



**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT

# **September 2023 Board Packet**

\* \* \* \* \*

# Agenda

\* \* \* \* \*



## **Regular Board Meeting Agenda**

Wednesday, September 6, 2023

6:30 PM

*This month's meeting will be held at the District office (2665 Noel Drive, Little Canada, MN) but also via the video conferencing platform Zoom. Board members, staff, consultants, and general public will be able to join in person OR via video and/or phone. The public will be able to listen to meeting but not participate with the exception of the visitor comments portion of the agenda. Instructions for joining in on the Zoom meeting can be found after the agenda.*

1. Call to Order – 6:30 PM
2. **Approval of Agenda (pg. 3)**
3. **Consent Agenda: To all be approved with one motion unless removed from consent agenda for discussion.**
  - A. Approval of Regular Meeting Minutes August 2, 2023 (pg. 7)
  - B. Treasurer's Report and Bill List (pg. 14)
  - C. Stewardship Grant Program
    - i. 23-43 CS Blasena, rain garden (pg. 26)
    - ii. 23-46 CS Griffin, shoreline and native habitat restoration (pg. 28)
    - iii. Additional Funding Request: 23-20 CS Escape Climbing, rain gardens (pg. 31)
  - D. Change Order No. 1 – Arbogast Underground Stormwater Filter (pg. 33)
4. Visitor Comments (limited to 4 minutes each)
5. Permit Program
  - A. Applications – None
  - B. Enforcement Action Report (pg. 37)
6. Stewardship Grant Program
  - A. Applications – see consent agenda
  - B. Budget Status Update (pg. 41)
7. Action Items
  - A. **Roosevelt Homes Accept Plans and Solicit Bids (pg. 43)**
  - B. **Permit Rule Amendment Response to Comments and Approval (pg. 55)**
    - i. **Approval of Watershed Management Rules – Resolution 23-01**
    - ii. **Approval of Cost Cap for Linear Projects – Resolution 23-02**
    - iii. **Approval of Stormwater Impact Fund Contribution Amount – Resolution 23-03**
  - C. **2024 Preliminary Budget and Levy Public Hearing (pg. 115)**
    - i. **Approval of 2024 Preliminary Budget and Levy Certification to Ramsey and Washington Counties – Resolution 23-04**
8. Attorney Report
9. Board Discussion Topics
10. New Reports and/or Presentations
  - A. Cottage Place Wetland Restoration Presentation (pg. 138)
  - B. Kohlman Creek Flood Risk Reduction – County Road C Culvert Scope Summary (pg. 200)
  - C. Board Governance Manual (pg. 203)

11. Administrator's Report (*pg. 219*)
  - A. Meetings Attended
  - B. Upcoming Meetings and Dates
  - C. Board Action Log and Updates
  - D. Board and CAC Tour
  - E. Minnesota Watersheds Updates
  - F. Integrating Natural Hazard Mitigation and Clean Water Act Planning and Project Implementation Workshop
12. Project and Program Status Reports (*pg. 223*)
  - Project Feasibility Studies*
    - A. Interim Emergency Response Planning
    - B. Kohlman Creek Flood Risk Feasibility Study
    - C. Ames Lake Area Flood Risk Reduction Planning Study
    - D. Owasso Basin/North Star Estates Improvements
    - E. Resiliency Study for non-Beltline Tributary Areas
  - Research Projects*
    - F. Kohlman Lake Aquatic Plans and Nutrients Study
    - G. Shallow Lake Aeration Study
  - Capital Improvements*
    - H. Woodbury Target Store Stormwater Retrofit Projects
    - I. Roosevelt Homes Targeted Retrofit Project
    - J. Stewardship Grant Program Support
    - K. Arbogast Stormwater Filtration BMP
    - L. Double Driveway Pond and Fish Creek Tributary Improvements
    - M. Pioneer Park Stormwater Reuse
    - N. Street Sweeping Pilot Program
  - CIP Project Repair and Maintenance*
    - O. Beltline 5-year Inspection
    - P. New Technology Mini Case Study: Comparison of Various Soil Amendments for Water Quality
  - Program Updates*
    - Q. Natural Resources Program
    - R. Public Involvement and Education Program
    - S. Communications and Outreach Program
13. Manager Comments and Next Month's Meeting
14. **Adjourn**





# RAMSEY-WASHINGTON

## METRO WATERSHED DISTRICT

### **NOTICE OF BOARD MEETING**

### **Wednesday, September 6, 2023**

### **6:30 PM**

### **Hybrid Meeting: In-Person and Web Conference**

This month's meeting will be held at the District office (2665 Noel Drive, Little Canada, MN) AND via the video conferencing platform Zoom. Board members, staff, consultants, and general public will be able to join in person or via Zoom. The public will be able to listen to meeting but not participate with the exception of the visitor comments portion of the agenda. Visitor comment may be given in person or via Zoom. Instructions for joining in on the Zoom meeting can be found below.

To access the meeting via webcast, please use this link: <https://us02web.zoom.us/j/83194812445?pwd=VWZrYnRjaHpOWnhNc3ljYmZjK1JUUT09>

The meeting room will open at 6:20 pm with the meeting starting at 6:30 pm. To connect to audio you may choose to use your computer audio options or you may use your mobile device to call. The phone access number is **(312) 626-6799**. The Meeting ID is **831 9481 2445**. The meeting password is **264092**. If you have any questions, please contact Tina Carstens at [tina.carstens@rwmwd.org](mailto:tina.carstens@rwmwd.org).

\* \* \* \* \*

# Consent Agenda

\* \* \* \* \*



**Ramsey-Washington Metro Watershed District  
Minutes of Regular Board Meeting  
August 2, 2023**

The Regular Meeting of August 2, 2023, was held at the District Office Board Room, 2665 Noel Drive, Little Canada, Minnesota, and via Zoom web conferencing at 6:30 p.m. A video recording of the meeting can be found at <https://youtu.be/1kPEIS1DjiY>. Video time stamps included after each agenda item in minutes.

**PRESENT:**

Val Eisele, President  
Dr. Pam Skinner, Vice President  
Matt Kramer, Treasurer  
Ben Karp, Secretary  
Mark Gernes, Manager

**ABSENT:**

**ALSO PRESENT:**

Tina Carstens, District Administrator  
Brad Lindaman, Barr Engineering  
Nicole Maras, Permit Coordinator  
Dave Vlasin, Project Coordinator

Paige Ahlborg, Project Manager  
Laurann Kirschner, Attorney for District  
Paul Erdmann, Natural Resources Program Manager  
Eric Korte, Water Monitoring Coordinator

**1. CALL TO ORDER**

The meeting was called to order by President Eisele at 6:30 p.m.

**2. APPROVAL OF AGENDA (00:20)**

Motion: Manager Kramer moved, Manager Skinner seconded, to approve the agenda as presented. Motion carried unanimously.

**3. CONSENT AGENDA (00:40)**

- A. Approval of Minutes from June 28, 2023
- B. Treasurer's Report and Bill List
- C. Permit Program
  - i. 23-22: MCES Lake Elmo West Connection, Oakdale/Woodbury
- D. Stewardship Grant Program
  - i. 23-38 CS: DeArmond, Rain Garden and Habitat Restoration
  - ii. 23-39 CS: Gerding, Rain Garden and Habitat Restoration
  - iii. 23-40: Gourley, Habitat Restoration
  - iv. 23-41 CS: Hines, Habitat Restoration
  - v. 23-42 CS: Radloff, Rain Garden and Habitat Restoration

Motion: Manager Skinner moved, Manager Karp seconded, to approve the consent agenda as presented. Motion carried unanimously.

#### **4. VISITOR COMMENTS (1:15)**

No comments.

#### **5. PERMIT PROGRAM (1:23)**

##### **A. Applications – See Consent Agenda**

##### **B. Monthly Enforcement Report**

During July, 15 notices were sent to address: install/maintain inlet protection (5), install/maintain perimeter control (6), stabilize exposed soils (1), contain liquid/solid wastes (1), remove discharged sediment (1), and maintain/protect permanent BMPs (1).

Nicole Maras provided additional details on the process they are following, along with Capital Regions, to respond to the comments received on the proposed rules change.

#### **6. STEWARDSHIP GRANT PROGRAM (5:18)**

##### **A. Applications – See Consent Agenda**

##### **B. Snowmelt BMP Analysis and Funding Recommendation**

Paige Ahlborg commented that this is a unique request from the City of Woodbury. She stated that the city is proposing to install a heated sidewalk for the purpose of salt reduction, noting that it would be a 2024 installation. She stated that she has been working with the city, along with Barr Engineering, and they believe that this is a good use of this technology as this area drains to an area that is chloride impaired.

President Eisele asked for clarification on the calculations that were used. Brad Lindaman provided additional explanation of the calculations that Barr staff used. President Eisele asked for clarification on the capital cost. Paige Ahlborg stated that is the estimate that Woodbury provided for the project and noted that the maximum grant award would be \$100,000.

Manager Skinner asked if there is a heater and pump that constantly pushes water through. Brad Lindaman replied that the sidewalk is not always heated, just when it is needed. Manager Skinner asked if a solar panel could power the system. Brad Lindaman replied that he did not believe that would be sufficient for this system. Manager Skinner commented that she believes this is a good project and fits within the goals of the District.

Manager Karp commented that while he believes this is a good project, his larger concern would be how the District would ensure Woodbury is not salting in addition to the heated sidewalk. Paige Ahlborg replied that they can include that element in their inspections. She noted that additional language could be written into the agreement to that degree.

Manager Gernes commented that this is a fantastic and innovative project, noting that this has been done in other states with similar climates. He believed that these types of projects should be considered as pilots as they will be able to learn from the results. He asked if there would be safety issues with the runoff that is generated from the sidewalk. Brad Lindaman commented that he was unsure if that element has been thought through, acknowledging that it could simply be moving the issue. Paige Ahlborg commented that this is very conceptual, and she would follow up with Woodbury about that question.

Manager Kramer commented that he would be highly skeptical that this would have a benefit. He commented that he is very familiar with an analysis that was presented to him on projects like this, noting that this type of system is expensive to run. He stated that he will support this project, but he wants to see the analysis of the chloride reduction. He commented that this would provide very little benefit as this is adjacent to a parking lot with vehicles tracking in salt. He noted that this would also generate runoff that could freeze in the parking lot, which would just cause more salt to be used on the parking lot.

President Eisele echoed the comments of Manager Kramer. He stated that return on investment is an important consideration. He commented that \$100,000 is a sizeable investment from this budget for something that they are unsure will provide the desired outcome. He stated that he will support this going forward to help inform what they would do next.

Tina Carstens stated that perhaps there could be future monitoring and analysis embedded in the agreement.

President Eisele stated that he supports trying new technologies and ideas and would be very supportive of a smaller pilot type project.

Manager Karp acknowledged that this is a large investment but commented that this would be a start.

Tina Carstens noted that this would be a city project and the city staff are certified in salt application.

Manager Gernes asked who is doing the maintenance on the parking lot and sidewalk and whether that would be the same person. He recognized that the city has requested \$100,000 and asked if the city would move forward with a lesser contribution from the District. Paige Ahlborg stated that the city did not request a level of funding and simply proposed the project and asked if the District would be willing to contribute. She stated that if the Board is more comfortable with a lower amount, she could bring that back to the city for their planning. She noted that if a formal application is submitted and the Board felt the project was eligible for a higher contribution, that change could be made.

President Eisele used the example of street sweeping, noting that there is clear evidence that provides benefit whereas this is not as clear. He commented that he would find it helpful to have more information showing the benefit.

Manager Kramer stated that perhaps it is expressed to Woodbury that the District is interested and wants to know the mechanisms that Woodbury would use to demonstrate that the chloride downstream has been reduced and assurance that there would be long-term analysis and monitoring. He stated that if someone falls, the city would most likely use salt. He commented that it is very innovative, and he is interested but does not think there is a lot of value unless the city is willing to do the value analysis.

Manager Skinner stated that the District does that type of analysis all the time and perhaps that could be part of the contribution from the District.

President Eisele stated that if this does come forward, he would want to see more of the information they have been talking about.

Tina Carstens stated that they could leave the level of funding more open-ended and just let the city know the District is interested but has these concerns. She noted that additional information could come back in the formal application.

President Eisele asked if there would be a way to see a summary of the data collected by Mississippi WMO, as they have implemented similar projects years ago.

Paige Ahlborg commented that she was unsure if the city would move forward without any contribution, and that level of contribution may need to be known before moving forward in the design process. She stated that in that case, she could return to the Board with the additional details and response.

Manager Skinner commented that this type of project could lead towards requests from homeowners for driveways and sidewalks.

President Eisele commented that would be where a policy would come into play.

C. Budget Status Update

Paige Ahlborg provided a summary of the report.

Manager Gernes asked if it would be typical to continue to receive requests this time of year. Paige Ahlborg stated that they are tracking about the same as the previous years.

**7. ACTION ITEMS – None (29:11)**

**8. ATTORNEY REPORT (29:30)**

Laurann Kirschner stated that she reviewed some contract issues, and they will work with staff to publish the notices for the budget prior to the September meeting.

**9. BOARD ISSUES, POLICIES, AND OPERATION (FOR DISCUSSION AT MEETING) (30:06)**

President Eisele commented that it would be great to continue to receive a summary from the CAC meetings and perhaps a presentation from a CAC member in the future.

**10. NEW REPORTS AND/OR PRESENTATIONS (30:50)**

A. 2024 Budget Discussion

Tina Carstens provided background information on how the proposed budget is created.

President Eisele asked the baseline of the levy from the previous year. Tina Carstens provided the details of the levy from the previous year. She commented that over the next several months she will be able to make adjustments based off carry over amounts from this year. She stated that she would like input from the Board tonight on the comfort level with levy increases. She noted that the budget for this year and next year will be very project heavy. She stated that if the Board desired a zero percent increase, some projects will be delayed. She provided an overview of staffing, District vehicles, and capital improvements as stated in her memorandum.

President Eisele used the scenario that the Board wanted a zero percent increase and asked when the discussion would occur about prioritization about projects. Tina Carstens replied that if that were the direction tonight, she would go through to propose priorities for the Board to review at the next meeting.

Manager Skinner commented that she would like to see the impacts to a household that have been shown in the past. Tina Carstens confirmed that she would have that in her presentation the next month. Manager Skinner acknowledged that the District applies for grants for projects and noted that she would find it helpful to have data on the level of grants applied for and received. Tina Carstens stated that the District is applying for watershed based implementation funding (WBIF) funds and provided details on additional grants the District is in the process of applying for. She noted that she does not yet have solid figures on grants.

President Eisele commented that this information helped him to have some baseline details and cost estimates on the capital projects. He asked and received confirmation that levying funds now and in 2024 for flood risk reduction will help to ease the burden in 2025.

Manager Gernes commented that it seems there has been some carryover in the past mainly because there have not been projects, but there will be projects in the future. He commented that continued carryover would help to smooth things out.

President Eisele commented that he would encourage looking at a lower levy but also acknowledges that the District has been acting purposefully to plan for the future. He stated that he would feel comfortable building in the increase over multiple years as opposed to a large increase to support the 2025 project. Manager Skinner agreed that she would rather split the increase over multiple years. Tina Carstens stated that the project repair and maintenance budget was also increased significantly because of the repairs needed on the Beltline, which will be a one-time payment.

Manager Gernes asked for additional input on certain line items such as building maintenance and utilities. Tina Carstens provided additional explanation on the increases/decreases proposed.

President Eisele asked if remote work is still prevalent for the District. Tina Carstens replied that there are still opportunities for employees to work from home a few days per week. President Eisele referenced the educational line item and asked for input. Tina Carstens explained that budget was increased in the past for the water steward program, and they have seen a decline in that participation, therefore the budget can also be decreased. She also provided clarification on the Minnesota Stormwater Research Council allocation.

Manager Skinner asked if the anticipated carryover could help to lower the levy impact to a five percent increase. President Eisele agreed that five percent seems more manageable for an increase. Tina Carstens confirmed that she could work towards getting the increase around five percent.

Manager Kramer stated that he was aiming for about 5.5 percent as they are building towards the future anticipated expenditures.

Manager Gernes commented that his range would perhaps be between three and five percent for the increase.

Manager Karp commented that perhaps it would be helpful to see different budget scenarios and what items would need to be cut in order to meet certain percentages.

President Eisele suggested three percent, five percent, and seven percent increase for scenarios.

#### **B. Wetland Workshop Follow-Up: Wetland Restoration Planning**

Tina Carstens provided a recap of previous information that was discussed at the wetland workshop. She provided the document that staff previously composed related to potential wetland restoration opportunities.

Manager Gernes commented that he would be curious to hear more about the prioritization, as those appear to be small projects and of course would not be as attractive as the larger potential for Cottage Place. Tina Carstens commented that any time there is a willing partner for a project, that makes it much easier to bring to fruition.

President Eisele commented that he is excited about the Cottage Place restoration proposal and agrees that it is helpful to work with a willing partner.

Tina Carstens stated that Barr Engineering could provide a presentation at the next meeting about wetland restoration potentials related to Cottage Place.

Manager Gernes asked if there has been any thought towards pursuing credits for shoreline restoration projects that have been completed. Tina Carstens replied that they have not gone down that road related to potential banking credits for shoreline restoration. Manager Gernes recognized that a typical banker would be interested in financial benefits whereas the District would have interest in having credits available for use by projects within the District.

President Eisele commented that he would be happy just to see the area return to wetlands.

Manager Karp recognized that this is a prioritization tool based on different factors. He commented that there are existing wetland complexes that could be expanded but do not appear on the list. Tina Carstens commented that they could look into those opportunities further.

#### **11. ADMINISTRATOR'S REPORT (1:10:58)**

##### **A. Meetings Attended**

No comments.

##### **B. Upcoming Meetings and Dates**

Tina Carstens reviewed the upcoming meetings and dates.

##### **C. Board Action Log and Updates**

Tina Carstens commented on the log.

##### **D. Minnesota Watersheds Update**

Tina Carstens asked managers to send their answers to her later this week noting that she would tabulate all the answers and submit one response.

##### **E. Diversity, Equity, Inclusion, and Accessibility Plan**

No comments.

#### **12. PROJECT AND PROGRAM STATUS REPORTS (1:18:05)**

##### *Project Feasibility Studies*

##### **A. Interim Emergency Response Planning**

##### **B. Kohlman Creek Flood Risk Feasibility Study**

##### **C. Ames Lake Area Flood Risk Reduction Planning Study**

##### **D. Owasso Basin/North Start Estates Improvements**

##### **E. Resiliency Study for Non-Beltline Tributary Areas**

##### *Research Projects*

##### **F. Kohlman Lake Aquatic Plants and Nutrients Study**

##### **G. Shallow Lake Aeration Study**

##### *Capital Improvements*

##### **H. Woodbury Target Store Stormwater Retrofit Projects**

##### **I. Roosevelt Homes Targeted Retrofit Project**

##### **J. Stewardship Grant Program Support**

##### **K. Arbogast Stormwater Filtration BMP**

##### **L. Double Driveway Pond and Fish Creek Tributary Improvements**

##### **M. Pioneer Park Stormwater Reuse**

##### *CIP Project Repair and Maintenance*

##### **N. 2023 CIP Maintenance and Repair Project**

##### **O. Beltline 5-Year Inspection**

##### *Program Updates*

##### **P. Natural Resources Program**

##### **Q. Public Involvement and Education Program**

##### **R. Communications and Outreach Program**

President Eisele referenced the permanent Beltline repairs needed after the temporary fix, which sound important and asked if there is urgency. Brad Lindaman commented that he believes that it is stabilized for the time being and they are pursuing different design alternatives. He stated that they are planning to have those prepared for the Board to review this fall in order to proceed. President Eisele asked if there would be concern with heavy



waters in the spring following snow melt. Brad Lindaman commented that while they would prefer to do the repair in the winter, that would not be plausible and therefore they will monitor the water levels. He again confirmed that the segment is stable at this time.

Dave Vlasin provided additional details on the process, noting that the repair was completed within the day.

**13. MANAGER COMMENTS AND NEXT MONTH'S MEETING (1:32:39)**

No additional comments.

**14. ADJOURN**

Motion: Manager Skinner moved, Manager Kramer seconded, to adjourn the meeting at 8:03 p.m. Motion carried unanimously.

DRAFT

## RWMWD BUDGET STATUS REPORT

## Administrative &amp; Program Budget

Fiscal Year 2023

8/31/2023

| Budget Category                  | Budget Item                                     | Account Number | Original Budget        | Budget Transfers | Current Month Expenses | Year-to-Date Expenses | Current Budget Balance | Percent of Budget |
|----------------------------------|---|----------------|------------------------|------------------|------------------------|-----------------------|------------------------|-------------------|
| Manager                          | Per diems                                       | 4355           | \$7,000.00             | -                | -                      | 375.00                | \$6,625.00             | 5.36%             |
|                                  | Manager expenses                                | 4360           | 3,000.00               | -                | -                      | -                     | 3,000.00               | 0.00%             |
| Committees                       | Committee/Bd Mtg. Exp.                          | 4365           | 3,500.00               | -                | 1,056.25               | 3,701.96              | (201.96)               | 105.77%           |
|                                  | <b>Sub-Total: Managers/Committees:</b>          |                | <b>\$13,500.00</b>     | <b>\$0.00</b>    | <b>\$1,056.25</b>      | <b>\$4,076.96</b>     | <b>\$9,423.04</b>      | <b>30.20%</b>     |
| Employees                        | Staff salary/taxes/benefits                     | 4010           | 1,860,000.00           | -                | 144,108.47             | 1,125,251.28          | 734,748.72             | 60.50%            |
|                                  | Employee expenses                               | 4020           | 15,000.00              | -                | 3,849.98               | 7,509.50              | 7,490.50               | 50.06%            |
|                                  | District training & education                   | 4350           | 75,000.00              | -                | 11,345.12              | 14,609.12             | 60,390.88              | 19.48%            |
|                                  | <b>Sub-Total: Employees:</b>                    |                | <b>\$1,950,000.00</b>  | <b>\$0.00</b>    | <b>\$159,303.57</b>    | <b>\$1,147,369.90</b> | <b>\$802,630.10</b>    | <b>58.84%</b>     |
| Administration/<br>Office        | GIS system maint. & equip.                      | 4170           | 10,000.00              | -                | -                      | 3,339.25              | 6,660.75               | 33.39%            |
|                                  | Data Base/GIS Maintenance                       | 4171           | 20,000.00              | -                | -                      | -                     | 20,000.00              | 0.00%             |
|                                  | Equipment maintenance                           | 4305           | 2,000.00               | -                | -                      | -                     | 2,000.00               | 0.00%             |
|                                  | Telephone                                       | 4310           | 2,000.00               | -                | 59.38                  | 415.42                | 1,584.58               | 20.77%            |
|                                  | Office supplies                                 | 4320           | 7,000.00               | -                | 803.31                 | 7,249.62              | (249.62)               | 103.57%           |
|                                  | IT/Internet/Web Site/Software Lic.              | 4325           | 85,000.00              | -                | 6,955.31               | 58,409.28             | 26,590.72              | 68.72%            |
|                                  | Postage   | 4330           | 2,000.00               | -                | 143.55                 | 317.70                | 1,682.30               | 15.89%            |
|                                  | Printing/copying                                | 4335           | 5,000.00               | -                | 294.00                 | 3,679.28              | 1,320.72               | 73.59%            |
|                                  | Dues & publications                             | 4338           | 15,000.00              | -                | -                      | 12,639.00             | 2,361.00               | 84.26%            |
|                                  | Janitorial/Trash Service                        | 4341           | 15,000.00              | -                | 1,662.52               | 8,023.38              | 6,976.62               | 53.49%            |
|                                  | Utilities/Bldg.Contracts                        | 4342           | 30,000.00              | -                | 697.97                 | 6,722.03              | 23,277.97              | 22.41%            |
|                                  | Bldg/Site Maintenance                           | 4343           | 125,000.00             | -                | 4,348.28               | 89,241.14             | 35,758.86              | 71.39%            |
|                                  | Miscellaneous                                   | 4390           | 5,000.00               | -                | -                      | -                     | 5,000.00               | 0.00%             |
|                                  | Insurance                                       | 4480           | 60,000.00              | -                | -                      | 57,143.00             | 2,857.00               | 95.24%            |
|                                  | Office equipment                                | 4703           | 100,000.00             | -                | 751.95                 | 4,992.52              | 95,007.48              | 4.99%             |
|                                  | Vehicle lease, maintenance                      | 4810-40        | 20,000.00              | -                | 807.59                 | 5,027.38              | 14,972.62              | 25.14%            |
|                                  | <b>Sub-Total: Administration/Office:</b>        |                | <b>\$503,000.00</b>    | <b>\$0.00</b>    | <b>\$16,523.86</b>     | <b>\$257,199.00</b>   | <b>\$245,801.00</b>    | <b>51.13%</b>     |
| Consultants/<br>Outside Services | Auditor/Accounting                              | 4110           | 75,000.00              | -                | 5,585.62               | 51,738.91             | 23,261.09              | 68.99%            |
|                                  | Engineering-administration                      | 4121           | 132,000.00             | -                | 9,042.44               | 55,698.37             | 76,301.63              | 42.20%            |
|                                  | Engineering-permit I&E                          | 4122           | 10,000.00              | -                | 575.00                 | 575.00                | 9,425.00               | 5.75%             |
|                                  | Engineering-eng. review                         | 4123           | 70,000.00              | -                | 6,074.00               | 36,583.50             | 33,416.50              | 52.26%            |
|                                  | Engineering-permit review                       | 4124           | 59,000.00              | -                | 3,931.00               | 34,903.00             | 24,097.00              | 59.16%            |
|                                  | Project Feasibility Studies                     | 4129           | 395,000.00             | -                | 38,211.01              | 155,042.89            | 239,957.11             | 39.25%            |
|                                  | Attorney-permits                                | 4130           | 5,000.00               | -                | 110.16                 | 110.16                | 4,889.84               | 2.20%             |
|                                  | Attorney-general                                | 4131           | 40,000.00              | -                | -                      | 12,129.60             | 27,870.40              | 30.32%            |
|                                  | Outside Consulting Services                     | 4160           | 20,000.00              | -                | -                      | -                     | 20,000.00              | 0.00%             |
|                                  | <b>Sub-Total: Consultants/Outside Services:</b> |                | <b>\$806,000.00</b>    | <b>\$0.00</b>    | <b>\$63,529.23</b>     | <b>\$346,781.43</b>   | <b>\$459,218.57</b>    | <b>43.02%</b>     |
| Programs                         | Educational programming                         | 4370           | 70,000.00              | -                | -                      | 21,106.00             | 48,894.00              | 30.15%            |
|                                  | Communications & Marketing                      | 4371           | 50,000.00              | -                | 1,537.93               | 4,467.53              | 45,532.47              | 8.94%             |
|                                  | Events  | 4372           | 51,000.00              | -                | -                      | 49,709.86             | 1,290.14               | 97.47%            |
|                                  | Water QM-Engineering                            | 4520-30        | 240,000.00             | -                | 49,283.97              | 141,594.96            | 98,405.04              | 59.00%            |
|                                  | Project operations                              | 4650           | 200,000.00             | -                | 2,044.53               | 21,530.63             | 178,469.37             | 10.77%            |
|                                  | SLMP/TMDL Studies                               | 4661           | 142,000.00             | -                | 806.00                 | 1,335.00              | 140,665.00             | 0.94%             |
|                                  | Natural Resources/Keller Creek                  | 4670-72        | 120,000.00             | -                | 2,587.72               | 30,735.84             | 89,264.16              | 25.61%            |
|                                  | Outside Prog.Support/Weed Mgmt.                 | 4683           | 57,000.00              | -                | -                      | 18,238.66             | 38,761.34              | 32.00%            |
|                                  | Research Projects                               | 4695           | 155,000.00             | -                | 18,771.31              | 83,113.61             | 71,886.39              | 53.62%            |
|                                  | Health and Safety Program                       | 4697           | 4,000.00               | -                | 1,477.13               | 2,398.39              | 1,601.61               | 59.96%            |
|                                  | <b>Sub-Total: Programs:</b>                     |                | <b>\$1,089,000.00</b>  | <b>\$0.00</b>    | <b>76,508.59</b>       | <b>\$374,230.48</b>   | <b>\$714,769.52</b>    | <b>34.36%</b>     |
| <b>GENERAL FUND TOTAL</b>        |   |                | <b>\$4,361,500.00</b>  | <b>\$0.00</b>    | <b>\$316,921.50</b>    | <b>\$2,129,657.77</b> | <b>\$2,231,842.23</b>  | <b>48.83%</b>     |
| CIP's                            | CIP Project Repair & Maintenance                | 516            | 1,500,000.00           | -                | 66,998.49              | 872,398.88            | 627,601.12             | 58.16%            |
|                                  | Targeted Retrofit Projects                      | 518            | 1,500,000.00           | -                | 304,914.75             | 642,277.08            | 857,722.92             | 42.82%            |
|                                  | Flood Risk Reduction Fund                       | 520            | 5,200,000.00           | -                | 10,306.90              | 613,143.18            | 4,586,856.82           | 11.79%            |
|                                  | Debt Services-96-97 Beltline/MM/Battle Creek    | 526            | 395,404.00             | -                | -                      | 393,783.56            | 1,620.44               | 99.59%            |
|                                  | Stewardship Grant Program Fund                  | 529            | 1,128,000.00           | -                | 132,908.83             | 298,919.53            | 829,080.47             | 26.50%            |
|                                  | Double Driveway Water Quality Optimization      | 537            | 675,000.00             | -                | 12,278.00              | 49,682.99             | 625,317.01             | 7.36%             |
|                                  | Wetland Restoration Projects                    | 540            | 500,000.00             | -                | -                      | -                     | 500,000.00             | 0.00%             |
| <b>CIP BUDGET TOTAL</b>          |   |                | <b>\$10,898,404.00</b> | <b>-</b>         | <b>\$527,406.97</b>    | <b>\$2,870,205.22</b> | <b>\$8,028,198.78</b>  | <b>26.34%</b>     |
| <b>TOTAL BUDGET</b>              |   |                | <b>\$15,259,904.00</b> | <b>\$0.00</b>    | <b>\$844,328.47</b>    | <b>\$4,999,862.99</b> | <b>\$10,260,041.01</b> | <b>32.76%</b>     |

## Current Fund Balances:

| Fund:   | Unaudited Beginning Fund Balance @ 12/31/22 | Fund Transfers | Year to date Revenue   | Current Month Expenses | Year to Date Expense  | Unaudited Fund Balance @ 08/31/23 |
|---|---|----------------|------------------------|------------------------|-----------------------|-----------------------------------|
| 101 - General Fund  | \$2,313,604.42                              | -              | 2,263,771.40           | 316,921.50             | 2,129,657.77          | 2,447,718.05                      |
| 516 - CIP Project Repair & Maintenance                                    | 1,143,456.57                                | -              | 630,667.61             | 66,998.49              | 872,398.88            | 901,725.30                        |
| 518 - Targeted Retrofit Projects  | 164,101.49                                  | -              | 853,083.34             | 304,914.75             | 642,277.08            | 374,907.75                        |
| 520 - Flood Damage Reduction Fund   | 5,075,970.05                                | -              | 179,262.21             | 10,306.90              | 613,143.18            | 4,642,089.08                      |
| 526 - Debt Services-96-97 Beltline/MM/Beltline-Battle Creek Tunnel Repair | 551,908.60                                  | -              | -                      | -                      | 393,783.56            | 158,125.04                        |
| 529 - Stewardship Grant Program Fund                                      | 428,736.05                                  | -              | 417,565.78             | 132,908.83             | 298,919.53            | 547,382.30                        |
| 536 - Stormwater Impact Fund  | 358,950.00                                  | -              | 782,281.00             | -                      | -                     | 1,141,231.00                      |
| 537 - Double Driveway Water Quality Optimization Implementation           | -   | -              | 104,391.45             | 12,278.00              | 49,682.99             | 54,708.46                         |
| 540 - Wetland Restoration Projects  | 498,036.00                                  | -              | -                      | -                      | -                     | 498,036.00                        |
| 580 - Contingency Fund  | 1,465,487.00                                | -              | -                      | -                      | -                     | 1,465,487.00                      |
| <b>Total District Fund Balance</b>  |   | <b>\$0.00</b>  | <b>\$ 5,231,022.79</b> | <b>\$ 844,328.47</b>   | <b>\$4,999,862.99</b> | <b>\$12,231,409.98</b>            |

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From August 1, 2023 to August 31, 2023**

| Check # | Date     | Payee ID | Invoice #                        | Payee                                    | Description                                      | Amount      |
|---------|----------|----------|----------------------------------|--|--|-------------|
| EFT     | 08/02/23 | hea002   | Sep-23                           | HealthPartners                           | Employee Benefits                                | \$18,582.27 |
| EFT     | 08/01/23 | met008   | Aug-23                           | MetLife-Group Benefits                   | Employee Benefits                                | 1,790.96    |
| EFT     | 08/22/23 | com004   | Aug-23                           | Comcast                                  | Utilities/Building Services Contracts            | 196.96      |
| EFT     | 08/24/23 | pit001   | Aug-23                           | Pitney Bowes Global Financial Serv, LLC. | Postage  | 143.55      |
| 73998   | 08/15/23 | ada002   | 3696489                          | Adam's Pest Control, Inc.                | Utilities/Building Services Contracts            | 94.72       |
| 73999   | 08/15/23 | aws001   | S1335957-080123                  | AWS Service Center                       | Utilities/Building Services Contracts            | 325.19      |
| 74000   | 08/15/23 | eme001   | SVC10554                         | Emergency Automotive Technologies, Inc.  | Vehicle Maintenance                              | 28.75       |
| 74001   | 08/15/23 | hea003   | 2908                             | Heartquest Trainers, LLC                 | Health & Safety Program                          | 1,283.71    |
| 74002   | 08/15/23 | hom001   | August                           | Home Depot Credit Services               | Natural Resource Program                         | 218.93      |
| 74003   | 08/15/23 | ncp001   | July 1, 2023                     | NCPERS Group Life Ins.                   | Employee Benefits                                | 32.00       |
| 74004   | 08/15/23 | nsp001   | 837846769                        | Xcel Energy                              | Building/Site Maintenance                        | 1,120.76    |
| 74005   | 08/15/23 | pet004   | Aug-23                           | Ashley N. Petel                          | Employee Expenses                                | 27.51       |
| 74006   | 08/15/23 | pre003   | 319570559                        | Premium Waters, Inc.                     | Utilities/Building Services Contracts            | 34.00       |
| 74007   | 08/15/23 | qwe001   | August 10, 2023                  | CenturyLink                              | Project Operations                               | 539.19      |
| 74008   | 08/15/23 | red002   | 150480021                        | Redpath & Company, LLC.                  | Accounting                                       | 5,416.72    |
| 74009   | 08/15/23 | red003   | 20230810043028                   | Red Wing Business Advantage Account      | Employee Benefits                                | 195.49      |
| 74010   | 08/15/23 | reg002   | 1836;1913;1921;1923              | Regents of the University of Minnesota   | Training & Education                             | 3,065.00    |
| 74011   | 08/15/23 | sai001   | 4148                             | Saint Paul Media                         | Communications & Marketing                       | 50.00       |
| 74012   | 08/15/23 | str005   | 1796                             | Strategic Diversity Initiatives          | Training & Education                             | 7,350.00    |
| 74013   | 08/15/23 | tec001   | 327181; 326799                   | Tech Sales Co.                           | Water Quality Monitoring - Staff                 | 1,485.00    |
| 74014   | 08/15/23 | uli001   | 166834655                        | Uline                                    | Building/Site Maintenance                        | 389.74      |
| 74015   | 08/15/23 | usb002   | August 2023 Statement            | U.S. Bank                                | July/August Credit Card Expense                  | 4,083.72    |
| 74016   | 08/15/23 | usb005   | 507554111                        | US Bank Equipment Finance                | Copier Lease                                     | 294.00      |
| 74017   | 08/15/23 | van001   | August 2023                      | Vanguard Cleaning Systems of Minnesota   | Janitorial/Trash/Plowing/Sweeping                | 831.26      |
| 74018   | 08/30/23 | ahl001   | June-August 2023                 | Paige Ahlborg                            | Employee Benefits, Expenses                      | 404.16      |
| 74019   | 08/30/23 | ame007   | 23-12                            | Ames Construction, Inc.                  | Escrow Refunds                                   | 36,000.00   |
| 74020   | 08/30/23 | att002   | 287256653401X08252023            | AT & T Mobility - ROC                    | Project Operations                               | 166.34      |
| 74021   | 08/30/23 | bar001   | July 15 to August 18, 2023       | Barr Engineering                         | Various  | 197,797.52  |
| 74022   | 08/30/23 | bar012   | INVRCO27297                      | Barco Products                           | Building / Site Maintenance                      | 402.63      |
| 74023   | 08/30/23 | cad001   | 19782089                         | Zayo Group, LLC                          | Water Quality Monitoring - Staff                 | 199.97      |
| 74024   | 08/30/23 | cen008   | 21-21; 21-26                     | 3M Center                                | Escrow Refunds                                   | 50,950.00   |
| 74025   | 08/30/23 | cit010   | 22-09 CS                         | City of White Bear Lake                  | Stewardship Grant Program                        | 12,396.00   |
| 74026   | 08/30/23 | cit025   | 23-01 CS                         | Cities Management                        | Stewardship Grant Program                        | 60,034.00   |
| 74027   | 08/30/23 | con007   | Feb-24                           | 4 Control Inc.                           | Natural Resources Program                        | 427.00      |
| 74028   | 08/30/23 | cre006   | 23-15 CS                         | Crestview at Woodbury                    | Stewardship Grant Program                        | 1,435.00    |
| 74029   | 08/30/23 | dau001   | Aug-23                           | Jennifer A. Dauer                        | Employee Expenses                                | 36.03       |
| 74030   | 08/30/23 | dav003   | Aug-51                           | Davey Resource Group, Inc.               | Construction Improvements/Project Main. & Rep.   | 1,799.76    |
| 74031   | 08/30/23 | eco002   | Dec-05                           | Ecoscapes, LLC.                          | Stewardship Grant Program                        | 15,000.00   |
| 74032   | 08/30/23 | erd001   | June-Aug 2023                    | Paul Erdmann                             | Employee Benefits, Training                      | 134.06      |
| 74033   | 08/30/23 | fit002   | Aug-23                           | Mary Fitzgerald                          | Employee Benefits, Expenses                      | 63.10       |
| 74034   | 08/30/23 | fit003   | Aug-23                           | Emily F. Kamin                           | Employee Benefits, Expenses                      | 57.29       |
| 74035   | 08/30/23 | fre002   | 22-04 MTN                        | Anne Frenchick                           | Stewardship Grant Program                        | 282.31      |
| 74036   | 08/30/23 | gil001   | 235142                           | Gilbert Mechanical Contractors, Inc.     | Building / Site Maintenance                      | 836.50      |
| 74037   | 08/30/23 | gra005   | WEB2447989075                    | Grainger                                 | Water Quality Monitoring - Staff                 | 1,340.44    |
| 74038   | 08/30/23 | gru001   | 01-28812                         | Gruber's Power Equipment                 | Natural Resources Program                        | 316.94      |
| 74039   | 08/30/23 | haz001   | Aug-23                           | Lauren Hazenson                          | Employee Benefits, Expenses                      | 148.75      |
| 74040   | 08/30/23 | hom001   | Aug-23                           | Home Depot Credit Services               | Project Operations/Maintenance and Repairs       | 423.19      |
| 74041   | 08/30/23 | inc001   | S-INV00749                       | In Control, Inc.                         | Project Operations/Maintenance and Repairs       | 1,400.00    |
| 74042   | 08/30/23 | inn002   | 4288424; SCN122567; 4306438      | Innovative Office Solutions LLC          | Building / Site Maintenance                      | 84.46       |
| 74043   | 08/30/23 | int001   | W23070485                        | Office of MN, IT Services                | Telephone  | 59.38       |
| 74044   | 08/30/23 | int003   | 201309                           | Intereum, Inc.                           | Equipment  | 300.00      |
| 74045   | 08/30/23 | kub001   | Jul/Aug 2023                     | Kyle W. Kubitza                          | Employee Benefits, Expenses                      | 102.28      |
| 74046   | 08/30/23 | lak007   | 1026                             | Lakes Aquatic Weed Removal               | Stewardship Grant Program                        | 20,860.00   |
| 74047   | 08/30/23 | lak010   | 23-14 CS                         | Melanie Lake                             | Stewardship Grant Program                        | 251.37      |
| 74048   | 08/30/23 | lan009   | 2071; 2039                       | Landbridge Ecological, Inc.              | Construction Improvements/Project Main. & Rep.   | 2,642.20    |
| 74049   | 08/30/23 | len001   | 22-13 MTN                        | Kristopher Lencowski                     | Stewardship Grant Program                        | 83.10       |
| 74050   | 08/30/23 | mcc004   | 22-06 MTN                        | Kara McGuire                             | Stewardship Grant Program                        | 95.03       |
| 74051   | 08/30/23 | mel001   | July/August 2023                 | Michelle L. Melser                       | Employee Benefits, Expenses                      | 475.31      |
| 74052   | 08/30/23 | met013   | 1427                             | Metro - INET                             | Roseville IT Services/Web Site/Software/Licenses | 6,859.00    |
| 74053   | 08/30/23 | nar001   | IV00255553                       | Nardini Fire Equipment                   | Building / Site Maintenance                      | 721.75      |
| 74054   | 08/30/23 | ncp001   | August 1, 2023                   | NCPERS Group Life Ins.                   | Employee Benefits                                | 16.00       |
| 74055   | 08/30/23 | nel007   | July-Aug 2023                    | Katrina L. Nelson                        | Employee Expenses                                | 43.16       |
| 74056   | 08/30/23 | nsp001   | 841967965                        | Xcel Energy                              | Building / Site Maintenance                      | 1,118.35    |
| 74057   | 08/30/23 | oak004   | 20105844                         | Oak Meadows Landscape/Design, Inc.       | Stewardship Grant Program                        | 950.00      |
| 74058   | 08/30/23 | odl001   | 20-07 MTN                        | Kristy Odland                            | Stewardship Grant Program                        | 1,000.00    |
| 74059   | 08/30/23 | pac001   | Aug 2023                         | Pace Analytical Services, Inc.           | Water Quality Monitoring - Staff                 | 36,369.40   |
| 74060   | 08/30/23 | pas002   | July/August 2023                 | Carol Passi                              | Employee Benefits, Expenses                      | 92.40       |
| 74061   | 08/30/23 | pci001   | Beltline Emer. Repair Proj Inv 1 | PCi Roads, LLC                           | Project Operations/Maintenance and Repairs       | 33,578.55   |
| 74062   | 08/30/23 | reg002   | 2110011962                       | Regents of the University of Minnesota   | Natural Resource Program                         | 850.00      |
| 74063   | 08/30/23 | rmb001   | M2300157                         | RMB Environmental Laboratories           | Water Quality Monitoring - Staff                 | 8,262.10    |
| 74064   | 08/30/23 | roc001   | 2813                             | Rock Leaf Water Environmental LLC        | Construction Improvements/Project Main. & Rep.   | 6,354.74    |
| 74065   | 08/30/23 | rya002   | 22-11 CS                         | Kelly Ryan                               | Stewardship Grant Program                        | 165.67      |
| 74066   | 08/30/23 | sai001   | 09/01/2023                       | Saint Paul Media                         | Communications and Marketing                     | 50.00       |
| 74067   | 08/30/23 | san003   | 080423AS; 080423GN               | Sandstrom Land Management                | Stewardship Grant Program                        | 14,578.50   |
| 74068   | 08/30/23 | shi001   | B17199099                        | SHI International Corp.                  | Equipment  | 451.95      |
| 74069   | 08/30/23 | sho004   | Progress Payment #2              | Shoreline Landscaping                    | Construction Imp./Targeted Retrofit Projects     | 232,023.25  |
| 74070   | 08/30/23 | sim001   | Aug-23                           | Emily Simmons                            | Employee Benefits, Expenses                      | 460.03      |
| 74071   | 08/30/23 | sod001   | Aug 2023                         | Nicole Soderholm                         | Employee Benefits, Expenses                      | 57.69       |

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From August 1, 2023 to August 31, 2023**

| Check #      | Date     | Payee ID | Invoice #           | Payee                                     | Description                       | Amount                     |
|--------------|----------|----------|---------------------|---|-----------------------------------|----------------------------|
| 74072        | 08/30/23 | til002   | 45161               | Joseph S. Tillotson                       | Employee Benefits, Expenses       | 61.63                      |
| 74073        | 08/30/23 | tim002   | M28476              | Timesaver Off-Site Secretarial, Inc.      | Committee/Board Meeting Expenses  | 196.75                     |
| 74074        | 08/30/23 | van001   | September 2023      | Vanguard Cleaning Systems of Minnesota    | Janitorial/Trash/Plowing/Sweeping | 831.26                     |
| 74075        | 08/30/23 | voy001   | 8692934232334       | US Bank Voyager Fleet Sys.                | Vehicle Fuel                      | 778.84                     |
| 74076        | 08/30/23 | was002   | 6179; 6152          | Washington Conservation District          | Stewardship Grant Program         | 4,598.35                   |
| 74077        | 08/30/23 | wil007   | Aug-23              | Patrick Williamson                        | Employee Benefits, Expenses       | 199.72                     |
| <b>Total</b> |          |          |                     |   |                                   | <b><u>\$805,252.64</u></b> |
| EFT          | 08/04/23 | myp001   | 08/04/23            | August 4th Payroll                        | 4110-101-000                      | 84.45                      |
| EFT          | 08/18/23 | myp001   | 08/18/23            | August 18th Payroll                       | 4110-101-000                      | 84.45                      |
| Dir.Dep.     | 08/04/23 | ---      | Payroll Expense-Net | August 4th Payroll                        | 4010-101-000                      | 36,331.47                  |
| EFT          | 08/04/23 | int002   | Internal Rev.Serv.  | August 4th Federal Withholding            | 2001-101-000                      | 12,458.32                  |
| EFT          | 08/04/23 | mnd001   | MN Revenue          | August 4th State Withholding              | 2003-101-000                      | 2,088.14                   |
| EFT          | 08/04/23 | per001   | PERA                | August 4th PERA                           | 2011-101-000                      | 6,459.79                   |
| EFT          | 08/04/23 | emp002   | Empower Retirement  | Employee Def. Comp. Contributions         | 2016-101-000                      | 1,653.00                   |
| EFT          | 08/04/23 | emp002   | Empower Retirement  | Employee IRA Contributions                | 2018-101-000                      | 857.00                     |
| Dir.Dep.     | 08/18/23 | ---      | Payroll Expense-Net | August 18th Payroll                       | 4010-101-000                      | 36,295.52                  |
| EFT          | 08/18/23 | int002   | Internal Rev.Serv.  | August 18th Federal Withholding           | 2001-101-000                      | 12,448.01                  |
| EFT          | 08/18/23 | mnd001   | MN Revenue          | August 18th State Withholding             | 2003-101-000                      | 2,085.73                   |
| EFT          | 08/18/23 | per001   | PERA                | August 18th PERA                          | 2011-101-000                      | 6,459.79                   |
| EFT          | 08/18/23 | emp002   | Empower Retirement  | Employee Def. Comp. Contributions         | 2016-101-000                      | 1,653.00                   |
| EFT          | 08/18/23 | emp002   | Empower Retirement  | Employee IRA Contributions                | 2018-101-000                      | 857.00                     |
|              |          |          |                     | <b>Payroll/Benefits:</b>                  |                                   | <b><u>\$119,815.67</u></b> |
| <b>Total</b> |          |          |                     | <b>Accounts Payable/Payroll/Benefits:</b> |                                   | <b><u>\$925,068.31</u></b> |

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From August 1, 2023 to August 31, 2023**

| Date     | Check # | Vendor ID | Name                                     | Account ID   | Description                                      | Amount      |        |
|----------|---------|-----------|--|--------------|--|-------------|--------|
| 08/02/23 | EFT     | hea002    | HealthPartners                           | 4040-101-000 | Employee Benefits                                | \$18,582.27 |        |
| 08/01/23 | EFT     | met008    | MetLife-Group Benefits                   | 4040-101-000 | Employee Benefits                                | 1,790.96    |        |
| 08/22/23 | EFT     | com004    | Comcast                                  | 4342-101-000 | Utilities/Building Services Contracts            | 196.96      |        |
| 08/24/23 | EFT     | pit001    | Pitney Bowes Global Financial Serv, LLC. | 4330-101-000 | Postage  | 143.55      |        |
| 08/15/23 | 73998   | ada002    | Adam's Pest Control, Inc.                | 4342-101-000 | Utilities/Building Services Contracts            | 94.72       |        |
| 08/15/23 | 73999   | aws001    | AWS Service Center                       | 4342-101-000 | Utilities/Building Services Contracts            | 325.19      |        |
| 08/15/23 | 74000   | eme001    | Emergency Automotive Technologies, Inc.  | 4820-101-000 | Vehicle Maintenance                              | 28.75       |        |
| 08/15/23 | 74001   | hea003    | Heartquest Trainers, LLC                 | 4697-101-000 | Health and Safety Program                        | 1,283.71    |        |
| 08/15/23 | 74002   | hom001    | Home Depot Credit Services               |              |  | 218.93      |        |
|          |         |           |  | 4530-101-000 | Water Quality Monitoring - Staff                 |             | 204.36 |
|          |         |           |  | 4670-101-000 | Natural Resources Program                        |             | 14.57  |
| 08/15/23 | 74003   | nep001    | NCPERS Group Life Ins.                   | 4040-101-000 | Employee Benefits                                | 32.00       |        |
| 08/15/23 | 74004   | nsp001    | Xcel Energy                              |              |  | 1,120.76    |        |
|          |         |           |  | 4530-101-000 | Water Quality Monitoring - Staff                 |             | 246.38 |
|          |         |           |  | 4343-101-000 | Building/Site Maintenance                        |             | 616.14 |
|          |         |           |  | 4650-520-000 | Project Operations/Flood Damage Reduction Fund   |             | 258.24 |
| 08/15/23 | 74005   | pet004    | Ashley N. Petel                          | 4020-101-000 | Employee Expenses                                | 27.51       |        |
| 08/15/23 | 74006   | pre003    | Premium Waters, Inc.                     | 4342-101-000 | Utilities/Building Service Contracts             | 34.00       |        |
| 08/15/23 | 74007   | qwe001    | CenturyLink                              | 4650-101-000 | Project Operations                               | 539.19      |        |
| 08/15/23 | 74008   | red002    | Redpath & Company, LLC.                  | 4110-101-000 | Accounting                                       | 5,416.72    |        |
| 08/15/23 | 74009   | red003    | Red Wing Business Advantage Account      | 4040-101-000 | Employee Benefits                                | 195.49      |        |
| 08/15/23 | 74010   | reg002    | Regents of the University of Minnesota   | 4350-101-000 | Training & Education                             | 3,065.00    |        |
| 08/15/23 | 74011   | sai001    | Saint Paul Media                         | 4371-101-000 | Communications and Marketing                     | 50.00       |        |
| 08/15/23 | 74012   | str005    | Strategic Diversity Initiatives          | 4350-101-000 | Training & Education                             | 7,350.00    |        |
| 08/15/23 | 74013   | tec001    | Tech Sales Co.                           | 4530-101-000 | Water Quality Monitoring - Staff                 | 1,485.00    |        |
| 08/15/23 | 74014   | uli001    | Uline                                    | 4343-101-000 | Building/Site Maintenance                        | 389.74      |        |
| 08/15/23 | 74015   | usb002    | U.S. Bank                                |              |  | 4,083.72    |        |
|          |         |           |  | 4343-101-000 | Building/Site Maintenance                        |             | 134.70 |
|          |         |           |  | 4365-101-000 | Committee/Board Meeting Expenses                 |             | 52.86  |
|          |         |           |  | 4325-101-000 | Roseville IT Services/Web Site/Software/Licenses |             | 96.31  |
|          |         |           |  | 4320-101-000 | Office Supplies                                  |             | 97.00  |
|          |         |           |  | 4697-101-000 | Health and Safety Program                        |             | 28.88  |
|          |         |           |  | 4371-101-000 | Communications and Marketing                     |             | 90.00  |
|          |         |           |  | 4697-101-000 | Health and Safety Program                        |             | 74.46  |
|          |         |           |  | 4320-101-000 | Office Supplies                                  |             | 360.00 |
|          |         |           |  | 4342-101-000 | Utilities/Building Services Contracts            |             | 41.11  |
|          |         |           |  | 4343-101-000 | Building/Site Maintenance                        |             | 14.99  |
|          |         |           |  | 4320-101-000 | Office Supplies                                  |             | 59.69  |
|          |         |           |  | 4365-101-000 | Committee/Board Meeting Expenses                 |             | 293.68 |
|          |         |           |  | 4342-101-000 | Utilities/Building Services Contracts            |             | 5.99   |
|          |         |           |  | 4350-101-000 | Training and Education                           |             | 199.56 |
|          |         |           |  | 4697-101-000 | Health and Safety Program                        |             | 23.33  |
|          |         |           |  | 4697-101-000 | Health and Safety Program                        |             | 46.11  |
|          |         |           |  | 4343-101-000 | Building/Site Maintenance                        |             | 158.84 |

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From August 1, 2023 to August 31, 2023**

| Date     | Check # | Vendor ID | Name                                   | Account ID   | Description                       | Amount     |
|----------|---------|-----------|--|--------------|-----------------------------------|------------|
|          |         |           |  | 4670-101-000 | Natural Resources Program         | 10.99      |
|          |         |           |  | 4697-101-000 | Health and Safety Program         | 20.64      |
|          |         |           |  | 4365-101-000 | Committee/Board Meeting Expenses  | 201.57     |
|          |         |           |  | 4371-101-000 | Communications and Marketing      | 44.00      |
|          |         |           |  | 4371-101-000 | Communications and Marketing      | 54.99      |
|          |         |           |  | 4371-101-000 | Communications and Marketing      | 174.64     |
|          |         |           |  | 4371-101-000 | Communications and Marketing      | 39.50      |
|          |         |           |  | 4371-101-000 | Communications and Marketing      | 658.00     |
|          |         |           |  | 4371-101-000 | Communications and Marketing      | 375.00     |
|          |         |           |  | 4670-101-000 | Natural Resources Program         | 51.70      |
|          |         |           |  | 4320-101-000 | Office Supplies                   | 24.20      |
|          |         |           |  | 4320-101-000 | Office Supplies                   | 230.48     |
|          |         |           |  | 4320-101-000 | Office Supplies                   | 30.00      |
|          |         |           |  | 4365-101-000 | Committee/Board Meeting Expenses  | 61.74      |
|          |         |           |  | 4530-101-000 | Water Quality Monitoring - Staff  | 325.02     |
|          |         |           |  | 4320-101-000 | Office Supplies                   | 1.94       |
|          |         |           |  | 4371-101-000 | Communications and Marketing      | 1.80       |
| 08/15/23 | 74016   | usb005    | US Bank Equipment Finance              | 4335-101-000 | Copier Lease                      | 294.00     |
| 08/15/23 | 74017   | van001    | Vanguard Cleaning Systems of Minnesota | 4341-101-000 | Janitorial/Trash/Plowing/Sweeping | 831.26     |
| 08/30/23 | 74018   | ahl001    | Paige Ahlborg                          |              |                                   | 404.16     |
|          |         |           |  | 4040-101-000 | Employee Benefits                 | 80.00      |
|          |         |           |  | 4020-101-000 | Employee Expense                  | 281.00     |
|          |         |           |  | 4350-101-000 | Training and Education            | 13.50      |
|          |         |           |  | 4365-101-000 | Committee/Board Meeting Expenses  | 29.66      |
| 08/30/23 | 74019   | ame007    | Ames Construction, Inc.                | 2024-101-000 | Escrow Refunds                    | 36,000.00  |
| 08/30/23 | 74020   | att002    | AT & T Mobility - ROC                  | 4650-101-000 | Project Operations                | 166.34     |
| 08/30/23 | 74021   | bar001    | Barr Engineering                       |              |                                   | 197,797.52 |
|          |         |           |  | 4121-101-000 | Engineering Admin                 | 9,042.44   |
|          |         |           |  | 4123-101-000 | Engineering Review                | 6,074.00   |
|          |         |           |  | 4129-101-000 | Project Feasibility               | 462.50     |
|          |         |           |  | 4129-101-000 | Project Feasibility               | 16,080.50  |
|          |         |           |  | 4129-101-000 | Project Feasibility               | 10,665.01  |
|          |         |           |  | 4128-520-000 | Engineering -Flood Damage         | 9,803.00   |
|          |         |           |  | 4129-101-000 | Project Feasibility               | 5,629.50   |
|          |         |           |  | 4129-101-000 | Project Feasibility               | 360.00     |
|          |         |           |  | 4129-101-000 | Project Feasibility               | 5,013.50   |
|          |         |           |  | 4520-101-000 | WQM-Engineering                   | 552.50     |
|          |         |           |  | 4520-101-000 | WQM-Engineering                   | 1,190.00   |
|          |         |           |  | 4122-101-000 | Engineering -Permit I & E         | 575.00     |
|          |         |           |  | 4124-101-000 | Eng. Permit Review                | 3,931.00   |
|          |         |           |  | 4661-101-000 | SLMP/TMDL Studies                 | 806.00     |
|          |         |           |  | 4695-101-000 | Research Projects                 | 2,179.50   |
|          |         |           |  | 4695-101-000 | Research Projects                 | 9,571.92   |
|          |         |           |  | 4695-101-000 | Research Projects                 | 7,019.89   |
|          |         |           |  | 4650-101-000 | Project Operations                | 769.00     |
|          |         |           |  | 4650-101-000 | Project Operations                | 570.00     |

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From August 1, 2023 to August 31, 2023**

| Date     | Check # | Vendor ID | Name                                 | Account ID   | Description  | Amount    |
|----------|---------|-----------|--------------------------------------|--------------|--|-----------|
|          |         |           |                                      | 4128-518-000 | Engineering -Targeted Retrofit                         | 12,001.50 |
|          |         |           |                                      | 4128-518-000 | Engineering -Targeted Retrofit                         | 23,388.00 |
|          |         |           |                                      | 4128-518-000 | Engineering -Targeted Retrofit                         | 4,187.50  |
|          |         |           |                                      | 4682-529-000 | Stewardship Grant Program                              | 1,179.50  |
|          |         |           |                                      | 4128-518-000 | Engineering -Targeted Retrofit                         | 15,772.44 |
|          |         |           |                                      | 4128-518-000 | Engineering -Targeted Retrofit                         | 17,542.06 |
|          |         |           |                                      | 4129-537-000 | Driveway Fish Creek Tributary                          | 12,278.00 |
|          |         |           |                                      | 4128-516-000 | Eng. Projects-Maint & Repair                           | 12,186.99 |
|          |         |           |                                      | 4128-516-000 | Eng. Projects-Maint & Repair                           | 8,966.27  |
|          |         |           |                                      | 4128-516-000 | Eng. Projects-Maint & Repair                           |           |
| 08/30/23 | 74022   | bar012    | Barco Products                       | 4343-101-000 | Building / Site Maintenance                            | 402.63    |
| 08/30/23 | 74023   | cad001    | Zayo Group, LLC                      | 4530-101-000 | Water Quality Monitoring - Staff                       | 199.97    |
| 08/30/23 | 74024   | cen008    | 3M Center                            | 2024-101-000 | Escrow Refunds   | 50,950.00 |
| 08/30/23 | 74025   | cit010    | City of White Bear Lake              | 4682-529-000 | Stewardship Grant Program                              | 12,396.00 |
| 08/30/23 | 74026   | cit025    | Cities Management                    | 4682-529-000 | Stewardship Grant Program                              | 60,034.00 |
| 08/30/23 | 74027   | con007    | 4 Control, Inc.                      | 4670-101-000 | Natural Resources Program                              | 427.00    |
| 08/30/23 | 74028   | cre006    | Crestview at Woodbury                | 4682-529-000 | Stewardship Grant Program                              | 1,435.00  |
| 08/30/23 | 74029   | dau001    | Jennifer Dauer                       | 4020-101-000 | Employee Expenses                                      | 36.03     |
| 08/30/23 | 74030   | dav003    | Davey Resource Group, Inc.           | 4630-516-000 | Construction Improvements/Project Maintenance & Repair | 1,799.76  |
| 08/30/23 | 74031   | eco002    | Ecoscapes, LLC.                      | 4682-529-000 | Stewardship Grant Program                              | 15,000.00 |
| 08/30/23 | 74032   | erd001    | Paul Erdmann                         |              |  | 134.06    |
|          |         |           |                                      | 4040-101-000 | Employee Benefits                                      | 80.00     |
|          |         |           |                                      | 4350-101-000 | Training and Education                                 | 54.06     |
| 08/30/23 | 74033   | fit002    | Mary Fitzgerald                      |              |  | 63.10     |
|          |         |           |                                      | 4040-101-000 | Employee Benefits                                      | 58.25     |
|          |         |           |                                      | 4020-101-000 | Employee Expense                                       | 4.85      |
| 08/30/23 | 74034   | fit003    | Emily Kamin                          |              |  | 57.29     |
|          |         |           |                                      | 4040-101-000 | Employee Benefits                                      | 40.00     |
|          |         |           |                                      | 4020-101-000 | Employee Expense                                       | 17.29     |
| 08/30/23 | 74035   | fre002    | Anne Frenchick                       | 4682-529-000 | Stewardship Grant Program                              | 282.31    |
| 08/30/23 | 74036   | gil001    | Gilbert Mechanical Contractors, Inc. | 4343-101-000 | Building / Site Maintenance                            | 836.50    |
| 08/30/23 | 74037   | gra005    | Grainger                             |              |  | 1,340.44  |
|          |         |           |                                      | 4530-101-000 | Water Quality Monitoring - Staff                       | 120.39    |
|          |         |           |                                      | 4670-101-000 | Natural Resources Program                              | 1220.05   |
| 08/30/23 | 47038   | gru001    | Gruber's Power Equipment             | 4670-101-000 | Natural Resources Program                              | 316.94    |
| 08/30/23 | 74039   | haz001    | Lauren Hazenson                      |              |  | 148.75    |
|          |         |           |                                      | 4040-101-000 | Employee Benefits                                      | 120.00    |
|          |         |           |                                      | 4020-101-000 | Employee Expense                                       | 28.75     |
| 08/30/23 | 74040   | hom001    | Home Depot Credit Services           |              |  | 423.19    |
|          |         |           |                                      | 4670-101-000 | Natural Resources Program                              | 328.56    |
|          |         |           |                                      | 4530-101-000 | Water Quality Monitoring - Staff                       | 24.65     |
|          |         |           |                                      | 4650-516-000 | Project Operations/Project Maintenance & Repair        | 69.98     |
| 08/30/23 | 74041   | inc001    | In Control, Inc.                     | 4650-516-000 | Project Operations/Project Maintenance & Repair        | 1,400.00  |
| 08/30/23 | 74042   | inn002    | Innovative Office Solutions, LLC.    | 4343-101-000 | Building / Site Maintenance                            | 84.46     |
| 08/30/23 | 74043   | int001    | Office of MN, IT Services            | 4310-101-000 | Telephone  | 59.38     |
| 08/30/23 | 74044   | int003    | Intereum, Inc.                       | 4703-101-000 | Equipment  | 300.00    |

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From August 1, 2023 to August 31, 2023**

| Date     | Check # | Vendor ID | Name                                   | Account ID   | Description  | Amount     |        |
|----------|---------|-----------|--|--------------|--|------------|--------|
| 08/30/23 | 74045   | kub001    | Kyle W. Kubitza                        |              |  | 102.28     |        |
|          |         |           |  | 4040-101-000 | Employee Benefits                                      |            | 40.00  |
|          |         |           |  | 4530-101-000 | Water Quality Monitoring - Staff                       |            | 62.28  |
| 07/25/23 | 74046   | lak007    | Lakes Aquatic Weed Removal             | 4682-529-000 | Stewardship Grant Program                              | 20,860.00  |        |
| 07/25/23 | 73967   | lak010    | Melanie Lake                           | 4682-529-000 | Stewardship Grant Program                              | 251.37     |        |
| 08/30/23 | 74048   | lan009    | Landbridge Ecological                  | 4630-516-000 | Construction Improvements/Project Maintenance & Repair | 2,642.20   |        |
| 08/30/23 | 74049   | len001    | Kristopher Lencowski                   | 4682-529-000 | Stewardship Grant Program                              | 83.10      |        |
| 08/30/23 | 74050   | mcg004    | Kara McGuire                           | 4682-529-000 | Stewardship Grant Program                              | 95.03      |        |
| 08/30/23 | 74051   | mel001    | Michelle L. Melser                     |              |  | 475.31     |        |
|          |         |           |  | 4040-101-000 | Employee Benefits                                      |            | 40.00  |
|          |         |           |  | 4020-101-000 | Employee Expenses                                      |            | 77.55  |
|          |         |           |  | 4343-101-000 | Building / Site Maintenance                            |            | 350.00 |
|          |         |           |  | 4343-101-000 | Building / Site Maintenance                            |            | 7.76   |
| 08/30/23 | 74052   | met013    | Metro-INET                             | 4325-101-000 | Roseville IT Services/Web Site/Software/Licenses       | 6,859.00   |        |
| 08/30/23 | 74053   | nar001    | Nardini Fire Equipment                 | 4343-101-000 | Building / Site Maintenance                            | 721.75     |        |
| 08/30/23 | 74054   | ncp001    | NCPERS Group Life Ins.                 | 4040-101-000 | Employee Benefits                                      | 16.00      |        |
| 08/30/23 | 74055   | nel007    | Katrina Nelson                         | 4020-101-000 | Employee Expenses                                      | 43.16      |        |
| 08/30/23 | 74056   | nsp001    | Xcel Energy                            |              |  | 1,118.35   |        |
|          |         |           |  | 4343-101-000 | Building / Site Maintenance                            |            | 630.77 |
|          |         |           |  | 4530-101-000 | Water Quality Monitoring - Staff                       |            | 241.92 |
|          |         |           |  | 4650-520-000 | Project Operations/Flood Damage Reduction Fund         |            | 245.66 |
| 08/30/23 | 74057   | oak004    | Oak Meadows Landscape/Design, Inc.     | 4682-529-000 | Stewardship Grant Program                              | 950.00     |        |
| 08/30/23 | 74058   | odl001    | Kristy Odland                          | 4682-529-000 | Stewardship Grant Program                              | 1,000.00   |        |
| 08/30/23 | 74059   | pac001    | Pace Analytical Services, Inc.         | 4530-101-000 | Water Quality Monitoring - Staff                       | 36,369.40  |        |
| 08/30/23 | 74060   | pas002    | Carol Passi                            |              |  | 92.40      |        |
|          |         |           |  | 4020-101-000 | Employee Expenses                                      |            | 52.40  |
|          |         |           |  | 4040-101-000 | Employee Benefits                                      |            | 40.00  |
| 08/30/23 | 74061   | pci001    | PCi Roads, LLC                         | 4650-516-000 | Project Operations/Project Maintenance & Repair        | 33,578.55  |        |
| 08/30/23 | 74062   | reg002    | Regents of the University of Minnesota |              |  | 850.00     |        |
|          |         |           |  | 4670-101-000 | Natural Resources Program                              |            | 200.00 |
|          |         |           |  | 4350-101-000 | Training and Education                                 |            | 650.00 |
| 08/30/23 | 74063   | rmb001    | RMB Environmental Laboratories         | 4530-101-000 | Water Quality Monitoring - Staff                       | 8,262.10   |        |
| 08/30/23 | 74064   | roc001    | Rock Leaf Water Environmental LLC      | 4630-516-000 | Construction Improvements/Project Maintenance & Repair | 6,354.74   |        |
| 08/30/23 | 74065   | rya002    | Kelly Ryan                             | 4682-529-000 | Stewardship Grant Program                              | 165.67     |        |
| 08/30/23 | 74066   | sai001    | Saint Paul Media                       | 4371-101-000 | Communications and Marketing                           | 50.00      |        |
| 08/30/23 | 74067   | san003    | Sandstrom Land Management              | 4682-529-000 | Stewardship Grant Program                              | 14,578.50  |        |
| 08/30/23 | 74068   | shi001    | SHI International Corp.                | 4703-101-000 | Equipment  | 451.95     |        |
| 08/30/23 | 74069   | sho004    | Shoreline Landscaping                  | 4630-518-000 | Construction Improvements/Targeted Retrofit Projects   | 232,023.25 |        |
| 08/30/23 | 74070   | sim001    | Emily Simmons                          |              |  | 460.03     |        |
|          |         |           |  | 4020-101-000 | Employee Expenses                                      |            | 200.04 |
|          |         |           |  | 4040-101-000 | Employee Benefits                                      |            | 40.00  |
|          |         |           |  | 4365-101-000 | Committee/Board Meeting Expenses                       |            | 219.99 |



**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From August 1, 2023 to August 31, 2023**


| Date         | Check #  | Vendor ID | Name                                   | Account ID                                | Description                       | Amount                          |        |
|--------------|----------|-----------|--|---|-----------------------------------|---------------------------------|--------|
| 08/30/23     | 74071    | sod001    | Nicole Soderholm                       |   |                                   | 57.69                           |        |
|              |          |           |  | 4040-101-000                              | Employee Benefits                 |                                 | 40.00  |
|              |          |           |  | 4020-101-000                              | Employee Expenses                 |                                 | 17.69  |
| 08/30/23     | 74072    | til002    | Joseph S. Tillotson                    |   |                                   | 61.63                           |        |
|              |          |           |  | 4040-101-000                              | Employee Benefits                 |                                 | 40.00  |
|              |          |           |  | 4020-101-000                              | Employee Expenses                 |                                 | 9.83   |
|              |          |           |  | 4670-101-000                              | Natural Resources Program         |                                 | 11.80  |
| 08/30/23     | 74073    | tim002    | Timesaver Off-Site Secretarial, Inc.   | 4365-101-000                              | Committee/Board Meeting Expenses  | 196.75                          |        |
| 08/30/23     | 74074    | van001    | Vanguard Cleaning Systems of Minnesota | 4341-001-000                              | Janitorial/Trash/Plowing/Sweeping | 831.26                          |        |
| 08/30/23     | 74075    | voy001    | US Bank Voyager Fleet Sys.             | 4830-101-000                              | Vehicle Fuel                      | 778.84                          |        |
| 08/30/23     | 74076    | was002    | Washington Conservation District       | 4682-529-000                              | Stewardship Grant Program         | 4,598.35                        |        |
| 08/30/23     | 74077    | wil007    | Patrick Williamson                     |   |                                   | 199.72                          |        |
|              |          |           |  | 4020-101-000                              | Employee Benefits                 |                                 | 140.00 |
|              |          |           |  | 4040-101-000                              | Employee Expenses                 |                                 | 40.61  |
|              |          |           |  | 4350-101-000                              | Training and Education            |                                 | 13.00  |
|              |          |           |  | 4670-101-000                              | Natural Resources Program         |                                 | 6.11   |
| <b>Total</b> |          |           |  |   |                                   | <b><u>\$805,252.64</u></b>      |        |
| 08/04/23     | EFT      | myp001    | August 4th Payroll                     | 4110-101-000                              | August 4th Payroll                | 84.45                           |        |
| 08/18/23     | EFT      | myp001    | August 18th Payroll                    | 4110-101-000                              | August 18th Payroll               | 84.45                           |        |
| 08/04/23     | Dir.Dep. | ---       | August 4th Payroll                     | 4010-101-000                              | August 4th Payroll                | 36,331.47                       |        |
| 08/04/23     | EFT      | int002    | August 4th Federal Withholding         | 2001-101-000                              | August 4th Federal Withholding    | 12,458.32                       |        |
| 08/04/23     | EFT      | mnd001    | August 4th State Withholding           | 2003-101-000                              | August 4th State Withholding      | 2,088.14                        |        |
| 08/04/23     | EFT      | per001    | August 4th PERA                        | 2011-101-000                              | August 4th PERA                   | 6,459.79                        |        |
| 08/04/23     | EFT      | emp002    | Employee Def. Comp. Contributions      | 2016-101-000                              | Employee Def. Comp. Contributions | 1,653.00                        |        |
| 08/04/23     | EFT      | emp002    | Employee IRA Contributions             | 2018-101-000                              | Employee IRA Contributions        | 857.00                          |        |
| 08/18/23     | Dir.Dep. | ---       | August 18th Payroll                    | 4010-101-000                              | August 18th Payroll               | 36,295.52                       |        |
| 08/18/23     | EFT      | int002    | August 18th Federal Withholding        | 2001-101-000                              | August 18th Federal Withholding   | 12,448.01                       |        |
| 08/18/23     | EFT      | mnd001    | August 18th State Withholding          | 2003-101-000                              | August 18th State Withholding     | 2,085.73                        |        |
| 08/18/23     | EFT      | per001    | August 18th PERA                       | 2011-101-000                              | August 18th PERA                  | 6,459.79                        |        |
| 08/18/23     | EFT      | emp002    | Employee Def. Comp. Contributions      | 2016-101-000                              | Employee Def. Comp. Contributions | 1,653.00                        |        |
| 08/18/23     | EFT      | emp002    | Employee IRA Contributions             | 2018-101-000                              | Employee IRA Contributions        | 857.00                          |        |
|              |          |           |  |   |                                   | <b><u>Payroll/Benefits:</u></b> |        |
|              |          |           |  |   |                                   | <b><u>\$119,815.67</u></b>      |        |
| <b>Total</b> |          |           |  | <b>Accounts Payable/Payroll/Benefits:</b> |                                   | <b><u>\$925,068.31</u></b>      |        |



**Summary of Professional Engineering Services During the Period  
July 15, 2023 through August 18, 2023**

|  | Total Engineering Budget<br>(2023) | Total Fees to Date<br>(2023) | Budget Balance<br>(2023) | Fees During Period | District Accounting Code | Plan Implementation<br>Task Number |
|--|------------------------------------|------------------------------|--------------------------|--------------------|--------------------------|------------------------------------|
| <b>Engineering Administration</b>  |                                    |                              |                          |                    |                          |                                    |
| General Engineering Administration   | \$87,000.00                        | \$55,698.37                  | \$31,301.63              | \$9,042.44         | 4121-101                 | DW-13                              |
| RWMWD Health and Safety/ERTK Program   | \$2,000.00                         | \$703.00                     | \$1,297.00               | \$0.00             | 4697-101                 | DW-13                              |
| Educational Program/Educational Forum Assistance   | \$20,000.00                        | \$702.50                     | \$19,297.50              | \$0.00             | 4129-101                 | DW-11                              |
| Topical Workshop, Education, and Planning  | \$25,000.00                        | \$3,159.00                   | \$21,841.00              | \$0.00             | 4129-101                 | DW-13                              |
| <b>Engineering Review</b>  |                                    |                              |                          |                    |                          |                                    |
| Engineering Review   | \$70,000.00                        | \$36,583.50                  | \$33,416.50              | \$6,074.00         | 4123-101                 | DW-13                              |
| <b>Project Feasibility Studies</b>   |                                    |                              |                          |                    |                          |                                    |
| Emergency Response Plans (communication with cities from 2021 and 2022 efforts)                        | \$15,000.00                        | \$1,382.50                   | \$13,617.50              | \$462.50           | 4129-101                 | DW-19                              |
| Kohlman Creek flood damage reduction feasibility study   | \$75,000.00                        | \$48,213.01                  | \$26,786.99              | \$16,080.50        | 4129-101                 | DW-9, KC-2, BELT-3                 |
| Kohlman Creek- Wakefield Lake Diversion Planning and Design  | \$111,600.00                       | \$10,000.50                  | \$101,599.50             | \$0.00             | 4129-101                 | DW-9, KC-2, BELT-3                 |
| Improvements to County Ditch 17  | \$5,000.00                         | \$250.00                     | \$4,750.00               | \$0.00             | 4129-101                 | DW-9, BELT-3                       |
| Improvements to Phalen Village   | \$5,000.00                         | \$400.00                     | \$4,600.00               | \$0.00             | 4129-101                 | DW-9, BELT-3                       |
| Ames Lake Technical Assistance and Project Planning with St. Paul                                      | \$40,000.00                        | \$23,380.51                  | \$16,619.49              | \$10,665.01        | 4129-101                 | DW-9, BELT-3                       |
| Resiliency Study for non-Beltline tributary areas (pre-planning study and evaluation of existing data) | \$150,000.00                       | \$50,120.50                  | \$99,879.50              | \$9,803.00         | 4128-520                 | DW-9                               |
| Evaluate compliance with South Metro Mississippi River TSS TMDL  | \$2,000.00                         | \$527.00                     | \$1,473.00               | \$0.00             | 4129-101                 | MR-2                               |
| Owasso Basin area/North Star Estates improvements (with City of Little Canada)                         | \$30,000.00                        | \$31,394.37                  | -\$1,394.37              | \$5,629.50         | 4129-101                 | GC-3                               |
| Street Sweeping  | \$20,000.00                        | \$14,292.50                  | \$5,707.50               | \$360.00           | 4129-101                 | DW-6, DW-15                        |
| Retrofit Inventory   | \$20,000.00                        | \$16,718.00                  | \$3,282.00               | \$5,013.50         | 4129-101                 | DW-17, DW-20                       |
| Wetland Restoration Workshop, Education, and Planning  | \$5,000.00                         | \$4,623.00                   | \$377.00                 | \$0.00             | 4129-101                 | DW-8, DW-13                        |
| Contingency*   | \$30,000.00                        |                              |                          |                    | 4129-101                 |                                    |
| <b>GIS Maintenance</b>   |                                    |                              |                          |                    |                          |                                    |
| GIS Maintenance  | \$5,000.00                         | \$0.00                       | \$5,000.00               | \$0.00             | 4170-101                 | DW-13                              |
| <b>Monitoring Water Quality/Project Monitoring</b>   |                                    |                              |                          |                    |                          |                                    |
| Lake Water Quality Monitoring (Misc QA/QC)   | \$10,000.00                        | \$90.00                      | \$9,910.00               | \$0.00             | 4520-101                 | DW-2                               |
| Annual WQ Report Assistance  | \$12,000.00                        | \$8,960.50                   | \$3,039.50               | \$0.00             | 4520-101                 | DW-2                               |
| Special Project BMP Monitoring   | \$25,000.00                        | \$9,573.16                   | \$15,426.84              | \$552.50           | 4520-101                 | DW-12                              |
| Grass Lake Berm Wetland Monitoring   | \$12,000.00                        | \$13,150.00                  | -\$1,150.00              | \$1,190.00         | 4520-101                 | DW-5, DW-8                         |
| Battle Creek Monitoring to address TMDL  | \$15,000.00                        | \$0.00                       | \$15,000.00              | \$0.00             | 4520-101                 | DW-1, DW-2                         |
| <b>Permit Processing, Inspection and Enforcement</b>   |                                    |                              |                          |                    |                          |                                    |
| Permit Application Inspection and Enforcement  | \$10,000.00                        | \$575.00                     | \$9,425.00               | \$575.00           | 4122-101                 | DW-7                               |
| Permit Application Review  | \$59,000.00                        | \$30,530.00                  | \$28,470.00              | \$3,931.00         | 4124-101                 | DW-7                               |
| <b>Lake Studies/TMDL Reports</b>   |                                    |                              |                          |                    |                          |                                    |
| West Vadnais Lake Incorporation  | \$15,000.00                        | \$75.00                      | \$14,925.00              | \$0.00             | 4661-101                 | DW-2                               |
| 2023 Grant Applications  | \$40,000.00                        | \$806.00                     | \$39,194.00              | \$806.00           | 4661-101                 | DW-13                              |
| WMP Updates - Including Implementation Plan Updates if needed  | \$20,000.00                        | \$0.00                       | \$20,000.00              | \$0.00             | 4661-101                 | DW-13                              |
| Prioritization of water quality projects from subwatershed feasibility study                           | \$5,000.00                         | \$39.00                      | \$4,961.00               | \$0.00             | 4661-101                 | DW-20                              |
| Carver Ponds Internal Load Reduction   | \$12,000.00                        | \$415.00                     | \$11,585.00              | \$0.00             | 4661-101                 | DW-12                              |
| Contingency for Lake Studies   | \$22,500.00                        | \$0.00                       | \$22,500.00              | \$0.00             |                          |                                    |
| <b>Research Projects</b>   |                                    |                              |                          |                    |                          |                                    |
| New Technology Mini Case Studies (average 6 per year)  | \$15,000.00                        | \$10,356.50                  | \$4,643.50               | \$2,179.50         | 4695-101                 | DW-12                              |
| Kohlman Permeable Weir Test System - Implement Monitoring Plan   | \$5,000.00                         | \$150.00                     | \$4,850.00               | \$0.00             | 4695-101                 | DW-12                              |
| Kohlman Lake Aquatic Plant Management Effects Study  | \$85,705.00                        | \$50,875.23                  | \$34,829.77              | \$9,571.92         | 4695-101                 | DW-12                              |
| Shallow Lake Aeration Study  | \$40,000.00                        | \$21,731.88                  | \$18,268.12              | \$7,019.89         | 4695-101                 | DW-12                              |
| <b>Project Operations</b>  |                                    |                              |                          |                    |                          |                                    |
| 2023 Tanners Alum Facility Monitoring  | \$17,000.00                        | \$10,611.50                  | \$6,388.50               | \$769.00           | 4650-101                 | TaL-3                              |
| Phalen/Keller and Twin Operations Support & Communications   | \$5,000.00                         | \$0.00                       | \$5,000.00               | \$0.00             | 4650-101                 | DW-5, DW-13                        |
| Lake Level Station Operation and Maintenance   | \$50,000.00                        | \$0.00                       | \$50,000.00              | \$0.00             | 4650-101                 | DW-5                               |
| Lake Level Station Rain Gages  | \$35,000.00                        | \$570.00                     | \$34,430.00              | \$570.00           | 4650-101                 | DW-5                               |
| <b>Capital Improvements</b>  |                                    |                              |                          |                    |                          |                                    |
| Tanners Outlet   | \$5,000.00                         | \$1,877.00                   | \$3,123.00               | \$0.00             | 4128-520                 | DW-9                               |
| Woodbury Target  | \$180,000.00                       | \$44,897.06                  | \$135,102.94             | \$12,001.50        | 4128-518                 | DW-6                               |
| Roosevelt Homes  | \$77,100.00                        | \$51,540.62                  | \$25,559.38              | \$23,388.000       | 4128-518                 | DW-6                               |
| Targeted Retrofit Projects 2023  | \$150,000.00                       | \$40,156.31                  | \$109,843.69             | \$4,187.50         | 4128-518                 | DW-6                               |
| Stewardship Grant Program  | \$75,000.00                        | \$22,728.50                  | \$52,271.50              | \$1,179.50         | 4682-529                 | DW-6                               |
| West Industrial Park Berm and associated improvements  | \$300,000.00                       | \$0.00                       | \$300,000.00             | \$0.00             | 4128-520                 | GC-3                               |
| Lake Emily Subwatershed BMP  | \$160,000.00                       | \$171,570.46                 | -\$11,570.46             | \$15,772.44        | 4128-518                 | LE-3                               |
| Pioneer Park Stormwater Reuse  | \$151,200.00                       | \$92,980.60                  | \$58,219.40              | \$17,542.06        | 4128-518                 | DW-6                               |
| Double Driveway and Fish Creek Tributary Improvements  | \$112,200.00                       | \$49,682.99                  | \$62,517.01              | \$12,278.00        | 4129-537                 | FC-2                               |
| <b>CIP Project Repair &amp; Maintenance</b>  |                                    |                              |                          |                    |                          |                                    |
| Routine CIP Inspection and Unplanned Maintenance Identification  | \$125,000.00                       | \$79,873.47                  | \$45,126.53              | \$12,186.99        | 4128-516                 | DW-5                               |
| Beltline 5-year Inspection   | \$15,000.00                        | \$41,732.27                  | -\$26,732.27             | \$8,966.27         | 4128-516                 | BELT-2                             |
| District Inspection Standardization  | \$0.00                             | \$0.00                       | \$0.00                   | \$0.00             | 4128-516                 | DW-5                               |
| 2023 CIP Maintenance and Repairs   | \$165,000.00                       | \$87,779.08                  | \$77,220.92              | \$0.00             | 4128-516                 | DW-5                               |

Barr declares under the penalties of Law that this Account,  
Claim, or Demand is just and that no part has been paid.

  
Bradley J. Lindaman, Vice President

**Arbogast Underground Stormwater Filter  
Progress Payment #2**

|      |   |                     |                     |
|------|---|---------------------|---------------------|
| 1.0  | Total Completed Through This Period:      | <u>\$304,110.00</u> |                     |
| 2.0  | Total Completed Previously Completed:     |                     | <u>\$59,875.00</u>  |
| 3.0  | Total Completed This Period:              |                     | <u>\$244,235.00</u> |
| 4.0  | Amount Previously Retained:               | <u>\$2,993.75</u>   |                     |
| 5.0  | Amount Retained This Period (See Note 1): |                     | <u>\$12,211.75</u>  |
| 6.0  | Total Amount Retained (See Note 1):       | <u>\$15,205.50</u>  |                     |
| 7.0  | Retainage Released Through This Period:   |                     | <u>\$0.00</u>       |
| 8.0  | Total Retainage Remaining:                | <u>\$15,205.50</u>  |                     |
| 9.0  | Amounts Previously Paid:                  | <u>\$56,881.25</u>  |                     |
| 10.0 | Amount Due This Estimate:                 |                     | <u>\$232,023.25</u> |

Note 1: At rate of 5%.


**SUBMITTED BY:**

Name: Stephan McLafferty Date: 8/25/2023  
Title: President  
Contractor: Shoreline Landscaping & Contracting

Signature: 

**RECOMMENDED BY:**

Name: Leslie DellAngelo Date: 8/24/2023  
Title: Project Engineer  
Engineer: Barr Engineering Company

Signature: 

**APPROVED BY:**

Name: Val Eisele Date: \_\_\_\_\_  
Title: President  
Owner: Ramsey-Washington Metro Watershed District

Signature: \_\_\_\_\_

**Arbogast Underground Stormwater Filter**  
**Ramsey-Washington Metro Watershed District**  
**Summary of Work completed through August 22, 2023 for Progress Payment #2**

|                          |           |  |      |                    |              |              | (1) Total Completed Through This Period |              | (2) Total Completed Previous Period |             | (3) Total Completed This Period |              |
|--------------------------|-----------|--|------|--------------------|--------------|--------------|---|--------------|-------------------------------------|-------------|---------------------------------|--------------|
| Line Item                | Item Code | Item Description   | UoFM | Estimated Quantity | Unit Price   | Extension    | Quantity                                | Amount       | Quantity                            | Amount      | Quantity                        | Amount       |
| 1                        | A         | Mobilization/Demobilization  | LS   | 1                  | \$43,500.00  | \$43,500.00  | 0.5                                     | \$21,750.00  | 0.50                                | \$21,750.00 | 0.00                            | \$0.00       |
| 2                        | B         | Traffic and Pedestrian Safety Control Measures                         | LS   | 1                  | \$8,500.00   | \$8,500.00   | 0.5                                     | \$4,250.00   | 0.50                                | \$4,250.00  | 0.00                            | \$0.00       |
| 3                        | C         | Control of Water   | LS   | 1                  | \$10,000.00  | \$10,000.00  | 0.5                                     | \$5,000.00   | 0.50                                | \$5,000.00  | 0.00                            | \$0.00       |
| 4                        | D         | Erosion and Sediment Control   | LS   | 1                  | \$5,000.00   | \$5,000.00   | 0.5                                     | \$2,500.00   | 0.50                                | \$2,500.00  | 0.00                            | \$0.00       |
| 5                        | E         | Salvage and Reinstall Topsoil (P)                                      | CY   | 100                | \$25.00      | \$2,500.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 6                        | F         | Salvage and Reinstall Landscape Boulders                               | LS   | 1                  | \$800.00     | \$800.00     | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 7                        | G         | Sawcut and Remove Concrete Curb  | LF   | 150                | \$3.00       | \$450.00     | 150                                     | \$450.00     | 0                                   | \$0.00      | 150                             | \$450.00     |
| 8                        | H         | Sawcut and Remove Asphalt Road Pavement                                | SY   | 125                | \$3.00       | \$375.00     | 125                                     | \$375.00     | 0                                   | \$0.00      | 125                             | \$375.00     |
| 9                        | H         | Sawcut and Remove Concrete and Asphalt Walk Pavement                   | SY   | 425                | \$15.00      | \$6,375.00   | 425                                     | \$6,375.00   | 425                                 | \$6,375.00  | 0                               | \$0.00       |
| 10                       | I         | Common Excavation and Off-Site Disposal (P)                            | CY   | 800                | \$25.00      | \$20,000.00  | 800                                     | \$20,000.00  | 800                                 | \$20,000.00 | 0                               | \$0.00       |
| 11                       | J         | Compacted Backfill (P)   | CY   | 300                | \$28.00      | \$8,400.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 12                       | K         | Connect Structure to Existing Pipes                                    | EA   | 2                  | \$2,500.00   | \$5,000.00   | 2                                       | \$5,000.00   | 0                                   | \$0.00      | 2                               | \$5,000.00   |
| 13                       | L         | MH-1 (72" Precast) incl. Stop Gate                                     | EA   | 1                  | \$28,560.00  | \$28,560.00  | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 14                       | L         | MH-2 (48" Precast)   | EA   | 1                  | \$6,350.00   | \$6,350.00   | 1                                       | \$6,350.00   | 0                                   | \$0.00      | 1                               | \$6,350.00   |
| 15                       | L         | MH-3 (48" Precast)   | EA   | 1                  | \$6,350.00   | \$6,350.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 16                       | L         | MH-4 (48" Precast)   | EA   | 1                  | \$6,350.00   | \$6,350.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 17                       | L         | MH-5 (48" Precast)   | EA   | 1                  | \$6,350.00   | \$6,350.00   | 1                                       | \$6,350.00   | 0                                   | \$0.00      | 1                               | \$6,350.00   |
| 18                       | L         | MH-6 (72" Precast)   | EA   | 1                  | \$12,630.00  | \$12,630.00  | 1                                       | \$12,630.00  | 0                                   | \$0.00      | 1                               | \$12,630.00  |
| 19                       | M         | 18" RCP  | LF   | 400                | \$113.00     | \$45,200.00  | 296                                     | \$33,448.00  | 0                                   | \$0.00      | 296                             | \$33,448.00  |
| 20                       | N         | 6" SCH 40 PVC Drain Pipe w/ Fittings (P)                               | LF   | 220                | \$38.00      | \$8,360.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 21                       | O         | 6" PVC Gate Valve  | EA   | 4                  | \$1,500.00   | \$6,000.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 22                       | P         | Cast-In-Place Vault Structure  | LS   | 1                  | \$283,000.00 | \$283,000.00 | 0.6                                     | \$170,000.00 | 0                                   | \$0.00      | 0.6                             | \$170,000.00 |
| 23                       | Q         | Precast Concrete Plank Lid   | EA   | 10                 | \$10,860.00  | \$108,600.00 | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 24                       | R         | Vault Access Manhole   | EA   | 7                  | \$2,830.00   | \$19,810.00  | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 25                       | S         | Stainless Steel Weir Plate   | EA   | 1                  | \$8,960.00   | \$8,960.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 26                       | T         | Aeration Splash Block  | EA   | 1                  | \$3,000.00   | \$3,000.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 27                       | U         | CC17 (Crushed Limestone) Filtration Media (P)                          | CY   | 75                 | \$147.00     | \$11,025.00  | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 28                       | V         | Concrete Curb w/Compacted Base   | LF   | 150                | \$62.00      | \$9,300.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 29                       | W         | Asphalt Road Pavement w/ Compacted Base                                | SY   | 125                | \$85.00      | \$10,625.00  | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 30                       | X         | Pedestrian Ramp w/ Truncated Dome and Compacted Base (MnDOT Std. Plt.) | EA   | 1                  | \$4,500.00   | \$4,500.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 31                       | Y         | Heavy Vehicle Asphalt Pavement w/ Compacted Base                       | SY   | 100                | \$91.00      | \$9,100.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 32                       | Y         | Asphalt Walk Pavement w/ Compacted Base                                | SY   | 425                | \$41.30      | \$17,552.50  | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 33                       | Z         | Painted Pavement Markings  | LS   | 1                  | \$2,500.00   | \$2,500.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 34                       | AA        | Common Topsoil Borrow (MnDOT 3877-1A)                                  | CY   | 50                 | \$48.00      | \$2,400.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 35                       | AB        | Seeding (MnDOT Low Maint. Turf Mix)                                    | SY   | 1000               | \$1.50       | \$1,500.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 36                       | AC        | Erosion Control Blanket  | SY   | 1000               | \$4.00       | \$4,000.00   | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 37                       | AD        | Landscape Edging   | LF   | 80                 | \$5.00       | \$400.00     | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 38                       | AE        | Double Shredded Hardwood Mulch   | CY   | 3                  | \$100.00     | \$300.00     | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| 39                       | AF        | Herbaceous Plant   | EA   | 12                 | \$25.00      | \$300.00     | 0                                       | \$0.00       | 0                                   | \$0.00      | 0                               | \$0.00       |
| Contract Base Extensions |           |  |      |                    |              | \$733,922.50 | \$294,478.00                            | \$59,875.00  | \$234,603.00                        |             |                                 |              |
| Change Order 1           |           |  |      |                    |              |              |   |              |                                     |             |                                 |              |
| C.O.1.A                  |           | Additional Steel Reinforcement for Cast-In-Place Vault Structure       | LS   | 1                  | \$9,632.00   | \$9,632.00   | 1                                       | \$9,632.00   | 0                                   | \$0.00      | 1                               | \$9,632.00   |
| Change Order Extensions  |           |  |      |                    |              | \$9,632.00   | \$9,632.00                              | \$0.00       | \$9,632.00                          |             |                                 |              |
| Contract Grand Total     |           |  |      |                    |              | \$743,554.50 | \$304,110.00                            | \$59,875.00  | \$244,235.00                        |             |                                 |              |

Galowitz Olson, PLLC  
10390 39th Street North  
Lake Elmo, Minnesota 55042  
Office: (651) 777-6960  
Fax: (651) 777-8937

Ramsey-Washington Metro Watershed District  
C/O Tina Carstens  
2665 Noel Drive  
Little Canada MN 55117

Page: 1  
August 24, 2023  
File No: 9M

General Account

Balance

\$3,364.00

## Stewardship Grant Application Summary

**Project Name:** Blasena

**Application Number:** 23-43 CS

**Board Meeting Date:** 9/6/2023

**Applicant Name:** Laura Blasena

**Residential** ☒

**Commercial/Government** ☐

### Project Overview:

This project is located off County Road B2 W just east of Willow Pond in the City of Roseville. The applicant is proposing to install a rain garden on the front corner of the yard to capture roof and driveway runoff. They are also looking to install native plants to add pollinator-friendly habitat to their property.

This project is eligible for 75% funding up to \$15,000.

### BMP type(s):

Rain Garden(1)

### Grant Request:

\$10,965.00

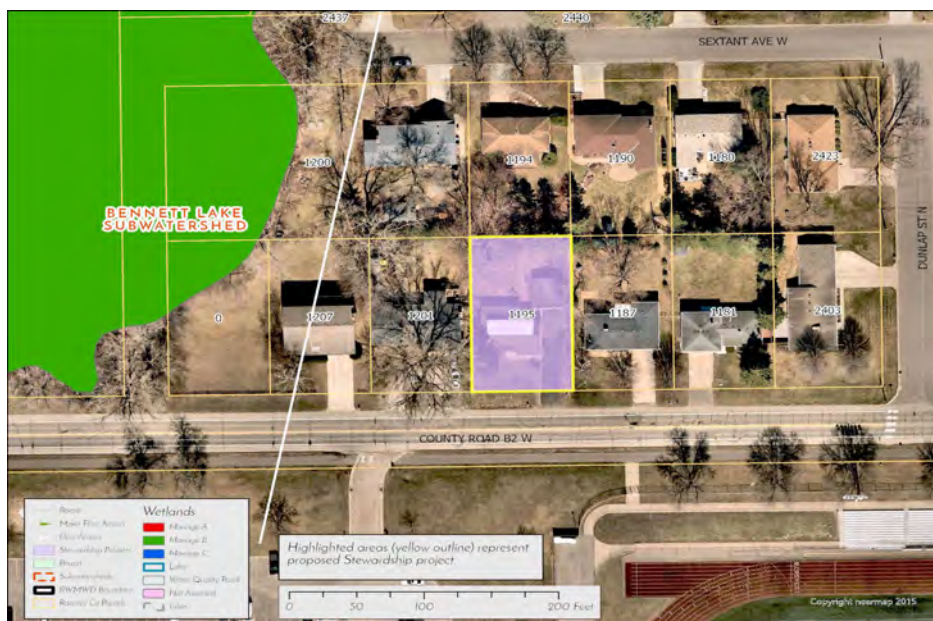
### Recommendation:

Staff recommends approval of this application.

### Subwatershed:

Lake Owasso

### Location Maps:





- GENERAL GRADING NOTES:**
1. ALL EXISTING AND ESTABLISHED CONTROL MEASURES SHALL BE IN PLACE BEFORE BEGINNING SITE GRADING ACTIVITIES.
  2. THE DESIGN SHOWN IS BASED ON EXISTING CONDITIONS BASED UPON THE LAND TITLE SURVEY COMPLETED BY HENRY S. JOHNSON CO., INC. ON 04/16/2018. THE CONTOURS SHOWN ARE BASED ON 1 FOOT VERTICAL INTERVALS PROVIDED BY HENRY S. JOHNSON CO., INC. THE CONTOUR DATA HAS BEEN ADJUSTED TO REFLECT A HYPOTHETICAL SURFACE OF A HYPOTHETICAL LAND SURFACE AND SHALL BE USED FOR REVIEW ONLY.
  3. CONTRACTOR SHALL BE RESPONSIBLE FOR ESTIMATING QUANTITIES OF CUT AND FILL MATERIAL TO BE MAINTAINED AND FOR THE ADJUSTMENT OF FILLING TO BE DONE. ALL CUTS ASSOCIATED WITH EXISTING MATERIAL AND EXISTING UNDESIRABLE/EXCESSIVE MATERIAL SHALL BE INCLUDED IN THE BID PRICE.
  4. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. CONTRACTOR WILL BE HELD STRICTLY RESPONSIBLE FOR ANY DAMAGE TO ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
  5. SAFETY MEASURES TO CONTRACTOR'S ADVANTAGE WITH CONFINED ACCESS TO CONSTRUCTION ACTIVITIES. CONTRACTOR WILL BE HELD STRICTLY RESPONSIBLE FOR CONFINING THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTIES DURING CONSTRUCTION OF THE WORK. THIS RESPONSIBILITY WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE CONTRACTOR TO THE DEVELOPER TO MAINTAIN CONSTRUCTION RECORD OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADJACENT OF THE CONTRACTOR'S SAFETY MEASURES IN OR ON NEAR THE CONSTRUCTION SITE.
  6. CONTRACTOR SHALL COMPLETE THE SITE GRADING CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE HENRY S. JOHNSON CO., INC. THE RECORD SHALL BE COMPLETED BY THE HENRY S. JOHNSON CO., INC. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETION OF THE RECORD SHALL BE COMPLETED BY THE HENRY S. JOHNSON CO., INC. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETION OF THE RECORD SHALL BE COMPLETED BY THE HENRY S. JOHNSON CO., INC.
  7. PRIOR TO FILLING OF THE EXISTING DRAIN, A TEST HOLE SHALL BE PERFORMED BY THE SURVEYOR AND FILLING WITH SAND. CONTRACTOR SHALL PROVIDE A LOOSE LATCH AND TRUCK WITH A DRIVER HEIGHT OF 25 FEET. THE TEST HOLE SHALL BE AT THE LOCATION OF THE DRAIN ENGINEER AND SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAIN ENGINEER.
  8. REPLACE ALL EXISTING SOIL SURFACES DURING CONSTRUCTION THAT HAVE BECOME UNDESIRABLE AND WILL NOT FILL WITH A TEST HOLE. REMOVE UNDESIRABLE SOIL FROM THE SITE AND REPLACE EXISTING SOIL OF THE ADJACENT, SOIL TO THE DRAIN.
  9. CONTRACTOR SHALL TAKE NECESSARY AND PRE-GRADING EXISTING DRAIN TYPICAL, IF MATERIAL IS APPLIED TO THE EXISTING DRAINAGE AND/OR EXISTING DRAINAGE, PROVIDE A LATCHED LATCH TO BE APPLIED TO ALL EXISTING DRAINAGE TO BE UNDESIRABLE.
  10. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION DURING CONSTRUCTION ACTIVITIES. ALL SITE MEASUREMENTS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE DRAIN ENGINEER.
  11. SEE SITE PLAN SHEET C-1 FOR SITE LAYOUT.
  12. PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  13. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  14. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  15. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  16. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  17. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  18. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  19. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  20. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  21. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  22. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  23. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  24. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  25. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  26. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  27. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  28. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  29. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  30. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  31. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  32. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  33. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  34. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  35. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  36. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  37. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  38. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  39. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  40. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  41. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  42. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  43. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  44. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  45. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  46. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  47. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  48. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  49. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  50. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  51. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  52. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  53. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  54. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  55. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  56. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  57. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  58. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  59. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  60. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  61. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  62. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  63. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  64. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  65. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  66. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  67. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  68. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  69. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  70. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  71. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  72. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  73. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  74. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  75. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  76. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  77. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  78. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  79. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  80. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  81. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  82. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  83. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  84. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  85. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  86. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  87. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  88. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  89. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  90. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  91. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  92. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  93. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  94. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  95. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  96. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  97. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  98. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  99. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.
  100. CONTRACTOR SHALL PROVIDE PROTECTIVE DRAINAGE FROM BUILDINGS AT ALL TIMES.

|  |                         |      |           |
|--|-------------------------|------|-----------|
| 1195 County Rd B2 West<br><b>LAURA BLASENA</b><br>1295 COUNTY ROAD B2 WEST<br>ROSEVILLE MN | CONSTRUCTION<br>DETAILS | DATE | REVISIONS |
|  |                         |      |           |
|  |                         |      |           |
|  |                         |      |           |
|  |                         |      |           |

|              |          |
|--------------|----------|
| Date: 8/1/23 |          |
| DRAWN BY     | CH       |
| CHECKED      |          |
| APPROVED     | Approved |
| SCALE        | Scale    |

**L1**



## Stewardship Grant Application Summary

**Project Name:** Griffin

**Application Number:** 23-46 CS

**Board Meeting Date:** 9/6/2023

**Applicant Name:** Killian Griffin

**Residential** ☒

**Commercial/Government** ☐

### Project Overview:

This project is located off Bellaire Ave and Crestline Dr just north of Heiner's Pond in the City of White Bear Lake. The applicant is proposing to restore their actively eroding shoreline as well as create an all native plant area on the west side of their front yard. They will be removing existing turf grass in the front yard and many invasives along the shoreline to make room for pollinator-friendly native plantings. The shoreline restoration work is eligible for 100% coverage and the front yard native planting is eligible for 50% coverage up to a maximum amount of \$15,000.

### BMP type(s):

Native Habitat Restoration(1), Shoreline Restoration(1)

### Grant Request:

\$15,000.00

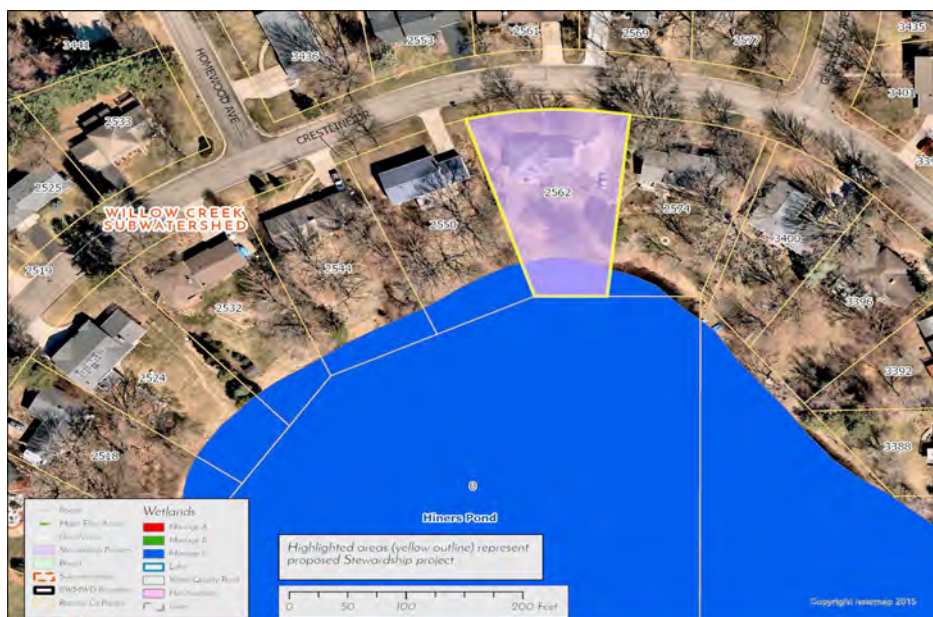
### Recommendation:

Staff recommends approval of this application.

### Subwatershed:

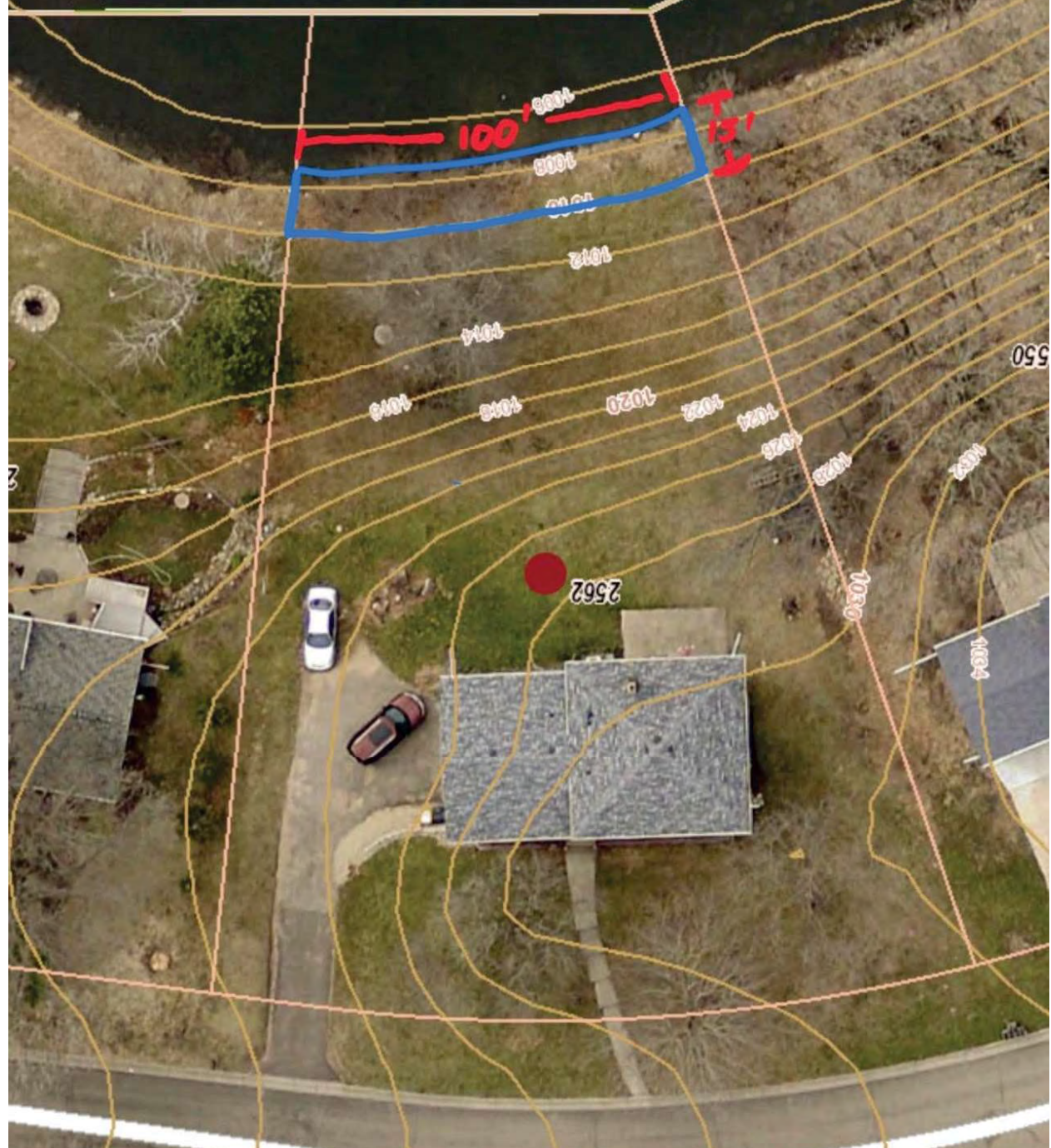
Willow Creek

### Location Maps:





**Nature Reserve**







**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT

(651) 792-7950  
rwmwd.org

2665 Noel Drive  
Little Canada, MN 55117

September 6, 2023

**To:** RWMWD Board of Managers

**From:** Paige Ahlborg, Watershed Project Manager

**Re:** Budget Adjustment - Escape Climbing 23-20 CS

Ryan Angelo from Escape Climbing of 100 S Owasso Blvd W in Little Canada applied for the Stewardship Grant Program for the installation of two rain gardens. The grant was approved on 6/7/2023 for \$72,104. The project is located in a priority area so the application is eligible for 100% funding up to \$100,000.

The first rain garden was installed as planned however some complications arose during the installation of the second rain garden. The applicant is requesting a budget increase of \$14,177 due to an increase in concrete work cost from their subcontractor, edits/additions to the rain garden design required by staff once we saw how much water was flowing off the parking lot into the proposed rain garden location, and the cost of purchasing larger plants than originally specified due to availability issues.

The total grant award of \$86,281 is still within the eligible amount of \$100,000 for this project type. Staff recommends approval of this request.



## Stewardship Grant Application Summary

**Project Name:** Escape Climbing

**Application Number:** 23-20\_CS

**Board Meeting Date:** 6/7/2023

**Applicant Name:** Ryan Angelo

**Residential** ☐ **Commercial/Government** ☒

### Project Overview:

This project is located off S Owasso Blvd W and Rice St in the City of Little Canada. The applicant is proposing to install two rain gardens to capture runoff from the rooftop and parking areas. Over 1,550 square feet of asphalt will be removed to install the rain gardens. Along with improving water quality, the applicant is also interested in creating a diverse native planting plan to increase pollinator habitat. This project is located in a priority area and is eligible for 100% funding up to \$100,000.

### BMP type(s):

Rain Garden(2)

### Grant Request:

\$72,104.00

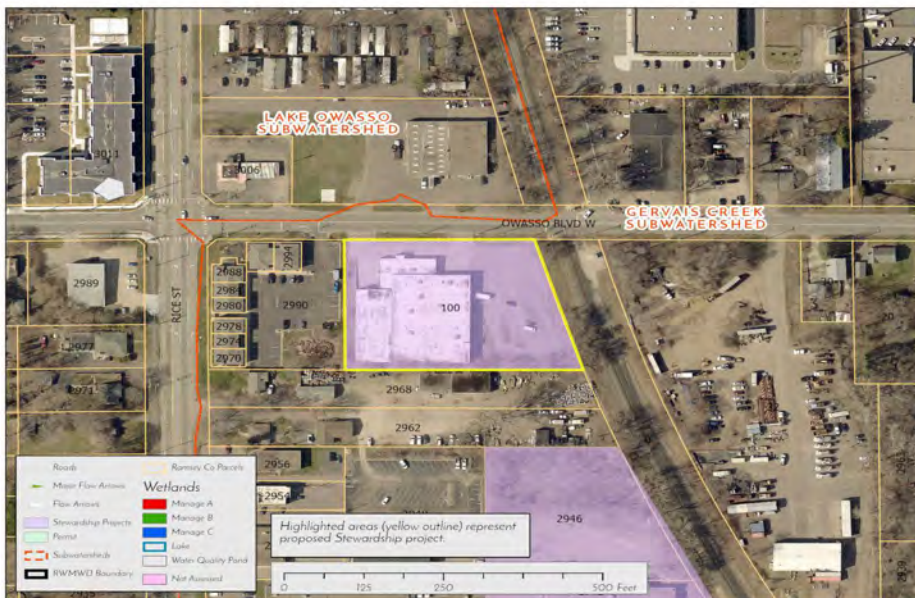
### Recommendation:

Staff recommends approval of this application.

### Subwatershed:

Gervais Creek

### Location Maps:



# Consent Agenda Action Item

---

**Board Meeting Date:** September 6, 2023

**Agenda Item No:** 3D

**Preparer:** Tina Carstens, Administrator

---

**Item Description:** Change Order No. 1 for the Arbogast Underground Stormwater Filter Project

---

## **Background:**

Change order 1 for the Arbogast Underground Stormwater Filter Project is attached. This change order will increase the contract price by \$9,632.00 and revises the substantial completion deadline from October 1, 2023 to November 15, 2023. This contract price change is available in this project's contingency budget.

---

## **Applicable District Goal and Action Item:**

**Goal:** Achieve quality surface water – The District will maintain or improve surface water quality to support healthy ecosystems and provide the public with a wide range of water-based benefits.

**Action Item:** Implement retrofit water quality improvement projects.

---

## **Staff Recommendation:**

Approve Change Order No. 1.

---

## **Financial Implications:**

This change order increases this contract price by \$9,632.00, which is available in the contingency budget for this project.

---

## **Board Action Requested:**

Approve Change Order No. 1.

**Change Order No. 1**  
**Ramsey-Washington Metro Watershed District**  
**Arbogast Underground Stormwater Filter**

**DATE OF ISSUANCE:** August 28, 2023

**Owner:** Ramsey-Washington Metro Watershed District  
2665 Noel Drive  
Little Canada, MN 55117  
Attn: Val Eisele

**Contractor:** Shoreline Landscaping & Contracting  
29159 Ivywood Trail  
Chisago City, MN 55013  
Attn: Stephan McLafferty

**Engineer:** Barr Engineering Company  
4300 MarketPointe Drive, Suite 200  
Minneapolis, MN 55435  
Attn: Brad Lindaman

**C.O.1.A      Change in unit price of Cast-In-Place Vault Structure.**

Description of Change:

This Contractor unit price for Cast-In-Place Vault Structure was based on the Engineer's design drawings included in the Contract Documents. The drawings contained an incorrect measurement of #6 steel reinforcement spacing of 9" O.C. when the actual spacing should have been 4.5" O.C. Due to this change, an increased amount of steel reinforcement was installed to ensure structural integrity of the exterior wall. This results in an additional Lump Sum (L.S.) cost of \$9,632.00.

Work will be measured on the basis of a single LS unit to install addition steel reinforcement, all complete as directed by the Engineer.

**C.O.1.B      Contract Completion Extensions**

Description of Change:

Due to delays beyond the control of the Contractor including an unknown utility conflict (Lumen/CenturyLink) and supply chain delays (stop log gate), the work could not be completed within the contract time. The Owner is extending the substantial completion date in the contract from October 1, 2023 to November 15, 2023.

### Change in Contract Time:

Substantial Completion Date is revised to be November 15, 2023.

### Total Impact on Contract Price:

Additional cost of **\$9,632.00** is anticipated.

This Change Order No. 1 is:

Submitted By:  
(ENGINEER)



\_\_\_\_\_  
Leslie DellAngelo, Project Engineer  
Barr Engineering Company

Date: August 28, 2023

Authorized By:  
(OWNER)

\_\_\_\_\_  
Val Eisele, President  
Ramsey-Washington Metro Watershed District

Date: \_\_\_\_\_

Approved By:  
(CONTRACTOR)



\_\_\_\_\_  
Stephan McLafferty, Owner  
Shoreline Landscaping and Contracting

Date: August 28, 2023

\* \* \* \* \*

# Permit Program

\* \* \* \* \*





# RAMSEY-WASHINGTON

## METRO WATERSHED DISTRICT

### MEMORANDUM

**Date:** September 6, 2023

**To:** Board of Managers and Staff

**From:** Nicole Maras, Permit Coordinator  
Mary Fitzgerald, District Inspector

**Subject:** August Enforcement Action Report

During August 2023:

|  |           |
|--|-----------|
| <b>Number of Violations:</b>           | <b>29</b> |
| Install/Maintain Inlet Protection      | 5         |
| Install/Maintain Perimeter Control     | 6         |
| Install/Maintain Construction Entrance | 2         |
| Sweep Streets                          | 3         |
| Stabilize Exposed Soils                | 2         |
| Contain Liquid/Solid Wastes            | 1         |
| Remove Discharged Sediment             | 4         |
| Maintain/Protect Permanent BMPs        | 3         |
| Install/Maintain Ditch Checks          | 1         |
| General Permit Requirements            | 2         |

### Activities and Coordination Meetings:

Active permit site monitoring and inspections, permitting assistance to private developers and public entities, Wetland Conservation Act (WCA) administration & procedures, new permit review with Barr Engineering, vegetation establishment inspections, wetland mitigation site inspections, initial erosion control walk-throughs at new permit sites, preconstruction meetings, MN Water Workforce Pilot Program meetings, rule revision meetings, MN Watersheds DEI Workgroup meetings, DEIA RWMWD Workgroup meeting, City of Roseville interns shadowing grants and permit team, NR interns shadowing permit team

### Single Lot Residential Permits Approved by Staff:

None

### **Permits Closed:**

18-16 Little Canada Elementary Addition (Little Canada)  
20-02 Conway Recreation Center Athletic Fields (St. Paul)  
20-07 John Glenn Middle School Addition (Maplewood)  
21-21 3M 227 Ramp Demo (Maplewood)  
21-26 3M Building 207 Demo (Maplewood)  
22-02 Little Canada 2022 SIP (Little Canada)  
23-12 Jordan Seeds Property Grading (Woodbury) -- WITHDRAWN

### **Project Updates:**

#### **23-21 MWWTP Lab Services Building (St. Paul)**

Staff attended an initial erosion control walk-through at the Metropolitan Council wastewater treatment plant on August 2<sup>nd</sup> to check for erosion and sediment control practices at a construction project at one of their labs. Staff found a few missing items including a construction entrance and inlet protection. Staff revisited the site on August 18<sup>th</sup>, and found all items to be properly installed and the site well taken care of. Staff will continue to inspect the site through construction of the new lab facilities at the plant.



#### **23-02 Caretta Assisted Living (Maplewood)**

A new assisted living development began work in the month of August, with mass grading and utility installation to occur through the months of August and September. Staff conducted an initial erosion control walk-through with the contractor on August 9<sup>th</sup> and noted temporary stabilization needed 200 ft back from





the creek on the south end of the site, as well as inlet protection at the north entrance. Staff revisited the site on August 24<sup>th</sup> and found both items to be completed, and the rest of the site well-managed.

### **23-15 Maplewood Myrtle-Sterling 2023 SIP (Maplewood)**

Road improvement work and infiltration basin installation continues at Hillside Park and along Lakewood Drive, Ripley Avenue, Kingston Avenue, and Myrtle Street in the City of Maplewood. Unfortunately, staff have found non-compliance at the last several visits to the site on July 12<sup>th</sup>, August 3<sup>rd</sup>, and August 15<sup>th</sup> mostly applicable to the infiltration basin construction in Hillside Park. Staff discovered turbid water and sediment making its way down the hill and into the wetland due to improper soil stabilization upstream and perimeter control. Clean-up, erosion prevention, and sediment control requirements have been clearly communicated to the project team. Efforts have improved on site, but more work is needed. Staff will continue to inspect the site diligently for additional clean-up and repair efforts. As the owner of the project, the City of Maplewood completed a follow-up site visit on Aug 23<sup>rd</sup> and communicated to the contractor that corrective actions are to be completed with urgency. City and watershed staff will discuss escalation of enforcement if improvements are not adequately completed.



\* \* \* \* \*

# Stewardship Grant Program

\* \* \* \* \*

# Stewardship Grant Program Budget Status Update

September 6, 2023

| Homeowner  | Coverage                        | Number of Projects: 26 | Funds Allocated |
|--|---------------------------------|------------------------|-----------------|
| Habitat Restoration and rain garden w/o hard surface drainage      | 50% Cost Share<br>\$15,000 Max  | 16                     | \$54,831.50**   |
| Rain garden w/hard surface drainage, pervious pavement, green roof | 75% Cost Share<br>\$15,000 Max  | 8                      | \$86,454*       |
| Master Water Steward Project                                       | 100% Cost Share<br>\$15,000 Max | 1                      | \$11,500        |
| Shoreland Restoration  | 100% Cost Share<br>\$15,000 Max | 1                      | \$15,000*       |

| Commercial, School, Government, Church, Associations, etc.                      | Coverage                               | Number of Projects: 20 | Funds Allocated |
|---|--|------------------------|-----------------|
| Habitat Restoration   | 50% Cost Share<br>\$15,000 Max         | 3                      | \$20,396        |
| Shoreland Restoration (below 100-year flood elevation w/actively eroding banks) | 100% Cost Share<br>\$100,000 Max       | 2                      | \$139,907       |
| Priority Area Projects  | 100% Cost Share<br>\$100,000 Max       | 4                      | \$264,154       |
| Non-Priority Area Projects  | 75% Cost Share<br>\$50,000 Max         | 0                      | \$0             |
| Public Art (\$50,000 Reserved)  | 50% Cost Share<br>\$15,000 Max/Project | 4                      | \$6,250         |
| Aquatic Veg Harvest/LVMP Development  | 50% Cost Share<br>\$15,000 Max         | 2                      | \$27,000        |
| Enhanced Street Sweeping (\$128,000 Reserved)                                   | Varies                                 | 5                      | \$128,000       |

|                        |   |    |                     |
|------------------------|---|----|---------------------|
| Maintenance            | 50% Cost Share<br>\$7,500 Max for 5 Years | 72 | \$51,150*           |
| Consultant Fees        |   |    | \$65,858.60         |
| <b>Total Allocated</b> |   |    | <b>\$856,066.10</b> |

\*includes funds to be approved at current board meeting

\*\*includes staff approvals since previous board meeting

| 2023 Stewardship Grant Program Budget |                     |
|---------------------------------------|---------------------|
| Budget                                | \$1,128,000         |
| Total Funds Allocated                 | \$856,066.10        |
| <b>Total Available Funds</b>          | <b>\$271,933.90</b> |

\* \* \* \* \*

# Action Items

\* \* \* \* \*

# Request for Board Action

---

**Board Meeting Date:** September 6, 2023

**Agenda Item No:** 7A

**Preparer:** Tina Carstens, Administrator

---

**Item Description:** 2023 Targeted Retrofit Project Accept Plans & Solicit Bids – Roosevelt Homes

---

**Background:**

See attached memo for more information on the Roosevelt Homes project.

This project was planned through our Targeted Retrofit program and will be funded through this project fund. The engineer's opinion of probably project construction cost is \$130,000. After approval at this meeting, the bidding process will be followed with a selection of contractor coming to the board for approval in November.

---

**Applicable District Goal and Action Item:**

**Goal: Manage risk of flooding** – The District will reduce the public's risk to life and property from flooding through programs and projects that protect public safety and well-being.

**Action Item:** Cooperate with appropriate stakeholders to identify, assess, and address potential flooding problems in the District.

---

**Staff Recommendation:**

Staff recommends approval of the preliminary design, estimated costs, and proposed project schedule, and direct staff to finalize the design and bidding documents and solicit bid proposals.

---

**Financial Implications:**

This project will be funded from the district's Targeted Retrofit Fund where there are sufficient funds available.

---

**Board Action Requested:**

Approve the preliminary design, estimated costs, and proposed project schedule, and direct staff to finalize the design and bidding documents and solicit bid proposals.



## Technical Memorandum

**To:** RWMWD Board of Managers  
**From:** Marcy Bean, Matt Metzger, Andrew Papke-Larson, and Brandon Barnes  
**Subject:** 90% Design Summary for Roosevelt Homes Stormwater Retrofit  
**Date:** August 31, 2023  
**Project:** 23/62-1477  
**c:** Paige Ahlborg (RWMWD), Tina Carstens (RWMWD), Brent Feller (St. Paul Housing Authority)

### 1 Introduction

This memorandum summarizes the 90%-level designs of the first phase of stormwater management proposed for Roosevelt Homes. The location of the project is shown in Figure 1, showing this first phase of work near Ames Avenue. This project is being designed in phases to assist St. Paul Housing Authority (SPHA) in mitigating frequent flooding at parts of the Roosevelt Homes property in St. Paul, similar to the flooding that occurred on the property in the summer of 2022 as shown in Figure 2. Barr updated the 30% design to 90% design including modeling, engineer's opinion of probable cost and construction documents. The final BMP design, modeling results, and cost estimate are discussed in the following sections. RWMWD staff and SPHA staff have been involved with the design progression from 30% to 90%, providing feedback and comments.



Figure 1 Project Location





Poor drainage within the property resulted in flood damage to existing buildings and property within the Roosevelt Homes development in August 2022.

**Figure 2 August 2022 Flooding on Roosevelt Homes Property**

## **2 BMP Design**

In 2022, Barr and RWMWD staff began meeting with SPHA to better understand the extents of flooding at the Roosevelt Community Center and surrounding housing community. Regular flooding of the maintenance facility garage is a primary concern, as well as resident parking lots where flood waters often cause damage, as shown in Figure 2. The site is bisected by Ames Avenue, where some water enters the site from the street and flows into the maintenance facility. In addition, limited capacity within the existing pipe system keeps water from leaving the site efficiently.

With these constraints in mind, Barr reviewed and updated stormwater models for the area. We then evaluated design options for providing additional flood storage on site (Phase 1, 2023) and making small scale changes to site grades to improve overland conveyance (Phase 2, 2024) to direct water to these storage areas. An existing dry basin, the west basin, is an important feature to modify to provide volume storage required to increase the capacity of overland flow routes in 2024. Additionally, a smaller basin is being created on the east side of the property to provide storage near the intersection of Ames Avenue which is also prone to frequent flooding.

The first phase of work is anticipated in late fall 2023. Phase 2 work will include landscaping of the two basins, conversion of turf to native vegetation, and small-scale site grading to improve overland flow conveyance through the site and direct water to the two basins.

Drawings and stormwater models have been submitted to the City of St. Paul for their plan review process. We anticipate approval in September or early October.

### 3 Modeling Results

Barr modeled the proposed BMP in both XPSWMM (hydrology and hydraulics) to determine the efficacy of the BMP. The primary purpose of site modifications is to reduce flood risk for habitable structures, additional minor water quality improvements are an additional benefit provided as part of the flood-risk reduction project, but were not quantified during final design.

The final design BMP removes 1 structure from the 100-year floodplain and reduces the frequency of flooding of property, infrastructure, and public areas within the development.

### 4 Engineer's Opinion of Probable Cost

The 90% design overview plan sheets for the stormwater basins are attached to this memo. A summary of the 90% engineer's opinion of probable cost, and flood-risk reduction benefits for the basins are included in the table below.

**Table 1 Summary of 90% Opinion of Probable Costs and Flood-Risk Reduction Benefits for Roosevelt Homes Stormwater Retrofit**

| Engineer 's<br>Opinion of<br>Probable Project<br>Construction<br>Cost | Engineer's Opinion of<br>Probable Cost Range<br>(-5% to +10%) | Habitable<br>Structures<br>Removed from<br>100-year<br>Floodplain |
|---|---|---|
| \$130,000   | \$123,500 - \$143,000   | 1   |

The current engineer's opinion of probable cost for the project ranges from -5% to +10%. These opinions include a 20% contingency and reflect a 90% design level of accuracy. This contingency reflects uncertainty in the design elements and current bid prices.

### 5 RWMWD Prioritization Tool

The Roosevelt Homes project was updated in the prioritization tool based on the 90% designs outlined in this memo.

The Roosevelt Homes project has a primary benefit of "Manage Risk of Flooding". The project reduces flood risk for habitable structures. The table below summarizes the project's scores per each goal in the RWMWD's Watershed Management Plan. A description of the credits that each project received in the tool under each of RWMWD's Plan Goal categories is included below, as well.

**Table 2 Summary of RWMWD Prioritization Tool Scores for Roosevelt Homes**

| Plan Goal Category                 | Roosevelt Homes<br>Scores per Plan<br>Goal Category | Tool Credits Descriptions   |
|------------------------------------|---|---|
| 1. Achieve Quality Surface Water   | 0.0   | Water quality benefits provided by increasing the west basin and constructing a new basin were not quantified for the calculating a prioritization score.   |
| 2. Achieve healthy ecosystems      | 0.0   | N/A   |
| 3. Manage risk of flooding         | 5.5   | The project removes 1 habitable structure from the floodplain, is located upstream of an area identified for potential projects in the Beltline Resiliency Study (site 4F-3)                        |
| 4. Support sustainable groundwater | 0.0   | N/A   |
| 5. Inform and empower communities  | 4.0   | Project fosters collaboration with cities, watershed management organizations, education institutions, or other stakeholders to develop and implement shared communication and messaging strategies |
| 6. Manage organization effectively | 7.0   | St. Paul Public Housing Authority will provide long-term operations and maintenance.<br><br>Willing project partners (SPHA) are collaborating on the design process                                 |

## 6 Recommendations and Attachments

Barr recommends seeking bids for the project to select a contractor for construction. The project aligns with the RWMWD goal of removing habitable structures from the floodplain. The SPHA (Property Owner) is willing to provide area to implement improvements and provide long-term maintenance.

### Schedule

Pending Board approval to bid the Roosevelt Homes Stormwater Retrofit Phase 1, Barr will conduct the project bidding process in September 2023, with the intent to bring back to the Board in November to approve award of a bid, pending approval from the City of Saint Paul. After bidding, if a responsible low bidder is identified, the project could begin construction as early as November 2023 if weather conditions allow.

### Attachments

90% Draft Overview Plans for the Roosevelt Homes Stormwater Retrofit

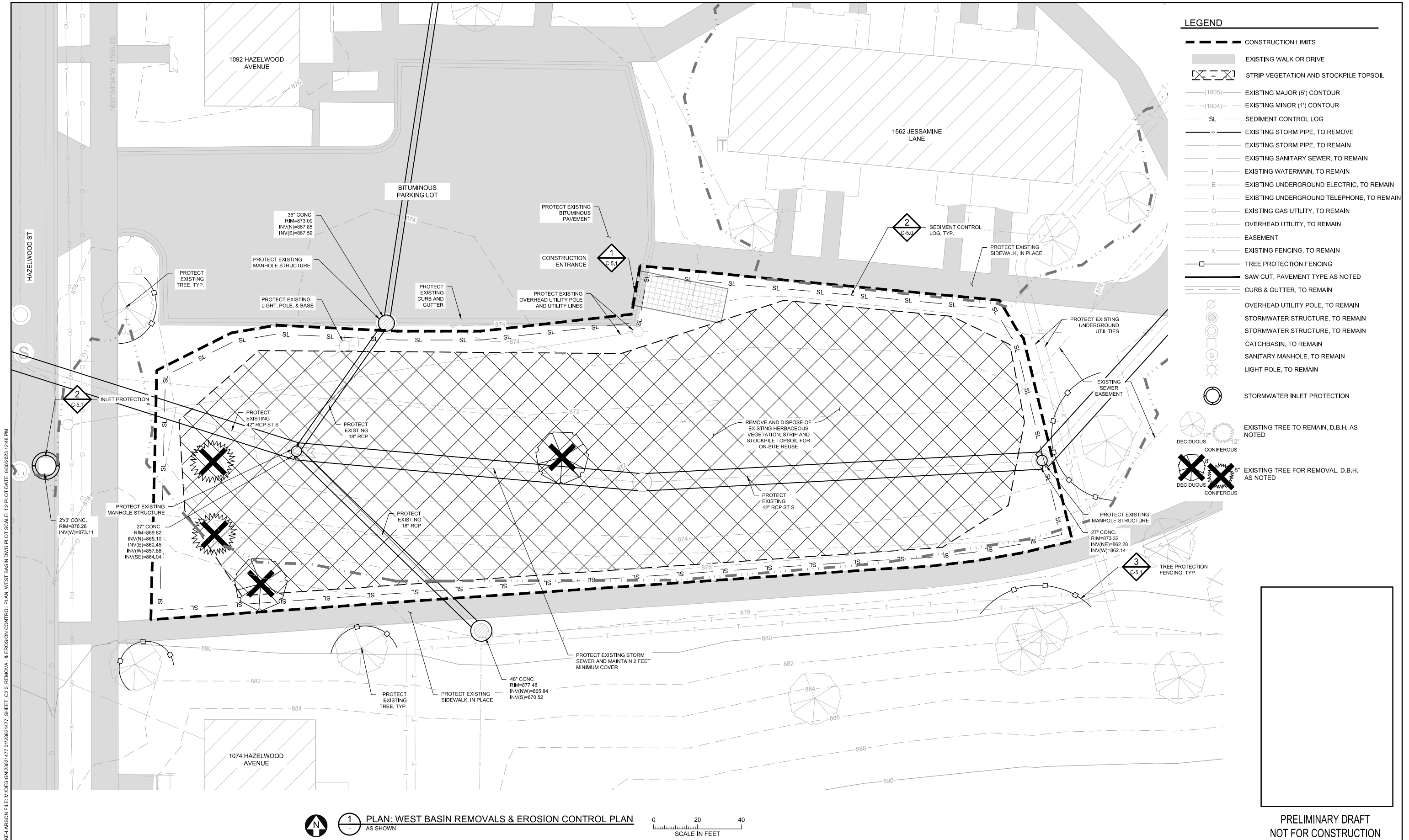
**To:** RWMWD Board of Managers  
**From:** Marcy Bean, Matt Metzger, Andrew Papke-Larson, and Brandon Barnes  
**Subject:** 90% Design Summary for Roosevelt Homes Stormwater Retrofit  
**Date:** August 31, 2023  
**Page:** 5

---

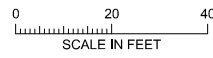
**Attachment: 90% Draft  
Overview Plans for the Roosevelt  
Homes Stormwater Retrofit**



CADD USER: ANDREW.M. PAPERL: JARSON FILE: M:\DESIGN\23621477\01\23621477\_SHEET\_C2.0\_REMOVAL & EROSION CONTROL PLAN\_WEST BASIN.DWG PLOT SCALE: 1/2"=1'-0" DATE: 8/30/2023 12:48 PM




1 PLAN: WEST BASIN REMOVALS & EROSION CONTROL PLAN  
AS SHOWN



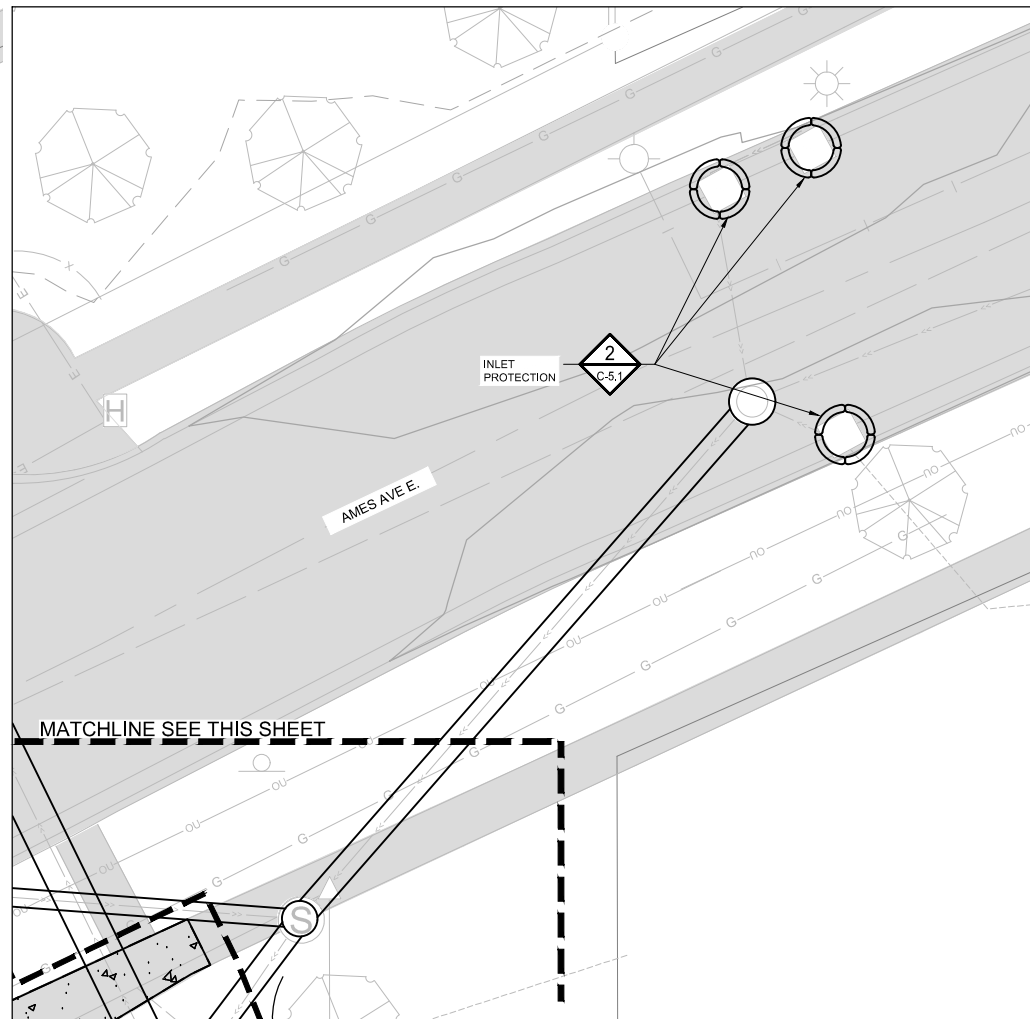
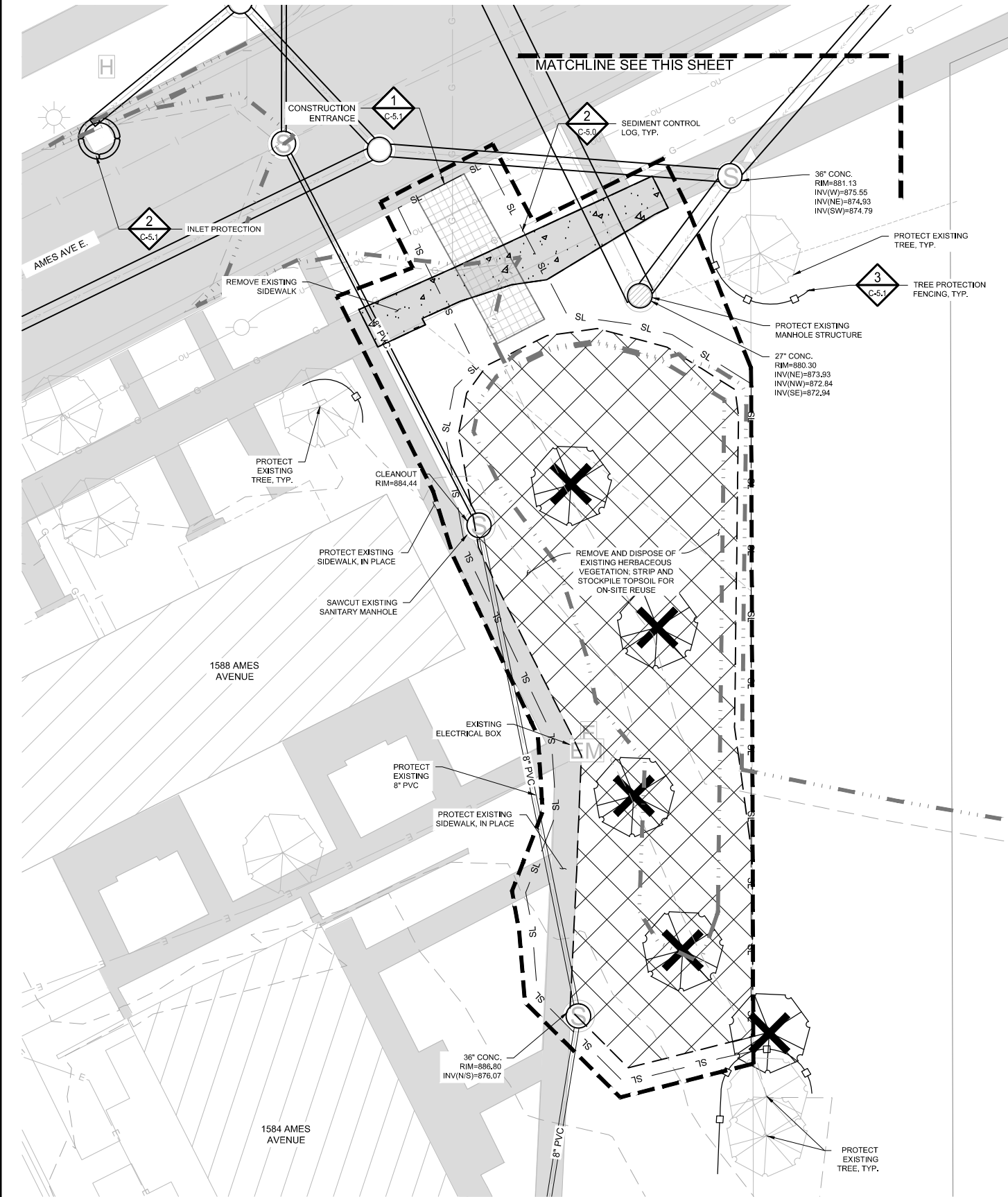
- LEGEND**
- CONSTRUCTION LIMITS
  - EXISTING WALK OR DRIVE
  - STRIP VEGETATION AND STOCKPILE TOPSOIL
  - EXISTING MAJOR (5') CONTOUR
  - EXISTING MINOR (1') CONTOUR
  - SEDIMENT CONTROL LOG
  - EXISTING STORM PIPE, TO REMOVE
  - EXISTING STORM PIPE, TO REMAIN
  - EXISTING SANITARY SEWER, TO REMAIN
  - EXISTING WATERMAIN, TO REMAIN
  - EXISTING UNDERGROUND ELECTRIC, TO REMAIN
  - EXISTING UNDERGROUND TELEPHONE, TO REMAIN
  - EXISTING GAS UTILITY, TO REMAIN
  - OVERHEAD UTILITY, TO REMAIN
  - EASEMENT
  - EXISTING FENCING, TO REMAIN
  - TREE PROTECTION FENCING
  - SAW CUT, PAVEMENT TYPE AS NOTED
  - CURB & GUTTER, TO REMAIN
  - OVERHEAD UTILITY POLE, TO REMAIN
  - STORMWATER STRUCTURE, TO REMAIN
  - STORMWATER STRUCTURE, TO REMAIN
  - CATCHBASIN, TO REMAIN
  - SANITARY MANHOLE, TO REMAIN
  - LIGHT POLE, TO REMAIN
  - STORMWATER INLET PROTECTION
  - EXISTING TREE TO REMAIN, D.B.H. AS NOTED
  - EXISTING TREE FOR REMOVAL, D.B.H. AS NOTED

PRELIMINARY DRAFT  
NOT FOR CONSTRUCTION

|     |  |  |  |  |  |  |  |  |  |                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|--|--|--|--|--|--|--|--|--|-----------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--------------------|--|--|--|--|--|--|--|--|--|---------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|     |  |  |  |  |  |  |  |  |  | CLIENT 08/30/23 |  |  |  |  |  |  |  |  |  | Project Office:<br>BARR ENGINEERING CO.<br>1000 7TH AVE SW<br>SUITE 450<br>CALGARY, AB T2P 5L5 |  |  |  |  |  |  |  |  |  | Scale AS SHOWN     |  |  |  |  |  |  |  |  |  | <div><div><div>RAMSEY-WASHINGTON</div><div>METRO WATERSHED DISTRICT</div></div></div> |  |  |  |  |  |  |  |  |  | BARR PROJECT No.<br>23621477.01   |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     |  |  |  |  |  |  |  |  |  | PERMIT          |  |  |  |  |  |  |  |  |  | BARR ENGINEERING CO.   |  |  |  |  |  |  |  |  |  | Date 08/30/2023    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | CLIENT PROJECT No.  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     |  |  |  |  |  |  |  |  |  | BID             |  |  |  |  |  |  |  |  |  | BARR ENGINEERING CO.   |  |  |  |  |  |  |  |  |  | Drawn MRM/AMP3     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     |  |  |  |  |  |  |  |  |  | CONSTRUCTION    |  |  |  |  |  |  |  |  |  | BARR ENGINEERING CO.   |  |  |  |  |  |  |  |  |  | Checked MRM/MPDB3  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|     |  |  |  |  |  |  |  |  |  | RECORD          |  |  |  |  |  |  |  |  |  | BARR ENGINEERING CO.   |  |  |  |  |  |  |  |  |  | Designed MRM/MPDB3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | EXISTING CONDITIONS, REMOVALS, &<br>EROSION CONTROL PLAN<br>STORM BASIN #1 (WEST) |  |  |  |  |  |  |  |  |  | DWG. No.<br>C-1.0  |  |  |  |  |  |  |  |  |  | REV. No.<br>A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| A   |  |  |  |  |  |  |  |  |  | A               |  |  |  |  |  |  |  |  |  | MDB3   |  |  |  |  |  |  |  |  |  | MRM                |  |  |  |  |  |  |  |  |  | 08/30/23   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  | PRELIMINARY DESIGN |  |  |  |  |  |  |  |  |  |               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| NO. |  |  |  |  |  |  |  |  |  | BY              |  |  |  |  |  |  |  |  |  | CHK.   |  |  |  |  |  |  |  |  |  | APP.               |  |  |  |  |  |  |  |  |  | DATE   |  |  |  |  |  |  |  |  |  | REVISION DESCRIPTION  |  |  |  |  |  |  |  |  |  |                    |  |  |  |  |  |  |  |  |  |               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



CADD USER: ANDREW.M. PAPERLARSON FILE: M:\DESIGN\23621477\_01\23621477\_SHEET\_C01\_1\_REMOVAL & EROSION CONTROL PLAN\_EAST BASIN.DWG PLOT SCALE: 1/2"=1' PLOT DATE: 8/30/2023 12:48 PM

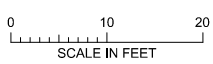


- LEGEND**
- CONSTRUCTION LIMITS
  - EXISTING WALK OR DRIVE
  - STRIP VEGETATION AND STOCKPILE TOPSOIL
  - EXISTING CONCRETE REMOVAL
  - EXISTING MAJOR (5') CONTOUR
  - EXISTING MINOR (1') CONTOUR
  - SEDIMENT CONTROL LOG
  - EXISTING STORM PIPE, TO REMOVE
  - EXISTING STORM PIPE, TO REMAIN
  - EXISTING SANITARY SEWER, TO REMAIN
  - EXISTING WATERMAIN, TO REMAIN
  - EXISTING UNDERGROUND ELECTRIC, TO REMAIN
  - EXISTING UNDERGROUND TELEPHONE, TO REMAIN
  - EXISTING GAS UTILITY, TO REMAIN
  - OVERHEAD UTILITY, TO REMAIN
  - EASEMENT
  - EXISTING FENCING, TO REMAIN
  - TREE PROTECTION FENCING
  - CURB & GUTTER, TO REMAIN
  - SAW CUT, PAVEMENT TYPE AS NOTED
  - OVERHEAD UTILITY POLE, TO REMAIN
  - STORMWATER STRUCTURE, TO REMAIN
  - STORMWATER STRUCTURE, TO REMAIN
  - CATCHBASIN, TO REMAIN
  - SANITARY MANHOLE, TO REMAIN
  - LIGHT POLE, TO REMAIN
  - STORMWATER INLET PROTECTION
  - EXISTING TREE TO REMAIN, D.B.H. AS NOTED
  - EXISTING TREE FOR REMOVAL, D.B.H. AS NOTED



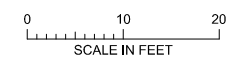
2  
AS SHOWN

PLAN: EAST BASIN REMOVALS & EROSION CONTROL PLAN



1  
AS SHOWN

PLAN: EAST BASIN REMOVALS & EROSION CONTROL PLAN



| NO. | BY | CHK. | APP. | DATE     | REVISION DESCRIPTION |
|-----|----|------|------|----------|----------------------|
| A   | A  | MDB  | MRM  | 08/30/23 | PRELIMINARY DESIGN   |

| CLIENT          | 08/30/23 |
|-----------------|----------|
| PERMIT          |          |
| BID             |          |
| CONSTRUCTION    |          |
| RECORD          |          |
| RELEASED TO/FOR |          |
| DATE RELEASED   |          |

**BARR**

Project Office:  
BARR ENGINEERING CO.  
1000 7TH AVE SW  
SUITE 450  
CALGARY, AB T2P 5L5

Corporate Headquarters:  
Minneapolis, Minnesota  
Ph: 1-800-632-2277

| Scale    | A          |
|----------|------------|
| Date     | 08/30/2023 |
| Drawn    | MRM/AMP3   |
| Checked  | MRM/MDB3   |
| Designed | MRM/MDB3   |
| Approved |            |

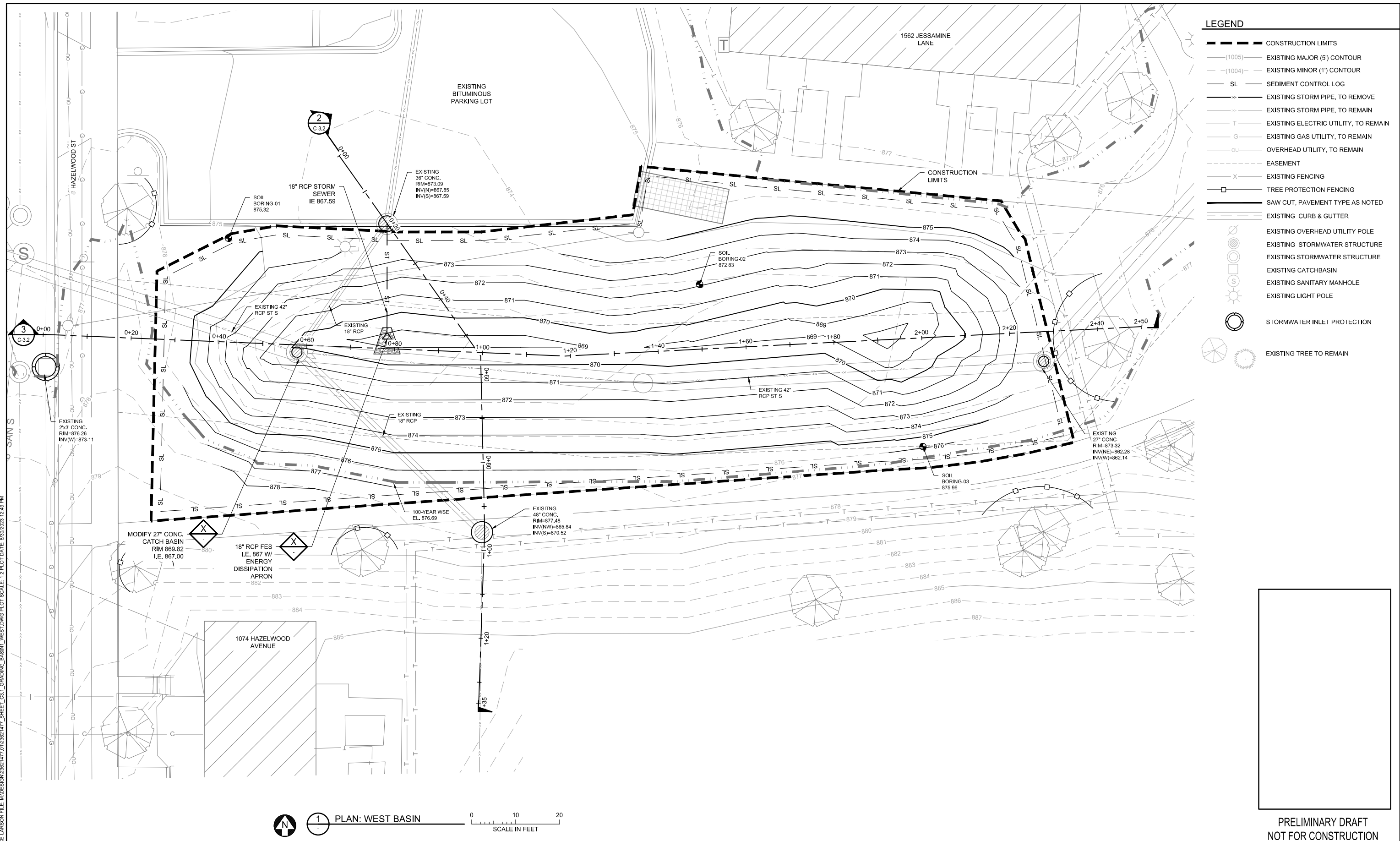


**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT

|   |  |
|---|--|
| ROOSEVELT HOMES<br>SAINT PAUL, MINNESOTA  |  |
| EXISTING CONDITIONS, REMOVALS, &<br>EROSION CONTROL PLAN<br>STORM BASIN #2 (EAST) |  |

|                                 |               |
|---------------------------------|---------------|
| BARR PROJECT No.<br>23621477.01 |               |
| CLIENT PROJECT No.              |               |
| DWG. No.<br>C1.1                | REV. No.<br>- |

PRELIMINARY DRAFT  
NOT FOR CONSTRUCTION

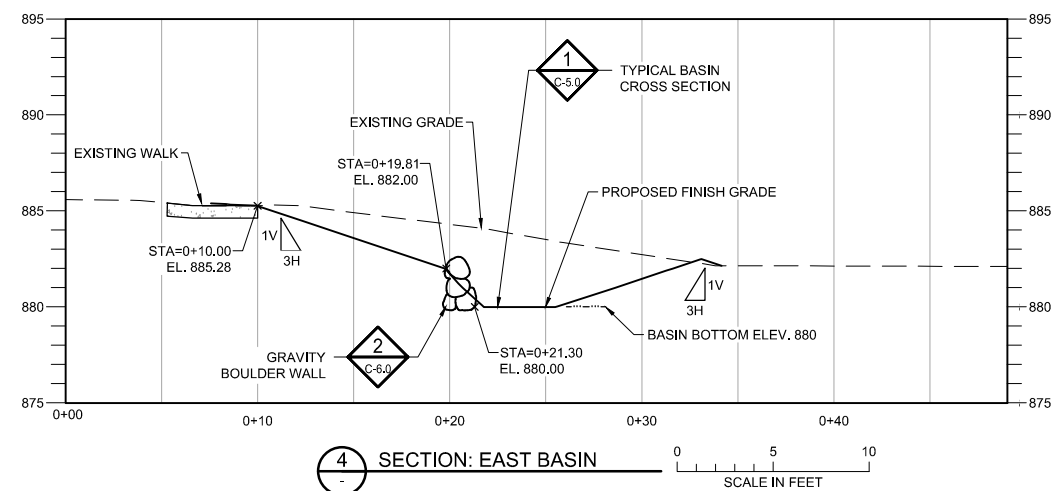
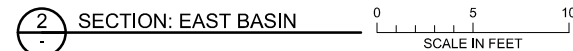
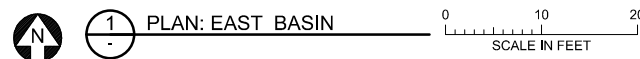


PRELIMINARY DRAFT  
NOT FOR CONSTRUCTION

[illegible]







|  |                    |          |
|--|--------------------|----------|
| ROOSEVELT HOMES<br>SAINT PAUL, MINNESOTA<br><br>STIE PLAN, GRADING PLAN, & PROFILES<br>STORM BASIN #2 (EAST) | BARR PROJECT No.   |          |
|  | 23621477.01        |          |
|  | CLIENT PROJECT No. |          |
|  | DWG. No.           | REV. No. |
|  | C-2.2              | A        |

# Request for Board Action

---

**Board Meeting Date:** September 6, 2023

**Agenda Item No:** 7B

**Preparer:** Tina Carstens, Administrator  
Nicole Maras, Permit Coordinator

---

**Item Description:** Permit Rule Amendment Response to Comments and Approval

---

## **Background:**

The District, in collaboration with Capitol Region Watershed District, has been going through the process of an amendment to the permit rules. The rule amendment process included regular technical advisory communications with stakeholders, an informal review period, a Q&A session, an official comment period, and a public hearing held on June 28, 2023. No comments were received at the public hearing.

During the official comment period, seven comment letters were received and are summarized in the enclosed document with responses to comments. As a result of the formal comments, the maximum trail width allowable in the criteria for disconnected impervious area was expanded from 8' to 10'. Clarifying language was added regarding gross pollutant removal requirements for areas that discharge directly to water bodies. None of the other comments submitted during the formal period resulted in changes to the rules.

Enclosed you will find the proposed amended rules for your approval (**Res. 23-01**), most of which would be effective immediately. In order to provide budgeting flexibility, staff are proposing the following increases in the stormwater impact fund contribution and linear cost cap to go into effect Jan 1, 2024:  
Linear Cost Cap: \$94,000 per impervious acre (currently \$75,000) (**Res. 23-02**)  
Stormwater Impact Fund: \$125,000 per impervious acre (currently \$100,000) (**Res. 23-03**)

---

## **Applicable District Goal and Action Item:**

**Goal: Manage organization effectively** – Operate in a manner that achieves the District's mission while adhering to its core principles.

**Action Item:** Implement, track, and update the District's permitting program, including periodic updates to the District's rules, as necessary.

---

## **Staff Recommendation:**

Approve the attached rule revisions and resolutions 23-01, 23-02, and 23-03.

---

## **Financial Implications:**

None.

---

## **Board Action Requested:**

Approve the rule revision and resolutions 23-01, 23-02, and 23-03.



# Ramsey-Washington Metro Watershed District Rules

Adopted 09/06/2006

Revised 09/06/2023

---

## Table of Contents

|  |    |
|--|----|
| Certification of Rules                   | 2  |
| General Policy Statement                 | 2  |
| Relationship to Municipalities           | 3  |
| Rule A. Definitions                      | 3  |
| Rule B. Permit Procedural Requirements   | 10 |
| Rule C. Stormwater Management            | 13 |
| Rule D. Flood Control                    | 23 |
| Rule E. Wetland Management               | 26 |
| Rule F. Erosion and Sediment Control     | 32 |
| Rule G. Illicit Discharge and Connection | 35 |
| Rule H. Enforcement                      | 41 |
| Rule I. Variances                        | 41 |
| Rule J. Severability                     | 42 |

## **Certification of Rules**

I, Benjamin Karp, Secretary of the Ramsey-Washington Metro Watershed District Board of Managers, certify that the attached is a true and correct copy of the Rules of the Ramsey-Washington Metro Watershed District having been properly adopted by the Board of Managers of the Ramsey-Washington Metro Watershed District.

Dated: September 06, 2023

---

## **General Policy Statement**

The Ramsey-Washington Metro Watershed District (District) is a political subdivision of the State of Minnesota, established under the Minnesota Watershed Law, Minnesota State Statute 103d. The District is also a watershed management organization as defined under the Minnesota Metropolitan Water Management Program and is subject to its directives and authorizations. Under the Watershed Law and the Metropolitan Water Management Program, the District exercises a series of powers to accomplish its statutory purposes. The District's general statutory purpose as stated in 103d.201 is to conserve the natural resources of the state by land use planning, flood control, and other conservation projects by using sound scientific principles for the protection of the public health and welfare and the provident use of the natural resources.

As required under the Metropolitan Water Management Program, the District has adopted a Watershed Management Plan, which contains the framework and guiding principles for the District in carrying out its statutory purposes. It is the District's intent to implement the Plan's goals and policies in these rules.

Land alteration affects the rate, volume, and quality of surface water runoff which ultimately must be accommodated by the existing surface water systems within the District. The watershed is 65 square miles and highly urbanized.

Land alteration and urbanization has and can continue to degrade the quality of runoff entering the waterbodies of the District due to non-point source pollution. Sedimentation from ongoing erosion processes and construction activities can reduce the hydraulic capacity of waterbodies and degrade water quality. Water quality problems already exist in all the lakes and other water resources throughout the District. The Mississippi River is the principal receiving water for all runoff from the District and is listed by the Environmental Protection Agency (EPA) and Minnesota Pollution Control Agency (MPCA) as "impaired".

Projects that do not address the increased rate or volume of stormwater runoff from urban development can aggravate existing flooding and water quality problems and contribute to or create new ones. Projects which fill floodplain or wetland areas without compensatory storage can aggravate existing flooding by reducing flood storage and hydraulic capacity of waterbodies, and can degrade water quality by eliminating the filtering capacity of those areas.

In these rules the District seeks to protect the public health and welfare and the natural

resources of the District by providing reasonable regulation of the District's lands and waters: 1) to reduce the severity and frequency of flooding and high water; 2) to preserve floodplain and wetland storage capacity; 3) to improve the chemical, physical and biological quality of surface water; 4) to reduce sedimentation; 5) to preserve waterbodies' hydraulic and navigational capacity; 6) to preserve natural wetland and shoreland features; and 7) to minimize future public expenditures to avoid or correct these problems.

---

## **Relationship of Ramsey-Washington Metro Watershed District to Municipalities**

The District recognizes that the primary control and determination of appropriate land use is the responsibility of the municipalities. Accordingly, the District will coordinate permit application reviews involving land development with the municipality where the land is located.

The District intends to be active in the regulatory process to ensure that water resources are managed in accordance with District goals and policies. Municipalities have the option of assuming a more active role in the permitting process after the adoption of a local water management plan approved by the District, and by adopting and implementing local ordinances consistent with the approved plan.

The District will also review projects sponsored or undertaken by municipalities and other governmental units, and will require permits in accordance with these rules for governmental projects which have an impact on water resources of the District. These projects include but are not limited to: land development, road, trail, and utility construction and reconstruction.

The District desires to serve as technical advisor to the municipalities in their preparation of local surface water management plans and the review of individual development proposals prior to investment of significant public or private funds. To promote a coordinated review process between the District and the municipalities, the District encourages the municipalities to involve the District early in the planning process.

---

## **Rule A: DEFINITIONS**

For the purposes of these rules, unless the context otherwise requires, the following words and terms have the meanings set forth below.

References in these Rules to specific sections of the Minnesota Statutes or Rules include any amendments, revisions or recodification of such sections. References in these Rules to manuals, plans, rules, assessments, modeling methods, technical guidance or District policies shall include any revisions or amendments.

The words “shall” and “must” are mandatory; the word “may” is permissive.

**Adjacent-** An area of land that has a common boundary or edge with a water resource or development.

**Alteration or Alter-** When used in connection with public waters or wetlands, any activity that will change or diminish the course, current, or cross-section of public waters or wetlands.

**Applicant-** Any person, entity, or political subdivision that submits an application to the District for a permit under these Rules.

**Approval:** Date of RWMWD Board action, including approval with any conditions.

**Atlas 14-** National Oceanic and Atmospheric Administration’s (NOAA) precipitation event frequency and magnitude estimates (replaces TP-40).

**Banking Credits-** Volume reduction in excess of the requirement for use on subsequent projects that are unable to meet the requirement onsite.

**Beltline Interceptor-** That portion of the Beltline Storm Sewer that is owned and operated by the District.

**Best Management Practices (BMPs)-** Measures taken to minimize negative effects on the environment including those documented in the Minnesota Stormwater Manual.

**Board or Board of Managers-** The Board of Managers of the Ramsey-Washington Metro Watershed District.

**Clean Water Act-** The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

**Common Plan of Development or Sale-** A contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land disturbing activities may occur.

**Compensatory Storage-** Excavated volume of material below the floodplain elevation required to offset floodplain fill.

**Criteria-** Specific details, methods and specifications that apply to all permits and reviews and that guide implementation of the District's goals and policies.

**Critical Duration Storm Event-** Storm duration that produces the largest peak discharge rates within a channel or storm sewer system and the highest water surface elevation within a water body.

**Development-** Any land disturbance, redevelopment affecting land, or creation/replacement of impervious surface, including but not limited to, road and/or parking lot construction or reconstruction.

**Disconnected Impervious-** Impervious surface that directs runoff to adjacent pervious areas where it can be infiltrated.

**District-** The Ramsey-Washington Metro Watershed District established under the Minnesota Watershed Law, Minnesota Statutes Chapter 103D.

**Drainage Way-** All water conveyance systems including but not limited to storm sewers, ditches, culverts, and open channels.

**Erosion-** The wearing away of the ground surface as a result of wind, flowing water, ice movement, or land disturbance.

**Erosion and Sediment Control Plan-** A plan of BMPs or equivalent measures designed to control runoff and erosion and to retain or control sediment on land during the period of land disturbance in accordance with the standards set forth in these Rules.

**Excavation-** The artificial displacement or removal of soil or other material.

**Fill-** The deposit of soil or other earth materials by artificial means.

**Floodplain-** The area adjoining a watercourse or natural or man-made water body, including the area around lakes, marshes, and lowlands, that is inundated during a 100-year flood.

**Freeboard-** The vertical distance between the regulatory high water elevation calculated by hydrologic modeling and the regulatory elevation on a structure or roadway.

**Gross Pollutants-** Larger particles of litter, vegetative debris, floatable debris, and coarse sediments in stormwater runoff.

**Habitable-** Any enclosed space usable for living or business purposes, which includes but is not limited to: working, sleeping, eating, cooking, recreation, office, office storage, or any combination thereof. An area used only for storage incidental to a residential use is not included in the definition of "Habitable."

**Hazardous Materials-** Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

**Illicit Connection-** An illicit connection is defined as either of the following:



1. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system, including but not limited to: any conveyances which allow any non-stormwater discharge including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by a political subdivision; or
2. Any drain or conveyance connected from a commercial or industrial land use to the storm drain system that has not been documented in plans, maps, or equivalent records and approved by a political subdivision.

**Illicit Discharge-** Any direct or indirect non-stormwater discharge to the storm drain system, except as exempted in Paragraph 5 of Rule G in these Rules.

**Impaired Waters-** A waterbody that does not meet water quality standards and designated uses because of pollutant(s), pollution, or unknown causes of impairment.

**Impervious Surface-** A surface compacted or covered with material so as to be highly resistant to infiltration by runoff. Impervious surface shall include roads, driveways and parking areas, sidewalks or trails greater than three feet wide, whether or not paved, patios, tennis and basketball courts, buildings with roofs, covered decks and other structures.

**Infiltration-** A stormwater retention method for the purpose of reducing the volume of stormwater runoff by transmitting a flow of water into the ground through the earth's surface.

**Infiltration Area-** An area set aside or constructed where stormwater from impervious surface runoff is treated and disposed of into the soil by percolation and filtration, and includes but is not limited to: infiltration basins, infiltration trenches, dry wells, underground infiltration systems, and permeable pavement.

**Iron-Enhanced Sand-** Any Best Management Practices (BMPs) that incorporate filtration media mixed with iron to remove dissolved phosphorus from stormwater.

**Land Disturbance-** Any activity that results in a change or alteration in the existing ground cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include but are not limited to: development, redevelopment, demolition, construction, reconstruction, clearing, grading, filling, stockpiling, excavation, and borrow pits.

**Linear Cost Cap-** Maximum required costs specific to satisfying the onsite volume reduction and water quality standards for linear projects

**Linear Project-** Roads, trails, and sidewalks that are not part of a common plan of development or sale.

**Low Floor-** The floor of the lowest enclosed area including the basement. An unfinished or flood-resistant enclosure, used solely for parking of vehicles, building access, or storage in an area other than a basement area shall not be considered a building's lowest floor.

**Low Opening-** The elevation of the lowest hydraulically connected entry point to a structure such as a door or window.

**Municipal Separate Storm Sewer System (MS4)-** The conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutter, ditches, man-made channels, or storm drains):

1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian organization, or a designated and approved management Agency under section 208 of the Clean Water Act (33 U.S.C § 1288) that discharges to waters of the United States;
2. Designed or used for collecting or conveying stormwater;
3. Which is not a combined sewer; and
4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR § 122.2.

**Municipality-** Any city wholly or partly within the Ramsey-Washington Metro Watershed District.

**National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge**

**Permit-** A permit issued by the Minnesota Pollution Control Agency that authorizes the discharge of pollutants to waters of the State.

**Non-Point Source Pollution-** Pollution that enters a water body from diffuse origins in the watershed and does not result from discernable, confined, or discrete conveyances.

**Non-Stormwater Discharge-** Any discharge to the storm drain system that is not composed entirely of stormwater.

**Ordinary High Water Level (OHW)-** The elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape. The ordinary high water level is commonly the point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the OHW level is the elevation of the top of the bank of the channel. For Public Waters and Public Waters Wetlands, the Minnesota Department of Natural Resources (DNR) determines the OHW.

**Owner-** A person or entity who has legal title to a parcel of land or a purchaser under a contract for deed.

**Parcel-** A parcel of land designated by plat, metes and bounds, registered land survey, auditor's subdivision, or other acceptable means and separated from other parcels or portions by its designation.

**Permittee-** The person or political subdivision in whose name a permit is issued pursuant to these Rules.

**Person-** Any individual, trustee, partnership, unincorporated association, limited liability company or corporation.

**Political Subdivision-** A municipality, county, or other political division, agency, or subdivision of the state.

**Pollutant-** Anything which causes or contributes to pollution. Pollutants may include but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes; yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances and accumulations; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

**Potential Stormwater Hotspots (PSHs)-** Commercial, industrial, institutional, municipal, or transportation-related operations that may produce higher levels of stormwater pollutants and/or present a higher potential risk for spills, leaks, or illicit discharges. PSHs may include, but are not limited to: gas stations, petroleum wholesalers, vehicle maintenance and repair facilities, auto recyclers, recycling centers and scrap yards, landfills, solid waste facilities, wastewater treatment plants, airports, railroad stations and associated maintenance facilities, and highway maintenance facilities.

**Public Waters-** Any waters as defined in Minnesota Statutes Section 103G.005, Subdivision 15.

**Public Water Wetlands-** Any wetlands as defined in Minnesota Statutes Section 103G.005, Subdivision 15a.

**River Dependent-** An activity or land use that relies on direct access to or use of the Mississippi River.

**Rules-** Regulations of the Ramsey-Washington Metro Watershed District intended to conserve the natural resources of the state by land use planning, flood control, and other conservation projects for the protection of the public health and welfare, and the provident use of the natural resources

**Runoff-** Rainfall, snowmelt, or irrigation water flowing over the ground surface.

**Seasonal High Groundwater-** The highest seasonal elevation in the ground that has soil voids that fill with water.

**Sediment-** Soil or other surficial material transported by surface water as a product of erosion.

**Sedimentation-** The process or action of depositing sediment.

**Sequencing Flexibility-** Deviation from the standard sequencing process as described in MN Rule 8420.0520, Subp. 7a.

**Sewage-** Waste produced by, including but not limited to: toilets, bathing, laundry, culinary operations, or the floor drains associated with these sources.

**Standards-** A preferred or desired level of quantity, quality, or value.

**Storm Drain System-** Publicly-owned facilities by which stormwater is collected and/or conveyed, including but not limited to: roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

**Stormwater-** Any surface flow, runoff, or drainage consisting entirely of water from any form of natural precipitation and resulting from such precipitation.

**Stormwater Impact Fund-** RWMWD administered fund into which an applicant may contribute money as a last alternative to providing onsite stormwater treatment per the alternative compliance sequencing outlined in Rule C.

**Stormwater Management Plan-** A plan for the permanent management and control of runoff prepared and implemented in accordance with the standards set forth in these Rules.

**Stormwater Pollution Prevention Plan (SWPPP)-** A document which describes the best management practices and activities to be implemented by a permittee to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or waterbodies to the maximum extent practicable.

**Stream-** A body of water continuously or intermittently flowing in a channel or watercourse, as a river, rivulet, or brook.

**Structure-** Anything manufactured, constructed, or erected which is normally attached to or positioned on land, including: portable structures, earthen structures, roads, water and storage systems, drainage facilities, and parking lots.

**Subdivision or Subdivide-** The separation of an area, parcel, or tract of land under single ownership into two or more parcels, tracts, or lots.

**Wastewater-** Any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

**Water Basin-** An enclosed natural or created depression with definable banks capable of containing water that may be partly filled with public waters.

**Waterbody-** All water basins, watercourses, and wetlands as defined in these Rules.

**Watercourse-** A natural or improved stream, river, creek, ditch, channel, culvert, drain, gully, swale, or wash in which waters flow continuously or intermittently in a defined direction.

**Watershed-** Region draining to a specific watercourse or water basin.

**Wetland-** Land transitional between terrestrial and aquatic systems as defined in Minnesota Statutes Section 103G.005, Subdivision 19.

**Wetland Conservation Act (WCA)-** Minnesota Wetland Conservation Act of 1991.

---

## **Rule B: PERMIT PROCEDURAL REQUIREMENTS**

- 1. APPLICATION REQUIRED-** Any person, or political subdivision undertaking an activity for which a permit is required by these Rules shall, prior to commencing work, submit to the District a permit application, engineering design data, plans, specifications, and other applicable information and exhibits as may be required by these Rules. Permit applications shall be signed by the owner or the owner's authorized agent, except for activities of a political subdivision which may be signed by either an authorized agent and submitted online via the District's website.
- 2. FORMS.** Permit applications must be submitted via the form provided by the District. Applicants may obtain and submit these forms online at the District's website: [www.rwmwd.org](http://www.rwmwd.org).
- 3. TIME FOR APPLICATION.** A complete permit application which includes all required exhibits shall be received by the District at least 21 calendar days prior to a regularly scheduled meeting date of the Board of Managers. Late submittals or submittals with incomplete exhibits will be scheduled to a subsequent meeting date.
- 4. ACTION BY BOARD.** The Board of Managers shall approve or deny an application containing all required information, exhibits and fees, in accordance with Minnesota Statutes, Section 15.99, as amended. Conditional approval may be granted to applications with administrative and/or minor plan edits required.

Application approval or conditional approval does not authorize work or regulated activity until the permit is issued. An exception to Manager approval may be made for single-lot residential permit applications not requesting a variance.

- 5. ISSUANCE OF PERMITS.** The District shall issue a permit only after the applicant has satisfied all requirements for the permit, has paid all required District fees, and the District has received any required surety. All activity under the permit shall be done in accordance with the approved plans and specifications unless modifications are approved by the District as stated in Rule B.8 Modifications.
- 6. COMPLIANCE.** Issuance of a permit based on plans, specifications, or other data shall not prevent the District from thereafter requiring the correction of errors in the approved plans, specifications, and data, or from preventing any activity in violation of these Rules.
- 7. EXPIRATION.** A permit shall expire if the permitted activity is not commenced within one year from date of approval by the Board, or if the permitted activity is suspended or abandoned for a period of one year from the date the activity originally commenced. Before activity on an expired permit can recommence, a new permit application may be required with the associated permit fees, unless alternate arrangements are approved by the District. The Board shall consider the new application on the basis of the Rules in effect on the date the application is received.
- 8. EXTENSION.** A permittee may apply for an extension of time to complete any remaining conditions or commence the approved activity under an unexpired permit application when the permittee is unable to commence the activity within a year from the date of approval as outlined by these Rules. Request for an extension of a permit approval must be in writing and state the reasons for the extension. Any plan changes and required fees must be included with the extension request. There must be no unpaid fees or other outstanding violations of the permit approval being extended. The request must be received by the District at least 30 days prior to the permit approval's expiration. The Board shall consider the request for an extension on the basis of the Rules in effect on the date the application is being considered. The Board may extend the time for commencing the approved activity for a period not exceeding one year upon finding that circumstances beyond the control of the permittee have prevented action from being taken.
- 9. MODIFICATIONS.** The permittee shall not modify the approved activity or deviate from the plans and specifications on file with the District without the prior approval of the District. Significant modifications may require Board approval.
- 10. INSPECTION AND MONITORING.** After issuance of a permit, the District may perform such field inspections and monitoring of the approved activity as the District deems necessary to determine compliance with the conditions of the permit and these Rules. Any portion of the activity not in compliance shall be promptly corrected. In applying for a permit, the applicant consents to the District's

entry upon the land for field inspections and monitoring, or for performing any work necessary to bring the activity into compliance at the permittee's expense.

**11. SUSPENSION OR REVOCATION.** The District may suspend or revoke a permit issued under these Rules wherever such approval or issuance is based on incorrect information supplied, or in violation of any provision of these Rules, or if the preliminary and final subdivision approval received from a municipality or county is not consistent with the conditions of the permit.

**12. CERTIFICATION OF COMPLETION.** The District shall certify completion of an activity for which a permit has been issued under these Rules and authorize the release of any required surety upon inspection and submittal of information verifying completion of the activity in accordance with the approved plans and conditions of the permit. Verification of stormwater practice functionality such as a flood test or other in-field test or observation shall be conducted in the presence of District staff or other authorized third party or documented in a report submitted to the District before completion can be certified and any surety released. Copies of documents, with evidence of recording where appropriate, that provide for maintenance of structures required by the permit shall be filed with the District before completion can be certified and any surety released. All temporary erosion prevention and sediment control BMPs must be removed following approval of a Certificate of Completion before any surety can be released. No activity may be certified as complete if there are any unpaid fees or other outstanding permit violations. If the District fails to make a determination as to compliance of an activity with the conditions of the permit within 60 days after submittal of the foregoing information verifying completion, the activity shall be deemed complete and any surety shall thereupon be released, unless seasonal conditions prohibit verification of stormwater practice functionality.

**13. PERMIT TRANSFERS.** The District may allow the transfer of a permit. No permit shall be transferred if there are any unpaid fees or other outstanding permit violations. Transfer of a permit does not alter the requirements of the permit or extend the permit term. In the event that a permit is transferred, the original permittee shall remain liable for the permit requirements unless (1) the transferee and transferor submit a Permit Transfer Form to the District or (2) the District approves a new permit for the transferee.

**14. PERMIT PROCESSING FEES.** The District shall charge the permit processing fees in accordance with a schedule adopted by written resolution of the Board of Managers and conforming to Minnesota Statutes 103D.345.

- (a) Applicant must submit the required permit processing fee to the District at the time it submits its permit application.

- (b) The processing fees described above shall not be charged to the federal government, the State of Minnesota, or a political subdivision of the State of Minnesota.
- (c) Any person or political subdivision performing an activity for which a permit is required under these Rules without having first obtained a permit from the District, shall pay, in addition to such fines, court costs or other amounts as may be payable by law as a result of such violation, a field inspection fee equal to the actual cost to the District for field inspections, monitoring, and investigation of such activity, including services of engineering, legal and other consultants. The field inspection fee shall be payable within 10 calendar days after issuance of a statement by the District. No permit shall be issued for the activity if there are any unpaid field inspection fees or other outstanding violations of these Rules.

**15. PERFORMANCE SURETY.** To assure compliance with these Rules, the District will require permit applicants to post a performance surety where the District determines that it is reasonable and necessary under the particular circumstances of any permit application filed with the District. The District shall determine the amount of any performance surety in accordance with a schedule adopted by written resolution of the Board of Managers. A performance surety will not be required of the federal government, the State of Minnesota, or a political subdivision of the State of Minnesota.

**16. OTHER PERMITS AND APPROVALS.** The applicant shall promptly provide the District with copies of all environmental permits and approvals required by other governmental entities, upon request.

---

## **Rule C:      STORMWATER MANAGEMENT**

- 1.      POLICY.** It is the policy of the Board of Managers to:
  - (a) Reduce runoff rates to levels that allow for stable conveyance of flow through watersheds in the District.
  - (b) Require rate control practices on development to preserve runoff rates at a level that shall not cause the degradation of the watershed.
  - (c) Limit runoff volumes by utilizing site designs that limit impervious surfaces or incorporate volume control practices such as infiltration.
  - (d) Minimize connectivity of impervious surfaces to the stormwater system.
  - (e) Require the use of effective non-point source pollution reduction BMPs in development projects.



- (f) Protect and maintain downstream drainage systems to provide permanent and safe conveyance of stormwater. Reduce the frequency and/or duration of potential downstream flooding.
  - (g) Reduce the total volume of stormwater runoff to protect surface water quality and provide recharge to groundwater.
  - (h) Remove sediment, pollutants, and nutrients from stormwater to protect surface water quality.
2. **REGULATION.** No person or political subdivision shall commence a land disturbing activity or the development of land one acre or greater, unless specifically exempted by Paragraph 5 below, without first obtaining a permit from the District that incorporates and approves a stormwater management plan for the activity or development.
3. **CRITERIA.** Stormwater management plans must comply with the following criteria:
- (a) **Hydrograph Method.** A hydrograph method based on sound hydrologic theory shall be used to analyze runoff for the design or analysis of flows and water levels. Reservoir routing procedures and critical duration storm events shall be used for design of detention basins and outlets.
  - (b) **Runoff Rate.** Runoff rates for the proposed activity shall not exceed existing runoff rates for the 2-year, 10-year, and 100-year critical storm events using Atlas 14 precipitation depths and MSE3 storm distributions, or as approved by the District. Runoff rates may be restricted to less than the existing rates when the capacity of downstream conveyance systems is limited.
  - (c) **Runoff Volume.** Stormwater runoff shall be retained onsite in the amount equivalent to 1.1 inches of runoff over the new and reconstructed impervious surfaces of the development. The required stormwater runoff volume shall be calculated as follows:  
  
**Required Stormwater Runoff Volume (ft<sup>3</sup>) = Impervious surfaces (ft<sup>2</sup>) x 1.1 (in) x 1/12 (ft/in)**
    - (1) For infiltration of the required stormwater runoff volume, the following requirements must be met:
      - (i) Infiltration volumes and facility sizes shall be calculated using the appropriate hydrologic soil group classification and design infiltration rate from the Minnesota Stormwater Manual. Select the design infiltration rate from the Minnesota Stormwater Manual based on the least permeable soil horizon within the first five feet below the bottom elevation of the proposed

infiltration BMP.

- (ii) The required stormwater runoff storage volume shall be provided below the invert of the low overflow outlet of the BMP.
- (iii) Runoff infiltrated during a rain event will not be credited towards the volume reduction requirement.
- (iv) Volume reduction credit shall not exceed the volume of 2.5 inches over the impervious surfaces of the drainage area to the BMP or the volume provided within the BMP, whichever is less.
- (v) The applicant may complete double-ring infiltrometer testing to the requirements of ASTM D3385 or other District approved infiltration test measurements at the proposed bottom elevation of the infiltration BMP. The measured infiltration rate shall be divided by the appropriate correction factor selected from the Minnesota Stormwater Manual. This test must be completed by a licensed soil scientist or engineer.
- (vi) The infiltration area shall be capable of infiltrating all all stormwater routed to the system through the uppermost soil surface or engineered media within 48 hours. for surface and subsurface BMPs. Additional flows that cannot infiltrate within the required 48 hours must be allowed to bypass the system through a stabilized discharge point.
- (vii) Infiltration areas shall be limited to the horizontal areas subject to prolonged wetting.
- (viii) Areas of permanent pools tend to lose infiltration capacity over time and shall not be accepted as an infiltration practice.
- (ix) Stormwater runoff must be pretreated to remove solids before discharging to infiltration areas to maintain the long term viability of the infiltration areas. Additional information on sizing and approaches can be found in the [Minnesota Stormwater Manual](#).
- (x) Design and placement of infiltration BMPs shall be done in accordance with the Minnesota Stormwater Manual guidance and requirements.
- (xi) Specific site conditions may make infiltration difficult, undesirable, or impossible. Some of these conditions are listed

in Table 1 and may qualify the applicant for Alternative Compliance Sequencing. The applicant may also submit a request to the District for Alternative Compliance Sequencing for site conditions not listed below. All requests shall indicate the specific site conditions present and a grading plan, utility plan, and the submittal requirement listed in Table 1.

| <b>Table 1. Alternative Compliance Site Conditions*</b>   |   |   |
|---|---|---|
| MPCA has limitations for constructing infiltration BMPs if it will receive discharges from or be constructed in these areas of concern. These conditions will apply to this permit.** |   |   |
| <b>Type</b>   | <b>Specific Site Conditions</b>   | <b>Infiltration Requirements</b>                      |
| Potential Contamination   | Potential Stormwater Hotspots (PSHs)/Industrial Facilities                      | Prohibited  |
|   | Contaminated Soils  | Prohibited  |
|   | Vehicle Fueling and Maintenance Areas   | Prohibited  |
| Physical Limitations  | Low Permeability (Type D Soils)   | Prohibited- Soil borings required                     |
|   | Bedrock within 3 vertical feet of bottom of infiltration area                   | Prohibited- Soil borings required                     |
|   | Seasonal High Groundwater within 3 vertical feet of bottom of infiltration area | Prohibited- Soil borings required                     |
|   | Type A soils with infiltration rates greater than 8.3 inches per hour           | Restricted without soil amendments                    |
|   | Karst Areas   | Prohibited- Soil borings required                     |
| Land Use Limitations  | Utility Locations   | Concerned- Site Map with detailed utility locations   |
|   | Adjacent Wells  | Restricted- Well Locations                            |
|   | Bridges   | Concerned- Site Map with detailed bridge restrictions |

\*Alternative Compliance is allowed for the volume reduction portion of Rule C only. Water quality requirements are still required in the form of gross pollutant removal as outlined in Rule C

\*\*Reference the Minnesota Stormwater Manual for more information regarding the MPCA's "contamination screening checklist" and "higher level of engineering review" for infiltration within a Drinking Water Supply Management Area (DWSMA).

(2) Stormwater reuse systems shall be allowed at an approved credit as calculated by the Stormwater Reuse Calculator found in the application guidance materials, or other approved calculator.

(3) **Alternative Compliance Sequencing.** To the maximum extent practicable, the volume reduction requirement shall be fully met onsite. If it is not possible because of site conditions listed above, the following **Alternative Compliance** may be achieved by any

combination of the sequence below but shall be explored in the order presented.

- (i) First, the applicant shall comply or partially comply with the volume reduction requirement to the maximum extent practicable onsite through alternative volume reduction methods as listed below and in the application guidance materials or as approved by the District. If the applicant meets these requirements, the project is compliant, and no further sequencing steps are necessary.
  - If filtration of the water quality volume is deemed necessary through alternative compliance sequencing, the “required stormwater runoff volume” shall be multiplied by 1.82 (i.e. 55% filtration credit), and the filtration BMP shall provide this storage volume below the invert of the low overflow outlet of the BMP (perforated drain pipes for filtration will not be considered the low overflow outlet).
  - If filtration with iron-enhanced sand is used as a filtration media, the “required stormwater runoff volume to be infiltrated” shall be multiplied by 1.25 (i.e. 80% filtration credit), and the filtration BMP shall provide this storage volume below the invert of the low overflow outlet of the BMP (perforated drain pipes for filtration will not be considered the low overflow outlet). Iron-enhanced media shall include a minimum of 5% of iron filings by weight and shall be uniformly blended with filtration media.
  - Other enhanced filtration media may be considered and credited at the sole discretion of the District.
- (ii) Second, for the remaining volume reduction required to fully meet the standard, the applicant shall comply or partially comply with the volume reduction standard at an offsite location or through the use of qualified banking credits as determined by Rule C – 3.c.5.
  - Volume reduction may be accomplished at another site outside of the project area or through the use of banked credits as long as it yields the same volume reduction benefit and is approved by the District prior to construction. When possible, offsite compliance and banking credits shall be achieved in the same drainage area or sub-watershed as the project site. Projects that propose to construct stormwater BMPs to achieve volume reduction credits may require District permit application, review and approval.

(iii) Third, as a last alternative, for the remaining volume reduction required, the applicant shall pay into the District's Stormwater Impact Fund (SIF) to cover the cost of implementing equivalent volume reduction elsewhere in the watershed. The required amount to contribute to the Stormwater Impact Fund shall be set by resolution of the Board.

- Money contributed to the Stormwater Impact Fund from a local government unit shall be spent within that local government unit's jurisdiction to the extent possible.
- Money contributed to the Stormwater Impact Fund shall be allocated to volume reduction projects by the District according to the Stormwater Impact Fund Implementation Plan as approved by the District Board. The volume reduction achieved by these projects shall offset the volume reduction that was not achieved on with the permitted development.
- Linear projects proposing to meet full or partial volume reduction requirements through Stormwater Impact Fund (SIF) contribution shall be assessed at the full SIF rate for the amount of SIF contribution being requested

(4) Regional Stormwater Treatment Facilities

- (i) For projects within the drainage area of an existing or planned future regional stormwater facility, the sequencing requirements may be waived if it has been determined by RWMWD that the benefits are equivalent or greater than an onsite treatment practice.
- (ii) Applicants must either utilize volume reduction credits or contribute to the Stormwater Impact Fund.

(5) Volume reduction provided in excess of the required treatment volume may be banked for use on another project or used to compensate for under-treated drainage areas within the same project. Volume reduction credits will be calculated based on the physical volume constructed above and beyond the required treatment volume pursuant to Section C.3.c.3.i-iii 'Alternative Compliance Sequencing. Volume reduction credit shall not exceed the volume of 2.5 inches over the impervious surfaces of the drainage area to the BMP or the volume provided within the BMP, whichever is less.

(6) Transfer of banked volume credits between applicants is allowed. Applicants shall submit a written request to the District outlining the

conditions of the transfer and confirming the volume of the transfer. The District must review and approve all credit transfers.

- (7) If an applicant determines during the course of planning, design or construction of a project that the required volume reduction cannot be achieved onsite and the applicant does not possess sufficient excess volume reduction credits to offset the volume required, the District may allow the applicant to defer the construction of volume reduction BMPs to a future identified project that the applicant will complete within two years of the date of the permit application. Failure to provide the required volume reduction by that date would obligate the applicant to pay into the Stormwater Impact Fund at the rate applicable at the time payment is made into the fund, unless alternative arrangements are approved by the District. If volume reduction is deferred, rate control requirements must still be met at any given time of the project.

- (d) **Water Quality.** Developments shall incorporate effective non-point source pollution reduction BMPs to achieve 90% total suspended solids (TSS) removal from the disturbed area of the project on an annual basis. Runoff volume reduction BMPs may be considered and included in the calculations towards compliance with achieving the 90% TSS removal requirement. Water quality calculations, documentation and/or water quality modeling may be requested to verify compliance with the standard. Documentation of 90% TSS removal is not required for projects that achieve compliance through Stormwater Impact Fund contributions.

- (1) Drainage areas that directly discharge to a wetland, river, lake, or stream shall meet the water quality standard onsite, regardless of any alternative compliance being proposed for the project. At a minimum, BMPs to remove gross pollutants shall be placed in each drainage area of the development that discharges directly to a wetland, river, lake, or stream.
- (2) Costs associated with implementation of gross pollutant removal devices may not be deducted from Stormwater Impact Fund contributions and do not result in adjustments to banked volume credit withdrawals.

- (e) **Linear Projects.** Costs specific to satisfying the onsite volume reduction and water quality requirements on linear projects need not exceed a cost cap which will be set by resolution of the Board. The cap shall apply to costs directly associated with the design, testing, land acquisition, and construction of the volume reduction and water quality stormwater BMPs only. Unit costs for construction shall be used to determine the cost of the volume reduction and water quality BMPs, and must be reviewed and approved by the District. The District may contribute an amount above the cap in order to meet the volume reduction and water quality requirements

or it may allow the applicant to partially comply with the standards when the cap is met. Volume constructed in excess of the required volume to meet the linear cost cap may be deposited into the District's volume reduction bank. At a minimum, BMPs to remove gross pollutants shall be placed onsite in each drainage area that discharges directly to a wetland, river, lake, or stream. If volume reduction is partially achieved due to the cost cap, rate control requirements must still be met at any given time of the project.

- (f) **Maintenance.** All stormwater water management structures and facilities, including volume reduction BMPs, shall be maintained to assure that the structures and facilities function as originally designed. Applicants shall submit a site-specific plan, schedule and narrative for maintenance of the proposed stormwater management BMPs. The maintenance responsibilities must be assumed by either the municipality's acceptance of the required easements dedicated to stormwater management purposes or by the applicant executing and recording a maintenance agreement acceptable to the District. Documentation of the recorded agreement must be submitted to the District prior to issuance of permit. Public developments shall require a maintenance agreement in the form of a Memorandum of Agreement or an approved Local Water Management Plan that details the methods, schedule, and responsible parties for maintenance of stormwater management facilities for permitted development. A single Memorandum of Agreement for each local government unit may be used to cover all stormwater management structures and facilities required herein, including volume reduction BMPs, within the LGU's jurisdiction.

**4. EXHIBITS.** The following exhibits must accompany the online permit application in electronic .pdf format.

- (a) Property lines and delineation of lands under ownership of the applicant.
- (b) Delineation of the drainage areas contributing runoff from off-site, proposed and existing sub-watersheds onsite, emergency overflows, and drainage ways.
- (c) Aerial photo showing the locations of water bodies downstream of the site.
- (d) Proposed and existing stormwater facilities' location, alignment, and elevation.
- (e) Delineation of existing onsite wetlands, marshes, shoreland, and floodplain areas.
- (f) Identification of existing and proposed normal, ordinary high, and 100-year water elevations onsite.

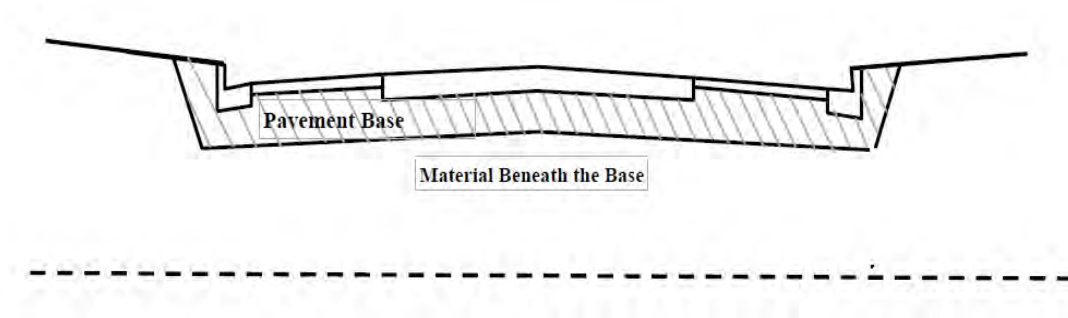
- (g) Identification of existing and proposed site contour elevations with at least a 2-foot contour interval including offsite contours where overflows are directed.
- (h) Construction plans and specifications of all proposed stormwater management facilities, including design details for outlet control structures.
- (i) Stormwater runoff volume and rate analysis for the 2-year, 10-year, and 100-year critical storm events, existing and proposed.
- (j) All hydrologic, water quality, and hydraulic computations completed to design the proposed stormwater management facilities.
- (k) Narrative addressing incorporation of stormwater BMPs, including individual BMP storage volumes and pretreatment method(s) used.
- (l) For non-linear projects, a site-specific plan, schedule, and narrative for ongoing maintenance of the proposed stormwater management BMPs.
- (m) Onsite soil borings within the footprint of the proposed stormwater BMP indicating soil type for purposes of selecting the appropriate design infiltration rates and verifying depth to seasonally high groundwater. Borings should extend a minimum 5 feet below the bottom of the proposed BMP. Number of borings should be in accordance with Minnesota Stormwater Manual recommendations.
- (n) For applications proposing infiltration area(s), information shall include identification, description (soil group and texture), redoximorphic features, and delineation of site soils to determine existing and proposed conditions suitable for percolation of stormwater runoff from impervious areas. Field evaluation of soil permeability in accordance with ASTM 3385 procedure for double ring infiltrometer testing or other approved method is encouraged.
- (o) For applications proposing alternative compliance sequencing, the required exhibits listed in Table 1.
- (p) All plan sheets shall be signed by a Minnesota licensed professional appropriate for the project.

## 5. EXCEPTIONS.

- (a) Rule C and its requirements shall not apply to land disturbing activity or the development of land that creates 100% pervious surfaces post-construction, unless the land disturbing activity or the development of land alters the drainage boundaries shown in the District's Watershed Management Plan.



- (b) Rule C and its requirements shall not apply to development less than 1 acre in size for all land uses unless the development is part of a common plan of development or sale that will ultimately exceed one acre in size. An applicant applying for a new permit under a common plan of development must meet the current Rules at the time of the submittal.
- (c) Rule C and its requirements shall not apply to construction on individual lots within a residential subdivision approved by the District, provided the activity complies with the original common plan of development.
- (d) Rule C and its requirements shall not apply to bridges.
- (e) Rule C and its requirements shall not apply to annually cultivated land used for farming, research, or horticulture.
- (f) Rule C and its requirements shall not apply to routine vegetation maintenance and pavement milling/overlaying activities that do not disturb the material beneath the pavement base and shall not be considered land disturbance (see example below):



(g) Rule C and its requirements shall not apply to disconnected impervious that meets all of the following conditions:

- Sidewalks and trails that are not parallel to, or alongside a roadway
- Maximum sidewalk or trail width of 10'
- Minimum 15' vegetated separation from any storm sewer conveyance including parking lots and ditches
- Maximum 5% slope
- Documented Type A or B soils conducive to infiltration

Sidewalks and trails parallel to roadways must still be included in impervious surface calculations.

## **Rule D: FLOOD CONTROL**

- 1. POLICY.** It is the policy of the Board of Managers to:
  - (a) Encourage water quantity controls to ensure no net increase in the impacts or potential for flooding on or off the site and encourage, where practical, controls to address existing flooding problems.
  - (b) Discourage floodplain filling for new non-river dependent developments.
  - (c) Only allow floodplain development in a manner that is compatible with the dynamic nature of floodplains.
- 2. REGULATION.** No person or political subdivision shall alter or fill land below the 100-year flood elevation of any waterbody, public water, or public water wetland without first obtaining a permit from the District.
- 3. CRITERIA.**
  - (a) Placement of fill within the 100-year floodplain is prohibited unless compensatory storage is provided. Compensatory storage must be provided on the development or immediately adjacent to the development within the affected floodplain.
    - (1) Compensatory storage shall result in the creation of floodplain storage to fully offset the loss of floodplain storage. Compensatory storage shall be created prior to or concurrently to the permitted floodplain filling.
  - (b) All habitable buildings, roads, and underground parking structures on or adjacent to a project site shall comply with the following flood control and freeboard requirements:
    - (1) See Table 2 for freeboard requirements on following page.

| <b>Table 2. Flood Control and Freeboard Requirements</b>                                  |   |   |   |
|---|---|---|---|
| <b>Condition</b>  | <b>Waterbodies with Piped Outlets and Mississippi River</b>   | <b>Waterbodies without Piped Outlets</b>                                    | <b>Subsurface Stormwater Management BMPs</b>  |
| <b>New Habitable Buildings*</b>   | Low floor must be a minimum of 2 feet above the 100-year flood elevation.   | Low floor must be a minimum of 5 feet above the 100-year flood elevation.   | Low floor must be a minimum of 2 feet above the 100-year flood elevation or one foot above the emergency overflow elevation unless flood-proofing measures are constructed with the building.<br><br><b>AND</b><br>Low opening must be a minimum of 2 feet above the 100-year flood elevation or one foot above the emergency overflow elevation. |
| <b>Existing Habitable Buildings- Adjacent to and Potentially Affected by Flood Waters</b> | Low opening must be a minimum of 2 feet above the 100-year flood elevation.   | Low opening must be a minimum of 5 feet above the 100-year flood elevation. | Low floor must be a minimum of 2 feet above the 100-year flood elevation or one foot above the emergency overflow elevation unless flood proofing measures are constructed with the BMP.<br><br><b>AND</b><br>Low opening must be a minimum of 2 feet above the 100-year flood elevation or one foot above the emergency overflow elevation.      |
| <b>Underground Parking Structures</b>   | Low opening must be a minimum of 2 feet above the 100-year flood elevation.   | Low opening must be a minimum of 2 feet above the 100-year flood elevation. | Low opening must be a minimum of 2 feet above the 100-year flood elevation or one foot above the emergency overflow elevation.  |
| <b>Public Roadway</b>   | Roadway shall not flood when adjacent to stormwater storage basin designed to store the 100-year storm event.<br>Freeboard requirement set by road authority. |   |   |

**\*All utilities below the low floor of new manufactured homes must have flood-proofing if located within the 100-year floodplain.**

(2) For waterbodies without a piped outlet:

- i. The normal water level of a waterbody without a piped outlet shall be determined by a qualified licensed geologist or hydrogeologist. A groundwater analysis using existing or installed monitoring wells on or near the site and soil conditions in the basin shall be used. Ideally, the peak groundwater elevation over a continuous three-year monitoring period shall be considered the normal water level

of a basin without a piped outlet, provided soil conditions allow full drainage of recent storm event within 48 hours.

- ii. For existing waterbodies without piped outlets, mottled soils may be considered in establishing a waterbody's normal water level in lieu of groundwater analysis.
- iii. An emergency response plan shall be developed for addressing potential flooding in homes below the overland emergency overflow swale around each waterbody without a piped outlet. The plans shall be adopted by the City and be included in a maintenance agreement for the development.

(3) For underground parking structures:

- i. Underground parking structures shall be flood-protected to minimize impacts from high groundwater during flood events.
- ii. All drainage structures within underground parking shall include an anti-backflow device to prevent stormwater from surcharging into the area.

(4) Emergency overflow swales or areas shall be constructed to convey the peak 100-year discharge from each waterbody to the next downstream waterbody and away from buildings.

**4. EXHIBITS.** The following exhibits must accompany the online permit application in electronic .pdf format.

- (a) Site plan showing the property lines, location, delineation of the work area, existing elevation contours of the work area, ordinary high water elevations, and 100-year flood elevation.
- (b) Bench marks, including datum used, to establish vertical control.
- (c) Grading plan showing any proposed elevation changes including low floor elevations of adjacent buildings and 100-year flood elevations resulting from proposed development.
- (d) Utility plans and details.
- (e) Roadway plans and details.
- (f) Preliminary plat of any proposed land development.
- (g) Stormwater management plan showing all data and computations used in estimating runoff, drainage areas, stormwater storage, and flood elevations

for the 2-year, 10-year, and 100-year storm events for both existing conditions and post development conditions. The plan shall be prepared and signed by a qualified professional engineer licensed in the State of Minnesota or a qualified hydrologist. The plan shall include a figure of receiving waterbodies downstream of the site.

- (h) Computation of change in flood storage capacity resulting from proposed grading.
- (i) Erosion control plan.
- (j) All plan sheets shall be signed by a Minnesota licensed professional appropriate for the project.

---

## **Rule E: WETLAND MANAGEMENT**

1. **POLICY.** It is the policy of the Board of Managers to:
  - (a) Manage wetlands to achieve no-net loss in the quantity, quality, and biological diversity of wetlands in the District.
  - (b) Increase the quantity, quality, and biological diversity of wetlands in the District by restoring or enhancing diminished or drained wetlands.
  - (c) Avoid impacts from activities that destroy or diminish the quantity, quality, and biological diversity of District wetlands.
  - (d) Replace affected wetlands where avoidance is not feasible and prudent.
  - (e) Encourage natural vegetation around wetlands to maintain the water quality and ecological functions that wetlands provide.
2. **REGULATION.** The regulation of Rule E is as follows:
  - (a) **AUTHORITY UNDER WETLAND CONSERVATION ACT (WCA).** The Wetland Conservation Act, as amended, and its implementing rules as set forth in Minnesota Rules Chapter 8420, as amended, are incorporated as part of this rule and shall govern draining, filling, excavating, and other alteration of a wetland The District intends to serve as the Local Government Unit (LGU) responsible for administering WCA, unless another LGU has elected to assume that role within its jurisdictional area. Wetland impacts shall be governed by the Wetland Conservation Act with the following exceptions:
    - (1) Sequencing flexibility shall not be allowed;

- (2) Wetland replacement, where permitted, shall be in accordance with the following prioritization for the location of the replacement wetland (both constructed and banked):
  - (i) Onsite replacement is most preferred;
  - (ii) Within the same subwatershed;
  - (iii) Within the District;
  - (iv) Outside of the District is the least preferred.
- (3) Permanently impacted wetlands shall be replaced through creation of new wetland, restoration of drained wetlands, or expansion of existing wetlands of the same type (Circular 39) at a minimum 2:1 ratio.

(b) **AUTHORITY UNDER WATERSHED LAW.** The criterion below relates to wetland buffers and water quality and is adopted under the District's watershed authority and applies whether or not the District is the Wetland Conservation Act local government unit (LGU) in the municipality where the wetland is located.

### 3. CRITERIA.

- (a) All stormwater must be treated to the water quality standard outlined in Rule C.d.1 before discharged to a wetland, regardless of any alternative compliance relevant to the project.
- (b) Wetland delineations and other LGU decisions shall be completed and submitted to the District on existing wetlands on the entire parcel for development.
  - (1) Data sheets shall be submitted with detailed information on field indicators (soils, hydrology, and vegetation) and a summary report.
  - (2) Wetland delineations shall be performed and submitted for review during the normal growing season for this area of the State (May 1 – October 15). Delineations performed outside of this time frame may or may not be permitted by the District. Review and approval shall be dependent on potential wetland impact in relation to the entire development or project. This decision is at the sole discretion of the District.
  - (3) Wetland boundaries shall be staked in the field for review and approval.

- (4) Wetland delineations shall remain valid for five years from District approval. Field verification may be required after the initial approval and within those five years.
- (c) Most wetlands in the District have been classified using MnRAM 3.4 and are identified in the District's Watershed Management Plan. The classifications are used for management of wetlands in the District and to establish required buffer widths. If a MnRAM assessment has not been completed for a wetland, the most stringent classification shall be assumed (Manage A). The following steps shall be followed for challenging of a wetland classification:
- (1) The wetland shall be assessed by a qualified wetland specialist using MnRAM version 3.4 or current version and between the dates of May 1 and October 15.
  - (2) MnRAM 3.4 or current version<sup>7</sup> data completed by the applicant and narrative justification for classification change shall be submitted.
  - (3) District staff shall review the data and justification and provide a recommendation to the Board of Managers.
  - (4) The District Board of Managers shall approve or deny the classification change request.
- (d) Wetland buffers shall be required for all developments adjacent to a wetland whether or not the wetland is located on the same parcel as the proposed development.
- (1) Table 4 outlines the classifications of wetlands and the corresponding no-disturb buffer widths and minimums that must be met:

| <b>Table 3. Wetland Buffer Widths</b> |           |          |           |
|---------------------------------------|-----------|----------|-----------|
| Wetland Classification                | Manage A  | Manage B | Manage C  |
| Average Buffer Width                  | 75 feet   | 50 feet  | 25 feet   |
| Minimum Buffer Width                  | 37.5 feet | 25 feet  | 12.5 feet |

- (2) New and existing ponds constructed for water quantity and quality adjacent to new development shall maintain a 10-foot vegetative buffer from the normal water level.
- (3) Stormwater management BMPs shall not be allowed to be constructed in the buffer area.

- (4) Wetland replacement through mitigation shall be allowed in the buffer area provided mitigation of buffer disturbance is also provided adjacent to wetland replacement. Mitigation wetlands are deemed Manage A with associated required buffer widths.
- (5) A permanent wetland buffer monument shall be installed at each lot line where it crosses a wetland buffer, and where needed to indicate the contour of the buffer, with a maximum spacing of two hundred (200) feet of wetland edge.
- (6) Where acceptable vegetation exists in buffer areas, the retention of such vegetation in an undisturbed state is required unless an applicant receives approval by the District to replace such vegetation. A buffer strip has acceptable vegetation if it:
  - (i) Has a continuous, dense layer of vegetation or overstory of trees and/or shrubs that have been uncultivated or unbroken for at least five consecutive years, or
  - (ii) Is not composed of undesirable plant species (including, but not limited to: reed canary grass, common buckthorn, purple loosestrife, leafy spurge, and noxious weeds), or
  - (iii) Does not have topography that tends to channelize the flow of surface runoff.
- (7) If the District determines the existing buffer to be unacceptable, the applicant shall maintain the minimum buffer in its undisturbed state but may disturb the remainder of the buffer area as long as the buffer area is re-planted with native species and maintained as a native habitat. The buffer planting must be identified on the permit application and the buffer landscaping shall comply with the following standards:
  - (i) Buffer areas shall be planted with a native seed mix approved by the District, with the exception of a one-time planting with an annual nurse or cover crop such as oats or rye for the purposes of temporary erosion control
  - (ii) The revegetation project shall be performed by a qualified contractor. All methods shall be approved by the District prior to planting or seeding.



- (iii) The seed mix shall be broadcast according to the specifications of the selected mix including date of application. The annual nurse or cover crop shall be applied at a minimum rate of 30 pounds per acre. The seed mix selected for permanent cover shall be appropriate for soil site conditions and yellow tag certified free of invasive species.
- (iv) Native shrubs may be allowed to be substituted for native forbs. All substitutions shall be approved by the District. Such shrubs may be bare root seedlings and shall be planted at eight foot spacing. Shrubs shall be distributed so as to provide a natural appearance and shall not be planted in rows.
- (v) Any groundcover or shrub plantings installed within the buffer area are independent of any landscaping requirements required elsewhere by the municipality or county.
- (vi) Compacted soils in the buffer area shall be loosened to a depth of at least 5" prior to seeding.
- (vii) No fertilizer shall be used in establishing new buffer areas, except on highly disturbed sites when necessary to establish acceptable buffer vegetation and then limited to amounts indicated by an accredited soil testing laboratory.
- (viii) All seeded areas shall be mulched or blanketed immediately in a method approved by the District.
- (ix) Buffer areas (both natural and created) shall be protected by erosion and sediment control measures during construction in accordance with these Rules. The erosion and sediment control measures shall remain in place until the vegetation is established.
- (x) Buffer vegetation shall be actively managed throughout the three-year establishment period. This includes but is not limited to: mowing, overseeding, spot weed control, prescribed burning, and watering.

- (xi) Buffer vegetation shall be established and maintained in accordance with the requirements above. During the first three full growing seasons, the applicant or developer must replant any buffer vegetation that does not survive. The applicant or developer shall specify a method acceptable to the District for monitoring compliance and verifying establishment of the buffer at the end of the third full growing season.

**4. EXHIBITS.** The following exhibits must accompany the online permit application in electronic .pdf format.

(a) Site plan showing:

- (1) Property lines, corners, and delineation of lands under ownership of the applicant.
- (2) Existing and proposed elevation contours with at least a 2-foot contour interval, including the existing run out elevation and flow capacity of the wetland outlet, and spoil disposal areas. Some circumstances may require a 1-foot contour interval.
- (3) Area of the wetland portion to be filled, drained, excavated, or otherwise altered.

(b) Complete delineation of the existing wetland(s), supported by the following documentation:

- (1) Identification of the delineation method used in accordance with the 1987 Army Corps of Engineers Manual.
- (2) Identification of presence or absence of normal circumstances or problem conditions.
- (3) Basin classification using the Cowardin method and Circular 39.
- (4) Wetland data sheets, or a report, for each sample site, referenced to the location shown on the delineation map. In each data sheet/report, the applicant must provide the reasoning for satisfying, or not satisfying, each of the technical criteria and why the area is or is not a wetland.
- (5) A delineation map showing the size, locations, configuration, and boundaries of wetlands in relation to identifiable physical characteristics, such as: roads, fence lines, waterways, or other identifiable features.

- (6) The location of all sample sites and stakes/flags must be accurately shown on the delineation map. Delineations submitted by applicants shall normally be field-verified by District staff.
- (c) A replacement plan, if required, outlining the steps followed for the sequencing process and including documentation supporting the proposed mitigation plan.
- (d) Buffer vegetation management and monitoring plans if necessary.
- (e) An Erosion Control Plan.
- (f) GIS shapefile of the delineation and/or proposed mitigation areas, if applicable.

**5. EXCEPTIONS.** Rule E and its requirements shall not apply to annually cultivated land used for farming, research, or horticulture, unless the activity results in draining or filling the wetland.

---

## **Rule F: EROSION AND SEDIMENT CONTROL**

- 1. POLICY.** It is the policy of the Board of Managers to require the preparation and implementation of erosion and sediment control plans to control the export of sediment offsite, which impacts surface water quality.
- 2. REGULATION.** No person or political subdivision shall commence a land disturbing activity of the development of land one acre or greater, unless specifically exempted by this Rule, without first obtaining a permit from the District that incorporates and approves an erosion and sediment control plan for the activity or development.
- 3. CRITERIA.** Erosion and sediment control plans shall comply with the following criteria:
  - (a) Erosion and sediment control measures shall be consistent with best management practices, and shall be sufficient to retain sediment onsite as demonstrated in the [Minnesota Stormwater Manual](#).
  - (b) Erosion and sediment control measures shall meet the requirements for the General Permit Authorization to Discharge Storm Water Associated With Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program, Permit MN R100001 (NPDES General Construction Permit), issued by the Minnesota Pollution Control Agency, except where more specific requirements are required.

- (c) The activity shall be phased when possible to minimize disturbed areas subject to erosion at any one time.
- (d) All construction site waste, such as discarded building materials, concrete washout, pavement or masonry cutting slurry, chemicals, litter, and sanitary and hazardous waste at the construction site shall be properly managed and disposed of so they shall not have an adverse impact on soil or water quality.
- (e) All turbid or sediment-laden waters related to dewatering must be discharged to a temporary sediment basin on the project site unless infeasible. Permittees must provide appropriate Best Management Practices (BMPs) to water discharged to a surface water such that the discharge does not adversely affect the receiving water or downstream properties. Permittees must continuously monitor discharge to any surface water to ensure adequate treatment has been achieved. Discharge points must be adequately protected from erosion and scour through accepted energy dissipation methods.
- (f) Use of temporary sediment basins are required where 10 or more acres of disturbed soil drain to a common location, or where 5 or more acres of disturbed soil are located within one mile of and discharge to a special or impaired water. Basin design and construction must comply with NPDES General Permit requirements.
- (g) Erosion and sediment controls required at the beginning of the project shall be installed before commencing the land disturbing activity, and shall not be removed without District approval. Applicants may phase installation of erosion and sediment controls provided the phasing plan is included in the approved erosion and sediment control plan.
- (h) The permittee shall be responsible for proper operation and maintenance of all erosion and sediment controls, and soil stabilization measures, in conformance with the requirements of the NPDES General Construction Permit. The permittee is responsible for the operation and maintenance of temporary erosion prevention and sediment control BMPs at the site over all of the areas of the site that have not been fully stabilized until the District has transferred the permit to another permittee, or until the site has undergone final stabilization as reviewed and approved by the District.

**4. EXHIBITS.** The following exhibits must accompany the online permit application in electronic .pdf format.

- (a) An existing and proposed topographic map which clearly shows contour elevations with at least 2-foot contour intervals on and adjacent to the land, property lines, all hydrologic features, the proposed land disturbing activities, and the locations of all runoff, erosion and sediment controls, and soil stabilization measures.

- (b) Plans and specifications for all proposed runoff, erosion and sediment controls, and temporary and permanent soil stabilization measures.
  - (1) Temporary erosion and sediment control measures, which shall remain in place until permanent vegetation is in place, shall be identified.
  - (2) Permanent erosion and sediment control measures such as emergency overflow swales shall be identified.
- (c) Detailed schedules for implementation of the land disturbing activity, the erosion and sediment controls, and soil stabilization measures.
- (d) Plans and specifications for dewatering methods and outlet of stormwater.
- (e) Plans and specifications for management and containment of all solid and liquid wastes, including hazardous wastes and concrete materials.
- (f) Plans, specifications, and maintenance thresholds for temporary sediment basins if required by the permit.
- (g) Detailed description of the methods to be employed for monitoring, maintaining, and removing the erosion and sediment controls, and soil stabilization measures. The name, address, and phone number of the person(s) responsible shall also be provided.
- (h) For projects over one acre of disturbed area, documentation that the project applicant has applied for a NPDES General Construction Permit shall be submitted as well as the Stormwater Pollution Prevention Plan (SWPPP) prepared for the NPDES permit.

## **5. EXCEPTIONS.**

- (a) Rule F and its requirements shall not apply to development less than 1 acre in size for all land uses, unless such development is greater than 1,000 square feet and:
  - (1) Is within the 100-year floodplain; or
  - (2) Is adjacent to a public water wetland, public water or wetland.
- (b) Rule F and its requirements shall not apply to annually cultivated land used for farming, research, or horticulture.

## **Rule G: ILLICIT DISCHARGE AND CONNECTION**

- 1. POLICY.** It is the policy of the Board of Managers to:
  - (a) Regulate the contribution of pollutants to the District's municipal separate storm sewer system (MS4) by any user;
  - (b) Prohibit Illicit Connections and Discharges to the District's MS4;
  - (c) Establish legal authority to carry out all inspection, surveillance, and monitoring procedures necessary to ensure compliance with this Rule;
  - (d) Require a District permit for new direct connections, changes to existing hydrology, and other impacts related to the proper function, access, and maintenance to the District's MS4 or easements; and
  - (e) Prohibit new direct connections or other impacts to the Beltline Interceptor or other components of the District's MS4 if the connection shall cause or exacerbate water conveyance or structural problems in the system, including but not limited to surcharging and flooding.
- 2. REGULATION.** This Rule shall apply to all water entering the storm drain system of the District's MS4 generated on any developed and undeveloped lands unless explicitly exempted by the District. A permit and stormwater management plan are required under this rule for new direct connections, replacement of existing connections, changes to existing hydrology, or other impacts to the Beltline Interceptor, or other components of the District's MS4, or its easements.
- 3. CRITERIA.**
  - (a) **Connection to the District's MS4 System.**
    - (1) New direct connections and replacement of existing connections shall be completed using a method that is approved by the District.
    - (2) Peak flow rate, the total volume of flow, and the timing of the flow for new connections must be managed to not cause new water conveyance problems or exacerbate existing water conveyance problems in the Beltline Interceptor. Enlargement of existing connections is considered a new connection.
  - (b) **Discharge Prohibitions.**
    - (1) **Prohibition of Illegal Discharges.** No person shall discharge or cause to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to pollutants that cause or

contribute to a violation of applicable water quality standards, other than stormwater.

(2) **Prohibition of Illicit Connections.** The construction, use, maintenance, or continued existence of illicit connections to the storm drain system without a District permit is prohibited.

(i) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(ii) A person is considered to be in violation of this Rule if the person connects a line conveying sewage to the District's MS4, or allows such a connection to continue.

(c) **Suspension of MS4 Access.**

(1) **Suspension due to Illicit Discharges in Emergency Situations.** The District may, without prior notice, suspend MS4 discharge access when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the District's MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the District may take such steps as deemed necessary to prevent or minimize damage to the District's MS4 or Waters of the United States, or to minimize danger to persons or the environment.

(2) **Suspension due to the Detection of Illicit Discharge.** Any person discharging to the District's MS4 in violation of this Rule may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The District shall notify a violator of the proposed termination of its MS4 access. The violator may petition the District for a reconsideration and hearing. A person commits an offense subject to enforcement if the person reinstates MS4 access to facilities terminated pursuant to this Section, without the prior approval of the District.

(d) **Monitoring of Discharges.**

(1) **Applicability.** This section applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity.

(2) **Access to Facilities.**

- (i) The District shall be permitted to enter and inspect facilities subject to regulation under this Rule as often as may be necessary to determine compliance with this Rule. The discharger shall make the necessary arrangements to allow access to representatives of the District.
  - (ii) Facility operators shall allow the District ready access to all parts of the premises for the purposes of inspection, sampling, examination, and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by state and federal law.
  - (iii) If the District has been refused access to any part of the premises from which stormwater is discharged, the District may seek issuance of a search warrant from any court of competent jurisdiction.
- (e) **Requirement to Prevent, Control, and Reduce Stormwater Pollutants by the Use of BMPs.** The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses by these structural and non-structural BMPs. Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required by the District to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system.
- (f) **Watercourse Protection.** Every person owning property through which a watercourse passes shall keep and maintain that part of the watercourse within the property free of trash, debris, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures shall not become a hazard to the use, function, or physical integrity of the watercourse.
- (g) **Notification of Spills.** Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which result or may result in illegal discharges or pollutants discharging into stormwater, the storm drain system, or water of the U.S., said person shall take all necessary steps to ensure the containment and cleanup of such release. In the event of such a release of hazardous materials, said person shall immediately notify emergency response agencies of the release. In the event of a release of



non-hazardous materials, said person shall notify the District in person or by phone or facsimile no later than the next business day following discovery of the release.

(h) **Enforcement.**

- (1) **Notice of Violation.** Whenever the District finds that a person has violated a prohibition or failed to meet a requirement of this Rule, the District may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:
  - (i) The performance of monitoring, analyses, and reporting;
  - (ii) The elimination of illicit connections or discharges;
  - (iii) That violating discharges, practices, or operations shall cease and desist;
  - (iv) The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
  - (v) Payment of a fine to cover administrative and remediation costs; and/or
  - (vi) The implementation of source control or treatment BMPs.
- (2) **Abatement.** If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work shall be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.
- (3) **Appeal of Notice of Violation.** Any person receiving a Notice of Violation may appeal the determination of the District. The notice of appeal must be received within 5 days from the date of the Notice of Violation. Hearing on the appeal before the District Board of Managers shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the District shall be final.
- (4) **Enforcement Measures after Appeal.** If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 3 days of the decision of the District Board of Managers, then representatives of the District are

authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the District or its agents to enter upon the premises for the purposes set forth above.

- (5) **Cost of Abatement.** The District may assess costs for abatement. Within 30 days after abatement of the violation, the District shall notify the property owner of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within 10 days. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.
- (6) **Injunctive Relief.** It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Rule. If a person has violated or continues to violate the provisions of this Rule, the District may petition for a preliminary or permanent injunction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.
- (7) **Violations Deemed a Public Nuisance.** In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Rule is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.
- (8) **Relation to Other Rules.** None of the enforcement provisions of this Rule shall abridge or alter the right of the District to seek remedies provided for under Rule H herein.

**4. EXHIBITS.** The following exhibits must accompany the online permit application in electronic .pdf format.

- (a) Property lines and delineation of lands identifying ownership and easements.
- (b) Proposed and existing stormwater facilities' location, alignment and elevation.

- (c) Identification of existing and proposed site contour elevations with at least a 2-foot contour interval.
- (d) Construction plans and specifications of the proposed connection, including design details, connection method, and timing of connection.
- (e) Stormwater runoff volume and rate analysis for the 2-, 10-, and 100-year critical events, existing and proposed conditions.
- (f) Narrative addressing incorporation of stormwater BMPs as otherwise applicable under Rule C
- (g) Onsite soil boring indicating soil type.
- (h) Construction dewatering plan and construction water control and treatment plan.

## **5. EXCEPTIONS.**

- (a) The following discharges are exempt from discharge prohibitions established by this Rule: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising groundwater, groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wetland flows, swimming pools (if dechlorinated - typically less than one PPM chlorine), street wash water, fire fighting activities, and any other water source not containing Pollutants.
- (b) Discharges specified in writing by the District as being necessary to protect public health and safety.
- (c) Dye testing is an allowable discharge but requires a verbal notification to the District prior to the time of the test.
- (d) Any non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

## **Rule H: ENFORCEMENT**

1. **MISDEMEANOR.** A violation of these Rules, an order, or stipulation agreement made, or a permit issued by the District is a misdemeanor subject to penalties as provided by Minnesota law.
  2. **METHOD OF ENFORCEMENT.** The District may exercise all powers conferred upon it by Minnesota Statutes Chapter 103D. A rule, order, or stipulation agreement made or a permit issued by the District may be enforced by criminal prosecution, injunction, action to compel performance, restoration, abatement, and other appropriate action.
  3. **PERMIT REQUIREMENT.** Pursuant to the terms of the permit, the District may issue a cease and desist order when it finds that a proposed or initiated activity or project presents a serious threat of soil erosion, sedimentation, or an adverse effect upon water quality or quantity, or violates any rule of the District.
  4. **ATTORNEY FEES AND COSTS.** In any civil action arising from or related to these Rules, an order or stipulation agreement made or a permit issued or denied by the District, the court may award the District reasonable attorney fees and costs.
  5. **ILLICIT DISCHARGE.** In addition to the remedies provided for in this Rule, the enforcement of Rule G shall be governed by Rule G(3)(h).
- 

## **Rule I: VARIANCES**

1. **WHEN AUTHORIZED.** The Board of Managers shall have the power to grant variances from these Rules where they find that extraordinary and unnecessary hardships may result from strict compliance with these Rules; provided that such variances shall not have the effect of nullifying the intent and purpose of these Rules and the overall plan of the District as adopted.
2. **PROCEDURE.**
  - (a) A written request for a variance shall be submitted to the District at least 12 calendar days prior to a regularly scheduled meeting date of the Board of Managers stating the exceptional conditions and the peculiar difficulties claimed.
  - (b) The request shall be referred to the Board and they shall review the request within 30 days of the date the request was filed with the District.
  - (c) In considering requests for variances, the Board shall consider the effect of the proposed variance upon the entire District and the anticipated effect of the proposed variance upon the overall plan of the District as adopted.

- (d) If the Board determines that the special conditions which apply to the structure or land in question are peculiar to such property, and do not apply generally to other land or structures in the District and that the granting of a variance shall not in any way impair or be contrary to the intent of these Rules and the overall plan of the District as adopted, the Board may grant such variances and impose conditions and safeguards to ensure compliance with these Rules and to protect adjacent property.
  - (e) Variances may be denied by Motion of the Board and such Motion shall constitute a finding and determination that the conditions required for approval do not exist. No application for a variance which has been denied wholly or in part shall be resubmitted for a period of six months from the date of said denial, except on grounds of new evidence or proof of change of conditions found to be valid by the District.
- 3. **TERM.** The term of a variance shall be concurrent with the associated permit.
  - 4. **VIOLATION.** A violation of any condition set forth in a variance shall be a violation of the District rules and shall automatically terminate the variance.
- 

#### **Rule J: SEVERABILITY**

If any provision of these Rules is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of these Rules shall not be affected thereby.

| Commenter  | Location in Rule Document  | Comment  | CRWD/RWMWD Response  | Rule Change After Comment |
|--|--|--|--|---------------------------|
| Joe Mulcahy,<br>Metropolitan<br>Council<br>Environmental<br>Services | NA   | The Metropolitan Council has no comments on the proposed CRWD and RWMWD Rule revisions. Thank you for the opportunity to review and comment on them.   | Thank you for the review and response.   | NA                        |
| David Brummel:<br>Washington<br>County                               | Rule C-<br>Stormwater<br>Management,<br>page 13 and Rule<br>F- Erosion and<br>Sediment Control,<br>page 32 | General.<br>Washington<br>County strongly<br>recommends that<br>the amended rules<br>of RWMWD,<br>particularly Rules<br>C –Stormwater<br>Management, and<br>F – Erosion and<br>Sediment Control,<br>be consistent with<br>the MPCA's MS4<br>and NPDES rule<br>requirements.<br>Inconsistent<br>language with<br>MS4 and NPDES<br>creates extreme<br>difficulty for public<br>partners who are<br>regulated MS4's.<br>Through further<br>email discussion<br>with Tom Dietrich<br>on 7/31/23, this<br>comment was | CRWD and RWMWD have been intentional about ensuring consistency between our Rules and the other related permits. Specific to the maintenance requirements, our draft maintenance agreements contain the baseline requirements of the MS4 permit, including annual inspection, and completion of maintenance needs. The watershed districts have also required more stringent timelines for completion than the MS4 permit. Draft maintenance agreement templates are available at <a href="http://www.rwmwd.org/permits">www.rwmwd.org/permits</a> and <a href="https://www.capitolregionwd.org/permits/your-permit/">https://www.capitolregionwd.org/permits/your-permit/</a> . | None proposed.            |

|  |                         |   |  |  |
|--|-------------------------|---|--|--|
|  |                         | mainly triggered by the specific maintenance agreement requirements in the MS4 permit.  |  |  |
| David Brummel:<br>Washington<br>County | Rule C.5.g., page<br>22 | Definitions.<br>Washington<br>County requests<br>modification of the<br>Disconnected<br>Impervious<br>definition (pg 4) to<br>include, "sidewalks<br>and trails 10ft wide<br>or less that are<br>bordered down-<br>gradient by<br>vegetated open-<br>space or<br>vegetated filter<br>strips with a<br>minimum width of<br>5ft." This is the<br>language used in<br>Rice Creek<br>Watershed District,<br>and we are<br>requesting<br>RWMWD be<br>consistent with<br>this definition. | This clarification is made later in Rule C.5.g<br>in the Exceptions section. An increase from 8'<br>to 10' maximum trail width is appropriate<br>given the feedback received from<br>stakeholders during this process. The<br>adjustment of maximum sidewalk and trail<br>width from 8 feet to 10 feet will be made. | Rule C.5.g.<br>Maximum<br>sidewalk or trail<br>width of 10'. |
| David Brummel:<br>Washington<br>County | NA                      | Rule C.<br>Washington<br>County is<br>supportive of:<br>1. Tying runoff<br>rate requirements  | Thank you for the comment.   | NA   |



|                                  |                      |  |  |                |
|----------------------------------|----------------------|--|--|----------------|
|                                  |                      | <p>to existing conditions as opposed to pre-development conditions.</p> <p>2. The alternative sequencing method proposed</p> <p>3. The exemption of mill/overlay and disconnected impervious projects from the requirements of Rule C.</p>   |  |                |
| David Brummel: Washington County | Rule C.5.f., page 24 | <p>Page 21. Rule C. 5(f). Washington County requests that the exemption be expanded to include “impervious surface mill, reclamation, or overlay; paving of an existing rural section gravel road; catch basin or pipe repair/replacement that maintains existing hydraulic capacity”. This is the language used in Brown’s Creek Watershed District rules, and we are requesting RWMWD be</p> | <p>No adjustment will be made. It is our intent to require stormwater treatment during construction projects when the opportunity is being provided during other construction activity, i.e. pipe replacement. Paving of existing gravel roads also has the potential to include stormsewer and treatment opportunities that should be included under the rules.</p> | None proposed. |

|                                       |   |  |  |                |
|---------------------------------------|---|--|--|----------------|
|                                       |   | consistent with this provision.  |  |                |
| Heather Butkowski, City of Lauderdale | NA  | No comment from Lauderdale.  | Thank you for the review and response.   | NA             |
| Kristin Seaman: City of Woodbury      | Rule A. Land Disturbance Definition, page 6 | <p>Rule A Definitions. Between the Definitions and the Stormwater Management sections, Land Disturbing activities are insufficiently detailed. The City is responsible for water, sanitary and stormwater utilities that are at or nearing the end of their lifespan. With recent projects, the District has implemented in-kind replacement of those utilities as land disturbance and required full treatment. It is requested that a threshold for disturbance in these cases be further defined. By doing so, the City will be able to better meet the</p> | No additional revisions proposed. The Districts removed the in-kind pipe repair/replacement language to reduce misinterpretation and confusion regarding the intent of exempting true mill and overlay projects. Replacing aging underground infrastructure significantly extends the usable life of the road, and is the appropriate time to plan and budget for improved stormwater treatment. Requiring stormwater treatment on fully-reconstructed impervious surfaces, regardless of whether pipe sizes increase, is viewed as progress towards our shared goal of climate resiliency and improved water quality for our communities, not as a penalty. | None proposed. |

|   |  |  |  |   |
|---|--|--|--|---|
|   |  | <p>watershed's rules and provide the appropriate budgeting/funding mechanisms. The way the District has implemented this section has also penalized the City for upsizing stormwater infrastructure, which is a necessary activity to decrease flood impacts in our changing climate.</p>  |  |   |
| <p>Kristin Seaman:<br/>City of Woodbury</p> | <p>Rule C.3.d.1 &amp; 2,<br/>page 19</p> | <p>Rule C Stormwater Management. Rule states, "(1) Drainage areas that directly discharge to a wetland, river, lake, or stream shall meet the water quality standard onsite, regardless of any alternative compliance being proposed for the project. (2) Costs associated with implementation of gross pollutant removal devices may not be</p> | <p>Revisions proposed in two locations to define water quality requirements at points of direct discharge to a wetland, river, lake, or stream on linear projects. The goal of these two additions is to require treatment at the source of impact, since the direct discharge location does not allow for the possibility of replacement treatment before the runoff enters the waterbody of concern. These provisions do not broadly impact implementation of the Linear Cost Cap though they do provide additional direction for the siting of water quality practices on the project. The cost cap benefit is still available for the volume control and water quality requirements of linear projects because the cost cap is not part of alternative compliance sequencing. Water quality requirements, in the form of gross pollutant removal at a minimum, are still required to be met at the point of any direct discharge to a wetland, river, lake, or stream. This may be in addition</p> | <p>Added to Rule C.3.d.1. and Rule C.3.e: "At a minimum, BMPs to remove gross pollutants shall be placed in each drainage area of the development that discharges directly to a wetland, river, lake, or stream."</p> |

|                                     |                          |   |   |                |
|-------------------------------------|--------------------------|---|---|----------------|
|                                     |                          | <p>deducted from Stormwater Impact Fund contributions and do not result in adjustment to banked volume credit withdrawals.”</p> <p>The City requests:</p> <ol style="list-style-type: none"> <li>1. Further clarification of items (1) and (2) in this section. It is unclear how they will impact projects in relation to the Linear Cost Cap. Will these exclusions make projects infeasible? Is there consideration to other public impacts to preventing projects from being approved and constructed?</li> </ol> | <p>to the cost cap volume control BMPs that are located elsewhere on site, depending on the site design. The Districts have not been made aware of any linear projects that have been determined infeasible solely based on compliance with gross pollutant removal requirements.</p>   |                |
| Kristin Seaman:<br>City of Woodbury | Rule C.3.d.2,<br>page 19 | <p>Rule C Stormwater Management. 2. Specific to item (2) (<i>above</i>), consider the upfront and continual maintenance costs for gross pollutant</p>   | <p>No additional revisions proposed. The Districts acknowledge that maintenance costs must be considered and budgeted for, but have not been made aware of street projects not being approved or constructed based on this factor. As was stated, it is preferable to provide some water quality treatment even if the full volume can't be provided on site. Gross Pollutant Removal</p> | None proposed. |

|                                     |                     |  |  |   |
|-------------------------------------|---------------------|--|--|---|
|                                     |                     | <p>removal devices in relation to project scopes being decreased or preventing projects from being approved and constructed. In areas of redevelopment or linear projects, for example, the City of Woodbury has three flexible treatment options and recognizes that adding treatment in an area that was constructed prior to water quality requirements is better than moving forward without any treatment, even if it is below the desired condition.</p> | <p>devices are the minimum and must be accompanied by volume or filtration practices elsewhere if water quality goals are to be achieved. RWMWD and CRWD have intentionally included alternative compliance sequencing flexibility to allow for unique site conditions and circumstances, as also referenced in the City's flexible treatment options.</p> |   |
| Kristin Seaman:<br>City of Woodbury | Rule C.5.g, page 24 | <p>Rule C Stormwater Management. Rule states exception for, "Maximum sidewalk or trail width of 8'."The City supports that this be reconsidered and</p>  | <p>An increase from 8' to 10' maximum trail width is appropriate given the feedback received from stakeholders during this process. The adjustment will be made.</p>   | <p>Rule C.5.g.ii. Maximum sidewalk or trail width of 10'.</p> |

|   |   |  |   |                       |
|---|---|--|---|-----------------------|
|   |   | <p>updated to be 10'. Ten-foot trails are industry-standard for multi-use. Trail users continue to diversify, from people who require ADA standards for mobility to personal electric bicycles and scooters. By only considering 8' trails in this exemption, this rule will press communities to underserve users in order to claim the exemption, or require treatment of the 2' delta, which are not likely to be successful stormwater BMPs.</p> |   |                       |
| <p>Kristin Seaman:<br/>City of Woodbury</p> | <p>Rule C.3.d.1.<br/>page 19. Rule E.3.a, page 27</p> | <p>Rule E: Wetland Management. Rule states, "all stormwater must be treated to the water quality standard outlined in Rule C.d.1 before discharged to a wetland, regardless of any alternative</p>   | <p>This language does not represent a new rule change and is consistent with projects permitted in the past. For projects that are unable to achieve the volume reduction standard onsite, gross pollutant removal is still required for discharge directly to a wetland. This is required to minimize any adverse impacts to wetlands during development and redevelopment projects and is fundamental to wetland protection in the District. For projects that do not meet the volume reduction standard and do not</p> | <p>None proposed.</p> |

|  |                                  |   |  |                       |
|--|----------------------------------|---|--|-----------------------|
|  |                                  | <p>compliance relevant to the project. Please provide analysis completed by the District to show this rule will not impact project's moving forward. It is conceivable that there will be situations where this requirement will not be achievable. What are an applicant's options when that is the case?</p>                    | <p>provide adequate TSS removal, a variance may be submitted for board consideration.</p>  |                       |
| <p>Andrew Hogg:<br/>City of St. Paul</p> | <p>Rule C.3.d.2,<br/>page 19</p> | <p>In City project areas where volume reduction is infeasible due to site characteristics, soil/bedrock conditions, utility conflicts, etc. the watershed rules require installation of gross pollutant removal structures, and the deferred obligation to attain volume reduction elsewhere. Application of this requirement</p> | <p>The Districts acknowledge the investments made for gross pollutant removal practices as important steps to capturing some of the material that comes off of public streets, but recognize that these devices alone will not achieve water quality standards and must continue to require mitigation in the form of equivalent volume reduction elsewhere. The Districts are open to continued discussion of costs associated with varying levels of treatment on linear projects.</p> | <p>None proposed.</p> |

|   |                        |  |   |                |
|---|------------------------|--|---|----------------|
|   |                        | introduces an element of duplication whereas public funding is dedicated to the immediate project need, and additional public funding is required at a later date to achieve the volume reduction requirements. The City requests that the watersheds recognize the significant public investment in gross pollutant removal structures and not penalize the City for site characteristics beyond its control by requiring volume reduction on a deferred basis. |   |                |
| Brent Johnson:<br>Bolton & Menk for<br>City of Landfall | Rule C.4.n, page<br>23 | Page 21, Rule C.4.n. The NPDES Construction Stormwater Permit Section 16.10 only requires "at least one soil boring, test pit or infiltrometer   | Redox features are being required as part of soil borings, documentation that is only sporadically included in current submittals and is an important component of determining groundwater levels for infiltration capacity. The proposed Rule does still require soil borings within the footprint of proposed BMPs, so this is not a relaxing of the NPDES permit. Redox features are not required to sequence to filtration but this | None proposed. |



|  |                            |  |  |   |
|--|----------------------------|--|--|---|
|  |                            | <p>test...for determining infiltration rates."</p> <p>The proposed rule relaxes the requirement for an infiltrometer test but still seems to be asking for a lot by requiring redox features.</p>  | <p>information should be made available if observed during soil investigation.</p>   |   |
| <p>Brent Johnson:<br/>Bolton &amp; Menk for<br/>City of Landfall</p> | <p>Rule C.5.g, page 24</p> | <p>Page 23, Rule C.5.g. Exempting sidewalks and trails that are bordered by an appropriate width of vegetation is a good idea, regardless of whether they are along or parallel to a road. The Rice Creek Watershed District (RCWD) exempts trails from their stormwater rules. "Rule C requirements do not apply to sidewalks and trails 10 feet wide or less that are bordered down-gradient by vegetated open space or vegetated filter</p> | <p>A previously proposed iteration of the Districts' criteria for disconnected impervious did allow sidewalks and trails parallel to roadways (with certain specifications), however the MPCA's new NPDES language specifically states that all sidewalks and trails parallel to roadways shall be considered impervious. After consultation with MPCA staff the proposed language was modified to be consistent with state requirements. An increase from 8' to 10' maximum trail width is appropriate given the feedback received from stakeholders during this process. The adjustment has been made.</p> | <p>Rule C.5.g.ii. Maximum sidewalk or trail width of 10'.</p> |

|  |  |   |  |
|--|--|---|--|
|  |  | <p>strip with a minimum of 5 feet." I recommend that you modify rule C.5.g to exempt linear trails and sidewalks with impervious surfaces 10 feet wide or less that are bordered down-gradient by vegetated open space with a minimum width equal to the trail and sidewalk width. The MIDS model and the impervious disconnection BMP was used to simulate a trail sloping to an equal sized vegetated area. The simulated reductions in annual runoff and pollutant loads are impressive; indicating that a trail exemption will still protect water quality (see following table).<br/><i>(Table included as attachment)</i></p> |  |
|--|--|---|--|

|   |    |  |  |    |
|---|----|--|--|----|
| Connie Taillon,<br>City of White Bear<br>Lake | NA | Thank you for the<br>opportunity to<br>review the<br>RWMWD draft<br>rules. The City of<br>White Bear Lake<br>reviewed the<br>RWMWD draft<br>rule updates and<br>have no<br>comments. | Thank you for the review and response. | NA |
|---|----|--|--|----|

| Topic  | Action   | Location of edit (RWMWD)  | Explanation   |
|--|--|---|---|
| Disconnected impervious language   | Current Rule update                                | Definitions (pg. 5), Rule C exceptions (pg.22)                    | To incentivize impervious disconnection and recognizing cost/benefit of treating trails in certain areas  |
| Adjust freeboard table to incorporate utility space under manufactured homes   | Current Rule update                                | Freeboard table (pg. 24)  | For the purposes of flood protection for new manufactured homes   |
| WCA language updates   | Current Rule update- clarification (RWMWD only)    | Rule E (pg. 26-27)  | Clarifying regulatory role  |
| MnRAM language updates   | Current Rule update- clarification (RWMWD only)    | Rule E (pg. 28-29)  | Clarifying MnRAM, buffer reqs   |
| Increase linear cost cap and Stormwater Impact Fund (SIF) amounts  | Current Rule update                                | Separate resolutions  | Proposed \$94K cost cap and \$125K SIF, based on past actual and future estimates of inflation. Expected implementation January 1, 2024.  |
| Include option to bank volume credits after the linear cost cap has been met.  | Current Rule update                                | Definition of Banking Credits (pg. 4), Rule C (pg. 18-19)         | Current Rules already allow for CRWD contribution above cost cap. This contribution could be in the form of banking credits, ie, Prior Ave reconstruction. Goal to expand the opportunities to bank credits and removed volume bank deficit in St. Paul   |
| Require a soil boring in footprint of every BMP regardless of filtration or infiltration.  | Current Rule update                                | Rule C (pg. 21)   | Soil borings are required to determine infeasibility of infiltration as a first step in sequencing. A design may change from filtration to infiltration later in the project and readily available soil borings are needed to determine feasibility.  |
| Add soil and redox direction for infiltration soils analysis.  | Current Rule update                                | Rule C exhibits (pg. 21)  | Additional factors to incorporate to improve assessment of infiltration capacity.   |
| Require wetland shapefile submittal with permit application.   | Current Rule update                                | Rule E exhibits (pg. 32)  | Goal to aggregate wetland information in electronic form for ease of regulatory administration.   |
| Reference on page 18 of rules should be Rule C – 3.c.5, not C- 3.c.4.  | Current Rule update                                | Rule C alternative compliance sequencing (pg. 18)                 | Update for accuracy.  |
| The linear cost cap applies to BMPs installed on site. Linear projects will contribute the full SIF amount if being used.                          | Current Rule update                                | Rule C alternative compliance sequencing (pg. 18)                 | The linear cost cap was, at least in part, instituted to provide flexibility for the unique constraints with providing onsite treatment. If the applicant is no longer providing onsite treatment, presumably the unique constraints are no longer an issue and the applicant should be held to the universal standard. This higher contribution to the SIF is also justified by the additional O&M costs on a BMP that CRWD owns and operates using SIF funds. |
| <del>Bridges are removed from the stormwater exemption and projects will need to provide treatment for bridge area.</del>                          | Removed: Not being proposed in current Rule update | NA  | The bridge exemption will remain following review of earlier comments.  |
| Updated land disturbance definition: remove pipe replacement from the mill and overlay definition of disturbance and move m&o exemption to Rule C. | Current Rule update- clarification                 | Definitions (pg. 6), Rule C exceptions (pg. 22)                   | Pipe replacement work is invasive work that does allow opportunity to incorporate stormwater treatment and was being misinterpreted/misued by permit applicants. The mill and overlay exemption is better suited in Rule C directly.  |
| Various minor text changes to update references, typos, etc.   | Current Rule update                                | various throughout  | Update for accuracy and clarity.  |
| Clarify requirement to pay SIF after 2 years grace period <i>unless other arrangements are made</i> .  | Current Rule update                                | Rule C alternative compliance sequencing (pg. 19)                 | Provide greater flexibility when accounting for extended planning/funding timelines.  |
| Gross pollutant removal (GPR) costs can NOT be deducted from SIF total, and do not adjust banking withdrawals                                      | Current Rule update                                | Table 1 (pg. 16), Rule C (pg. 19-20)                              | GPR considered a baseline requirement, regardless of SIF, etc.  |
| Text adjustments to Rule B   | Current Rule update (CRWD mainly, RWMWD some)      | Rule B (starts pg. 10)  | Adjustments to clarify process for approvals and permit amendments.   |
| Clarification of mimimum gross pollutant removal for water quality requirements, including linear projects.  | Current Rule update                                | Rule C Water Quality (pg. 19), Rule C Linear Projects (pg. 19-20) | Addition to clarify priority of water quality treatment at points where a project would be constructing a pipe connection into a wetland, river, lake, or stream, and that the cost cap does still apply to linear projects in this condition.  |



## RESOLUTION 23-01

### RESOLUTION ADOPTING WATERSHED MANAGEMENT RULES

WHEREAS, The Ramsey-Washington Metro Watershed District (hereinafter “District”) is a political subdivision of the State of Minnesota established under the Minnesota Watershed Law, Minnesota Statute 103D; and

WHEREAS, Minnesota Statute section 103D.341 mandates that the District adopt rules to accomplish the purposes of the Minnesota Watershed Law and to implement the powers of the Board of Managers; and

WHEREAS, the District has submitted proposed rule revisions to the Board of Managers for review and comment; and

WHEREAS, the proposed rule revisions have been noticed for review and comment to all public transportation authorities as well as each municipality within the District for at least 45 days; and

WHEREAS, the proposed rule revisions have been noticed for public comment and hearing in legal newspapers generally circulated within the District once a week for two successive weeks;

THEREFORE, BE IT RESOLVED by the Ramsey-Washington Metro Watershed District that the rules are adopted by the Board of Managers;

BE IT FURTHER RESOLVED that the adopted rules shall be filed with the county recorder of each county affected by the watershed district;

BE IT FURTHER RESOLVED that the adopted rules shall be provided to public transportation authorities that have jurisdiction within the watershed district and to each municipality affected by the watershed district.

Adopted by the Board of Managers of the Ramsey-Washington Metro Watershed District this 6<sup>th</sup> day of September 6, 2023.

---

Val Eisele, President

Attest:

---

Benjamin Karp, Secretary



## RESOLUTION 23-02

### RESOLUTION SETTING A CAP ON COSTS FOR LINEAR PROJECTS

WHEREAS, the Ramsey -Washington Metro Watershed District (hereinafter "District") has rules that require volume reduction and water quality to be achieved by all projects greater than one acre in size including linear projects; and

WHEREAS, the technical advisory committee recommended to the Board of Managers that a cap on costs per acre be set for linear projects and should apply to water quality and volume reduction best management practices; and

WHEREAS, the volume reduction and water quality costs per acre of imperviousness for linear projects is typically higher than non-linear projects; and

WHEREAS, linear projects have a long range planning process and complex budgets, therefore it is important to have a known cost for compliance for planning and budgeting purposes; and

WHEREAS, linear projects are commonly within established corridors with limited space available for volume reduction and water quality best management practices, limited right- of-way and often share the right-of-way space with public utilities that all have the right and need to be located in that area; and

WHEREAS, linear projects affect and impact many adjacent landowners, stakeholders and/ or residents and require a greater level of coordination than nonlinear projects; and  
WHEREAS, linear projects have a large acreage of impervious surfaces to be treated with the volume reduction and water quality standards;

THEREFORE, BE IT RESOLVED by the District that the total amount of volume reduction and water quality costs to the project applicant shall not exceed \$94,000 per acre of impervious surfaces in the project area; and

BE IT FURTHER RESOLVED that the Board shall reserve the right to contribute cost share funds to the road authority above the \$94,000 cap to achieve part or all of the volume reduction shortfall; and

BE IT FURTHER RESOLVED that this \$94,000 cap on costs for linear projects go into effect on January 1, 2024.

Adopted by the Board of Managers of the Ramsey-Washington Metro Watershed District this 6<sup>th</sup> day of September 6, 2023.

---

Val Eisele, President

Attest:

---

Benjamin Karp, Secretary



## RESOLUTION 23-03

### RESOLUTION SETTING A CONTRIBUTION AMOUNT FOR THE STORMWATER IMPACT FUND

WHEREAS, the Ramsey -Washington Metro Watershed District (hereinafter " District") has rules that require volume reduction to be achieved by all projects greater than one acre in size; and

WHEREAS, volume reduction best management practices protect surface water quality and recharge groundwater; and

WHEREAS, the DISTRICT has a goal of achieving volume reduction on all permitted projects; and

WHEREAS, the technical advisory committee recommended to the Board of Managers that an alternative compliance procedure be established for projects that cannot meet the volume reduction standard onsite; and

WHEREAS, the alternative compliance procedure has, as a final alternative, payment to a stormwater impact fund; and

WHEREAS the District developed a Stormwater Impact Fund Implementation Plan; and

WHEREAS the money contributed to the Stormwater Impact Fund will be spent according to the Stormwater Impact Fund Implementation Plan.

THEREFORE, BE IT RESOLVED by the District that project applicants shall contribute an amount equal to \$125,000 per acre of impervious surfaces of a project site to the stormwater impact fund; and

BE IT FURTHER RESOLVED that this \$125,000 per acre of impervious surfaces contribution amount to the stormwater impact fund go into effect on January 1, 2024.

Adopted by the Board of Managers of the Ramsey-Washington Metro Watershed District this 6<sup>th</sup> day of September 6, 2023.

---

Val Eisele, President

Attest:

---

Benjamin Karp, Secretary

# Request for Board Action

---

**Board Meeting Date:** September 6, 2023

**Agenda Item No:** 7C

**Preparer:** Tina Carstens, Administrator

---

**Item Description:** Approval of District budget and preliminary levy for fiscal year 2024.

---

## **Background:**

The board discussed the preliminary budget table at the August Board meeting. That draft budget has been noticed in the legal newspaper, Pioneer Press, and posted on the District web site. No comments have been received to date. The required public hearing will be held at the September board meeting prior to this action item to receive comments. At the public hearing I will give a short presentation on the proposed 2024 budget and preliminary levy and highlight any changes I have made since the August meeting. I continued to review our current year status and carry over potential to refine the levy impact for 2024. That along with more refined project costs has brought the proposed preliminary levy increase to 6.55%.

This preliminary budget approval is required to be sent to the county by September 30<sup>th</sup>. We can then further refine the budget up until December 6<sup>th</sup> board meeting when the final levy will be approved. While this budget does show an increase in the proposed levy over 2023, that number will be further refined before the December meeting. I would anticipate the 6.55% increase to stay or be less by the December meeting.

As the board requested last month, I have also evaluated what lesser increases in the levy would look like for our budget. In order to bring the levy down to a 5% increase, we would need to decrease our 2024 levy by approximately \$100,000. In order to bring the levy down to a 3%, that decrease in levy is about \$150,000. It is possible that those decreases could be accomplished through further carry over analysis as it gets closer to December. We have also applied for grant funds for the Double Driveway/Fish Creek project that would significantly change the levy needs for that project. It is also a potential that we could phase in that project to share the costs between 2024 and 2025. The same could be said for the wetland restoration project that we will be talking about at this meeting as well. I do believe if the board would like to bring the levy down closer to a 3% increase that we could get creative in our project planning and budgeting to achieve that.

I would suggest that the board consider the 6.55% for this preliminary levy approval with direction given to what your goal is for final levy approval in December.

Attached to this cover sheet is the resolution, draft budget table, budget program line item breakouts, narrative, and draft slides for the public hearing budget presentation.

---



---

**Applicable District Goal and Action Item:**

**Goal: Manage effectively** – The District will operate in a manner that achieves its mission while adhering to its core principles.

**Action Item:** Follow all legal requirements applicable to watershed districts.

---

**Staff Recommendation:**

Approve the draft budget for purposes of the preliminary levy and approve resolution 23-04.

---

**Financial Implications:**

The counties require preliminary levy certification by September 30<sup>th</sup> of each year. This step is required for final levy authority in December.

---

**Board Action Requested:**

Approve the draft budget for purposes of the preliminary levy and approve resolution 23-04.



## RESOLUTION 23-04

### RESOLUTION APPROVING THE PRELIMINARY PAYABLE 2024 TAX LEVY

WHEREAS, the Ramsey-Washington Metro Watershed District (District) prepared a budget for fiscal year 2024 to implement the District's programs and projects as defined in the District's Watershed Management Plan; and

WHEREAS, the District distributed the proposed budget and levy for review and comment and conducted a requisite public hearing on September 6, 2023;

NOW, THEREFORE, BE IT RESOLVED by the Board of Managers of the Ramsey-Washington Metro Watershed District that the following preliminary levy be certified to Ramsey and Washington Counties.

|                          |                  |
|--------------------------|------------------|
| General Revenue Levy     | \$7,337,500      |
| <u>Debt Service Levy</u> | <u>\$244,963</u> |
| Total Levy               | \$7,582,463      |

Adopted by the Board of Managers of the Ramsey-Washington Metro Watershed District this 6<sup>th</sup> day of September, 2023.

---

Val Eisele, President

Attest:

---

Benjamin Karp, Secretary

Fiscal Year 2024 Budget V3  
Preliminary Levy Approval

| Budget ID Number | Budget Item          |   | FY 2023 Budget | General Fund | Capital Improvements | Carry-over Funds | Other Funds | Total Proposed 2024 Budget | Increase (decrease) from 2023 Budget |
|------------------|----------------------|---|----------------|--------------|----------------------|------------------|-------------|----------------------------|--------------------------------------|
| 1                | Engineering          | Administration  | 132,000        | 132,000      |                      |                  |             | 132,000                    | 0                                    |
| 2                |                      | Engineering Review  | 70,000         | 75,000       |                      |                  |             | 75,000                     | 5,000                                |
| 3                |                      | Permit Application Review                                 | 59,000         | 65,000       |                      |                  |             | 65,000                     | 6,000                                |
| 4                |                      | Permit Inspection and Enforcement                         | 10,000         | 10,000       |                      |                  |             | 10,000                     | 0                                    |
| 5                |                      | Project Feasibility Studies                               | 395,000        | 275,000      |                      |                  |             | 275,000                    | (120,000)                            |
| 6                |                      | GIS Maintenance   | 5,000          | 5,000        |                      |                  |             | 5,000                      | 0                                    |
| 7                |                      |   |                |              |                      |                  |             |                            |                                      |
| 8                | Attorney             | General   | 40,000         | 40,000       |                      |                  |             | 40,000                     | 0                                    |
| 9                |                      | Permit Enforcement  | 5,000          | 5,000        |                      |                  |             | 5,000                      | 0                                    |
| 10               |                      |   |                |              |                      |                  |             |                            |                                      |
| 11               | Managers             | Meeting Per diems   | 7,000          | 7,000        |                      |                  |             | 7,000                      | 0                                    |
| 12               |                      | Managers Expenses   | 3,000          | 3,000        |                      |                  |             | 3,000                      | 0                                    |
| 13               |                      |   |                |              |                      |                  |             |                            |                                      |
| 14               | Auditor/Accounting   | Auditor/Accounting  | 75,000         | 80,000       |                      |                  |             | 80,000                     | 5,000                                |
| 15               |                      |   |                |              |                      |                  |             |                            |                                      |
| 16               | Miscellaneous        | Dues & Publications                                       | 15,000         | 15,000       |                      |                  |             | 15,000                     | 0                                    |
| 17               |                      | Insurance   | 60,000         | 65,000       |                      |                  |             | 65,000                     | 5,000                                |
| 18               |                      | Committee & Board Meeting Expenses                        | 3,500          | 3,500        |                      |                  |             | 3,500                      | 0                                    |
| 19               |                      | Miscellaneous   | 5,000          | 5,000        |                      |                  |             | 5,000                      | 0                                    |
| 20               |                      |   |                |              |                      |                  |             |                            |                                      |
| 21               | Administrative       | Salary & Benefits   | 1,860,000      | 2,000,000    |                      |                  |             | 2,000,000                  | 140,000                              |
| 22               |                      | Employee Expenses   | 15,000         | 10,000       |                      |                  |             | 10,000                     | (5,000)                              |
| 23               |                      | Janitorial/Trash Services/Snow Plowing                    | 15,000         | 15,000       |                      |                  |             | 15,000                     | 0                                    |
| 24               |                      | Building Maintenance                                      | 125,000        | 100,000      |                      |                  |             | 100,000                    | (25,000)                             |
| 25               |                      | Utilities (gas,electric, water, sewer, maintenance)       | 30,000         | 20,000       |                      |                  |             | 20,000                     | (10,000)                             |
| 26               |                      | Office Supplies   | 7,000          | 7,000        |                      |                  |             | 7,000                      | 0                                    |
| 27               |                      | Copying/Printing  | 5,000          | 5,000        |                      |                  |             | 5,000                      | 0                                    |
| 28               |                      | Postage/Delivery  | 2,000          | 2,000        |                      |                  |             | 2,000                      | 0                                    |
| 29               |                      | Office Furniture & Computer Equipment                     | 100,000        | 80,000       |                      |                  |             | 80,000                     | (20,000)                             |
| 30               |                      | Office Equipment Maintenance                              | 2,000          | 2,000        |                      |                  |             | 2,000                      | 0                                    |
| 31               |                      | Training/Education  | 75,000         | 75,000       |                      |                  |             | 75,000                     | 0                                    |
| 32               |                      | Telephone   | 2,000          | 2,000        |                      |                  |             | 2,000                      | 0                                    |
| 33               |                      | District Vehicles/Maintenance                             | 20,000         | 60,000       |                      |                  |             | 60,000                     | 40,000                               |
| 34               |                      | GIS System Maintenance & Equip.                           | 5,000          | 0            |                      |                  |             | 0                          | (5,000)                              |
| 35               |                      | Database/GIS Maintenance & Equipment                      | 20,000         | 20,000       |                      |                  |             | 20,000                     | 0                                    |
| 36               |                      | IT Services/Internet/Website/Software Licenses            | 85,000         | 100,000      |                      |                  |             | 100,000                    | 15,000                               |
| 37               |                      | Outside Program Support                                   | 57,000         | 57,000       |                      |                  |             | 57,000                     | 0                                    |
| 38               |                      | Outside Consulting Services                               | 20,000         | 40,000       |                      |                  |             | 40,000                     | 20,000                               |
| 39               |                      |   |                |              |                      |                  |             |                            |                                      |
| 40               | Program              | WMP, Lakes, TMDLs, Grants                                 | 142,000        | 157,000      |                      |                  |             | 157,000                    | 15,000                               |
| 41               | Activities           | Natural Resources Program                                 | 120,000        | 120,000      |                      |                  |             | 120,000                    | 0                                    |
| 42               |                      | Water Monitoring-Lab Costs & Equip.                       | 240,000        | 260,000      |                      |                  |             | 260,000                    | 20,000                               |
| 43               |                      | Research Projects   | 155,000        | 150,000      |                      |                  |             | 150,000                    | (5,000)                              |
| 44               |                      | Project Operations  | 200,000        | 200,000      |                      |                  |             | 200,000                    | 0                                    |
| 45               |                      | Education Program   | 70,000         | 50,000       |                      |                  |             | 50,000                     | (20,000)                             |
| 46               |                      | Communications and Marketing                              | 50,000         | 60,000       |                      |                  |             | 60,000                     | 10,000                               |
| 47               |                      | Events  | 51,000         | 56,000       |                      |                  |             | 56,000                     | 5,000                                |
| 48               |                      | Health & Safety Program/Staff In-House Training           | 4,000          | 4,000        |                      |                  |             | 4,000                      | 0                                    |
| 49               |                      |   |                |              |                      |                  |             |                            |                                      |
| 50               | Capital Improvements | Maplewood Mall SRF Loan Debt Service                      | 92,441         |              | 92,000               |                  |             | 92,000                     | (441)                                |
| 51               | Summary              | Beltline and Battle Creek Tunnel Repair Debt Service      | 302,963        |              | 152,963              | 150,000          |             | 302,963                    | 0                                    |
| 52               |                      | Targeted Retrofit Projects                                | 1,500,000      |              | 500,000              | 800,000          | 800,000     | 2,100,000                  | 600,000                              |
| 53               |                      | Stewardship Grant Fund                                    | 1,128,000      |              | 750,000              | 500,000          |             | 1,250,000                  | 122,000                              |
| 54               |                      | Double Driveway Water Quality Optimization Implementation | 675,000        |              | 700,000              | 100,000          | 475,000     | 1,275,000                  | 600,000                              |
| 55               |                      | Project Repair & Maintenance                              | 1,500,000      |              | 800,000              | 800,000          |             | 1,600,000                  | 100,000                              |
| 56               |                      | Wetland Restoration Projects                              | 500,000        |              | 200,000              | 500,000          |             | 700,000                    | 200,000                              |
| 57               |                      | Flood Risk Reduction Fund                                 | 5,200,000      |              | 500,000              | 4,700,000        |             | 5,200,000                  | 0                                    |
|                  |                      | Totals  | 15,259,904     | 4,437,500    | 3,694,963            | 7,550,000        | 1,275,000   | 16,957,463                 | 1,697,559                            |

|   | Budget Total | Budget Total By Fund |            | Proposed Levy |
|---|--------------|----------------------|------------|---------------|
|   |              | General Fund         | CIB        |               |
| 2024 Budget Total and totals by fund                | 16,957,463   | 4,437,500            | 12,519,963 | 7,582,463     |
| 2023 Budget Total and totals by fund                | 15,259,904   | 4,361,500            | 10,898,404 | 7,116,500     |
| 2024 Budget Increase or (Decrease) from 2023 Budget | 1,697,559    | 76,000               | 1,621,559  | 465,963       |
| 2024 Budget % change from 2023 Budget               | 11.12%       | 1.74%                | 14.88%     | 6.55%         |

|                      | Projected '23 | Proposed    | Projected Other | Proposed     | FY '24      |
|----------------------|---------------|-------------|-----------------|--------------|-------------|
| Fund Sources         | Carry-Over    | 24 Levy     | Income          | 24 Budget    | Carry-Over  |
| General Fund         | \$2,500,000   | \$3,887,500 | \$50,000        | \$4,437,500  | \$2,000,000 |
| Capital improvements | \$7,550,000   | \$3,694,963 | \$1,275,000     | \$12,519,963 | \$0         |
| Total                | \$10,050,000  | \$7,582,463 | \$1,325,000     | \$16,957,463 | \$2,000,000 |

## 2024 Budget Program Line Item Breakouts

| Project Feasibility Studies (Line 5)  |           |
|---|-----------|
| Evalutate Compliance with South Metro Mississippi River TSS TMDL                | \$20,000  |
| Street Sweeping Study Evaluation  | \$20,000  |
| Retrofit Inventory and Assessment   | \$60,000  |
| Resiliency Study for non-Beltline Tributary Areas (future feasibility included) | \$150,000 |
| Contingency   | \$25,000  |
| Total =   | \$275,000 |

| Outside Program Support (Line 37)   |          |
|-------------------------------------|----------|
| Watershed Partners                  | \$10,000 |
| Blue Thumb                          | \$3,000  |
| East Metro Education                | \$13,000 |
| Cooperative Weed Management Program | \$10,000 |
| GIS Users Group                     | \$1,000  |
| Contingency                         | \$20,000 |
| Total =                             | \$57,000 |

| WMP, Lakes, TMDLs, Grants (Line 40)                           |           |
|---|-----------|
| Grant Applications  | \$20,000  |
| Watershed Management Plan Updates (Engagement, Gaps Analysis) | \$80,000  |
| West Vadnais Lake Incorporation                               | \$15,000  |
| Subwatershed Feasibility Studies Prioritization               | \$5,000   |
| Carver Ponds Internal Load Reduction                          | \$12,000  |
| Contingency   | \$25,000  |
| Total =   | \$157,000 |

| NR Program (Line 41)     |           |
|--------------------------|-----------|
| Ongoing Site Maintenance | \$25,000  |
| Carp Management Program  | \$30,000  |
| Restoration Project Work | \$20,000  |
| Equipment Needs          | \$40,000  |
| Contingency              | \$5,000   |
| Total =                  | \$120,000 |

| Water Monitoring (Line 42)                             |           |
|--|-----------|
| WQ Equipment Replacement and Repair                    | \$70,000  |
| Lab Costs  | \$100,000 |
| Barr Engineering Monitoring Assistance and Reporting   | \$30,000  |
| Barr Engineering Special Project Monitoring Assistance | \$60,000  |
| Total =  | \$260,000 |

| Research (Line 43)                                  |           |
|---|-----------|
| Minnesota Stormwater Research Council               | \$50,000  |
| Shallow Lakes Aeration Study Finalization           | \$5,000   |
| Kohlman Lake Aquatic Plant Management Effects Study | \$20,000  |
| Ferric Chloride Applcation to Gervais Mill Pond     | \$40,000  |
| New Technology Reports                              | \$15,000  |
| Internal Research/Contingency                       | \$20,000  |
| Total =   | \$150,000 |

| Education/Events/Communications (Lines 45-47) |           |
|---|-----------|
| Education and Work in Schools                 | \$50,000  |
| Communications and Marketing                  | \$60,000  |
| WaterFest                                     | \$40,000  |
| Watershed Excellence Awards                   | \$6,000   |
| Events Contingency                            | \$10,000  |
| Total =                                       | \$166,000 |

| Targeted Retrofits (Line 52)  |             |
|-------------------------------|-------------|
| Roosevelt Homes (2024 work)   | \$450,000   |
| Woodbury Target               | \$950,000   |
| Pioneer Park Stormwater Reuse | \$700,000   |
| Total =                       | \$2,100,000 |

| Project Repair and Maintenance (Line 55)         |             |
|--|-------------|
| 2024 Project Repair and Maintenance Contract     | \$625,000   |
| Beltline Fix Near River Outfall                  | \$600,000   |
| Routine Inspections and Unplanned Maintenance ID | \$125,000   |
| BMP and NR Maintenance Program                   | \$250,000   |
| Total =  | \$1,600,000 |

| Flood Risk Reduction Fund (Line 57)                                 |             |
|---|-------------|
| West Industrial Park Berm and Improvements (Owasso Basin area)      | \$1,250,000 |
| Ames Lake Area Improvements Design                                  | \$250,000   |
| PCU Pond Area Improvements Design                                   | \$150,000   |
| County Road C Culvert Capacity Implementation                       | \$200,000   |
| Kohlman Creek Storage and Detention Design                          | \$150,000   |
| Funding for Implementation of Flood Risk Reduction Projects in 2025 | \$3,200,000 |
| Total =   | \$5,200,000 |

Items shown on these budget line item breakouts are subject to change. Projects are identified but may need adjustments or additional project opportunities with similar goals may be determined during the year.

## 2024 BUDGET NARRATIVE V2

| Budget Line No.                     | Item & Description   | Budget Amount | Change from '23<br>increase (decrease) |
|-------------------------------------|--|---------------|--|
| <b>General Fund Budget Summary:</b> |  |               |  |
| 1                                   | <b>Engineering - Administration</b><br>Oversight of all District Engineering activities, supervising staff assigned to projects, responding to general inquiries of the public and the Board, and preparing correspondence and billings. Engineering attendance at meetings of the District- covers Board and related project meetings, mini case studies, data collection, analysis, preparation of reports as requested by the managers and assisting in District water management planning activities. This also includes preparation for board workshop topics as requested. | 132,000       | 0                                      |
| 2                                   | <b>Engineering - Review</b><br>Review and comment on plans and proposals submitted to the District for review relative to District regulations, policies and concerns. Assist communities and counties with data and information needs related to projects and plans.  | 75,000        | 5,000                                  |
| 3                                   | <b>Engineering - Permit Application Review and Processing</b><br>Provides for Engineering assistance in review of all permit applications, clarifying problems with the developer, meet developer on-site, coordinate permit issues with communities, counties, and other regulatory bodies.   | 65,000        | 6,000                                  |
| 4                                   | <b>Engineering - Permit Inspection &amp; Enforcement</b><br>Inspect projects when a designed improvement is involved and requested by District staff.  | 10,000        | 0                                      |
| 5                                   | <b>Engineering - Project Feasibility Studies</b><br>This item provides a budget item for annual feasibility studies in preparation of future capital improvement projects. See Program Budget Line Item Breakout table.  | 275,000       | (120,000)                              |
| 6                                   | <b>Engineering - GIS Maintenance</b><br>Provides funds for maintenance and assistance of the District GIS system.  | 5,000         | 0                                      |

| <b>Budget Line No.</b> | <b>Item &amp; Description</b>   | <b>Budget Amount</b> | <b>Change from '23<br/>increase (decrease)</b> |
|------------------------|---|----------------------|--|
| 8                      | <b>Attorney - General</b><br>Legal advice at meetings, research on various issues for Board consideration, preparation and publication of legal notices, preparation of Board resolutions, and other matters requiring legal counsel.     | 40,000               | 0  |
| 9                      | <b>Attorney - Permit Enforcement</b><br>Legal advice on permit sites including enforcement activities, letter and legal action as necessary.  | 5,000                | 0  |
| 11                     | <b>Manager per Diems</b><br>Manager per diems for regular and special meeting attendance. Increased budget due to increase in state statute amount allowed for manager per diems.   | 7,000                | 0  |
| 12                     | <b>Manager Expenses</b><br>Manager Expenses incurred in the performance of official manager duties, such as attendance at conferences and meetings and related expenses.  | 3,000                | 0  |
| 14                     | <b>Auditor/Accounting</b><br>Preparation of the District's annual audit and provide monthly accounting services.  | 80,000               | 5,000  |
| 16                     | <b>Dues &amp; Publications</b><br>Dues for appropriate organization memberships (MAWD, League of MN Cities, etc.) and for purchase of necessary publications and reference materials.   | 15,000               | 0  |
| 17                     | <b>Insurance</b><br>District General Liability, Property/Casualty, Public Official Liability insurance, etc.  | 65,000               | 5,000  |
| 18                     | <b>Committee &amp; Board Meeting Expenses</b><br>Budget to cover miscellaneous expenses related to the duties and activities of District advisory committees, such as, meeting refreshments, supplies, public information materials, etc. | 3,500                | 0  |

| <b>Budget Line No.</b> | <b>Item &amp; Description</b>   | <b>Budget Amount</b> | <b>Change from '23<br/>increase (decrease)</b> |
|------------------------|---|----------------------|--|
| 19                     | <b>Miscellaneous Expenses</b><br>Expenses of the District not elsewhere classified. Examples include: miscellaneous financial charges and expenses, District tour expenses, pass through expenses, etc.                               | 5,000                | 0  |
| 21                     | <b>Staff Salaries, Taxes &amp; Benefits</b><br>Includes salary, taxes, insurance and benefits for existing full time staff plus summer interns. This budget includes an allowance for a salary increases and increased benefit costs. | 2,000,000            | 140,000  |
| 22                     | <b>Employee Expenses</b><br>This includes mileage, parking, and supply expenses incurred by the District's staff.   | 10,000               | (5,000)  |
| 23                     | <b>Janitorial/Trash Services/Snow Removal</b><br>Contract services required for office building and winter snow removal.  | 15,000               | 0  |
| 24                     | <b>Building Maintenance</b><br>Building repairs, equipment and landscape maintenance expenses.  | 100,000              | (25,000)                                       |
| 25                     | <b>Utilities</b> (gas, electric, water, sewer)<br>Provides for office building utility expenses.  | 20,000               | (10,000)                                       |
| 26                     | <b>Office Supplies</b><br>Office supply costs for district operations.  | 7,000                | 0  |
| 27                     | <b>Copying/Printing</b><br>Photocopying and commercial printing expenses.   | 5,000                | 0  |
| 28                     | <b>Postage/Delivery</b><br>District postage and delivery expenses.  | 2,000                | 0  |
| 29                     | <b>Office Furniture and Computer Equipment</b><br>Acquisition of necessary new and replacement office equipment and furniture.  | 80,000               | (20,000)                                       |



| <b>Budget Line No.</b> | <b>Item &amp; Description</b>   | <b>Budget Amount</b> | <b>Change from '23<br/>increase (decrease)</b> |
|------------------------|---|----------------------|--|
| 30                     | <b>Office Equipment Maintenance</b><br>To fund office equipment maintenance.  | 2,000                | 0  |
| 31                     | <b>Training/Education</b><br>Training and education expenses for the District staff including pursuing equity/inclusion work.   | 75,000               | 0  |
| 32                     | <b>Telephone</b><br>District telephone expenses. Includes office phone system and support costs.  | 2,000                | 0  |
| 33                     | <b>Vehicle Replacement, Equipment and Maintenance</b><br>Provides for fleet maintenance and equipment as well as a new vehicle purchase.  | 60,000               | 20,000   |
| 34                     | <b>GIS System Maintenance &amp; Equipment</b><br>Removing this line item and combining with the Database Improvements line below.   | 0                    | (5,000)  |
| 35                     | <b>Database &amp; GIS Maintenance and Equipment</b><br>Provides for improvements to district database programs for permit program, stewardship grant program, inspections and timesheets. Also includes GIS system needs. | 20,000               | 0  |
| 36                     | <b>IT Services/Internet/Web Site/Software Licenses</b><br>Provides for maintenance and upgrades to computer network and software upgrades.  | 100,000              | 15,000   |
| 37                     | <b>Outside Program Support</b><br>Provides budget for financial support of programs that provide support to the District and its goals. See attached list.  | 57,000               | 0  |
| 38                     | <b>Outside Consultant Services</b><br>Provides funds for contracting special services with outside consultants as needs arise in the year. This includes DEIA work consultants.   | 40,000               | 20,000   |

| <b>Budget Line No.</b> | <b>Item &amp; Description</b>  | <b>Budget Amount</b> | <b>Change from '23<br/>increase (decrease)</b> |
|------------------------|--|----------------------|--|
| 40                     | <b>WMP, Lakes, TMDLs, Grants</b><br>This item is for various water body studies and related topics. See Program Budget Line Item Breakout table.   | 157,000              | 15,000   |
| 41                     | <b>Natural Resources Program</b><br>This item includes funding for project to enhance ecological diversity within the District – habitat restoration projects, site maintenance, studies and research.   | 120,000              | 0  |
| 42                     | <b>Water Quality Monitoring</b><br>Includes lab costs and equipment for lake sampling, BMP monitoring and performance monitoring. See attached list for breakdown.   | 260,000              | 20,000   |
| 43                     | <b>Research Projects</b><br>This account provides funds for conducting research into various water and resource management issues and problems. The budget includes contributions to the Minnesota Stormwater Research (MSR) program as well as the potential projects shown in the attached Program Budget Line Item Breakout table.  | 150,000              | (5,000)  |
| 44                     | <b>Project Operations</b><br>This budget provides funds for the ongoing operational costs for District projects that incur utility or supply costs. Some examples include the auto lake level monitoring systems as well as the Keller Channel Weir and Phalen Outlet modification operations.   | 200,000              | 0  |
| 45                     | <b>Educational Programming</b><br>Production of materials and programs designed to improve the understanding and knowledge of the school children, general public, city and county staff, developers and others of the District's programs and watershed management. This includes continued support of Master Water Stewards Program as well as support of the Adopt-a-Drain program. | 50,000               | (20,000)                                       |

| <b>Budget Line No.</b> | <b>Item &amp; Description</b>   | <b>Budget Amount</b> | <b>Change from '23<br/>increase (decrease)</b> |
|------------------------|---|----------------------|--|
| 46                     | <b>Communications and Marketing</b><br>This will be used to support our communications and marketing plan including updates to printed materials, accessibility audit of our digital platforms, and a community survey. | 60,000               | 10,000   |
| 47                     | <b>Events</b><br>Provide funds for the annual WaterFest program and Watershed Excellence Awards program.  | 56,000               | 5,000  |
| 48                     | <b>Health &amp; Safety Program/Staff In-house Training</b><br>Provides funds to support the District staff safety program, training costs, equipment.   | 4,000                | 0  |

**Capital Improvement Budget Summary:**

|    |  |           |         |
|----|--|-----------|---------|
| 50 | <b>Maplewood Mall SRF Loan Debt Service</b><br>Annual payment for the State Revolving Fund (SRF) loan for Maplewood Mall Phase IV project.   | 92,000    | (441)   |
| 51 | <b>2016 Beltline and Battle Creek Tunnel Repair Debt Service</b><br>This is the principal and interest payment for a bond issue approved in 2016.  | 302,963   | 0       |
| 52 | <b>Targeted Retrofit Projects</b><br>This budget is to fund projects that have been targeted by the District as a priority project for water quality and natural habitat. Projects are vetted in the current year and potential project implementations are planned for 2024. Projects with the most potential at this time are planned for. Other projects identified to meet the goals for targeted retrofits may also present themselves over the next year. Staff will manage projects within the proposed Targeted Retrofit Projects budget and present them to the board as they develop. See Program Budget Line Item Breakout table. | 2,100,000 | 600,000 |

| <b>Budget Line No.</b> | <b>Item &amp; Description</b>  | <b>Budget Amount</b> | <b>Change from '23<br/>increase (decrease)</b> |
|------------------------|--|----------------------|--|
| 53                     | <b>Stewardship Grant Fund</b><br>Provide funds for cost-share assistance to local partners, churches, public and private developers and homeowners for funding of volume reduction, habitat restoration, and other practices above the requirements of District rules.   | 1,250,000            | 122,000  |
| 54                     | <b>Double Driveway Water Quality Optimization Implementation</b><br>This is a capital improvement project that may materialize out of the 2022 feasibility study of the same name. This is a water quality project in the Fish Creek subwatershed to target sediment based on the impairment the creek has.  | 1,275,000            | 600,000  |
| 55                     | <b>Project Repair and Maintenance</b><br>Provides funds for the maintenance of District projects and trunk conveyor system. Also includes funds for continuation of a BMP maintenance program and a contingency fund. See Program Budget Line Item Breakout table.   | 1,600,000            | 100,000  |
| 56                     | <b>Wetland Restoration Projects</b><br>This is a placeholder for the board to consider for projects that would include wetland restoration work.   | 700,000              | 200,000  |
| 57                     | <b>Flood Risk Reduction Fund</b><br>Provides funds for flood control projects including acquisition or flood proofing of existing flood prone structures. Assistance to cities to reduce flood risks in areas identified by District modeling of Atlas 14 storm events could also be included. This fund pools money for projects that meet the board's flood risk reduction goals. Funds are also held in reserves for other project opportunities that may arise. See the Program Budget Line Item Breakout table. | 5,200,000            | 0  |



**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT

*Quality Water for Quality Life.*

# 2024 Preliminary Budget & Levy Public Hearing Overview

|  | Budget<br>Total | Budget Total By Fund |              | Proposed<br>Levy |
|--|-----------------|----------------------|--------------|------------------|
|  |                 | General Fund         | CIP          |                  |
| 2024 Budget Total and totals by fund                   | \$16,957,463    | \$4,437,500          | \$12,519,963 | \$7,582,463      |
| 2023 Budget Total and totals by fund                   | \$15,259,904    | \$4,361,500          | \$10,898,404 | \$7,116,500      |
| 2024 Budget Increase or (Decrease) from<br>2023 Budget | \$1,697,559     | \$76,000             | \$1,621,559  | \$465,963        |
| 2024 Budget % change from 2023 Budget                  | 11.12%          | 1.74%                | 14.88%       | 6.55%            |



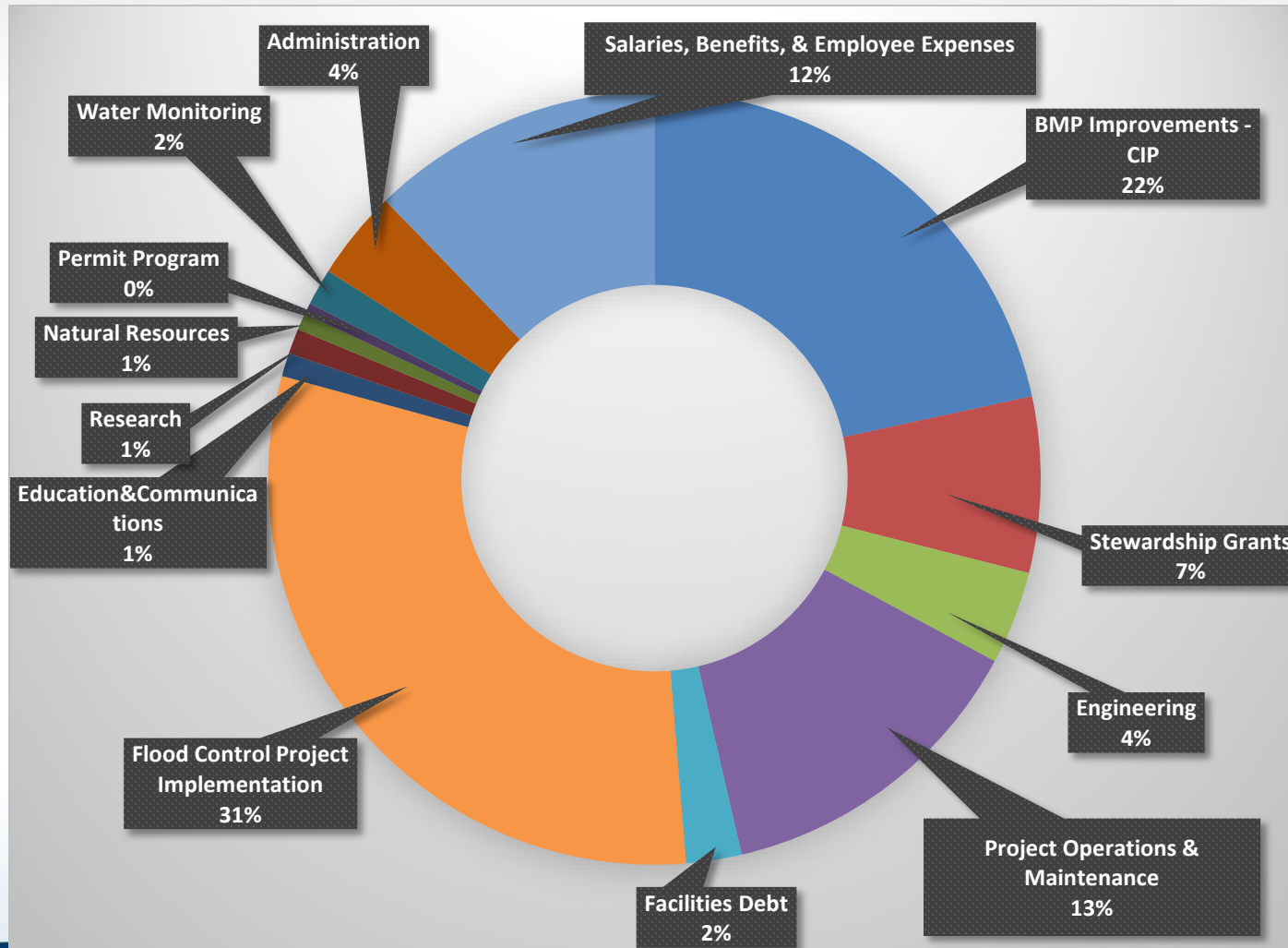
# Capital Improvement Projects

## Budget Items

| CIP Project  | 2024 Budget         | 2024 Levy        | Carry-over       | 2023 Budget         | Difference         |
|--|---------------------|------------------|------------------|---------------------|--------------------|
| Maplewood Mall SRF Loan Debt Service                 | 92,000              | 92,000           | 0                | 92,441              | 441                |
| Beltline and Battle Creek Tunnel Repair Debt Service | 302,963             | 152,963          | 150,000          | 302,963             | 0                  |
| Targeted Retrofit Projects                           | 2,100,000           | 500,000          | 800,000          | 1,500,000           | 600,000            |
| Stewardship Grant Fund                               | 1,250,000           | 750,000          | 500,000          | 1,128,000           | 122,000            |
| Double Driveway Water Quality Optimization           | 1,275,000           | 700,000          | 100,000          | 675,000             | 600,000            |
| Project Repair & Maintenance                         | 1,600,000           | 800,000          | 800,000          | 1,500,000           | 100,000            |
| Wetland Restoration Projects                         | 700,000             | 200,000          | 500,000          | 500,000             | 200,000            |
| Flood Risk Reduction Fund                            | 5,200,000           | 500,000          | 4,700,000        | 5,200,000           | 0                  |
| <b>TOTALS</b>  | <b>\$12,519,963</b> | <b>3,694,963</b> | <b>7,550,000</b> | <b>\$10,898,404</b> | <b>\$1,621,559</b> |



# Budget % by Program Area

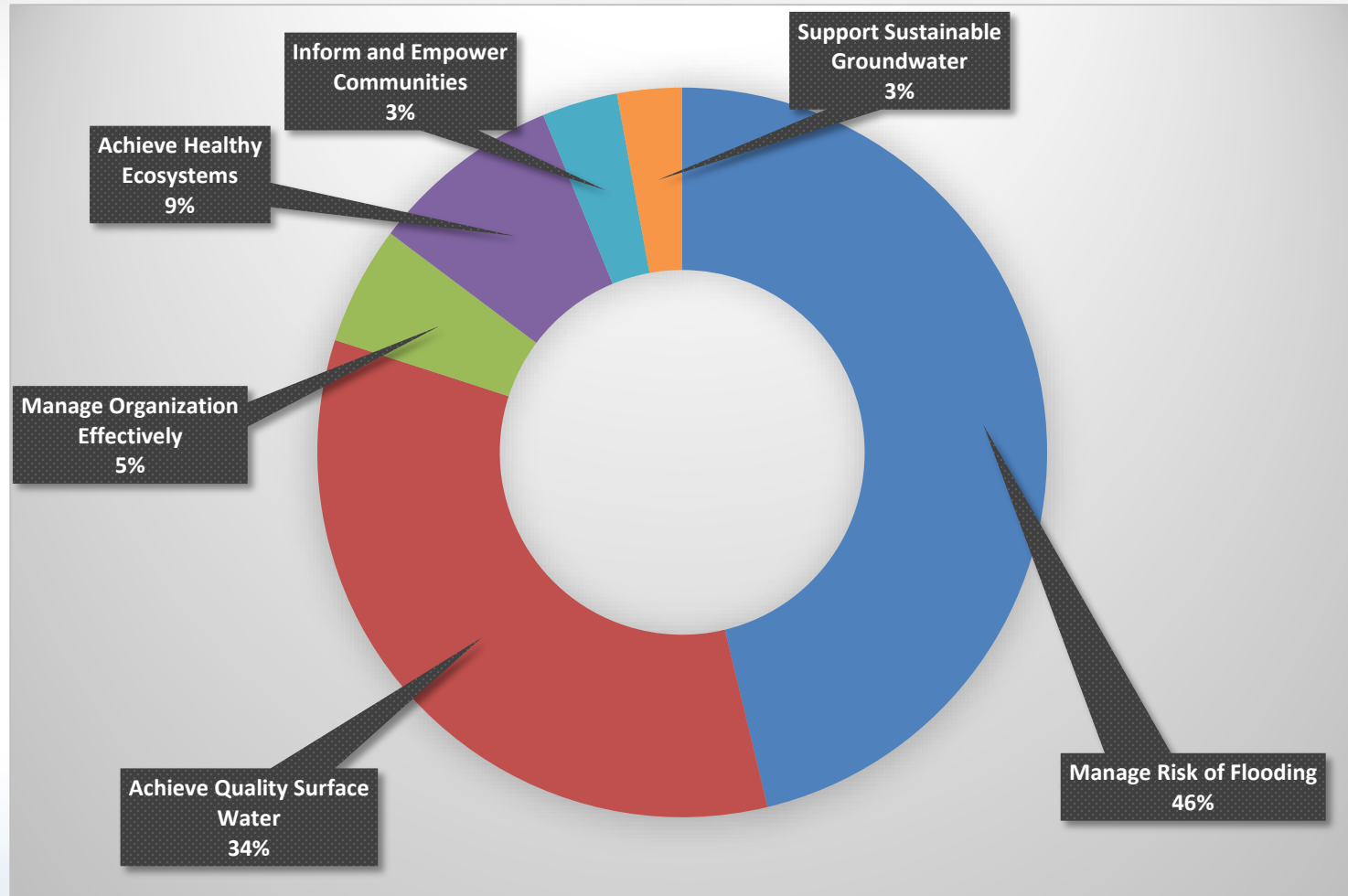


**Projects: 79%**  
**Admin and Programs: 21%**

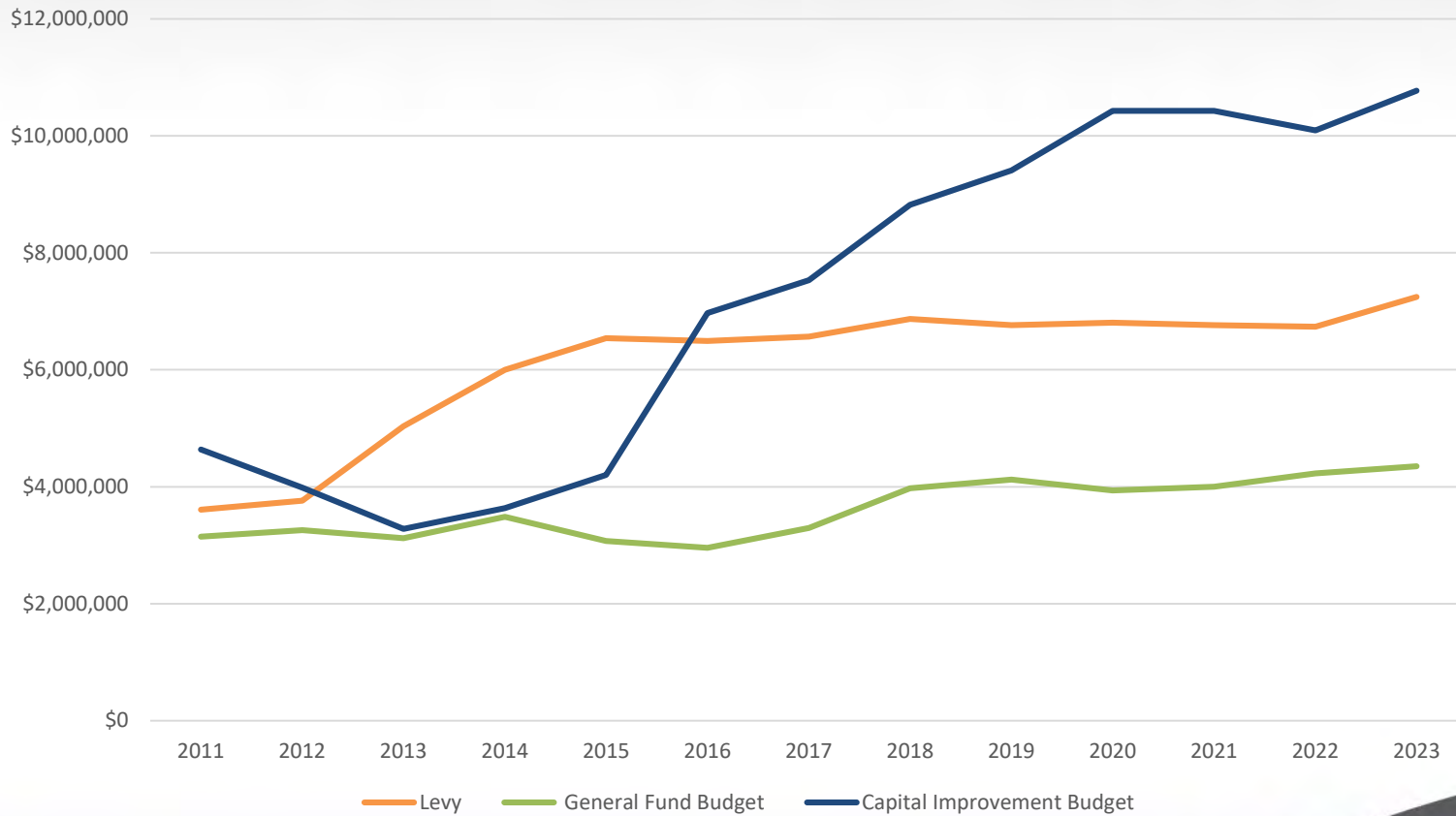




# Budget % by Watershed Management Plan Goals



# Historical Levy and Budget



# Impact of Proposed Levy on Residential Homestead Taxes

2024 Local Tax Rate = 2.600% (decrease of -5.7% from 2023)

Assumes a 8.8% change in market value from 2023 to 2024, the median change.

| Proposed Pay 2024 |                  |              |          |                 |           |
|-------------------|------------------|--------------|----------|-----------------|-----------|
| Market Value      | Homestead Market | Taxable      | Tax      | Taxing District | Change    |
| Before Exclusion  | Value Exclusion  | Market Value | Capacity | Portion of Tax  | From 2023 |
|                   |                  |              |          |                 |           |
| 250,000           | 14,700           | 235,300      | 2,353    | \$61.18         | 4.0%      |
| 300,000           | 10,200           | 289,800      | 2,898    | \$75.35         | 3.7%      |
| 350,000           | 5,700            | 344,300      | 3,443    | \$89.52         | 3.6%      |
| 400,000           | 1,200            | 398,800      | 3,988    | \$103.69        | 3.4%      |



# Impact of Proposed Levy on Residential Homestead Taxes

Assumes a 8.8% change in market value from 2023 to 2024, the median change.

| Proposed Pay 2024   |           |                     |           |                     |           |
|---------------------|-----------|---------------------|-----------|---------------------|-----------|
| Taxing District     | Change    | Taxing District     | Change    | Taxing District     | Change    |
| Portion of Tax      | From 2023 | Portion of Tax      | From 2023 | Portion of Tax      | From 2023 |
| 6.55% Levy Increase |           | 5.11% Levy Increase |           | 3.00% Levy Increase |           |
| \$61.18             | 4.0%      | \$60.24             | 2.4%      | \$58.87             | 0.1%      |
| \$75.35             | 3.7%      | \$74.19             | 2.1%      | \$72.51             | -0.2%     |
| \$89.52             | 3.6%      | \$88.14             | 2.0%      | \$86.14             | -0.4%     |
| \$103.69            | 3.4%      | \$102.09            | 1.8%      | \$99.78             | -0.5%     |





**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT

*Quality Water for Quality Life.*

[rwmwd.org](http://rwmwd.org)

\* \* \* \* \*

# New Reports/ Presentations

\* \* \* \* \*



# Cottage Place Wetland Restoration Project

**Presentation to RWMWD's Board of Managers September 6, 2023**

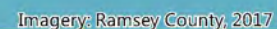
Brendan Dougherty, Landscape Architect, Barr Engineering Company



# Presentation Overview

- Project background
- Site history
- Wetland delineation summary
- Phase 1 and 2 site assessments
- Project goals and objectives
- Next steps





- 



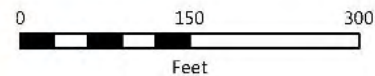
FIGURE 4





Imagery: Ramsey County, 2017

- City or Church Property
- Parcel Boundary
- Historical Wetland = 9.24 acres
- 2018 Wetland Delineation = 2.34 acres



**PROPERTY OWNERSHIP**  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

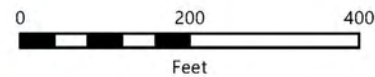
**FIGURE 8**





Imagery: Ramsey County 1953

 Historical Wetland




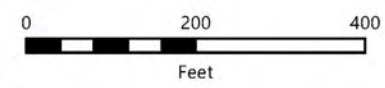
1953 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

FIGURE 9B



Imagery: Ramsey County 1974

 Historical Wetland



1974 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

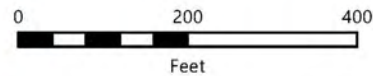
FIGURE 9C





Imagery: Ramsey County 1985

 Historical Wetland



1985 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

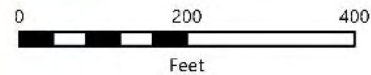
FIGURE 9D





Imagery: Ramsey County 2015

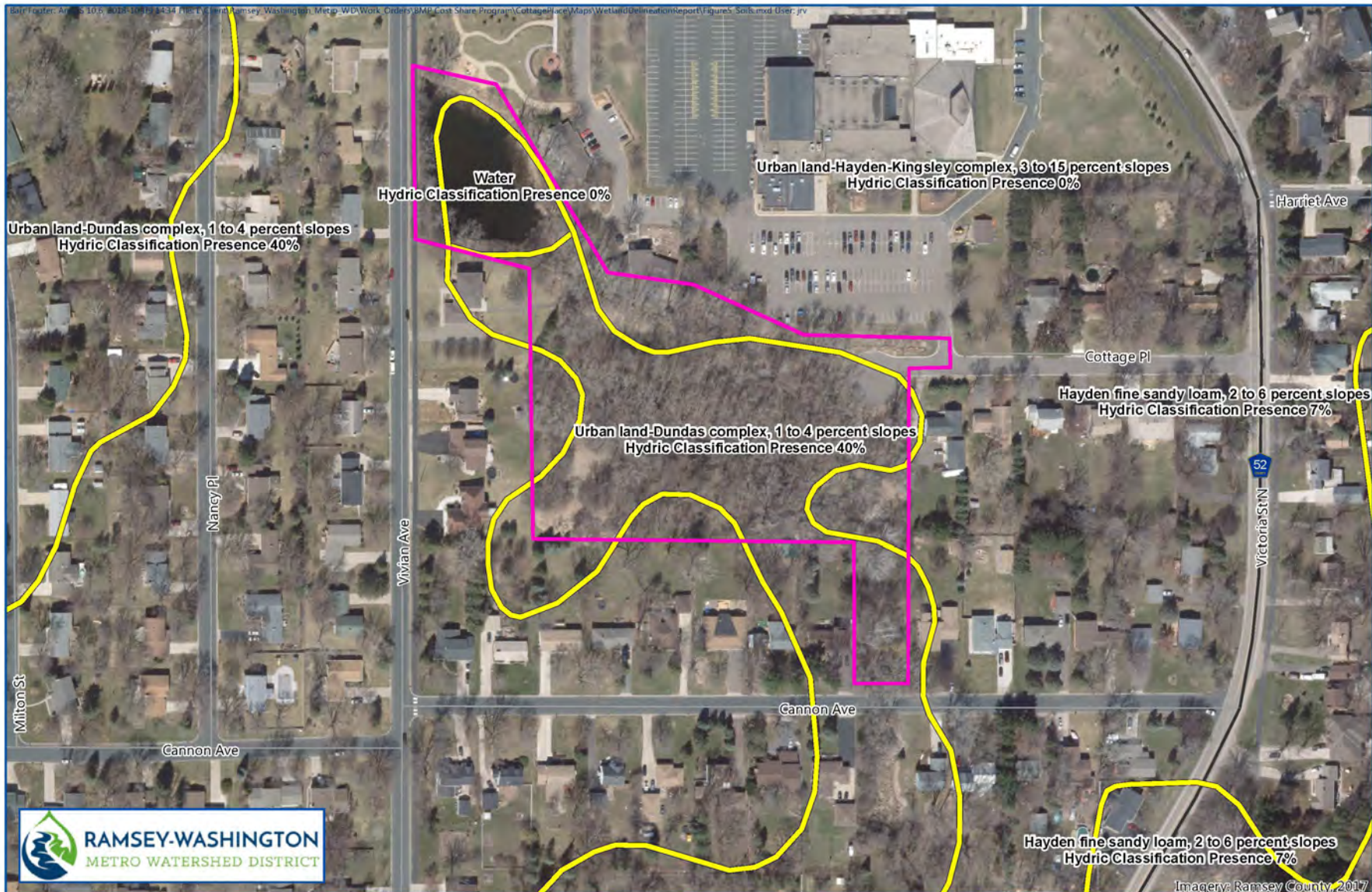
 Historical Wetland



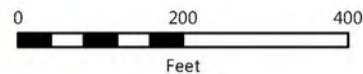
2015 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

FIGURE 9K





- Wetland Evaluation Area
- Statewide SSURGO Data



SOIL SURVEY MAP  
Cottage Place  
Ramsey-Washington Metro  
Watershed District

FIGURE 5













RAMSEY-WASHINGTON  
METRO WATERSHED DISTRICT

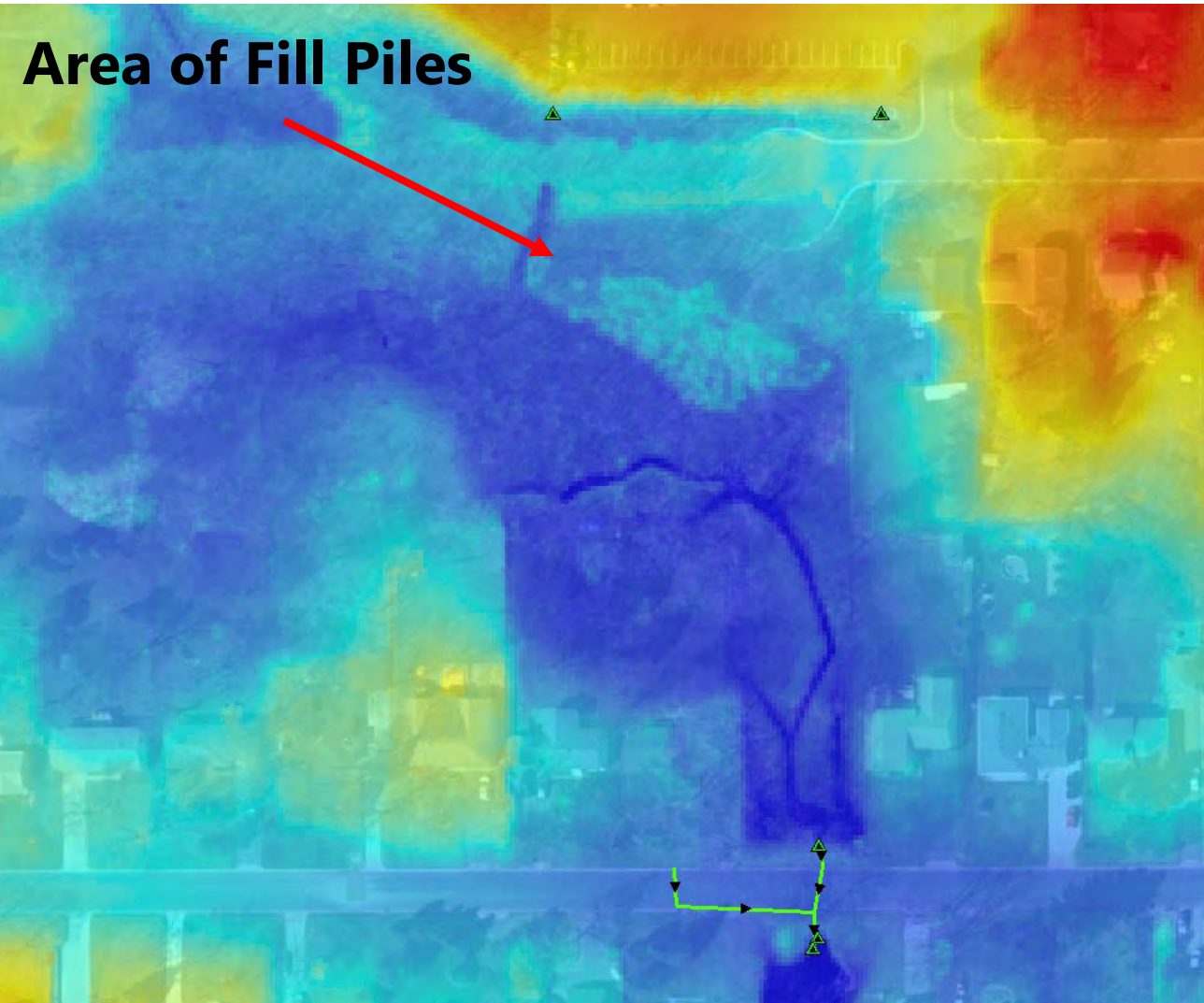






# Phase 1 and 2 Environmental Assessments

**Phase 1:** *Historical filling of undocumented materials and evidence of dumping on the east side of the site as a recognized environmental condition.*



## **Phase 2 test trenches:**

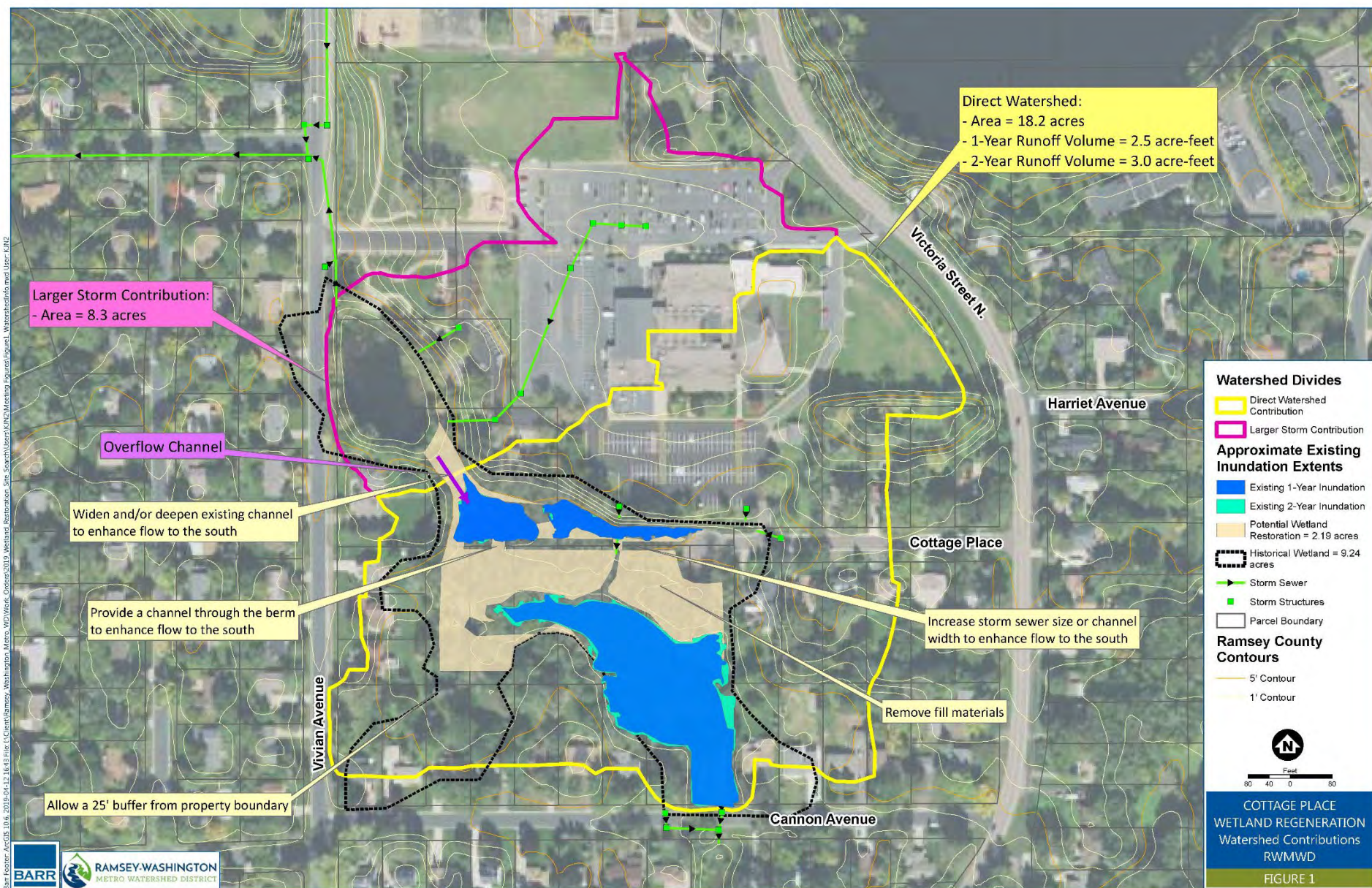
*The presence of the debris in the fill should be addressed as part of the project...no further investigations are believed to be needed.*



**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT



San Foster ArcGIS 10.6, 2019-04-12 16:43 File: I:\Client\Ramsey, Washington Metro, WDW\Work\Ones\2019 Wetland Restoration Site Search\Users\KJ\Meeting Figures\Figure1 Watershed.rvt User: KJ\2





### Wetland Area

Existing Wetland: 1.42 acres

Proposed Wetland: 2.35 acres

Additional Wetland Created: 0.93 acres







**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT





**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT





RAMSEY-WASHINGTON  
METRO WATERSHED DISTRICT





**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT





# RAMSEY-WASHINGTON

## METRO WATERSHED DISTRICT

*Quality Water for Quality Life.*

## Project Work Plan

Original Date: March 15, 2019

Updated: August 31, 2023

### Project: Cottage Place Wetland Restoration

Project: 23/62-1306.00

### Project Team

District Staff: Paige Ahlborg

Barr Staff: Erin Anderson Wenz, Fred Rozumalski, Katie Turpin-Nagel, Jennifer Brekken, Karen Wold, Brendan Dougherty

### Barr Team Roles

|                                     |  |
|-------------------------------------|--|
| Project Management:                 | Brendan Dougherty                      |
| Design:                             | Fred Rozumalski, Brendan Dougherty     |
| Hydraulic and Hydrologic Modeling:  | Katie Turpin-Nagel                     |
| Engineering Review:                 | Erin Anderson-Wenz, Katie Turpin-Nagel |
| Landscape Architecture:             | Fred Rozumalski, Brendan Dougherty     |
| Wetland Delineation and Permitting: | Karen Wold                             |

### City of Shoreview Staff

Public Works Director: Tom Wesolowski

City Natural Resources Specialist: Jeremiah Walters

### Scope of Work

Cottage Place wetland is a degraded wetland that has lost much of its ecological value and stormwater treatment capacity due to changes within the watershed and direct alterations by people. A portion of the wetland has been filled with bituminous asphalt, concrete and possibly other unknown materials that are visible as distinct dump truck piles overgrown with cottonwood and boxelder trees. The property is owned by the City of Shoreview and the Church of St. Odelia. This site provides many opportunities to meet District goals including:

- to restore ecological value
- to provide additional stormwater treatment
- to clean up environmental contamination
- to serve as an educational facility
- to restore wildlife habitat
- to provide passive recreation

**Tasks 1 through 3** of this project were completed during 2018 and 2019. The project was then put on hold as the District pursued other priorities in 2020, 2021 and 2022. District staff propose that Tasks 4



through 8 be pursued in 2024. A description of the completed tasks (1 through 3) are included below in italics.

***Task 1** involved conducting a site analysis and a visioning workshop. Existing information on hydrology, soils, plant community, potential environmental contamination and adjacent land uses were gathered and mapped in preparation for a visioning workshop. Barr staff facilitated a visioning workshop with District and City staff, and Church of St. Odelia representatives to produce goals and objectives for the project along with a vision of what the site would ideally become. A wetland delineation report was completed for the site's in 2018 (Barr, 2018) and a complete topographic survey of the site was completed for the development of a design base layer to be used in the creation of construction drawings later in the project.*

***Task 2** involved the process of environmental investigation and cleanup. The first step was to conduct a Phase 1 environmental site assessment (ESA) to evaluate the potential sources and areas of soil and groundwater contamination based on historical land use and current site conditions. The Phase I process involved a desktop study of regulatory and historical records, interviews and a site visit, which were documented in a Phase I ESA report. A Phase I ESA helps inform plans for collecting environmental samples, and is required when seeking MPCA review and approval of investigation and cleanup, and grant funding. A meeting was conducted to share the Phase 1 investigation results with the District and City staff.*

*Next, Barr conducted a limited Phase 2 investigation to assess soil conditions and collect environmental samples. The results of this investigation are included as an attachment to this memo, with its recommendations summarized below:*

*"The presence of the debris in the fill should be addressed as part of the project. If possible, the fill soils with debris could remain on-site and it is recommended that a debris-free, vegetated clean soil cover be established over the debris if the project's earthwork and grading plans can accommodate it. If the project requires soil export, any exported soils that are free of debris would meet MPCA's guidelines for soil reuse. If export of soils with debris from the site is required for the project, those soils will likely need to be taken to a landfill for disposal, as they do not meet MPCA's soil reuse guidelines.*

*Based on the favorable field screening and analytical results, enrollment of the project into MPCA's voluntary brownfields program is not recommended and no further investigations are believed to be needed. It may be helpful to prepare a Construction Contingency Plan to help guide the earthwork contractor and field staff in the event unexpected environmental conditions are encountered in the fill during excavation. If topsoil or fill is imported for the project, we also recommend testing the soil for contamination prior to importing to the site. Barr can assist you with those items and include them in the plans and specifications for the project."*

***Task 3** included the conceptual design of a wetland regeneration plan. Barr developed a conceptual drawing of the wetland regeneration project with the layout of additional stormwater treatment, habitat improvements, recreational/educational facilities and other aspects set forth in the initial workshop. The conceptual design was presented to District staff and then presented to City staff and Church representatives to determine best course forward for both the District and the land owners.*

**Task 4** will involve the assessment of stormwater improvement options. Modeling will be conducted using XPSWMM to verify flood elevations (hydraulics) and P8 to analyze water quality benefit.

**Task 5** will involve the wetland permitting processes that may be necessary if the wetland is to be altered.

**Task 6** will involve the creation of plans and specifications for Cottage Place wetland restoration project. A meeting will be conducted at the kick-off for this task with all project partners to review the conceptual plan and discuss any changes that may be necessary. Construction plans will then be developed and reviewed by District staff, City staff and park staff, as well as St. Odelia Church staff at both 30% and 100% completion to ensure that the project meets desired goals. When Barr has completed 100% plans and specifications, they will be presented to the Board for approval along with an engineer's opinion of cost for the project.

**Task 7** will involve public solicitation of bids for construction of the project. If the RWMWD board approves the plans and specifications created in Task 6, Barr will solicit and accept bids. The bids and Barr's recommendation will be presented to the RWMWD board for selection of a contractor.

**Task 8** will involve assisting district staff with construction observation and administration. We anticipate that construction will be completed, and the project closed out in spring of 2025.

### **Budget**

Barr will complete the work outlined above (Tasks 4 through 8) on a time and expense basis, for an estimated **\$113,800**.

## **Project Tracking**

### **Project Milestones**

| <b>Milestone</b>                                     | <b>Estimated Completion Date</b> | <b>Actual Completion Date</b> |
|--|----------------------------------|-------------------------------|
| Task 4: Assessment of stormwater Improvement options | January, 2024                    |                               |
| Task 5: Wetland Permitting                           | February, 2024                   |                               |
| Task 6a: 30% Plans and Specifications                | March, 2024                      |                               |
| Task 6b: 100% Plans and Specifications               | April, 2024                      |                               |
| Task 7: Project Bidding                              | May, 2024                        |                               |
| Task 8: Construction Administration                  | Summer/Fall, 2024                |                               |

**Attachment: Wetland Delineation Report (Barr, 2018)**



RAMSEY-WASHINGTON  
METRO WATERSHED DISTRICT



# **Wetland delineation report**

## ***Cottage Place—Shoreview***

Prepared for the  
Ramsey-Washington Metro Watershed District

October 2018

# Wetland delineation report

## Cottage Place—Shoreview

October 2018

## Contents

|       |   |    |
|-------|---|----|
| 1.0   | Introduction .....                                  | 1  |
| 2.0   | General environmental setting.....                  | 2  |
| 2.1   | Site description .....                              | 2  |
| 2.2   | Site topography.....                                | 2  |
| 2.3   | Precipitation .....                                 | 2  |
| 2.4   | National wetland inventory .....                    | 5  |
| 2.5   | Water resources.....                                | 5  |
| 2.6   | Soil resources .....                                | 5  |
| 3.0   | Wetland delineation .....                           | 6  |
| 3.1   | Wetland delineation and classification methods..... | 6  |
| 3.2   | Wetland descriptions .....                          | 6  |
| 3.2.1 | Wetland 1 .....                                     | 7  |
| 3.2.2 | Wetland 2/stormwater pond .....                     | 8  |
| 3.3   | Wetland restoration potential .....                 | 8  |
| 4.0   | Regulatory overview .....                           | 10 |
| 5.0   | References .....                                    | 11 |



## List of tables

|         |   |
|---------|---|
| Table 1 | Antecedent moisture conditions prior to June 1, 2018 site visit |
| Table 2 | Precipitation in comparison to WETS data                        |
| Table 3 | Wetland summary table   |

## List of figures

|              |                               |
|--------------|-------------------------------|
| Figure 1     | Site location map             |
| Figure 2     | Site topography               |
| Figure 3     | National wetland inventory    |
| Figure 4     | Public water inventory        |
| Figure 5     | Soil survey map               |
| Figure 6     | Wetland delineation map       |
| Figure 7     | Potential restoration         |
| Figure 8     | Property ownership            |
| Figures 9A-K | Aerial imagery from 1940-2015 |

## List of appendices

|            |                    |
|------------|--------------------|
| Appendix A | Wetland data forms |
| Appendix B | Site photographs   |

## Certifications

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Certified Wetland Delineator under the State of Minnesota Wetland Delineator Certification Program.



---

Karen Wold  
Certified Wetland Delineator No. 1090

---

August 3, 2018

---

Date

---

## 1.0 Introduction

On behalf of the Ramsey-Washington Metro Watershed District (RWMWD), Barr Engineering Co. has completed a wetland delineation as part of a potential restoration evaluation. The wetland evaluation area is located west of Victoria Street North and south of County Road E in Shoreview, Ramsey County, Minnesota, within Section 35 of Township 30 North, Range 23 West. See **figure 1** for a project location map.

On June 1, 2018, Barr conducted a wetland delineation within the evaluation area to assist with the planning activities. This wetland delineation report has been prepared in accordance with the 1987 *U.S. Army Corps of Engineers Wetland Delineation Manual*, the 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, and the requirements of the Minnesota Wetland Conservation Act (WCA) of 1991. A joint application form requesting wetland boundary and type concurrence and U.S. Army Corps of Engineers (USACE) jurisdictional determination is included with this wetland delineation report.

This report includes general environmental information (section 2.0), descriptions of the delineated wetland area (section 3.0), and a discussion of regulations and the administering authorities (section 4.0). The **tables** include the antecedent moisture conditions prior to the June 1, 2018 site visit; precipitation data; and wetland summary. The **figures** include the site location map, site topography map, National Wetland Inventory map, Public Waters Inventory, soil survey map, wetland delineation map, and historical aerial imagery. **Appendix A** includes wetland determination data Forms, and site photographs are included in **appendix B**.

---

## 2.0 General environmental setting

### 2.1 Site description

The wetland evaluation area includes approximately 7 acres (**figure 1**) within the potential restoration area, which is primarily within City of Shoreview property south of the Church of St. Odilia property. Residential properties surround the City of Shoreview property to the west, south, and east (**figure 8**). An east/west sanitary-sewer line (**figure 6**) is located at the northern portion of the City of Shoreview property with a vegetated gravel access drive. The majority of the wetland evaluation area is forested. Rock, concrete, asphalt, and sediment fill materials (**figure 7**) are present throughout the site along with a few dilapidated tree forts.

### 2.2 Site topography

The topography varies from an elevation of 944 feet mean sea level (MSL) in the lowest wetland areas to 952 feet MSL at the highest upland areas. The site is situated in a low area surrounded by higher elevations within the church and residential properties. Moderately steep slopes are present along the northern edge between the church property and the City of Shoreview property. The remaining portion of the evaluation area consists of moderate to shallow slopes adjacent to the wetlands (**figure 2**).

### 2.3 Precipitation

Recent precipitation data were compared to historic data for evaluating annual and monthly deviations from normal conditions. Simulated precipitation data were obtained from the Minnesota Climatology Working Group's Wetland Delineation Precipitation Data Retrieval from a Gridded Database ([http://climate.umn.edu/gridded\\_data/precip/wetland/wetland.asp](http://climate.umn.edu/gridded_data/precip/wetland/wetland.asp)) for wetlands in Ramsey County, Township 30 North, Range 23 West, Section 35.

Antecedent (preceding) moisture conditions were within the normal range based on precipitation during the three months prior to the June 1, 2018 site visit (**table 1**). The 2017 annual precipitation was within the normal range, and the 2017 water year was wetter than the normal range (**table 2**).

Table 1

Antecedent Moisture Conditions Prior to June 1, 2018 Site Visit

**Precipitation Worksheet Using Gridded Database****Precipitation data for target wetland location:**county: **Ramsey**township number: **30N**township name: **unnamed**range number: **23W**nearest community: **Arden Hills**section number: **35****Aerial photograph or site visit date:****Friday, June 1, 2018****Score using 1981-2010 normal period**

|  |                                     |                                      |                                     |
|--|-------------------------------------|--------------------------------------|-------------------------------------|
| <b>values are in inches</b><br><a href="#">A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.</a> | first prior month:<br><b>May-18</b> | second prior month:<br><b>Apr-18</b> | third prior month:<br><b>Mar-18</b> |
| <b>estimated precipitation total for this location:</b>  | <b>2.91R</b>                        | <b>2.48R</b>                         | <b>1.54</b>                         |
| <b>there is a 30% chance this location will have less than:</b>  | 2.82                                | 1.94                                 | 1.24                                |
| <b>there is a 30% chance this location will have more than:</b>  | 4.09                                | 3.37                                 | 1.94                                |
| <b>type of month:</b> dry normal wet   | normal                              | normal                               | normal                              |
| <b>monthly score</b>   | <b>3 * 2 = 6</b>                    | <b>2 * 2 = 4</b>                     | <b>1 * 2 = 2</b>                    |
| <b>multi-month score:</b>  |                                     |                                      |                                     |
| 6 to 9 (dry) 10 to 14 (normal) 15 to 18 (wet)  |                                     |                                      |                                     |
| <b>12 (Normal)</b>   |                                     |                                      |                                     |



Table 2  
Precipitation in Comparison to WETS Data

**Precipitation data for target wetland location:**

county: **Ramsey** township number: **30N**  
 township name: **unnamed** range number: **23W**  
 nearest community: **Arden Hills** section number: **35**

precipitation totals are in inches

**color key:**

total is in lowest 30th percentile of the period-of-record distribution

total is => 30th and <= 70th percentile

total is in highest 30th percentile of the period-of-record distribution

**multi-month totals:**

**WARM** = warm season (May thru September)

**ANN** = calendar year (January thru December)

**WAT** = water year (Oct. previous year thru Sep. present year)

A 'R' following a monthly total indicates a provisional value derived from radar-based estimates.

| Period-of-Record Summary Statistics |      |      |      |       |       |       |       |      |      |      |      |      |       |       |       |
|-------------------------------------|------|------|------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|
|                                     | Jan  | Feb  | Mar  | Apr   | May   | Jun   | Jul   | Aug  | Sep  | Oct  | Nov  | Dec  | WARM  | ANN   | WAT   |
| 30%                                 | 0.47 | 0.46 | 1.02 | 1.63  | 2.54  | 3.10  | 2.53  | 2.67 | 2.09 | 1.33 | 0.66 | 0.55 | 16.14 | 26.10 | 25.99 |
| 70%                                 | 1.01 | 1.09 | 1.95 | 2.90  | 4.16  | 5.49  | 4.45  | 4.48 | 3.89 | 2.70 | 1.82 | 1.22 | 21.01 | 32.30 | 32.45 |
| mean                                | 0.85 | 0.86 | 1.60 | 2.44  | 3.63  | 4.45  | 3.86  | 3.70 | 3.14 | 2.30 | 1.50 | 1.01 | 18.78 | 29.32 | 29.35 |
| 1981-2010 Summary Statistics        |      |      |      |       |       |       |       |      |      |      |      |      |       |       |       |
|                                     | Jan  | Feb  | Mar  | Apr   | May   | Jun   | Jul   | Aug  | Sep  | Oct  | Nov  | Dec  | WARM  | ANN   | WAT   |
| 30%                                 | 0.50 | 0.44 | 1.24 | 1.94  | 2.82  | 3.10  | 2.63  | 3.59 | 2.27 | 1.46 | 0.98 | 0.57 | 18.61 | 30.70 | 27.58 |
| 70%                                 | 1.13 | 0.99 | 1.94 | 3.37  | 4.09  | 5.51  | 5.11  | 5.31 | 3.88 | 3.78 | 2.06 | 1.27 | 22.57 | 35.35 | 36.00 |
| mean                                | 0.84 | 0.78 | 1.79 | 2.86  | 3.63  | 4.45  | 4.47  | 4.32 | 3.48 | 2.75 | 1.75 | 1.14 | 20.35 | 32.26 | 32.07 |
| Year-to-Year Data                   |      |      |      |       |       |       |       |      |      |      |      |      |       |       |       |
| Year                                | Jan  | Feb  | Mar  | Apr   | May   | Jun   | Jul   | Aug  | Sep  | Oct  | Nov  | Dec  | WARM  | ANN   | WAT   |
| 2018                                | 1.09 | 1.48 | 1.54 | 2.48R | 2.91R | 4.95R |       |      |      |      |      |      |       |       |       |
| 2017                                | 0.95 | 0.67 | 0.61 | 3.53  | 6.11  | 3.08  | 2.55  | 6.62 | 1.32 | 5.11 | 0.53 | 0.82 | 19.68 | 31.90 | 33.29 |
| 2016                                | 0.37 | 0.91 | 2.31 | 3.61  | 2.40  | 5.75  | 6.81  | 9.45 | 6.66 | 3.20 | 2.58 | 2.07 | 31.07 | 46.12 | 48.72 |
| 2015                                | 0.32 | 0.38 | 0.64 | 2.19  | 5.89  | 4.97  | 6.85  | 2.89 | 4.89 | 3.14 | 4.89 | 2.42 | 25.49 | 39.47 | 32.75 |
| 2014                                | 1.39 | 1.35 | 0.89 | 7.17  | 4.44  | 9.57  | 2.11  | 4.13 | 2.57 | 1.40 | 1.12 | 1.21 | 22.82 | 37.35 | 39.99 |
| 2013                                | 0.77 | 1.46 | 2.39 | 4.70  | 6.03  | 8.07  | 3.12  | 0.89 | 1.34 | 4.25 | 0.50 | 1.62 | 19.45 | 35.14 | 32.26 |
| 2012                                | 0.56 | 1.89 | 1.86 | 2.86  | 8.82  | 3.98  | 5.37  | 1.16 | 0.52 | 1.41 | 0.66 | 1.42 | 19.85 | 30.51 | 28.97 |
| 2011                                | 0.84 | 0.93 | 2.48 | 3.13  | 4.55  | 3.76  | 10.76 | 4.13 | 0.52 | 0.83 | 0.25 | 0.87 | 23.72 | 33.05 | 38.00 |
| 2010                                | 0.65 | 0.74 | 0.70 | 2.26  | 2.85  | 5.59  | 4.44  | 6.22 | 5.29 | 1.56 | 2.50 | 2.84 | 24.39 | 35.64 | 37.46 |
| 2009                                | 0.51 | 1.03 | 1.54 | 1.17  | 0.43  | 2.94  | 2.02  | 6.59 | 0.37 | 6.07 | 0.42 | 2.23 | 12.35 | 25.32 | 21.87 |
| 2008                                | 0.10 | 0.47 | 1.75 | 3.73  | 2.90  | 3.10  | 2.53  | 2.33 | 2.10 | 2.24 | 1.42 | 1.61 | 12.96 | 24.28 | 25.88 |
| 2007                                | 0.85 | 1.08 | 3.16 | 1.85  | 2.61  | 1.71  | 1.37  | 5.82 | 5.41 | 4.81 | 0.11 | 1.95 | 16.92 | 30.73 | 27.36 |
| 2006                                | 0.80 | 0.44 | 1.95 | 3.64  | 4.08  | 3.90  | 1.25  | 6.42 | 3.34 | 0.56 | 1.00 | 1.94 | 18.99 | 29.32 | 33.83 |
| 2005                                | 1.35 | 1.09 | 1.22 | 2.43  | 3.81  | 5.72  | 2.61  | 3.64 | 6.14 | 5.07 | 1.49 | 1.45 | 21.92 | 36.02 | 33.84 |
| 2004                                | 0.52 | 1.64 | 1.77 | 3.26  | 5.72  | 4.58  | 4.04  | 1.64 | 4.25 | 4.13 | 1.17 | 0.53 | 20.23 | 33.25 | 30.68 |
| 2003                                | 0.26 | 0.91 | 1.62 | 2.60  | 6.57  | 5.89  | 2.18  | 0.73 | 2.36 | 1.25 | 1.00 | 1.01 | 17.73 | 26.38 | 27.68 |

---

## 2.4 National Wetland Inventory

The U.S. Fish and Wildlife Service (USFWS) NWI map identifies one type 5 palustrine intermittently exposed shallow open water community with an unconsolidated bottom (PUBG) within the area of a storm pond on the St. Odilia property at the northwest portion of the evaluation area (**figure 3**).

## 2.5 Water resources

There are no Minnesota Department of Natural Resources PWI basins or watercourses located within the site. Several PWI wetlands and basins including Richmond Pond (62-221W), Shoreview Pond (62-079W), Island Basin (62-07501P), Lake Judy (62-081P), and Lake Emily (62-080W) are located within a half mile surrounding the site. Lake Wabasso (62-082P) and Lake Owasso (62-056P) are located within 1 mile southeast of the site (**figure 4**).

## 2.6 Soil resources

Soil information for the site was obtained from the Natural Resources Conservation Service (NRCS) Soil Survey Geographic Database (SSURGO) (U.S. Department of Agriculture, NRCS, 2014, Version 1.1). The soil map unit names and hydric classification are labeled in **figure 5**. The majority of the evaluation area is mapped as partially hydric urban land-Dundas complex, 1- to 4-percent slopes. The outer edges of the evaluation area is mapped as non-hydric urban land-Hayden-Kingsley complex, 3- to 15-percent slopes.

## 3.0 Wetland delineation

### 3.1 Wetland delineation and classification methods

Wetlands within the site were delineated and classified during a site visit on June 1, 2018. The wetland delineation was established according to the routine on-site determination method specified in the 1987 *U.S. Army Corps of Engineers Wetlands Delineation Manual* and the 2012 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*.

The delineated wetland boundaries and sample points were surveyed using a global positioning system with sub-meter accuracy (**figure 6**). Wetlands were classified using the USFWS Cowardin System—*Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979), the USFWS Circular 39 system (Shaw and Fredine, 1956), and the Eggers and Reed Wetland Classification System—*Wetland Plants and Plant Communities of Minnesota and Wisconsin* (Eggers and Reed, 1977).

Soil borings were placed in and around wetland areas, to a depth of at least 24 inches below the ground surface where possible. Representative soil samples from each boring were examined for the presence of hydric soil indicators using the NRCS hydric soil indicators (Version 8.1). Soil colors (e.g., 7.5YR 4/2, etc.) were determined using a Munsell® soil color chart and noted on the wetland determination data forms in **appendix A**.

Hydrologic conditions were evaluated at each soil boring and noted on the wetland determination data forms. The dominant plant species were identified, and the corresponding wetland indicator status of each plant species was determined and noted on the forms. Photographs taken at the time of the site visit are provided in **appendix B**.

### 3.2 Wetland descriptions

Two wetlands were delineated within the site. A description of each wetland area is provided below, with representative photographs in **appendix B**. **Table 3** summarizes the delineated wetland types and sizes.

**Table 3** Wetland summary table

| Wetland ID | Circular 39 type | Cowardin classification | Eggers and Reed community                    | Wetland area (acres) |
|------------|------------------|-------------------------|--|----------------------|
| Wetland 1  | 1/2              | PFO1/PEMB               | Seasonally flooded forest/fresh (wet) meadow | 1.42                 |
| Wetland 2  | 5                | PUBG                    | Shallow open water                           | 0.93*                |
| Total      |                  |                         |  | 2.34                 |

\* Level I desktop delineation

### 3.2.1 Wetland 1

Wetland 1 is currently a 1.42-acre type 1/2 (PFO1/EMB) seasonally flooded forest and fresh (wet) meadow wetland (**figure 6**). The fresh (wet) meadow portions of the wetland are dominated by reed canary grass (*Phalaris arundinacea*) with hummock sedge (*Carex stricta*) and giant goldenrod (*Solidago gigantea*). The majority of the wetland is a seasonally flooded forested community dominated by American elm (*Ulmus americana*) boxelder (*Acer negundo*), green ash (*Fraxinus pennsylvanica*), cottonwood (*Populus deltoides*), and common buckthorn (*Rhamnus cathartica*) with 10-percent vegetative cover in the herbaceous layer including reed canary grass, common buckthorn, jack-in-the-pulpit (*Arisaema thriphyllum*), and beggarticks (*Bidens frondosa*). Wetland 1 is significantly disturbed from an invasion of common buckthorn; stormwater control structures (**figure 6**); dumping of concrete, asphalt, and rock fill material; and sediment accumulation (**figure 7, appendix B**).

At the time of the site visit, the majority of the wetland was inundated with 1 to 3 inches of water and saturated within the upper 12 inches at the wetland fringe. The wetland receives stormwater runoff from surrounding residential lots and the adjacent St. Odilia property. Outflow from wetland 2 (which is essentially a stormwater pond) northwest of wetland 1 travels through a vegetated channel. Stormwater from the St. Odilia parking lot is directed through a channelized shallow marsh storm feature within the northeast finger of wetland 1 between the St. Odilia parking lot and Cottage Place cul-de-sac. A vegetated access road west of the Cottage Place cul-de-sac provides a berm at the north end of wetland 1, with a culvert that outlets to the southern portion of wetland 1. Flow from wetland 1 outlets through a culvert at the south end under Cannon Avenue into a shallow marsh south of Cannon Avenue (**appendix B**). Ultimately, outflow from this area reaches Lake Emily.

Soils in wetland 1 meet the A11 depleted below dark surface hydric soil criteria with very dark gray (10YR 3/1) loamy clay and silt loam surface over a depleted gray (10YR 6/1) loamy clay. A thick layer of sediment accumulation is present within much of the forested portion of the wetland. Sampling point SP-1 documents wetland criteria for the fresh (wet) meadow portion of wetland 1 (**appendix A**).

Soils in the adjacent upland are similarly hydric soils meeting the A11 hydric soil criteria. The transition to upland is characterized by slightly upward-sloping topography above the elevation of water lines on the trees at the fringe of the wetland. Wetland boundaries are more abrupt in areas with rock and concrete fill material defining the upland topography (**appendix B**). Upland soils were not saturated within the upper 12 inches, and the herbaceous layer included Virginia creeper (*Parthenocissus quinquefolia*), ground ivy (*Glechoma hederacea*), broad-leaved nightshade (*Circaea canadensis*), and burdock (*Arctium minus*). Trees in the adjacent forested upland areas include cottonwood, green ash, boxelder, buckthorn, and Amur maple (*Acer ginnala*). Sampling point SP-2 documents the upland forested area adjacent to wetland 1 (**appendix A**).

---

### 3.2.2 Wetland 2/stormwater pond

A stormwater pond (listed in **table 3** as wetland 2) located at the northwest portion of the evaluation area was delineated by level 1 desktop analysis and was determined to be approximately 0.93 acres in size. Overflow from the stormwater pond flows through a non-wetland vegetated channel, into the northwest corner of wetland 1. Historical aerial imagery shows this stormwater pond as originally connected with wetland 1 and extending northwest beyond the evaluation area (**figure 7**).

## 3.3 Wetland restoration potential

The site was initially considered as an option for a water-quality improvement project. Upon viewing the significant disturbance in the wetland, the RWMWD became interested in evaluating options for improving the wetland characteristics and overall aesthetics of the property. In addition, the RWMWD has a policy of no net loss of wetlands within the watershed district; one-to-one replacement is required if wetland areas are impacted during development and redevelopment activities. Therefore, the RWMWD is interested in the potential for this site to provide wetland replacement options within the watershed district boundary.

Historical aerial imagery from 1940 through 2015 was reviewed to evaluate the potential for wetland restoration (**figures 9A-9K**). The predevelopment 1940 and 1953 imagery and hydric soil mapping indicates that the area of wetland within the evaluation area was historically approximately 9.24 acres and extended to the northwest and southeast beyond the evaluation area. The current wetland area of wetland 1 and the stormwater pond totals 2.34 acres, which is almost 7 acres smaller than the original wetland size due to development, fill, and altered hydrology (**figure 7**). However, with constraints of property ownership and existing infrastructure, there is only the potential for about 2.2 acres of wetland restoration (**figure 7**).

Based on imagery, the site appears to have historically been a type 1 or 2 seasonally flooded basin or wet/sedge meadow. Remnant sedges were found at the western edge of the wetland. Over time, trees have covered the majority of the site, including non-native invasive common buckthorn. The natural hydrologic regime of the wetland has been significantly disturbed through control structures.

Areas that were historically wetland and are now upland may be eligible for WCA credit under Minnesota Rules 8420.0526 Subpart 3 as restoration of completely drained or filled wetland areas. Areas that are now wetland but filled with sediment and dominated by common buckthorn may be eligible for partial WCA credit under Minnesota Rules Subpart 4B restoration of partially drained or filled wetland area that have been substantially degraded by partial drainage or fill.

Restoration could involve removing fill materials including concrete, asphalt, rock, and sediment; restoring the natural hydrologic regime; removing non-native invasive vegetation; and re-establishing native vegetation.



---

The potential wetland restoration is not large enough for a USACE-approved bank site, which would need to have at least 5 acres of credits and be more connected to adjacent habitat corridors. However, it might be an option for project-specific wetland replacement for sites that are not USACE jurisdictional. This site may provide an opportunity for applicants to meet the RWMWD no net loss wetland policy if the project site does not have wetland restoration potential.

---

## 4.0 Regulatory overview

The USACE regulates the placement of dredge or fill materials into wetlands that are located adjacent to or are hydrologically connected to interstate or navigable waters under the authority of Section 404 of the Clean Water Act. If the USACE has jurisdiction over any portion of a project, they may also review impacts to wetlands under the authority of the National Environmental Policy Act.

Filling, excavating, and draining wetlands are also regulated by the WCA, which is locally administered by the RWMWD.

The USACE and RWMWD should be contacted before altering any wetlands.

This report, along with the attached joint application form, requests wetland boundary and type concurrence from the RWMWD and USACE. This submittal also requests an approved jurisdictional determination from the USACE with respect to administration of Section 404 of the Clean Water Act.

With this submittal, the RWMWD will arrange a technical evaluation panel site meeting to review the wetland delineation and discuss wetland restoration and replacement options for this site. After agency discussion, if a non-USACE certified wetland bank is a desired option, a wetland bank scoping document will be prepared.

---

## 5.0 References




- Cowardin, L.M., V. Carter, F.C. Golet, and R.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Fish and Wildlife Service, FWS/OBS079/31, 103 pp.
- Eggers, S.D. and Reed, D.M. 2011. *Wetland Plants and Plant Communities of Minnesota and Wisconsin*. U.S. Army Corps of Engineers, St. Paul District. St. Paul, Minnesota.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. *Phytoneuron* 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.
- Shaw, S.P., and C.G. Fredine. 1956. *Wetlands of the United States*. U.S. Fish and Wildlife Service, Circular 39. 67 pp.
- U.S. Department of Agriculture, Natural Resources Conservation Service. 2014. Soil Survey Geographic (SSURGO) Database, Version 1.1.
- U. S. Department of Agriculture, Natural Resources Conservation Service. 2017. *Field Indicators of Hydric Soils in the United States, Version 8.1*. G.W. Hurt and L.M. Vasilas (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.
- U.S. Army Corps of Engineers. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*. January 2012. Wetlands Regulatory Assistance Program.
- U.S. Army Corps of Engineers. 1987. *1987 U.S. Army Corps of Engineers Wetland Delineation Manual*. Wetlands Research Program Technical Report Y-87-1 (on-line edition). Waterways Experiment Station, Vicksburg, Mississippi.
- U.S. Fish and Wildlife Service. 1956. *Wetlands of the United States Circular 39*. U.S. Government Printing Office, Washington, D.C.

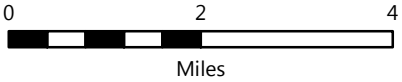
## Figures





Imagery: MN GEO, 2016

-  Wetland Evaluation Area
-  County Boundary
-  RWMWD Jurisdictional Boundary

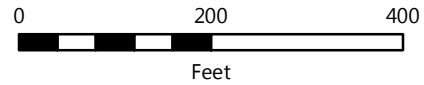


**SITE LOCATION MAP**  
Cottage Place  
Ramsey-Washington Metro  
Watershed District  
**FIGURE 1**





- Wetland Evaluation Area
- LiDAR Contours, Ramsey County, 2011
- 10-Foot Contour
- 2-Foot Contour



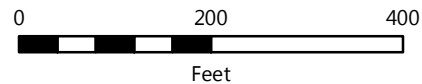
SITE TOPOGRAPHY  
Cottage Place  
Ramsey-Washington Metro  
Watershed District

FIGURE 2





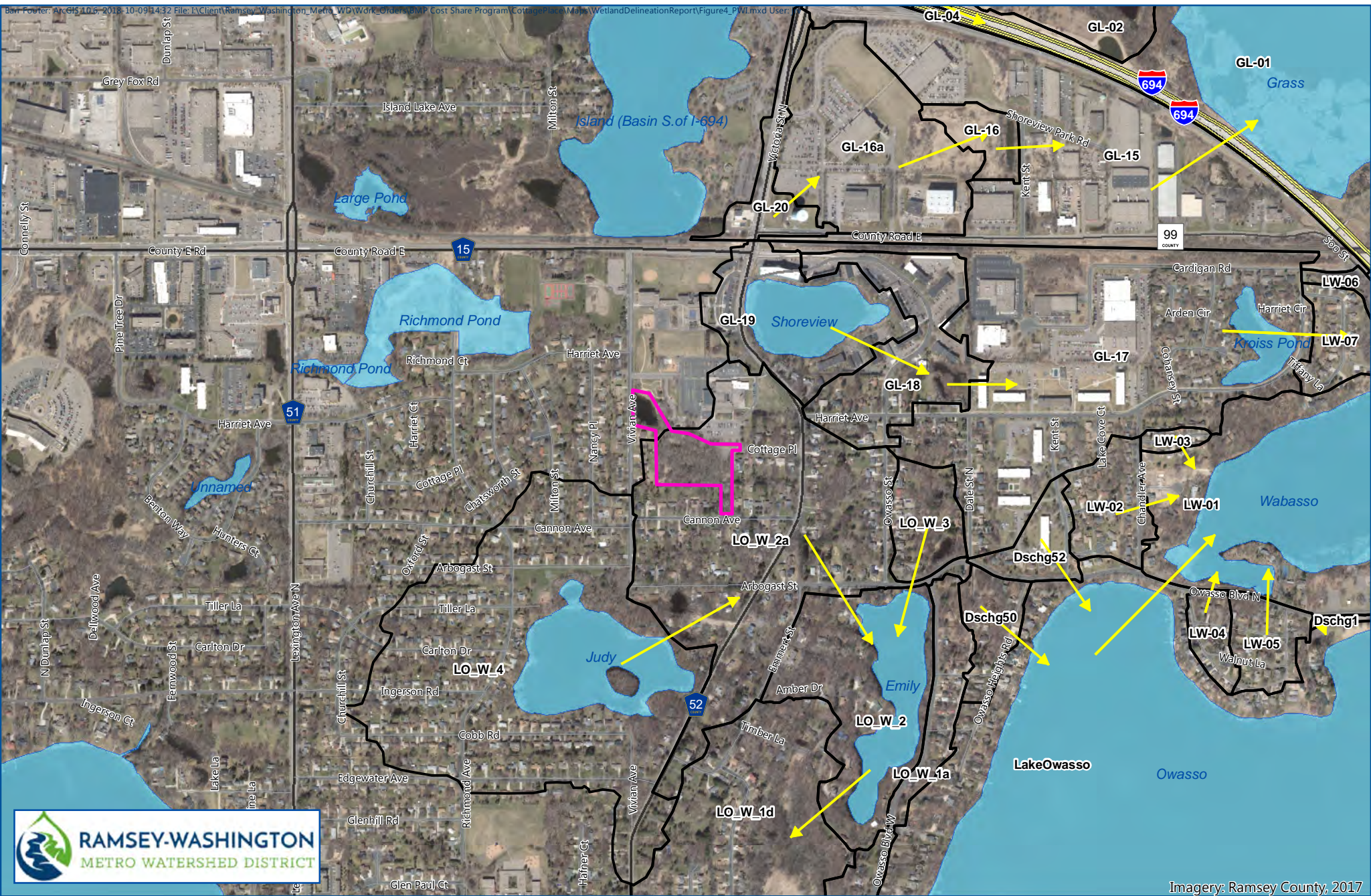
Wetland Evaluation Area  
National Wetland Inventory (MN DNR East Central Update)  
Circular 39 Type  
PUBG



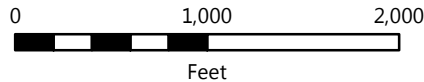
NATIONAL WETLAND INVENTORY  
Cottage Place  
Ramsey-Washington Metro  
Watershed District

FIGURE 3





- Wetland Evaluation Area
- Drainage Area Outflow
- Drainage Areas
- MN DNR Public Water Inventory Basin

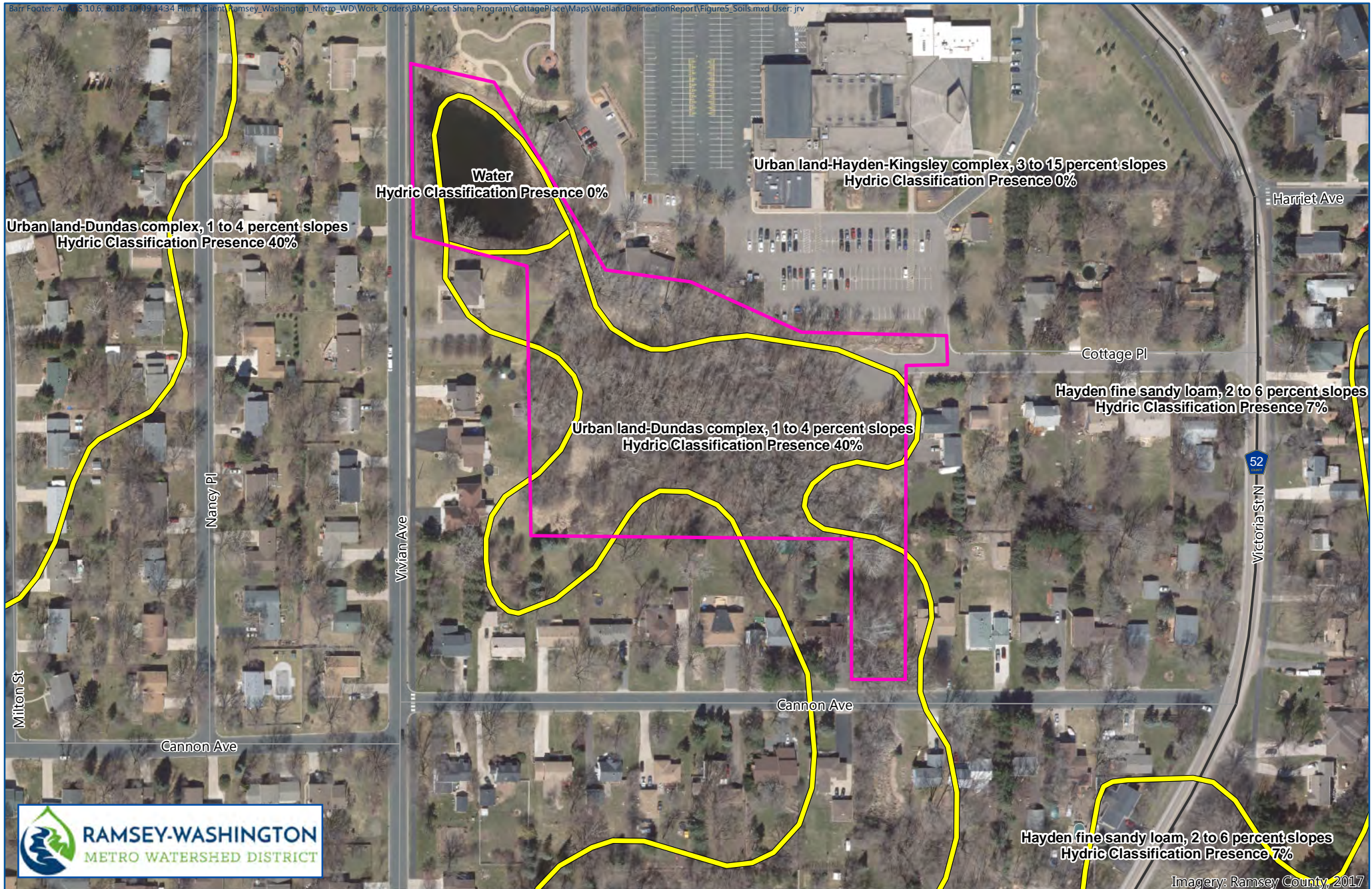


PUBLIC WATER INVENTORY  
Cottage Place  
Ramsey-Washington Metro  
Watershed District

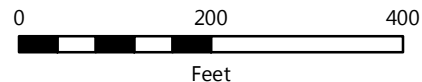
FIGURE 4

Imagery: Ramsey County, 2017





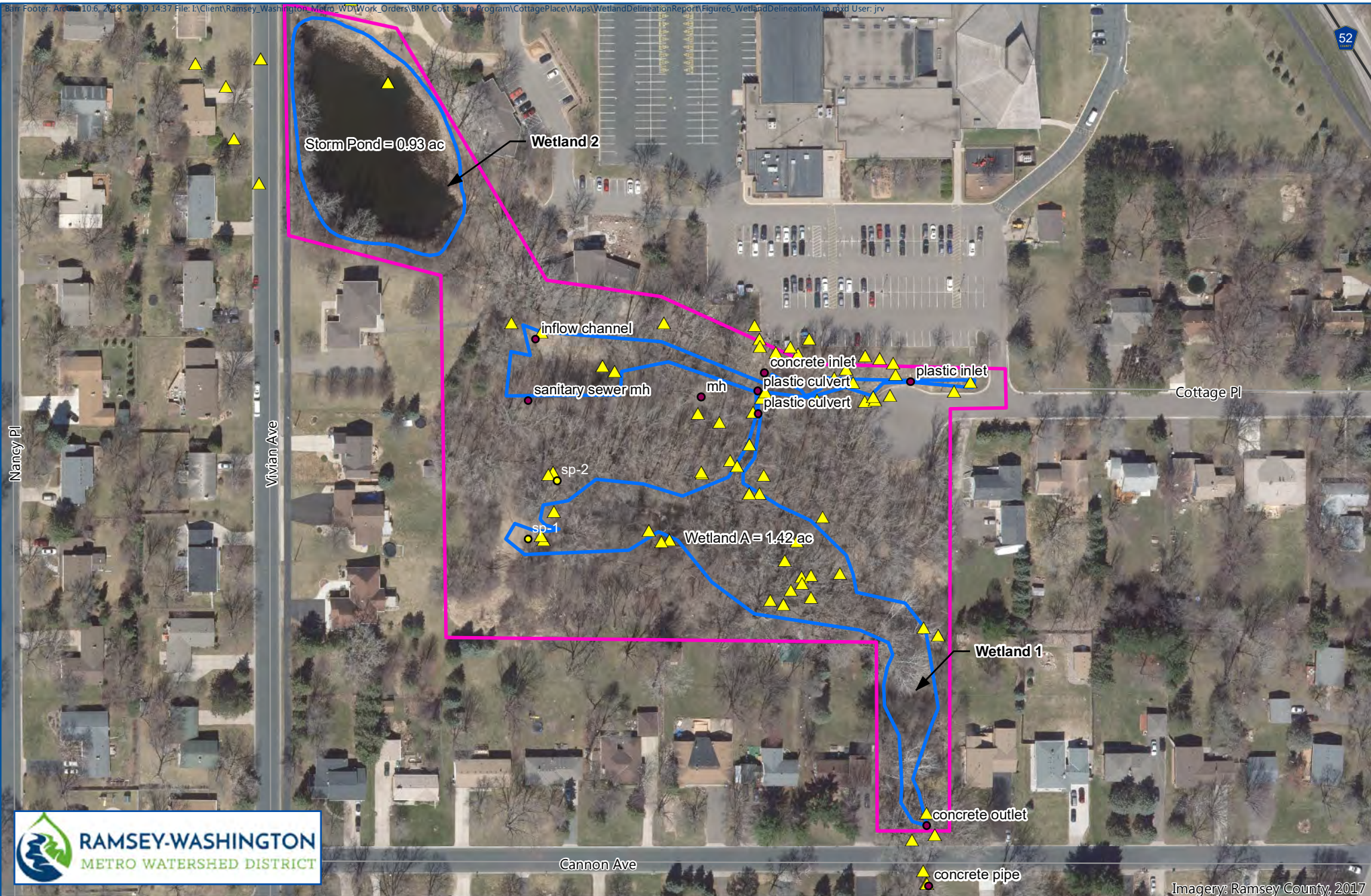
- Wetland Evaluation Area
- Statewide SSURGO Data



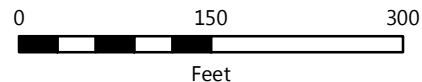
SOIL SURVEY MAP  
Cottage Place  
Ramsey-Washington Metro  
Watershed District

FIGURE 5





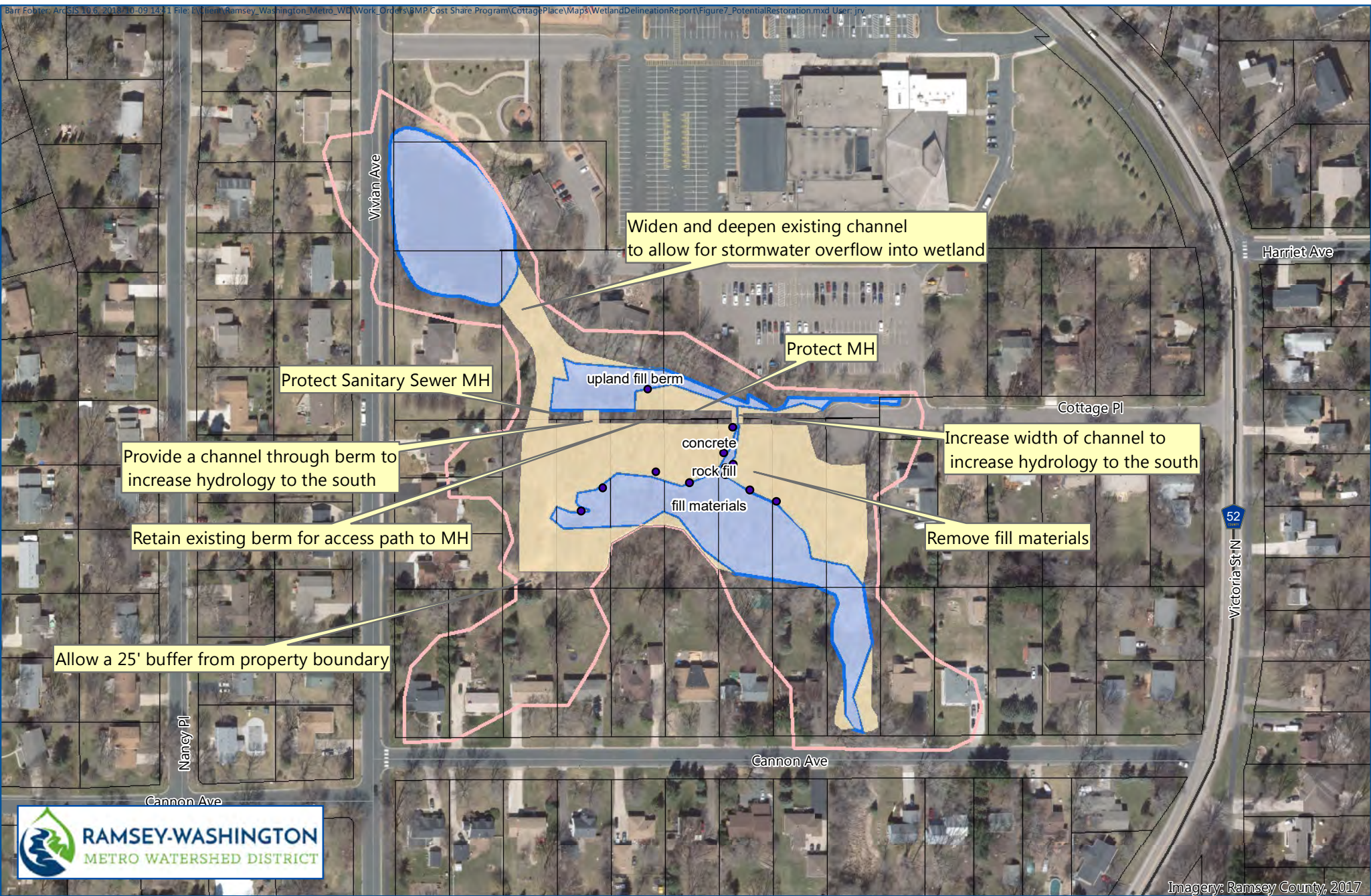
- Sampling Location
- Inlet Outlet Features
- ▲ Photo Locations
- Wetland Evaluation Area
- 2018 Wetland Delineation



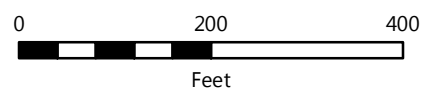
WETLAND DELINEATION MAP  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

FIGURE 6





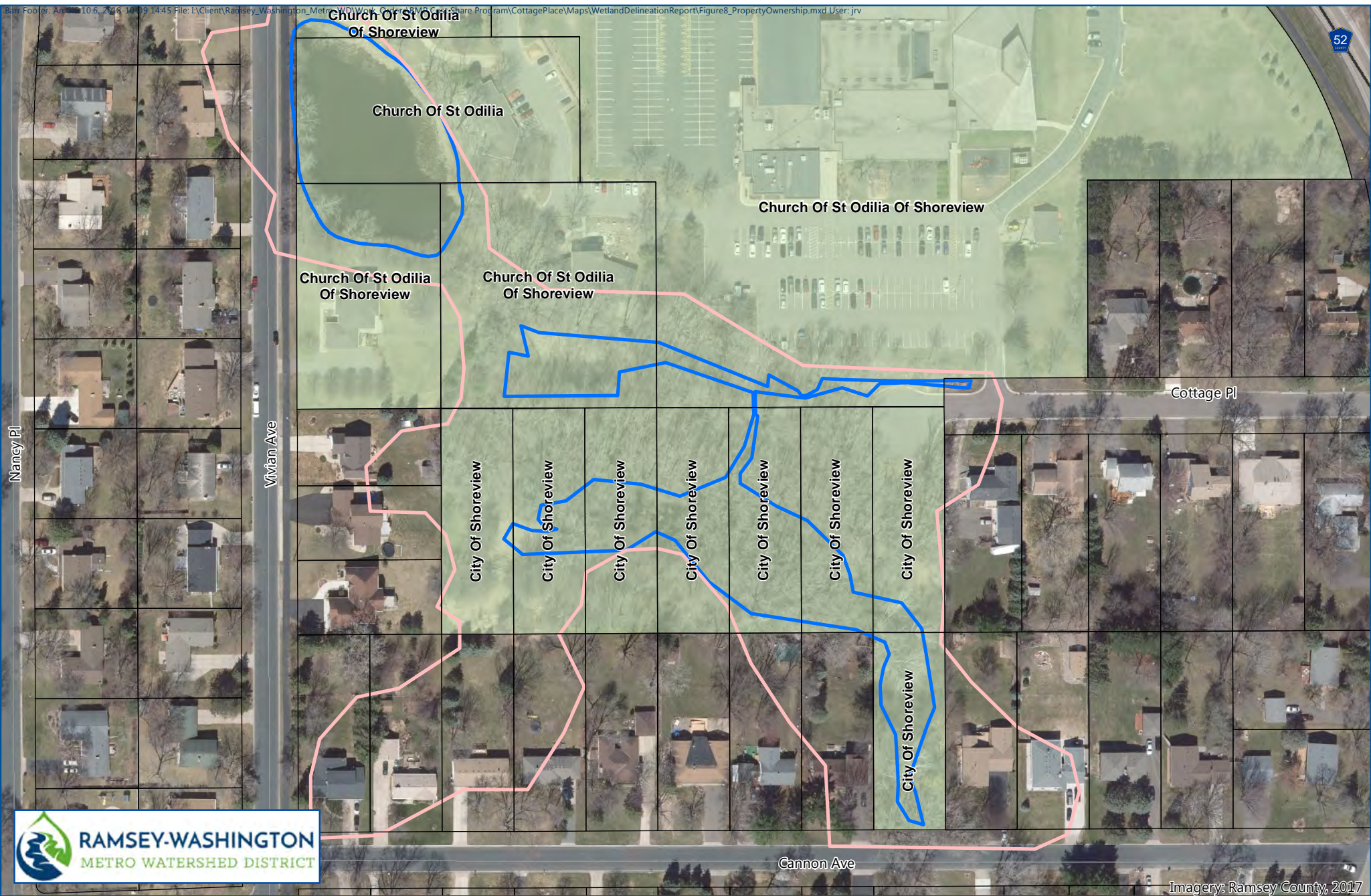
- Wetland Fill Areas
- Potential Wetland Restoration = 2.19 acres
- Parcel Boundary
- Historical Wetland = 9.24 acres
- 2018 Wetland Delineation = 2.34 acres



POTENTIAL RESTORATION  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

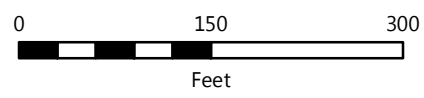
FIGURE 7





Imagery: Ramsey County, 2017

- City or Church Property
- Parcel Boundary
- Historical Wetland = 9.24 acres
- 2018 Wetland Delineation = 2.34 acres



PROPERTY OWNERSHIP  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

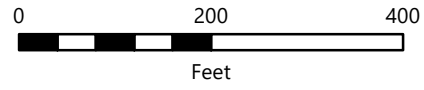
FIGURE 8





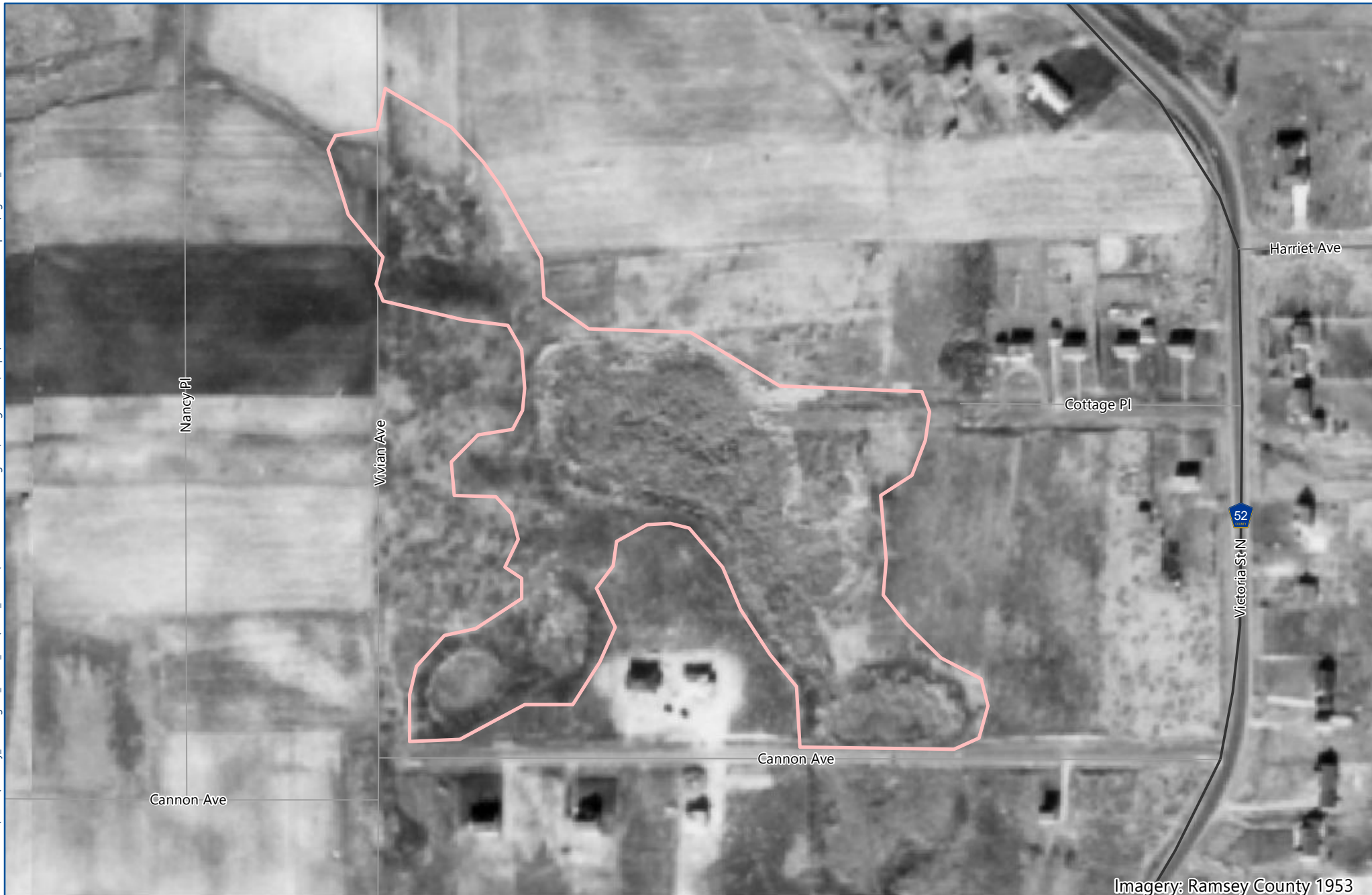
Imagery: Ramsey County 1940

 Historical Wetland



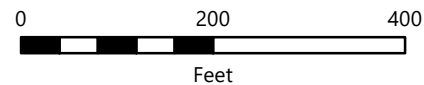
1940 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

FIGURE 9A



Imagery: Ramsey County 1953

 Historical Wetland



1953 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

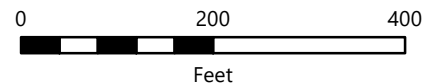
FIGURE 9B





Imagery: Ramsey County 1974

 Historical Wetland

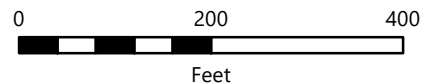


1974 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

FIGURE 9C



Historical Wetland



1985 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

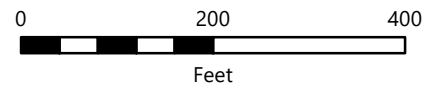
FIGURE 9D





Imagery: Ramsey County 1991

 Historical Wetland



1991 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

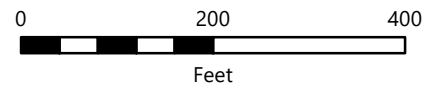
FIGURE 9E





Imagery: Ramsey County 2003

 Historical Wetland




2003 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

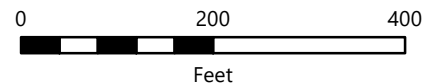
FIGURE 9F





Imagery: Ramsey County 2006

 Historical Wetland



2006 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

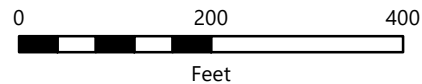
FIGURE 9G





Imagery: Ramsey County 2008

 Historical Wetland



2008 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

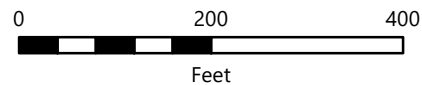
FIGURE 9H





Imagery: Ramsey County 2009

 Historical Wetland



2009 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

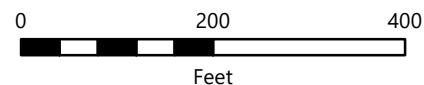
FIGURE 9I





Imagery: Ramsey County 2011

Historical Wetland



2011 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

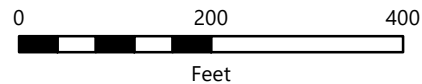
FIGURE 9J





Imagery: Ramsey County 2015

Historical Wetland



2015 IMAGERY  
Cottage Place Wetland  
Ramsey-Washington Metro  
Watershed District

FIGURE 9K

**Attachment: Cottage Place Wetland Regeneration Concept Plan (Barr, 2019)**







## Project work plan

**Original date:** August 30, 2023

Updated:

**Project:** Kohlman Creek County Road C Culvert Replacement

**Project #:** 23/62-1200.21 002

**Project team:**

RWMWD staff: Paige Ahlborg (project manager), Tina Carstens

Barr staff: Brandon Barnes, Tyler Olsen (project manager), Greg Nelson (designer), Parker Brown (modeling support)

## Scope of work

The Kohlman Creek Flood Risk Reduction Feasibility Study includes identification of system modifications along Kohlman Creek to remove habitable structures from the floodplain. One modification identified is the replacement of the culvert at County Road C.

This project consists of preparing plans and specifications and coordinating with Ramsey County on project bidding for the County Road C culvert replacement. The modifications consist of replacing an existing 42-inch round culvert with a 4-ft by 10-ft box culvert under County Road C. This replacement will reduce flood elevations upstream and remove approximately 5 structures from the 100-year floodplain.

Coordination with the County will be critical during the project, as the County is planning a pavement rehabilitation (mill and overlay) project for County Road C, to be constructed in 2024. Preliminary conversations indicate that final construction drawings and project specifications would be needed by early fall 2023 to include the culvert replacement in the County project.

Barr proposes the following work tasks:

**Task 1: survey and geotechnical investigation:** This task involves site characterization including conducting a topographic survey and a geotechnical investigation near the County Road C crossing. Barr staff will complete survey tasks and will subcontract with a geotechnical drilling company to perform soil borings necessary to inform final design of the box culvert.

**Task 2: final design:** This task includes performing engineering and analysis and design of the County Road C culvert crossing including:

- Hydrologic and hydraulic modeling of the Kohlman Creek system
- Geotechnical analysis and design of backfill requirements
- Structural analysis (structural design of culvert loads)
- Civil design of site grading, storm sewer inlets, and erosion control measures

Additionally, this task will include preparing permit applications for RWMWD, City, and County to facilitate the culvert replacement. This task includes development of final project specifications to be included in the bidding documents with the final construction drawings.



**Task 3: County coordination, bidding, and construction administration:** This task involves coordinating with Ramsey County on the concurrent pavement rehabilitation project planned for 2024. Barr will coordinate with the County regarding overall project schedule and milestone dates for deliverables such that the culvert replacement can occur prior to the roadway rehabilitation project.

At this time, it is unknown whether RWMWD or the County would bid the culvert replacement project. One option is that RWMWD provides culvert replacement plans for the County to include the overall pavement rehabilitation project. Another option is that RWMWD administers the bid and manages construction of the culvert before the County's pavement rehabilitation project. Barr and RWMWD staff are discussing the County's preferred method for project bidding and construction administration. For the purposes of this work scope, it is assumed that RWMWD would bid the project separately.

This task also includes construction administration and observation. Barr assumes construction will last approximately 3-4 weeks, Barr staff will review submittals, payment applications, and respond to RFIs, while RWMWD staff will be the primary onsite construction observation.

## Budget

Barr's fees and related subconsultant/investigation subcontractor fees for the tasks 1-3 are estimated to cost \$95,000. This does not include any construction costs.

## Schedule

The proposed project schedule is outlined below. The design of the culvert replacement will be completed in the fall of 2023 to align with Ramsey County's schedule for the road rehabilitation. Bidding will occur over the winter of 2023/2024 for an anticipated spring 2024 construction start.

## Project tracking

Project milestones

| Milestone   | Anticipated Budget | Estimated completion date   | Actual date |
|---|--------------------|-----------------------------|-------------|
| Project start   |                    | August 2023                 | August 2023 |
| Task 1: survey and geotechnical investigation                         | \$25,000           | September 2023              |             |
| Task 2: final design  | \$45,000           | September 2023 <sup>1</sup> |             |
| Task 3: County coordination, bidding, and construction administration | \$25,000           | Spring 2024                 |             |

<sup>1</sup> Tentative schedule. Assuming final plans are part of Ramsey County Street Improvement Project plan set and Barr is not required to prepare bidding documents. If RWMWD bids project, final design and bid documents will be prepared by January 2024.

Monthly updates

| Month          | Budget spent (\$/%) |
|----------------|---------------------|
| September 2023 |                     |
| October 2023   |                     |

| Month         | Budget spent (\$/%) |
|---------------|---------------------|
| November 2023 |                     |
| December 2023 |                     |



## Governance Manual - Introduction

---

Ramsey-Washington Metro Watershed District (RWMWD) is a special purpose unit of government established under Minnesota Statutes chapters 103B and 103D. RWMWD is governed by a five-member Board of Managers, four of whom are appointed by the Ramsey County Board of Commissioners and one of whom are appointed by the Washington County Board of Commissioners. The day-to-day operations of RWMWD are managed and directed by an administrator, implementing the watershed management plan adopted by the Board of Managers.

For purposes of establishing the RWMWD Governance Manual, existing policies were updated and new policies were developed for adoption. All were then incorporated herein. The manual includes specific policy and protocol documents that fulfill specific statutory or internal management purposes.

The manual establishes clear written policies, procedures and instructions for the management of RWMWD activities and accounts, complete recordkeeping and records management, and responses to requests for data. The manual also should help to ensure that similar transactions are handled consistently, that accounting principles used are appropriate and proper, and that records and reports are produced in forms desired by the managers and state review entities, including the Legislature, the Office of the State Auditor and the Board of Water and Soil Resources.

The manual consists of this document, along with the following policies and protocols adopted by the district:

- **Bylaws**, including a conflict of interest policy and fulfilling the requirement of Minnesota Statutes section 103D.315, subdivision 11. (Current Bylaws included. Proposed revised Bylaws to come at a future meeting.)
- **General Governance of the Board**, including principles and roles of the board of managers. (Included below for your review and discussion)
- **District Governance Policy & Schedule** establish operational procedures and, as noted below, policy on specific administrative matters. The schedule highlights the tasks and reviews the Board of Managers will conduct each year, with support from staff, to ensure the policies and protocols remain current, legally compliant and effectively scaled for RWMWD operations. (Included below for your review and discussion)

- **Public Purposes Expenditures Policy** includes protocols and requirements to ensure that the RWMWD complies with the requirement in the state constitution (Article X, section 1) that expenditures by government bodies serve public purposes. (Current policy that will be compiled and shared with the board at a future meeting)
- **Investment and Depository Policy & Procedures** provide terms for investment and collateralization of RWMWD funds, while the **Internal Controls Manual** provides protocols for management and administration of RWMWD bank accounts and compliance with governmental best practices issued by the Office of the State Auditor and others. (Current policy that will be compiled and shared with the board at a future meeting)
- **Fund Balance Policy** guides RWMWD's use and management of funds it receives to implement its comprehensive plan and statutory purposes. (Current policy that will be compiled and shared with the board at a future meeting)
- **Credit Card Policy** establishes controls and procedures for use of the RWMWD credit card. (Current policy that will be compiled and shared with the board at a future meeting)
- **Policies and Procedures for Public Access to Documents** fulfills requirements of the state Data Practices Act (Minnesota Statutes chapter 13) applicable to the RWMWD. (Current policy that will be compiled and shared with the board at a future meeting)  
The following auxiliary documents fulfill specific requirements of the Data Practices Act:
  - Security of Not-Public Data and procedures to ensure accuracy and security of data on individuals and to notify data subjects of their rights under the DPA.
  - Tennesen notices and consent forms, created when needed and tailored for specific circumstances where private or confidential data is collected from individuals, such as new employees, or distributed (Minn. Stat. § 13.04, subd. 2). (The manual includes the District's basic templates.)
- **Computer Use Policy** defines protocols and acceptable use of technology provided to the managers for RWMWD business purposes. (Current policy that will be compiled and shared with the board at a future meeting)
- **Electronic records management policy & Records Retention Schedule** allows RWMWD to efficiently manage and, when appropriate, archive its files, and fulfills the requirement of section 138.17, subdivision 7, as well and the Data Practices Act requirement that the District maintain a list of private and confidential data on individuals maintained by the District (section 13.05, subdivision 1). The electronic records management policy is included in the general RWMWD governance policies. Accompanying that statement, the records schedule includes indication of whether the District stores information electronically or in hard copy form, in compliance with the



- Uniform Electronic Transactions Act, Minnesota Statutes section 325L.17. (Current policy that will be compiled and shared with the board at a future meeting)
- **Policy for Management of Permit Fees, Financial Assurance and Abandoned Property** provides protocols to manage assurances collected by RWMWD from permittees and ensures that funds submitted are managed in accordance with the state unclaimed property law (chapter 345 generally and section 345.38 specifically). The policy is accompanied by an escrow agreement template, for escrow of funds submitted by permittees to fulfill financial assurance requirements in the District rules. (Current policy that will be compiled and shared with the board at a future meeting)

The manual will be annually reviewed at the Board of Managers' business meeting (typically in March) and updated as necessary. The manual will be submitted within 60 days of adoption to the Office of the State Auditor in compliance with Minnesota Statutes section 6.756, as will any revisions and additional policies when adopted.

RWMWD staff and contractors are expected to conduct RWMWD business in accordance with the manual and to alert the Board of Managers to improvements and additions needed.

Except as explicitly provided by law, this governance manual is for the internal guidance of the RWMWD and does not create any rights in any third party. Except as constrained by law, the Board of Managers retains its discretion to deviate from a policy herein as in its judgment circumstances warrant.

# **Bylaws**

## **Ramsey-Washington Metro Watershed District**

**Originally Adopted: June 27, 1975**

**Last Revised: January 7, 2009**

These bylaws establish rules governing conduct and procedure of the Managers of the Ramsey - Washington Metro Watershed District.

**Section 1. Place of Meeting.** The principal place of business of the Ramsey –Washington Metro Watershed District shall be located at 2665 Noel Drive, Little Canada, MN 55117. The standard regular meeting place shall be in the Board Room at the above address; provided, however, that the Managers may adjourn to other meeting places within the District by posting notice of the adjourned meeting place at least twenty-four hours before the time of said meeting.

**Section 2. Regular Meetings.** The Ramsey -Washington Metro Watershed District shall meet on the first Wednesday of the month, and at such other times as the Managers shall determine.

**Section 2A. Posting.** Notice of meetings other than the regular monthly meeting shall be posted in a conspicuous place at its legal place of business at least 72 hours before said meeting.

**Section 2B. Call of Meetings.** Meetings other than the regular monthly meetings may be called by the Managers. Any Manager may cause the Secretary to issue a call for a meeting; provided, that the Secretary shall cause written notice of said meeting to be mailed to each manager at least eight days before the meeting. The eight- day written notice requirement may be waived by any Manager by his consent given in a form adopted by the Board either before or after the meeting to which notice was to be given.

**Section 2C. Conducting the Meetings.** The meetings shall be presided over by the President or Vice President in his or her absence, and in the absence of the President or Vice President the remaining Managers shall appoint a President Pro Tem. Except where a public meeting is provided by Minnesota Statutes Chapter 103D and 103B, the meetings are of the Managers only with speaking and voting privileges granted only to them. The meetings of the Managers, however, shall be open meetings, and the President or any two Managers may call upon other persons to speak on any question before the Managers. The meetings of the Managers shall be informal but questions of parliamentary procedure shall be resolved by the application of Robert's Rules of Parliamentary Law, Current Revised Edition. Unless otherwise specified in the call for meeting, meetings other than the regular monthly meetings are also regular meetings of the District. At a regular meeting anything can be considered that may properly be brought before the Managers.

**Section 2D. Minutes.** The Secretary shall cause the preparation and distribution of minutes of all meetings of the Managers. The minutes shall constitute an official record of the proceedings and be reviewed and approved by the Managers. The original minutes shall be filed and recorded in the office of the Managers, and copies shall be furnished to each Manager.

**Section 3. Special Meetings.** A special meeting of the Managers is a meeting called for the purpose of conducting certain specified business and the Managers may only consider such matters. In all other respects Sections 1 and 2 of the bylaws shall apply to special meetings as well.

**Section 4. Annual Meeting.** The annual meeting of the Ramsey -Washington Metro Watershed District will be held at the regular meeting in January of each year. At the annual meeting, the Managers will elect officers for the District for the term of January 1 through December 31. The Managers will proceed to elect among themselves the following officers: President, Vice President, Secretary, and Treasurer. In addition to the election of officers, the Managers shall appoint or reappoint for the ensuing year a bank or depository for funds of the District, a consulting engineer, legal counsel, and such other professional assistance as the District may require. Upon motion made and carried these appointments may be continued for action at a subsequent meeting in which event the appointments continue until terminated or renewed. In all other respects, Sections 1 and 2 of the bylaws shall apply to annual meetings as well.

**Section 5. Public Meetings.** Public hearings or meetings of the Ramsey-Washington Metro Watershed District are governed by Minnesota Statutes Chapter 103D and 103B, these bylaws and Robert's Rules of Parliamentary Law, Current Revised Edition. The President may refuse to recognize any person appearing before the Board who has already spoken twice on any single question.

**Section 6. Voting.** The President has full voting privileges at all times and may vote on any issue and need not confine his or her voting to break ties in voting by the Managers.

**Section 7. Electronic Communication.** Providing there is no violation of the open meeting laws pursuant to the State of Minnesota, the Managers may use electronic forms of communication including, but not limited to, interactive television and computer.

**Section 8. Quorum.** A quorum shall consist of any three Managers present. No meeting shall be opened without a quorum.

**Section 9. Rules of Procedure.** The President may appoint a Parliamentarian who may be one of the Managers or the attorney for the District. The function of the Parliamentarian is to advise the President at his or her request. Conduct and procedure not provided for herein are governed by Minnesota Statutes Chapter 103D and 103B, and Robert's Rules of Parliamentary Law, Current Revised Edition.

**Section 10. Adoption and Revision.** These bylaws may be adopted by a majority vote of the Managers. Thereafter, suspension or revision of these bylaws shall require the affirmative votes of four of the Managers.



# General Governance of the Board

---

## I. BOARD OF MANAGERS GOVERNANCE PRINCIPLES

The Board governs in a manner that is consistent with the district's vision, mission and goals as identified in the watershed management plan.

The Board commits to conducting its business adhering to the highest ethical, legal, and fiduciary standards. Board members shall act solely on behalf of and for the benefit of the district, not for the benefit of themselves, their employer, or their place of business.

A spirit of openness, candor, and mutual respect for the input and opinions of others are critical to the Board's ability to govern effectively. Board members are expected to spend the time necessary to attend meetings and come prepared and informed on the issues.

## II. ROLE OF THE BOARD

### A. As a whole, the Board is expected to fulfill the following roles:

1. Determine and uphold the district's mission.
2. Hire, support, and assess the Administrator.
3. Support the Administrator in determining staff positions.
4. Ensure an effective strategic planning process by setting short and long term goals as well as program and project priorities.
5. Ensure adequate resources such as structure, funds, time, volunteers, staff, and technology. Complete the required yearly annual budget and levy process.
6. Develop, monitor and strengthen the district's programs and services.
7. Ensure legal and ethical integrity, maintain accountability and exercise fiduciary oversight.
8. Elect officers of president, vice president, secretary, and treasurer.

### **III. ROLE OF AN INDIVIDUAL BOARD MEMBERS**

#### **A. General Expectations**

1. Know the district's vision, mission, goals, policies, programs, services, strengths, and needs.
2. Perform duties of board membership responsibly, and with energy and enthusiasm.
3. Be an active advocate for the district's policies and programs.
4. Approach issues with an open mind, objectively evaluating all input and information.
5. Conduct yourself in your personal and professional life in a manner that does not reflect poorly on the district or on themselves as leaders of the organization.

#### **B. Meetings**

1. Prepare for and actively participate in board meetings.
2. Willingly serve on committees as needed.
3. Maintain confidentiality of the board's executive sessions and protect the disclosure of private and confidential information.
4. Suggest agenda items as needed to ensure that significant, policy-related matters are addressed.

#### **C. Decision-making**

1. Each board member is expected to be actively involved in board discussions. Board members must share their opinions, listen to the opinions of others, and make an effort to see the issues from a variety of perspectives other board members may bring. If a board member holds a view that has not been voiced, it is their obligation to share that view during the board meeting – not simply before or after a meeting.
2. Any board member who believes that they have a financial conflict of interest on any decision, must disclose before the discussion begins and recuse themselves from the discussion and vote.
3. In deciding how to vote, board members are expected to take into account the collective interests on all residents within the district and to vote with what they believe to be the common interest.

4. After a vote is taken, unless the decision violates their core value, each board member is expected to support the majority decision of the board.

#### **D. Speaking on District Board Matters**

1. If it is asked or inferred that an individual board member speak on behalf of the district, board members should defer to the staff administrator and president. All comments should refer to official district policies and positions.
2. When speaking on district matters in a public setting, board members should be clear if they are representing the district or their own personal opinions as a resident of the district.

#### **E. Relationships with Staff**

1. Provide advice and support to the district administrator. Keep most communication with the administrator or request the desire to consult with other district staff on matters.
2. Avoid asking for special favors of the staff, including special requests for extensive information, without prior consultation with the administrator or president.

#### **F. Managing Conflicts**

1. Serve the organization as a whole rather than any special interest group or constituency.
2. Maintain independence and objectivity and do what a sense of fairness, ethics, and personal integrity dictate.
3. Except in limited circumstances permitted under Minnesota law, never accept or offer gifts from or to anyone who does business with the district.

#### **G. Financial Management**

1. Ensure financial solvency and accountability and the efficient and effective use of funds.
2. Ensure an annual audit is conducted.
3. Approve monthly expenses.

## **IV. ROLE OF MEMBERS SERVING IN OFFICER POSITIONS**

### **A. President**

1. Ensure that the board and individual members fulfill their responsibilities for the governance of the district and adhere to the board's governance principles.
2. Be a partner to the administrator in helping to achieve the district's mission. Provide support and encouragement to the administrator.
3. Facilitate a productive, mutually respectful relationship between the board and staff.
4. Chair meetings of the board, ensuring that the board functions effectively, interacts with staff optimally, and fulfills all of its duties, including reaching timely decisions. In leading discussions, work to ensure that all members participate and that all points of view are fully expressed before a vote is taken.
5. Sign and deliver in the name of the district any contracts, deeds, correspondence, or other instruments pertaining to the business of the district, as authorized by the board.
6. Be a signatory to the district's financial accounts.
7. The president has full voting privileges, may vote on any issue, and not need to confine their voting to break ties.

### **B. Vice-President**

1. Fulfill any delegable roles and responsibilities of the president as requested by the president. In the absence or disability of the president, the vice president shall act as president.
2. Serve as the personnel committee of the board and facilitate an annual review of the administrator's performance and compensation.
3. Be a signatory to the district's accounts.

### **C. Treasurer**

1. Be a signatory to watershed accounts and financial records.
2. The following treasurer responsibilities are delegated to district staff under the direction of the board of managers: Develop and maintain the district's financial accounts and records; arrange for the annual audit of the district's financial records; and provide the board with monthly reports of records to describe the financial condition; deposit all



monies, drafts, and checks in the name of and to the credit of the district at such banks and depositories as the board may approve.

**D. Secretary**

1. Certify levies, records, and proceedings of the District.
2. Be a signatory on district accounts.
3. The following secretary responsibilities are delegated to district staff: oversee the preparation and distribution of the minutes of all meetings of the district; distribute minutes in advance of meetings; suspend oral reading of minutes at regular meeting; maintain all approved and revised meeting minutes at the district office and oversee the preparation and proper notice of all meetings called by the district board.

## **District Governance Policies**

---

The following general governance policies help ensure the sound administration of the district business and continued focus of district resources on protection and improvement of the water resources in the Ramsey-Washington Metro Watershed District.

### **I. Contracting**

- A. The board of managers may delegate to the administrator the authority to approve work change directives and change orders. The administrator may require a district contractor to secure additional or replacement payment and/or performance bonds to cover any increased price of a district project resulting from a change order approved by the administrator. A change order approved by the administrator under delegated authority will be presented to the board of managers at its next meeting for approval and signature.

### **II. Per diems**

- A. Managers may receive one per diem payment per day for participation in a meeting of the board of managers and for other necessary meetings and duties. Per diem payments will be provided at rates and for activities and necessary duties as established by the board of managers and indicated on the per diem request form. The per diem claim forms shall be submitted to district staff for processing.

### **III. Records Management and Retention**

- A. The district will make and preserve all records necessary to ensure the availability of a full and accurate accounting of the district's official activities.
- B. The district will adopt and maintain a records retention schedule to be approved by the state archives office, governing the retention and/or disposal of records created by the district. (document will be in appendix)
- C. In keeping with the direction of the Uniform Electronic Transactions Act, the district will create and retain its records in electronic form to the greatest extent possible.
- D. The administrator is the responsible authority for purposes of district compliance with the Data Practices Act, Minnesota Statutes chapter 13.
- E. The administrator is the data practices compliance official for purposes of district compliance with the Data Practices Act.

#### **IV. Delegated Authority**

- A. No employee of the district may exercise authority beyond that which is allocated to the administrator by the district bylaws and policies that constitute the Governance Manual.
- B. Authority delegated to the administrator may not be delegated to other employees or contractors.
- C. Duties assigned to the administrator may be delegated to other employees or contractors by the administrator, however the administrator will remain responsible to the board of managers for the proper execution of all delegated duties.
- D. The administrator may not commit funds outside of the approved budget without the approval of the board of managers.

#### **V. Managers' Authority**

- A. No manager may speak on behalf of the district unless authorized to do so by the board of managers.
- B. No individual manager may provide direction, instructions, or authorization to the administrator unless specifically authorized to do so by the board of managers.

## Schedule of Regular Activities

---

The district will observe the following schedule of required activities to ensure continued compliance with laws and regulations:

- A. The district conducts its annual business meeting in March. At that meeting the board of managers:
  - i. Elect officers of president, vice president, treasurer, and secretary.
  - ii. Approves a schedule of meetings of the Board of Managers for the ensuing year.
  - iii. Names a district depository bank and an official newspaper for publication of notices.
  - iv. Reviews the district Citizen Advisory Committee membership.
  - v. Reviews and, as necessary, directs the preparation of updates to its governance manual.
- B. The district annually publishes at least one newsletter or other watershed-wide communication that explains the district's programs and project activities. Information on the board of managers contact information will be maintained on the district website.
- C. The district biennially solicits engineering, legal, auditing, accounting and other professional service proposals in accordance with Minnesota Statutes.
- D. The district annually audits its accounts and expenditures in accordance with Minnesota Statutes.
- E. The district annually submits to the Board of Water and Sewer Resources a financial, activity, and audit report each year by May 1 (within 180 days of the end of the district's financial year) in accordance with Minnesota Statutes.
- F. The administrator, as the Data Practices Act responsible authority, reviews annually the District's DPA policy and associated protocols to ensure harmony with current law in accordance with Minnesota Statutes.
- G. Annually on or before September 30, the district holds a public hearing on its budget for the next year and the total amount of funding necessary to be raised from ad valorem tax levies to meet the budget. After the hearing and with consideration of comments received, the board adopts the budget and levy, and the levy is then certified to Ramsey



and Washington Counties. A final opportunity for citizens to comment on the budget and levy is available at the district's December meeting of the board prior to final budget and levy approval.

\* \* \* \* \*

# Administrator's Report

\* \* \* \* \*

## MEMO

**TO:** Board of Managers and Staff  
**FROM:** Tina Carstens, Administrator  
**SUBJECT:** August Administrator's Report  
**DATE:** August 31, 2023

### A. Meetings Attended

|                      |          |  |
|----------------------|----------|--|
| Tuesday, August 1    | 9:00 AM  | MAWA Executive Committee Meeting       |
| Wednesday, August 2  | 5:00 PM  | Board Tour and Meeting                 |
| Tuesday, August 8    | 9:00 AM  | CLFLWD Tour of the our Office          |
| Thursday, August 10  | 2:30 PM  | Meeting with WeCo                      |
| Monday, August 14    | 11:00 AM | Annual meeting with Barr               |
|                      | 2:00 PM  | Fish Creek Tributary Meeting           |
| Tuesday, August 15   | 12:00 PM | Ecosystems Discussion                  |
|                      | 2:00 PM  | Retrofit Inventory and Prioritization  |
| Wednesday, August 16 | 2:00 PM  | Permit check-in                        |
| Tuesday, August 22   | 1:30 PM  | Met Council Central Sub region Meeting |
|                      | 3:30 PM  | Emergency Response Plan Meeting        |
| Monday, August 28    | 9:30 AM  | DEIA Workgroup                         |
|                      | 1:00 PM  | Pre-Workshop Meeting                   |
| Wednesday, August 30 | 9:00 AM  | Kohlman Creek Flood Risk Meeting       |
|                      | 11:00 AM | MW Events-Education Committee          |
|                      | 12:00 PM | Administrator Meeting                  |
| Friday, September 1  | 9:00 PM  | MW Review of 103D with BWSR            |

### B. Upcoming Meetings and Dates

|  |                      |
|--|----------------------|
| CAC Meeting                            | September 26, 2023   |
| October Board Meeting                  | October 4, 2023      |
| Metro Watersheds Meeting               | October 17, 2023     |
| CAC Meeting                            | October 24, 2023     |
| November Board Meeting                 | November 1, 2023     |
| Watershed Excellence Awards            | November 16, 2023    |
| Minnesota Watersheds Annual Conference | November 28-30, 2023 |
| CAC Meeting                            | December 5, 2023     |
| December Board Meeting                 | December 6, 2023     |

**C. Board Action Log and Updates**

This month's board action log is attached. Each month, I review this list and add anything that was suggested in the previous meeting. If you have anything you'd like to add, this would be the time for board discussion.

**D. Board and CAC Tour**

This fall, I would like to hold a bus tour of sites in the district for the board and CAC towards the end of September or beginning of October. Because of the time needed to get between sites, it is nice to be able to start the tour around 4:00 pm. Will be doable for most of the board? Here is a doodle poll to try and pick a date for the tour that works for most of the board and staff.

<https://doodle.com/meeting/participate/id/eVQEvNXd>

**E. Minnesota Watersheds (formally MAWD) Updates**

Preparations are being made for the annual conference in Alexandria coming up this winter.

For the monthly newsletters go here: <https://www.mnwatersheds.com/news-letters>

**F. Integrating Natural Hazard Mitigation and Clean Water Act Planning and Project Implementation Workshop**

I was invited by staff at the Ramsey County Emergency Management office to attend a workshop in Cincinnati, OH as titled above. This workshop is being hosted by the Association of State Floodplain Managers, the National Association of Wetland Managers, and the US Environmental Protection Agency. The purpose of this workshop is to facilitate the creation of collaborative partnerships to build cross-governmental relationships and awareness across different departments, agencies, and at various levels of government in terms of hazard mitigation and water resource protection planning, program development, and implementation.

The hosts are bringing together a cadre of leaders in the hazard mitigation and water quality fields. Throughout the workshop, we will lead discussions on breaking down silos, coming to a common language, floodplains, wetlands, and green infrastructure, hazard mitigation, permitting, regulations, and funding across water quality and mitigation projects, and cost-benefit analysis for nature-based practices.

This is an extremely important conversation to have as we continue our work in flood risk reduction and water quality throughout the district. We have been working with Ramsey County emergency management to find ways to collaborate on our work and we have built those relationships over the last several years. I also anticipate the discussion on funding to be very interesting and potentially relevant to how we can get more support for the flood risk work that we are doing. The workshop is September 12-13. I will report back to you at next month's meeting with a summary and next steps.



## Board of Managers Action Log

Wednesday, September 6, 2023

| Item  | Anticipated Action Date   | Means of Action                | Completed |
|---|---------------------------|--------------------------------|-----------|
| Land Acquisition and Use Policy   | Fall 2023<br>(Priority 1) | Board discussion and approval. |           |
| Governance Manual   | Fall 2023<br>(Priority 1) | Board review and approval.     | Sept 2023 |
| West Vadnais Lake Boundary Change   | Fall 2023<br>(Priority 1) | Board review and approval.     |           |
| Alum Use Policy   | Fall 2023                 | Proposed policy discussion.    |           |
| Adopt-A-Drain Program Evaluation and Promotion                                      | Fall 2023                 | Presentation and discussion.   |           |
| Review of Equity Areas Definition   | Summer 2023               | Presentation & discussion      | June 2023 |
| Planting of Edible Plants in Restoration Areas                                      | Winter 2022/2023          | Barr new technology report     | Feb 2023  |
| PFAS (Per- and polyfluoroalkyl substances) in MN and RWMWD's role.                  | Winter 2022/2023          | Presentation                   | Feb 2023  |
| Miyawaki Mini-Forest Assessment   | Fall 2022                 | Barr new technology report     | Oct 2022  |
| Alum use for internal load control along with information on alternative solutions. | Fall/Winter 2022          | Memo/Presentation              | Nov 2022  |
|   |                           |                                |           |
|   |                           |                                |           |
|   |                           |                                |           |

\* \* \* \* \*

# Project and Program Status Reports

\* \* \* \* \*

## Memorandum

**To:** Board of Managers and Staff  
**From:** Tina Carstens, Brad Lindaman, and Erin Anderson Wenz  
**Subject:** Project and Program Status Report – August 2023  
**Date:** August 31, 2023

**Note:** The location, brief description, and current status of each project described below can be found on the [2023 RWMWD engineering services story map](#).

---

### Project feasibility studies

#### **A. Interim emergency response planning for district areas at risk of flooding (Barr project manager: Gareth Becker; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to provide information and guidance to cities throughout the district about how to protect low-lying habitable structures from flooding during the 100-year storm event. These emergency response plans address areas for which there is 1) not currently a feasible project that has been identified to protect structures or 2) a project that cannot be implemented in the near future due to logistical and/or budgeting reasons. This effort is an outcome of the Beltline resiliency study. This project will extend into 2022.*

Barr created plan sheets for emergency flood-risk-mitigation measures and site-specific modifications. We split figures by municipality and are preparing a draft transmittal memorandum for each city. Barr and RWMWD staff met in August to review the figures before transmitting information to each municipality. A final draft of memoranda, a review by RWMWD staff, and delivery to municipalities will occur in September.

#### **B. Kohlman Creek flood risk reduction feasibility study (Barr project manager: Tyler Olsen; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to complete a feasibility evaluation of modifications to reduce flood risk along Kohlman Creek to remove structures from the 100-year floodplain. Work includes coordination with the cities of Maplewood and North Saint Paul, evaluation of alternatives to reduce flood risk, preparation of cost estimates for each alternative, and identification of permitting requirements. This project focused primarily on areas surrounding PCU Pond and the wetland complex west of White Bear Avenue. This feasibility study is a follow-up study of flood-prone areas identified in the Beltline resiliency study.*

This month, Barr began modeling proposed flood-risk-reduction concepts in the XPSWMM hydrologic model, iterating to find feasible solutions that reduce flood risk. Barr also met with RWMWD, North St. Paul, Maplewood, and Ramsey County staff (public works and parks) to review the proposed flood damage reduction concepts from the Beltline resiliency study and gather feedback on these concepts and those from the cities. Barr will continue modeling proposed alternatives over the next period and

develop cost estimates for the alternatives to aid in annual budgeting for final design and construction in 2024.

**C. Ames Lake area flood risk reduction planning study (Barr project manager: Matt Metzger; RWMWD project manager: Tina Carstens)**

*The purpose is to complete a planning-level evaluation of modifications to reduce flood risk near Ames Lake, supported by the City of Saint Paul. Work includes coordination discussions with Saint Paul; review of potential pipe alignments, land acquisition costs, utility conflicts, and permitting issues; and related design. If the planning study identifies projects that impact regional drainage, a feasibility study will be completed in 2023. This planning study is a follow-up study that was identified in the Beltline resiliency study.*

This month, Barr continued developing concept designs, drawings, estimated construction quantities, and cost estimates for flood-risk-reduction BMPs on the Saint Paul Housing and Redevelopment Authority (HRA) parcels. Concepts have included wet ponds with live storage, dry storage basins, park spaces, and native plantings. The alternatives involve mass excavation and grading on the site to create extreme precipitation flood storage volume. This entails tree removal, reconfiguring the parcel(s) as public park space, and establishing new flow connections to existing drainage networks. Barr is reviewing the cost-effectiveness of grading and possibly retaining walls to maximize the desired storage volume. We anticipate sharing initial concepts with the City of Saint Paul and Saint Paul HRA staff in September and soliciting feedback.

**D. Owasso Basin area/North Star Estates improvements (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to evaluate the benefit-cost of flood risk reduction strategies in the Owasso Basin/North Star Estates area by reviewing potential pipe and berm alignments, land acquisition costs, utility conflicts, permitting issues, and related design as well as construction and long-term maintenance costs associated with each alternative that achieves the project objective of removing habitable structures from the floodplain in this area. Stakeholder outreach with the City of Little Canada is an important part of this effort. This study is a continuation of the Owasso Basin bypass study, which laid out several phases of implementation and areas of further study.*

In August, Barr and RWMWD staff followed up with representatives from Saint Paul Regional Water and North Star Estates to review proposed system modifications to reduce flood risk and discuss site constraints that could affect design. Saint Paul Water and North Star Estates are considering modifications within their respective properties. They will provide RWMWD with direction in the near future regarding site constraints that should be considered during the final design of system improvements. Also, Barr continued planning for geotechnical field investigations to support the final design of system modifications. Tasks included reviewing historical soil borings from the early 1990s when the Owasso Basin was constructed and collecting soil borings to fill in gaps from historical borings. Geotechnical investigations will be scheduled following feedback from Saint Paul Regional Water and North Star Estates. We expect design activity to increase through the fall as we prepare for the first construction phase in 2024.

**E. Resiliency study for non-Beltline tributary areas (pre-planning study and evaluation of existing data) (Barr project managers: Jay Hawley, Lulu Fang; RWMWD project manager: Tina Carstens)**



*The purpose of this project is to evaluate system-scale modifications to reduce flood risk within the portion of the RWMWD that was not evaluated as part of the Beltline resiliency evaluation. This portion of the watershed includes the Tanners Lake, Battle Creek Lake, Battle Creek, Carver Lake, Fish Creek, and Snake Creek subwatersheds. The evaluation will identify modifications to the drainage system to reduce flood risk to habitable structures located within the 100-year floodplain of District-managed water bodies, including evaluating actively managing outlet control structures on Tanners Lake, Battle Creek Lake, and Carver Lake. This evaluation will allow RWMWD to identify potential system-wide strategies for mitigating flood risk that are consistent with the portion of the district that is tributary to the Beltline, which was studied as part of the Beltline resiliency evaluation.*

This month, Barr staff continued to review and update the existing-conditions XPSWMM hydrologic models for the Tanners Lake, Battle Creek Lake, Battle Creek, Carver Lake, Fish Creek, and Snake Creek subwatersheds based on LiDAR, aerial imagery, and recent development plans. We also received GIS files for the City of Woodbury storm sewer system this month. Staff continued incorporating storm sewer information provided by the cities to more accurately account for storage and flow routing in areas near potentially flood-prone structures. Storm sewer updates are anticipated to wrap up in September. At that point, the team will begin evaluating system modifications needed to remove habitable structures from the floodplain. The study is expected to continue through 2023.

## Research projects

### **F. Kohlman Lake aquatic plants and nutrients: phase I and II (Barr project manager: Keith Pilgrim; RWMWD project manager: Paul Erdmann)**

*The objective of this preliminary investigation is to determine the effect of intensive aquatic-plant management on Kohlman Lake water quality. The goal is to help the district identify a science-based aquatic plant management policy.*

Activities during this month included management of and communication with parties conducting sampling (Barr, RWMWD, and Ramsey County staff). Barr has conducted multiple drone surveys of both Kohlman and Beaver Lakes. Significant model-building efforts have been made to prepare for data from the 2023 monitoring season.

### **G. Shallow lake aeration study (Barr project manager: Keith Pilgrim; RWMWD project manager: Paul Erdmann)**

*The purpose of this project is to determine the potential for aeration to reduce internal phosphorus loading from bottom sediments in shallow lakes and ponds.*

Aerators have been placed in Bennett Lake (mid-2022), Markham Pond, and Gervais Mill Pond (end of 2022). Monitoring began in 2022, and the initial results demonstrated that aeration could reduce internal loading. Monitoring by Barr and RWMWD staff is being conducted again in 2023 to get a full-year evaluation of the benefits for Bennett Lake and Gervais Mill Pond. A final report with a comprehensive analysis and recommendation regarding the potential for shallow lake aeration to control internal loading and improve shallow lake water quality will be provided at the end of 2023.

Barr staff activity during this month included field collection of porewater, porewater analysis, and evaluation of field and porewater data collected to date.

## Capital improvements

### **H. Woodbury Target store stormwater retrofit projects (Barr project manager: Katie Turpin-Nagel; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to design, provide bid assistance for, and oversee construction of BMP retrofits at two Target retail stores.*

Barr had an internal design team kickoff meeting on July 18. Since then, Barr has been working to develop 50% design plan sheets, including verifying utility information, communicating with product manufacturers, developing CAD drawings, and performing hydraulics calculations. Barr plans to coordinate with RWMWD staff on a 50% design review in early-to-mid September.

### **I. Roosevelt Homes targeted retrofit project (Barr project manager: Marcy Bean; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to create construction documents for a multi-phase flood management and water quality improvement project at the Roosevelt Homes public housing area in St. Paul.*

Roosevelt Homes is a multi-family housing area owned by the Saint Paul Public Housing Authority (SPHA). The area is in a flood-prone area of the city. Barr recently updated existing conditions models to show more detailed resolution, and preliminary concepts were developed to provide the owner with options to consider. SPHA is interested in moving forward with 1–2 year phased retrofits. Barr and the RWMWD are coordinating with the City of Saint Paul to help inform improvements.

During this period, Barr evaluated information from soil borings, furthered design development, and drafted construction documents for Phase 1 (west and east basins). Barr also met with City of Saint Paul staff for a pre-application meeting to discuss the site review application process and designs.

Included in this board packet is a set of plans and a specification table of contents (90% complete), along with the engineers opinion of cost provided for board consideration at the September 6th board meeting. If the board deems it appropriate, they should consider a motion that “approves the draft plans and specifications, proposed schedule, and project cost, and directs staff to advertise the project for the purpose of bidding”. If authorized, staff will likely receive bids in September and will present those bids to the board at the October 4th meeting. Phase 1 of the work is planned for later this fall, with planting to follow in spring 2024.

### **J. Stewardship grant program support (Barr project manager: Marcy Bean and Michael McKinney; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to a) provide BMP design and review services to cost-share applicants throughout the RWMWD on as-needed basis and b) support development of the stewardship grant program.*

Woodland Hills Church in Maplewood is interested in removing a portion of its underutilized parking lot. During this period, Barr updated construction documents based on the concept design requested by the property owner. The project removes over 1.25 acres of pavement, captures up to 270 pounds of total suspended solids annually, adds native habitat, and creates gathering spaces for facility users. The site will become a model community for tiny homes in partnership with the non-profit group Settled. In partnership with Ramsey County, District staff are now seeking Clean Water Grant funding for this

project. Barr modified stormwater models during this period to provide more detail for this potential grant.

**K. Arbogast Stormwater Filtration BMP (Barr project manager: Leslie DellAngelo; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to complete final design, plans, and specifications for a regional stormwater BMP in the Lake Emily subwatershed with the purpose of decreasing phosphorus loads to Lake Emily, which is deemed to be at risk of impairment from excess nutrients.*

During the last period, Barr reviewed Shoreline Landscaping and Contracting submittals, responded to construction questions, observed construction activities, and attended weekly construction meetings. Construction was delayed due to a utility conflict and resumed in mid-August. The date of substantial completion will need to be extended for completion of all work.

**L. Double Driveway Pond and Fish Creek tributary improvements (Barr project manager: Tyler Olsen; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to design and implement vegetation improvements around Double Driveway Pond, as well as stream-stabilization improvements in the Fish Creek tributary upstream of Double Driveway Pond.*

During this period, Barr staff reviewed the 30% Fish Creek tributary restoration design with RWMWD staff. Barr also shared updated cost estimates based on the 30% design estimates and will provide district staff with materials for engaging the property owners moving forward. Additionally, staff applied for a BWSR Clean Water Fund grant for this project.

**M. Pioneer Park stormwater reuse (Barr project manager: Jennifer Koehler; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project, in partnership with the City of Little Canada, is to design and implement a stormwater-reuse irrigation system in Pioneer Park to conserve groundwater and reduce phosphorus loading to downstream district waterbodies.*

Barr held a 100% design review meeting with district and city staff on August 18, 2023. This included a review of front-end documents, technical specifications, plans, and cost estimates. We are finalizing the necessary permitting submittals (wetland and MPARS/Appropriations). Additionally, we have discussed details on the bidding schedule with district staff related to the estimated lead time on treatment and pump systems.

**N. Street Sweeping Pilot Program (Barr project manager: Michael B McKinney; RWMWD project manager: Paige Ahlborg)**

*The purpose of this study is to support a pilot program for enhanced street-sweeping efforts by incorporating funding from the district's Stewardship Grant program.*

During this period, Barr coordinated with the district regarding developing and submitting an RFQ for enhanced sweeping in a small portion of White Bear Lake. The district, Barr, the City of White Bear Lake, and the selected contractor will meet in the next weeks to discuss project implementation and planning.

## CIP project repair and maintenance

### **O. Beltline 5-year inspection (Barr project manager: Nathan Campeau; RWMWD project manager: Dave Vlasin)**

*The purpose of this effort is to adequately maintain the Beltline interceptor storm sewer system to extend the longevity of the tunnel.*

In early July, a sinkhole was discovered over the Beltline alignment, just upstream of the outfall into the Mississippi River. An inspection inside the tunnel revealed two holes in the sides of the large steel pipe section about 10 feet from the outfall to the Mississippi River and another tunnel area needing immediate attention.

An emergency temporary repair was completed within a week of the discovery of the sinkhole. The repair work resulted in a stockpile of potentially contaminated soil. Barr sampled the soil and coordinated testing, which found it suitable for use at industrial facilities. Subsequently, Barr and district staff worked with the landowner (Port Authority) to have the property tenant use the soil on the property itself, saving the district the costs of hauling the soil to a landfill. This allowed the contract with the repair contractor, PCiRoads, to be closed out. The total payment to the contractor was \$33,578.55—under the contract value of \$35,000.

During the repair work, it was clear that a more extensive, long-term repair would be needed for approximately 70 feet of corroded steel tunnel. Barr staff have completed a hydraulic evaluation of several repair alternatives for consideration by the district and are now looking at the construction feasibility of those alternatives. A permanent repair recommendation is expected in September.

In August, Barr also completed the draft Beltline and Battle Creek 5-Year Inspection Report, detailing inspections and repairs.

### **P. New technology mini case study (Barr project manager: Marcy Bean; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to educate the board and RWMWD staff on new and interesting technologies and design strategies related to water quality improvement and other issues of concern within the district. The information provided for these new technologies is often based on manufacturer's claims that have not specifically been modeled or tested by district staff or Barr unless explicitly stated as such.*

## **Comparison of Various Soil Amendments for Water Quality Treatment**

### **Overview**

Several soil amendments are currently considered for use in stormwater BMPs to allow for additional water quality treatment. Barr staff thought compiling these products in an at-a-glance format for reference may be helpful.



## Amendments

### Aluminum or Iron-WTR (water treatment residual), spent lime

- **Application/Targeted contaminant:** For removal of phosphate, nitrogen, metals, bacteria
- **Summary:** WTRs are byproducts of water treatment for drinking water. This process can generate vast quantities of sludge-like material that requires disposal.
- **Pros:** WTRs are a byproduct. The cost is low since disposal sites can be difficult to find. The sorption capabilities for soluble P will differ based on the source of the WTR.
- **Cons:** It has the potential to leach arsenic, manganese, and vanadium. It may also leach aluminum (Al). At low pH, Al becomes more soluble; appropriate stormwater for treatment with WTR should be relatively neutral (6.5–7.5 pH). Studies are not conclusive on whether WTRs affect plant growth.

### Biochar

- **Application/Targeted contaminant:** For removal of nitrogen, metals, PAHs, bacteria
- **Summary:** Biochar is a charcoal-like substance created by pyrolysis and gasification of various organic materials. There are several sources of biochar, including field residue, woody biomass, forestry waste, nut shells, fruit pits, and other agricultural byproducts.
- **Pros:** Biochar can enhance soil structure, increase water retention, decrease acidity, improve porosity, reduce nitrogen leaching, and improve electrical conductivity and microbial properties. It can enhance fertility in the soil and nutrient cycling. It can improve hydraulic performance and retain water. It has been shown to retain metals and, if fine-grained, can remove bacteria.
- **Cons:** The function of the biochar depends on the source and how it is processed. Potential contamination of the biochar with heavy metals can occur. It has not been proven effective in removing phosphate unless it is impregnated with cations during the production process.

### Coir

- **Application/Targeted contaminant:** To increase water-holding capacity, reduce bulk density of soils, provide erosion protection, and support plant growth
- **Summary:** Coir is the mesocarp of the coconut fruit and is a waste byproduct. It consists of short fibers and is hydrophilic. There are three types of coir: 1) pith, which is dark brown and has a high water retention capacity; 2) fibers, which retain water and break down over time; and 3) chips, which are small chunks of coir that increase porosity and retain water.
- **Pros:** Coir has available nutrients, a high water-holding capacity, a high germination index, and does not collapse when wet. These are all properties that enhance soil structure. There is some evidence that coir can remove heavy metals.
- **Cons:** The research is not conclusive on whether coir leaches phosphate. It is mainly used for soil structure and water capacity issues. There is limited research on how coir performs in reducing contaminants and nutrients from stormwater.

### Compost

- **Application/Targeted contaminant:** To increase the water-holding capacity of soils, increase infiltration, improve porosity, support plant growth, adsorb pollutants and metals, and alleviate compaction

- **Summary:** Compost is a product of the controlled biological decomposition of organic materials sanitized through heat generation.
- **Pros:** Since it is a waste product, it is cost-effective. It can reduce the need for pesticides and fertilizers and enhance soil health by alleviating compaction and increasing infiltration.
- **Cons:** Depending on the source, compost can have a high phosphorus leaching potential-releasing more phosphorus than it removes.

#### **Iron filings, or “Iron Aggregate”**

- **Application/Targeted contaminant:** For removal of phosphate and metals
- **Summary:** Iron filings (also called “iron aggregate”) are granular iron that can be mixed with sand for a high-permeability filter media. The iron oxidizes (i.e., rusts) when exposed to moisture and oxygen, and the oxidized iron surface has a strong affinity to bind dissolved phosphorus and some metals.
- **Pros:** Iron filings are efficient at removing phosphate and some metals.
- **Cons:** Because oxidation relies on aerobic conditions, iron filings are only appropriate for stormwater treatment in installations with significant natural aeration potential (intermittent flows, for example). Also, the longevity of functionality is currently unknown. Iron filings may need to be replaced and disposed of if P removal is no longer efficient.

#### **Peat**

- **Application/Targeted contaminant:** For the removal of heavy metals
- **Summary:** Peat is formed by the accumulation of partially decomposed organic matter in certain wetlands. The peat is harvested, dried, pressed into pellets, and sold as a soil amendment or water treatment media.
- **Pros:** Peat can be a byproduct of development activities and, thus, cost-effective. It is effective in adsorbing heavy metals.
- **Cons:** Peat has been shown to have leaching potential, which can vary based on the source. Also, peat harvesting can harm the environment, removing habitat that is very slow to regenerate.

#### **Wood chips**

- **Application/Targeted contaminant:** To improve soil structure
- **Summary:** Small-to-medium pieces of wood are formed by cutting or chipping larger pieces of wood, such as tree branches, logs, or stumps. This amendment can also include leaves, bark, and wood.
- **Pros:** Wood chips decompose slowly, release nutrients slowly, retain moisture, provide weed control, moderate temperature, and are sustainable. They are resistant to compaction and are relatively affordable.
- **Cons:** Wood chips have leaching potential (certain heavy metals, arsenic, and selenium), depending on their source.

## **Q. Natural Resources Update—Paul Erdmann, Patrick Williamson & Joe Tillotson**

### **Lake Owasso Shoreline Restoration Expansion**

The NR Team began planning the Lake Owasso Shoreline Expansion project. In September, we will prep the site and in early October approximately 2,000 native plants plus seed will be installed in the 3,900 square foot expansion, where we will convert poorly established turf and invasive plants to upland prairie. This will bring the entire Owasso restoration to about 0.40 acres, adding to a critical shoreline buffer that will improve and protect water quality while providing pollinator and wildlife habitat. This project is a collaboration with Ramsey County Parks & Recreation and is funded by a Conservation Partners Legacy grant.

### **Keller Lake Shoreline Restoration Project**

The NR Team began prepping the Keller Lake Shoreline Restoration Project in August. This project is a collaboration with Ramsey County Parks & Recreation and is part of the Keller Regional Park project (“Keller Habitat Enhancement Project”), which is also funded by a Conservation Partners Legacy grant. This project will add 1,335 linear feet of native buffer to our existing 2,000 linear feet of restored shoreline within the Regional Park. The majority of work on this project will take place in 2024.

### **Carp Management Update**

On August 14<sup>th</sup> after a rare, large rain event, the NR Team, with assistance from our contractor, Carp Solutions, removed 18 carp from the Gervais Mill Ponds, just above Gervais Lake. Paul took a video of the crew in action, which Lauren posted on [Instagram](#) and [Facebook](#). It has been a somewhat slow carp management year due to low water levels, ongoing drought, and previous successful management efforts. The team was excited to finally see some carp at the barriers after checking them all summer and spring and finding few or no carp.

### **Career Development/Learning Opportunities**

NR staff attended several tours of restoration sites in August. Staff toured the Cedar Creek Ecosystem Science Reserve. Initially, we were led to Cedar Lake Bog which included sections of old growth forest, white cedar swamp, and ended at Cedar Lake Bog. This lake is where Dr. Raymond Lineman conducted his groundbreaking research on trophic level dynamics which is now a fundamental concept in ecology. Staff and interns then toured areas of bison grazing and units of oak savanna that receive different timing treatments of prescribed fire. Side-by-side, it was easy to see the difference between frequent and infrequent burns. We were exposed to plant communities we don’t have in our District and learned a great deal from their Education and Community Engagement Coordinator, Kara Baldwin, Ph.D.

NR staff also attended a Metro Conservation Network tour of the City of Minneapolis’ Quaking Bog and Eloise Butler Wildflower Garden and Bird Sanctuary which are part of the Theodore Wirth Regional Park.

**To:** Board of Managers and Staff  
**From:** Tina Carstens and Brad Lindaman  
**Subject:** Project and Program Status Report August 2023  
**Date:** August 31, 2023

---

Page 10

Staff learned about the unique bog ecosystem and current restoration efforts and the history of the Eloise Butler Garden and their ongoing education and conservation efforts.

Over the last few weeks, Joe has been engaged in a University of Minnesota Extension course on site assessment for ecological restoration. The course focuses on how to assess and identify the characteristics of site conditions like soils, topography, and existing vegetation in order to plan successful restorations.

### **Farewell Interns**

On August 31<sup>st</sup> we will say, “Farewell, for now” to NR interns, Jenni Dauer and Katrina Nelson. Jenni has accepted a Naturalist position with Three Rivers Park District, and Katrina will be returning to the University of Minnesota to finish her last semester to earn her degree in Environmental Science, Policy, & Management.

Ashley Petel left us on August 10<sup>th</sup> to attend a field course to develop forestry and plant ID skills, but will be returning on a part time basis on September 7<sup>th</sup>.

We thank these interns for all of their great work in adverse conditions this summer! Their can-do attitudes and willingness to learn will be missed.



**To:** Board of Managers and Staff  
**From:** Tina Carstens and Brad Lindaman  
**Subject:** Project and Program Status Report August 2023  
**Date:** August 31, 2023

Page 11



Map above shows existing Owasso restoration in green, the expansion area in purple. Photo shows existing restoration below posts, expansion area above posts.



Map shows Keller shoreline restoration area. Keller Island, north of the project was restored by the District from 2010-2012. Photo below: a park patron paints a scene. Notice the narrow vegetative buffer, which is a mix of invasive plants, weedy annuals, and some remnant native plants which we will preserve.







Above and Left- August 14<sup>th</sup> Carp run, NR and Carp Solutions staff.

Below- 2023 NR Interns, L-R- Katrina Nelson, Ashley Petel, Jenni Dauer, at Crow-Hassan Park Preserve, July Field Tour.





## R. Public Involvement and Education Program – Sage Passi

### Grow With Us: Sharing Native Plants With Our Communities



In late July and early August, we took the plants we grew in classrooms out into the community to share them at several events organized by our partners. We were invited by Urban Roots, a youth empowerment organization located on the east side of St. Paul to participate in their event for the public, *Rivoli Bluff Bash* on July 29. Phyllis Webster, one of our Water Stewards (See photos above left and center) spent several hours with Sage Passi interfacing with the public to share tips on growing native plants.

Youth interns in Urban Roots' conservation program support and improve green spaces around the East St. Paul and participate in the restoration of local parks through removal of displaced plant species, native seed collection and installation of native plants. They teach hands-on skills through the installation and maintenance of rain and pollinator gardens in public and private spaces. They recently completed the prep on the large Wilderness in the City pollinator demonstration project at Battle Creek Regional Park.

At the next event, National Night Out at the East Side Boys and Girls Club on August 1 we set up a table just outside the large native garden we helped create over the past two years. There was lots of interest by neighborhood residents attending the event who were excited to take free native plants home for their yards. (Photo above right): Water Steward, Martha Boyd and a youth participant at this event. A highlight of the evening was the dedication of the bronze sculpture by Senator Fong Hawj, Aloun Phoulavan, artist consultant and Randee Edmundson, RWMWD CAC. (Photo below left). Boys and Girls Club sculpture (Photo below right).





Our third plant-give-away event was on August 6 at the Pollinator Festival at Lake Phalen organized by Wakan Tipi Awanyankapi, a native-led East Side environmental conservation nonprofit. RWMWD had the opportunity to share many trays of native plants, give advice on growing them and connecting with people who had received Lawns to Legumes grants who appreciated finding a local source for native plants. Thank you to Water Stewards, Martha Boyd and Phyllis Webster for their support in setting up, interacting with people attending this event and providing advice and encouragement for the many people who stopped by our table.



### **Volunteer Planting Event at Battle Creek Regional Park**

**Thank you CAC, LEAP team and Water Stewards!**



On August 15, we brought together volunteers from the CAC, LEAP team and Water Stewards (photo above left), (photo above center: Bette Danielson) and (photo above right: John Chikkala) to assist in a native planting event at the Wilderness in the City, Battle Creek Regional Park site in Maplewood. Sixteen of us (including Green Corps/Metro Blooms staff person Alexandra Zerzan) gathered in the park to lend our support to this project which is one of several sites for the Wilderness in the City's Pollinator Garden Project that will replace environmentally degrading turf with native pollinator gardens in six Twin Cities Regional Parks. We planted about two hundred eighteen native seedlings. These community projects are designed to help inspire and educate people to plant their own native pollinator gardens. The goal is a mosaic of high quality native pollinator gardens across the metro area. Parks where these projects are also being created include Bunker Hills Regional Park in Anoka County, Lebanon Hills Regional Park, Eloise Butler Wildflower Garden Entrance, Minnehaha Park and Keller Regional Park. Funding is being provided by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR).

## **S. Communications and Outreach Program – Lauren Hazenson**

### **Website Accessibility Audit**

RWMWD is finalizing a contract with WeCo to complete an accessibility audit for the website, provide guidance on creating more accessible documents, and review our social media channels. WeCo staff who currently have sight, hearing, or cognitive accessibility needs will be completing the audit and working with us to find solutions to the errors found in the process. Additionally, they will provide online training to three staff so that we can continue to find and fix accessibility errors after our contract with WeCo is completed. The resulting changes to our communications tools will not only make them usable for those with accessibility needs, many of the adjustments will make the site more adaptable for all user needs.

### **Community Survey**

We have selected FlashVote as our community survey contractor. Their proposal stood out as the only one offering a text message delivery option, which is much more effective at reaching a younger and more diverse audience than traditional postcards. The survey, when completed, will be delivered first to a scientifically representative group in each city within the District. Then, a second delivery of the same survey will be sent to as many people as possible through our communications channels and community partners. We expect survey creation to begin later this Fall, with a goal of completing the survey by the end of this calendar year. After the report and analysis are presented by FlashVote, we will begin using the results to inform our 2024/2025 community outreach and communications plan.

### **Displays and Handouts**

The staff workgroup has created a list of display and handout materials for various audiences to address several RWMWD strategic goals. These include general RWMWD introduction materials, handouts and displays covering best practices, materials encouraging active partnership or volunteering, and program-specific topics like grant participation. Subgroups for the general information and best practices content met in August and began drafting the written content for both sets of materials. We also rehired illustrator Maggie Wiebe to continue creating images consistent with our brand with accuracy and aesthetic appeal. Illustrations and design will remain consistent across all materials to give a distinctive look and feel to the District.

### **Recognition Dinner and Watershed Excellence Awards**

The staff team organizing the annual Recognition Dinner met this month to finalize the event date, event plan, and individual responsibilities. The 2023 Recognition Dinner will be held on Thursday, November 16, at Keller Golf Course. A call for nominations and save the date message was sent via the monthly newsletter and will also go out via an email to attendees.

### **Drone Purchase and Training**

Several watershed districts and organizations have opted to purchase a drone and train a staff member as a licensed unmanned aircraft pilot. This method is a cost savings for the District long-term as hiring a

**To:** Board of Managers and Staff  
**From:** Tina Carstens and Brad Lindaman  
**Subject:** Project and Program Status Report August 2023  
**Date:** August 31, 2023

---

Page 17

drone videographer for individual projects can be expensive. I will begin the Part 107 training in September and will complete the pilot's test later this year. A cost-effective camera drone has been purchased for licensed use documenting RWMWD projects.

### **E-newsletter**

Audience: 1,552

Opens: 48.3%

Link clicks: 0.7%

### **Social Media (Facebook, Twitter, Instagram)**

**Numbers as of 8/28**

#### **Facebook**

Reach: 1,060

Engagement(likes, shares, comments): 137

Audience: 1,596

#### **Instagram**

Reach: 5,342

Engagement: 203

Audience: 863 (note: we added 69 new followers in August!)

#### **Twitter**

Reach: 47

Engagement: 3

Audience: 986

### **Resident Communications/Professional Development/ Public Meetings, Misc.**

- Staff/resident communications support
- City fall edition newsletter article promoting Adopt A Drain
- Public Relations Society of America Webinar: The Evolving Language of Equity