County has a street sweeping protocol that addresses proper handling and disposal of street sweepings. Our facility SWPPPs include oversight over managing any street sweeping related stockpiles.
- *Item e* – Emergency response is addressed by Ramsey County’s spill response protocol and in the Public Works Maintenance Division’s Critical Incident Action Plan and Oil Spill Procedure.
- *Items f & g* – Public Works facility SWPPPs cover these items. We will update or add SWPPPs for Parks and Recreation and Public Health facilities as needed to comply with these items.
- *Item h* – See *Item k*
- *Item i* – This item is addressed by Ramsey County’s Spill Prevention and Response Training
- *Item j* – Ramsey County Public Works keeps maps of grass maintenance areas on county ROW
- *Item k* – Ramsey County does not currently have an herbicide, pesticide, and fertilizer specific policy beyond our spill prevention and response training. Field staff responsible for lawn maintenance are encouraged to attend the MPCA’s Summer Turf Grass Maintenance Training. Public Works staff are encouraged to take pesticide applicator training.

BMPs to be Implemented

- Review facility SWPPPs for necessary changes to better address the items in this section.
 - Implementation timeline – Early 2022
 - **Implementation progress = INCOMPLETE**
- Review and determine whether the MPCA’s Summer Turf Grass Maintenance training sufficiently addresses *items h, j, and k*.
 - Implementation timeline - Early 2022
 - **Implementation progress = COMPLETE, the training adequately addresses these items.**

	<p><u>Responsible Staff</u></p> <p>Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works Director of Operations – Parks, Trails Aquatics – Ramsey County Parks and Recreation Environmental Resource Specialist – Ramsey County Parks and Recreation Building Services Manager – Ramsey County Property Management Director of Building Operations – Ramsey County Property Management</p>
21.5	<p><i>The permittee must implement the following BMPs at permittee owned/operated salt storage areas:</i></p> <p><i>a. cover or store salt indoors;</i> <i>b. store salt on an impervious surface; and</i> <i>c. implement practices to reduce exposure when transferring material from salt storage areas (e.g., sweeping, diversions, and/or containment). [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County has drafted a Snow and Ice Control Protocol that includes guidance on salt storage. There are site maps for county locations where snow and salt are stockpiled during normal winters. <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> Review our snow and ice control protocols and policies to find and address areas with room for improvement. <ul style="list-style-type: none"> Implementation progress = Draft form COMPLETED in 2023 <p><u>Responsible Staff</u></p> <p>Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works Highway Maintenance Supervisor – Ramsey County Public Works Highway Maintenance General Supervisor – Ramsey County Public Works Director of Operations – Parks, Trails Aquatics – Ramsey County Parks and Recreation Environmental Resource Specialist – Ramsey County Parks and Recreation Building Services Manager – Ramsey County Property Management Director of Building Operations – Ramsey County Property Management Environmental Health Supervisor – Ramsey County Public Health</p>
21.11	<p><i>Based on inspection findings, the permittee must determine if repair, replacement, or maintenance measures are necessary in order to ensure the structural integrity and proper function of structural stormwater BMPs and outfalls. The permittee must complete necessary maintenance as soon as possible. If the permittee determines necessary maintenance cannot be completed within one year of discovery, the permittee must document a schedule(s) for completing the maintenance. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> Ramsey County maintains a list of stormwater BMPs and outfalls that require maintenance. BMPs that are not repaired at the end of the calendar year are identified and reported in our MS4 SWPPP Annual report. Our Public Works Department has a maintenance crew that is assigned to perform repairs on stormwater Infrastructure

BMPs to be Implemented

- Ramsey County is currently converting to a web-based asset management program. When fully implemented, BMP inspectors will be able to open a repair ticket. The structure will be tracked through the repair process. Structures requiring frequent repairs will be able to be identified for possible replacement.
 - Implementation Timeline – 2024-2025
 - **Implementation progress = In Progress: Integration of the asset management system is currently in progress**

Responsible Staff

Environmental Services Supervisor – Ramsey County Public Works

Environmental Resource Specialist– Ramsey County Public Works

Park Maintenance and Operations Supervisor – Ramsey County Parks and Recreation

Highway Maintenance Supervisor – Ramsey County Public Works

- 21.15 *The permittee must conduct an annual assessment of the operations and maintenance program to evaluate program compliance, the status of achieving the measurable requirements in Section 21, and determine how the program might be improved. Measurable requirements are activities that must be documented or tracked as applicable to the MCM (e.g., inventory, trainings, inspections, maintenance activities, etc.). The permittee must perform the annual assessment prior to completion of each annual report and document any modifications made to the program as a result of the annual assessment. [Minn. R. 7090]*

BMP Description

- Ramsey County collects the data required by this item and reports the results in our MS4 SWPPP Annual Report on our stormwater web page: <https://www.ramseycounty.us/residents/environment/stormwater-management>. We will review the data and determine whether any changes to our program are needed.

Performance Criteria

- 21.3 – Ramsey County Facility Inventory
 - List any new facilities added to Ramsey County's inventory
 - No new facilities added to the MS4 in 2023
 - List any SWPPP updates completed for county facilities
 - No facility SWPPPs were updated in 2023
- 21.4 – Pollutant reduction BMPs
 - Street Sweeping
 - # of lane miles swept
 - Ramsey County has 295 miles of roadway and 935 lane miles
 - Two sweeping events (spring and fall) = 1,870 total lane miles
 - Total amount of street sweepings recovered (tons)

Table 32. Ramsey County Street Sweeping Event Data	
Year	Amount Recovered (tons)
2015	1,425
2016	1,185
2017	1,368
2018	1,286
2019*	581
2020	1,827
2021**	561
2022	892
2023	1,444

*Amount recovered reduced due to equipment failure

**Spring recovery total only

- List road corridors and lane miles targeted for additional sweeping (See Appendix A for the new priority area sweeping program)

Table 33. Ramsey County corridors targeted for additional sweeping			
Road Section	Length	Traffic Lanes	Lane Miles
Cleveland Ave – Ford Pkwy to Randolph Ave	0.63	4	2.52
Labore Rd – CR E to Goose Lake Rd	0.55	2.24	1.23
Maryland Ave – Rice St to Jackson St	0.47	4	1.88
Old Snelling – CR E to Hwy 96	2.09	2	4.18
Randolph Ave – Cleveland to Brimhall	1.06	4	4.24
Edgerton St – Arlington to Maryland	0.50	4	2.00
Larpenteur Ave – Dale St to Marion St	0.80	3	2.40
Lexington Ave – CR B2 to Hwy 36	0.46	3	1.38
Cleveland Ave – Iona Ln to CR C2	0.25	4	1.00

- 21.5 – Salt storage and management
 - List any changes or updates made to the snow and ice handling protocol
 - No changes made in 2023
- 21.6 – Snow control operations
 - Report salt usage for prior winter season
 - Winter severity
 - # of storm events
 - Total snow fall (inches)
 - Total # of tons of salt used
 - # of tons of salt used per lane mile

Table 34. Ramsey County winter season road salt usage				
Winter	Season Usage (Tons)	Lbs / lane mile per event	# of Events	Total Snowfall (in)
2011-2012	3,505	536	14	23.0
2012-2013	8,656	561	33	71.0
2013-2014	10,491	607	37	67.7
2014-2015	6,209	428	31	32.0
2015-2016	2,867	321	18	30.1
2016-2017	4,697	419	24	32.0
2017-2018	13,683	770	38	77.4
2018-2019	5,899	422	30	68.8
2019-2020	3,610	334	28	47.0
2020-2021	3,047	269	25	51.0
2021-2022	3,552	160	33	48.0
2022-2023	5,253	290	21	88.2
2023-2024	2,671	263	14	28.1

- 21.7 – Salt Management Training
 - # of employees trained in smart salting techniques (reported by date, position, and department)
 - Public Works 2023 Smart Salt Training completed
 - General Supervisor = 0

- Public Works 2023 Control and Application Rate Training
 - Laborers & Equipment Operators = 34
 - Area supervisors = 6
- Property Management employees completing Smart Salt Training = 3

- 21.8 – Pond Assessments
 - # capacity assessments of ponds and sediment basins = 8
 - % of total ponds and sediment basins surveyed = $8/33 = 24.2\%$
 - Capacity assessment results (% remaining, basins targeted for delta removal or full cleanout)

Table 35. Ramsey County 2023 Pond Capacity Gauging Results

Pond Name	Date Surveyed	Remaining Capacity	Maintenance Schedule
County D Pond	1/12/23	100.1%	No cleanout needed
Highway 96 Arsenal Pond	2/9/23	99.4%	No cleanout needed.
County I @ Lexington Pond	1/12/23	59.5%	South end has high sediment levels. Wait on cleanout.
Hwy 96 @ Hwy 10 Filtration System Wet Pond	1/12/23	28.9%	Small pond with limited capacity. Review after 2028 survey.
Hwy 96 Joint Facility Pond	2/9/23	99.4%	No cleanout needed
Midway Yard Waste Site Basin	8/11/23	OK	Shallow dry basin. Berm repair may be needed. Reported to the operating department (RC Public Health)
Moundsvew Compost Site Sed Basin #1	8/11/23	Good	Shallow dry basin. Looked good.
Moundsvew Compost Site Sed Basin #2	8/11/23	Good	Basin wall needs repair. Reported to RC Public Health.

NOTE: Yard waste site basins are not measured for remaining volume. They are visually inspected only.

- 21.9 – Structural Stormwater BMPs
 - # of structural stormwater BMPs inspected = 322
 - % of total inventoried stormwater BMPs = $322/322 = 100\%$
 - # of stormwater BMPs identified for needed maintenance = 15
- 21.10 – Pond and Outfall Inspections
 - # of ponds inspected for structural deficiencies / regular maintenance = 29
 - % of ponds inspected for regular maintenance = $29/33 = 87.9\%$
 - # of outfalls inspected = 332
 - % of total outfalls inspected plus the projected 5-year total

Table 36. Outfall inspections and projection (2023 total outfalls = 1389)

Year	2019	2020	2021	2022	2023	5 year total
Inspections	584	545	356	188	332	2005
% inspected	30.0%	26.0%	23.9%	14.2%	23.9%	118%

NOTE: Total outfalls calculated each year may be different based on eliminating outfalls not in MS4

- 21.11 – Stormwater BMP and Outfall Maintenance
 - # of Stormwater BMPs with maintenance performed = 26
 - # of Stormwater outfalls with maintenance performed = 4
 - List remaining BMPs and Outfalls with repair needs, expected completion timeframe – *See Figure 4*

-
- 21.12 – Additional Stormwater Training
 - List additional training completed, WQ Forums attended, TAP participation by Ramsey County employees
 - Midwest Aquatic Plant Management Society
 - Lake Owasso Vegetation Management TAC
 - Minnesota Lake Management Society
 - Snail Lake Improvement District
 - Kohlman Gervais Spoon Keller Improvement Group
 - RWMWD Watershed Management Plan TAC
 - Rice Creek Watershed District TAC
 - Como Lake TMDL, MPCA Chloride TMDL TAC
 - Turtle and White Bear Lake augmentation TAC
 - USGS WBL/TCMA Surface/Groundwater Modeling TAC
 - North and East Metro GWMA Advisory Team
 - RWMWD Water Fest
 - Bald Eagle TMDL TAC
 - Silver West Carp Removal/Lake Improvement TAC
 - Ramsey County Aquatic Invasive Species TAC
 - MN Bighead Carp TAC
 - Road Salt Symposium
 - 21.13 – Outfall Inspections resulting in Illicit Discharge Reports
 - List outfalls with observed illicit discharges and response/results = 0
 - List outfalls with maintenance needs identified (poor quality rating) – *See Figure 4 from 21.11*
 - 21.14 – Pond Sediment Removals
 - List pond delta removals (Small removal amounts – exempt)
 - Como Primary Pond North End
 - List pond sediment cleanout projects
 - There were no full pond cleanout projects in 2023
 - Include sediment disposal methods/locations/analysis results
 - Not applicable in 2023
-

22.1	Discharges to Impaired Waters with a USEPA-Approved TMDL that Includes an Applicable WLA. [Minn. R. 7090]
22.2	<p><i>If the permittee has 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. a list of all BMPs applied towards achieving applicable WLAs for oxygen demand, nitrate, TSS, and TP; b. the implementation status of BMPs included in the compliance schedule at the time of final application submittal; and c. an updated estimate of cumulative TSS and TP load reductions. [Minn. R. 7090]</i></p>
	<p><u>BMP Description</u></p> <ul style="list-style-type: none"> • Ramsey County had 20 waterbodies with approved TMDLs in 2023. • Ramsey County WLAs <ul style="list-style-type: none"> ○ Bald Eagle Lake Nutrient TMDL-Bald Eagle-(62-0002-00)-TP ○ Como Lake TMDL (Metro)-Como-(62-0055-00)-TP ○ Kohlman Lake TMDL-Kohlman-(62-0006-00)-TP ○ Lake St. Croix Excess Nutrient TMDL-St. Croix-(82-0001-00)-TP ○ Peltier/Centerville Lake Nutrient Impairment TMDL-Peltier-(02-0004-00)-TP ○ Ramsey-Washington WD WRAPS 2010-Battle Creek-(07010206-592)-TSS ○ Ramsey-Washington WD WRAPS 2010-Bennett-(62-0048-00)-TP ○ Ramsey-Washington WD WRAPS 2010-Wakefield-(62-0011-00)-TP ○ Rice Creek Watershed District Southwest Urban Lakes- Excess Nutrients TMDL-East Moore-(02-0075-01)-TP ○ Rice Creek Watershed District Southwest Urban Lakes- Excess Nutrients TMDL-ISLAND (BASIN N. OF I-694) -(62-0075-02)-TP ○ Rice Creek Watershed District Southwest Urban Lakes- Excess Nutrients TMDL-Island (Basin S.of I-694)-(62-0075-01)-TP ○ Rice Creek Watershed District Southwest Urban Lakes- Excess Nutrients TMDL-Little Johanna-(62-0058-00)-TP ○ Rice Creek Watershed District Southwest Urban Lakes- Excess Nutrients TMDL-Long-(62-0067-00)-TP ○ Rice Creek Watershed District Southwest Urban Lakes- Excess Nutrients TMDL-Pike-(62-0069-00)-TP ○ Rice Creek Watershed District Southwest Urban Lakes- Excess Nutrients TMDL-Valentine-(62-0071-00)-TP ○ Silver (West) Lake (Metro)-Silver-(62-0083-00)-TP ○ South Metro Mississippi TSS TMDL-Mississippi River-(07040001-531)-TSS ○ Vadnais Lake Area WMO-Goose-(62-0034-00)-TP ○ Vadnais Lake Area WMO-Unnamed-(62-0126-00)-TP ○ Vadnais Lake Area WMO-Wilkinson-(62-0043-00)-TP • Ramsey County reports WLA progress with a spreadsheet in the MPCA MS4 Annual Report. The annual reports are posted on our Stormwater Management webpage following submittal to the state. <p><u>BMPs to be Implemented</u></p> <ul style="list-style-type: none"> • Map Ramsey County maintenance activities such as ditch cleanouts and other sediment removal activities by watershed to add to TMDL WLA compliance activity NOTE – This BMP will be removed from the SWPPP. Ditching doesn't count toward waste load reduction. It will be moved to other maintenance records, because sediment disposal is an important component of the county program. <ul style="list-style-type: none"> ○ Implementation timeline – Complete

Performance Criteria

- Ditching/Sediment Removal

Table 37. 2023 Sediment Removals

Date	Removal Type (Ditch/Delta)	Road Segment	Street	Watershed	TMDL Type	Linear/Square Feet	Volume Material Removed
7/31	Ditch	S099A	County E	Long Lake	Nutrients	438	48 yds
10/23	Ditch	S071A	Portland	White Bear Lake	Mercury	580	12 yds
11/15	Delta	S051Y	Lexington Ave	Como Lake	Hg, Nutrients, Chloride	1000	72 yds

- Ramsey County Public Works Environmental Services Division monitors area lakes for water quality parameters. The lakes are assessed annually using the Metropolitan Council's Lake Water Quality Report Card. The results and trends are reported in our MS4 SWPPP Annual Report .
 - See Figure 5
- Ramsey County will report chloride levels and trends from our chloride testing program.
 - See Appendix B

Responsible Personnel

Environmental Services Supervisor – Ramsey County Public Works

Environmental Resource Specialist– Ramsey County Public Works

- 22.5 *If the permittee has an applicable WLA where a reduction in pollutant loading is required for chloride, the permittee must document the amount of deicer applied each winter maintenance season to all permittee owned/operated surfaces. [Minn. R. 7090]*

BMP Description

- Ramsey County is part of the Twin Cities Metro Area Chloride TMDL and Management Plan
- Ramsey County has over 300 miles of road that must be managed for snow and ice control each winter. Most of the county's chloride use is salt application to roadways.
- Ramsey County Public Works Maintenance Division tracks the annual salt use, salt use by event, and by lane mile
- Salt application at Ramsey County facilities may be conducted by county staff or snow removal vendors
- Determine the feasibility of tracking salt use at county facilities, including contract language requiring deliverables to the county upon completion of the snow and ice season.
 - Implementation timeline – 2022
 - **Implementation progress: Partially complete. See Table 38**

Table 38. Ramsey County Facility Salt Usage	
Facility Name	2023 Salt Usage (lbs)
90 West Plato	600
555 Cedar	1000
Medical Examiner	250
160 East	1750



	<p><u>Responsible Staff</u></p> <p>Environmental Services Supervisor – Ramsey County Public Works Environmental Resource Specialist– Ramsey County Public Works Highway Maintenance Supervisor – Ramsey County Public Works Highway Maintenance General Supervisor – Ramsey County Public Works Deputy Director of Highway Maintenance – Ramsey County Public Works Director of Building Operations – Ramsey County Property Management Director of Operations – Ramsey County Parks</p>
22.6	<p><i>If the permittee has an applicable WLA where a reduction in pollutant loading is required for chloride, each calendar year the permittee 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 may use the Agency's Smart Salting Assessment Tool or other available resources and methods to complete this assessment. The permittee must document the assessment. The assessment may include, but is not limited to:</i></p> <p><i>a. operational changes such as pre-wetting, pre-treating the salt stockpile, increasing plowing prior to deicing, monitoring of road surface temperature, etc.; b. implementation of new or modified equipment providing pre-wetting, or other capability for minimizing salt use; c. regular calibration of equipment; d. optimizing mechanical removal to reduce use of deicers; or e. designation of no salt and/or low salt zones. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> • Ramsey County employees responsible for salt application regularly attend Smart Salt training • Ramsey County Public Works Maintenance Division uses the Smart Salting Assessment tool to evaluate our winter maintenance operations. <p><u>Performance Criteria</u></p> <ul style="list-style-type: none"> • Annual salt application on county roads is reported in MCM 6, <i>Item 21.15</i> • Ramsey County Environmental Services Division monitors select area lakes for chloride concentration through the year. We include lake chloride levels in our MS4 SWPPP Annual Report (Reported in <i>Item 22.2 and Appendix B</i>)
24.1	<p>Stormwater Pollution Prevention Program (SWPPP) Modification. [Minn. R. 7090]</p>
24.2-24.4	<p><i>24.2 The Commissioner may require the permittee to modify the SWPPP as needed, in accordance with the procedures of Minn. R. 7001, and may consider the following factors:</i></p> <p><i>a. discharges from the MS4 are impacting the quality of receiving waters;</i> <i>b. more stringent requirements are necessary to comply with state or federal regulations; and</i> <i>c. additional conditions are deemed necessary to comply with the goals and applicable requirements of the Clean Water Act and protect water quality. [Minn. R. 7090]</i></p> <p><i>24.3 Modifications that the permittee chooses to make to the SWPPP other than modifications authorized in item 24.4, must be approved by the Commissioner in accordance with the procedures of Minn. R. 7001. All requests must be in writing, setting forth schedules for compliance. The request must discuss alternative program modifications, assure compliance with requirements of the permit, and meet other applicable laws. [Minn. R. 7090]</i></p> <p><i>24.4 The permittee may modify the SWPPP without prior approval of the Commissioner provided the Commissioner is notified of the modification in the annual report for the year the modification is made and the modification falls under one of the following categories:</i></p> <p><i>a. a BMP is added, and none subtracted, from the SWPPP; or b. a less effective BMP is replaced with a more effective BMP. The alternate BMP must address the same, or similar, concerns as the ineffective or failed BMP. [Minn. R. 7090]</i></p> <p><u>BMP Description</u></p> <ul style="list-style-type: none"> • Ramsey County will summarize any changes made to our MS4 SWPPP in our Annual Report submitted to the MPCA and in this section of our SWPPP Annual Report <ul style="list-style-type: none"> ○ There were no changes made to Ramsey County's SWPPP in 2023.

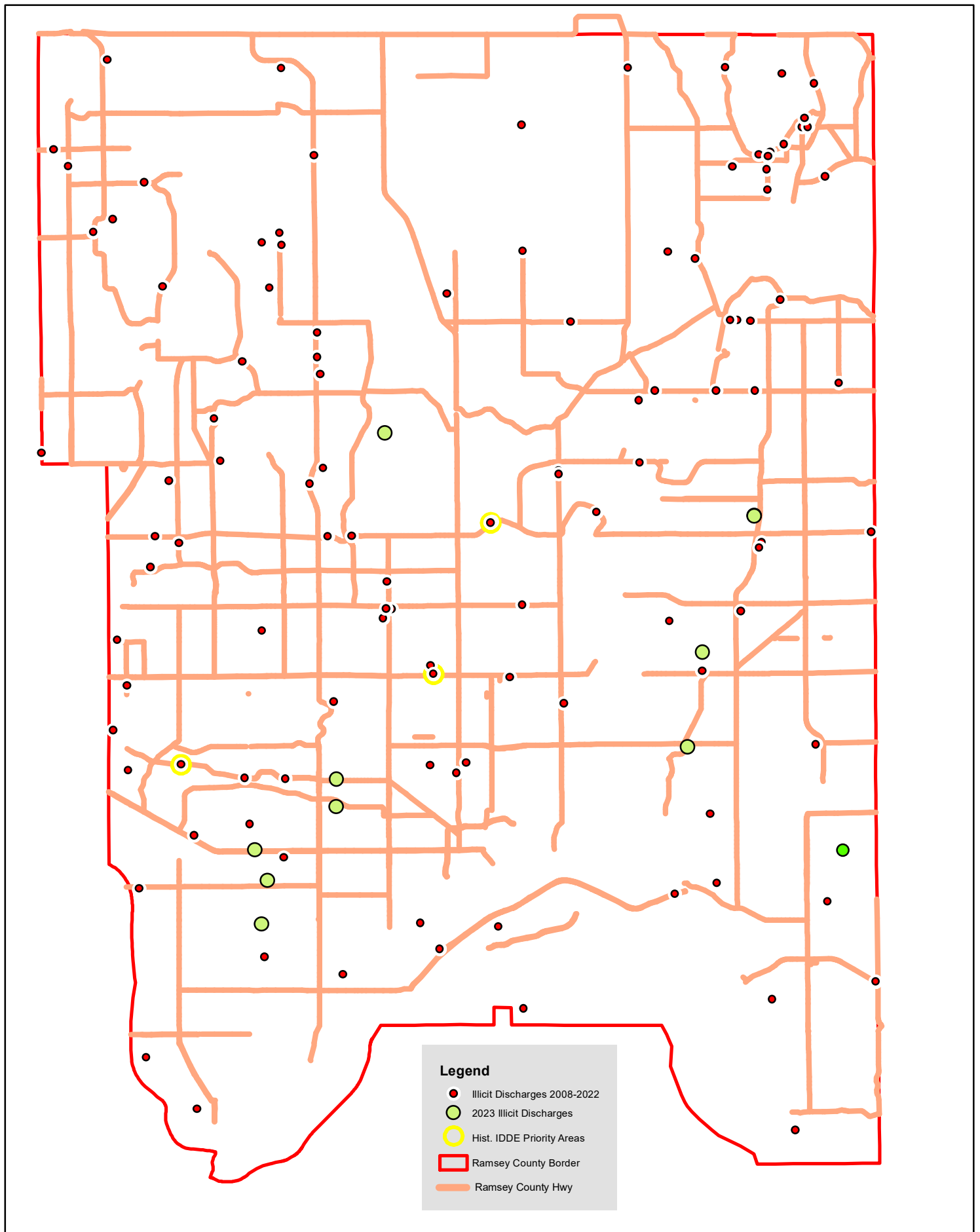


Figure 1. 2023 Illicit Discharge Map

Figure 2 - Ramsey County 2023 CSW Training

Date	Course	Job Title	Department
1/10/2023	Const Site Manager - Recert	Engineer/Const/Survey Tech	PubWks/Eng/Design&Constrctn
1/11/2023	Const of SWPPP - Certification	Engineer/Const/Survey Tech 4	PubWks/Eng/Design&Constrctn
1/17/2023	Const Site Manager Recert - Virtual	Engineer/Const/Survey Tech 3	PubWks/Eng/Design&Constrctn
1/17/2023	Const Site Manager Recert - Virtual	Engineer/Const/Survey Tech	PubWks/Eng/Design&Constrctn
1/17/2023	Construction Site Mngr Recert-online	Engineer/Const/Survey Tech 4	PubWks/Eng/Design&Constrctn
1/17/2023	Construction Site Mngmt Recert	Engineer/Const/Survey Tech 4	PubWks/Eng/Design&Constrctn
1/17/2023	Construction Site Mngmt Recert	Engineer/Const/Survey Tech 4	PubWks/Eng/Design&Constrctn
2/2/2023	Design of Construction SWPPP In person	Environmtal Resrces Spclst 2	PubWks/Eng/EnviroSvc
3/2/2023	Construction Site Mngr Recert in person	Environmtal Resrces Spclst 2	PubWks/Eng/EnviroSvc
9/5/2023	Design of Construction SWPPP-virtual	Engineer 3	PubWks/Eng/Design&Constrctn
4/1/2023	Construction Site Installer Recert	Environmtal Resrces Spclst	Parks&Rec/SWC
5/1/2023	Construction Site Mngr	Environmtal Resrces Spclst	Parks&Rec/SWC
5/1/2023	Construction Site Mngr	Environmtal Resrces Spclst	Parks&Rec/SWC

Total Staff Trained	13
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Figure 3. MCM 5 Post Construction SW Mgmt. Volume Reduction Sequencing

Project	Department	Active or Future Project ¹	Permitting MS4	Volume Reduction Required	Volume Reduction Sequencing Needed ²	Offsite Treatment Selected	Stormwater Fund Contribution	Maintenance / Cooperative Agreements
Lexington Ave - County E to I694	Public Works	Active	Rice Creek WD	Y	Y	N	N	RCWD
Lexington Ave Ph 2	Public Works	Active	Capitol Region WD	Y	N	N	Y	CRWD
South Shore Blvd Trail	Public Works	Active	Rice Creek WD	Y	Y	N	N	RCWD, White Bear Lake, White Bear Twp
Cleveland Ave - Como to Larpenteur	Public Works	Active	Capitol Region WD	Y	Y	N	N	CRWD
Old 8 4 to 3 Lane Conversion	Public Works	Active	Rice Creek WD	Y	Y	N	N	RCWD, New Brighton
Old Snelling @ County E	Public Works	Active	Rice Creek WD	Y	Y	N	N	RCWD
Hodgson Rd – Gramsie to Bridge	Public Works	Active	Ramsey-Washington MWD	Y	Y	N	N	RWMWD, Shoreview, Vadnais Heights
Otter Lake Rd - Hwy 96 to 4th	Public Works	Future	VLAWMO / White Bear Lake	Y	Y	N	N	VLAWMO, White Bear Lake
White Bear Ave @ Larpenteur	Public Works	Future	Ramsey-Washington MWD	Y	Y	N	Y	RWMWD
Eustis St - Como to Roselawn	Public Works	Future	Capitol Region WD	Y	Y	N	N	CRWD, St Anthony
County D	Public Works	Future	Ramsey-Washington MWD	N	N	N	N	Little Canada, Maplewood, Vadnais Heights
CR B Snelling to Lexington	Public Works	Future	N/A	N	N	N	N	N/A
Rice St - Penn to Wheelock	Public Works	Future	CRWD	Y	Unk	N	N	CRWD, St Paul

NOTE: This chart reports the performance criteria for items 20.7 - 20.15 under section 20.23

¹Future projects are reporting the expected sequencing as of this report. Final stormwater treatment is subject to change.

²Standard volume reduction via infiltration is not possible due to design and installation restrictions. This is typically a filtration and/or one of the other alternative methods listed.

Figure 4. Ramsey County 2022 BMP and Outfall Repair Needs

Structure	Problem	Scheduled Completion of Repair
Arlington Filter Pond	Sediment cleanout and fence repair, filter media cleanout	Sediment removal and fence replacement completed in early 2024. Filter media repair pending.
5492 East Bald Eagle Blvd Washout	Culvert replacement and structure repair needed.	Repair TBD
Bald Eagle Ave @ Soo Line Filter Basin	Underdrain outlet may be clogged	Repair TBD
Battle Creek Mitigation Wetland culverts	Failing culverts on Parks property draining mitigation wetland	Pending
County C cross culvert - east of Linden Lane	Culvert outlet blocked by a large sediment delta	Postponed due to easement acquisition needs
County E2 @ RC Ditch #4	Culvert may have a void	Repair TBD
Hwy 10 culvert	Failing culvert needs replacement	Pending
Hwy 96 @ Hwy 10 Filter Basin	Riser pipe came off	Determining repair plan
Kohlman Ponding Area Dike	Dike deteriorating	Dike removal plan and abandonment of basin is currently in the planning process.
Larpenteur @ Prosperity Enhanced Filter Basin	Basin does not drain quickly enough due to baseflow not accounted for in design	Determining repair plan
Larpenteur/Gottfried Pond	Some slope repairs are needed	This is being transferred to Capitol Region WD. They will conduct future repairs.
Lexington Ave @ County C Sediment Sump	Basin cleanout needed. Easement access from railroad needed.	Not completed due to access problem, working on a plan
Lexington Ave @ W 7th Tree Trench #1 Riser	Riser pipe damaged by lawn equipment	Planned in 2024
Maryland @ Westminster IB	Fence repair needed	Repair TBD
Outfall #4746h - County J east of Lexington	Brush and sediment blocking the outfall	Repair request submitted to maintenance
Outfall #4878h -Larpenteur Ave to Woodview Marsh	Failing culvert. Televising needed.	In planning phase. Repair date TBD
Outfalls from MS4 at multiple (54) locations	Various needs including debris removal, culvert repair, etc.	Further assessment needed
Oxford Filter Basin inlet	Sediment build up is partially blocking the inlet	Repair request submitted to Maintenance
Silverwood Pond #3 Trash Weir	Weir structure is heaved	Determining repair plan
South Heights Pond	Basin bottom sediment cleanout, tree removal, and bank repairs needed.	In planning phase. Cleanout date TBD
Wakefield Diversion Structure	Trash grates clogged with debris	Request submitted
Whitaker Pond	1. Sediment cleanout needed. 2. Weir boards are coming loose with debris stuck in and on the weir	1. Sediment analysis and mapping completed by contractor in 2022. 2. Weir analysis and repair/dredging plan to be completed in 2025

Figure 5. Ramsey County 2023 Lake Water Quality Score

Department Summary



CRITICAL SUCCESS INDICATOR & PERFORMANCE MEASURES

DEPARTMENT

INSERT & CENTER A CRITICAL SUCCESS INDICATOR

NATURAL RESOURCES ARE MANAGED TO SUSTAIN AND ENHANCE THE ENVIRONMENT.

PERFORMANCE MEASURES – HIGHLIGHTS

This measure tracks the summer average water quality in Ramsey County lakes for three important water quality parameters: water transparency, nutrients (phosphorus), and algae (measured as chlorophyll). Water quality data provide an important measure of the overall effectiveness of lake management efforts and help direct regulatory efforts of State and local units of government.

PERFORMANCE MEASURES

		2021	2022	2023	2024	2025
#	Performance Measures	Actual	Actual	Actual	Estimate	Estimate
1	Lake Water Quality Score	2.95	2.60	2.84	2.85	2.85

PERFORMANCE MEASURES - DISCUSSION

Public Works has developed a water quality database for recreational lakes in Ramsey County since 1981. In 2023, water sampling was completed on 29 lake basins during the summer (May through September). This measure is based on the Metropolitan Council’s Lake Water Quality Report Card. For each lake, a score is assigned for the average summer water transparency, Total Phosphorus concentration, and Chlorophyll *a* concentration. The scores correspond to ranges in values for each parameter such that a score of ‘4’ or ‘A’ represents the best water quality and ‘0’ or ‘F’ represents the poorest water quality. The average water quality score is calculated for each lake and a grade is assigned. This measure reports the overall average numeric score for all County lakes sampled.

Overall, 2023 lake water quality scores were above average. Nine lakes’ overall grade level increased by a single letter overall, while only one decreased. Below average precipitation levels and decreased rain events lead to favorable conditions for lakes. Carp removal efforts were performed on Como, Silver W, Long, Bennett, Owasso, and the Gervais chain of lakes. An in-lake alum treatment was performed on Como lake in 2021. A new holding pond and sediment chamber, both containing spent lime to bind phosphorus, were installed at Wakefield Lake in 2021. Island North is no longer treated to remove vegetation. These environmental factors and best management practices contributed to the continued high water quality scores.

Lake water quality reflects land use and activities within the watershed of a lake as well as internal factors. Ramsey County is a NPDES MS4 permit holder and has developed a Storm Water Pollution Prevention Plan (SWPPP) to reduce water quality impacts. The County’s management efforts described in the SWPPP contribute to the reduction of pollutant loading to our lakes and continued improvement in water quality is expected over time.

The lake water quality database is used by the MN Pollution Control Agency to identify Impaired Waters. The County contributes to Total Maximum Daily Load (TMDL) studies for lakes identified as Impaired Waters. State and Water Management Organization (WMO) regulatory requirements related to water quality protection and the management of impaired waters are increasing. County road construction and maintenance projects must meet specific criteria related to erosion control, wetland impacts and mitigation, storm water volume reduction, and water quality.

Appendix A. RCPW Priority Area Sweeping Program

Ramsey County began to develop a priority area sweeping program in 2022. The purpose was to provide targeted and increased sweeping in vulnerable areas in the county. This year was considered a “pilot” year where the priority areas were identified, mapped, and provided to the public works maintenance department to assess and improve the implementation.

Ramsey County had previously targeted road segments next to our many lakes for extra sweeping as time allowed. Three types of priority areas (PA's) were identified for the 2022 season. Level 1, Level 2, and E-Coli. Level 1 priority areas were road segments that drained to water bodies impaired for excess nutrient related contaminants such as sediment and phosphorus. Level 2 areas drained to unimpaired water bodies. E-Coli areas drained to water bodies impaired by fecal bacteria. Primary attention was to be given to the Level 1 and E-Coli areas.

The map included on page 2 of this document was provided to the maintenance department prior to the spring sweeping event. During the event they collected and weighed the material collected in those areas. The sweepers stopped at the end of each mapped priority area and dumped the material into trucks that were hauled back to our facility for weighing.

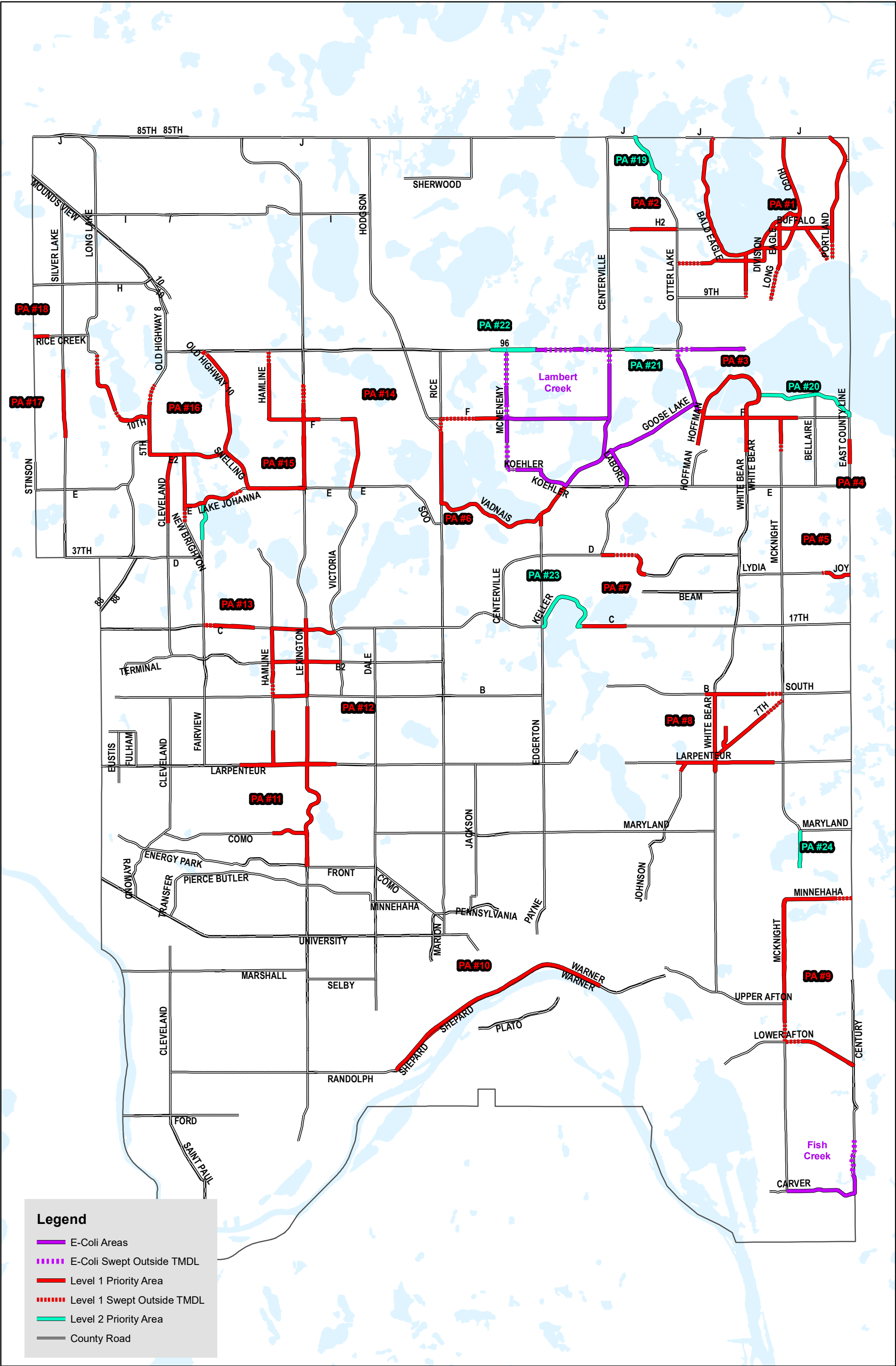
One improvement suggested by maintenance department was to provide more detailed maps that were easier to read. Prior to the fall sweeping event, the county was divided into four quarters and those maps (pages 3-6) were provided to the sweeping crews.

Some of the lessons learned from 2022 included:

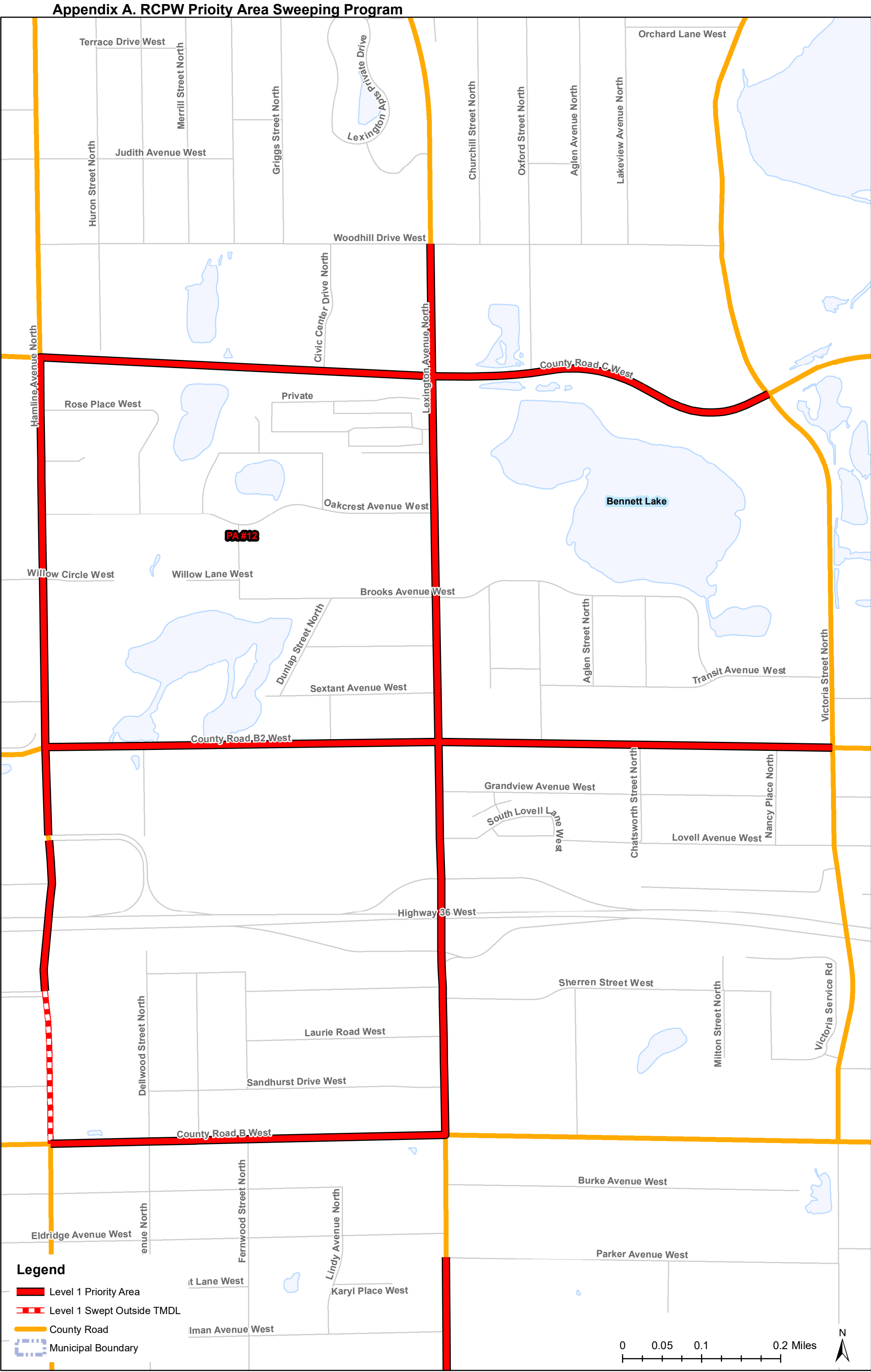
1. The volume to weight ratio for the spring vs. fall event was much different with the spring event collected denser material. The fall event included a higher ratio of organic leaf matter.
2. It required too much time to continuously haul separate loads back to the office to be weighed.
3. The priority areas were mapped based on the direction of flow from the roadway. This resulted having to continuously interrupt the sweeping to dump the material. It was also hard for the drivers to discern the end points.
4. The quad maps were still too large to easily read the location of the priority area boundaries.

The changes implemented for the 2023 season as a result were:

1. The maintenance department determined a weight estimate in 2022 based on how much hopper capacity is used at the end of each segment. That estimate was used in 2023 instead of direct weighing.
2. New maps were created for each specific priority area to make the data collection easier. Most boundaries within the priority areas were moved to the nearest roadway intersection to make it easier for the crews to know when to stop collecting. This resulted in some of the collection data coming from outside of a PA, but there was usually an equivalent elimination of a similar sized segment from within a priority area. We decided the data collected was probably representative of what was collected within each priority area. The overall sweeping collected was unchanged, because the events covered the entire county. They were not limited to the priority areas. The 2023 sweeping map for the county and some examples of the priority area maps are shown on the following pages.



[illegible]



Appendix B. Ramsey County Lake Chloride Level Trends

Ramsey County is currently part of the Twin Cities Metro Area Chloride TMDL and Management Plan. The implementation plan for participating agencies includes using the Winter Maintenance Assessment tool (WMAt) and Smart Salt training to reduce salt usage during winter operations. Ramsey County also conducts chloride level monitoring in 28 county lakes in partnership with the local watershed districts. A waterbody is considered impaired if two or more samples exceed 230 mg/L chloride within a three-year period, or one sample exceeds 860 mg/L.

In 2023, Ramsey County had 11 water bodies listed as chloride impaired:

Kohlman Lake, Como Lake, Little Johanna Lake, South Long Lake, Pike Lake, Valentine Lake, Mallard Marsh, Kasota Ponds (North and West), Battle Creek, and one unnamed creek.

Additional waters that were added to the impaired waters list in 2024 are also shown as impaired in the attached charts. These waters include:

County Ditch #2 (1st St SW to Pike Lake), Unnamed creek to Long Lake, Lake Gervais, Lake Johanna, Beam Pond, and an Unnamed Lake upstream of Kohlman Lake.

Additional information on the Twin Cities Metropolitan Area Chloride Management Plan may be found at these locations on the MPCA website:

[https://stormwater.pca.state.mn.us/index.php/TCMA_Chloride_Management_Plan -
TCMA_Chloride_Conditions](https://stormwater.pca.state.mn.us/index.php/TCMA_Chloride_Management_Plan_-_TCMA_Chloride_Conditions)

<https://www.pca.state.mn.us/sites/default/files/wq-iw11-06ff.pdf>

The charts below show the chloride trends in the lakes that Ramsey County monitors. Although the chloride concentrations and rates of increase vary widely, all lakes are trending upwards with several reaching impaired levels.

Appendix B. Ramsey County Lake Chloride Level Trends

