



**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT

# **June 2022**

# **Board Packet**

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# Agenda

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## **Regular Board Meeting Agenda**

Wednesday, June 1, 2022

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. In order to continue to be sensitive to the COVID-19 pandemic, we may need to limit the number of public in the board room. 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 May 4, 2022 (pg. 7)
  - B. Treasurer's Report and Bill List (pg. 14)
  - C. Permit Program
    - i. 22-19 796 Bielenberg Office Building, Woodbury (pg. 32)
  - D. Stewardship Grant Program
    - i. 22-18 CS Svoboda, rain garden (pg. 37)
    - ii. 22-19 CS Kohlman Chain Lake Vegetation Management Plan Phase 4 (pg. 39)
  - E. East St. Paul Target Store Retrofit – Change Order No. 4 (pg. 40)
4. Visitor Comments (limited to 4 minutes each)
5. Permit Program
  - A. Applications
    - i. **22-18 Battle Creek Park Improvements, St. Paul (pg. 44)**
  - B. Enforcement Action Report (pg. 51)
6. Stewardship Grant Program
  - A. Applications – see consent agenda
  - B. Budget Status Update (pg. 54)
7. Action Items
  - A. **Review and Accept the 2021 District Annual Financial Audit (pg. 56)**
  - B. **Stormwater Pollution Prevention Plan Annual Report (pg. 142)**
8. Attorney Report
9. Board Issues, Policies and Operation (for discussion at meeting)
  - A. Ponds of Battle Creek Golf Course Correspondence from Cliff Aichinger
  - B. Board Action Log
10. New Reports and/or Presentations
  - A. Watershed Management Plan Wetlands Update (pg. 178)
  - B. Owasso Basin Feasibility Study Update (pg. 185)
  - C. New Scope Summaries for Review
    - i. Lake Emily Subwatershed Regional BMP (pg. 194)

- ii. Carver Ponds Improvements Feasibility Study *(pg. 200)*
  - iii. Double Driveway Pond Improvements Feasibility Study *(pg. 205)*
  - iv. Kohlman Creek Flood Risk Reduction Feasibility Study *(pg. 208)*
11. Administrator's Report *(pg. 213)*
- A. Meetings Attended
  - B. Upcoming Meetings and Dates
  - C. Ongoing Project Update
  - D. West Vadnais Lake Boundary Change Update
12. Project and Program Status Reports *(pg. 216)*
- A. Interim Emergency Response Planning
  - B. Kohlman Creek Flood Risk Feasibility Study
  - C. Kohlman Creek/Wakefield Lake Diversion Feasibility Study
  - D. County Ditch 17 Improvements Feasibility Study
  - E. Phalen Village Feasibility Study
  - F. Ames Lake Area Flood Risk Reduction Planning Study
  - G. Owasso Basin/North Star Estates Improvements
  - H. Double Driveway Pond Optimization Study
  - I. Carver Ponds Improvement Study
  - J. Annual Water Quality Report Assistance
  - K. Special Project BMP Monitoring
  - L. Kohlman Permeable Weir Test System
  - M. Shallow Lake Aeration Study
  - N. Target Store Stormwater Retrofit Projects
  - O. Ryan Drive and Keller Parkway Conveyance Project
  - P. Targeted Retrofit Projects
  - Q. Woodbury Target Stormwater Retrofits
  - R. Lake Emily Subwatershed Regional BMP
  - S. Beltline Five Year Inspection
  - T. District Inspection Standardization
  - U. CIP Maintenance and Repair Project 2022
  - V. Topic of Emerging Concern: Jumping Worms
  - W. Natural Resources Program Update
  - X. Public Involvement and Education Program Update
  - Y. Communications Program, Website Redesign, & WaterFest Update
13. Manager Comments and Next Month's Meeting
14. **Adjourn**



# RAMSEY-WASHINGTON

## METRO WATERSHED DISTRICT

### NOTICE OF BOARD MEETING

Wednesday, June 1, 2022

6:30 PM

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

**NEW:** 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. In order to continue to be sensitive to the COVID-19 pandemic, we may need to limit the number of public in the board room area. 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/87386070889?pwd=SHFSdDkzWmZGTm5ONjBNTVpubG9hQT09>

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 **873 8607 0889**. The meeting password is **892698**. If you have any questions, please contact Tina Carstens at [tina.carstens@rwmwd.org](mailto:tina.carstens@rwmwd.org).

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# Consent Agenda

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**Ramsey-Washington Metro Watershed District  
Minutes of Regular Board Meeting  
May 4, 2022**

The Regular Meeting of May 4, 2022, 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/c2XT-d2MbTM>. Video time stamps included after each agenda item in minutes.

**PRESENT:**

Dianne Ward, Vice President  
Dr. Pam Skinner, Treasurer (via Zoom)  
Val Eisele, Secretary  
Matt Kramer, Manager

**ABSENT:**

Larry Swope, President

**ALSO PRESENT:**

Tina Carstens, District Administrator  
Tracey Galowitz, Attorney for District  
Erin Anderson Wenz, Barr Engineering  
Lindsey Provos, Water Quality Technician

Paige Ahlborg, Project Manager  
Nicole Soderholm, Permit Inspector  
Dave Vlasin, Project Coordinator  
Matt Doneux, Natural Resources Technician

**1. CALL TO ORDER**

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

**2. APPROVAL OF AGENDA (0:01:35)**

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

Tracey Galowitz administered the Oath of Office to Managers Ward, Eisele, Skinner and Kramer.

**3. CONSENT AGENDA (0:03:05)**

- A. Approval of Minutes from April 6, 2022
- B. Treasurer's Report and Bill List
- C. Permit Program
  - i. 22-13 – American Cooperative on Lake Phalen, Maplewood
  - ii. 22-14 – Maplewood Cope Avenue Improvements, Maplewood
  - iii. 22-15 – RWMWD Lake Owasso Shoreline Restoration, Shoreview
  - iv. 22-16 – Maplewood Assisted Living, Maplewood
- D. Stewardship Grant Program
  - i. 22-10 CS – Montana Avenue, Native Habitat Restoration
  - ii. 22-11 CS – Ryan, Native Habitat Restoration
  - iii. 22-12 CS – Hoffman, Rain Garden
  - iv. 22-13 CS – Hill Murray, Native Habitat Restoration
  - v. 22-14 CS – Starr, Rain Garden

Motion: Manager Kramer moved, Manager Eisele seconded, to approve the consent agenda as presented. Further discussion: Manager Eisele referenced Permit #22-16 which mentioned a previous approval and asked when that occurred. Nicole Soderholm stated that the previous Permit #04-37 was noted which reflects action took place in 2004. She stated that occurred under different rules and design criteria and therefore a review was requested under the new rules and regulations. She noted that the updated calculations were provided. She noted that she could follow up with Manager Eisele to provide him with any of that previous data he may be interested in.

Manager Eisele referenced the grant for #22-14 and asked if that property is also participating in the restored lakeshore project. Paige Ahlborg replied that property is not participating in the lakeshore restoration because she is not within the project area for this year. She hoped that the property would be interested in a future phase.

Acting President Ward stated that if there is a permit that includes an older permit, perhaps a summary of that older permit could be included. Nicole Soderholm confirmed that she could attempt to provide a brief summary in the future.

Motion carried unanimously.

**4. VISITOR COMMENTS (0:07:36)**

No comments.

**5. PERMIT PROGRAM (0:07:37)**

A. Applications – See Consent Agenda

B. Monthly Enforcement Report

During April, six notices were sent to address: install/maintain perimeter control (1), stabilize exposed soils (2), remove discharged sediment (2), and protect/maintain permanent BMPs (1).

Nicole Soderholm provided background on the residential permit process that was previously piloted and approved by the Board.

Manager Eisele asked for an update on the EAW with Woodbury. Nicole Soderholm noted that it was introductory and brief, focusing on the potential redevelopment of a nursery site. She commented on the benefit of the District being involved early on to discuss any potential collaboration. Tina Carstens noted that the EAW would most likely be completed in 2023 and construction potentially in 2024.

**6. STEWARDSHIP GRANT PROGRAM (0:13:06)**

A. Applications – See Consent Agenda

B. Budget Status Update

Paige Ahlborg reviewed the budget status update with the group.

**7. ACTION ITEMS (0:15:27)**

A. Lake Owasso Shoreline Restoration Accept Bids and Order Project

Paige Ahlborg reported that four bids were received, and staff is happy with the low bidder who also completed the Twin Lake restoration project. She stated that the contractor is easy to work with and is excited for the project as well. Tina Carstens stated that the engineer's estimate for the project was \$169,112 and the low bid was \$158,490.



Manager Eisele commented that he was surprised that two bids were significantly higher and asked if the District has worked with those contractors in the past. Paige Ahlborg stated that those contractors had high mobilization costs and maintenance costs, as this project includes two years of maintenance.

Motion: Manager Eisele moved, Manager Kramer seconded, to accept the bids and award the Lake Owasso Shoreline Restoration Project to Landbridge Ecological, Inc. and direct staff to prepare and mail the notice of award, prepare the agreements, and review the required submittals. Motion carried unanimously.

B. 2022 Targeted Retrofit Accept Bids and Order Projects

Paige Ahlborg stated that Shoreline Landscaping was the low bid for this project with a bid under the engineer's estimate. She noted that the District has never worked with this contractor, although this contractor has worked on some of the cost-share projects. She stated that the contractor is excited to work on the project and staff did verify references and positive feedback was received from those entities.

Manager Eisele asked if this process was followed because the District had not worked with the contractor before. Erin Anderson Wenz stated that if the District has not worked with the contractor in the past, they do call references and ask for project examples. She stated that staff completed that process and put that information into a memo for the Board to review.

Manager Eisele referenced the next steps which include reviewing required submittals and asked if that is the typical process. Erin Anderson Wenz confirmed that is standard process. Tracey Galowitz stated that the District does not always accept the low bidder because of negative past experience and therefore the District accepts the lowest responsible bidder.

Acting President Ward commented that she liked this format and appreciate the additional information. Manager Eisele agreed.

Motion: Manager Eisele moved, Manager Kramer seconded, to accept the bids and award the 2022 Targeted Retrofit project to Shoreline Landscaping and direct staff to prepare and mail the notice of award, prepare the agreements, and review the required submittals. Motion carried unanimously.

**8. ATTORNEY REPORT (0:22:28)**

Tracey Galowitz had nothing further to report.

**9. BOARD ISSUES, POLICIES, AND OPERATION (FOR DISCUSSION AT MEETING) (0:22:50)**

A. Administrator Performance Review Closed Meeting Summary

Acting President Ward reported that the Board met in closed session at 6:30 p.m. on April 22<sup>nd</sup> at the District office to complete the performance review of the Administrator. She stated that she will be meeting with Tina Carstens monthly, and the review schedule will be updated going forward in order to complete the review in a more timely manner.

B. CAC Meeting

Manager Eisele stated that he attended the meeting and commented that they are a passionate and engaged group.

C. Board Action Log

Manager Eisele asked if there is any input that would be helpful from the Managers. Tina Carstens stated that at the close of the meeting she reviews the items and additional input could be provided at that time or during the meeting if desired.

D. Fraud Education

Acting President Ward noted that this item will be covered at the next meeting.

E. Wetlands Policy

Manager Eisele asked if there would be another workshop on this topic. Tina Carstens confirmed that another workshop would be held at the end of summer or beginning of fall.

F. West Vadnais Lake Follow-Up Thoughts

Tina Carstens stated that the City of Vadnais Heights held a Council workshop the previous night to discuss this topic. She stated that she has been told that it was a good discussion with the Council, and they were positive about the steps identified to move forward. She commented that it seems there is support for the boundary change. She reviewed the process that would be followed for a boundary change. She stated that the City was curious as to why the District would want to take on the boundary change as it would mean that the District would take on the additional costs. She noted that she will attend any requested meetings by Vadnais Heights and/or VLAWMO. She confirmed that she would alert the Board to any such meetings.

Manager Eisele asked if there has been discussion about the intent of the land parcels. Tina Carstens stated that she followed up on that comment and the City did state that they would want to understand the impact on their residents. She noted that the change would be that property taxes would be paid to the District through their levy rather than how the funds are collected by VLAWMO.

**10. NEW REPORTS AND/OR PRESENTATIONS (0:36:45)**

A. 2022 Engineering Projects Overview

1. Flood Risk Reduction: County Ditch 17 Improvements
2. Flood Risk Reduction: Phalen Village
3. Flood Risk Reduction: Ames Lake Technical Assistance
4. South Metro Mississippi River TSS TMDL Compliance
5. Watershed Management Plan Wetlands Update

Erin Anderson Wenz reviewed the different ways the Board is kept informed on ongoing projects including this annual Storymap presentation. She displayed the map which identifies all the projects within the District and the types of projects. She reviewed examples of different projects that are ongoing including lake level monitoring, flood risk reduction studies, aeration studies, TMDL compliance, and other ongoing projects throughout the district.

Manager Eisele asked for clarification on work that could be credited towards TSS. Erin Anderson Wenz confirmed that would only be applicable to the Beltline and its tributary area. She provided details on the monitoring that has been done and the data that can be reviewed.

Manager Eisele asked what would happen if the District was out of compliance. Erin Anderson Wenz replied that the process would be similar to the work the District does with impaired waters including targeted retrofit projects and giving priority for cost-share projects within an impaired subwatershed. She stated that the difference is that in those watersheds the District is not the MS4, whereas the District is the MS4 for the Beltline.

Manager Skinner thanked staff for the presentation. She recognized the things the District has done throughout the watershed for years which all serve to reduce TSS that enters the Beltline. She referenced the work that the District did in Battlecreek Park and noted that she has noticed deteriorating metal structures. She asked who is charged with maintenance. Tina Carstens stated that those structures within the dog park area would be installed by the local municipality. She stated that anything within the District responsibility is inspected and maintained. She guessed that those pipes mentioned are part of the local drainage infrastructure.

Erin Anderson Wenz provided a brief update on the scope summary for Ames Lake area. Manager Eisele stated that he appreciates the additional detail that was provided for the different level storm events. He recalled a previous discussion about an introductory discussion that would be completed with the cities and asked for an update. Erin Anderson Wenz confirmed that those meetings were completed with the cities and provided a brief update.

Erin Anderson Wenz reviewed the district wide project examples, explaining how the project prioritization tool and inspections tool are used. She also reviewed a tracking feature for scope summaries.

The Board agreed that this presentation is helpful, and it would like to have a link to this feature in order to follow along with progress.

Manager Eisele thanked staff for listening and continuing to provide an almost instantaneous response to the comments of the Board.

Acting President Ward referenced the Watershed Management Plan wetlands update and asked that task one be moved up to June. Staff confirmed that could be done.

Motion: Manager Kramer moved, Manager Eisele seconded, to accept the work plans and scope summaries. Motion carried unanimously.

**11. ADMINISTRATOR'S REPORT (1:18:35)**

A. Meetings Attended

Noted.

B. Upcoming Meetings and Dates

Tina Carstens highlighted the upcoming meetings and dates.

C. Ongoing Project Update

Noted.

D. Right Track YJ2 Intern

Tina Carstens stated that this intern will join the District this summer through a program called Right Track.

Paige Ahlborg stated that this program is through the City of Saint Paul and the District was approved to be a host site. She noted that the intern would have an interest in natural resources and the program would help to provide real life experience. She reviewed some of the responsibilities the intern would be tasked with. She noted that the intern could be between 16 to 24 years old and would begin in June and run for eight weeks or possibly more, depending on the availability of the intern.

Acting President Ward commented that this is a great thing and matches the desire of the Board and District related to outreach.

Manager Eisele stated that there had been a previous discussion about completing a Board tour and asked if summer would be a good time. Tina Carstens stated that typically they would shoot for September as the weather is typically more cooperative and projects are nearing completion. She agreed that could be something that could be scheduled.

Acting President Ward commented that prior to COVID the Board would sometimes tour an ongoing project site before a Board meeting, which she found helpful.

Manager Eisele stated that at the CAC there was a comment suggesting outreach to younger residents. Tina Carstens confirmed that the Communications Intern provided a presentation to the CAC related to a social media campaign that would be targeted at younger residents. She stated that perhaps that presentation could be provided to the Board at the next meeting.

E. West Vadnais Lake Boundary Change Update  
Noted.

**12. PROJECT AND PROGRAM STATUS REPORTS (1:25:55)**

- A. Interim Emergency Response Planning
- B. Kohlman Creek Flood Risk Feasibility Study
- C. Kohlman Creek/Wakefield Lake Diversion Feasibility Study
- D. County Ditch 17 Improvements Feasibility Study
- E. Phalen Village Feasibility Study
- F. Ames Lake Area Flood Risk Reduction Planning Study
- G. Owasso Basin/North Star Estates Improvements
- H. Double Driveway Pond Optimization Study
- I. Annual Water Quality Report Assistance
- J. Special Project BMP Monitoring
- K. Kohlman Permeable Weir Test System
- L. Shallow Lake Aeration Study
- M. Ryan Drive and Keller Parkway Conveyance Project
- N. Targeted Retrofit Projects
- O. Woodbury Target Stormwater Retrofits
- P. South Lake Emily Filtration BMP
- Q. Beltline Five Year Inspection
- R. District Inspection Standardization
- S. CIP Maintenance and Repair Project 2022
- T. Natural Resources Program Update
- U. Public Involvement and Education Program Update
- V. Communications Program, Website Redesign, and WaterFest Update
- W. CAC Meeting Update

Manager Eisele referenced the dead fish impact mentioned in the natural resources information and asked if that impacts water quality. Tina Carstens stated that staff has not noticed a change in water quality for that reason. Matt Doneux stated that for the level of fish they noted there would not be a noticeable change.

Acting President Ward referenced Item G and asked if there are updated maps. Erin Anderson Wenz stated that some maps were updated with the survey that was completed that included targeted topographic information. She confirmed that those maps could be shared with the Board. She noted that staff has been reviewing information from FEMA on how they assess flood risk in manufactured home communities as well in order to bring information to the discussions with the city.

Manager Eisele referenced the shallow lake aeration study and asked if there have been agreements with Bennett Lake that makes staff feel confident with the study timeline. Erin Anderson Wenz agreed that this seems more promising than the experience with Frog Pond but noted that Bennett is a larger body of water.

Manager Eisele referenced the website redesign and asked when the next round of testing would occur. Tina Carstens replied that would be done in June and anticipated that staff would provide more information to the Board at the next meeting.

**13. MANAGER COMMENTS AND NEXT MONTH'S MEETING (1:34:40)**

No comments.

**14. ADJOURN**

Motion: Manager Eisele moved, Manager Kramer seconded, to adjourn the meeting at 8:05 p.m. Motion carried unanimously.

DRAFT

RWMWD BUDGET STATUS REPORT

Administrative & Program Budget

Fiscal Year 2022

5/31/2022

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	\$8,500.00	-	-	459.10	\$8,040.90	5.40%
	Manager expenses	4360	4,000.00	-	-	-	4,000.00	0.00%
Committees	Committee/Bd Mtg. Exp.	4365	3,500.00	-	583.70	1,852.42	1,647.58	52.93%
	<b>Sub-Total: Managers/Committees:</b>		<b>\$16,000.00</b>	<b>\$0.00</b>	<b>\$583.70</b>	<b>\$2,311.52</b>	<b>\$13,688.48</b>	<b>14.45%</b>
Employees	Staff salary/taxes/benefits	4010	1,660,000.00	-	124,994.94	676,832.35	983,167.65	40.77%
	Employee expenses	4020	15,000.00	-	445.25	1,572.81	13,427.19	10.49%
	District training & education	4350	75,000.00	-	889.65	4,566.30	70,433.70	6.09%
	<b>Sub-Total: Employees:</b>		<b>\$1,750,000.00</b>	<b>\$0.00</b>	<b>\$126,329.84</b>	<b>\$682,971.46</b>	<b>\$1,067,028.54</b>	<b>39.03%</b>
Administration/Office	GIS system maint. & equip.	4170	10,000.00	-	700.00	2,241.02	7,758.98	22.41%
	Data Base/GIS Maintenance	4171	40,000.00	-	-	98.94	39,901.06	0.25%
	Equipment maintenance	4305	3,000.00	-	152.69	152.69	2,847.31	5.09%
	Telephone	4310	4,000.00	-	59.34	296.70	3,703.30	7.42%
	Office supplies	4320	7,000.00	-	509.05	2,190.61	4,809.39	31.29%
	IT/Internet/Web Site/Software Lic.	4325	75,000.00	-	6,626.68	32,181.97	42,818.03	42.91%
	Postage	4330	3,000.00	-	-	381.52	2,618.48	12.72%
	Printing/copying	4335	5,000.00	-	294.00	1,976.40	3,023.60	39.53%
	Dues & publications	4338	11,000.00	-	-	7,643.94	3,356.06	69.49%
	Janitorial/Trash Service	4341	15,000.00	-	594.00	4,709.90	10,290.10	31.40%
	Utilities/Bldg.Contracts	4342	30,000.00	-	2,003.75	5,993.59	24,006.41	19.98%
	Bldg/Site Maintenance	4343	150,000.00	-	2,561.74	15,327.51	134,672.49	10.22%
	Miscellaneous	4390	5,000.00	-	-	-	5,000.00	0.00%
	Insurance	4480	55,000.00	-	-	-	55,000.00	0.00%
	Office equipment	4703	150,000.00	-	25.00	1,525.00	148,475.00	1.02%
	Vehicle lease, maintenance	4810-40	20,000.00	-	1,343.43	2,121.18	17,878.82	10.61%
	<b>Sub-Total: Administration/Office:</b>		<b>\$583,000.00</b>	<b>\$0.00</b>	<b>\$14,869.68</b>	<b>\$76,840.97</b>	<b>\$506,159.03</b>	<b>13.18%</b>
Consultants/Outside Services	Auditor/Accounting	4110	70,000.00	-	2,257.89	14,773.69	55,226.31	21.11%
	Engineering-administration	4121	125,000.00	-	7,178.00	32,346.00	92,654.00	25.88%
	Engineering-permit I&E	4122	10,000.00	-	1,422.00	1,549.50	8,450.50	15.50%
	Engineering-eng. review	4123	60,000.00	-	6,890.50	32,645.00	27,355.00	54.41%
	Engineering-permit review	4124	55,000.00	-	2,281.00	20,815.50	34,184.50	37.85%
	Project Feasibility Studies	4129	410,000.00	-	38,461.72	87,244.22	322,755.78	21.28%
	Attorney-permits	4130	10,000.00	-	-	-	10,000.00	0.00%
	Attorney-general	4131	40,000.00	-	897.00	7,577.60	32,422.40	18.94%
	Outside Consulting Services	4160	20,000.00	-	-	-	20,000.00	0.00%
	<b>Sub-Total: Consultants/Outside Services:</b>		<b>\$800,000.00</b>	<b>\$0.00</b>	<b>\$59,388.11</b>	<b>\$196,951.51</b>	<b>\$603,048.49</b>	<b>24.62%</b>
Programs	Educational programming	4370	75,000.00	-	10,605.00	19,094.15	55,905.85	25.46%
	Communications & Marketing	4371	50,000.00	-	12,053.97	12,211.77	37,788.23	24.42%
	Events	4372	46,000.00	-	17,002.55	28,536.79	17,463.21	62.04%
	Water QM-Engineering	4520-30	180,000.00	-	9,991.85	29,234.00	150,766.00	16.24%
	Project operations	4650	200,000.00	-	19,229.80	21,803.87	178,196.13	10.90%
	SLMP/TMDL Studies	4661	125,000.00	-	24.00	5,461.50	119,538.50	4.37%
	Natural Resources/Keller Creek	4670-72	120,000.00	-	31,025.48	35,362.17	84,637.83	29.47%
	Outside Prog.Support/Weed Mgmt.	4683	57,000.00	-	1,500.00	17,369.33	39,630.67	30.47%
	Research Projects	4695	225,000.00	-	13,774.30	29,010.30	195,989.70	12.89%
	Health and Safety Program	4697	3,000.00	-	1,270.09	1,270.09	1,729.91	42.34%
	<b>Sub-Total: Programs:</b>		<b>\$1,081,000.00</b>	<b>\$0.00</b>	<b>\$116,477.04</b>	<b>\$199,353.97</b>	<b>\$881,646.03</b>	<b>18.44%</b>
<b>GENERAL FUND TOTAL</b>			<b>\$4,230,000.00</b>	<b>\$0.00</b>	<b>\$317,648.37</b>	<b>\$1,158,429.43</b>	<b>\$3,071,570.57</b>	<b>27.39%</b>
CIP's	CIP Project Repair & Maintenance	516	1,500,000.00	-	262,601.55	487,858.71	1,012,141.29	32.52%
	Targeted Retrofit Projects	518	1,500,000.00	-	9,446.13	94,836.11	1,405,163.89	6.32%
	Flood Risk Reduction Fund	520	5,200,000.00	-	7,564.32	17,874.40	5,182,125.60	0.34%
	Debt Services-96-97 Beltline/MM/Battle Creek	526	394,710.00	-	-	276,190.20	118,519.80	69.97%
	Stewardship Grant Program Fund	529	1,000,000.00	-	4,415.20	36,361.13	963,638.87	3.64%
	Wetland Restoration Projects	540	500,000.00	-	-	-	500,000.00	0.00%
<b>CIP BUDGET TOTAL</b>			<b>\$10,094,710.00</b>	<b>-</b>	<b>\$284,027.20</b>	<b>\$913,120.55</b>	<b>\$9,181,589.45</b>	<b>9.05%</b>
<b>TOTAL BUDGET</b>			<b>\$14,324,710.00</b>	<b>\$0.00</b>	<b>\$601,675.57</b>	<b>\$2,071,549.98</b>	<b>\$12,253,160.02</b>	<b>14.46%</b>

Current Fund Balances:

Fund:	Unaudited Beginning Fund Balance @ 12/31/21	Fund Transfers	Year to date Revenue	Current Month Expenses	Year to Date Expense	Unaudited Fund Balance @ 05/31/22
101 - General Fund	\$2,382,780.48	-	17,908.00	317,648.37	1,158,429.43	1,242,259.05
516 - CIP Project Repair & Maintenance	461,820.89	-	118,886.14	262,601.55	487,858.71	92,848.32
518 - Targeted Retrofit Projects	866,004.98	-	46,521.00	9,446.13	94,836.11	817,689.87
520 - Flood Damage Reduction Fund	3,093,746.70	-	859.89	7,564.32	17,874.40	3,076,732.19
526 - Debt Services-96-97 Beltline/MM/Beltline-Battle Creek Tunnel Repair	944,949.78	-	-	-	276,190.20	668,759.58
529 - Stewardship Grant Program Fund	854,748.21	-	-	4,415.20	36,361.13	818,387.08
536 - Stormwater Impact Fund	309,836.56	-	-	-	-	309,836.56
540 - Wetland Restoration Projects	498,035.60	-	-	-	-	498,035.60
580 - Contingency Fund	1,435,341.00	-	-	-	-	1,435,341.00
<b>Total District Fund Balance</b>	<b>\$10,847,264.20</b>	<b>\$0.00</b>	<b>\$ 184,175.03</b>	<b>\$ 601,675.57</b>	<b>\$2,071,549.98</b>	<b>\$8,959,889.25</b>

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From May 1, 2022 to May 31, 2022**

Check #	Date	Payee ID	Invoice #	Payee	Description	Amount
EFT	04/28/22	fle003	Apr 2022	Fleet E-Payments	Vehicle Fuel-General	\$301.36
EFT	05/01/22	met008	May 2022	MetLife-Group Benefits	Employee Benefits	1,733.59
EFT	05/11/22	hea002	Jun 2022	HealthPartners	Employee Benefits	12,563.83
72967	05/04/22	nat005	May 2022	National Camera Exchange	Educational Program	6,299.70
72968	05/11/22	ada002	3454196	Adam's Pest Control, Inc.	Utilities/Bldg. Contracts	86.11
72969	05/11/22	asi002	1174	Asian Invasion	Events	100.00
72970	05/11/22	aws001	S1335957-050122	AWS Service Center	Utilities/Bldg. Contracts	292.14
72971	05/11/22	cit009	54868	City of St. Paul	Events	1,000.00
72972	05/11/22	gru001	01-14417	Gruber's Power Equipment	Natural Resources Project	657.19
72973	05/11/22	hej001	349045	Hejny Rental	Natural Resources Project	80.65
72974	05/11/22	hom001	8050225	Home Depot Credit Services	Natural Resources Project	43.94
72975	05/11/22	pra001	2212307000	Prairie Moon Nursery, Inc.	Natural Resources Project	1,577.10
72976	05/11/22	pre003	318754872	Premium Waters, Inc.	Utilities/Bldg. Contracts	28.00
72977	05/11/22	sai001	3465	Saint Paul Media	Communications & Marketing	11,250.00
72978	05/11/22	shi001	B15115338	SHI International Corp.	Office Equipment-General	25.00
72979	05/11/22	uli001	148258017	Uline	Health & Safety Program	200.28
72980	05/11/22	usb005	471345694	US Bank Equipment Finance	Printing Expense	294.00
72981	05/11/22	van001	83454	Vanguard Cleaning Systems of Minnesota	Utilities/Bldg. Contracts	594.00
72982	05/11/22	was003	199786	Washington Co.-Taxation Div.	Auditor/Accounting	35.00
72983	05/25/22	att002	287256653401	AT & T Mobility - ROC	IT/Website/Software	166.34
72984	05/25/22	bal002	May 2022	Darcy Ballantyne	Employee Reimbursement	40.42
72985	05/25/22	bar001	4/16-5/13-22	Barr Engineering	April/May Engineering	117,366.72
72986	05/25/22	bro001	15428920-00	Brock White, Inc.	Natural Resources Project	4,175.51
72987	05/25/22	cad001	18423316	Allstream	Water QM Staff	84.59
72988	05/25/22	car007	RWMWD_5_9_22	Carp Solutions, LLC	Natural Resources Project	15,065.00
72989	05/25/22	cit011	230898	City of Roseville	IT/Website/Software	6,264.21
72990	05/25/22	dav003	136095	Davey Resource Group, Inc.	Construction Imp.-Maint. & Rep.	9,967.50
72991	05/25/22	fit001	Progress Pay #2	Fitzgerald Excavating & Trucking, Inc.	Construction Imp.-Maint. & Rep.	130,676.30
72992	05/25/22	fit001	Progress Pay #4	Fitzgerald Excavating & Trucking, Inc.	Construction Imp.-Maint. & Rep.	92,382.23
72993	05/25/22	fit002	May 2022	Mary Fitzgerald	Employee Reimbursement	106.57
72994	05/25/22	fre001	1184	Freshwater Society	Outside Program Support	1,500.00
72995	05/25/22	gal001	May 2022	Galowitz Olson, PLLC	May Legal Fees	1,978.00
72996	05/25/22	ing002	May 2022	INGCO International, Inc.	Communications & Marketing	772.68
72997	05/25/22	inn002	IN3776712	Innovative Office Solutions LLC	Office Supplies	211.44
72998	05/25/22	int001	W2202086	Office of MN, IT Services	Telephone Expense	59.34
72999	05/25/22	lea003	14-1006	L. Tracy Leavenworth	Educational Program	2,058.39
73000	05/25/22	mbc001	1132	MBohn Consulting, LLC	Events	5,000.00
73001	05/25/22	mcg004	22-06 MTN	Kara McGuire	Stewardship Grant Fund	150.00
73002	05/25/22	mea001	21-02	Mead Metals, Inc.	Dev Escrow-General	7,600.00
73003	05/25/22	min008	33141	Minnesota Native Landscapes, Inc.	Construction Imp.-Maint. & Rep.	6,400.00
73004	05/25/22	nar001	IV00206411	Nardini Fire Equipment	Utilities/Bldg. Contracts	1,003.50
73005	05/25/22	nep001	May 2022	NCPERS Group Life Ins.	Employee Benefits	16.00
73006	05/25/22	nsp001	776028213	Xcel Energy	Project Operations/Bldg./Site Maint.	1,487.81
73007	05/25/22	pac001	2210372397	Pace Analytical Services, Inc.	Water QM Staff	4,625.00
73008	05/25/22	pas002	May 2022	Sage Passi	Employee Reimbursement	337.94
73009	05/25/22	pet001	48312	Peterson Companies, Inc.	Project Operations/Bldg./Site Maint.	10,055.00
73010	05/25/22	pra001	2214402700	Prairie Moon Nursery, Inc.	Construction Imp.-Maint. & Rep.	139.00
73011	05/25/22	put001	May 2022	Catherine C. Putzier	Employee Reimbursement	14.74
73012	05/25/22	qwe001	May 2022	CenturyLink	Project Operations	252.41
73013	05/25/22	red002	150469945	Redpath & Company	April Accounting/Payroll Services	2,074.99
73014	05/25/22	san003	050122	Sandstrom Land Management	Construction Imp.-Maint. & Rep.	5,200.00
73015	05/25/22	sca001	2470	Scales Advertising	Project Operations	450.00
73016	05/25/22	sig001	INV-39239	Sign-A-Rama	Vehicle Expense	630.00
73017	05/25/22	sim001	May 2022	Emily Simmons	Employee Reimbursement	190.63
73018	05/25/22	sod001	May 2022	Nicole Soderholm	Employee Reimbursement	204.73
73019	05/25/22	sot001	20-31	SOTA Partners, LLC	Dev Escrow-General	8,400.00
73020	05/25/22	stu001	2019565	Studio Lola	Committee/Board/Events	7,971.24

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From May 1, 2022 to May 31, 2022**

Check #	Date	Payee ID	Invoice #	Payee	Description	Amount
73021	05/25/22	til002	May 2022	Joseph S. Tillotson	Employee Reimbursement	67.22
73022	05/25/22	tim002	M27332	Timesaver Off-Site Secretarial, Inc.	Committee/Board Meeting Exp.	190.50
73023	05/25/22	tro002	22-5	Cathy Troendle	Educational Program	1,948.48
73024	05/25/22	twi002	Z210048	Twin City Garage Door Co.	Bldg/Site Maintenance	699.00
73025	05/25/22	usb002	May 2022	U.S. Bank	May Credit Card	18,727.90
73026	05/25/22	van001	82601	Vanguard Cleaning Systems of Minnesota	Janitorial/Trash Service	594.00
73027	05/25/22	voy001	May 2022	US Bank Voyager Fleet Sys.	Vehicle Fuel	713.43
73028	05/25/22	was002	5602	Washington Conservation District	Stewardship Grant Fund	2,356.00
<b>Total</b>						<b><u><u>\$507,536.65</u></u></b>
EFT	05/13/22	myp001	05/13/22	May 13th Payroll Fees	4110-101-000	73.95
EFT	05/27/22	myp001	05/27/22	May 27th Payroll Fees	4110-101-000	73.95
Dir.Dep.	05/13/22	---	Payroll Expense-Net	May 13th Payroll	4010-101-000	31,598.11
EFT	05/13/22	int002	Internal Rev.Serv.	May 13th Federal Withholding	2001-101-000	11,203.82
EFT	05/13/22	mnd001	MN Revenue	May 13th State Withholding	2003-101-000	2,005.82
EFT	05/13/22	per001	PERA	May 13th PERA	2011-101-000	6,319.12
EFT	05/13/22	emp002	Empower Retirement	Employee Def.Comp. Contributions	2016-101-000	2,420.00
EFT	05/13/22	emp002	Empower Retirement	Employee IRA Contributions	2018-101-000	400.00
Dir.Dep.	05/27/22	---	Payroll Expense-Net	May 27th Payroll	4010-101-000	31,821.98
EFT	05/27/22	int002	Internal Rev.Serv.	May 27th Federal Withholding	2001-101-000	11,327.77
EFT	05/27/22	mnd001	MN Revenue	May 27th State Withholding	2003-101-000	2,024.02
EFT	05/27/22	per001	PERA	May 27th PERA	2011-101-000	6,319.12
EFT	05/27/22	emp002	Empower Retirement	Employee Def.Comp. Contributions	2016-101-000	2,420.00
EFT	05/27/22	emp002	Empower Retirement	Employee IRA Contributions	2018-101-000	400.00
<b>Payroll/Benefits:</b>						<b><u><u>\$108,407.66</u></u></b>
<b>Total</b>						<b>Accounts Payable/Payroll/Benefits: <u><u>\$615,944.31</u></u></b>



**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From May 1, 2022 - May 31, 2022**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
04/28/22	EFT	fle003	Fleet E-Payments	4830-101-000	Vehicle Fuel-General	\$301.36	
05/01/22	EFT	met008	MetLife-Group Benefits	4040-101-000	Employee Benefits-General	1,733.59	
05/11/22	EFT	hea002	HealthPartners	4040-101-000	Employee Benefits-General	12,563.83	
05/04/22	72967	nat005	National Camera Exchange	4370-101-000	Educational Program-General	6,299.70	
05/11/22	72968	ada002	Adam's Pest Control	4342-101-000	Utilities/Bldg. Contracts	86.11	
05/11/22	72969	asi002	Asian Invasion	4372-101-000	Events	100.00	
05/11/22	72970	aws001	AWS Service Center	4342-101-000	Utilities/Bldg. Contracts	292.14	
05/11/22	72971	cit009	City of St. Paul	4372-101-000	Events	1,000.00	
05/11/22	72972	gru001	Gruber's Power Equipment	4670-101-000	Natural Resources Project-General	657.19	
05/11/22	72973	hej001	Hejny Rental	4670-101-000	Natural Resources Project-General	80.65	
05/11/22	72974	hom001	Home Depot Credit Services	4670-101-000	Natural Resources Project-General	43.94	
05/11/22	72975	pra001	Prairie Moon Nursery, Inc.	4670-101-000	Natural Resources Project-General	1,577.10	
05/11/22	72976	pre003	Premium Waters, Inc.	4342-101-000	Utilities/Bldg. Contracts	28.00	
05/11/22	72977	sai001	Saint Paul Media	4371-101-000	Communications & Marketing	11,250.00	
05/11/22	72978	shi001	SHI International Corp.	4703-101-000	Office Equipment-General	25.00	
05/11/22	72979	uli001	Uline	4697-101-000	Health & Safety Program	200.28	
05/11/22	72980	usb005	US Bank Equipment Finance	4335-101-000	Printing-General	294.00	
05/11/22	72981	van001	Vanguard Cleaning Systems of Minnesota	4342-101-000	Utilities/Bldg. Contracts	594.00	
05/11/22	72982	was003	Washington Co. - Taxation Div.	4110-101-000	Auditor/Accounting	35.00	
05/25/22	72983	att002	AT & T Mobility - ROC	4325-101-000	IT/Website/Software	166.34	
05/25/22	72984	bal002	Darcy Ballantyne	4020-101-000	Employee Expenses-General	40.42	
05/25/22	72985	bar001	Barr Engineering			117,366.72	
				4121-101-000	Engineering Admin-General Fund		7,178.00
				4123-101-000	Engineering-Review		6,890.50
				4129-101-000	Project Feasability-General		1,657.50
				4129-101-000	Project Feasability-General		1,266.00
				4129-101-000	Project Feasability-General		14,281.00
				4129-101-000	Project Feasability-General		2,162.50
				4129-101-000	Project Feasability-General		3,716.50
				4129-101-000	Project Feasability-General		1,927.50
				4129-101-000	Project Feasability-General		637.50
				4129-101-000	Project Feasability-General		1,120.50
				4129-101-000	Project Feasability-General		1,173.00
				4129-101-000	Project Feasability-General		10,519.72
				4520-101-000	Engineering-WQM		34.50
				4520-101-000	Engineering-WQM		513.00
				4520-101-000	Engineering-WQM		1,369.76
				4520-101-000	Engineering-WQM		895.45
				4122-101-000	Engineering-Permit I&E		1,422.00
				4124-101-000	Engineering-Permit Review		2,281.00
				4661-101-000	SLMP/TMDL Studies		24.00
				4695-101-000	Research Projects-General		1,061.00
				4695-101-000	Research Projects-General		1,658.50
				4695-101-000	Research Projects-General		11,054.80
				4650-101-000	Project Operations-General		9,240.00
				4128-518-000	Engineering-Targeted Retrofit		335.00
				4128-520-000	Engineering-Flood Damage		7,171.64
				4128-518-000	Engineering-Targeted Retrofit		2,111.58

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From May 1, 2022 - May 31, 2022**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
				4128-518-000	Engineering-Targeted Retrofit		3,233.05
				4128-518-000	Engineering-Targeted Retrofit		3,030.50
				4682-529-000	Engineering-Stewardship Grant Program		1,564.20
				4128-516-000	Engineering-Maint. & Repair		10,038.99
				4128-516-000	Engineering-Maint. & Repair		339.00
				4128-516-000	Engineering-Maint. & Repair		1,935.50
				4128-516-000	Engineering-Maint. & Repair		5,523.03
05/25/22	72986	bro001	Brock White, Inc.	4670-101-000	Natural Resources Project-General	4,175.51	
05/25/22	72987	cad001	Allstream	4530-101-000	Water QM Staff-General	84.59	
05/25/22	72988	car007	Carp Solutions, LLC	4670-101-000	Natural Resources Project-General	15,065.00	
05/25/22	72989	cit011	City of Roseville	4325-101-000	IT/Website/Software	6,264.21	
05/25/22	72990	dav003	Davey Resource Group, Inc.	4630-516-000	Construction Imp.-Maint & Rep	9,967.50	
05/25/22	72991	fit001	Fitzgerald Excavating & Trucking, Inc.	4630-516-000	Construction Imp.-Maint & Rep	130,676.30	
05/25/22	72992	fit001	Fitzgerald Excavating & Trucking, Inc.	4630-516-000	Construction Imp.-Maint & Rep	92,382.23	
05/25/22	72993	fit002	Mary Fitzgerald			106.57	
				4020-101-000	Employee Expenses-General		48.32
				4040-101-000	Employee Benefits-General		58.25
05/25/22	72994	fre001	Freshwater Society	4683-101-000	Outside Program Sport	1,500.00	
05/25/22	72995	gal001	Galowitz Olson, PLLC			1,978.00	
				4131-101-000	Attorney General-General		897.00
				4131-518-000	Attorney-Targeted Retrofit		736.00
				4131-529-000	Attorney-Stewardship Grant		345.00
05/25/22	72996	ing002	INGCO International, Inc.	4371-101-000	Communications & Marketing	772.68	
05/25/22	72997	inn002	Innovative Office Solutions, LLC	4320-101-000	Office Supplies-General	211.44	
05/25/22	72998	int001	Office of MN, IT Services	4310-101-000	Telephone-General	59.34	
05/25/22	72999	lea003	L. Tracy Leavenworth	4370-101-000	Educational Program-General	2,058.39	
05/25/22	73000	mbc001	Mbohn Consulting, LLC	4372-101-000	Events	5,000.00	
05/25/22	73001	ncg004	Kara McGuire	4682-529-000	Stewardship Grant Fund	150.00	
05/25/22	73002	mea001	Mead Metals, Inc.	2024-101-000	Dev Escrow-General	7,600.00	
05/25/22	73003	min008	Minnesota Native Landscapes, Inc.	4630-516-000	Construction Imp.-Maint & Rep	6,400.00	
05/25/22	73004	nar001	Nardini Fire Equipment	4342-101-000	Utilities/Bldg. Contracts	1,003.50	
05/25/25	73005	nep001	NCBERS Group Life Insurance	4040-101-000	Employee Benefits-General	16.00	
05/25/22	73006	nsp001	Xcel Energy			1,487.81	
				4650-101-000	Project Operations-General		277.39
				4650-520-000	Project Operations-Flood		392.68
				4343-101-000	Bldg/Site Maintenance		817.74
05/25/22	73007	pac001	Pace Analytical Services, Inc.	4530-101-000	Water QM Staff-General	4,625.00	
05/25/22	73008	pas002	Sage Passi			337.94	
				4020-101-000	Employee Expenses-General		137.48
				4040-101-000	Employee Benefits-General		160.46
				4370-101-000	Educational Program-General		40.00
05/25/22	73009	pet001	Peterson Companies, Inc.			10,055.00	
				4343-101-000	Bldg/Site Maintenance		1,045.00
				4650-101-000	Project Operations-General		9,010.00
05/25/22	73010	pra001	Prairie Moon Nursery, Inc.	4630-516-000	Construction Imp.-Maint & Rep	139.00	
05/22/22	73011	put001	Catherine C. Putzier	4020-101-000	Employee Expenses-General	14.74	

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From May 1, 2022 - May 31, 2022**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
05/25/22	73012	qwe001	CenturyLink	4650-101-000	Project Operations-General	252.41	
05/25/22	73013	red002	Redpath & Company, Ltd.	4110-101-000	Auditor/Accounting	2,074.99	
05/25/22	73014	san003	Sandstrom Land Management	4630-516-000	Construction Imp.-Maint & Rep	5,200.00	
05/25/22	73015	sca001	Scales Advertising	4650-101-000	Project Operations-General	450.00	
05/25/22	73016	sig001	Sign-A-Rama	4840-101-000	Vehicle Misc.-General	630.00	
05/25/22	73017	sim001	Emily Simmons			190.63	
				4020-101-000	Employee Expenses-General		62.77
				4040-101-000	Employee Benefits-General		40.00
				4670-101-000	Natural Resources Project-General		31.88
				4320-101-000	Office Supplies-General		55.98
05/25/22	73018	sod001	Nicole Soderholm			204.73	
				4040-101-000	Employee Benefits-General		130.43
				4020-101-000	Employee Expenses-General		74.30
05/25/22	73019	sot001	SOTA Partners, LLC	2024-101-000	Dev Escrow-General	8,400.00	
05/25/22	73020	stu001	Studio Lola			7,971.24	
				4365-101-000	Committee/Board Meeting Expense		138.00
				4372-101-000	Events		7,833.24
05/25/22	73021	til002	Joseph S. Tillotson	4020-101-000	Employee Expenses-General	67.22	
05/25/22	73022	tim002	Timesaver Off-Site Secretarial, Inc.	4365-101-000	Committee/Board Meeting Expense	190.50	
05/25/22	73023	tro002	Cathy Troendle			1,948.48	
				4370-101-000	Educational Program-General		1,872.50
				4370-101-000	Educational Program-General		55.40
				4370-101-000	Educational Program-General		20.58
05/25/22	73024	twi002	Twin City Garage Door Co.	4343-101-000	Bldg/Site Maintenance	699.00	
05/25/22	73025	usb002	U.S. Bank			18,727.90	
				4325-101-000	IT/Website/Software		96.14
				4320-101-000	Office Supplies-General		45.22
				4372-101-000	Events		140.00
				4530-101-000	Water QM Staff-General		107.10
				4320-101-000	Office Supplies-General		97.00
				4350-101-000	Training & Education-General		200.00
				4670-101-000	Natural Resources Project-General		688.43
				4370-101-000	Educational Program-General		258.43
				4670-101-000	Natural Resources Project-General		258.43
				4325-101-000	IT/Website/Software		99.99
				4670-101-000	Natural Resources Project-General		169.60
				4670-101-000	Natural Resources Project-General		602.91
				4530-101-000	Water QM Staff-General		578.35
				4350-101-000	Training & Education-General		320.00
				4530-101-000	Water QM Staff-General		210.00
				4670-101-000	Natural Resources Project-General		6,472.77
				4365-101-000	Committee/Board Meeting Expense		92.40
				4365-101-000	Committee/Board Meeting Expense		162.80
				4320-101-000	Office Supplies-General		12.42
				4670-101-000	Natural Resources Project-General		925.00
				4697-101-000	Health & Safety Program		76.41
				4320-101-000	Office Supplies-General		26.31
				4530-101-000	Water QM Staff-General		369.60

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From May 1, 2022 - May 31, 2022**

<b>Date</b>	<b>Check #</b>	<b>Vendor ID</b>	<b>Name</b>	<b>Account ID</b>	<b>Account Description</b>	<b>Amount</b>	<b>Check Detail</b>
				4530-101-000	Water QM Staff-General		179.55
				4670-101-000	Natural Resources Project-General		38.64
				4320-101-000	Office Supplies-General		32.75
				4530-101-000	Water QM Staff-General		152.69
				4697-101-000	Health & Safety Program		993.40
				4371-101-000	Communications & Marketing		31.29
				4530-101-000	Water QM Staff-General		25.18
				4670-101-000	Natural Resources Project-General		40.88
				4170-101-000	GIS System Maintenance & Equip.		700.00
				4320-101-000	Office Supplies-General		25.99
				4372-101-000	Events		70.44
				4372-101-000	Events		25.00
				4530-101-000	Water QM Staff-General		13.49
				4350-101-000	Training & Education-General		369.65
				4372-101-000	Events		170.15
				4372-101-000	Events		184.72
				4372-101-000	Events		657.00
				4372-101-000	Events		613.00
				4372-101-000	Events		221.75
				4530-101-000	Water QM Staff-General		111.83
				4372-101-000	Events		687.25
				4530-101-000	Water QM Staff-General		675.00
				4530-101-000	Water QM Staff-General		199.45
				4372-101-000	Events		300.00
				4670-101-000	Natural Resources Project-General		85.98
				4670-101-000	Natural Resources Project-General		67.70
				4670-101-000	Natural Resources Project-General		43.87
				4320-101-000	Office Supplies-General		1.94
05/25/22	73026	van001	Vanguard Cleaning Systems of Minnesota	4341-101-000	Janitorial/Trash Service	594.00	
05/25/22	73027	voy001	US Bank Voyager Fleet Sys.	4830-101-000	Vehicle Fuel-General	713.43	
05/25/22	73028	was002	Washington Conservation District	4682-529-000	Stewardship Grant Fund	2,356.00	
<b>Accounts Payable Total:</b>						<b><u>507,536.65</u></b>	

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From May 1, 2022 - May 31, 2022**

<b>Date</b>	<b>Check #</b>	<b>Vendor ID</b>	<b>Name</b>	<b>Account ID</b>	<b>Account Description</b>	<b>Amount</b>	<b>Check Detail</b>
EFT	05/13/22	myp001	Payroll Fees	4110-101-000	May 13th Payroll Fees	73.95	
EFT	05/27/22	myp001	Payroll Fees	4110-101-000	May 27th Payroll Fees	73.95	
Dir.Dep.	05/13/22	---	Payroll Expense-Net	4010-101-000	May 13th Payroll	31,598.11	
EFT	05/13/22	int002	Internal Rev.Serv.	2001-101-000	May 13th Federal Withholding	11,203.82	
EFT	05/13/22	mnd001	MN Revenue	2003-101-000	May 13th State Withholding	2,005.82	
EFT	05/13/22	per001	PERA	2011-101-000	May 13th PERA	6,319.12	
EFT	05/13/22	emp002	Empower Retirement	2016-101-000	Employee Def.Comp. Contributions	2,420.00	
EFT	05/13/22	emp002	Empower Retirement	2018-101-000	Employee IRA Contributions	400.00	
Dir.Dep.	05/27/22	---	Payroll Expense-Net	4010-101-000	May 27th Payroll	31,821.98	
EFT	05/27/22	int002	Internal Rev.Serv.	2001-101-000	May 27th Federal Withholding	11,327.77	
EFT	05/27/22	mnd001	MN Revenue	2003-101-000	May 27th State Withholding	2,024.02	
EFT	05/27/22	per001	PERA	2011-101-000	May 27th PERA	6,319.12	
EFT	05/27/22	emp002	Empower Retirement	2016-101-000	Employee Def.Comp. Contributions	2,420.00	
EFT	05/27/22	emp002	Empower Retirement	2018-101-000	Employee IRA Contributions	400.00	
<b>Payroll/Benefits</b>						<b><u>\$108,407.66</u></b>	
<b>TOTAL:</b>						<b><u>\$615,944.31</u></b>	




**Summary of Professional Engineering Services During the Period  
April 16, 2022 through May 13, 2022**

	Total Engineering Budget (2022)	Total Fees to Date (2022)	Budget Balance (2022)	Fees During Period	District Accounting Code	Plan Implementation Task Number
<b>Engineering Administration</b>						
General Engineering Administration	\$80,000.00	\$32,346.00	\$47,654.00	\$7,178.00	4121-101	DW-13
RWMWD Health and Safety/ERTK Program	\$2,000.00	\$0.00	\$2,000.00	\$0.00	4697-101	DW-13
Educational Program/Educational Forum Assistance	\$20,000.00	\$2,847.50	\$17,152.50	\$1,657.50	4129-101	DW-11
Topical Workshop, Education, and Planning	\$25,000.00	\$0.00	\$25,000.00	\$0.00	4129-101	DW-13
<b>Engineering Review</b>						
Engineering Review	\$60,000.00	\$32,645.00	\$27,355.00	\$6,890.50	4123-101	DW-13
<b>Project Feasibility Studies</b>						
Interim emergency response plan funds for top priority District flooding areas	\$30,000.00	\$13,116.50	\$16,883.50	\$1,266.00	4129-101	DW-19
Groundwater/Surface Water Next Steps	\$50,000.00	\$0.00	\$50,000.00	\$0.00	4129-101	DW-10, DW-16
Hillcrest Golf Course	\$20,000.00	\$72.00	\$19,928.00	\$0.00	4129-101	DW-6
Kohlman Creek flood damage reduction feasibility study	\$75,000.00	\$4,293.50	\$70,706.50	\$0.00	4129-101	DW-9, KC-2, BELT-3
Kohlman Creek- Wakefield Lake Diversion Planning and Design	\$111,600.00	\$17,077.00	\$86,010.00	\$14,281.00	4129-101	DW-9, KC-2, BELT-3
Improvements to County Ditch 17	\$20,000.00	\$4,845.00	\$15,155.00	\$2,162.50	4129-101	DW-9, BELT-3
Improvements to Phalen Village	\$20,000.00	\$4,746.50	\$15,253.50	\$3,716.50	4129-101	DW-9, BELT-3
Ames Lake Technical Assistance and Project Planning with St. Paul	\$25,000.00	\$10,029.00	\$14,971.00	\$1,927.50	4129-101	DW-9, BELT-3
694/494/94 WQ treatment feasibility study	\$30,000.00	\$0.00	\$30,000.00	\$0.00	4129-101	BCL-3
Double Driveway Optimization Study	\$25,000.00	\$2,356.50	\$22,643.50	\$637.50	4129-101	FC-2
Carver Pond Improvements Study (Fish Creek Subwatershed)	\$25,000.00	\$2,449.00	\$22,551.00	\$1,120.50	4129-101	FC-2
Evaluate compliance with South Metro Mississippi River TSS TMDL	\$30,000.00	\$1,860.00	\$28,140.00	\$1,173.00	4129-101	MR-2
Owasso Basin area/North Star Estates improvements (with City of Little Canada)	\$50,000.00	\$20,582.72	\$29,417.28	\$10,519.72	4129-101	GC-3
Wetland Restoration Workshop, Education, and Planning	\$5,000.00	\$2,969.00	\$2,031.00	\$0.00	4129-101	DW-8
Contingency*	\$45,000.00	\$0.00	\$45,000.00	\$0.00	4129-101	
<b>GIS Maintenance</b>						
GIS Maintenance	\$5,000.00	\$554.00	\$4,446.00	\$0.00	4170-101	DW-13
<b>Monitoring Water Quality/Project Monitoring</b>						
Lake Water Quality Monitoring (Misc QA/QC)	\$10,000.00	\$34.50	\$9,965.50	\$34.50	4520-101	DW-2
Annual WQ Report Assistance	\$10,000.00	\$6,348.00	\$3,652.00	\$513.00	4520-101	DW-2
Special Project BMP Monitoring	\$25,000.00	\$4,831.92	\$20,168.08	\$1,369.76	4520-101	DW-12
Grass Lake Berm Wetland Monitoring	\$10,000.00	\$2,618.95	\$7,381.05	\$895.45	4520-101	DW-5
<b>Permit Processing, Inspection and Enforcement</b>						
Permit Application Inspection and Enforcement	\$10,000.00	\$1,549.50	\$8,450.50	\$1,422.00	4122-101	DW-7
Permit Application Review	\$55,000.00	\$20,815.50	\$34,184.50	\$2,281.00	4124-101	DW-7
<b>Lake Studies/TMDL Reports</b>						
2022 Grant Applications	\$40,000.00	\$2,005.50	\$37,994.50	\$0.00	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 studies	\$5,000.00	\$816.00	\$4,184.00	\$24.00	4661-101	DW-13
Cost/Benefit Analysis of Treatment Options for Bennett and Wakefield in 2020 Internal Load Analysis	\$35,000.00	\$570.00	\$34,430.00	\$0.00	4661-101	WL-3, Bel-3
Phalen Chain of Lakes Changes in Water Quality	\$2,500.00	\$2,070.00	\$430.00	\$0.00	4661-101	DW-2, DW-12
Contingency for Lake Studies	\$22,500.00	\$0.00	\$22,500.00	\$0.00	4661-101	
<b>Research Projects</b>						
New Technology Mini Case Studies (average 6 per year)	\$12,000.00	\$2,367.00	\$9,633.00	\$1,061.00	4695-101	DW-12
Kohlman Permeable Weir Test System - Implement Monitoring Plan	\$50,000.00	\$5,666.50	\$44,333.50	\$1,658.50	4695-101	DW-12
Shallow Lake Aeration Study	\$90,000.00	\$20,976.80	\$69,023.20	\$11,054.80	4695-101	DW-12
<b>Project Operations</b>						
2021 Tanners Alum Facility Monitoring	\$15,000.00	\$9,930.00	\$5,070.00	\$9,240.00	4650-101	TaL-3
<b>Capital Improvements</b>						
North St. Paul Target	\$160,000.00	\$156,963.80	\$3,036.20	\$0.00	4128-518	DW-6
East St Paul and North St. Paul Target Retrofit Projects	\$5,000.00	\$545.00	\$4,455.00	\$335.00	4128-518	DW-6
Ryan Drive-Keller Parkway Conveyance	\$194,000.00	\$220,447.20	-\$26,447.20	\$7,171.64	4128-520	DW-9, GC-3
Commercial Sites Retrofit Projects 2022 (Targeted Retrofits)	\$45,000.00	\$7,687.58	\$37,312.42	\$2,111.58	4128-518	DW-6
School Sites Retrofit Projects 2022 (Targeted Retrofits)	\$45,000.00	\$44,208.05	\$791.95	\$3,233.05	4128-518	DW-6
Church Sites Retrofit Projects 2022 (Targeted Retrofits)	\$45,000.00	\$38,069.98	\$6,930.02	\$3,030.50	4128-518	DW-6
Stewardship Grant Program: Gen1 BMP Design Assistance and Review (cases where Dist is approached by landowner, or landowner is not commercial, school, church).	\$75,000.00	\$9,366.36	\$65,633.64	\$1,564.20	4682-529	DW-6
Kohlman Creek Storage and Detention	\$200,000.00	\$0.00	\$200,000.00	\$0.00	4128-520	KC-2
Wetland Restoration	\$100,000.00	\$0.00	\$100,000.00	\$0.00	4128-529	DW-8
South Owasso Boulevard East WQ Pond	\$150,000.00	\$0.00	\$150,000.00	\$0.00	4128-520	GC-3
West Industrial Park Berm and associated improvements	\$150,000.00	\$0.00	\$150,000.00	\$0.00	4128-520	GC-3
South Lake Judy Filtration- Regional BMP	\$160,000.00	\$0.00	\$160,000.00	\$0.00	4128-518	LE-3
<b>CIP Project Repair &amp; Maintenance</b>						
Routine CIP Inspection and Unplanned Maintenance Identification	\$125,000.00	\$23,385.09	\$101,614.91	\$10,038.99	4128-516	DW-5
Beltline 5-year Inspection	\$70,000.00	\$46,312.32	\$23,687.68	\$339.00	4128-516	BELT-2
District Inspection Standardization	\$34,200.00	\$23,510.50	\$10,689.50	\$1,935.50	4128-516	DW-5
2022 CIP Maintenance and Repairs	\$150,000.00	\$76,968.06	\$73,031.94	\$5,523.03	4128-516	DW-5
2023 CIP Maintenance and Repairs (planning, bidding, and project setup)	\$40,000.00	\$0.00	\$40,000.00	\$0.00	4128-516	DW-5

**\$117,366.72**

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

**2022 Capitol Improvemnet Project (CIP) Progress Payment Number 2**

1.0	Total Completed Through This Period:	<u>\$284,664.24</u>	
2.0	Total Completed Previously Completed:		<u>\$147,110.24</u>
3.0	Total Completed This Period:		<u>\$137,554.00</u>
4.0	Amount Previously Retained:	<u>\$7,355.51</u>	
5.0	Amount Retained This Period (See Note 1):		<u>\$6,877.70</u>
6.0	Total Amount Retained (See Note 1):	<u>\$14,233.21</u>	
7.0	Retainage Released Through This Period:		<u>\$0.00</u>
8.0	Total Retainage Remaining:	<u>\$14,233.21</u>	
9.0	Amounts Previously Paid:	<u>\$139,754.73</u>	
10.0	Amount Due This Estimate:		<u><u>\$130,676.30</u></u>

Note 1: Retainage shall be 5 percent of the value of the Work completed.

SUBMITTED BY:

Name: Jason Fitzgerald Date: \_\_\_\_\_  
Title: President  
Contractor: Fitzgerald Excavating & Trucking, Inc.

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

RECOMMENDED BY:

Name: Brad Lindaman Date: \_\_\_\_\_  
Title: District Engineer  
Engineer: Barr Engineering Company

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

APPROVED BY:

Name: Lawrence Swope Date: \_\_\_\_\_  
Title: President  
Owner: Ramsey-Washington Metro Watershed District

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

**2022 Capital Improvement Project (CIP)  
Ramsey-Washington Metro Watershed District  
Summary of Work Completed Through May 17, 2022 for Progress Payment Number 2**

Item	Description	Unit	Estimated Quantity	Unit Price	Extension	(1) Total Completed Through This Period		(2) Total Completed Previous Period		(3) Total Completed This Period	
						Quantity	Amount	Quantity	Amount	Quantity	Amount
<b>General</b>											
A	Mobilization/Demobilization	L.S.	1	\$80,000.00	\$80,000.00	0.50	\$40,000.00	0.20	\$16,000.00	0.30	\$24,000.00
B	Control of Water	L.S.	1	\$25,000.00	\$25,000.00	0.20	\$5,000.00	0.20	\$5,000.00	0.00	\$0.00
C	Traffic Control	L.S.	1	\$2,000.00	\$2,000.00	0.50	\$1,000.00	0.20	\$400.00	0.30	\$600.00
<b>Site 1 - Tamarack Swamp, Woodbury (PFS Basins Cleaning/Sweeping)</b>											
F	Sediment Log (9-Inch Diameter)	L.F.	60	\$1.00	\$60.00	0	\$0.00	0	\$0.00	0	\$0.00
D	Sediment/Muck Cleanout Excavation, Loading, Hauling and Disposal of Regulated Material (SRV Level 2 and 3)	TON	92	\$36.00	\$3,312.00	0	\$0.00	0	\$0.00	0	\$0.00
G	Paver Sweeping (1,400 S.Y.)	S.Y.	1,400	\$3.00	\$4,200.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	100	\$1.00	\$100.00	0	\$0.00	0	\$0.00	0	\$0.00
<b>Site 2 - Tanners Wetland, Oakdale (Wetland Weir Maintenance)</b>											
J	Permeable Weir Maintenance (Reopening Drainage Slots and Remove all Brush and Debris)	L.F.	580	\$20.00	\$11,600.00	580	\$11,600.00	0	\$0.00	580	\$11,600.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	210	\$1.00	\$210.00	0	\$0.00	0	\$0.00	0	\$0.00
<b>Site 3 - Gervais Mill Park, Little Canada (Mill Pond Filter Maintenance)</b>											
L	Flotation Silt Curtain	L.F.	45	\$20.00	\$900.00	45	\$900.00	0	\$0.00	45	\$900.00
O	Composite Mud Mats Protection (Double Layer)	S.Y.	100	\$5.00	\$500.00	0	\$0.00	0	\$0.00	0	\$0.00
H	Remove Existing 1-1/2 inch to 2-inch Filter Rock	L.S.	1	\$8,000.00	\$8,000.00	1	\$8,000.00	0	\$0.00	1	\$8,000.00
I	Clear Washed Filter Rock	TON	50	\$50.00	\$2,500.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	400	\$1.00	\$400.00	0	\$0.00	0	\$0.00	0	\$0.00
<b>Site 4 - Lower Afton Road, Maplewood (Drainageway Sediment Removal)</b>											
M	Construction Entrance	EACH	1	\$500.00	\$500.00	0	\$0.00	0	\$0.00	0	\$0.00
N	Temporary Rock Filter Dike	TON	10	\$40.00	\$400.00	0	\$0.00	0	\$0.00	0	\$0.00
O	Composite Mud Mats Protection (Double Layer)	S.Y.	45	\$5.00	\$225.00	0	\$0.00	0	\$0.00	0	\$0.00
D	Sediment/Muck Cleanout Excavation, Loading, Hauling and Disposal of Regulated Material (SRV Level 2 and 3)	TON	127	\$36.00	\$4,572.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	210	\$1.00	\$210.00	0	\$0.00	0	\$0.00	0	\$0.00
<b>Site 5 - Kohlman Basin, Maplewood (Sand Filter Maintenance)</b>											
M	Construction Entrance	EACH	1	\$500.00	\$500.00	0	\$0.00	0	\$0.00	0	\$0.00
Q	Inlet Protection	EACH	2	\$150.00	\$300.00	0	\$0.00	0	\$0.00	0	\$0.00
D	Sediment/Muck Cleanout Excavation, Loading, Hauling and Disposal of Regulated Material (SRV Level 2 and 3)	TON	15	\$36.00	\$540.00	0	\$0.00	0	\$0.00	0	\$0.00
R	Clean Openings on Energy Dissipation Structure	L.S.	1	\$3,000.00	\$3,000.00	0	\$0.00	0	\$0.00	0	\$0.00
S	Removal and Disposal of Filter Material (Pea Rock and Sand)	C.Y.	14	\$30.00	\$420.00	0	\$0.00	0	\$0.00	0	\$0.00
T	Filter Fabric MN/DOT Type 5	S.Y.	38	\$6.00	\$228.00	0	\$0.00	0	\$0.00	0	\$0.00
U	Clean Washed Sand	TON	14	\$40.00	\$568.00	0	\$0.00	0	\$0.00	0	\$0.00
V	Pea Rock	TON	4	\$40.00	\$172.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Access Restoration (Seeding and Erosion Control Blanket)	S.Y.	200	\$1.00	\$200.00	0	\$0.00	0	\$0.00	0	\$0.00



**2022 Capital Improvement Project (CIP)**  
**Ramsey-Washington Metro Watershed District**  
**Summary of Work Completed Through May 17, 2022 for Progress Payment Number 2**

Item	Description	Unit	Estimated Quantity	Unit Price	Extension	(1) Total Completed Through This Period		(2) Total Completed Previous Period		(3) Total Completed This Period	
						Quantity	Amount	Quantity	Amount	Quantity	Amount
<b>Site 6 - Wakefield Lake, Maplewood (Test Cell Media Replacement)</b>											
M	Construction Entrance	EACH	1	\$500.00	\$500.00	0	\$0.00	0	\$0.00	0	\$0.00
W	Clean-out Accumulated Sediment in Riprap Void Areas	L.S.	1	\$2,000.00	\$2,000.00	0	\$0.00	0	\$0.00	0	\$0.00
D	Sediment/Muck Cleanout Excavation, Loading, Hauling and Disposal of Regulated Material (SRV Level 2 and 3)	TON	42	\$36.00	\$1,512.00	0	\$0.00	0	\$0.00	0	\$0.00
X	Granite Sand	TON	35	\$35.00	\$1,225.00	0	\$0.00	0	\$0.00	0	\$0.00
Y	Iron Aggregate	TON	1.8	\$125.00	\$225.00	0	\$0.00	0	\$0.00	0	\$0.00
I	Clear Washed Filter Rock	TON	0.2	\$250.00	\$50.00	0	\$0.00	0	\$0.00	0	\$0.00
Z	MN/DOT Class III Riprap (Field Stone) with Geotextile Filter Fabric	TON	10	\$90.00	\$900.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Access Restoration (Seeding and Erosion Control Blanket)	S.Y.	380	\$1.00	\$380.00	0	\$0.00	0	\$0.00	0	\$0.00
<b>Site 7 - County Road D, Vadnais Heights (Washout Repair)</b>											
M	Construction Entrance	EACH	1	\$500.00	\$500.00	1	\$500.00	0	\$0.00	1	\$500.00
P	Clear and Grub	L.S.	1	\$8,000.00	\$8,000.00	1	\$8,000.00	0	\$0.00	1	\$8,000.00
K	Silt Fence	L.F.	300	\$3.00	\$900.00	0	\$0.00	0	\$0.00	0	\$0.00
AA	Remove and Disposal of Existing 15" Flared End Section and 1.5' of 15" C.P.E.P.	L.S.	1	\$1,000.00	\$1,000.00	0	\$0.00	0	\$0.00	0	\$0.00
BB	22" HDPE DR 17 Pipe	L.F.	131	\$120.00	\$15,720.00	0	\$0.00	0	\$0.00	0	\$0.00
CC	Anti-Seepage Collar for 22" HDPE Pipe	EACH	4	\$2,400.00	\$9,600.00	0	\$0.00	0	\$0.00	0	\$0.00
DD	24" RCP CL 3	L.F.	29	\$125.00	\$3,625.00	0	\$0.00	0	\$0.00	0	\$0.00
EE	24" RCP Flared End Section w/ Pipe Ties	Each	1	\$1,500.00	\$1,500.00	0	\$0.00	0	\$0.00	0	\$0.00
FF	48" Dia. Precast Concrete Manhole with Manhole Casting Assembly	EACH	2	\$5,000.00	\$10,000.00	0	\$0.00	0	\$0.00	0	\$0.00
Z	MN/DOT Class IV Riprap (Field Stone) with Geotextile Filter Fabric	TON	25	\$90.00	\$2,250.00	0	\$0.00	0	\$0.00	0	\$0.00
HH	Excavate, Cut, Fill, Grade Channel	L.S.	1	\$35,000.00	\$35,000.00	0	\$0.00	0	\$0.00	0	\$0.00
II	High Performance Turf Reinforcement Mat (HP-TRM)	S.Y.	250	\$14.00	\$3,500.00	0	\$0.00	0	\$0.00	0	\$0.00
JJ	High Performance Flexible Growth Medium (HP-FGM)	S.Y.	375	\$5.00	\$1,875.00	0	\$0.00	0	\$0.00	0	\$0.00
KK	Rock Grade Control Check Dam	EACH	2	\$3,000.00	\$6,000.00	0	\$0.00	0	\$0.00	0	\$0.00
LL	Salvage and Replace Topsoil	C.Y.	62	\$10.00	\$620.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	660	\$3.00	\$1,980.00	0	\$0.00	0	\$0.00	0	\$0.00
<b>Site 8 - Gervais Creek, Little Canada (Creek Improvements Restoration)</b>											
M	Construction Entrance	EACH	1	\$500.00	\$500.00	1	\$500.00	0	\$0.00	1	\$500.00
P	Clear and Grub	L.S.	1	\$5,000.00	\$5,000.00	1	\$5,000.00	0	\$0.00	1	\$5,000.00
MM	Salvage and Replace Large Fallen Tree in Slope Wash-out	L.S.	1	\$2,000.00	\$2,000.00	1	\$2,000.00	0	\$0.00	1	\$2,000.00
Q	Inlet Protection	EACH	1	\$150.00	\$150.00	0	\$0.00	0	\$0.00	0	\$0.00
K	Slit Fence (Double Row)	L.F.	130	\$6.00	\$780.00	65	\$390.00	0	\$0.00	65	\$390.00
NN	Clean Sediment 8' out from Existing Pipe	L.S.	1	\$1,000.00	\$1,000.00	1	\$1,000.00	0	\$0.00	1	\$1,000.00
OO	Remove Existing 18" CMP and Headwall	L.S.	1	\$500.00	\$500.00	1	\$500.00	0	\$0.00	1	\$500.00
BB	18" HDPE DR 17	L.F.	119	\$95.00	\$11,305.00	119	\$11,305.00	0	\$0.00	119	\$11,305.00
BB	28" HDPE DR 17	L.F.	81	\$230.00	\$18,630.00	81	\$18,630.00	0	\$0.00	81	\$18,630.00
CC	Anti-Seepage Collar for 28" HDPE Pipe	EACH	3	\$2,400.00	\$7,200.00	3	\$7,200.00	0	\$0.00	3	\$7,200.00
DD	24" RCP CL 3	L.F.	25	\$125.00	\$3,125.00	16	\$2,000.00	0	\$0.00	16	\$2,000.00
EE	24" RCP Flared End Section w/ Pipe Ties	EACH	1	\$1,500.00	\$1,500.00	1	\$1,500.00	0	\$0.00	1	\$1,500.00
FF	48" Dia. Precast Concrete Manhole with Manhole Casting Assembly	EACH	2	\$7,000.00	\$14,000.00	2	\$14,000.00	0	\$0.00	2	\$14,000.00
GG	30" Dia. Precast Concrete Catch Basin with Casting Assembly	EACH	4	\$2,900.00	\$11,600.00	4	\$11,600.00	0	\$0.00	4	\$11,600.00
Z	MN/DOT Class IV Riprap (Field Stone) with Geotextile Filter Fabric	TON	20	\$90.00	\$1,800.00	0	\$0.00	0	\$0.00	0	\$0.00
UU	Select Granular Backfill	C.Y.	237	\$20.00	\$4,740.00	0	\$0.00	0	\$0.00	0	\$0.00
LL	Salvage and Replace Topsoil	C.Y.	175	\$10.00	\$1,750.00	0	\$0.00	0	\$0.00	0	\$0.00
II	High Performance Turf Reinforcement Mat (HP-TRM)	S.Y.	95	\$14.00	\$1,330.00	0	\$0.00	0	\$0.00	0	\$0.00
JJ	High Performance Flexible Growth Medium (HP-FGM)	S.Y.	345	\$5.00	\$1,725.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	700	\$3.00	\$2,100.00	0	\$0.00	0	\$0.00	0	\$0.00

**2022 Capital Improvement Project (CIP)  
Ramsey-Washington Metro Watershed District  
Summary of Work Completed Through May 17, 2022 for Progress Payment Number 2**

Item	Description	Unit	Estimated Quantity	Unit Price	Extension	(1) Total Completed Through This Period		(2) Total Completed Previous Period		(3) Total Completed This Period	
						Quantity	Amount	Quantity	Amount	Quantity	Amount
<b>Site 9 - Meadowood Pond, Woodbury (Pond Cleanout)</b>											
M	Construction Entrance	EACH	2	\$500.00	\$1,000.00	2	\$1,000.00	2	\$1,000.00	0	\$0.00
P	Clear and Grub	L.S.	1	\$4,000.00	\$4,000.00	1	\$4,000.00	0	\$0.00	1	\$4,000.00
L	Flotation Silt Curtain	L.F.	330	\$10.00	\$3,300.00	0	\$0.00	0	\$0.00	0	\$0.00
Q	Inlet Protection	EACH	3	\$150.00	\$450.00	0	\$0.00	0	\$0.00	0	\$0.00
D	Sediment/Muck Cleanout Excavation, Loading, Hauling and Disposal of Regulated Material (SRV Level 2 and 3)	TON	500	\$36.00	\$18,000.00	0	\$0.00	0	\$0.00	0	\$0.00
Z	MN/DOT Class III Riprap (Field Stone) with Geotextile Filter Fabric	TON	20	\$90.00	\$1,800.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	1150	\$1.00	\$1,150.00	343	\$343.00	0	\$0.00	343	\$343.00
<b>Site 10 - Ventura Pond, Woodbury (Pond Cleanout)</b>											
M	Construction Entrance	EACH	1	\$500.00	\$500.00	1	\$500.00	1	\$500.00	0	\$0.00
Q	Inlet Protection	EACH	2	\$150.00	\$300.00	0	\$0.00	0	\$0.00	0	\$0.00
PP	Remove Trash Guard and Clean-out 5' of Pipe	EACH	2	\$1,000.00	\$2,000.00	2	\$2,000.00	0	\$0.00	2	\$2,000.00
D	Sediment/Muck Cleanout Excavation, Loading, Hauling and Disposal of Regulated Material (SRV Level 2 and 3)	TON	250	\$36.00	\$9,000.00	300	\$10,800.00	300	\$10,800.00	0	\$0.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	650	\$1.00	\$650.00	689	\$689.00	384	\$384.00	305	\$305.00
<b>Site 11 - Lake Terrace Pond, Woodbury (Pond Cleanout)</b>											
M	Construction Entrance	EACH	1	\$500.00	\$500.00	1	\$500.00	1	\$500.00	0	\$0.00
Q	Inlet Protection	EACH	2	\$150.00	\$300.00	0	\$0.00	0	\$0.00	0	\$0.00
L	Flotation Silt Curtain	L.F.	150	\$10.00	\$1,500.00	150	\$1,500.00	0	\$0.00	150	\$1,500.00
D	Sediment/Muck Cleanout Excavation, Loading, Hauling and Disposal of Regulated Material (SRV Level 2 and 3)	TON	2880	\$36.00	\$103,680.00	2,001	\$72,050.40	2,001	\$72,050.40	0	\$0.00
Z	MN/DOT Class III Riprap (Field Stone) with Geotextile Filter Fabric	TON	20	\$90.00	\$1,800.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	175	\$1.00	\$175.00	181	\$181.00	0	\$0.00	181	\$181.00

**2022 Capital Improvement Project (CIP)  
 Ramsey-Washington Metro Watershed District  
 Summary of Work Completed Through May 17, 2022 for Progress Payment Number 2**

Item	Description	Unit	Estimated Quantity	Unit Price	Extension	(1) Total Completed Through This Period		(2) Total Completed Previous Period		(3) Total Completed This Period	
						Quantity	Amount	Quantity	Amount	Quantity	Amount
<b>Site 12 - Willow Creek, White Bear</b>											
QQ	Furnish and Install Prefabricated Headwall Grate	L.S.	1	\$7,500.00	\$7,500.00	0	\$0.00	0	\$0.00	0	\$0.00
<b>Site 13 - RWMWD Office, Little Canada (Inlet Structure Sink Hole Repair)</b>											
RR	Exploration Excavation of Sink Hole Around Structure and Disposal of Excavated Materials	L.S.	1	\$2,000.00	\$2,000.00	0	\$0.00	0	\$0.00	0	\$0.00
LL	Salvage and Replace Existing Topsoil	L.S.	1	\$2,000.00	\$2,000.00	0	\$0.00	0	\$0.00	0	\$0.00
SS	Furnish and Install External Manhole Seal	Each	1	\$2,000.00	\$2,000.00	0	\$0.00	0	\$0.00	0	\$0.00
TT	Back Fill with Granular Bentonite/Sand Mixture	C.Y.	2	\$175.00	\$350.00	0	\$0.00	0	\$0.00	0	\$0.00
E	Site Restoration (Seeding and Erosion Control Blanket)	S.Y.	25	\$1.00	\$25.00	0	\$0.00	0	\$0.00	0	\$0.00
<b>Contract Base Extensions =</b>					<b>\$514,194.00</b>		<b>\$244,188.40</b>		<b>\$106,634.40</b>		<b>\$137,554.00</b>
<b>Change Order 1</b>											
C.O.1.A	Woodbury Ponds - Sediment/Muck Cleanout Excavation, Loading, Hauling and Disposal of Regulated Material (SRV Level 2) to alternative, non-landfill, site.	TON	2,000	\$32.00	\$64,000.00	1,265	\$40,475.84	1,265	\$40,475.84	0	\$0.00
<b>Change Order Extensions =</b>					<b>\$64,000.00</b>		<b>\$40,475.84</b>		<b>\$40,475.84</b>		<b>\$0.00</b>
<b>Contract Grand Total =</b>					<b>\$578,194.00</b>		<b>\$284,664.24</b>		<b>\$147,110.24</b>		<b>\$137,554.00</b>

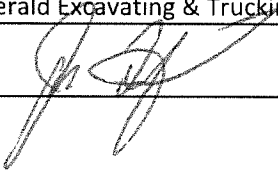
**Ryan Drive and Keller Pkwy Conveyance Upgrades  
Progress Payment No. 4  
For Work Completed Through May 13, 2022**

1.0	Total Completed Through This Period:	<u>\$698,615.83</u>	
2.0	Total Previously Completed:		<u>\$638,140.63</u>
3.0	Total Completed This Period:		<u>\$60,475.20</u>
4.0	Amount Previously Retained:		<u>\$ 31,907.03</u>
5.0	Amount Retained This Period (See Note 1):		<u>\$3,023.76</u>
6.0	Total Amount Retained (See Note 1):		<u>\$34,930.79</u>
7.0	Retainage Released Through This Period:		<u>\$34,930.79</u>
8.0	Total Retainage Remaining:		<u>\$0.00</u>
9.0	Amounts Previously Paid:	<u>\$606,233.60</u>	
10.0	Amount Due This Estimate:		<u><u>\$92,382.23</u></u>

Note 1: At rate of 5%.

SUBMITTED BY:

Name: Gary Richter Date: 5/18/2022  
 Title: Project Manager  
 Contractor: Fitzgerald Excavating & Trucking

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

RECOMMENDED BY:

Name: Samuel Redinger Date: 5/18/2022  
 Title: Project Engineer  
 Engineer: Barr Engineering Co.

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

APPROVED BY:

Name: Lawrence Swope Date: \_\_\_\_\_  
 Title: President  
 Owner: Ramsey-Washington Metro Watershed District

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

Ryan Drive and Keller Pkwy Conveyance Upgrades  
 Ramsey-Washington Metro Watershed District  
 Summary of Work Completed Through May 13, 2022 for Progress Payment No. 4 FINAL

Item	Description	Unit	Bidding Estimated Quantity	Fitzgerald Excavating		(1) Total Completed This Period		(2) Total Completed Previous Periods		(3) Total Completed To Date	
				Unit Price	Extension	Quantity	Amount	Quantity	Amount	Quantity	Amount
<b>General</b>											
01 55 26.01	Traffic Control	LS	1	\$ 15,000.00	\$ 15,000.00		\$ -	1	\$ 15,000.00	1	\$ 15,000.00
01 71 13.01	Mobilization/Demobilization	LS	1	\$ 105,000.00	\$ 105,000.00	0.2	\$ 21,000.00	0.8	\$ 84,000.00	1	\$ 105,000.00
<b>Site 1 - Keller Pkwy</b>											
01 74 23.02	Construction Entrance	EA	2	\$ 1,000.00	\$ 2,000.00		\$ -	0	\$ -	0	\$ -
01 74 23.04	Silt Fence	LF	550	\$ 2.50	\$ 1,375.00		\$ -	0	\$ -	0	\$ -
01 74 23.05	Flotation Silt Curtain	LF	80	\$ 20.00	\$ 1,600.00		\$ -	92	\$ 1,840.00	92	\$ 1,840.00
01 74 23.06	Erosion Control Blanket and Seeding	SY	310	\$ 3.00	\$ 930.00		\$ -	79	\$ 237.00	79	\$ 237.00
02 41 00.01	Removal of Trees, Brush, and Debris (Disposal Off Site)	LS	1	\$ 15,000.00	\$ 15,000.00		\$ -	1	\$ 15,000.00	1	\$ 15,000.00
02 41 00.03	Remove and Dispose of 96-in Wide x 62-in Tall RC Arch Pipe	LF	116	\$ 75.00	\$ 8,700.00		\$ -	116	\$ 8,700.00	116	\$ 8,700.00
02 41 00.04	Remove and Dispose of Fencing	LF	120	\$ 15.00	\$ 1,800.00		\$ -	120	\$ 1,800.00	120	\$ 1,800.00
02 41 00.05	Saw-Cut, Bituminous pavement	LF	100	\$ 10.00	\$ 1,000.00		\$ -	92	\$ 920.00	92	\$ 920.00
02 41 00.06	Remove and Dispose Bituminous Pavement	SY	400	\$ 5.00	\$ 2,000.00		\$ -	399	\$ 1,995.00	399	\$ 1,995.00
02 41 00.07	Remove and Dispose Bituminous Driveway Pavement	SY	50	\$ 10.00	\$ 500.00		\$ -	65	\$ 650.00	65	\$ 650.00
31 00 00.01	Strip, Salvage, and Replace Topsoil (6-in Depth)	CY	270	\$ 12.00	\$ 3,240.00		\$ -	90	\$ 1,080.00	90	\$ 1,080.00
31 00 00.02	Sediment and Muck Excavation, Loading, and Hauling (Regulated)	TON	520	\$ 20.00	\$ 10,400.00		\$ -	0	\$ -	0	\$ -
31 00 00.03	Sediment and Muck Excavation, Loading, and Hauling (Non-Regulated)	CY	0	\$ 40.00	\$ -		\$ -	0	\$ -	0	\$ -
31 00 00.04	Sediment and Muck Disposal Fee	TON	520	\$ 20.00	\$ 10,400.00		\$ -	0	\$ -	0	\$ -
31 00 00.07	Aggregate Base Class 6	CY	60	\$ 35.00	\$ 2,100.00		\$ -	48	\$ 1,680.00	48	\$ 1,680.00
31 00 00.08	Riprap w/fabric (Mn/DOT CL III)	CY	350	\$ 60.00	\$ 21,000.00		\$ -	175	\$ 10,500.00	175	\$ 10,500.00
31 00 00.09	Shoulder Aggregate Class 2 (100% Crushed Quarry Rock)	TON	25	\$ 45.00	\$ 1,125.00		\$ -	20.84	\$ 937.80	20.84	\$ 937.80
31 00 00.10	Topsoil Placement (Borrow)(Allowance)	CY	25	\$ 35.00	\$ 875.00		\$ -	0	\$ -	0	\$ -
31 23 19.01	Water Management - Keller Pkwy	LS	1	\$ 27,000.00	\$ 27,000.00		\$ -	1	\$ 27,000.00	1	\$ 27,000.00
32 12 00.02	2.5-in Type 12.5 Non-Wearing Course Mixture (4,B)(SPNWB430B)	TON	60	\$ 100.00	\$ 6,000.00		\$ -	89.6	\$ 8,960.00	89.6	\$ 8,960.00
32 12 00.04	2.5-in Type SP 9.5 Wearing Course Mixture 4,C (SPWEA440C)	TON	60	\$ 105.00	\$ 6,300.00		\$ -	63.63	\$ 6,681.15	63.63	\$ 6,681.15
32 12 00.05	2-in Type SP 9.5 Wearing Course Mixture 4,C (SPWEA440C)	TON	50	\$ 105.00	\$ 5,250.00		\$ -	50	\$ 5,250.00	50	\$ 5,250.00
32 12 00.06	Driveway Patching	TON	10	\$ 155.00	\$ 1,550.00		\$ -	13	\$ 2,015.00	13	\$ 2,015.00
32 31 13.01	Fencing (Chain Link)	LF	140	\$ 50.00	\$ 7,000.00	140	\$ 7,000.00	0	\$ -	140	\$ 7,000.00
33 42 00.03	16-FT Wide X 4-FT Tall Reinf. Conc. Box Culvert End Section (MnDOT Class I, Type III)	EA	4	\$ 16,000.00	\$ 64,000.00		\$ -	4	\$ 64,000.00	4	\$ 64,000.00
33 42 00.04	16-FT Wide X 4-FT Tall Reinf. Conc. Box Culvert (MnDOT Class I)	LF	86	\$ 1,735.00	\$ 149,210.00		\$ -	86	\$ 149,210.00	86	\$ 149,210.00
<b>Site 2 - Ryan Drive</b>											
01 74 23.02	Construction Entrance	EA	4	\$ 800.00	\$ 3,200.00		\$ -	0	\$ -	0	\$ -
01 74 23.03	Sediment Log (9-in Diameter)	LF	540	\$ 5.00	\$ 2,700.00	44	\$ 220.00	0	\$ -	44	\$ 220.00
01 74 23.04	Silt Fence	LF	600	\$ 2.50	\$ 1,500.00		\$ -	0	\$ -	0	\$ -
01 74 23.06	Erosion Control Blanket and Seeding	SY	690	\$ 3.00	\$ 2,070.00	1469	\$ 4,407.00	0	\$ -	1469	\$ 4,407.00
01 74 23.07	Rock Filter Dike	EA	1	\$ 500.00	\$ 500.00		\$ -	0	\$ -	0	\$ -
02 41 00.01	Removal of Trees, Brush, and Debris (Disposal Off Site)	LS	1	\$ 15,000.00	\$ 15,000.00		\$ -	1	\$ 15,000.00	1	\$ 15,000.00
02 41 00.02	Remove and Dispose of 30-inch RC Circ. Pipe	LF	53	\$ 55.00	\$ 2,915.00		\$ -	53	\$ 2,915.00	53	\$ 2,915.00
02 41 00.04	Remove and Dispose of Fencing	LF	15	\$ 50.00	\$ 750.00		\$ -	15	\$ 750.00	15	\$ 750.00
02 41 00.05	Saw-Cut, Bituminous pavement	LF	181	\$ 12.00	\$ 2,172.00		\$ -	175.54	\$ 2,106.48	175.54	\$ 2,106.48
02 41 00.06	Remove and Dispose Bituminous Pavement	SY	327	\$ 10.00	\$ 3,270.00		\$ -	394	\$ 3,940.00	394	\$ 3,940.00
02 41 00.08	Reclamation (12-in Depth)	SY	1,490	\$ 5.00	\$ 7,450.00		\$ -	1300	\$ 6,500.00	1300	\$ 6,500.00

Ryan Drive and Keller Pkwy Conveyance Upgrades  
 Ramsey-Washington Metro Watershed District  
 Summary of Work Completed Through May 13, 2022 for Progress Payment No. 4 FINAL

Item	Description	Unit	Bidding Estimated Quantity	Fitzgerald Excavating		(1) Total Completed This Period		(2) Total Completed Previous Periods		(3) Total Completed To Date	
				Unit Price	Extension	Quantity	Amount	Quantity	Amount	Quantity	Amount
02 41 00.09	Haul Out/Stockpile Millings	CY	500	\$ 12.00	\$ 6,000.00		\$ -	433	\$ 5,196.00	433	\$ 5,196.00
31 00 00.01	Strip, Salvage, and Replace Topsoil (6-in Depth)	CY	264	\$ 14.00	\$ 3,696.00	264	\$ 3,696.00	0	\$ -	264	\$ 3,696.00
31 00 00.02	Sediment and Muck Excavation, Loading, and Hauling (Regulated)	TON	330	\$ 20.00	\$ 6,600.00		\$ -	76.44	\$ 1,528.80	76.44	\$ 1,528.80
31 00 00.03	Sediment and Muck Excavation, Loading, and Hauling (Non-Regulated)	CY	0	\$ 45.00	\$ -		\$ -	0	\$ -	0	\$ -
31 00 00.04	Sediment and Muck Disposal Fee	TON	330	\$ 20.00	\$ 6,600.00		\$ -	0	\$ -	0	\$ -
31 00 00.05	Roadway Embankment (Select Granular Borrow)	CY	1,160	\$ 30.00	\$ 34,800.00		\$ -	923.78	\$ 27,713.40	923.78	\$ 27,713.40
31 00 00.07	Aggregate Base Class 6	CY	440	\$ 35.00	\$ 15,400.00		\$ -	433	\$ 15,155.00	433	\$ 15,155.00
31 00 00.08	Riprap w/fabric (Mn/DOT CL III)	CY	120	\$ 65.00	\$ 7,800.00	20.88	\$ 1,357.20	74	\$ 4,810.00	94.88	\$ 6,167.20
31 00 00.09	Shoulder Aggregate Class 2 (100% Crushed Quarry Rock)	TON	90	\$ 45.00	\$ 4,050.00		\$ -	0	\$ -	0	\$ -
31 00 00.10	Topsoil Placement (Borrow) (Allowance)	CY	25	\$ 35.00	\$ 875.00		\$ -	0	\$ -	0	\$ -
31 23 19.02	Water Management - Ryan Drive	LS	1	\$ 27,000.00	\$ 27,000.00		\$ -	1	\$ 27,000.00	1	\$ 27,000.00
32 12 00.01	2-in Type 12.5 Non-Wearing Course Mixture 3,C (SPNWB340C)	TON	180	\$ 100.00	\$ 18,000.00		\$ -	182.3	\$ 18,230.00	182.3	\$ 18,230.00
32 12 00.06	Driveway Patching	TON	80	\$ 100.00	\$ 8,000.00		\$ -	40	\$ 4,000.00	40	\$ 4,000.00
32 31 13.01	Fencing (Chain Link)	LF	80	\$ 50.00	\$ 4,000.00	80	\$ 4,000.00	0	\$ -	80	\$ 4,000.00
33 42 00.01	14-ft Wide X 5-ft Tall Reinf. Conc. Box Culvert End Section (MnDOT Class, Type I)	EA	2	\$ 16,000.00	\$ 32,000.00		\$ -	2	\$ 32,000.00	2	\$ 32,000.00
33 42 00.02	14-ft Wide X 5-ft Tall Reinf. Conc. Box Culvert (MnDOT Class I)	LF	38	\$ 1,680.00	\$ 63,840.00		\$ -	38	\$ 63,840.00	38	\$ 63,840.00
<b>BASE BID TOTAL</b>					<b>\$750,543.00</b>		<b>\$41,680.20</b>		<b>\$638,140.63</b>		<b>\$679,820.83</b>

Bid Alternate 1 (Ryan Drive Wearing Course Paving)											
Item	Description	Unit	Bidding Estimated Quantity	Unit Price	Extension						
32 12 00.03	2-in Type SP 9.5 Wearing Course Mixture 3,C (SPWEA340C)	TON	180	\$ 115.00	\$ 20,700.00		\$ -		\$ -	0	\$ -
<b>BID ALTERNATE #1</b>					<b>\$20,700.00</b>		<b>\$0.00</b>		<b>\$0.00</b>		<b>\$0.00</b>
<b>TOTAL BASE BID PLUS BID ALTERNATE #1</b>					<b>\$771,243.00</b>		<b>\$41,680.20</b>		<b>\$638,140.63</b>		<b>\$679,820.83</b>

CHANGE ORDER - ADDITIONAL ITEMS											
Item	Description	Unit	Bidding Estimated Quantity	Unit Price	Extension						
C.02.A	Subsurface Drain End Treatments	EA	8	\$ 490.00	\$ 3,920.00	6	\$ 2,940.00		\$ -	6	\$ 2,940.00
C.02.B	Drainage Culvert and Backflow Preventor	LS	1	\$ 9,975.00	\$ 9,975.00	1	\$ 9,975.00		\$ -	1	\$ 9,975.00
C.02.C	Local Drainage Improvements at 209 Ryan Drive	LS	1	\$ 5,880.00	\$ 5,880.00	1	\$ 5,880.00		\$ -	1	\$ 5,880.00
<b>SUBTOTAL CHANGE ORDERS</b>					<b>\$19,775.00</b>		<b>\$18,795.00</b>		<b>\$0.00</b>		<b>\$18,795.00</b>
<b>TOTAL BASE BID PLUS BID ALTERNATE #1, PLUS CHANGE ORDERS</b>					<b>\$791,018.00</b>		<b>\$60,475.20</b>		<b>\$638,140.63</b>		<b>\$698,615.83</b>
<b>RETAINAGE (5% Retainage)</b>					<b>\$39,550.90</b>		<b>\$3,023.76</b>		<b>\$ 31,907.03</b>		<b>\$34,930.79</b>
<b>TOTAL AMOUNT DUE:</b>							<b>\$57,451.44</b>		<b>\$606,233.60</b>		<b>\$663,685.04</b>

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

Page: 1  
May 18, 2022  
File No: 9M

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

	Balance
General Account	\$897.00
Lafferty Project	\$736.00
Lake Owasso Project	\$345.00
	<u>\$1,978.00</u>

# Permit Application Coversheet

Date June 01, 2022

Project Name 796 Bielenberg Office Building Project Number 22-19

Applicant Name John McCarty, St. Paul Development Corporation

Type of Development Office

## Property Description

This project is located northwest of Tamarack Road and Bielenberg Drive in the City of Woodbury. The applicant is proposing to construct an office building with associated parking lot. The total site area is 1.39 acres. This site is part of a common plan of development 'Tamarack PUD' (Permit #06-29). A copy of the #06-29 permit coversheet is enclosed for the Board's reference with additional information available upon request. Stormwater treatment was constructed with the original permit to meet the District's rules at the time (0.5" volume reduction). Since treatment volumes and rainfall depths have increased since then, the applicant is proposing additional treatment (0.6") in the form of an iron-enhanced filtration basin to meet current requirements/design standards. A wetland was identified on the southwest corner of the site. A Wetland Conservation Act (WCA) incidental determination was approved on 3/15/22 (#22-03 WCA) --the applicant has demonstrated the wetland was artificially created due to past site grading activities and parking lot runoff. The wetland will be impacted to construct the filtration basin, and replacement is not required.

## Watershed District Policies or Standards Involved:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> <i>Wetlands</i>              | <input checked="" type="checkbox"/> <i>Erosion and Sediment Control</i> |
| <input checked="" type="checkbox"/> <i>Stormwater Management</i> | <input type="checkbox"/> <i>Floodplain</i>                              |

## Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

## Water Quality Considerations

### *Short Term*

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

### *Long Term*

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

## Staff Recommendation

Staff recommends approval of this permit with the special provisions.

## Attachments:

- Project Location Map
- Project Grading Plan

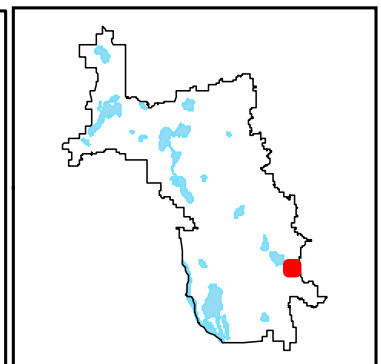
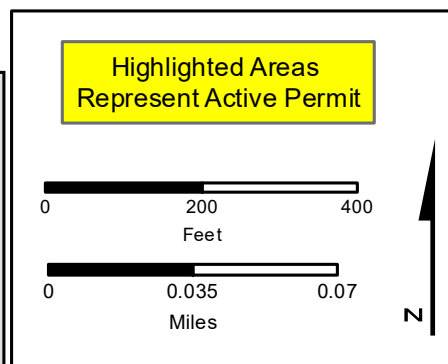


# #22-19 : 796 Bielenberg Office Building



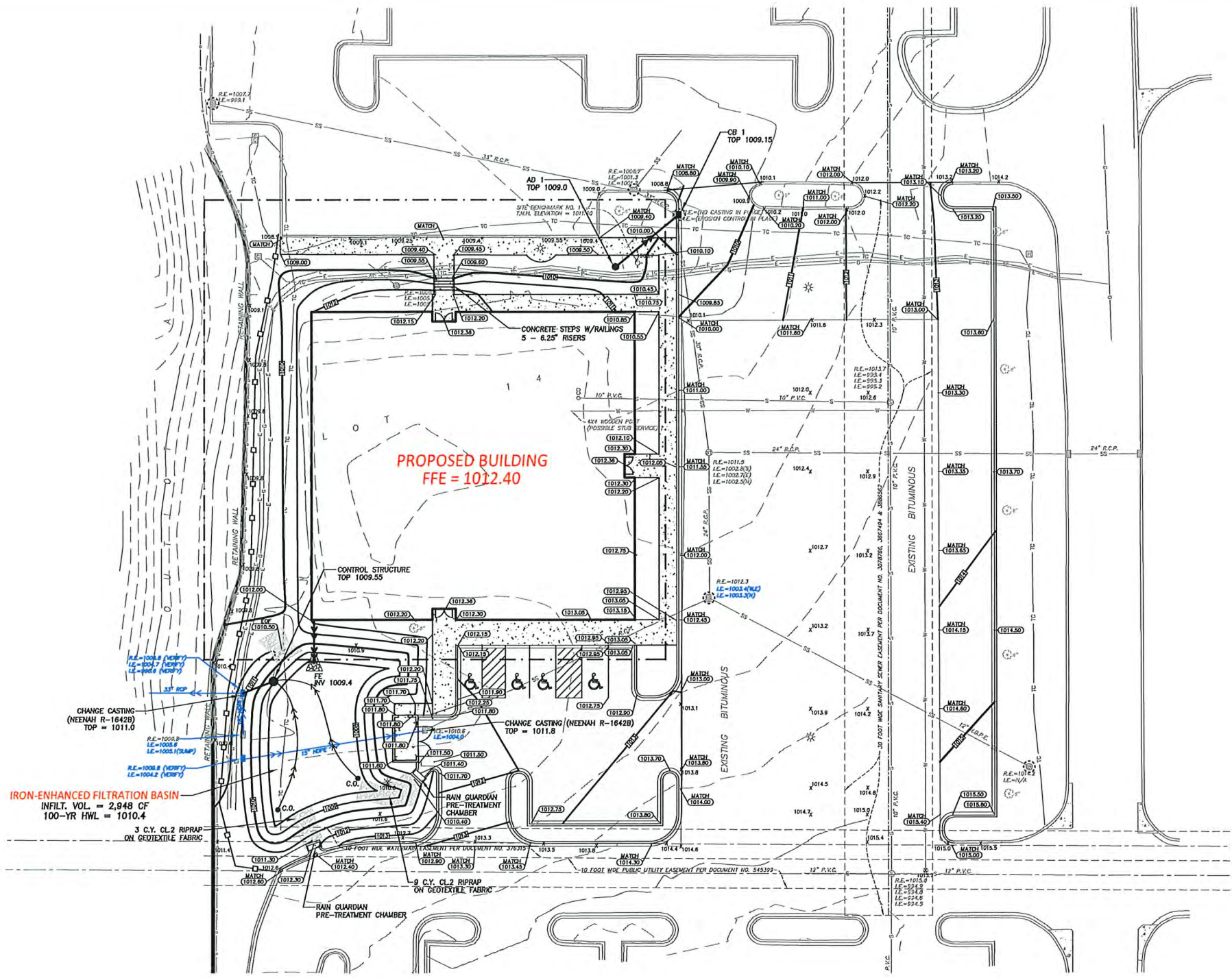
Wetlands	
	Manage A
	Manage B
	Manage C
	Lake
	Sediment Pond
	Not Assessed

	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits
	Washington Co Parcels



### Special Provisions

1. The applicant shall submit the final, signed geotechnical report.
2. The applicant shall submit the escrow fee of \$6,950.
3. The applicant shall submit the executed stormwater maintenance agreement for the proposed stormwater facilities.
4. The applicant shall submit a draft, site-specific BMP Operations & Maintenance Plan for the proposed stormwater facilities. Note: An as-built, final O&M Plan will be required prior to permit closure.
5. The applicant shall submit contact information for the trained erosion control coordinator responsible for implementing the Stormwater Pollution Prevention Plan (SWPPP).
6. The applicant shall submit the final, signed plans set.
7. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Construction Permit coverage for the project.



**GRADING NOTES**

- ① - All elevations shown are to final surfaces.

**EROSION CONTROL NOTES**

- ① - Contractor is responsible for all notifications and inspections required by General Storm Water Permit.
- ② - All erosion control measures shown shall be installed prior to grading operations and maintained until all areas disturbed have been restored.
- ③ - Sweep paved public streets as necessary where construction sediment has been deposited.
- ④ - Each area disturbed by construction shall be restored per the specifications within 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.
- ⑤ - Temporary soil stockpiles must have silt fence around them and cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches.
- ⑥ - All pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours of connection to a surface water.
- ⑦ - Excess concrete/water from concrete trucks shall be disposed of in portable washout concrete basin or disposed of in a contained area.
- ⑧ - Spring/summer temporary turf establishment: seed shall be MNDOT Mixture 21-111 @ 100 lbs/acre and mulch shall be MNDOT Type 1. Winter temporary turf establishment: seed shall be MNDOT Mixture 21-112 @ 100 lbs/acre and mulch shall be MNDOT Type 1.
- ⑨ - Contractor to keep stormwater systems offline and protected from construction activity and clogging by sediment until all contributing areas are permanently restored.
- ⑩ - The contractor shall notify Nicole Soderholm, Ramsey-Washington Metro Watershed District, at 651-792-7976 at least 48 hours prior to the construction of any volume reduction BMPs.
- ⑪ - The specified erosion/sediment control practices are the minimum. Additional practices may be required during the course of construction.

**INSPECTION AND MAINTENANCE**

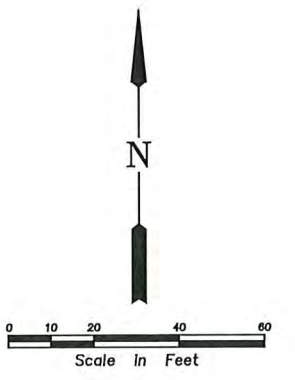
- The site must be inspected once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours.
- All inspections and maintenance conducted must be recorded in writing and records retained with the SWPPP.
- Areas of the site that have undergone final stabilization, may have the inspection of these areas reduced to once per month.
- All silt fence must be repaired, replaced, or supplemented within 24 hours when they become nonfunctional or the sediment reaches 1/3 of the height of the fence.
- Surface waters and conveyance systems must be inspected for evidence of sediment being deposited. Removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints.
- Construction site vehicle exit locations must have sediment removed from off-site paved surfaces within 24 hours of discovery.
- Infiltration areas shall be graded to finished grade when all contributing drainage areas have been stabilized. Protect infiltration area from sediment and heavy equipment compaction during/after construction with silt fence.

**POLLUTION PREVENTION MANAGEMENT**

- All solid waste must be disposed of off-site per the MPCA disposal requirements.
- All hazardous waste must be properly stored with restricted access to storage areas to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA Regulations.

**LEGEND**

- PROPOSED CONTROL STRUCTURE
- PROPOSED CATCH BASIN
- ▲ PROPOSED FLARED END
- PROPOSED STORM SEWER
- PROPOSED CONCRETE
- PROPOSED STD. DUTY BITUMINOUS
- PROPOSED CONTOUR
- PROPOSED ELEVATION
- SILT FENCE
- INLET PROTECTION DEVICE
- PROPOSED EC BLANKET MNDOT CAT. 3P - 2S STRAW
- BOUNDARY/ROW/BLOCK LINE
- EASEMENT
- DRAINAGE ARROW
- W- EXISTING WATERMAIN
- S- EXISTING SANITARY SEWER
- SS- EXISTING STORM SEWER
- G- EXISTING BURIED GAS LINE
- E- EXISTING BURIED ELECTRIC LINE
- T- EXISTING BURIED TELEPHONE LINE
- TC- EXISTING BURIED COMMUNICATION LINE
- 980- EXISTING CONTOUR
- x 995.50 EXISTING ELEVATION



NOTE: EXISTING UTILITY INFORMATION SHOWN IN BLUE WAS MEASURED BY REHDER & ASSOCIATES. THE CONTRACTOR SHALL VERIFY THIS UTILITY INFORMATION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND IN THE FIELD.

Boundary & Topographical information was prepared by Egan, Field & Nowak, Inc. This information has not been verified as to its accuracy or completeness by Rehder & Associates, Inc.

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

*Michael P. Adams* Date: 5-23-22  
 Name: Michael P. Adams Reg. No.: 45858

3-18-22	ISSUED
5-11-22	FORWARD PERMIT SUBMITTAL
5-25-22	REVISE BASIN ADDRESS FORWARD COMMENTS

GRADING, DRAINAGE, & EROSION CONTROL PLAN  
 796 BIELENBERG DRIVE OFFICE BLDG  
 CITY OF WOODBURY

SHEET NUMBER

C2

Mark Anderson  
Tony Kaster

### Permit Application Coversheet

Date September 6, 2006

Project Name Tamarack Hills 2nd Project Number 06-29

Applicant Name Commercial Equity Partners

Type of Development Commercial

#### Property Description

This property is located in the City of Woodbury at the northwest corner of Tamarack and Bielenberg Roads. The Board previously approved permit #05-35 which allowed stockpiling of material on this site and also wetland fill and replacement to occur. Permit #05-35 also permitted the development of the northeast parcel at this same intersection. The applicant is proposing a commercial development on this site. The site borders a number of wetlands including the new mitigation wetland that is the process of being completed. The stormwater management plan includes two stormwater ponds and two larger infiltration basins near the wetlands and a number of smaller infiltration basins in the parking lots. Attached to this permit is a variance request from the applicant in regards to the no disturb buffer policy. The applicant is proposing to grade within the entire buffer area in order to remove existing nonnative vegetation and replace it with an improved native buffer. The applicant proposes to initially leave 10 feet of the buffer no disturb while mass grading is done on the site in the rest of the buffer areas. As soon as the grading is complete, the buffer will be hydroseeded. Following the stabilization of the developed areas, the entire buffer including the 10 feet previously left undisturbed will be finished graded and immediately seeded and blanketed. The applicant has submitted buffer management and performance standards which includes a five year maintenance plan.

#### Watershed District Policies or Standards Involved:

- Wetlands*
- Erosion and Sediment Control*
- Stormwater Management*

#### Water Quantity Considerations

The proposed plan is adequate to handle the runoff from this site.

#### Water Quality Considerations

##### *Short Term*

The erosion and sediment control plan with the special provisions is adequate to protect the downstream water resources during construction.

##### *Long Term*

The proposed plan is adequate to protect the long term water quality of downstream water resources.

#### Staff Recommendation

Staff recommends approval of this permit with the special provisions. Staff also recommends approval of the variance request.

#### Attachments:

- Project Location Map
- Project Grading Plan

## Stewardship Grant Application Summary

**Project Name:** Svoboda

**Application Number:** 22-18 CS

**Board Meeting Date:** 6/1/2022

**Applicant Name:** Thomas Svoboda

**Residential**

**Commercial/Government**

### Project Overview:

This property is located off Tamberwood Trail on the southeast side of the Tamarack Nature Preserve in the City of Woodbury. The applicant is proposing to install a large rain garden in their front yard to help reduce stormwater runoff into the Tamarack Nature Preserve. The rain garden will be planted with native plants and shrubs to help increase pollinator habitat and reduce the area they need to mow and irrigate on their property.

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

### BMP type(s):

Rain Garden(1)

### Grant Request:

\$15,000.00

### Recommendation:

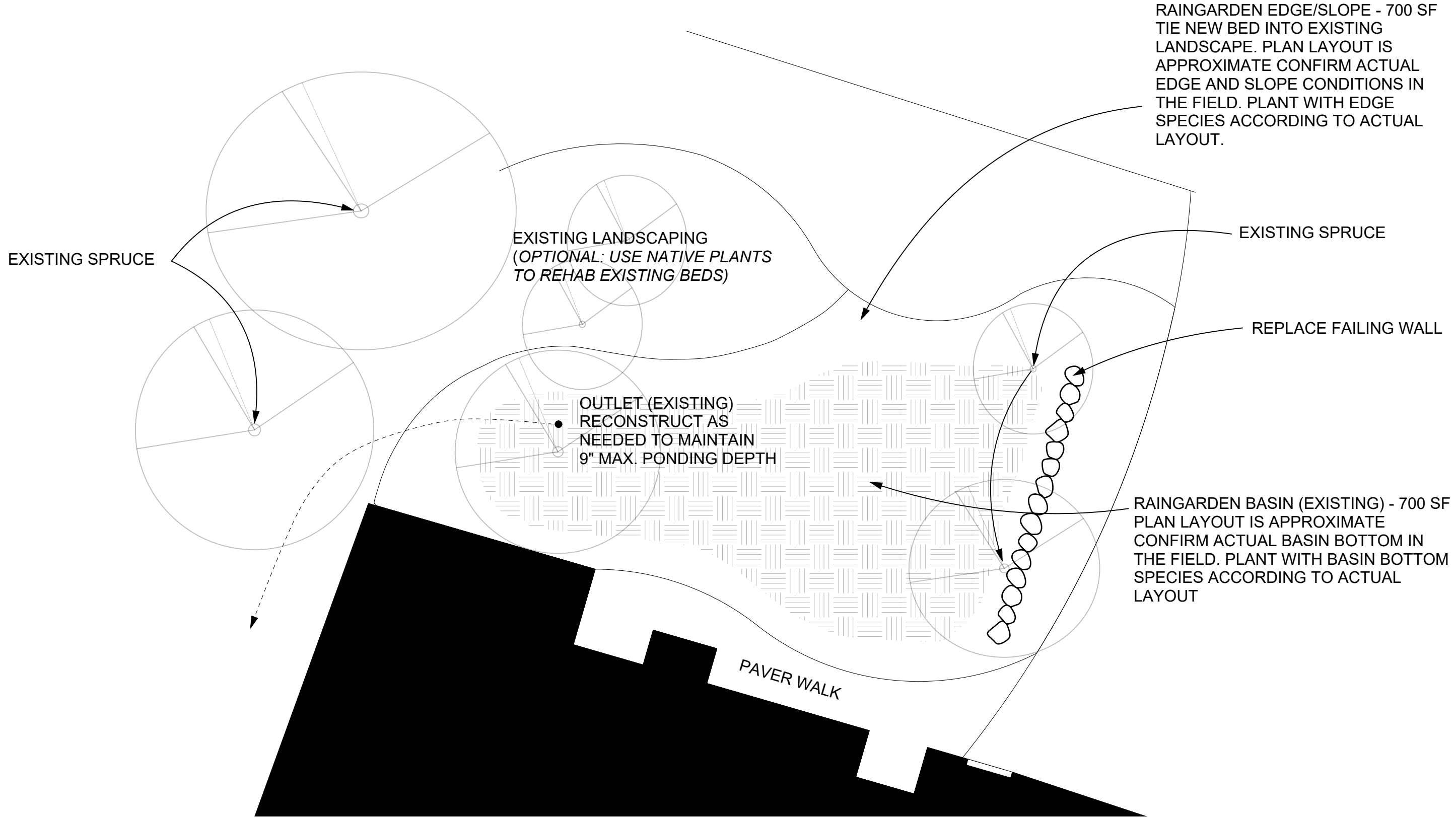
Staff recommends approval of this application.

### Subwatershed:

Battle Creek Lake

### Location Maps:





RAINGARDEN EDGE/SLOPE - 700 SF TIE NEW BED INTO EXISTING LANDSCAPE. PLAN LAYOUT IS APPROXIMATE CONFIRM ACTUAL EDGE AND SLOPE CONDITIONS IN THE FIELD. PLANT WITH EDGE SPECIES ACCORDING TO ACTUAL LAYOUT.

EXISTING SPRUCE

REPLACE FAILING WALL

OUTLET (EXISTING) RECONSTRUCT AS NEEDED TO MAINTAIN 9" MAX. PONDING DEPTH

RAINGARDEN BASIN (EXISTING) - 700 SF PLAN LAYOUT IS APPROXIMATE CONFIRM ACTUAL BASIN BOTTOM IN THE FIELD. PLANT WITH BASIN BOTTOM SPECIES ACCORDING TO ACTUAL LAYOUT

PAVER WALK

1 Raingarden Layout  
Scale: 1/8" = 1'-0"



**Washington Conservation District**  
455 Hayward Ave N  
Oakdale, MN 55128  
(651) 330-8220  
www.mnwcd.org



2665 Noel Drive - Little Canada, MN 55117  
(651) 792-7950 www.rwmwd.org

Project Address  
Tom Svoboda  
1580 Tamberwood Trl  
Woodbury, MN 55129

Project Designer  
Andrew Novak  
Washington Conservation District

Project Title  
**Tom Svoboda Raingarden**

Sheet Title  
**Raingarden Layout**

CAD File Name PLAN Svoboda, Tom.vwx	Scale
Revision	Sheet No.
Drawn By	2
Reviewed By	of
Date 2/1/22	5

# Stewardship Grant Application Summary

**Project Name:** Kohlman Chain LVMP Phase 4

**Application Number:** 22-19 CS

**Board Meeting Date:** 6/1/2022

**Applicant Name:** John James

**Residential**

**Commercial/Government**

## Project Overview:

The associations for Kohlman, Gervais, Spoon and Keller Lakes are requesting grant funding for the next step in their lake management process in an ongoing effort to show plant harvesting will benefit water quality of these lakes. This phase involves completing two point intercept surveys for the lakes to assess current plant communities with a goal to either mechanically harvest or treat with herbicide in the fall. The survey work is eligible for 50% coverage up to \$15,000.

## BMP type(s):

Aquatic Vegetation Harvesting(1)

## Grant Request:

\$10,930.00

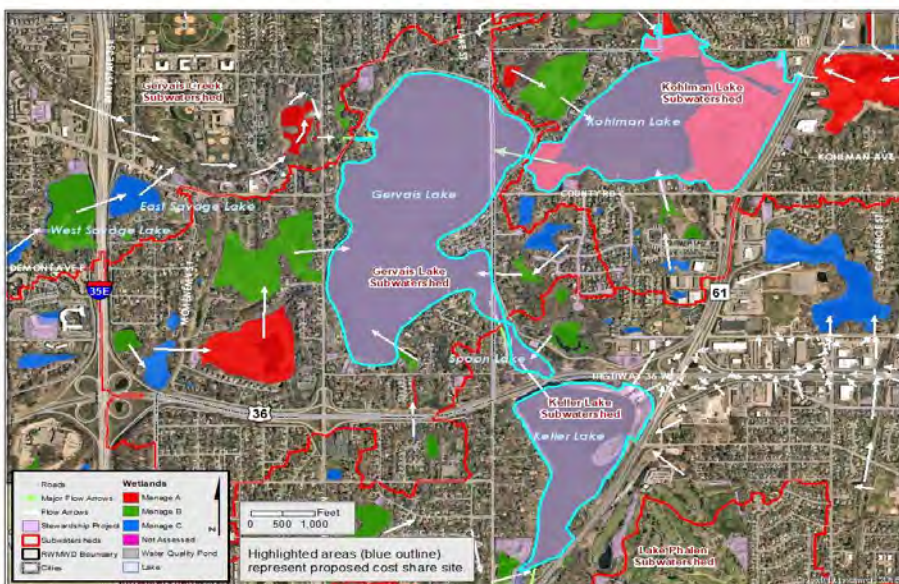
## Recommendation:

Staff recommends approval of this application.

## Subwatershed:

Gervais Lake, Keller Lake, Kohlman Lake

## Location Maps:



# Consent Agenda Action Item

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**Board Meeting Date:** June 1, 2022

**Agenda Item No:** 3E

**Preparer:** Tina Carstens, Administrator

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**Item Description:** Change Order No. 4 for the East St. Paul Target Store Retrofit

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**Background:**

Attached is change order number 4 for the East St. Paul Target Store Stormwater Retrofit project. The change order extends the plant warranty by one month to June 15, 2022 due to the spring 2022 weather delaying plant growth. There are no changes in contract price due to this change. Please see attached for more information on this change order.

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**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.

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**Staff Recommendation:**

Approve Change Order No. 4.

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**Financial Implications:**

This change order does not change the contract price for this project.

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**Board Action Requested:**

Approve Change Order No. 4.



**Change Order No. 4  
Ramsey-Washington Metro Watershed District  
East St. Paul Target Retail Store Stormwater Retrofits**

DATE OF ISSUANCE: May 13, 2022

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

**Contractor:** Sunram Construction, Inc.  
20010 75th Avenue North  
Corcoran, MN 55340  
Attn: Ryan Sunram

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

### **C.O.4 Plant Warranty Extension**

Description of Change:

The project plant warranty was set to expire on May 15, 2022. Weather in spring 2022 has delayed plant growth, making warranty inspection infeasible as of May 13, 2022. In order to confirm plant survival rates, this change order documents a one-month plant warranty extension. Per specifications, plants that have not survived will be replaced at no cost to the Owner, within ten days of Final Review.

The Owner is extending the warranty completion date in the contract from May 15, 2022 to June 15, 2022.

### **Total Impact on Contract Price:**

These changes do not impact total contract price.

This Change Order No. 4 is:

Submitted By:   
(ENGINEER) \_\_\_\_\_  
Marcy Bean, Project Landscape Architect  
Barr Engineering Company

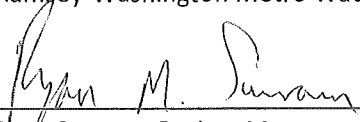
Date: May 13, 2022

Authorized By:  
(OWNER)

\_\_\_\_\_  
Lawrence Swope, President  
Ramsey-Washington Metro Watershed District

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

Approved By:  
(CONTRACTOR)

  
\_\_\_\_\_  
Ryan Sunram, Project Manager  
Sunram Construction, Inc.

Date: 5/19/20

\* \* \* \* \*

# Permit Program

\* \* \* \* \*

# Permit Application Coversheet

Date June 01, 2022

Project Name Battle Creek Park Improvements Project Number 22-18

Applicant Name Ryan Ries, Ramsey County Parks

Type of Development Park/Green Space

## Property Description

This project is located at Battle Creek Park West in the City of St. Paul. The applicant is proposing to complete a number of park construction activities, including a maintenance building with associated parking, grading for sledding hills, installation of artificial snow making equipment with associated high-pressure watermain, and vegetation management on existing grass trails/ski paths. A wet pond with a filtration bench is proposed to meet stormwater treatment requirements. Pretreatment will include a sumped inlet and baffle. A variance request for temporary wetland buffer disturbance is proposed to accommodate work on the trail/ski paths. Parks staff will be responsible for reestablishing native vegetation following construction activity.

## Watershed District Policies or Standards Involved:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> <i>Wetlands</i>              | <input checked="" type="checkbox"/> <i>Erosion and Sediment Control</i> |
| <input checked="" type="checkbox"/> <i>Stormwater Management</i> | <input type="checkbox"/> <i>Floodplain</i>                              |

## Water Quantity Considerations

The proposed stormwater management plan is sufficient to handle the runoff from the site.

## Water Quality Considerations

### *Short Term*

The proposed erosion and sediment control plan is sufficient to protect downstream water resources during construction.

### *Long Term*

The proposed stormwater management plan is sufficient to protect the long term quality of downstream water resources.

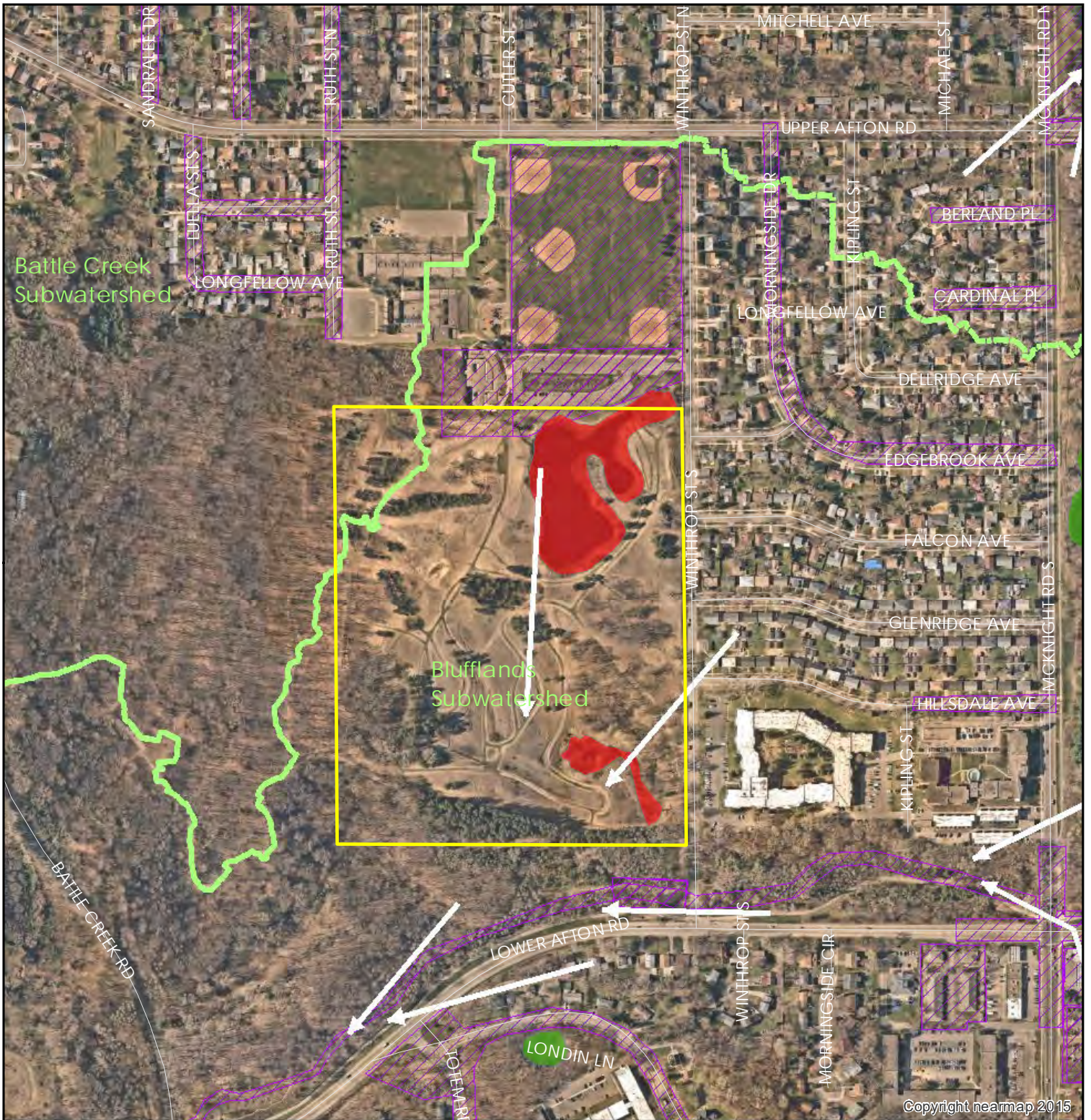
## Staff Recommendation

Staff recommends approval of this permit with the special provisions and variance request (Rule E).

## Attachments:

- Project Location Map
- Project Grading Plan

# #22-18 Battle Creek Park Improvements



Wetlands	
<span style="color: red;">■</span>	Manage A
<span style="color: green;">■</span>	Manage B
<span style="color: blue;">■</span>	Manage C
<span style="color: lightblue;">■</span>	Lake
<span style="color: gray;">■</span>	Sediment Pond
<span style="color: purple;">■</span>	Not Assessed

	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits
	Washington Co Parcels

**Highlighted Areas Represent Active Permit**

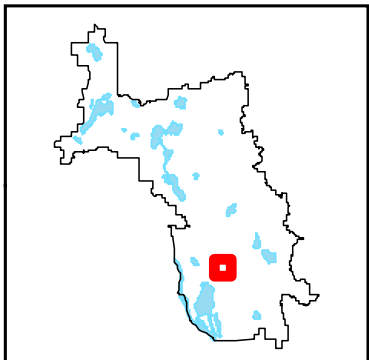
0      400      800

Feet

0      0.075      0.15

Miles

N

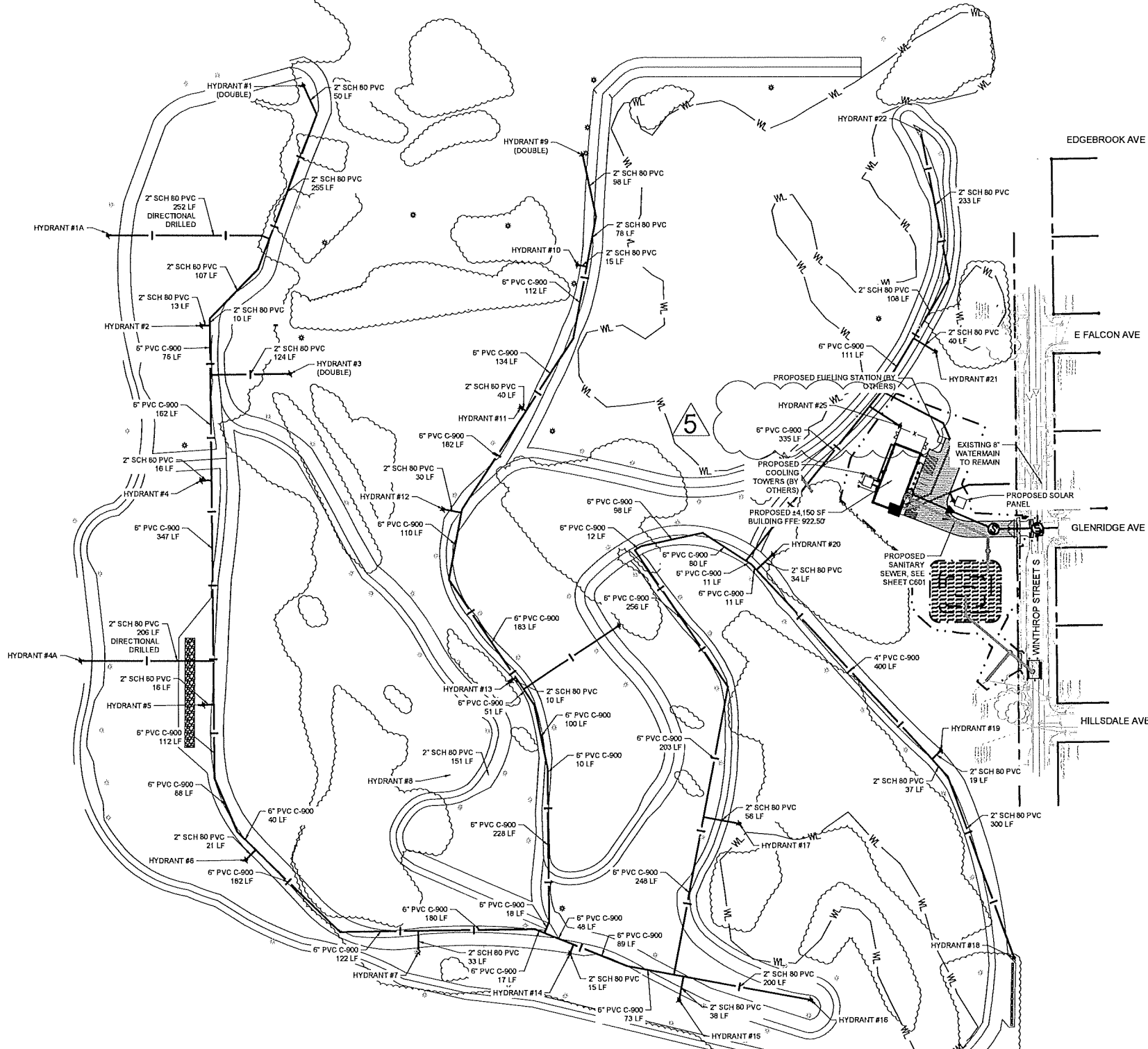


22-18

### Special Provisions

1. The applicant shall submit a detail for the Prinsco pretreatment inlet.
2. The applicant shall submit the final, signed plans set.
3. The applicant shall submit contact information for the trained erosion control coordinator responsible for implementing the Stormwater Pollution Prevention Plan (SWPPP).
4. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Construction Permit coverage for the project.

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

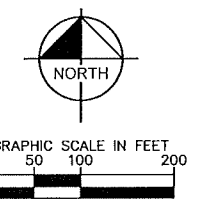


**LEGEND**

EXISTING	PROPOSED	DESCRIPTION
(Symbol)	(Symbol)	GATE VALVE
(Symbol)	(Symbol)	HYDRANT
(Symbol)	(Symbol)	REDUCER
(Symbol)	(Symbol)	TEE
(Symbol)	(Symbol)	SANITARY SEWER MAINHOLE
(Symbol)	(Symbol)	SANITARY CLEANOUT
(Symbol)	(Symbol)	WATERMAIN
(Symbol)	(Symbol)	SANITARY SEWER
(Symbol)	(Symbol)	STORM SEWER
(Symbol)	(Symbol)	ELC
(Symbol)	(Symbol)	UNDERGROUND ELECTRIC
(Symbol)	(Symbol)	COM
(Symbol)	(Symbol)	TELEPHONE
(Symbol)	(Symbol)	GAS MAIN
(Symbol)	(Symbol)	TILE
(Symbol)	(Symbol)	GRAIN TILE

**UTILITY PLAN NOTES**

- ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- SANITARY SEWER PIPE SHALL BE AS FOLLOWS:  
 8" PVC SDR26 PER ASTM D-3034, FOR PIPES LESS THAN 12' DEEP  
 6" PVC SDR26 PER ASTM D-3034, FOR PIPES MORE THAN 12' DEEP  
 6" PVC SCHEDULE 40 PER ASTM D-3034  
 DUCTILE IRON PIPE PER AWWA C150  
 2" HDPE PER AWWA C900, ASTM F714, NSF 61 OR TYPE K COPPER PER ASTM B88
- PIPE MATERIAL FOR 8" DUCTILE IRON PIPE MUST BE CLASS S2, PIPE MATERIAL FOR 6" AND 4" DUCTILE IRON PIPE MUST BE CLASS S3. THE EXTERIOR OF DUCTILE IRON PIPE SHALL BE COATED WITH A LAYER OF ARC-SPRAYED ZINC PER ISO 8179. THE INTERIOR CEMENT MORTAR LINING SHALL BE APPLIED WITHOUT ASPHALT SEAL COAT
- MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH RESTRAINTS SUCH AS THRUST BLOCKING, WITH STAINLESS STEEL OR COBALT BLUE BOLTS, OR AS INDICATED IN THE CITY SPECIFICATIONS AND PROJECT DOCUMENTS.
- ALL UTILITIES SHOULD BE KEPT TEN (10) APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE OR STRUCTURE).
- SERVICE CONNECTIONS SHALL BE INSTALLED WITH 9 FEET OF COVER AS PER THE ESTABLISHED GRADE FROM THE MAIN TO THE PROPERTY LINE OR, IF APPLICABLE, TO THE UTILITY EASEMENT LINE. WHEN SOLID ROCK CONDITIONS ARE ENCOUNTERED, WATER SERVICES MAY BE INSTALLED WITH 6.5 FEET OF COVER. AT THIS DEPTH, THE NEED FOR INSULATION WILL BE DETERMINED BY SPRWS INSPECTORS.
- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES, OR ANY OBSTRUCTION (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE SCH. 40 OR C900 WITH MECHANICAL JOINTS AT LEAST 10 FEET ON EITHER SIDE OF THE CENTER LINE OF THE CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE FASTENERS AS REQUIRED TO PROVIDE A MINIMUM OF 18" VERTICAL SEPARATION, MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- TOPS OF MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS, IN GREEN AREAS, WITH WATER TIGHT LIDS.
- ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE CITY OF ST. PAUL AND/OR STATE OF MN WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- CONTRACTOR SHALL REFERENCE ARCH / MEP PLANS FOR SITE LIGHTING AND ELECTRICAL PLAN.
- BACKFLOW DEVICES (DDCV AND PRZ ASSEMBLIES) AND METERS ARE LOCATED IN THE INTERIOR OF THE BUILDING. REF. ARCH / MEP PLANS.
- ALL ONSITE WATERMANS AND SANITARY SEWERS SHALL BE PRIVATELY OWNED AND MAINTAINED.
- ALL WATERMAIN STUBOUTS SHALL BE MECHANICALLY RESTRAINED WITH REACTION BLOCKING
- IF THE EXISTING MAINHOLE FOR THE PROPOSED SEWER SERVICE CONNECTION IS A BRICK CONSTRUCTION, RECONSTRUCTION OF THE MAINHOLE ACCESS MAY BE REQUIRED.
- WATER SERVICES TO BE INSTALLED ACCORDING TO SPRWS "STANDARDS FOR THE INSTALLATION OF WATER MAINS"
- A FOUR-SIDED TRENCH BOX IS REQUIRED ON ALL EXCAVATIONS DEEPER THAN 5 FEET WHERE UNDERGROUND WORK OR INSPECTION IS TO BE PERFORMED BY SPRWS. FOR ALL WET TAPS TO BE PERFORMED BY SPRWS, A MINIMUM TRENCH BOX SIZE OF 8 FEET HIGH X 8 FEET WIDE X 10 FEET LONG IS REQUIRED. LADDERS ARE REQUIRED AND MUST EXTEND 3 FEET ABOVE THE SURFACE OF THE TRENCH. SIDEWALKS, PAVEMENTS, DUCTS, AND APPURTENANT STRUCTURES SHALL NOT BE UNDERMINED UNLESS A SUPPORT SYSTEM OR ANOTHER METHOD OF PROTECTION IS PROVIDED. TRENCHES IN EXCESS OF 20 FEET IN DEPTH MUST BE SIGNED OFF BY A REGISTERED PROFESSIONAL ENGINEER. EXCAVATED MATERIAL MUST BE KEPT A MINIMUM OF 2 FEET FROM THE EDGE OF THE TRENCH.
- PIPE MUST BE WRAPPED IN V-HIG POLYWRAP ENCASEMENT
- MAINTAIN 3 FEET VERTICAL SEPARATION BETWEEN WATER AND SEWER PIPES OR A 18 INCH SEPARATION INCLUDING 4 INCH HIGH DENSITY INSULATION PER SPRWS STANDARD PLATE D-19 FOR TYPICAL WATER MAIN OFFSETS
- REFER TO SPRWS "STANDARDS FOR THE INSTALLATION OF WATER MAINS" STANDARD PLATE D-11 FOR RESTRAINED PIPE REQUIREMENT
- ALL WATER SERVICE VALVE BOXES WITHIN CONSTRUCTION AREA MUST BE EXPOSED AND BROUGHT TO GRADE UPON COMPLETION OF CONSTRUCTION
- ALL PIPE WORK INSIDE OF PROPERTY TO BE PERFORMED BY A PLUMBER LICENSED BY THE STATE OF MINNESOTA AND CERTIFIED BY THE CITY OF SAINT PAUL. SPRWS REQUIRES SEPARATE OUTSIDE AND INSIDE PLUMBING PERMITS FOR EACH NEW WATER SERVICE
- WATER FACILITY PIPEWORK WITHIN RIGHT OF WAY TO BE INSTALLED BY SPRWS. EXCAVATION AND RESTORATION BY OWNER'S CONTRACTOR.
- THE CONTRACTOR PROVIDING EXCAVATION IS RESPONSIBLE FOR OBTAINING ALL EXCAVATION AND OBSTRUCTION PERMITS REQUIRED BY ANY GOVERNING AUTHORITY



FOR CITY PERMIT USE

<b>Kimley»Horn</b> 2016 KIMLEY-HORN AND ASSOCIATES, INC. 767 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114 PHONE: 651-654-1197 WWW.KIMLEY-HORN.COM	CLIENT/CITY COMMENTS ADDENDUM #1 05/06/2022 ZTR
	CITY COMMENTS 04/22/2022 ZTR
	CITY AND WATERSHED COMMENTS 02/17/2022 ZTR
	ADDENDUM #1 02/14/2022 ZTR
SPR CITY COMMENTS 12/26/2021 ZTR	REVISIONS No. DATE BY
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. MICHAEL C. BRANDT, P.E. DATE: 02/10/2022 LIC. NO. 42951	ISSUED FOR CONSTRUCTION BATTLE CREEK PARK IMPROVEMENTS PREPARED FOR RAMSEY COUNTY PARKS ST. PAUL, MN
OVERALL UTILITY PLAN	SHEET NUMBER C600

## MEMORANDUM

To: Nicole Soderholm, Permit Coordinator

From: Michael C Brandt, Project Manager, P.E.  
Kimley-Horn and Associates, Inc.

Date: May 4, 2022

Subject: Battle Creek Park Maintenance Building and Site Improvements

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Ramsey County is proposing improvements to Battle Creek Park in Saint Paul, including a new +/- 4,150 sf maintenance building, installation of snow-making guns/equipment throughout the park, improving to two sledding hills, and widening of existing trail/ski paths. The proposed maintenance building is directly west of the intersection of Winthrop Street and Glenridge Avenue and will include site paving, utilities, building, and stormwater management basin. The proposed watermain installation for the snow guns will take place within the existing trail/ski paths. Hydrants for snow guns will be added in several locations along the watermain installation.

One of the proposed items as part of this project is to widen the existing trail/ski paths by mowing a portion of the grasses on each or one side of the trail. The widening of the existing trail/ski paths will include minor grading in very minimal portions of the site; the majority of the widening will only require a wider mowing path. Additionally, in areas where the grasses are sparse, additional spot seeding may be installed.

The purpose of this variance request is for the temporary impacts within the 75' average buffer area and within the 37.5' buffer area surrounding the two onsite wetlands (referred to as Wetland A and B for the purposes of this memorandum). The nature of the impacts is outlined below.

The proposed watermain for the snow guns will be installed using an open trench cut; installation of the watermain will follow the alignment of the existing trail/ski paths throughout the site. These improvements are proposed to impact within the 37.5' minimum wetland buffer and average 75' wetland buffer. No additional fill or grading is proposed within the limits of the 37.5' minimum wetland buffer. Once the watermain is installed and backfilled, the disturbed areas will be seeded to establish cover quickly to prevent erosion in the area. Ramsey County Parks will be responsible for establishing native plantings after the temporary cover is established.

Proposed impact locations for areas within 75' average buffer and within 37.5' minimum buffer are shown in the attached exhibit. Temporary impacts total approximately 1.40 acres within 75' of the two onsite wetlands. Wetland A temporary impacts are approximately 1.12 acres within 75' and Wetland



B temporary impacts are approximately 0.28 acres within 75'. The temporary wetland impacts are listed and shown in EX-A included in this memorandum.

Please don't hesitate to reach out with any questions or if additional information is needed. We appreciate your time and consideration.

Sincerely,  
KIMLEY-HORN AND ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Michael C Brandt", written over a light gray horizontal line.

Michael C Brandt, Project Manager, P.E.

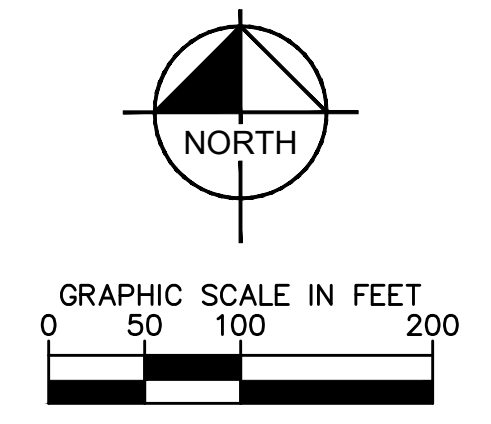


**LEGEND**

- EXISTING WETLAND
- LIMITS OF DISTURBANCE, OFFSET FOR CLARITY
- 37.5' MINIMUM WETLAND BUFFER
- TEMPORARY WETLAND IMPACTS 37.5'-75'
- TEMPORARY WETLAND IMPACTS WITHIN 37.5' MINIMUM BUFFER
- PROPOSED WATERMAIN

**WETLAND IMPACT SUMMARY**

WETLAND A (PUB F)	
AREA OF TEMPORARY DISTURBANCE WITHIN 37.5' BUFFER	0.21 ACRES
AREA OF TEMPORARY DISTURBANCE 37.5' TO 75' FROM WETLAND	0.91 ACRES
WETLAND B (PEM1A)	
AREA OF TEMPORARY DISTURBANCE WITHIN 37.5' BUFFER	0.06 ACRES
AREA OF TEMPORARY DISTURBANCE 37.5' TO 75' FROM WETLAND	0.22 ACRES



ISSUED FOR CONSTRUCTION

**BATTLE CREEK PARK IMPROVEMENTS**  
 PREPARED FOR  
**RAMSEY COUNTY PARKS**  
 ST. PAUL, MN

**WETLAND IMPACTS EXHIBIT**

KHA PROJECT	16022001
DATE	05/03/2022
SCALE	AS SHOWN
DESIGNED BY	CJJ
DRAWN BY	CJJ
CHECKED BY	MCB

**Kimley»Horn**  
 2018 KIMLEY-HORN AND ASSOCIATES, INC.  
 787 EUSTIS STREET, SUITE 100, ST. PAUL, MN 55114  
 PHONE: 651-452-4197  
 WWW.KIMLEY-HORN.COM

No.	REVISIONS	DATE	BY



# RAMSEY-WASHINGTON

## METRO WATERSHED DISTRICT

### MEMORANDUM

**Date:** June 1, 2022

**To:** Board of Managers and Staff

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

**Subject:** May Enforcement Action Report

During May 2022:

<b>Number of Violations:</b>	<b>5</b>
Install/Maintain Perimeter Control	1
Install/Maintain Inlet Protection	1
Remove Discharged Sediment	2
Implement Proper Dewatering	1

#### Activities and Coordination Meetings:

Permitting assistance to private developers and public entities, miscellaneous resident inquiries, ongoing ESC inspections/reporting, WCA administration, new permit review with Barr Engineering, initial SWPPP meetings with contractors, wetland hydrology training, underground BMP inspections with Barr, permit closure/final walk-throughs, University of Minnesota regulatory enforcement training, permit status update meeting with Costco and City of Woodbury, MPCA enforcement/audit process Q&A session, MS4 2021 draft annual report preparation and public notice

#### Project Updates:

#22-09 Xcel Energy Lexington to County Road C (Roseville)

Construction is underway at the gas pipe replacement project on sections of County Road B and Hamline Avenue from Lexington Avenue to County Road C. Various pipe replacement techniques will be used to complete the project including open trench, horizontal directional drilling, and jack and bore. Staff attended an initial erosion and sediment control inspection walk-through on May 5<sup>th</sup> with representatives from Q3 Contracting and Xcel Energy. Staff

found the site to be compliant with minimal disturbed soil present. Staff returned to the site on May 20<sup>th</sup> and found all necessary erosion and sediment control BMPs in place and functional.

**#21-32 Rooney 2<sup>nd</sup> Addition (White Bear Lake)**

The single-family home subdivision project has begun in the month of May, with grading and soil correction work to start. Staff conducted an initial erosion control walk-through with the general contractor on May 5<sup>th</sup>. Staff noted a few missing items including inlet protection and a construction entrance. Staff returned to the site on May 20<sup>th</sup> for a routine inspection. Staff discovered inlet protection was still missing, as well as failing perimeter control with a sediment release towards the neighboring property. Staff wrote a non-compliant inspection report and communicated necessary immediate repairs to the contractors. Staff are in close communication with site contacts to ensure all repairs are made and site improvements installed to prevent the issue from reoccurring.

**#19-36 Luther Cadillac (Vadnais Heights)**

The new Luther Cadillac dealership project off of Highway 61 has begun in the month of May. When complete, the project will include a Cadillac dealership with associated parking, drive lanes, sidewalks, and an underground stormwater detention system with proprietary filtration cartridges to treat runoff. On May 18<sup>th</sup>, staff visited the site for an initial erosion control walk-through with the general contractor. Perimeter control had been installed, but staff noted two low points of the site that should be closely monitored as they will likely receive a large amount of flow during rain events. Staff encouraged the site to install additional erosion and sediment control BMPs in the contributing areas to minimize erosion and sediment runoff. Staff will continue to inspect the site biweekly through the duration of the project –more frequently if there are compliance issues.

**Single Lot Residential Permits Approved by Staff:**

22-17 2560 Edgerton Street (Little Canada- shoreline project, Gervais Lake)

**Permits Closed:**

18-22 Richardson Elementary Addition (North St. Paul)  
20-31 Woodspring Hotel Maplewood (Maplewood) --WITHDRAWN  
21-02 Mead Metals Addition (Shoreview)

\* \* \* \* \*

# Stewardship Grant Program

\* \* \* \* \*

## Stewardship Grant Program Budget Status Update

**June 1, 2022**

Homeowner	Coverage	Number of Projects: 9	Funds Allocated
Habitat Restoration and rain garden w/o hard surface drainage	50% Cost Share \$15,000 Max	5	\$19,850
Rain garden w/hard surface drainage, pervious pavement, green roof	75% Cost Share \$15,000 Max	4	\$48,125*
Master Water Steward Project	100% Cost Share \$15,000 Max	0	\$0
Shoreland Restoration	100% Cost Share \$15,000 Max	0	\$0

Commercial, School, Government, Church, Associations, etc.	Coverage	Number of Projects: 11	Funds Allocated
Habitat Restoration	50% Cost Share \$15,000 Max	3	\$25,500
Shoreland Restoration (below 100-year flood elevation w/actively eroding banks)	100% Cost Share \$100,000 Max	1 (Lake Owasso)	\$160,000
Priority Area Projects	100% Cost Share \$100,000 Max	4	\$328,540
Non-Priority Area Projects	75% Cost Share \$50,000 Max	1	\$50,000
Public Art	50% Cost Share \$15,000 Max	0	\$0
Aquatic Veg Harvest/LVMP Development	50% Cost Share \$15,000 Max	2	\$12,430*

Maintenance	50% Cost Share \$5,000 Max for 5 Years	68	\$49,275
Consultant Fees			\$24,400
<b>Total Allocated</b>			<b>\$718,120</b>

2022 Stewardship Grant Program Budget		
Budget		\$1,000,000
Total Funds Allocated		\$718,120
<b>Total Available Funds</b>		<b>\$281,880</b>

*\*Includes projects pending approval at the June 1, 2022 board meeting.*

\* \* \* \* \*

# Action Items

\* \* \* \* \*

# Request for Board Action

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**Board Meeting Date:** June 1, 2022

**Agenda Item No:** 7A

**Preparer:** Tina Carstens, Administrator

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**Item Description:** Review and Accept the 2021 District Annual Financial Audit

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**Background:**

The District is required by law to complete and file an annual audit of the District's financial records. A final audit report is enclosed for your review. The auditor has also prepared an audit management letter that serves as an easier way to understand a summary of the audit. The audit will be sent to the State Auditor as well as the Board of Water and Soil Resources as required. The audit will also be available on the district website.

The audit gives the District a clean opinion. This is the highest opinion that can be given. There was one internal control finding that required a correction to the district's capital assets statement. This was a misstatement with multiyear projects where the assets were recorded at the end of the project when they should have been stated partially in the year previously. These misstatements did not have an effect on the opinion of the financial statements.

Andy Hering from Redpath will be present at the meeting to answer any questions you may have as well as to talk about your responsibilities as a board member as it relates to detecting fraud.

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**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:** Maintain financial solvency and accountability.

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**Staff Recommendation:**

Accept the 2021 Annual Audit Report.

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**Financial Implications:**

None.

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**Board Action Requested:**

Accept the 2021 Annual Audit Report.



**RAMSEY-WASHINGTON METRO  
WATERSHED DISTRICT**

AUDIT MANAGEMENT LETTER

DECEMBER 31, 2021

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To the Board of Managers  
Ramsey-Washington Metro Watershed District  
Little Canada, Minnesota

We have completed our audit of the Ramsey-Washington Metro Watershed District (the District) for the year ended December 31, 2021. In conjunction with that audit, we present this management letter on matters relating to the financial operations of the District. We offer this report as an additional analytical perspective for the Board of Managers in monitoring the financial position and operations of the accounts and funds of the District. This report also contains required communications to those charged with governance.

Several reports are issued in conjunction with the audit. A summary is as follows:

- Opinion on Financial Statements – unmodified (clean) opinion
- Report on Internal Control – one internal control finding
- Minnesota Legal Compliance Report – no compliance findings

Thank you for the opportunity to serve the District. We are available to discuss this report with you.

*Redpath and Company, Ltd.*

REDPATH AND COMPANY, LTD.

St. Paul, Minnesota

May 24, 2022

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# RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

## Audit Management Letter

### Cash and Investments

Cash and investment balances at December 31, 2021 and 2020 were as follows:

Fund	December 31,		Increase (Decrease)
	2021	2020	
General	\$3,747,934	\$5,431,914	(\$1,683,980)
Debt Service Funds:			
General Obligation Bonds	943,722	669,342	274,380
Certificates of Participation	-	200,950	(200,950)
Capital Project Funds:			
Stormwater Impact Fund	314,817	-	314,817
Capital Projects CIB	7,454,398	7,160,560	293,838
Total	<u>\$12,460,871</u>	<u>\$13,462,766</u>	<u>(\$1,001,895)</u>

Investment income totaled \$1,527 for the year ended December 31, 2021 as compared to \$56,177 for the year ended December 31, 2020. The decrease is consistent with other watershed districts and is due to lower interest rates.

### Taxes Receivable

Taxes receivable at December 31, 2021 and 2020 consisted of the following:

	December 31,		Increase (Decrease)
	2021	2020	
Delinquent	\$80,985	\$76,288	\$4,697
Due from County	90,005	120,366	(30,361)
Total	<u>\$170,990</u>	<u>\$196,654</u>	<u>(\$25,664)</u>

# RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

## Audit Management Letter

Delinquent taxes receivable represent the balance of property taxes levied for collection in 2015 through 2021, but which remained unpaid by the property owner as of December 31, 2021. This uncollected portion of property taxes is also classified as unavailable revenue and is not part of fund balance at year-end. Accounting standards related to revenue recognition for governments require revenue to be both measurable and available. Delinquent property taxes are not considered to be available.

Due from County taxes receivable consist of amounts collected by Ramsey County and Washington County during November and December of 2021, but not remitted to the District until January 2022. Such amounts are included in fund balance at year-end.

The District's overall property tax collection rate was 99.4% for the year ended December 31, 2021. The following table details the District's 2021 levy and collections:

	Ramsey & Washington Counties
Total levy (pay 2021)	<u>\$6,763,498</u>
<u>2021 collections:</u>	
July 2021 collections	3,536,297
December 2021 collections	3,099,436
January 2022 collections	<u>90,005</u>
Total collections - 2021	<u>\$6,725,738</u>
Collection percentage - current and delinquent	<u>99.4%</u>

# RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

## Audit Management Letter

### Fund Balance – All Funds

Fund balance represents the net current assets of each fund (i.e., cash plus receivables minus liabilities).

The District's funds are all governmental type funds. Governmental type funds are accounted for using the current financial resources measurement focus. With this measurement focus, only current assets and current liabilities generally are included on the balance sheet.

At December 31, 2021 and 2020, fund balance of the District was as follows:

Fund	December 31,		Increase (Decrease)
	2021	2020	
General	\$2,382,780	\$4,364,964	(\$1,982,184)
Debt Service Funds:			
General Obligation Bonds	944,949	949,395	(4,446)
Certificates of Participation	-	204,398	(204,398)
Capital Project Funds:			
Stormwater Impact Fund	309,837	-	309,837
Capital Projects CIB	7,345,231	6,617,981	727,250
Total	<u>\$10,982,797</u>	<u>\$12,136,738</u>	<u>(\$1,153,941)</u>

During 2021, the Stormwater Impact Fund was created to separately track the collection and expenditure of stormwater impact fees. The fund received a \$314,817 transfer from the General Fund, which represented the balance of unspent stormwater impact fees at the time the fund was created.

# RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

## Audit Management Letter

### General Fund

The fund balance of the General Fund decreased by \$1,982,184 during the year. Statement 6 of the Annual Financial Report details the General Fund budget versus actual operating results. A summary is presented below:

Budgeted change in fund balance		(\$1,753,125)
Actual revenue over (under) budgeted revenue:		
Property taxes	(\$8,688)	
Intergovernmental	11,303	
Investment income	(18,982)	
Permit escrow fees	10,595	
Stormwater impact payment	44,539	
Refunds, reimbursements and other	55,131	
		<u>93,898</u>
Actual expenditures (over) under budget:		
Engineering	44,868	
Salaries/payroll taxes/benefits	(59,050)	
Watershed programs	465,849	
All other (net)	502,558	
		<u>954,225</u>
Transfers out		<u>(1,277,182)</u>
Net change in fund balance		<u><u>(\$1,982,184)</u></u>

For watershed programs, positive expenditure budget variances included project feasibility studies (\$195,551), lake studies/WRAPS/TMDL (\$84,401), and outside programs (\$100,050). Other positive expenditure budget variances included office equipment and maintenance (\$246,303) and project operations (\$128,284).



# RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

Audit Management Letter

## Intergovernmental Revenue

Intergovernmental grants and aids, and cost sharing agreement revenue (in all funds) in 2021 include the following:

Metro Mississippi East grant	\$93,042
Met Council WOMP grant	11,250
City of Little Canada grant	71,365
Other	<u>53</u>
Total intergovernmental revenue	<u><u>\$175,710</u></u>

## Stormwater Impact Payments

Stormwater impact payment revenue totaled \$44,539 for the year ended December 31, 2021 as compared to \$200,555 for the year ended December 31, 2020. The majority of the decrease is due to a payment received from Hy-Vee in 2020 in the amount of \$100,000 for an alternative compliance payment.

## Pension Liability

GASB Statement No. 68 requires the District to report its proportionate share of PERA's net pension liability. During 2021, the District's share of PERA's net pension liability decreased by \$150,097 to \$683,272. The District paid its required contribution of \$87,049 to the Plan, which was equal to 7.5% of eligible wages. The District is not obligated to "pay off" the net pension liability.

**103.B Levy Authority**

The District levies taxes under the authority of Minnesota Statute 103B.241. As such, the District's General Fund is not limited by the \$250,000 tax levy authorized in Minnesota Statute 103D. The District no longer employs Special Revenue Funds to account for maintenance and projects and instead levies for all non-CIB Fund projects out of the General Fund. Minnesota Statute 103B.241 Subd.1 reads in part as follows:

***103B.241 LEVIES***

*Subdivision 1. Watershed plans and projects. Notwithstanding chapter 103D, a local government unit or watershed management organization may levy a tax to pay the increased costs of preparing a plan under sections 103B.231 and 103B.235 or for projects identified in an approved and adopted plan necessary to implement the purposes of section 103B.201. The proceeds of any tax levied under this section shall be deposited in a separate fund and expended only for the purposes authorized by this section. Watershed management organizations and local government units may accumulate the proceeds of levies as an alternative to issuing bonds to finance improvements.*

# RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

Audit Management Letter

## General Fund Balance

The fund balance of the General Fund for the past ten years is as follows:

<u>Year Ended December 31</u>		<u>Amount</u>	<u>Increase (Decrease)</u>
2012	*	\$1,363,334	(\$1,130,626)
2013		1,725,348	362,014
2014		2,211,684	486,336
2015		2,901,187	689,503
2016		3,420,562	519,375
2017		4,329,905	909,343
2018		4,464,553	134,648
2019		4,633,167	168,614
2020		4,364,964	(268,203)
2021		2,382,780	(1,982,184)

\* Restated for prior period adjustment

The District sets the General Fund tax levy and budgets expenditures at a level consistent with the District's reserve balance policy. In 2021, the District's final budget reflected a decrease of \$1,753,125 in General Fund reserves. Actual reserves decreased by \$1,982,184 as detailed previously.

The District budget includes a higher level of program activity in the General Fund, and as such requires a levy. Schedules and completion of projects is variable and often results in carryover fund balances and unspent levy amounts. These program funds are generally spent in the following budget year if not spent in the current budget year. Excess budget balances are considered in the following year levy/budget process to reduce ensuing year tax levies by spending down available fund balances. Past management reports have discussed the purposes and benefits of maintaining adequate cash flow reserve balances. A summary of these purposes and benefits is as follows:

1. Cash flow reserve. The District receives revenue from property taxes primarily in December and July. The District, however, incurs expenditures throughout the year. Timing differences in the receipt of property taxes should be compensated for with adequate operating reserves. The District targets 50% of the ensuing year's expenditure budget as the end of year minimum unassigned fund balance. The unassigned balance at December 31, 2021 was \$2,365,944 or 56% of the ensuing year's expenditure budget.
2. Emergency and/or unanticipated expenditures. Operating budgets are estimates only. The District requires a surplus to finance unforeseen events. One method of measuring the amount of this type of surplus is to use a percent of the District's annual operating budget (i.e., 10% to 15% or more, depending upon the budget philosophy of the District).
3. Preliminary project funding. Feasibility studies of potential projects require financing. The District does receive such preliminary funding for certain projects. Other minor projects may be more efficiently funded through available reserves.

# RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

Audit Management Letter

## CIB Authority

This fund was established to account for the Capital Improvement Budget (CIB) process of the District. A summary of financial activity of this fund from inception is presented in Exhibit 2 of the Annual Financial Report.

Under the authorities provided by State Statute 103B.241, the District is authorized to levy ad valorem taxes for the purposes of financing the CIB projects. The District has levied the following amounts for CIB projects over the past ten years:

<u>Collectible Year</u>	<u>CIB Levy Certified</u>
2012	\$1,584,379
2013	2,268,479
2014	2,945,481
2015	3,513,200
2016	3,839,885
2017	3,205,383
2018	3,859,885
2019	3,754,885
2020	4,211,885
2021	3,962,337

These levies have financed the CIB projects of the District as well as debt service payments on the Certificates of Participation (paid off February 1, 2020). A summary of the District's ad valorem tax levies is presented in Exhibit 1 of the Annual Financial Report. Additionally, a breakdown of the District's CIB Fund levy by project is presented in Exhibit 2 of the Annual Financial Report.

**Long-Term Debt**

As of December 31, 2021, the District has the following outstanding long-term debt:

- General Obligation Minnesota Public Facilities Authority (MPFA) Loan of 2012
  - December 31, 2021 balance is \$522,000, matures in 2027
- General Obligation Drainage Bonds of 2016A
  - December 31, 2021 balance is \$2,950,000, matures in 2032

The schedules of indebtedness and deferred tax levies associated with the District's long-term debt are presented in Exhibits 3 and 4 of the Annual Financial Report.

The District has a General Obligation Bonds debt service fund to account for activity associated with the G.O. MPFA Loan and the G.O. Drainage Bonds. Fund balance decreased from \$949,395 at December 31, 2020 to \$944,949 at December 31, 2021.

During 2019, the District transferred \$863,674 of excess project funds into the General Obligation Bonds fund. During 2020, \$304,813 of these funds were used to pay the 2016A debt service requirements in lieu of levying property taxes. For 2022, approximately \$395,000 of the funds will be used to pay debt service requirements in lieu of levying property taxes.

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**COMMUNICATION WITH THOSE CHARGED WITH GOVERNANCE**

We have audited the financial statements of the governmental activities and each major fund of Ramsey-Washington Metro Watershed District (the District) for the year ended December 31, 2021. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated February 24, 2022. Professional standards also require that we communicate to you the following information related to our audit.

**Significant Audit Matters**

*Qualitative Aspects of Accounting Practices*

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the District are described in Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during 2021. We noted no transactions entered into by the District during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected.

The most sensitive estimates affecting the financial statements are estimates used to calculate the net pension liability, the pension related deferred outflows and inflows of

resources and pension expense. These estimates are based on actuarial studies. We evaluated the key factors and assumptions used to develop these estimates in determining that they are reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. Determining sensitivity is subjective, however, we believe the disclosures most likely to be considered sensitive are Note 7 – Long-Term Debt and Note 13 – Prior Period Adjustment.

The financial statement disclosures are neutral, consistent and clear.

*Difficulties Encountered in Performing the Audit*

We encountered no difficulties in dealing with management in performing and completing our audit.

*Corrected and Uncorrected Misstatements*

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. There were no uncorrected misstatements that have an effect on our opinion on the financial statements. The uncorrected misstatements or the matters underlying them could potentially cause future period financial statements to be materially misstated, even though, in our judgment, such uncorrected misstatements are immaterial to the financial statements under audit.



The following material misstatements detected as a result of audit procedures were corrected by management:

- Infrastructure assets in the amount of \$691,634 were understated as of December 31, 2020. This understatement resulted in a prior period adjustment.
- Due from other governments and grant revenue were understated by \$117,886.

*Disagreements with Management*

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

*Management Representations*

We have requested certain representations from management that are included in the management representation letter dated May 24, 2022.

*Management Consultations with Other Independent Accountants*

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the District's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

*Other Audit Findings or Issues*

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the District's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

**Other Matters**

We applied certain limited procedures to the budgetary comparison schedule and the schedules of pension information which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were engaged to report on the individual fund financial statements, which accompany the financial statements but are not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

# RAMSEY-WASHINGTON METRO WATERSHED DISTRICT

Audit Management Letter

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We were not engaged to report on the introductory and other information sections, which accompany the financial statements but are not RSI. Such information has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

## **Other Reports**

Various reports on compliance and internal controls are contained in the Other Required Reports section of the audited financial statements document.

## **Restriction on Use**

This information is intended solely for the information and use of the Board of Managers and management of Ramsey-Washington Metro Watershed District and is not intended to be, and should not be, used by anyone other than these specified parties.

**RAMSEY-WASHINGTON METRO  
WATERSHED DISTRICT**

ANNUAL FINANCIAL REPORT

DECEMBER 31, 2021

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**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**TABLE OF CONTENTS**

	<u>Reference</u>	<u>Page No.</u>
<b>INTRODUCTORY SECTION</b>		
Organization		3
<b>FINANCIAL SECTION</b>		
Independent Auditor's Report		7
Basic Financial Statements:		
Government-Wide Financial Statements:		
Statement of Net Position	Statement 1	12
Statement of Activities	Statement 2	13
Fund Financial Statements:		
Balance Sheet - Governmental Funds	Statement 3	14
Statement of Revenues, Expenditures and Changes in Fund Balance - Governmental Funds	Statement 4	15
Reconciliation of the Statement of Revenues, Expenditures and Changes in Fund Balance of Governmental Funds	Statement 5	16
Notes to Financial Statements		17
Required Supplementary Information:		
Budgetary Comparison Schedule - General Fund	Statement 6	36
Schedule of Proportionate Share of Net Pension Liability - General Employees Retirement Fund	Statement 7	38
Schedule of Pension Contributions - General Employees Retirement Fund	Statement 8	39
Notes to RSI		41
Individual Fund Financial Statements:		
General Fund:		
Comparative Balance Sheet	Statement 9	44
Comparative Statement of Revenue, Expenditures and Changes in Fund Balance	Statement 10	45
<b>OTHER INFORMATION - UNAUDITED</b>		
Taxable Valuations, Tax Levies and Tax Rates	Exhibit 1	49
CIB Fund - Schedule of Financial Activity from Inception	Exhibit 2	50
Combined Schedule of Indebtedness	Exhibit 3	52
Deferred Tax Levies - Per Board Resolutions	Exhibit 4	54
<b>OTHER REQUIRED REPORTS</b>		
Report on Internal Control		57
Schedule of Findings and Resonses for Report on Internal Control		59
Minnesota Legal Compliance Report		61

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## **INTRODUCTORY SECTION**



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**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**

ORGANIZATION

December 31, 2021

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	<u>Term Expires</u>
Managers:	
Lawrence Swope - President	February 23, 2023
Clifton Aichinger - Vice President	February 23, 2022
Pamela Skinner - Secretary	February 23, 2024
Dianne Ward - Treasurer	February 23, 2023
Val Eisele - Manager	February 23, 2024
Administrator:	
Tina Carstens	Appointed

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## **FINANCIAL SECTION**

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## INDEPENDENT AUDITOR'S REPORT

To the Board of Managers  
Ramsey-Washington Metro Watershed District  
Little Canada, Minnesota

### **Report on the Audit of the Financial Statements**

#### ***Opinions***

We have audited the financial statements of the governmental activities and each major fund of Ramsey-Washington Metro Watershed District, as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise Ramsey-Washington Metro Watershed District's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and each major fund of Ramsey-Washington Metro Watershed District, as of December 31, 2021, and the respective changes in financial position, for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### ***Basis for Opinions***

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Ramsey-Washington Metro Watershed District and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### ***Report on Summarized Comparative Information***

We have previously audited Ramsey-Washington Metro Watershed District's 2020 financial statements, and we expressed unmodified audit opinions on the respective financial statements of the governmental activities and each major fund in our report dated April 26, 2021. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2020 is consistent, in all material respects, with the audited financial statements from which it has been derived.

### ***Responsibilities of Management for the Financial Statements***

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about Ramsey-Washington Metro Watershed District's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

### ***Auditor's Responsibilities for the Audit of the Financial Statements***

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of Ramsey-Washington Metro Watershed District's internal control. Accordingly, no such opinion is expressed.

- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about Ramsey-Washington Metro Watershed District's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the budgetary comparison schedule and the schedules of pension information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Management has omitted the management's discussion and analysis that accounting principles generally accepted in the United States of America require to be presented to supplement the basic financial statements. Such missing information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. Our opinions on the basic financial statements are not affected by this missing information.



### *Supplementary Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise Ramsey-Washington Metro Watershed District's basic financial statements. The individual fund financial statements are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the individual fund financial statements are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

### *Other Information*

Management is responsible for the other information included in the annual report. The other information comprises the introductory and other information sections but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon. In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

*Redpath and Company, Ltd.*

REDPATH AND COMPANY, LTD.  
St. Paul, Minnesota

May 24, 2022

## **BASIC FINANCIAL STATEMENTS**

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**

STATEMENT OF NET POSITION

**Statement 1**

December 31, 2021

With Comparative Totals For December 31, 2020

	Primary Government	
	Governmental Activities	
	2021	2020
Assets:		
Cash and investments	\$12,460,871	\$13,462,766
Due from other governmental units	336,987	372,678
Property taxes receivable:		
Delinquent	80,985	76,288
Due from county	90,005	120,366
Prepaid items	16,836	410,922
Capital assets - net of accumulated depreciation:		
Depreciable	13,227,703	12,292,902
Nondepreciable	1,276,412	661,754
Total assets	<u>27,489,799</u>	<u>27,397,676</u>
Deferred outflows of resources related to pensions	<u>592,381</u>	<u>126,261</u>
Liabilities:		
Accounts payable	96,349	312,757
Salaries payable	34,559	31,775
Due to other governmental units	216,173	394,708
Escrow deposits payable	1,323,914	1,188,520
Retainage payable	31,907	49,554
Unearned revenue	-	-
Accrued interest payable	29,815	31,824
Compensated absences payable:		
Due within one year	92,870	95,929
Due in more than one year	40,056	23,407
Unamortized bond premium	53,044	58,305
Bonds payable:		
Due within one year	323,000	322,000
Due in more than one year	3,149,000	3,472,000
Net pension liability:		
Due in more than one year	683,272	833,369
Total liabilities	<u>6,073,959</u>	<u>6,814,148</u>
Deferred inflows of resources related to pensions	<u>630,813</u>	<u>34,410</u>
Net position:		
Net investment in capital assets	13,982,115	12,350,656
Unrestricted	7,395,293	8,324,723
Total net position	<u>\$21,377,408</u>	<u>\$20,675,379</u>

The accompanying notes are an integral part of these financial statements.

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**

**STATEMENT OF ACTIVITIES**

**Statement 2**

For The Year Ended December 31, 2021

With Comparative Totals For The Year Ended December 31, 2020

Functions/Programs	Expenses	Program Revenues		Net (Expense) Revenue and Changes in Net Position Primary Government		
		Charges For Services	Operating Grants and Contributions	Capital Grants and Contributions	Totals	
					2021	2020
Primary government:						
Governmental activities:						
General government	\$2,427,569	\$36,454	\$ -	\$ -	(\$2,391,115)	(\$2,195,145)
Programs	584,782	-	177,395	-	(407,387)	(85,192)
Projects	3,285,468	-	107,774	-	(3,177,694)	(4,103,262)
Interest on long-term debt	68,526	-	-	-	(68,526)	(74,169)
Total governmental activities	<u>\$6,366,345</u>	<u>\$36,454</u>	<u>\$285,169</u>	<u>\$0</u>	<u>(6,044,722)</u>	<u>(6,457,768)</u>
General revenues:						
Property taxes					6,741,624	6,724,923
Unrestricted investment earnings					1,527	56,177
Miscellaneous other					3,600	8,490
Total general revenues					<u>6,746,751</u>	<u>6,789,590</u>
Change in net position					<u>702,029</u>	<u>331,822</u>
Net position - January 1, as previously reported					20,675,379	20,232,491
Prior period adjustment					-	111,066
Net position - January 1, as restated					<u>20,675,379</u>	<u>20,343,557</u>
Net position - December 31					<u>\$21,377,408</u>	<u>\$20,675,379</u>

The accompanying notes are an integral part of these financial statements.

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**

BALANCE SHEET

**Statement 3**

GOVERNMENTAL FUNDS

December 31, 2021

With Comparative Totals For December 31, 2020

	General Fund	General Obligation Bonds	Certificates of Participation	Stormwater Impact Fund	Capital Projects CIB	Total Governmental Funds	
						2021	2020
<b>Assets:</b>							
Cash and investments	\$3,747,934	\$943,722	\$ -	\$314,817	\$7,454,398	\$12,460,871	\$13,462,766
Due from other governmental units	101	-	-	-	336,886	336,987	372,678
Due from other funds	2,593	-	-	-	-	2,593	-
<b>Property taxes receivable:</b>							
Delinquent	26,482	4,730	2,332	-	47,441	80,985	76,288
Due from county	29,428	1,227	2,593	-	56,757	90,005	120,366
Prepaid items	16,836	-	-	-	-	16,836	410,922
<b>Total assets</b>	<b>\$3,823,374</b>	<b>\$949,679</b>	<b>\$4,925</b>	<b>\$314,817</b>	<b>\$7,895,482</b>	<b>\$12,988,277</b>	<b>\$14,443,020</b>
<b>Liabilities:</b>							
Accounts payable	\$42,122	\$ -	\$ -	\$ -	\$54,227	\$96,349	\$312,757
Salaries payable	34,559	-	-	-	-	34,559	31,775
Due to other governmental units	13,517	-	-	4,980	197,676	216,173	394,708
Due to other funds	-	-	2,593	-	-	2,593	-
Escrow deposits payable	1,323,914	-	-	-	-	1,323,914	1,188,520
Retainage payable	-	-	-	-	31,907	31,907	49,554
<b>Total liabilities</b>	<b>1,414,112</b>	<b>0</b>	<b>2,593</b>	<b>4,980</b>	<b>283,810</b>	<b>1,705,495</b>	<b>1,977,314</b>
<b>Deferred inflows of resources:</b>							
Unavailable revenue	26,482	4,730	2,332	-	266,441	299,985	328,968
<b>Fund balance:</b>							
Nonspendable	16,836	-	-	-	-	16,836	410,922
Restricted	-	944,949	-	-	-	944,949	670,545
Assigned	-	-	-	309,837	7,345,231	7,655,068	6,617,981
Unassigned	2,365,944	-	-	-	-	2,365,944	4,437,290
<b>Total fund balance</b>	<b>2,382,780</b>	<b>944,949</b>	<b>0</b>	<b>309,837</b>	<b>7,345,231</b>	<b>10,982,797</b>	<b>12,136,738</b>
<b>Total liabilities, deferred inflows of resources, and fund balance</b>	<b>\$3,823,374</b>	<b>\$949,679</b>	<b>\$4,925</b>	<b>\$314,817</b>	<b>\$7,895,482</b>	<b>\$12,988,277</b>	<b>\$14,443,020</b>
Fund balance reported above						\$10,982,797	\$12,136,738
Amounts reported in the statement of net position are different because:							
Capital assets are not financial resources and, therefore, are not reported in the funds.						14,504,115	12,954,656
Other long-term assets are not available to pay for current period expenditures and, therefore, are reported as unavailable revenue in the funds.						299,985	328,968
Deferred outflows of resources related to pensions are not current financial resources and, therefore, are not reported in the funds.						592,381	126,261
Long-term liabilities are not due and payable in the current period and, therefore, are not reported in the funds. Long-term liabilities at year end consist of:							
Bonds payable						(3,472,000)	(3,794,000)
Unamortized bond premium						(53,044)	(58,305)
Accrued interest payable						(29,815)	(31,824)
Compensated absences payable						(132,926)	(119,336)
Net pension liability						(683,272)	(833,369)
Deferred inflows of resources related to pensions are associated with long-term liabilities that are not due and payable in the current period and, therefore, are not reported in the funds.						(630,813)	(34,410)
Net position (Statement 1)						\$21,377,408	\$20,675,379

The accompanying notes are an integral part of these financial statements.

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**STATEMENT OF REVENUES, EXPENDITURES AND**  
**CHANGES IN FUND BALANCE**  
**GOVERNMENTAL FUNDS**  
For The Year Ended December 31, 2021  
With Comparative Totals For The Year Ended December 31, 2020

**Statement 4**

	General Fund	General	Certificates of Participation	Stormwater Impact Fund	Capital Projects CIB	Total Governmental Funds	
		Obligation Bonds				2021	2020
<b>Revenues:</b>							
General property taxes	\$2,202,687	\$393,350	\$194,119	\$ -	\$3,946,771	\$6,736,927	\$6,768,795
Intergovernmental - grants	11,303	-	-	-	164,407	175,710	162,577
Stormwater impact payment	44,539	-	-	-	-	44,539	200,555
Investment income	1,018	-	-	-	509	1,527	56,177
Permit escrow fees	25,595	-	-	-	-	25,595	24,555
Refunds and reimbursements	51,531	-	-	-	56,243	107,774	277,227
Other	3,600	-	-	-	-	3,600	5,990
Total revenues	<u>2,340,273</u>	<u>393,350</u>	<u>194,119</u>	<u>0</u>	<u>4,167,930</u>	<u>7,095,672</u>	<u>7,495,876</u>
<b>Expenditures:</b>							
Current:							
General government	2,327,340	-	-	-	-	2,327,340	2,305,700
Programs	577,151	-	-	4,980	-	582,131	748,386
Capital outlay	140,784	-	-	-	-	140,784	28,903
Construction/projects	-	-	-	-	4,801,562	4,801,562	4,803,224
Debt service:							
Principal	-	322,000	-	-	-	322,000	436,000
Interest and fiscal agent fees	-	75,796	-	-	-	75,796	82,712
Total expenditures	<u>3,045,275</u>	<u>397,796</u>	<u>0</u>	<u>4,980</u>	<u>4,801,562</u>	<u>8,249,613</u>	<u>8,404,925</u>
Revenues over (under) expenditures	<u>(705,002)</u>	<u>(4,446)</u>	<u>194,119</u>	<u>(4,980)</u>	<u>(633,632)</u>	<u>(1,153,941)</u>	<u>(909,049)</u>
<b>Other financing sources (uses):</b>							
Transfers in	-	-	-	314,817	1,360,882	1,675,699	-
Transfers out	(1,277,182)	-	(398,517)	-	-	(1,675,699)	-
Total other financing sources (uses)	<u>(1,277,182)</u>	<u>0</u>	<u>(398,517)</u>	<u>314,817</u>	<u>1,360,882</u>	<u>0</u>	<u>0</u>
Net change in fund balance	(1,982,184)	(4,446)	(204,398)	309,837	727,250	(1,153,941)	(909,049)
Fund balance - January 1	4,364,964	949,395	204,398	-	6,617,981	12,136,738	13,045,787
Fund balance - December 31	<u>\$2,382,780</u>	<u>\$944,949</u>	<u>\$0</u>	<u>\$309,837</u>	<u>\$7,345,231</u>	<u>\$10,982,797</u>	<u>\$12,136,738</u>

The accompanying notes are an integral part of these financial statements.

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**RECONCILIATION OF THE STATEMENT OF REVENUES,**  
**EXPENDITURES AND CHANGES IN FUND BALANCE OF**  
**GOVERNMENTAL FUNDS**  
For The Year Ended December 31, 2021  
With Comparative Totals For The Year Ended December 31, 2020

**Statement 5**

	<u>2021</u>	<u>2020</u>
Amounts reported in the statement of activities (Statement 2) are different because:		
Net changes in fund balances - total governmental funds (Statement 4)	(\$1,153,941)	(\$909,049)
Governmental funds report capital outlays as expenditures. However, in the statement of activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense:		
Depreciation expense	(519,094)	(461,291)
Capital outlay and construction costs capitalized	2,068,553	1,112,346
The net effect of various miscellaneous transactions involving capital assets (i.e. sales, trade-ins, and donations) is to increase net position.	-	2,500
Revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the funds:		
Change in unavailable revenue - delinquent property taxes	4,697	(43,872)
Change in unavailable revenue - stormwater impact payment	(33,680)	(33,680)
Change in unavailable revenue - 2020 pond dredging project reimbursement	-	219,000
The issuance of long-term debt (e.g., bonds, leases) provides current financial resources to governmental funds, while the repayment of the principal of long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effect on net position.		
Repayment of principal of long-term debt	322,000	436,000
Governmental funds report the effects of bond premiums and discounts when the debt is first issued, whereas these amounts are deferred and amortized over the life of the debt in the statement of activities.		
Amortization of bond premium	5,261	5,261
Some expenses reported in the statement of activities do not require the use of current financial resources and, therefore, are not reported as expenditures in governmental funds. Changes in these expense accruals are as follows:		
Change in accrued interest payable	2,009	3,282
Change in compensated absences payable	(13,590)	(19,773)
Governmental funds report pension contributions as expenditures, however, pension expense is reported in the statement of activities. This is the amount by which pension expense differed from pension contributions in the current period:		
Pension contributions	\$87,049	
Pension expense	(67,235)	
	<u>19,814</u>	<u>21,098</u>
Change in net position (Statement 2)	<u>\$702,029</u>	<u>\$331,822</u>

The accompanying notes are an integral part of these financial statements.

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
NOTES TO FINANCIAL STATEMENTS  
December 31, 2021

---

**Note 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

The accounting policies of the Ramsey-Washington Metro Watershed District (the District) conform to accounting principles generally accepted in the United States of America applicable to governmental units. The following is a summary of significant accounting policies.

**A. FINANCIAL REPORTING ENTITY**

The Ramsey-Washington Metro Watershed District was created in 1975 by the Minnesota Water Resources Board as provided in Minnesota Statutes Chapter 112. The District is operated by a five member Board of Managers appointed by the Ramsey and Washington County Boards of Commissioners for three year terms. In accordance with Governmental Accounting Standards Board (GASB) pronouncements and generally accepted accounting principles, the financial statements of the reporting entity should include the primary government and its component units. The District (primary government) does not have any component units.

**B. GOVERNMENT-WIDE AND FUND FINANCIAL STATEMENTS**

The government-wide financial statements (i.e., the statement of net position and the statement of activities) report information on all of the non-fiduciary activities of the primary government. *Governmental activities*, which normally are supported by taxes and intergovernmental revenues, are reported separately from *business-type activities*. There are no *business-type activities*, which rely to a significant extent on fees and charges for support.

The statement of activities demonstrates the degree to which the direct expenses of a given function are offset by program revenues. *Direct expenses* are those that are clearly identifiable with a specific function. *Program revenues* include 1) charges to customers or applicants who purchase, use or directly benefit from goods, services or privileges provided by a given function and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function. Taxes and other items not included among program revenues are reported instead as *general revenues*.

Separate financial statements are provided for governmental funds. Major individual governmental funds are reported as separate columns in the fund financial statements. The District reports the following major funds:

General Fund is the general operating fund of the District. It is used to account for financial resources to be used for general administrative expenses and for the construction and maintenance of projects of common benefit to the District.

General Obligation Bonds Debt Service is established to account for accumulation of resources for, and the payment of, long-term debt principal, interest and related costs.

Certificates of Participation Debt Service is established to account for accumulation of resources for, and the payment of long-term debt principal, interest and costs related to the 2005 Certificates of Participation. The debt was paid in full during 2020.

Stormwater Impact Fund is established to account for the accumulation of resources to be used for equivalent volume reduction projects as required by the permitting program as shown in Ramsey-Washington Metro Watershed District's Rule C.3.c.3.iii.



**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
December 31, 2021

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Capital Project CIB Fund is established to account for the capital improvement program as a part of the Watershed Management Plan. The fund is financed by an ad valorem tax levy. This fund was established pursuant to Minnesota Statutes, Chapter 473.

**C. MEASUREMENT FOCUS, BASIS OF ACCOUNTING AND FINANCIAL STATEMENT PRESENTATION**

The government-wide financial statements are reported using the *economic resources measurement focus* and the *accrual basis of accounting*. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Property taxes are recognized as revenues in the year for which they are levied. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

Governmental fund financial statements are reported using the *current financial resources measurement focus* and the *modified accrual basis of accounting*. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be *available* when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the District considers all revenues, except reimbursement grants, to be available if they are collected within 60 days of the end of the current fiscal period. Reimbursement grants are considered available if they are collected within one year of the end of the current fiscal period. Expenditures generally are recorded when a liability is incurred, as under accrual accounting. However, debt service expenditures are recorded only when payment is due.

Property taxes, intergovernmental revenues and interest associated with the current fiscal period are all considered to be susceptible to accrual and so have been recognized as revenues of the current fiscal period. All other revenue items are considered to be measurable and available only when cash is received.

As a general rule the effect of inter-fund activity has been eliminated from the government-wide financial statements. Exceptions to this general rule are transactions that would be treated as revenues, expenditures or expenses if they involved external organizations, such as buying goods and services or payments in lieu of taxes, are similarly treated when they involve other funds of the District. Elimination of these charges would distort the direct costs and program revenues reported for the various functions concerned.

**D. BUDGETS**

The Board of Managers prepares annual revenue and expenditure budgets for the District's General Fund. The District monitors budget performance on the fund basis. All amounts over budget have been approved by the Board through the disbursement approval process. The modified accrual basis of accounting is used by the District for budgeting data. All appropriations end with the fiscal year for which they were made. Encumbrance accounting, under which purchase orders, contracts and other commitments of monies are recorded in order to reserve that portion of the applicable appropriation, is not employed by the District.

**E. CASH AND INVESTMENTS**

Cash and investment balances from all funds are pooled and invested to the extent available in authorized investments. Investment income is allocated to individual funds on the basis of the fund's equity in the cash and investment pool.

Investments are stated at fair value, except investments in external investment pools that meet GASB 79 requirements which are stated at amortized cost. Investment income is accrued at the balance sheet date.

**F. PROPERTY TAX REVENUE RECOGNITION**

The Board of Managers annually adopts a tax levy and certifies it to the county in October (levy/assessment date) of each year for collection in the following year. The county is responsible for billing and collecting all property taxes for itself, the city, the local school district and other taxing authorities. Such taxes become a lien on January 1 and are recorded as receivables by the District at that date. Real property taxes are payable (by property owners) on May 15 and October 15 of each calendar year. Personal property taxes are payable by taxpayers on February 28 and June 30 of each year. These taxes are collected by the county and remitted to the District on or before July 7 and December 2 of the same year. Delinquent collections for November and December are received the following January. The District has no ability to enforce payment of property taxes by property owners. The county possesses this authority.

GOVERNMENT-WIDE FINANCIAL STATEMENTS

The District recognizes property tax revenue in the period for which the taxes were levied. Uncollectible property taxes are not material and have not been reported.

GOVERNMENTAL FUND FINANCIAL STATEMENTS

The District recognizes property tax revenue when it becomes both measurable and available to finance expenditures of the current period. In practice, current and delinquent taxes and state credits received by the District in July, December and January are recognized as revenue for the current year. Taxes collected by the county by December 31 (remitted to the District the following January) are classified as due from county. Taxes not collected by the county by December 31 are classified as delinquent taxes receivable. The portion of delinquent taxes not collected by the District in January is fully offset by deferred inflow of resources because they are not available to finance current expenditures.

PROPERTY TAX LEVY

103B Levy Authority

The District levies taxes under the authority of Minnesota Statute 103B.241. As such, the District's General Fund and the Capital Projects CIB Funds are not limited by the tax levy authorized in Minnesota Statute 103D. The District levies for maintenance and project costs out of the General and Capital Projects CIB Funds. Minnesota Statute Section 103B.241 Subd.1 reads in part as follows:

***103B.241 LEVIES***

*Subdivision 1. Watershed plans and projects. Notwithstanding chapter 103D, a local government unit or watershed management organization may levy a tax to pay the increased costs of preparing a plan under sections 103B.231 and 103B.235 or for projects identified in an approved and adopted plan necessary to implement the purposes of section 103B.201. The proceeds of any tax levied under this section shall be deposited in a separate fund and expended only for the purposes authorized by this section. Watershed management organizations and local government units may accumulate the proceeds of levies as an alternative to issuing bonds to finance improvements.*

**G. INVENTORIES**

The original cost of materials and supplies has been recorded as expenditures at the time of purchase. The District does not maintain material amounts of inventories.

**H. PREPAID ITEMS**

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items in both government-wide and fund financial statements. Prepaid items are reported using the consumption method and recorded as expenditures/expenses at the time of consumption.

**I. CAPITAL ASSETS**

Capital assets, which include property, plant, equipment and infrastructure assets and intangible assets such as easements and computer software, are reported in the government-wide financial statements. Capital assets (including intangible assets) are defined by the District as assets with an initial, individual cost of more than \$5,000 and an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at acquisition value at the date of donation. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend asset lives are not capitalized.

Capital assets are depreciated using the straight-line method over the following estimated useful lives:

Buildings	40 years
Furniture and fixtures	5 years
Equipment	5 years
Vehicles	5 years
Infrastructure	50 – 100 years

**J. LONG-TERM OBLIGATIONS**

In the government-wide financial statements, long-term debt is reported as a liability in the statement of net position. Material bond premiums and discounts are amortized over the life of the bonds.

In the fund financial statements, governmental fund types recognize bond premiums and discounts during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources while discounts on debt issuances are reported as other financing uses.

**K. COMPENSATED ABSENCES**

It is the District's policy to permit employees to accumulate earned but unused vacation and sick pay benefits. A liability for these amounts is reported in governmental funds only if they have matured, for example, as a result of employee resignations and retirements. All vacation pay and accumulated sick leave benefits that are vested as severance pay are accrued when incurred in the government-wide financial statements.

**L. DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES**

In addition to assets, the statement of net position reports a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to future period and so will *not* be recognized as an outflow of resources (expense) until then. The District has one item that qualifies for reporting in this category. It is the pension related deferred outflows reported in the government-wide Statement of Net Position.

In addition to liabilities, the statement of net position reports a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to future periods and so will *not* be recognized as an inflow of resources (revenue) until that time. The District has pension related deferred inflows of resources reported in the government-wide Statement of Net Position. The District also has an item, which arises only under a modified accrual basis of accounting, that qualifies for reporting in this category. Accordingly, the item, unavailable revenue, is reported only in the governmental fund balance sheet. The governmental funds report unavailable revenues from property taxes and unavailable stormwater impact fees.

**M. DEFINED BENEFIT PENSION PLANS**

For purposes of measuring the net pension liability, deferred outflows and inflows of resources, and pension expense, information about the fiduciary net position of the Public Employees Retirement Association (PERA) and additions to and deductions from PERA's fiduciary net position have been determined on the same basis as they are reported by PERA, except that PERA's fiscal year end is June 30. For this purpose, plan contributions are recognized as of employer payroll paid dates and benefit payments and refunds are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

**N. FUND BALANCE CLASSIFICATIONS**

In the fund financial statements, governmental funds report fund balance in classifications that disclose constraints for which amounts in those funds can be spent. These classifications are as follows:

*Nonspendable* - consists of amounts that are not in spendable form, such as prepaid items.

*Restricted* - consists of amounts related to externally imposed constraints established by creditors, grantors or contributors; or constraints imposed by state statutory provisions.

*Committed* - consists of internally imposed constraints. These constraints are established by Resolution of the Board.

*Assigned* - consists of internally imposed constraints. These constraints reflect the specific purpose for which it is the Board's intended use. These constraints are established by the Board and/or management. Pursuant to Board Resolution, the Board's District Administrator and/or Treasurer is authorized to establish assignments of fund balance.

*Unassigned* - is the residual classification for the general fund and also reflects negative residual amounts in other funds.

When both restricted and unrestricted resources are available for use, it is the District's policy to first use restricted resources, and then use unrestricted resources as they are needed.

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
December 31, 2021

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When committed, assigned or unassigned resources are available for use, it is the District's policy to use resources in the following order: 1) committed 2) assigned and 3) unassigned.

**O. INTERFUND TRANSACTIONS**

Interfund services provided and used are accounted for as revenues or expenditures. Transactions that constitute reimbursements to a fund for expenditures initially made from it that are properly applicable to another fund, are recorded as expenditures in the reimbursing fund and as reductions of expenditures in the fund that is reimbursed. All other interfund transactions are reported as transfers.

The District provides temporary advances to funds that have insufficient cash balances by means of an advance from another fund shown as due from other funds in the advancing fund, and due to other funds in the fund with the deficit, until adequate resources are received.

**P. USE OF ESTIMATES**

The preparation of financial statements in accordance with generally accepted accounting principles in the United States of America (GAAP) requires management to make estimates that affect amounts reported in the financial statements during the reporting period. Actual results could differ from such estimates.

**Q. RECLASSIFICATIONS**

Certain reclassifications were made to prior year amounts to conform to the current year presentation.

**R. COMPARATIVE TOTALS**

The basic financial statements, individual fund financial statements, required supplementary information, and supplementary financial information include certain prior-year summarized comparative information in total but not at the level of detail required for presentation in conformity with generally accepted accounting principles. Accordingly, such information should be read in conjunction with the District's financial statements for the year ended December 31, 2020 from which the summarized information was derived.

**Note 2 DEPOSITS AND INVESTMENTS**

**A. DEPOSITS**

In accordance with Minnesota Statutes, the District maintains its deposits at depository banks authorized by the Board of Managers. All such banks are members of the Federal Reserve System.

Minnesota Statutes require that all District deposits be protected by insurance, surety bond, or collateral. The market value of collateral pledged must equal 110% of the deposits not covered by insurance or bonds. Securities pledged as collateral are required to be held in safekeeping by the District or in a financial institution other than that furnishing the collateral. Minnesota Statute 118A.03 identifies allowable forms of collateral.

Custodial Credit Risk - Deposits. Custodial credit risk is the risk that in the event of a bank failure, the District's deposits may not be returned to it. The District did not have deposits at December 31, 2021.

## **B. INVESTMENTS**

Subject to rating, yield, maturity and issuer requirements as prescribed by statute, Minnesota Statutes 118A.04 and 118A.05 authorize the District to invest in United States securities, state and local securities, commercial paper, time deposits, high-risk mortgage-backed securities, temporary general obligation bonds, repurchase agreements, Minnesota joint powers investment trust and guaranteed investment contracts.

The District has investments in the Minnesota Municipal Money Market Fund (4M fund). The 4M fund is an external investment pool regulated by Minnesota Statutes and the Board of Directors of the League of Minnesota Cities. The 4M fund is an unrated pool and the fair value of the position in the pool is the same as the value of pool shares. The pool is managed to maintain a portfolio weighted average maturity of no greater than 60 days and seeks to maintain a constant net asset value (NAV) of \$1 per share. The pool measures its investments at amortized cost in accordance with GASB Statement No. 79. The 4M Liquid Asset Fund has no redemption requirements. The 4M Plus Fund requires funds to be deposited for a minimum of 14 calendar days. Withdrawals prior to the 14-day restriction period are subject to a penalty equal to 7 days interest on the amount withdrawn.

At December 31, 2021, the amount of investments held in the 4M fund was \$12,460,871, all of which were in the 4M Liquid Asset Fund.

The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. The hierarchy has three levels. Level 1 investments are valued using inputs that are based on quoted prices in active markets for identical assets. Level 2 investments are valued using inputs that are based on quoted prices for similar assets or inputs that are observable, either directly or indirectly. Level 3 investments are valued using inputs that are unobservable.

Because investments of the 4M fund are measured at amortized cost, its investments are not categorized within the fair value hierarchy described above.

## **C. INVESTMENT RISKS**

Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will be unable to fulfill its obligation to the holder of the investment. The District follows state statutes in regards to credit risk of investments. The District does not have an investment policy which further limits its investment choices.

Interest Rate Risk. Interest rate risk is the risk that changes in the interest rates of debt investments could adversely affect the fair value of an investment. The District does not have an investment policy which limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

Concentration of Credit Risk. Concentration of credit risk is the risk of loss that may be attributed to the magnitude of the District's investment in a single issuer. The District does not have an investment policy which addresses the concentration of credit risk.

Custodial Credit Risk. For investments in securities, custodial credit risk is the risk that in the event of a failure of the counterparty, the District will not be able to recover the value of its investment securities that is in the possession of an outside party. Investments in investment pools and money markets are not evidenced by securities that exist in physical or book entry form, and therefore are not subject to custodial

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
 December 31, 2021

credit risk disclosures. The District does not have an investment policy which addresses custodial credit risk.

**Note 3 RECEIVABLES**

Significant receivable balances not expected to be collected within one year of December 31, 2021 are as follows:

	Major Funds				Total
	General	General Obligation Bonds	Certificates of Participation	Capital Projects CIB	
Delinquent property taxes	\$25,000	\$4,500	\$2,200	\$44,700	\$76,400

**Note 4 UNAVAILABLE REVENUES**

Governmental funds report deferred inflows of resources in connection with receivables for revenues that are not considered to be available to liquidate liabilities of the current period. At the end of the current fiscal year, the various components of unavailable revenue reported in the governmental funds were as follows:

	Property Taxes	2020 Pond Dredging Project	Total
		Reimbursement	
General Fund	\$26,482	\$ -	\$26,482
General Obligation Bonds	4,730	-	4,730
Certificates of Participation	2,332	-	2,332
Capital Projects CIB	47,441	219,000	266,441
Total unavailable revenue	\$80,985	\$219,000	\$299,985

**Note 5**    **DEFINED BENEFIT PENSION PLANS**

**A. PLAN DESCRIPTION**

The District participates in the following cost-sharing multiple-employer defined benefit pension plan administered by the Public Employees Retirement Association of Minnesota (PERA). PERA's defined benefit pension plans are established and administered in accordance with Minnesota Statutes, Chapters 353 and 356. PERA's defined benefit pension plans are tax qualified plans under Section 401(a) of the Internal Revenue Code.

All full-time and certain part-time employees of the District are covered by the General Employees Retirement Fund (GERF). GERF members belong to the Coordinated Plan. Coordinated Plan members are covered by Social Security.

**B. BENEFITS PROVIDED**

PERA provides retirement, disability, and death benefits. Benefit provisions are established by state statute and can only be modified by the state legislature. Vested, terminated employees who are entitled to benefits but are not receiving them yet are bound by the provisions in effect at the time they last terminated their public service.

Benefits are based on a member's highest average salary for any five successive years of allowable service, age, and years of credit at termination of service. Two methods are used to compute benefits for PERA's Coordinated members. Members hired prior to July 1, 1989 receive the higher of Method 1 or Method 2 formulas. Only Method 2 is used for members hired after June 30, 1989. Under Method 1, the accrual rate for Coordinated members is 1.2% of average salary for each of the first ten years of service and 1.7% of average salary for each additional year. Under Method 2, the accrual rate for Coordinated Plan members is 1.7% of average salary for all years of service. For members hired prior to July 1, 1989 a full annuity is available when age plus years of service equal 90 and normal retirement age is 65. For members hired on or after July 1, 1989, normal retirement age is the age for unreduced Social Security benefits capped at 66.

Benefit increases are provided to benefit recipients each January. The postretirement increase is equal to 50% of the cost-of-living adjustment (COLA) announced by the SSA, with a minimum increase of at least 1% and a maximum of 1.5%. Recipients that have been receiving the annuity or benefit for at least a full year as of the June 30 before the effective date of the increase will receive the full increase. For recipients receiving the annuity or benefit for at least one month but less than a full year as of the June 30 before the effective date of the increase will receive a reduced prorated increase. For members retiring on January 1, 2024 or later, the increase will be delayed until normal retirement age (age 65 if hired prior to July 1, 1989, or age 66 for individuals hired on or after July 1, 1989). Members retiring under Rule of 90 are exempt from the delay to normal retirement.



**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
December 31, 2021

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**C. CONTRIBUTIONS**

Minnesota Statutes Chapter 353 sets the rates for employer and employee contributions. Contribution rates can only be modified by the state legislature.

Coordinated Plan members were required to contribute 6.5% of their annual covered salary in fiscal year 2021 and the District was required to contribute 7.5%. The District's contributions to the GERP for the year ended December 31, 2021 were \$87,049. The District's contributions were equal to the required contributions as set by state statute.

**D. PENSION COSTS**

At December 31, 2021, the District reported a liability of \$683,272 for its proportionate share of GERP's net pension liability. The District's net pension liability reflected a reduction due to the State of Minnesota's contribution of \$16 million. The State of Minnesota is considered a non-employer contributing entity and the state's contribution meets the definition of a special funding situation. The State of Minnesota's proportionate share of the net pension liability associated with the District totaled \$20,880. The net pension liability was measured as of June 30, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The District's proportion of the net pension liability was based on the District's contributions received by PERA during the measurement period for employer payroll paid dates from July 1, 2020 through June 30, 2021, relative to the total employer contributions received from all of PERA's participating employers. The District's proportionate share was 0.0160% at the end of the measurement period and 0.0139% for the beginning of the period.

District's proportionate share of the net pension liability	\$683,272
State of Minnesota's proportionate share of the net pension liability associated with the District	<u>20,880</u>
Total	<u><u>\$704,152</u></u>

For the year ended December 31, 2021, the District recognized pension expense of \$67,235 for its proportionate share of the GERP's pension expense. In addition, the District recognized an additional \$1,685 as pension expense (and grant revenue) for its proportionate share of the State of Minnesota's contribution of \$16 million to the GERP.

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
December 31, 2021

At December 31, 2021, the District reported its proportionate share of the GERS' deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual economic experience	\$4,472	\$20,910
Changes in actuarial assumptions	417,192	15,430
Net collective difference between projected and actual investment earnings	-	594,473
Changes in proportion	127,923	-
Contributions paid to PERA subsequent to the measurement date	42,794	-
<b>Total</b>	<u><u>\$592,381</u></u>	<u><u>\$630,813</u></u>

The \$42,794 reported as deferred outflows of resources related to pensions resulting from District contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2022. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

<u>Year Ended December 31,</u>	<u>Pension Expense</u>
2022	\$22,604
2023	33,830
2024	23,738
2025	(161,398)
2026	-
Thereafter	-

The net pension liability will be liquidated by the general fund.

**E. ACTUARIAL ASSUMPTIONS**

The total pension liability in the June 30, 2021 actuarial valuation was determined using an individual entry-age normal actuarial cost method and the following actuarial assumptions:

Inflation	2.25% per year
Investment Rate of Return	6.50%

The long-term investment rate of return is based on a review of inflation and investment return assumptions from a number of national investment consulting firms. The review provided a range of investment return rates deemed to be reasonable by the actuary. An investment return of 6.50% was deemed to be within that range of reasonableness for financial reporting purposes.

Salary growth assumptions range in annual increments from 10.25% after one year of service to 3.0% after 29 years of service and 6.0% per year thereafter. Mortality rates were based on the Pub-2010 General Employee Mortality Table, with slight adjustments to fit PERA's experience. Cost of living benefit increases after retirement are assumed to be 1.25% per year.

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
December 31, 2021

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Actuarial assumptions for GERF are reviewed every four years. The most recent four-year experience study was completed in 2019. The assumption changes were adopted by the Board and become effective with the July 1, 2020 actuarial valuation.

The following changes in actuarial assumptions and plan provisions occurred in 2021:

- The investment return and single discount rates were changed from 7.50% to 6.50% for financial reporting purposes.
- The mortality improvement scale was changed from Scale MP-2019 to Scale MP-2020.

The State Board of Investment, which manages the investments of PERA, prepares an analysis of the reasonableness on a regular basis of the long-term expected rate of return using a building-block method in which best-estimate ranges of expected future rates of return are developed for each major asset class. These ranges are combined to produce an expected long-term rate of return by weighting the expected future rates of return by the target asset allocation percentages. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Domestic equity	33.5%	5.10%
International equity	16.5%	5.30%
Fixed income	25.0%	0.75%
Private markets	25.0%	5.90%
Total	100.0%	

**F. DISCOUNT RATE**

The discount rate used to measure the total pension liability in 2021 was 6.5%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and employers will be made at the rate set in Minnesota statutes. Based on these assumptions, the fiduciary net position of the GERF was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**G. PENSION LIABILITY SENSITIVITY**

The following presents the District's proportionate share of the net pension liability, calculated using the discount rate disclosed in the preceding paragraph, as well as what the District's proportionate share of the net pension liability would be if it were calculated using a discount rate one percentage point lower or one percentage point higher than the current discount rate:

	1% Decrease in Discount Rate (5.5%)	Discount Rate (6.5%)	1% Increase in Discount Rate (7.5%)
Proportionate share of the GERF net pension liability	\$1,393,525	\$683,272	\$100,465

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
December 31, 2021

**H. PENSION PLAN FIDUCIARY NET POSITION**

Detailed information about the pension plan's fiduciary net position is available in a separately-issued PERA financial report that includes financial statements and required supplementary information. That report may be obtained at [www.mnpera.org](http://www.mnpera.org).

**Note 6 CAPITAL ASSETS**

Capital asset activity for the year ended December 31, 2021 was as follows:

	Restated Beginning Balance	Increases	Decreases	Ending Balance
Capital assets, not being depreciated:				
Land	\$421,581	\$ -	\$ -	\$421,581
Construction in progress	798,466	842,077	(785,712)	854,831
Total capital assets, not being depreciated	<u>1,220,047</u>	<u>842,077</u>	<u>(785,712)</u>	<u>1,276,412</u>
Capital assets, being depreciated:				
Building	2,234,955	-	-	2,234,955
Furniture and fixtures	102,063	128,814	(90,464)	140,413
Equipment	131,110	11,970	-	143,080
Vehicles	147,651	-	-	147,651
Infrastructure	20,529,168	1,871,404	-	22,400,572
Total capital assets, being depreciated	<u>23,144,947</u>	<u>2,012,188</u>	<u>(90,464)</u>	<u>25,066,671</u>
Less accumulated depreciation for:				
Building	794,717	55,872	-	850,589
Furniture and fixtures	102,063	21,519	(90,464)	33,118
Equipment	125,683	4,048	-	129,731
Vehicles	77,538	25,980	-	103,518
Infrastructure	10,310,337	411,675	-	10,722,012
Total accumulated depreciation	<u>11,410,338</u>	<u>519,094</u>	<u>(90,464)</u>	<u>11,838,968</u>
Total capital assets being depreciated - net	<u>11,734,609</u>	<u>1,493,094</u>	<u>0</u>	<u>13,227,703</u>
Capital assets - net	<u>\$12,954,656</u>	<u>\$2,335,171</u>	<u>(\$785,712)</u>	<u>\$14,504,115</u>

Depreciation expense was charged to function/programs as follows:

General government	\$104,768
Programs	2,651
Projects	<u>411,675</u>
Total depreciation expense	<u>\$519,094</u>

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
December 31, 2021

**Note 7 LONG-TERM DEBT**

Annual debt service requirements to maturity for general obligation bonds are as follows:

Year Ending December 31,	G.O. MPFA Loan of 2012		G.O. Drainage Bonds of 2016A		Totals	
	Principal	Interest	Principal	Interest	Principal	Interest
2022	\$83,000	\$8,848	\$240,000	\$60,263	\$323,000	\$69,111
2023	85,000	7,441	245,000	55,413	330,000	62,854
2024	86,000	6,000	250,000	50,463	336,000	56,463
2025	88,000	4,543	255,000	45,413	343,000	49,956
2026	89,000	3,051	260,000	40,263	349,000	43,314
2027	91,000	1,542	270,000	34,963	361,000	36,505
2028	-	-	275,000	29,513	275,000	29,513
2029	-	-	280,000	23,963	280,000	23,963
2030	-	-	285,000	17,956	285,000	17,956
2031	-	-	290,000	11,125	290,000	11,125
2032	-	-	300,000	3,750	300,000	3,750
Total	<u>\$522,000</u>	<u>\$31,425</u>	<u>\$2,950,000</u>	<u>\$373,085</u>	<u>\$3,472,000</u>	<u>\$404,510</u>

The following is a schedule of changes in the District's indebtedness for the year ended December 31, 2021:

	Beginning Balance	Additions	Deletions	Ending Balance	Due Within One Year
Governmental activities:					
Bonded debt:					
G.O. MPFA Loan of 2012	\$604,000	\$ -	(\$82,000)	\$522,000	\$83,000
G.O. Drainage Bonds of 2016A	3,190,000	-	(240,000)	2,950,000	240,000
Unamortized bond premium	58,305	-	(5,261)	53,044	-
Compensated absences	119,336	108,707	(95,117)	132,926	92,870
Total governmental activities	<u>\$3,971,641</u>	<u>\$108,707</u>	<u>(\$422,378)</u>	<u>\$3,657,970</u>	<u>\$415,870</u>

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
 December 31, 2021

**GENERAL OBLIGATION MINNESOTA PUBLIC FACILITIES AUTHORITY (MPFA) LOAN OF 2012**

The District entered into a loan agreement with the Minnesota Public Facilities Authority (MPFA) on May 5, 2012. The agreement called for the MPFA to lend \$1,569,623 from the Clean Water Revolving Fund Principal Forgiveness – Green Project, to the District for the purpose of funding the eligible costs related to the Maplewood Mall project. Of this amount, \$1,177,217 (the “Loan”) has a final maturity date of August 20, 2027 and carries an interest rate of 1.695% per annum. The remaining \$392,406 (the “Green Principal Forgiveness”), is not required to be repaid except as otherwise provided per the terms of the agreement. The District’s management has indicated that the terms of the “Green Principal Forgiveness” will be met. The loan is considered a direct borrowing and is a general obligation of the District for which it pledges its full faith, credit and taxing powers to the payment of principal and interest on the bonds.

**\$3,860,000 GENERAL OBLIGATION DRAINAGE BONDS, SERIES 2016A**

The District sold \$3,860,000 of General Obligation bonds, Series 2016A on November 15, 2016 for the purpose of funding eligible ongoing maintenance and repairs for the Beltline and Battle Creek Tunnel repair project. The term of the bond is 15 years, at an interest rate of 2.0% - 2.5% per annum. The final maturity date is February 1, 2032.

**PLEDGED REVENUE**

Future revenue pledged for the payment of long-term debt is as follows:

Bond Issue	Use of Proceeds	Revenue Pledged			Remaining Principal and Interest	Current Year	
		Type	Percent of Total Debt Service	Term of Pledge		Principal and Interest Paid	Pledged Revenue Received
2016A Bond	Beltline and Battle Creek Tunnel Repair	Property Taxes	100%	2016 - 2031	\$3,323,085	\$305,063	\$301,474

**Note 8 CONTINGENCIES**

The District’s management has indicated that there are no pending lawsuits or other actions in which the District is a defendant.

**Note 9 COMMITTED CONTRACTS**

At December 31, 2021, the District had committed contracts of \$205,688 for construction/repair projects.

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
December 31, 2021

**Note 10 FUND BALANCE**

**A. CLASSIFICATIONS**

At December 31, 2021, a summary of the governmental fund balance classifications are as follows:

	<u>General Fund</u>	<u>General Obligation Bonds</u>	<u>Stormwater Impact Fund</u>	<u>Capital Projects CIB</u>	<u>Total</u>
Nonspendable:					
Prepaid items	\$16,836	\$ -	\$ -	\$ -	\$16,836
Restricted for:					
Debt service	-	944,949	-	-	944,949
Assigned for:					
Construction/projects	-	-	309,837	7,345,231	7,655,068
Unassigned	<u>2,365,944</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>2,365,944</u>
 Total	 <u>\$2,382,780</u>	 <u>\$944,949</u>	 <u>\$309,837</u>	 <u>\$7,345,231</u>	 <u>\$10,982,797</u>

**B. MINIMUM UNASSIGNED FUND BALANCE POLICY**

The Board has formally adopted a policy regarding the minimum unassigned fund balance for the General Fund. The most significant revenue source of the General Fund is property taxes. This revenue source is received in two installments during the year – June and December. As such, it is the District’s goal to begin each fiscal year with sufficient working capital to fund operations between each semi-annual receipt of property taxes.

The policy establishes a year end targeted unassigned fund balance amount for cash-flow timing needs, emergencies/contingencies and compensated absences of 50% of the subsequent year’s budgeted expenditures. At December 31, 2021, the unassigned fund balance of the General Fund was 56% of the subsequent year’s budgeted expenditures.

**Note 11 RISK MANAGEMENT**

The District is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters.

Workers compensation coverage is provided through a pooled self-insurance program through the League of Minnesota Cities Insurance Trust (LMCIT). The District pays an annual premium to LMCIT. The District is subject to supplemental assessments if deemed necessary by the LMCIT. The LMCIT reinsures through Workers Compensation Reinsurance Association (WCRA) as required by law. For workers compensation, the District is not subject to a deductible. The District workers compensation coverage is retrospectively rated. With this type of coverage, final premiums are determined after loss experience is known. The amount of premium adjustment, if any, is considered immaterial and not recorded until received or paid.

Other insurance coverage is provided through a pooled self-insurance program through the LMCIT. The District pays an annual premium to the LMCIT. The District is subject to supplemental assessments if deemed necessary by the LMCIT. The LMCIT reinsures through commercial companies for claims in excess of various amounts. The District retains risk for the deductible portions of the insurance policies. The amount of these deductibles is considered immaterial to the financial statements.

**RAMSEY WASHINGTON METRO WATERSHED DISTRICT**  
**NOTES TO FINANCIAL STATEMENTS**  
 December 31, 2021

There were no significant reductions in insurance from the previous year or settlements in excess of insurance coverage for any of the past three fiscal years.

**Note 12 RECENTLY ISSUED ACCOUNTING STANDARDS**

The Governmental Accounting Standards Board (GASB) recently approved the following statements which were not implemented for these financial statements:

**Statement No. 87 Leases.** The provisions of this Statement are effective for reporting periods beginning after June 15, 2021.

**Statement No. 92 Omnibus 2020.** The provisions of this Statement are effective for reporting periods beginning after June 15, 2021.

**Statement No. 94 Public-Private and Public-Public Partnerships and Availability Payment Arrangements.** The provisions of this Statement are effective for reporting periods beginning after June 15, 2022.

**Statement No. 96 Subscription-Based Information Technology Arrangements.** The provisions of this Statement are effective for fiscal years beginning after June 15, 2022.

**Statement No. 99 Omnibus 2022.** The provisions of this Statement are effective for reporting periods beginning after June 15, 2022.

The effect these standards may have on future financial statements is not determinable at this time.

**Note 13 PRIOR PERIOD ADJUSTMENT**

During 2021, the District identified \$691,634 of previously unrecorded infrastructure assets which were constructed by the District during 2019 and 2020. Previously, the cost of these assets had been recognized as an expense on the statement of activities. A prior period adjustment in the amount of \$111,066 is presented to restate beginning net position as of January 1, 2020. Comparative 2020 totals on the statement of activities have been restated to increase net expense of the projects function by \$580,568.

Details of the prior period adjustments are as follows:

	Governmental Activities
Net position - January 1, 2021, as previously reported	\$19,983,745
2019 infrastructure	111,066
2020 infrastructure	580,568
Net position - January 1, 2021, as restated	<u>\$20,675,379</u>



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**REQUIRED SUPPLEMENTARY INFORMATION**

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**

REQUIRED SUPPLEMENTARY INFORMATION

BUDGETARY COMPARISON SCHEDULE - GENERAL FUND

For The Year Ended December 31, 2021

With Comparative Actual Amounts For The Year Ended December 31, 2020

**Statement 6**

**Page 1 of 2**

	2021		Actual Amounts	Variance with Final Budget - Positive (Negative)	2020 Actual Amounts
	Budgeted Amounts				
	Original	Final			
<b>Revenues:</b>					
General property taxes	\$2,211,375	\$2,211,375	\$2,202,687	(\$8,688)	\$2,486,568
Intergovernmental - grants	-	-	11,303	11,303	15,479
Stormwater impact payment	-	-	44,539	44,539	200,555
Investment income	20,000	20,000	1,018	(18,982)	22,851
Permit escrow fees	15,000	15,000	25,595	10,595	24,555
Refunds and reimbursements	-	-	51,531	51,531	58,788
Other	-	-	3,600	3,600	5,990
<b>Total revenues</b>	<b>2,246,375</b>	<b>2,246,375</b>	<b>2,340,273</b>	<b>93,898</b>	<b>2,814,786</b>
<b>Expenditures:</b>					
General government:					
Engineering:					
Administration	93,000	93,000	72,948	20,052	66,786
Engineer review	65,000	65,000	47,793	17,207	46,183
Permit review	55,000	55,000	47,391	7,609	47,265
Subtotal engineering	213,000	213,000	168,132	44,868	160,234
Committee expenditures	3,500	3,500	3,729	(229)	2,825
Consulting	20,000	20,000	-	20,000	-
District training	75,000	75,000	15,960	59,040	7,241
Dues	11,000	11,000	11,568	(568)	9,905
Employee expenses	15,000	15,000	7,133	7,867	26,650
GIS system maintenance and equipment	50,000	50,000	6,277	43,723	5,329
Insurance	50,000	50,000	44,215	5,785	41,477
Internet/website	70,000	70,000	63,556	6,444	56,580
Legal and audit	115,000	115,000	80,955	34,045	82,897
Manager's per diem and expenses	12,000	12,000	7,825	4,175	9,825
Miscellaneous	5,000	5,000	-	5,000	377
Office equipment and maintenance	318,000	318,000	71,697	246,303	55,811
Office supplies and postage	10,000	10,000	6,586	3,414	6,552
Printing	8,000	8,000	4,982	3,018	5,014
Project operations	200,000	200,000	71,716	128,284	68,935
Salaries/payroll taxes/benefits	1,520,000	1,520,000	1,579,050	(59,050)	1,489,655
Telephone	8,000	8,000	1,308	6,692	917
Utilities	30,000	30,000	14,831	15,169	13,678
Vehicle lease and maintenance	43,000	43,000	147,463	(104,463)	33,875
Water quality monitoring	180,000	180,000	161,141	18,859	256,826
<b>Total general government</b>	<b>2,956,500</b>	<b>2,956,500</b>	<b>2,468,124</b>	<b>488,376</b>	<b>2,334,603</b>

See accompanying notes to the required supplementary information.

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**

REQUIRED SUPPLEMENTARY INFORMATION

BUDGETARY COMPARISON SCHEDULE - GENERAL FUND

For The Year Ended December 31, 2021

With Comparative Actual Amounts For The Year Ended December 31, 2020

**Statement 6**

**Page 2 of 2**

	2021			Variance with Final Budget - Positive (Negative)	2020 Actual Amounts
	Budgeted Amounts		Actual Amounts		
	Original	Final			
Watershed programs:					
Project feasibility studies	\$440,000	\$440,000	\$244,449	\$195,551	\$346,261
Communications and marketing	25,000	25,000	26,356	(1,356)	14,685
Education programming	60,000	60,000	23,711	36,289	14,800
Health and safety program	3,000	3,000	988	2,012	2,774
Lake Studies/WRAPS/TMDL	103,000	103,000	18,599	84,401	78,025
Natural resources program	140,000	140,000	103,866	36,134	106,322
Outside programs	127,000	127,000	26,950	100,050	47,092
Research projects	95,000	95,000	95,676	(676)	113,415
Waterfest	50,000	50,000	36,556	13,444	25,012
Total watershed programs	<u>1,043,000</u>	<u>1,043,000</u>	<u>577,151</u>	<u>465,849</u>	<u>748,386</u>
Total expenditures	<u>3,999,500</u>	<u>3,999,500</u>	<u>3,045,275</u>	<u>954,225</u>	<u>3,082,989</u>
Revenues over (under) expenditures	(1,753,125)	(1,753,125)	(705,002)	1,048,123	(268,203)
Other financing sources (uses):					
Transfers out	-	-	(1,277,182)	1,277,182	-
Net change in fund balance	<u>(\$1,753,125)</u>	<u>(\$1,753,125)</u>	<u>(1,982,184)</u>	<u>\$2,325,305</u>	<u>(268,203)</u>
Fund balance - January 1			<u>4,364,964</u>		<u>4,633,167</u>
Fund balance - December 31			<u>\$2,382,780</u>		<u>\$4,364,964</u>

See accompanying notes to the required supplementary information.

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**SCHEDULE OF PROPORTIONATE SHARE OF NET PENSION LIABILITY -**  
**GENERAL EMPLOYEES RETIREMENT FUND**  
For The Last Ten Years

**Statement 7**

Measurement Date June 30	Fiscal Year Ending December 31	District's Proportionate (Percentage) of the Net Pension Liability	District's Proportionate Share (Amount) of the Net Pension Liability (a)	State's Proportionate Share (Amount) of the Net Pension Liability Associated with District (b)	District's Proportionate Share of the Net Pension Liability and the State's Proportionate Share of the Net Pension Liability Associated with District (a+b)	Covered Payroll (c)	Proportionate Share of the Net Pension Liability as a Percentage of its Covered Payroll (a+b)/c	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2015	2015	0.0132%	\$684,093	\$ -	\$684,093	\$773,820	88.4%	78.2%
2016	2016	0.0120%	974,340	12,771	987,111	747,482	132.1%	68.9%
2017	2017	0.0125%	797,992	10,038	808,030	805,604	100.3%	75.9%
2018	2018	0.0127%	704,544	23,081	727,625	852,560	85.3%	79.5%
2019	2019	0.0128%	707,683	21,999	729,682	903,338	80.8%	80.2%
2020	2020	0.0139%	833,369	25,647	859,016	983,775	87.3%	79.1%
2021	2021	0.0160%	683,272	20,880	704,152	1,151,307	61.2%	87.0%

The schedule is provided prospectively beginning with the District's fiscal year ended December 31, 2015 and is intended to show a ten year trend. Additional years will be reported as they become available.

See accompanying notes to the required supplementary information.

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**SCHEDULE OF PENSION CONTRIBUTIONS - GENERAL EMPLOYEES RETIREMENT FUND**  
For The Last Ten Years

**Statement 8**

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Fiscal Year Ending December 31	Statutorily Required Contribution (a)	Contributions in Relation to the Statutorily Required Contribution (b)	Contribution Deficiency (Excess) (a-b)	Covered Payroll (c)	Contributions as a Percentage of Covered Payroll (b/c)
2015	\$57,121	\$57,121	\$ -	\$761,606	7.5%
2016	57,310	57,310	-	764,138	7.5%
2017	60,595	60,595	-	807,938	7.5%
2018	65,933	65,933	-	879,103	7.5%
2019	68,723	68,723	-	916,307	7.5%
2020	81,725	81,725	-	1,089,683	7.5%
2021	87,049	87,049	-	1,160,648	7.5%

The schedule is provided prospectively beginning with the District's fiscal year ended December 31, 2015 and is intended to show a ten year trend. Additional years will be reported as they become available.

See accompanying notes to the required supplementary information.

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**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**NOTES TO RSI**  
December 31, 2021

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**Note A LEGAL COMPLIANCE – BUDGETS**

The General Fund budget is legally adopted on a basis consistent with accounting principles generally accepted in the United States of America. The legal level of budgetary control is at the fund level for the General Fund.

**Note B PENSION INFORMATION**

**PERA – General Employees Retirement Fund**

2021 Changes in Actuarial Assumptions:

- The investment return and single discount rates were changed from 7.50% to 6.50% for financial reporting purposes.
- The mortality improvement scale was changed from Scale MP-2019 to Scale MP-2020.

2020 Changes in Actuarial Assumptions:

- The price inflation assumption was decreased from 2.50% to 2.25%.
- The payroll growth assumption was decreased from 3.25% to 3.00%.
- Assumed salary increase rates were decreased 0.25% and assumed rates of retirement were changed resulting in more unreduced (normal) retirements and slightly fewer Rule of 90 and early retirements. Assumed rates of termination and disability were also changed.
- Base mortality tables were changed from RP-2014 tables to Pub-2010 tables, with adjustments.
- The mortality improvement scale was changed from Scale MP-2018 to Scale MP-2019.
- The spouse age difference was changed from two years older for females to one year older.
- The assumed number of married male new retirees electing the 100% Joint & Survivor option changed from 35% to 45%. The assumed number of married female new retirees electing the 100% Joint & Survivor option changed from 15% to 30%. The corresponding number of married new retirees electing the Life annuity option was adjusted accordingly.

2020 Changes in Plan Provisions:

- Augmentation for current privatized members was reduced to 2.0% for the period July 1, 2020 through December 31, 2023 and 0.0% after. Augmentation was eliminated for privatizations occurring after June 30, 2020.

2019 Changes in Actuarial Assumptions:

- The mortality projection scale was changed from MP-2017 to MP-2018.

2019 Changes in the Plan Provisions:

- The employer supplemental contribution was changed prospectively, decreasing from \$31.0 million to \$21.0 million per year. The State's special funding contribution was changed prospectively, requiring \$16.0 million due per year through 2031.

2018 Changes in Actuarial Assumptions:

- The mortality projection scale was changed from MP-2015 to MP-2017.
- The assumed benefit increase was changed from 1.00% per year through 2044 and 2.50% per year thereafter to 1.25% per year.



**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**NOTES TO RSI**  
December 31, 2021

---

2017 Changes in Actuarial Assumptions:

- The Combined Service Annuity (CSA) loads were changed from 0.8% for active members and 60% for vested and non-vested deferred members. The revised CSA loads are now 0.0% for active member liability, 15.0% for vested deferred member liability and 3.0% for non-vested deferred member liability.
- The assumed post-retirement benefit increase rate was changed from 1.0% per year for all years to 1.0% per year through 2044 and 2.5% per year thereafter.

2016 Changes in Actuarial Assumptions:

- The assumed post-retirement benefit increase rate was changed from 1.0% per year through 2035 and 2.5% per year thereafter to 1.0% per year for all future years.
- The assumed investment return was changed from 7.9% to 7.5%. The single discount rate was changed from 7.9% to 7.5%.
- Other assumptions were changed pursuant to the experience study dated June 30, 2015. The assumed future salary increases, payroll growth, and inflation were decreased by 0.25% to 3.25% for payroll growth and 2.50% for inflation.

## **INDIVIDUAL FUND FINANCIAL STATEMENTS**

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**COMPARATIVE BALANCE SHEET**  
**GENERAL FUND**  
December 31, 2021  
With Comparative Totals For The Year Ended December 31, 2020

**Statement 9**

	<u>2021</u>	<u>2020</u>
<b>Assets:</b>		
Cash and investments	\$3,747,934	\$5,431,914
Due from other governmental units	101	41,530
Due from other funds	2,593	-
Property taxes receivable:		
Delinquent	26,482	30,051
Due from county	29,428	44,217
Prepaid items	<u>16,836</u>	<u>132,072</u>
 Total assets	 <u><u>\$3,823,374</u></u>	 <u><u>\$5,679,784</u></u>
 <b>Liabilities:</b>		
Accounts payable	\$42,122	\$21,937
Salaries payable	34,559	31,775
Due to other governmental units	13,517	8,857
Escrow deposits payable	<u>1,323,914</u>	<u>1,188,520</u>
Total liabilities	<u>1,414,112</u>	<u>1,251,089</u>
 <b>Deferred inflows of resources:</b>		
Unavailable revenue	<u>26,482</u>	<u>63,731</u>
 <b>Fund balance:</b>		
Nonspendable	16,836	132,072
Unassigned	<u>2,365,944</u>	<u>4,232,892</u>
Total fund balance	<u>2,382,780</u>	<u>4,364,964</u>
 Total liabilities, deferred inflows of resources, and fund balance	 <u><u>\$3,823,374</u></u>	 <u><u>\$5,679,784</u></u>

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**COMPARATIVE STATEMENT OF REVENUE, EXPENDITURES AND**  
**CHANGES IN FUND BALANCE**  
**GENERAL FUND**  
For The Year Ended December 31, 2021  
With Comparative Totals For The Year Ended December 31, 2020

**Statement 10**

	<u>2021</u>	<u>2020</u>
Revenues:		
General property taxes	\$2,202,687	\$2,486,568
Intergovernmental - grants	11,303	15,479
Stormwater impact payment	44,539	200,555
Investment income	1,018	22,851
Permit escrow fees	25,595	24,555
Refunds and reimbursements	51,531	58,788
Other	3,600	5,990
Total revenues	<u>2,340,273</u>	<u>2,814,786</u>
Expenditures:		
Current:		
General government	2,327,340	2,305,700
Programs	577,151	748,386
Capital outlay	140,784	28,903
Total expenditures	<u>3,045,275</u>	<u>3,082,989</u>
Revenues over (under) expenditures	(705,002)	(268,203)
Other financing sources (uses):		
Transfers out	<u>(1,277,182)</u>	<u>-</u>
Net change in fund balance	(1,982,184)	(268,203)
Fund balance - January 1	<u>4,364,964</u>	<u>4,633,167</u>
Fund balance - December 31	<u><u>\$2,382,780</u></u>	<u><u>\$4,364,964</u></u>

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**OTHER INFORMATION - UNAUDITED**

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RAMSEY-WASHINGTON METRO WATERSHED DISTRICT  
TAXABLE VALUATIONS, TAX LEVIES AND TAX RATES - UNAUDITED

Exhibit 1

	2021/22 Tax Capacity Values	2020/21 Tax Capacity Values	2019/20 Tax Capacity Values	2018/19 Tax Capacity Values	2017/18 Tax Capacity Values
Taxable valuations:					
Washington County	\$46,235,738	\$43,980,559	\$41,789,361	\$38,856,341	\$35,953,519
Ramsey County	180,083,939 **	175,983,773	162,115,952	153,459,180	142,027,646
Total	<u>\$226,319,677</u>	<u>\$219,964,332</u>	<u>\$203,905,313</u>	<u>\$192,315,521</u>	<u>\$177,981,165</u>

	2021		2020		2019		2018		2017	
	2022		2021		2020		2019		2018	
	Levy	Tax Capacity Rate	Levy	Tax Capacity Rate	Levy	Tax Capacity Rate	Levy	Tax Capacity Rate	Levy	Tax Capacity Rate
General Fund	\$3,195,000	1.412	\$2,211,375	1.005	\$2,499,500	1.226	\$2,609,500	1.357	\$2,562,550	1.440
Debt levy	-	.000	394,901	.180	92,611	.045	399,113	.208	448,951	.252
CIB Fund	3,540,000	1.564	4,157,222	1.890	4,211,885	2.066	3,754,885	1.952	3,859,885	2.169
Total	<u>\$6,735,000</u>	<u>2.976</u>	<u>\$6,763,498</u>	<u>3.075</u>	<u>\$6,803,996</u>	<u>3.337</u>	<u>\$6,763,498</u>	<u>3.517</u>	<u>\$6,871,386</u>	<u>3.861</u>

\*\* Based on the 2022 proposed value, final value was not available.



**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**CIB FUND - UNAUDITED**  
**SCHEDULE OF FINANCIAL ACTIVITY FROM INCEPTION**

Project	CIB Year	Expenditures		
		Prior Years	12/31/2021	Total
Completed projects:				
Subtotal - completed projects	1987-2013	\$35,381,666	\$ -	\$35,381,666
Current CIB projects:				
516 - Project Maintenance and Repair	1992-2018	12,772,488	1,041,525	13,814,013
529 - BMP Incentive Grant Program	2007-2018	5,724,948	521,522	6,246,470
528 - Faith Based Volume Reduction	2013	425,554	-	425,554
518 - School/Commercial Site Retrofit	2015	3,850,751	1,311,372	5,162,123
520 - Flood Damage	2015	1,694,058	1,921,014	3,615,072
553 - Wakefield Project	2017	1,097,607	5,129	1,102,736
540 - Wetland Restoration Projects	2021	-	-	-
Subtotal		25,565,406	4,800,562	30,365,968
580 - CIB contingency account		266,879	1,000	267,879

Revenue	Revenue				Revenue	
Prior Years Revenue	2021 CIB Levy	Investment Income	Transfers/ Reallocation	Grant/Project Reimbursement	Total Revenue	Over/(Under) Expenditures
\$35,411,370 #	\$ -	\$ -	\$ -	\$ -	\$35,411,370	\$29,704
13,400,144	520,285	-	-	56,243	13,976,672	162,659
5,133,221	697,250	-	57,000	-	5,887,471	(358,999)
1,639,303	-	-	-	-	1,639,303	1,213,749
4,863,253	249,018	-	905,365	93,042	6,110,678	948,555
4,977,269	1,982,182	-	-	71,365	7,030,816	3,415,744
1,248,877	-	-	-	-	1,248,877	146,141
-	498,036	-	-	-	498,036	498,036
31,262,067	3,946,771	0	962,365	220,650	36,391,853	6,025,885
1,158,495	-	509	398,517	-	1,557,521	1,289,642
				Fund balance - December 31, 2021		\$7,345,231

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
**COMBINED SCHEDULE OF INDEBTEDNESS - UNAUDITED**  
 December 31, 2021

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	<u>Dated</u>	<u>Final Due Date</u>	<u>Net Interest Rate</u>
Bonded indebtedness:			
General Obligation Debt:			
G.O. Bonds of 2012 - PFA Bond	5/5/2012	8/20/2027	1.70%
G.O. Drainage Bonds of 2016A	11/15/2016	2/1/2032	2.09%
Total bonded indebtedness			
Unamortized bond premiums			
Compensated absences			
Total indebtedness			

Authorized and Issued	Retired	Outstanding 12/31/2021	Due in 2022	
			Principal	Interest
\$1,177,217	\$655,217	\$522,000	\$83,000	\$8,848
3,860,000	910,000	2,950,000	240,000	60,263
<u>5,037,217</u>	<u>1,565,217</u>	<u>3,472,000</u>	<u>323,000</u>	<u>69,111</u>
		53,044	-	-
		<u>132,926</u>	<u>92,870</u>	<u>-</u>
<u>\$5,037,217</u>	<u>\$1,565,217</u>	<u>\$3,657,970</u>	<u>\$415,870</u>	<u>\$69,111</u>

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**  
DEFERRED TAX LEVIES - PER BOARD RESOLUTIONS - UNAUDITED  
December 31, 2021

**Exhibit 4**

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<u>Year of Levy/ Collection</u>	<u>G.O. Drainage Bonds of 2016A</u>
2021/2022	\$302,863
2022/2023	302,963
2023/2024	302,963
2024/2025	302,863
2025/2026	307,663
2026/2027	307,263
2027/2028	306,763
2028/2029	306,163
2029/2030	304,750
2030/2031	<u>307,500</u>
Totals	<u><u>\$3,051,754</u></u>

## **OTHER REQUIRED REPORTS**

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## REPORT ON INTERNAL CONTROL

To the Board of Managers  
Ramsey-Washington Metro Watershed District  
Little Canada, Minnesota

In planning and performing our audit of the financial statements of the governmental activities and each major fund of Ramsey-Washington Metro Watershed District as of and for the year ended December 31, 2021, in accordance with auditing standards generally accepted in the United States of America, we considered Ramsey-Washington Metro Watershed District's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Ramsey-Washington Metro Watershed District's internal control. Accordingly, we do not express an opinion on the effectiveness of Ramsey-Washington Metro Watershed District's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore material weaknesses or significant deficiencies may exist that were not identified. However, as described in the accompany schedule of findings and responses, we identified a deficiency in internal control that we consider to be a material weakness.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. We consider the deficiency described in the accompanying schedule of findings and responses as item 2021-1 to be a material weakness.



This communication is intended solely for the information and use of management, Ramsey-Washington Metro Watershed District's Board of Managers, and others within the organization, and is not intended to be, and should not be, used by anyone other than these specified parties.

*Redpath and Company, Ltd.*

REDPATH AND COMPANY, LTD.  
St. Paul, Minnesota

May 24, 2022

### **2021-1 Prior Period Adjustment / Financial Statement Corrections**

*Criteria:* The District's internal controls should allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis.

*Condition:* Audit procedures detected a material understatement of infrastructure capital assets in the amount of \$691,634 as of December 31, 2020. In addition, misstatements relating to due from other governments and grant revenue were detected during the audit. All such items were corrected.

*Cause:* Certain expenditures which were eligible to be capitalized were not indentified as capitalizable costs during 2019 or 2020. Also, a reconciliation was not performed to verify amounts capitalized tied to project expenditures as reported in the general ledger. Regarding grant reveue, not all eligible grant revenue was identified prior to the beginning of the audit.

*Effect:* Inadequate controls over the year-end closing process results in an increased risk that financial statement misstatements may occur and not be detected on a timely basis. The correction to infrastructure assets resulted in a restatement to the District's previously reported net position balance.

*Recommendation:* We recommend staff review project costs and determine which costs are eligible to be capitalized each year. In addition, we recommend projects funded by grants be reviewed at year-end to ensure grant revenue is reported in the proper year.

*Views of Responsible Officials and Corrective Action Plan:* Staff have implemented procedures to ensure project costs eligible to be capitalized are appropriately identified. In addition, projects funded by grants will be reviewed so that grant revenue is recorded in the proper period.

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## MINNESOTA LEGAL COMPLIANCE REPORT

To the Board of Managers  
Ramsey-Washington Metro Watershed District  
Little Canada, Minnesota

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the governmental activities and each major fund of Ramsey-Washington Metro Watershed District as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise Ramsey-Washington Metro Watershed District's basic financial statements, and have issued our report thereon dated May 24, 2022.

In connection with our audit, nothing came to our attention that caused us to believe that Ramsey-Washington Metro Watershed District failed to comply with the provisions of the contracting and bidding, deposits and investments, conflicts of interest, public indebtedness, claims and disbursements, and miscellaneous provisions sections of the *Minnesota Legal Compliance Audit Guide for Other Political Subdivisions*, promulgated by the State Auditor pursuant to Minnesota Statute § 6.65, insofar as they relate to accounting matters. However, our audit was not directed primarily toward obtaining knowledge of such noncompliance. Accordingly, had we performed additional procedures, other matters may have come to our attention regarding Ramsey-Washington Metro Watershed District's noncompliance with the above referenced provisions, insofar as they relate to accounting matters.

This report is intended solely for the information and use of those charged with governance and management of Ramsey-Washington Metro Watershed District and the State Auditor and is not intended to be, and should not be, used by anyone other than these specified parties.

*Redpath and Company, Ltd.*

REDPATH AND COMPANY, LTD.  
St. Paul, Minnesota

May 24, 2022

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# Request for Board Action

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**Board Meeting Date:** June 1, 2022

**Agenda Item No:** 7B

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

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**Item Description:** Accept the submittal of the 2021 MS4 Storm Water Pollution Prevention Plan (SWPPP) Annual Report and receive public comments.

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**Background:**

All MS4s are required to complete an annual report and submit it to the Minnesota Pollution Control Agency (MPCA) by June 30 of each year. The report details the implementation status of the approved MS4 permit. The District SWPPP and the Annual Report are available on the District website. I have also attached the annual report to this memo for your review. As we discussed previously, this annual report relates to our current MS4 permit.

This annual report relates to items that we complete for our MS4 permit, but it also gives you an idea of the type of information that we provide to our member cities and counties. We coordinate a number of our MS4 efforts with our partners, especially related to education and outreach efforts.

At the June 1 Board meeting, any members of the public that wish to comment on the SWPPP may during this agenda item.

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**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 Items:** Follow all legal requirements applicable to watershed districts.

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**Staff Recommendation:**

Accept the 2021 MS4 Annual Report.

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**Financial Implications:**

None.

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**Board Action Requested:**

Accept the 2021 MS4 Annual Report and authorize District Administrator to submit the report to the MPCA.

# MS4 question worksheet for 2021 annual report

Municipal Separate Storm Sewer Systems (MS4s)  
Reporting period January 1, 2021 to December 31, 2021

Due June 30, 2022

Copy of questions – **Not for submittal**

**Instructions:** This form is for your personal use only. Complete the online annual report to provide a summary of your activities under the 2013 MS4 Permit (Permit) between January 1, 2021, and December 31, 2021. The online annual report and additional information can be found on the Minnesota Pollution Control Agency's (MPCA) website at: [https://stormwater.pca.state.mn.us/index.php?title=MS4\\_Annual\\_Report](https://stormwater.pca.state.mn.us/index.php?title=MS4_Annual_Report).

**Note:** The annual report questions remain unchanged from the previous annual report because MS4 permittees were covered under the 2013 MS4 Permit for the majority of 2021. In the next annual report (due June 30, 2023), you will be required to report on activities completed to meet requirements under the 2020 MS4 Permit.

**Questions:** Contact Cole Landgraf ([cole.landgraf@state.mn.us](mailto:cole.landgraf@state.mn.us) or 651-757-2880) or your assigned MPCA staff member listed at [https://stormwater.pca.state.mn.us/index.php?title=MS4\\_staff\\_contact\\_information\\_and\\_staff\\_assignments](https://stormwater.pca.state.mn.us/index.php?title=MS4_staff_contact_information_and_staff_assignments).

## Contact information

### MS4 General contact information

Full name: Tina Carstens Title: Administrator  
Mailing address: 2665 Noel Drive  
City: Little Canada State: MN Zip code: 55117  
Phone: 651-792-7960 Email: tina.carstens@rwmwd.org

### Preparer contact information (if different from the MS4 General contact)

Full name: Nicole Title: Soderholm  
Mailing address: 2665 Noel Drive  
City: Little Canada State: MN Zip code: 55117  
Phone: 651-792-7976 Email: nicole.soderholm@rwmwd.org

## Minimum Control Measure (MCM) 1: Public education and outreach

The following questions refer to Part III.D.1. of the Permit.

2. Did you select a stormwater-related issue of high priority to be emphasized during this Permit term?  Yes  No  
[Part III.D.1.a.(1)]
3. If 'Yes' in Q2, what is your stormwater-related issue(s)? Check all that apply.
- Total Maximum Daily Loads (TMDLs)
  - Local businesses
  - Residential best management practices (BMPs)
  - Pet waste
  - Yard waste
  - Deicing materials
  - Household chemicals
  - Construction activities
  - Post-construction activities
  - Other (describe): Storm drain cleaning

4. Have you distributed educational materials or equivalent outreach to the public focused on illicit discharge  Yes  No recognition and reporting? [Part III.D.1.a.(2)]
5. Do you have an implementation plan as required by the Permit? [Part III.D.1.b.]  Yes  No
6. How did you distribute educational materials or equivalent outreach? [Part III.D.1.a.] *Check all that apply in table below.*
7. For the items checked in **Q6** below, who is the intended audience? *Check all that apply in table below.*
8. For the items checked in **Q6** below, enter the total circulation/audience in table below (if unknown, use best estimate).

Q6. How did you distribute educational materials? (Check all that apply):	Q7. Intended audience? (Check all that apply.)						Q8. Total circulation /audience:
	Residents	Local businesses	Developers	Students	Employees	Other	
<input checked="" type="checkbox"/> Brochure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	200
<input checked="" type="checkbox"/> Newsletter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,591
<input type="checkbox"/> Utility bill insert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Newspaper ad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Radio ad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Television ad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Cable access channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Stormwater-related event	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	400
<input checked="" type="checkbox"/> School presentation or project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	671
<input checked="" type="checkbox"/> Website	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	53,013
<input checked="" type="checkbox"/> Other (1): describe Smart Salting targeted letter to school principals, churches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	97
<input checked="" type="checkbox"/> Other (2): describe BMP tour, Shoreview	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15
<input type="checkbox"/> Other (3): describe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

For **Q9** and **Q10**, provide a brief description of each activity related to public education and outreach (e.g., rain garden workshop, school presentation, public works open house) held and the date each activity was held from January 1, 2021, to December 31, 2021. [Part III.D.1.c.(4)]

9. Date of activity *in table below*
10. Description of activity *in table below*

Q9. Date of activity	Q10. Description of activity
Throughout 2021	See Addendum for MCM 1

11. Between January 1, 2021, and December 31, 2021, did you modify your BMPs, measurable goals, or future plans for your public education and outreach program? [Part IV.B.]  Yes  No

If 'Yes,' describe these modifications:

RWMWD needed to modify plans for the annual WaterFest event because partners and participants were hesitant to participate due to the ongoing Covid-19 pandemic. During a normal year the event typically draws between 1,500 and 3,000 people. There was a much smaller audience in 2021 (est. 400 visitors).

In general, RWMWD staff engaged a smaller number of school-aged youth during 2021 due to pandemic-related school disruptions, visitor policies, etc. Programming was more focused on outdoor



activities in the spring and fall as much as possible for safer interaction with students and teachers.

## MCM 2: Public participation/involvement

The following questions refer to Part III.D.2.a. of the Permit.

12. You must provide a minimum of one opportunity each year for the public to provide input on the adequacy of your Stormwater Pollution Prevention Program (SWPPP). Did you provide this opportunity between January 1, 2021, and December 31, 2021? [Part III.D.2.a.(1)]  Yes  No
13. If 'Yes' in Q12, what was the opportunity that you provided? *Check all that apply.*  Yes  No
- Public meeting  
 Public event  
 Other
14. If '**Public meeting**' in Q13, did you hold a stand-alone meeting or combine it with another event?  
 Stand-alone  
 Combined
- Enter the date of the public meeting: 6/2/21  
Enter the number of citizens that attended and were informed about your SWPPP: 5
15. If '**Public event**' in Q13, describe:  
  
Enter the date (mm/dd/yyyy) of the public meeting: \_\_\_\_\_  
Enter the number of citizens that attended and were informed about your SWPPP: \_\_\_\_\_
16. If '**Other**' in Q13, describe:  
  
Enter the date (mm/dd/yyyy) of the public meeting: \_\_\_\_\_  
Enter the number of citizens that attended and were informed about your SWPPP: \_\_\_\_\_
17. Between January 1, 2021, and December 31, 2021, did you receive any input regarding your SWPPP?  Yes  No  
If 'Yes,' enter the total number of individuals or organizations that provided comments on your SWPPP. \_\_\_\_\_
18. If 'Yes' in Q17, did you modify your SWPPP as a result of written input received? [Part III.D.2.b.(2)]  Yes  No  
If 'Yes,' describe those modifications.
19. Between January 1, 2021, and December 31, 2021, did you modify your BMPs, measurable goals, or future plans for your public participation/involvement program? [Part IV.B.]  Yes  No  
If 'Yes,' describe those modifications.

## MCM 3: Illicit discharge detection and elimination

The following questions refer to Part III.D.3. of the Permit.

20. Do you have a regulatory mechanism which prohibits non-stormwater discharges to your MS4? [Part III.D.3.b.]  Yes  No
21. Did you identify any illicit discharges between January 1, 2021, and December 31, 2021? [Part III.D.3.h.(4)]  Yes  No

22. If 'Yes' in Q21, enter the number of illicit discharges detected. 2
23. If 'Yes' in Q21, how did you discover these illicit discharges? Check all that apply and enter the number of illicit discharges discovered by each category.
- Public complaint
  - Staff
24. If 'Public complaint' in Q23, enter the number discovered by the public: 1
25. If 'Staff' in Q23, enter the number discovered by staff: 1
26. If 'Yes' in Q21, did any of the discovered illicit discharges result in an enforcement action (this includes verbal warnings)?  Yes  No
27. If 'Yes' in Q26, what type of enforcement action(s) was taken and how many of each action were issued between January 1, 2021, and December 31, 2021? **Check all that apply.** For each of the below checked, enter the number that were issued.  Yes  No
- Verbal warning: 1
  - Notice of violation: \_\_\_\_\_
  - Fine: \_\_\_\_\_
  - Criminal action: \_\_\_\_\_
  - Civil penalty: \_\_\_\_\_
  - Other: describe
- In 1 out of 2 illicit discharge incidents, self-reporting by another public entity alerted the District and the MN Duty Officer prior to any opportunity for staff or public discovery. Discharge occurred in infrastructure owned by that MS4. The District likes to be kept in the loop and often provides follow-up for water resource protection purposes.*
28. If 'Yes' in Q26, did the enforcement action(s) taken sufficiently address the illicit discharge(s)?  Yes  No
29. If 'No' in Q28, why was the enforcement not sufficient to address the illicit discharge(s)?
30. Do you have written Enforcement Response Procedures (ERPs) to compel compliance with your illicit discharge regulatory mechanism(s)? [Part III.B.]  Yes  No
31. Between January 1, 2021 and December 31, 2021, did you train all field staff in illicit discharge recognition (including conditions which could cause illicit discharges) and reporting illicit discharges for further investigations? [Part III.D.3.e.]  Yes  No
32. If 'Yes' in Q31, how did you train your field staff? **Check all that apply.**
- Email
  - PowerPoint
  - Presentation
  - Video
  - Field training
  - Other: describe

**The following questions refer to Part III.C.1. of the Permit.**

33. Did you update your storm sewer system map between January 1, 2021, and December 31, 2021? [Part III.C.1.]  Yes  No
34. Does your storm sewer map include all pipes 12 inches or greater in diameter and the direction of stormwater flow in those pipes? [Part III.C.1.a.]  Yes  No
35. Does your storm sewer map include outfalls, including a unique identification (ID) number and an associated geographic coordinate? [Part III.C.1.b.]  Yes  No
36. Does your storm sewer map include all structural stormwater BMPs that are part of your MS4? [Part III.C.1.c.]  Yes  No
37. Does your storm sewer map include all receiving waters? [Part III.C.1.d.]  Yes  No

38. In what format is your storm sewer map available:

- Hardcopy only
- GIS
- CAD
- Other: describe

39. Between January 1, 2021, and December 31, 2021, did you modify your BMPs, measurable goals, or future plans for your illicit discharge detection and elimination program? [Part IV.B.]  Yes  No

If 'Yes,' describe those modifications.

## MCM 4: Construction site stormwater runoff control

### The following questions refer to Part III.D.4. of the Permit

40. Do you have a regulatory mechanism that is at least as stringent as the Agency's general permit to Discharge Stormwater Associated with Construction Activity (CSW Permit) No. Minn. R. 100001 (<http://www.pca.state.mn.us/index.php/view-document.html?qid=18984>) for erosion and sediment controls and waste controls? [Part III.D.4.a.]  Yes  No  
(Permit can be found on the MPCA website at <https://www.pca.state.mn.us/water/construction-stormwater> (titled 'Minnesota NPDES/SDS Construction Stormwater General Permit').
41. Have you developed written procedures for site plan reviews as required by the Permit? [Part III.D.4.b.]  Yes  No
42. Have you documented each site plan review as required by the Permit? [Part III.D.4.f.]  Yes  No
43. Enter the number of site plan reviews conducted for sites an acre or greater between January 1, 2021, and December 31, 2021. 33
44. What types of enforcement actions do you have available to compel compliance with your regulatory mechanism? Check all that apply and enter the number of each used from January 1, 2021, to December 31, 2021.
- Verbal warning, Number that were issued: 2
  - Notice of violation, Number that were issued: 73
  - Administrative order, Number that were issued: \_\_\_\_\_
  - Stop-work order, Number that were issued: 0
  - Fine, Number that were issued: \_\_\_\_\_
  - Forfeit of security of bond money: 22
  - Withholding of certificate of occupancy \_\_\_\_\_
  - Criminal action, Number that were issued: \_\_\_\_\_
  - Civil penalty, Number that were issued: 0
  - Other: describe. Compliance letter from attorney, Number that were issued: 0
45. Do you have written ERPs to compel compliance with your construction site stormwater runoff control regulatory mechanism(s)? [Part III.B.]  Yes  No
46. Enter the number of active construction sites an acre or greater that were in your jurisdiction between January 1, 2021, and December 31, 2021: 44
47. Do you have written procedures for identifying priority sites? [Part III.D.4.d.(1)]  Yes  No

48. If 'Yes,' in Q47, How are sites prioritized? Check all that apply.

- Site topography
- Soil characteristics
- Types of receiving water(s)
- Stage of construction
- Compliance history
- Weather conditions
- Citizen complaints
- Project size
- Other: describe

49. Do you have a checklist or other written means to document site inspections when determining compliance? [Part III.D.4.d.(4)]  Yes  No

50. Enter the number of site inspections conducted for sites an acre or greater between January 1, 2021, and December 31, 2021. 523

51. Weekly, biweekly, monthly, or seasonally depending on project stage and priority level  
Enter the frequency at which site inspections are conducted (e.g., daily, weekly, monthly). [Part III.D.4.d.(2)]

52. Enter the number of trained inspectors that were available for construction site inspections between January 1, 2021, and December 31, 2021. 3

53. Provide the contact information for the inspector(s) and/or organization that conducts construction stormwater inspections for your MS4. List your primary construction stormwater contact first if you have multiple inspectors.

**(1) Inspector name:**

Organization: Mary Fitzgerald, RWMWD

Phone (office): 651-792-7956

Phone (work cell): \_\_\_\_\_

Email: mary.fitzgerald@rwmwd.org

Preferred contact method: Phone or e-mail

**(2) Inspector name:**

Organization: Nicole Soderholm, RWMWD

Phone (office): 651-792-7976

Phone (work cell): \_\_\_\_\_

Email: nicole.soderholm@rwmwd.org

Preferred contact method: Phone or e-mail

**(3) Inspector name:**

Organization: Paige Ahlborg, RWMWD

Phone (office): 651-792-7964

Phone (work cell): \_\_\_\_\_

Email: paige.ahlborg@rwmwd.org

Preferred contact method: Phone or e-mail

54. What training did inspectors receive? **Check all that apply.**
- University of Minnesota Erosion and Stormwater Management Certification Program
  - Qualified Compliance Inspector of Stormwater (QCIS)
  - Minnesota Laborers Training Center Stormwater Pollution Prevention Plan Installer or Supervisor
  - Minnesota Utility Contractors Association Erosion Control Training
  - Certified Professional in Erosion and Sediment Control (CPESC)
  - Certified Professional in Stormwater Quality (CPSWQ)
  - Certified Erosion Sediment and Storm Water Inspector (CESSWI)
  - Other: describe
55. Between January 1, 2021, and December 31, 2021, did you modify your BMPs, measurable goals, or future plans for your construction site stormwater runoff control program? [Part IV.B.]  Yes  No
- If 'Yes,' describe those modifications:

## MCM 5: Post-construction stormwater management in new development and redevelopment

The following questions refer to Part III.D.5. of the Permit.

56. Do you have a regulatory mechanism which meets all requirements as specified in Part III.D.5.a. of the Permit?  Yes  No
57. What approach are you using to meet the performance standard for Volume, Total Suspended Solids (TSS), and Total Phosphorus (TP) as required by the permit? [Part III.D.5.a.(2)] *Check all that apply.* Refer to the Technical Support Document at <http://www.pca.state.mn.us/index.php/view-document.html?gid=17815> for guidance on stormwater management approaches. *The TSD can be found on the MPCA website at <https://www.pca.state.mn.us/water/municipal-stormwater-ms4> (refer to the Post Construction Stormwater Management section under the 'Guidance and BMPs' tab).*
- Retain a runoff volume equal to one inch times the area of the proposed increase of impervious surfaces on-site
  - Retain the post-construction runoff volume on site for the 95th percentile storm
  - Match the pre-development runoff conditions
  - Adopt the Minimal Impact Design Standards
  - An approach has not been selected
  - Other method (Must be technically defensible - e.g., based on modeling, research and acceptable engineering practices)
- If 'Other method,' describe:*
- Retain a volume of 1.1" times the area of the new and reconstructed impervious surfaces onsite. All stormwater BMPs require pretreatment method(s) for TSS removal. Runoff rates for the 2, 10, and 100-year critical storm events must not exceed existing conditions.
58. Do you have written ERPs to compel compliance with your post-construction stormwater management regulatory mechanism(s)? [Part III.B.]  Yes  No
59. Between January 1, 2021, and December 31, 2021, did you modify your BMPs, measurable goals, or future plans for your post-construction stormwater management program? [Part IV.B.]  Yes  No
- If 'Yes,' describe those modifications.

## MCM 6: Pollution prevention/good housekeeping for municipal operations

The following questions refer to Part III.D.6. of the Permit.

60. Enter the total number of **structural stormwater BMPs, outfalls** (excluding underground outfalls), and **ponds** within your MS4 (exclude privately owned). Enter the number for each category below:

Structural stormwater BMPs: 21

Outfalls: 19

Ponds: 20

61. Enter the total number of **structural stormwater BMPs, outfalls** (excluding underground outfalls), and **ponds** that were inspected from January 1, 2021 to December 31, 2021 within your MS4 (exclude privately owned) [Part III.D.6.e.]. Enter the number for each category below:

Structural stormwater BMPs: 21

Outfalls: 19

Ponds: 20

62. Have you developed an alternative inspection frequency for any structural stormwater BMPs, as allowed in Part III.D.6.e.(1) of the Permit?  Yes  No

63. Based on inspection findings, did you conduct any maintenance on any structural stormwater BMPs?  Yes  No [Part III.D.6.e.(1)]

64. If 'Yes' in Q63, briefly describe the maintenance that was conducted:

*Removed 1 CY material (sediment/debris/muck) from Battle Creek sump, removed 1 CY material from Tanners Lake Alum Plant sump, removed 1 CY material from ABI sump, removed 1 CY material from Frost-Kennard spent lime chamber, removed 92 tons sediment/muck from PFS pavers, removed/replaced 50 tons filter rock at Gervais Mill Pond filter strip, removed 75 CY materia from Lower Afton Road sand trap, removed 12 CY material from ABI Pond diversion, reconstructed Owasso Basin berm, dredged 3,680 linear feet of Gervais Creek (removed 6,162 tons of material), cleaned 580 linear feet of permeable weirs at Tanners Wetland/Horseshoe Park, cleaned 65 linear feet of permeable weirs at Tanners 5<sup>th</sup> Street wetlands, repaired sink hole around overflow structure at McKnight berm.*

*The District coordinates maintenance activities for other MS4s by hiring a contractor and overseeing work. The cities then reimburse the District for project costs. This year, activities included: removed 127 tons of material from Round Lake Pond (City of Little Canada), removed 220 tons material from Margaret Pond and replaced stormwater infrastructure under Margaret Avenue (City of North St. Paul).I*

65. Do you own or operate any stockpiles, and/or storage and material handling areas? [Part III.D.6.e.(3)]  Yes  No

66. If 'Yes' in Q65, did you inspect all stockpiles and storage and material handling areas quarterly? [Part III.D.6.e.(3)]  Yes  No

67. If 'Yes' in Q66, based on inspection findings, did you conduct maintenance at any of the stockpiles and/or storage and material handling areas?  Yes  No

68. If 'Yes' in Q67, briefly describe the maintenance that was conducted:

69. Between January 1, 2021, and December 31, 2021, did you modify your BMPs, measurable goals, or future plans for your pollution prevention/good housekeeping for municipal operations program? [Part IV.B.]  Yes  No

If 'Yes,' describe those modifications:

## Discharges to impaired waters with a EPA-approved TMDL that includes an applicable WLA

If you have been assigned a Waste Load Allocation (WLA) in a TMDL that was approved by the U.S. Environmental Protection Agency (EPA) prior to August 1, 2013, and were not meeting WLA(s) at the time of your permit application, you must complete the **TMDL Annual Report Form**, available on the MPCA website at: [https://stormwater.pca.state.mn.us/index.php?title=Download\\_page\\_with\\_TMDL\\_forms](https://stormwater.pca.state.mn.us/index.php?title=Download_page_with_TMDL_forms).

Attach your completed TMDL Annual Report Form to the actual Annual Report as instructed within that document. [Part III.E.]

71. [question left blank for you to attach a file]

## Alum or Ferric Chloride Phosphorus Treatment Systems

The following questions refer to Part III.F.3.a. of the Permit. Provide the information below as it pertains to your alum or ferric chloride phosphorus treatment system.

72. Date(s) of operation:

Month	Date(s) of operation (mm/dd/yyyy – mm/dd/yyyy)
January	N/A
February	N/A
March	N/A
April	4/14/21-4/30/21
May	5/1/21-5/31/21
June	6/1/21-6/16/21, 6/20/21-6/30/21
July	7/1/21-7/20/21
August	N/A
September	9/13/21-9/30/21
October	N/A
November	N/A
December	N/A

Month	Q73 Chemical(s) used for treatment	Q74 Gallons of alum or ferric chloride treatment	Q75 Gallons of water treated	Q76 Calculated pounds of phosphorus removed
January	N/A	N/A	N/A	N/A
February	N/A	N/A	N/A	N/A
March	N/A	N/A	N/A	N/A
April	Alum	1,423	37,867,089	13.6
May	Alum	777	51,401,362	13.4
June	Alum	235	11,812,344	2.2
July	Alum	175	2,286,868	0.2
August	N/A	N/A	N/A	N/A
September	Alum	380	8,359,678	0.9
October	N/A	N/A	N/A	N/A
November	N/A	N/A	N/A	N/A
December	N/A	N/A	N/A	N/A

77. Any performance issues and corrective action(s), including date(s) when corrective action(s) were taken, between January 1, 2021, and December 31, 2021:

*The outflow pH was below 6.0 from 17:12 to 20:22 on 8/9/21. The Minnesota Department of Public Safety Duty Officer was contacted, and the pH values below 6.0 were reported. At the time of the low pH readings, the treatment facility was not operational. The inflow mixer was being repaired and kicked up a lot of sediment that likely had high alum concentrations, causing the low pH measured at the outflow. To resolve this issue, (1) the pipe to the alum treatment facility was blocked off, and the weir was removed to prevent water from entering and exiting the flocc pond; (2) the mixing chamber was cleaned out (alum removed); (3) the inflow pipe was then unblocked to allow water to reenter the treatment facility. The alum facility did not resume normal operations until 9/13/21 due to a lack of inflow because of persistent regional drought conditions.*

## Partnerships

78. Did you rely on any other regulated MS4s to satisfy one or more permit requirements?  Yes  No
79. If 'Yes' in Q78, describe the agreements you have with other regulated MS4s and which permit requirements the other regulated MS4s help satisfy: [Part IV.B.6.]

## Additional information

If you would like to provide any additional files to accompany your Annual Report, use the space below to upload those files. For each space, you may attach one file.

- 80. [Optional space for you to attach a file]
- 81. [Optional space for you to attach a file]
- 82. [Optional space for you to attach a file]
- 83. Optional, describe the file(s) uploaded:

## Owner or Operator Certification

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The person with overall administrative responsibility for SWPPP implementation and permit compliance must certify this MS4 Annual Report. This person must be duly authorized and should be either a principal executive (i.e., Director of Public Works, City Administrator) or ranking elected official (i.e., Mayor, Township Supervisor).

- Yes - I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete (Minn. R. 7001.0070). I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment (Minn. R. 7001.0540).

By typing my name in the following space, I certify the above statements to be true and correct, to the best of my knowledge, and that information can be used for the purpose of processing my MS4 Annual Report.

Name of certifying official: The certifying official must electronically sign the online Annual Report form.

Title: Administrator Date: \_\_\_\_\_  
(mm/dd/yyyy)

**Note:** In the online form, you will be prompted to provide the email(s) of the individual(s) you would like to receive the MS4 Annual Report for 2021 submittal confirmation email from the MPCA. After you submit the form, please allow up to three business days to receive this confirmation email.

Email (1) nicole.soderholm@rwmwd.org  
Email (2) \_\_\_\_\_  
Email (3) \_\_\_\_\_



## **2021 MS4 Annual Report Addendum: MCM 1**

### **Schools and Youth Engagement**

5/6, 5/11: Ames Lake Clean-Up with 2 fourth and 2 fifth Grade L'Etoile du Nord classes hiked to Ames Lake to explore the life in the wetland and do a clean-up around the Lake with RWMWD education staff on May 6 and May 11, 100 kids

4/29: Rain garden clean-up and run-off lesson at Weaver Elementary in Maplewood on April 29 with 3 classes (75 kids)

5/25: Three Weaver Elementary fifth grade classes visited Wakefield Park on May 25 to explore the wildlife, flora, rain gardens and study and measure the water quality of Wakefield Lake. (75 kids)

5/26: Central Park Elementary rain garden clean-up – May 26 with two 6<sup>th</sup> grade classes in Roseville (50 youth)

Site preparations and Native planting at Boys and Girls Club with L'Etoile du Nord fifth graders (52) and high school youth (42)

10/26, 11/4: Watershed lesson and water quality monitoring pre-lesson in class with two fifth grade classes) from L'Etoile du Nord in St. Paul on October 26 followed up by hands-on lesson at Ames Lake in St. Paul doing water quality monitoring on November 4 (50 youth)

10/29, 11/1: Walking field trip by 3 fourth grade classes from Battle Creek Elementary to McKnight Basins, Battle Creek and neighborhood rain gardens to learn about flow of water through watershed, flood prevention and protecting water through rain gardens October 29 and November 1, (66 kids)

11/3, 11/5: Watershed and non-point source pollution education lesson for 2 classes of Central Park 6<sup>th</sup> graders in Roseville on November 3 and leaf/storm drain cleaning at Wildlife Rehabilitation Center and Central Park arboretum parking lots in Roseville on November 5 (50 youth)

11/23, 11/24: Battle Creek Elementary watershed non-point source pollution lesson with 3 fourth grade classes, November 23 and 24 (66 kids)

Planting for Water Quality – seed starting for L’Etoile du Nord third graders, 2 classes , December 8 and December 16 (45 kids)

### **Community Outreach/Education/Stewardship Events**

2/24: Water Steward virtual tour for 2021 Water Stewards-in-training presented by certified Water Stewards, Linda Neilson, Paul Gardner and Michelle Natarajan sharing their experiences of water stewardship capstone projects including rain gardens, rain barrels and bee lawns (4 adults)

6/19-6/27: WaterFest, a public education and engagement event at Lake Phalen – included “We Are Water” exhibit (400 participants)

7/12: Shoreview BMP Tour for the public, July 12 with stops at the Hoffman residence to see two rain gardens, a stop at the Gardner residence to see tiered rain garden system with curb cut and multiple rain barrels and two shoreline restoration projects at Snail Lake and Snail Lake Regional Park. (15 people)

Throughout August: Shoreview Self-Guided BMP tour held during the month of August featuring 12 stops in Shoreview including home and school rain gardens, shoreline and wetland buffer restorations, a native pollinator school garden and sites that featured permeable asphalt, pavers, pervious concrete, rain barrels and a stormwater pond that uses iron filings to capture and reduce phosphorus levels. This tour’s itinerary was published online on our website with descriptions and a map with signs at each location with QR codes that linked to this information about each BMP (unknown participants).

8/21: Bikes and Blooms tour in Battle Creek Subwatershed August 21 --stops at a variety of watershed friendly rain gardens, native plantings and landscaping projects on the East Side of St. Paul. This tour provided the opportunity to learn about the history of water management in the Battle Creek area, view projects implemented to address flooding issues at the McKnight infiltration basins in Battle Creek Regional Park’s Water Park and the weirs along the creek. The tour also introduced the group to boulevard native plantings that resolved drainage issues, a bee lawn/alternative turf project recently completed at a residence, and a large front yard pollinator friendly native planting. (20 attendees)

## **Outreach and Education:**

### **Smart Salting:**

Smart Salting Letters to principals at 26 elementary schools

Smart Salting Letters to principals at 17 middle and high schools

Smart Salting Letters to 54 churches

### **SMART Salting Workshops:**

Smart Salting for Property Managers, Nov. 2, 18 participants

### **Adopt-A-Drain:**

A total of 882 drains adopted, 467 participants. Collected 5,681.3 pounds of debris, 65 new participants adopted 184 new drains in 2021

### **Illicit Discharge Detection and Elimination (IDDE) Education**

“When Watershed Educators Go Rogue” EMWREP East Metro Blog (12,407 views (8501 visitors)

### **RWMWD Website**

53,013 visitors

22,646 page views

### **RWMWD Newsletter**

1,591 recipients

Newsletter Article education topics:

Adopt a drain: 10/8, 11/8

Rain gardens, native planting: 9/17

### **RWMWD Social media**

1,126 Facebook followers

675 Instagram followers

1,017 Twitter followers

### **Social Media Posts by Topic**

Adopt a Drain: 4/9, 6/23, 9/22, 10/8, 12/1 (Facebook and Twitter)

Yard waste: 10/5 (Facebook)

Raingardens and native plants: 7/14, 4/22 (Facebook and Twitter) 6/22 (Instagram)

Pet waste: 6/15 (Twitter and Facebook)

Deicing/smart salting: 1/26, 2/11, (Facebook, Twitter, Instagram) and 12/7, 12/10, 12/19 (Instagram and Facebook)

Stewardship grants April 22, 2021 (Facebook)

Who polluted the water May 25, 2021 (Facebook)

Stormwater grants September 29, 2021 (Facebook)

Salt Report December 6, 2021 (Facebook)

Ice and Snow Removal Tips December 19,2021 (Facebook)

EMWREP Blog about Salt: <https://eastmetrowater.org/2021/10/26/salt-a-growing-problem-for-minnesotas-water/> Blog has 8501 visitors

# **Annual Report**

***Prepared for the Ramsey Washington Metro Watershed District for  
Submittal to the Minnesota Pollution Control Agency  
to Fulfill the Reporting Requirements for the Tanners Alum Treatment  
Facility permitted under the General NPDES/SDS Permit for Municipal  
Separate Storm Sewer Systems, Permit MNR040000***

***Barr Engineering Co.***

***May 2022***

## **1.0 Report Overview**

Discharge from the Tanner's Lake Alum Treatment Facility is permitted under the Ramsey Washington Metro Watershed District (RWMWD) Municipal Separate Storm Sewer Systems (MS4) permit which is covered by the Minnesota Pollution Control Agency (MPCA) Small MS4 General Permit MNR040000. Submission of an annual report is required by the MS4 permit. Included in this 2021 annual report are:

- Operation details including volume of water treated, gallons of alum used, and average alum dose.
- Summaries of data collected from the inflow to the facility and outflow from the facility (i.e., floc pond discharge), and
- Phosphorus load removed by the alum treatment facility, estimated from FLUX modeling,
- Lake data from Tanner's Lake, and
- Summary of 2021 sludge management activities.

## **2.0 Operation in 2021**

In 2021, the Tanner's alum treatment facility operated for a total of 113 days during April 14 through September 30. The alum plant was shut down multiple times during the treatment season due to lack of flow into the treatment facility. The treatment facility was shut down on June 16, resumed operation on June 20, was shut down on July 20, resumed operation on September 13, and was shut down on September 30, which was the end of the 2021 treatment season. Total water flows treated by the Tanners alum treatment facility in 2021 were 29,515,241 gallons. Total alum application in 2021 was 2,990 gallons. The average aluminum dose applied in 2021 was 5.54 mg/L Al.

## **3.0 Tabular Summary of 2021 In-Stream Data**

Data collected from permitted monitoring points SW001 (upstream of treatment plant), and SD002 (discharge from floc pond) during April 14 through September 30, 2021 are summarized in Tables 1 and 2.

The 2021 data collected from permitted monitoring points SW001 and SD002 have been electronically submitted to the MPCA in EQUIS format.

**Table 1 Water Quality Data Summary: Upstream Inflow to the Alum Treatment Facility (SW001)**

Date	Sample	Aluminum (µg/L)		Phosphorus (mg/L)			pH (SU)
		Total	Dissolved	Total	Dissolved	Ortho	
4/15/2021	Grab	150	9.0*	0.086	0.0058	0.006	7.85
4/22/2021	Grab		32.2	0.054	<0.010	<0.0021	7.80
4/28/2021	Grab		<7.1	0.19	<0.010	0.016	7.89
5/5/2021	Grab	1,390	8.3*	0.079	<0.010	<0.0021	7.73
5/12/2021	Grab		<7.1	0.1	0.012	0.0022*	7.41
5/19/2021	Grab		12.2*	0.17	0.041	0.026	7.73
5/27/2021	Grab		11.0*	0.36	0.081	0.049	7.62
6/3/2021	Grab	207	10.8*	0.22	0.024	0.016	7.90
6/9/2021	Grab		7.1*	0.21	0.034	0.014	7.88
Due to lack of flow, the alum treatment facility was shut down on 6/16/2021 and resumed operation on 6/21/2021							
6/24/2021	Grab		27.8	0.079	0.025	0.019	7.34
7/1/2021	Grab	108	19.4*	0.085	0.031	0.019	7.92
7/8/2021	Grab		14.8*	0.082	0.032	0.028	8.06
7/15/2021	Grab		22	0.075	0.039	0.029	7.78
Due to lack of flow, the alum treatment facility was shut down on 7/20/2021 and resumed operation on 9/13/2021.							
8/10/2021	Grab	120	35.4	0.078	0.034	0.023	7.48
9/16/2021	Grab	52.7	8.4*	0.16	0.028	0.017	7.68
9/22/2021	Grab		<8.0	0.1	0.029	0.027	7.64
9/30/2021	Grab		<8.0	0.071	0.022	0.024	7.75

\*Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

Table 2 Water Quality Data Summary: Discharge from Floc Removal Basin (SD002)

Date	Sample	Aluminum (µg/L)		Phosphorus (mg/L)			pH (SU)
		Total	Dissolved	Total	Dissolved	Ortho	
4/15/2021	Grab	2,230	67	0.026	<0.0024	0.0015	7.30
4/22/2021	Grab		49.8	0.018*	<0.010	<0.0021	7.68
4/28/2021	Grab		46.9	0.026	<0.010	0.0068	7.57
5/5/2021	Grab	90	51.1	0.03	0.013*	<0.0021	7.24
5/12/2021	Grab		44.1	0.042	0.0077	<0.0012	7.78
5/19/2021	Grab		42.5	0.038	<0.0024	0.0020	7.31
5/27/2021	Grab		45.9	0.076	0.0097	0.0014	7.16
6/3/2021	Grab	2,570	76.8	0.076	0.0091	<0.0012	7.27
6/9/2021	Grab		47.9	0.10	0.011	<0.0012	7.40
6/16/2021	Grab		93.3	0.15	0.0038*	0.0024	7.12
6/24/2021	Grab		24.0	0.038	0.005	<0.0014	7.31
7/1/2021	Grab	286	17.0*	0.068	0.0064	0.003	7.38
7/8/2021	Grab		19.7*	0.055	0.0032*	<0.0014	7.38
7/15/2021	Grab		18.6*	0.056	0.0039*	0.0031	7.46
7/20/2021	Grab		13.9*	0.024	0.007	0.0021	7.32
8/10/2021	Grab	1,990	30.2	0.043	0.11	<0.0014	6.82
9/16/2021	Grab	1,060	50.1	0.064	0.0089	0.0024	7.16
9/22/2021	Grab		51.4	0.04	0.0038*	0.0023	7.28
9/30/2021	Grab		24.8	0.03	0.0027*	0.03	7.33

\*Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

#### 4.0 Graphical Summary of 2021 In-Stream Data and Compare 2021 Data with Previous Years

Figures 1 through 5 present 2021 data in graphical format and compare it with data collected in previous years. The data collection location for the outflow has varied between the floc pond outflow (1998-2003 and 2007-2021) and the 7<sup>th</sup> Street wetland outflow (2004-2006). The historical graphs in this report only present the outflow data from the floc pond, the outflow specified in the MS4 permit. Inflow and outflow total aluminum data are presented in Figure 1. Inflow and outflow dissolved aluminum data are presented in Figure 2. Inflow and outflow total phosphorus data are presented in Figure 3. Inflow and outflow dissolved phosphorus data are presented in Figure 4. Dissolved phosphorus during 2008 through 2017 was measured as ortho phosphorus.



During 2018, dissolved phosphorus was measured as ortho phosphorus during May 3 and May 10 and as dissolved phosphorus during all other 2018 monitoring events. All 2019 through 2021 dissolved phosphorus measurements were as dissolved phosphorus. Inflow and outflow pH data are presented in Figure 5.

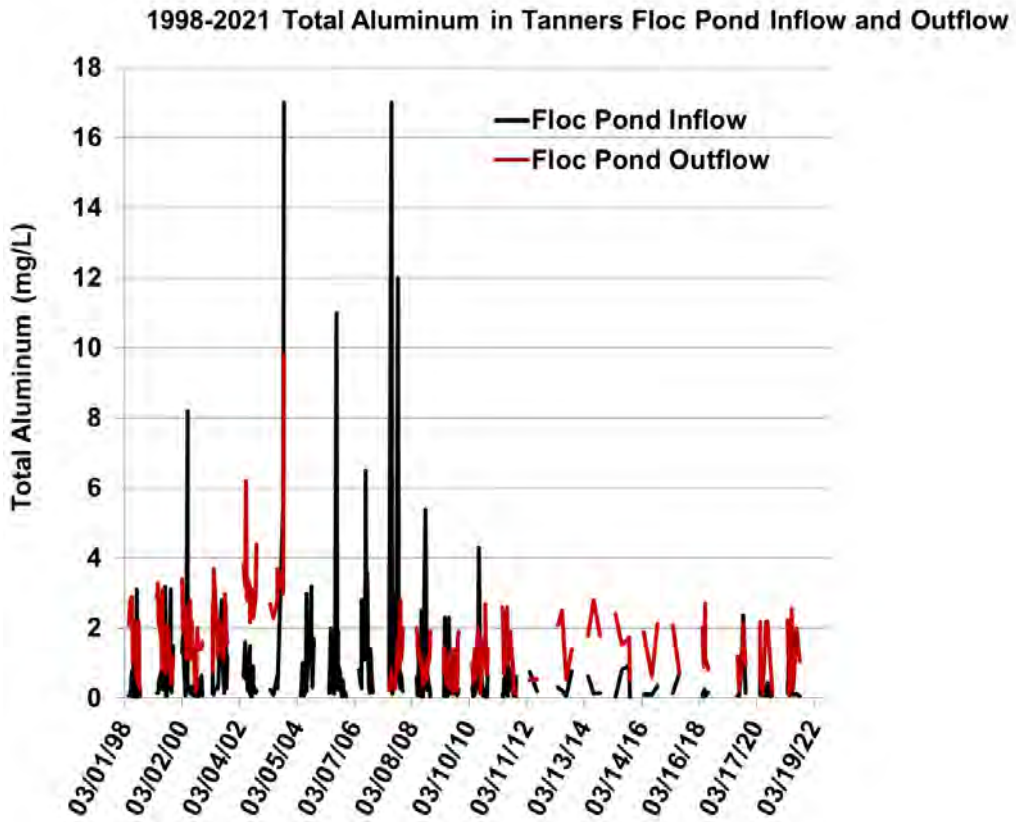


Figure 1. 1998-2021 Total Aluminum in Tanners Floc Pond Inflow and Outflow

1998-2021 Dissolved Aluminum in Tanners Floc Pond Inflow and Outflow

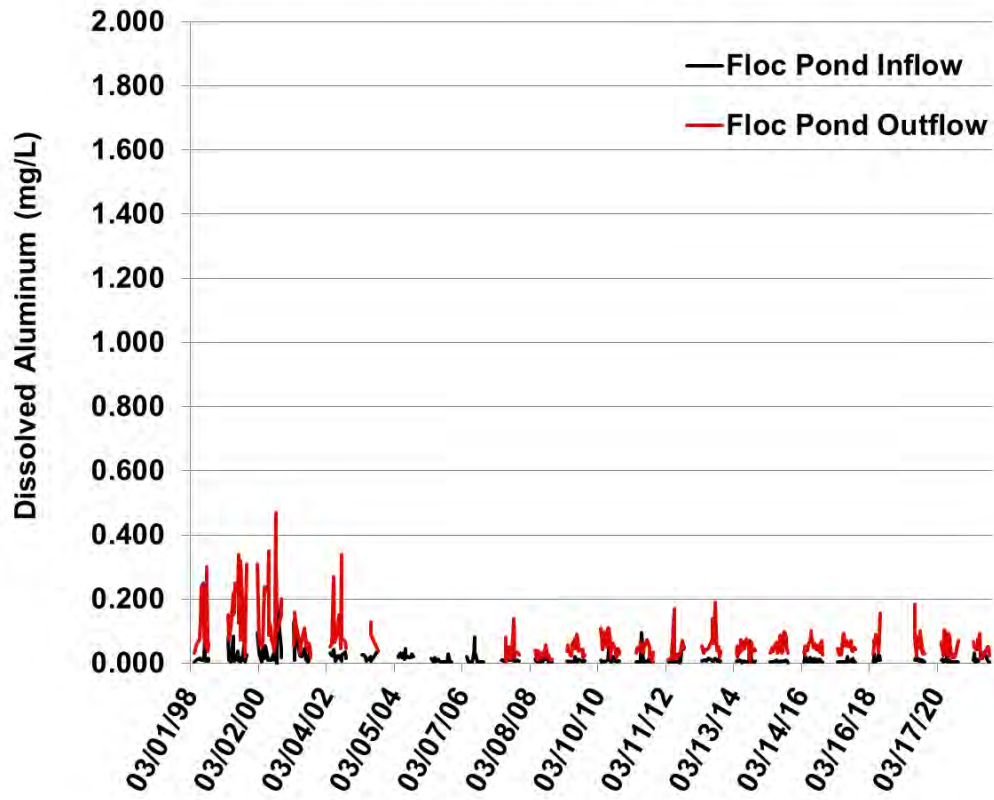


Figure 2. 1998-2021 Dissolved Aluminum in Tanners Floc Pond Inflow and Outflow

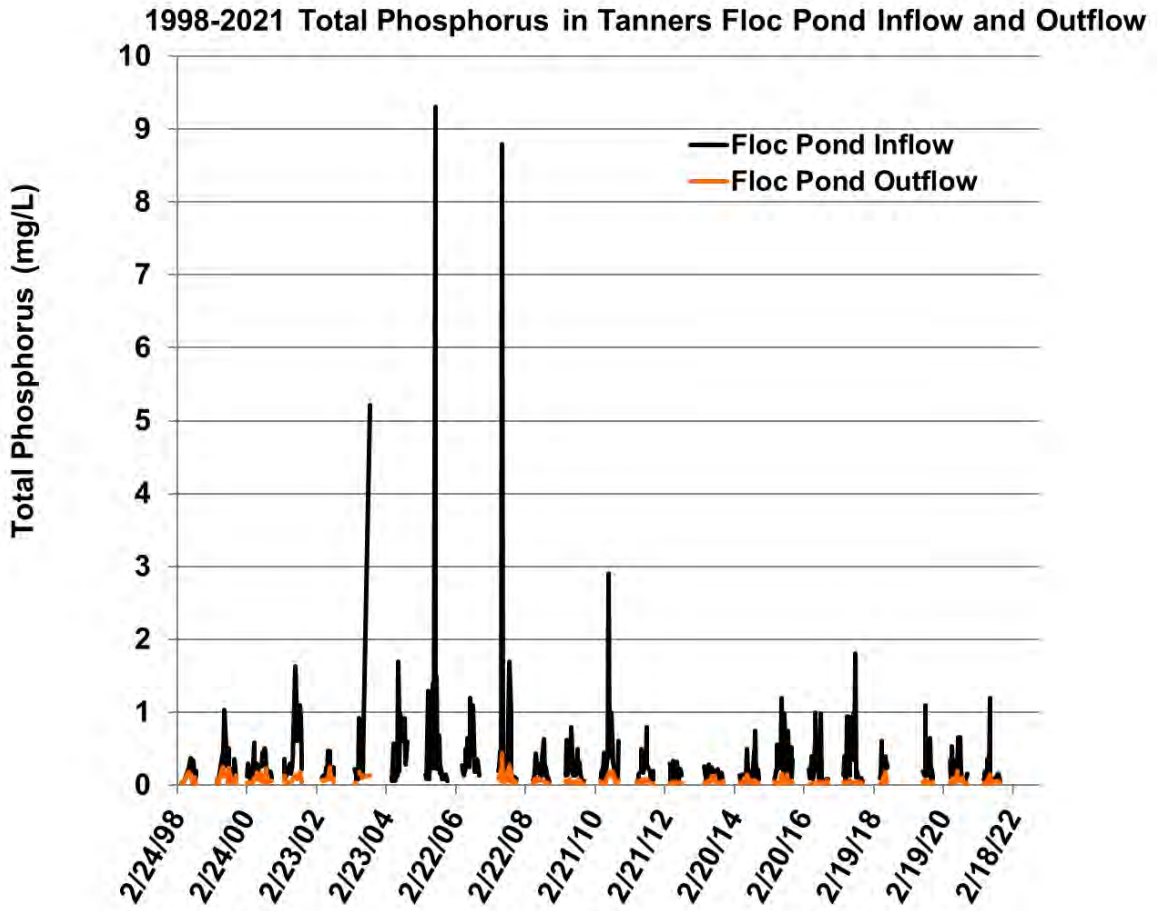


Figure 3. 1998-2021 Total Phosphorus in Tanners Floc Pond Inflow and Outflow

### 2008-2021 Dissolved Phosphorus in Tanners Floc Pond Inflow and Outflow

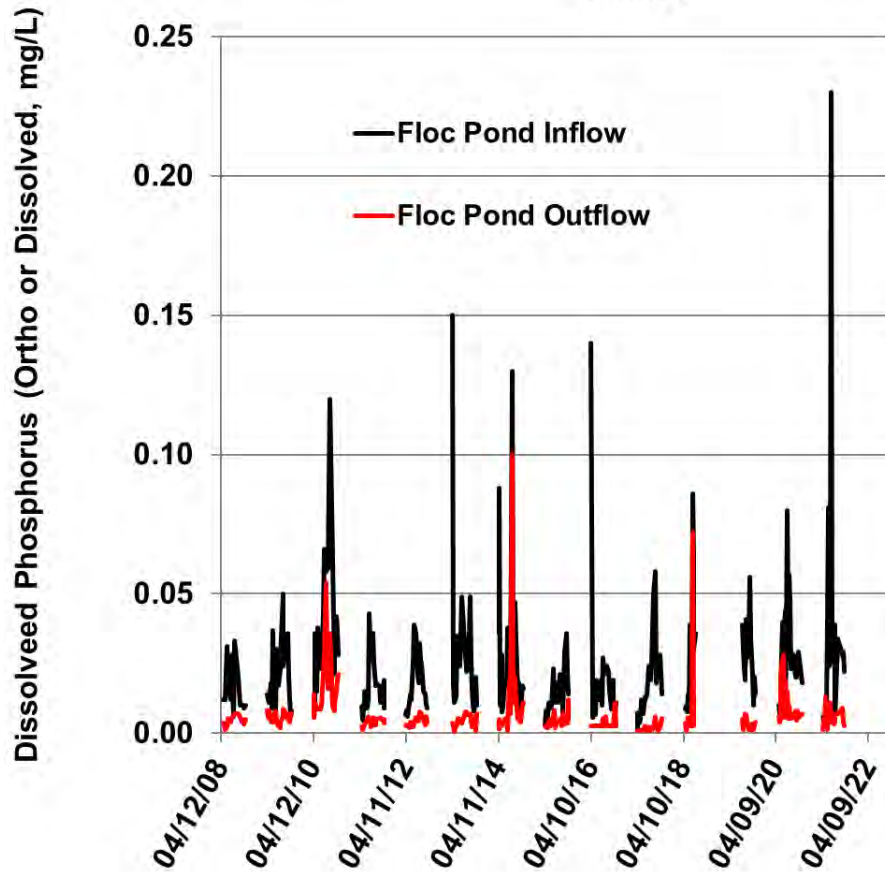


Figure 4. 2008-2021 Dissolved Phosphorus in Tanners Floc Pond Inflow and Outflow

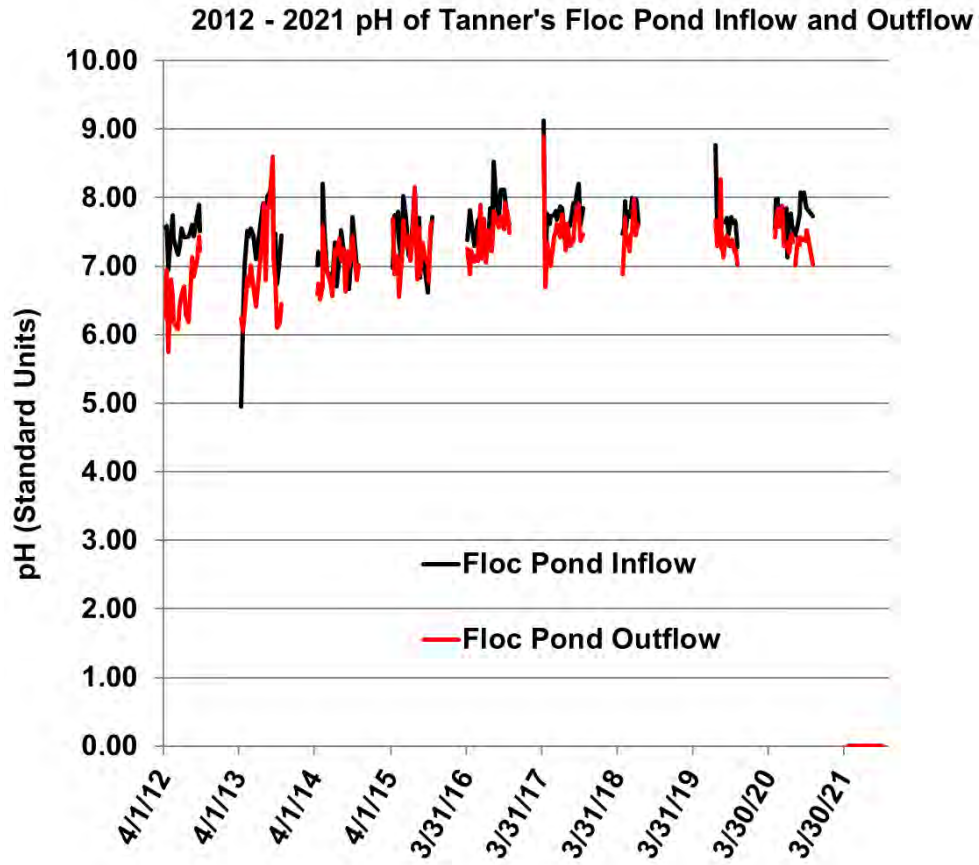


Figure 5. 2012-2021 pH of Tanners Floc Pond Inflow and Outflow

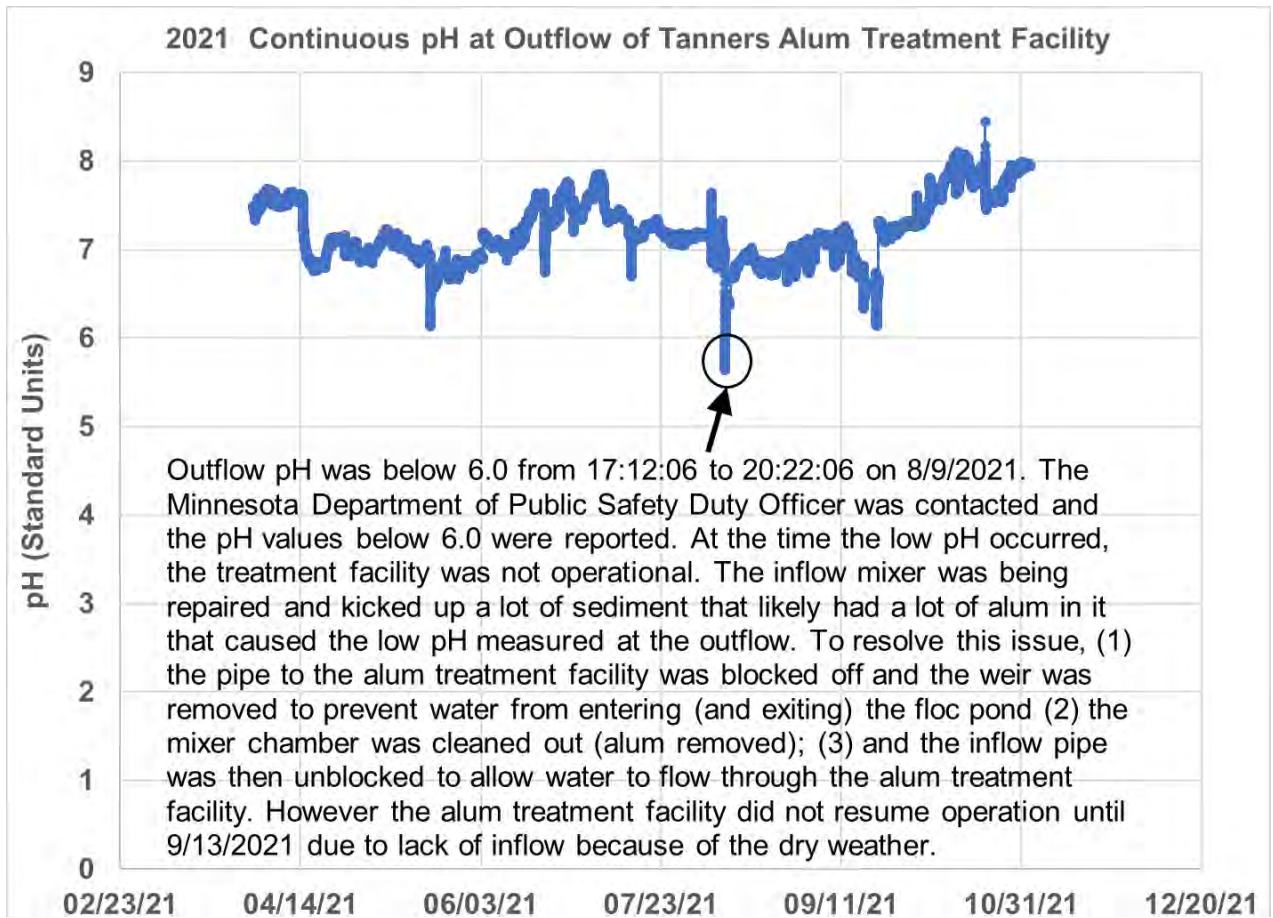


Figure 6. 2021 Continuous pH of Tanners Floc Pond Outflow

**5.0 2021 Phosphorus Removal by Treatment Facility: FLUX Modeling**

Total and dissolved phosphorus removal by the Tanner’s Alum Treatment Facility during 2021 were estimated from FLUX modeling of inflow and outflow phosphorus load during the period of facility operation. Continuous flow data together with inflow and outflow total and dissolved phosphorus data were input into the FLUX model to determine phosphorus load. FLUX estimated total phosphorus and dissolved phosphorus inflow and outflow loads and loads removed by the alum treatment facility are for the operation period of the alum treatment facility and do not include periods when the facility was not treating inflow waters. The dry weather in 2021 resulted in the alum treatment facility being shut down due to lack of inflow during a substantial portion of the treatment season. The alum treatment facility began operation on April 14 and ended operation for the 2021 treatment season on September 30. During this period, the alum treatment facility was shut down due to lack of inflow on June 16, resumed operation on June 20, was shut down on July 20 due to lack of inflow, resumed operation on September 13, and remained in operation until the end of the treatment season on September 30. Periods when the facility was not in operation were not included in the estimated inflow or outflow load or load

removed by the alum treatment facility. 2021 model results are presented in Table 3. Table 3 also presents the FLUX model results for 2012 through 2020.

In 2021, the estimated inflow total phosphorus load during the period of facility operation was 42 pounds. The treatment facility removed an estimated 30 pounds of total phosphorus. On average, 72 percent of the total phosphorus load entering the treatment facility during the 2021 period of operation was removed by alum treatment (Table 3).

During 2012 through 2020, average total phosphorus removal rates by the Tanners alum treatment facility have ranged from a low of 68 percent in 2020 to a high of 89 percent in 2016. The 2021 average total phosphorus removal rate of 72 percent was within the range of removal rates observed during 2012 through 2020.

In 2021, the estimated inflow dissolved phosphorus load during the period of facility operation was 7 pounds and the treatment facility removed an estimated 5 pounds of dissolved phosphorus. Hence, on average, 73 percent of the dissolved phosphorus load entering the treatment facility was removed by alum treatment (Table 3). The 2021 dissolved phosphorus removal rate was within the range of removal rates observed during 2012 through 2020 (59 to 92 percent) (Table 3).

Monthly inflow and outflow total phosphorus loads estimated by FLUX are shown in Figure 6 and monthly inflow and outflow dissolved phosphorus loads are shown in Figure 7.

**Table 3. Tanners Alum Treatment Facility: 2012-2021 Phosphorus Removal Estimated from FLUX Modeling**

Year	Parameter	Inflow Mass (lbs)	Outflow Mass (lbs)	Phosphorus Removed (lbs)	Phosphorus Removal (%)
2012	Total Phosphorus	151	21	130	86
	Dissolved Phosphorus (Ortho)	13	2	11	82
2013	Total Phosphorus	158	43	115	73
	Dissolved Phosphorus (Ortho)	35	4	32	89
2014	Total Phosphorus	350	106	244	70
	Dissolved Phosphorus (Ortho)	34.6	8.3	26.3	76
2015	Total Phosphorus	514	77	437	85
	Dissolved Phosphorus (Ortho)	19	6	13	70
2016	Total Phosphorus	509	57	452	89
	Dissolved Phosphorus (Ortho)	34	5	29	85
2017	Total Phosphorus	405	51	354	87
	Dissolved Phosphorus (Ortho)	25	2	23	92
2018	Total Phosphorus	182**	52**	129**	71**
	Dissolved Phosphorus (Dissolved and Ortho*)	23**	9**	13**	59**
2019	Total Phosphorus	193**	23**	169**	88**
	Dissolved Phosphorus (Dissolved)	21**	2**	19**	90**
2020	Total Phosphorus	198**	64**	134**	68**
	Dissolved Phosphorus (Dissolved)	28**	10**	18**	65**
2021	Total Phosphorus	42**	12**	30**	72**
	Dissolved Phosphorus (Dissolved)	7**	2**	5**	73**

\*Ortho phosphorus was measured on 5/3/2018 and 5/10/2018 and dissolved phosphorus was measured on all other 2018 sample dates.

\*\*FLUX estimated loads and loads removed by alum treatment facility are for the operation period of the alum treatment facility. Periods when the facility was not in operation were not included in the estimated loads or loads removed by the alum treatment facility.



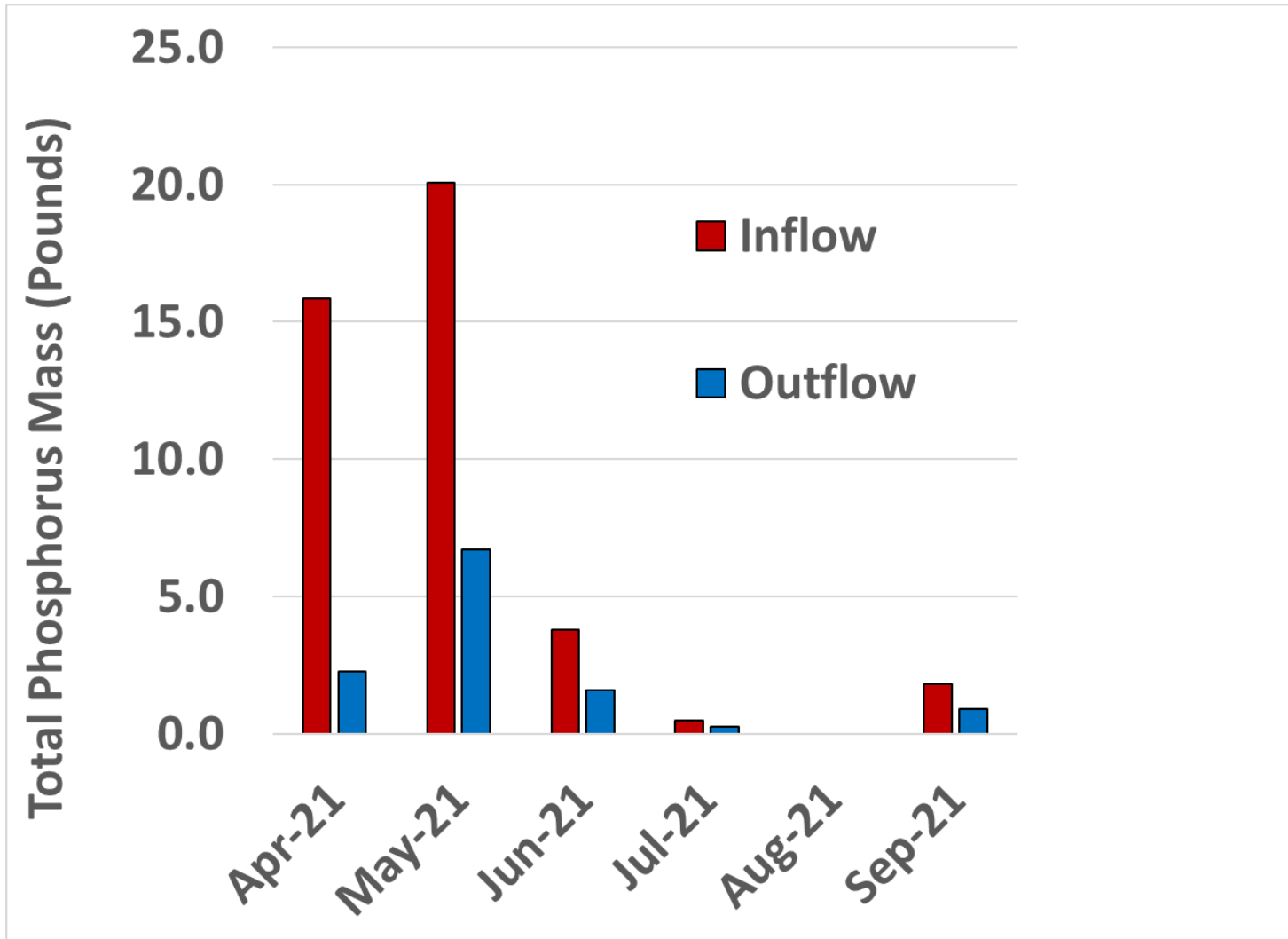


Figure 6. 2021 Inflow and Outflow Total Phosphorus Loads

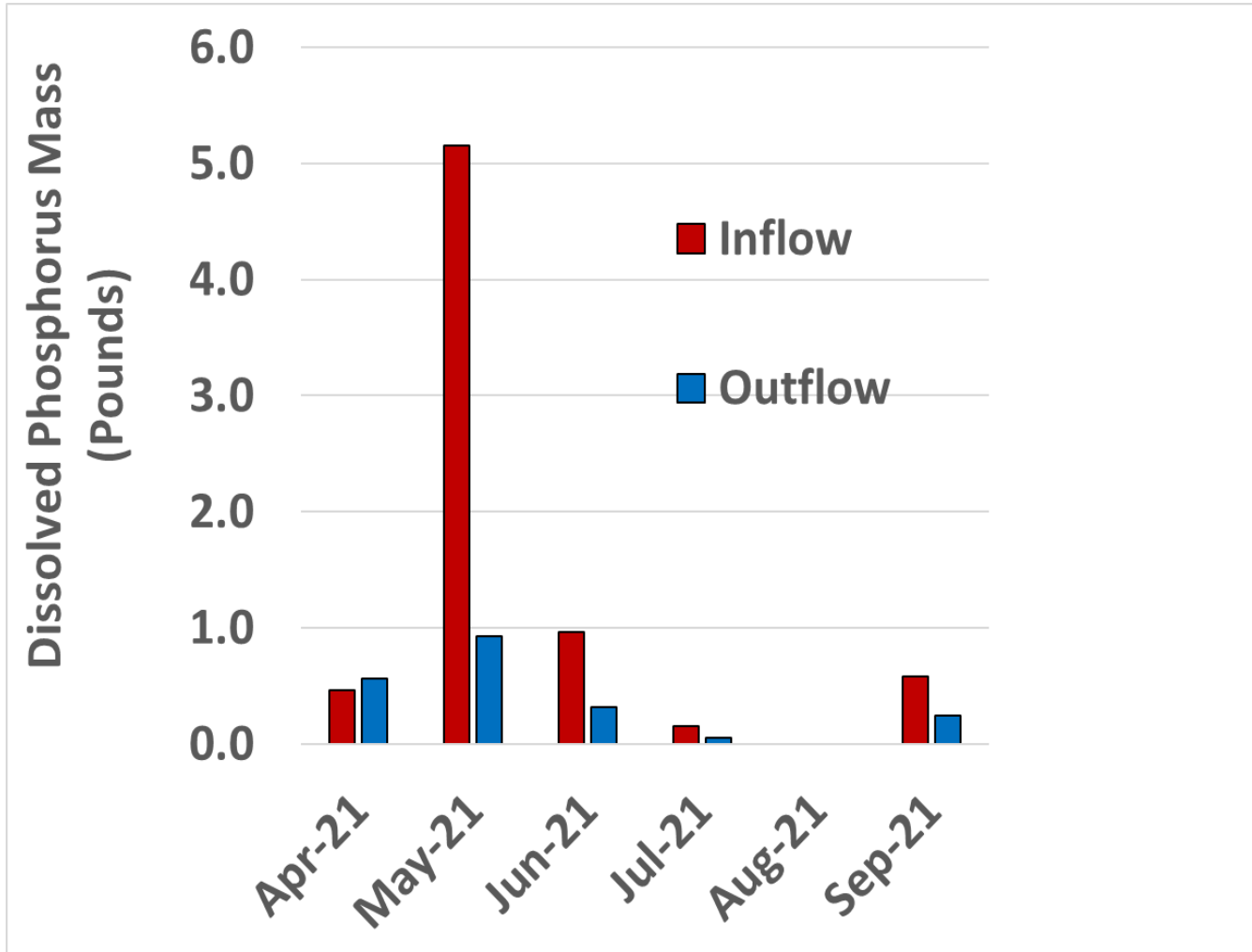


Figure 7. 2021 Inflow and Outflow Dissolved Phosphorus Loads

A monthly summary of gallons of water treated, gallons of alum applied during treatment, and pounds of total and dissolved phosphorus removed during the 2021 operation period for the Tanners alum treatment facility is shown in Table 4.

**Table 4. Tanners Alum Treatment Facility: Summary of Gallons of Water Treated, Gallons of Alum Applied during Treatment, and the FLUX Modeling Estimate of Pounds of Total and Dissolved Phosphorus Removed during the 2021 Operation Period\***

Month	Q73 Chemical used for treatment	Q74 Gallons of alum or ferric chloride treatment	Q75 Gallons of water treated	Q76 Calculated pounds of total phosphorus removed	Q76 Calculated pounds of dissolved phosphorus removed
January	*	0	0	0	0
February	*	0	0	0	0
March	*	0	0	0	0
April	Alum	1,423	37,867,089	13.6	0.0
May	Alum	777	51,401,362	13.4	4.2
June	Alum	235	11,812,344	2.2	0.6
July	Alum	175	2,286,868	0.2	0.1
August	*	0	0	0	0
September	Alum	380	8,359,678	0.9	0.3
October	*	0	0	0	0
November	*	0	0	0	0
December	*	0	0	0	0

\*The 2021 treatment facility operation period was April 14 through September 30. The treatment facility was shut down during parts of June, July, and September and for all of August. The gallons of water treated and calculated pounds of total phosphorus and dissolved phosphorus removed is only for the period of operation and does not include the periods when the treatment facility was not operational.

## 6.0 Sludge Removal Activities Occurring in 2021-

RWMWD staff assessed the floc depths in the floc pond on October 5, 2021. Staff determined that the pond needed to be cleaned out and proceeded with clean out of the alum floc pond.

The floc pond cleanout occurred during October 6, 2021 through October 19, 2021. A total of 8,298,300 gallons of alum sludge from the pond was pumped to a nearby sanitary sewer located near the intersection of Century Avenue and Margaret Avenue East (Table 5). Alum sludge samples were collected on October 12, 2021 and October 14, 2021. Total Suspended solids and total phosphorus concentrations measured in the samples as well as average total suspended solids and total phosphorus from the two samples are summarized in Table 6.

**Table 5. Daily Volume Pumped from Tanners Alum Floc Pond During October 6, 2021 through October 19, 2021**

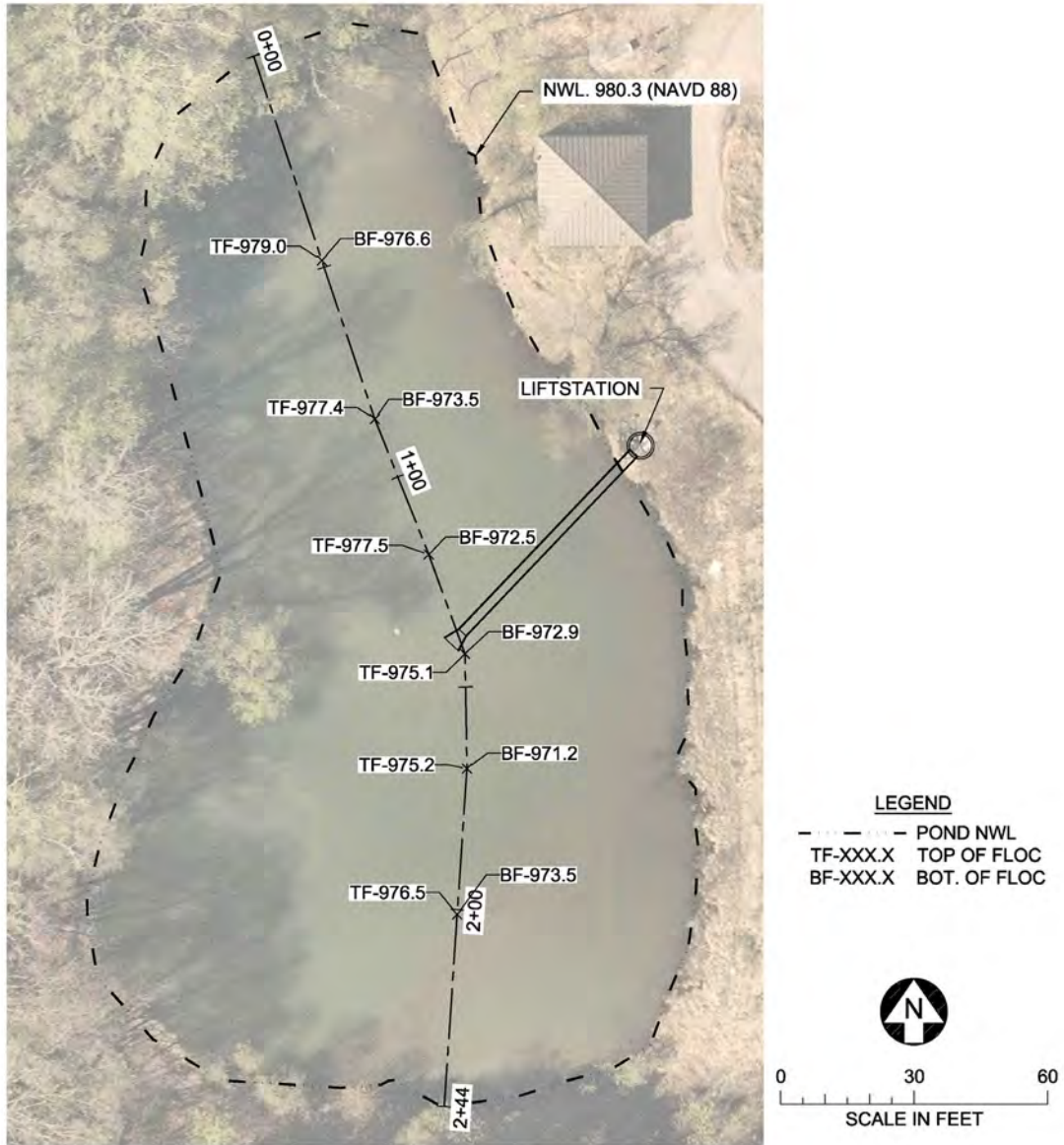
Date	Time	Volume (USG)
10/6/2021	15:58	29,905
10/7/2021	19:08	111,388
10/8/2021	20:04	235,282
10/9/2021	13:10	284,712
10/11/2021	19:45	346,268
10/12/2021	20:03	500,377
10/13/2021	20:00	621,308
10/14/2021	16:30	709,978
10/15/2021	20:00	806,422
10/16/2021	17:15	873,153
10/17/2021	17:00	950,738
10/18/2021	16:00	1,028,649
10/19/2021	15:00	1,800,120

**Table 6 Total Suspended Solids and Total Phosphorus Concentrations in Alum Sludge Removed from Tanners Floc Pond: October 12, 2021, October 14, 2021, and Average**

Year	Sample 1 Total Suspended Solids (mg/L) 10/12/2021	Sample 2 Total Suspended Solids (mg/L) 10/14/2021	Average Total Suspended Solids (mg/L)	Sample 1 Total Phosphorus (mg/L) 10/12/2021	Sample 2 Total Phosphorus (mg/L) 10/14/2021	Average Total Phosphorus (mg/L)
2021	19,500	18,600	19,050	42.5	36.6	39.6

RWMWD staff assessed the floc depths in the floc pond on October 5, 2021 and again on May 5, 2022. Results of floc pond assessments on October 5, 2021 and May 5, 2022 are shown in Figures 8 through 11. The assessments indicate a significant quantity of alum sludge was removed from the floc pond during October 6 through October 19, 2021.

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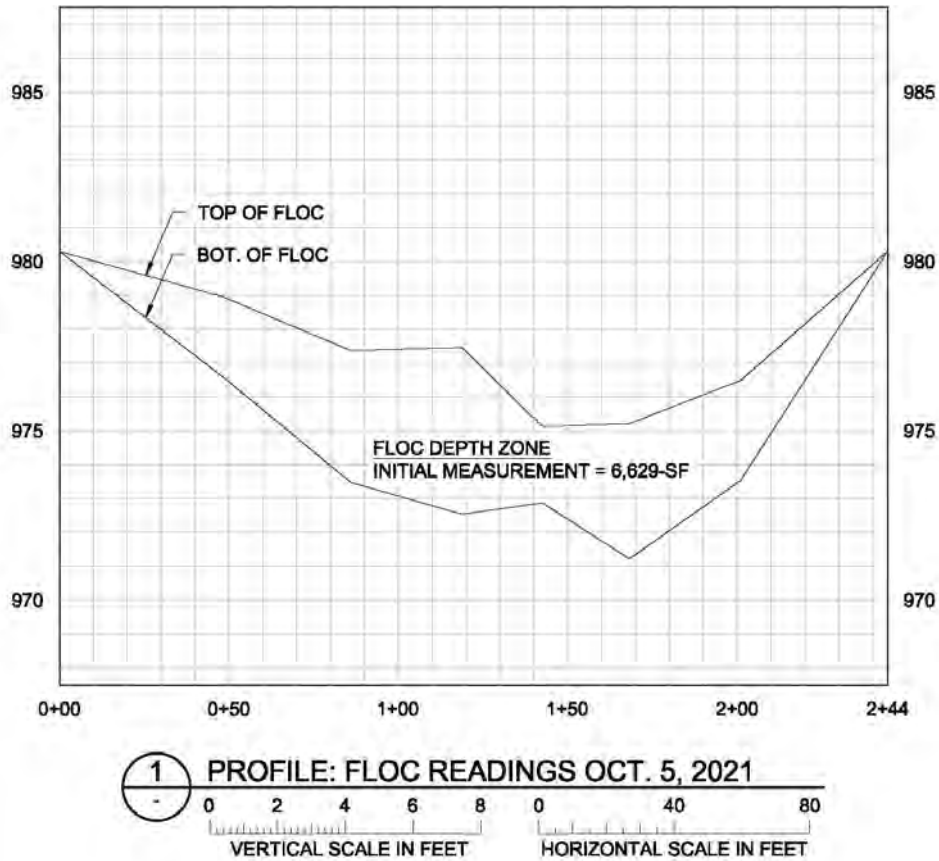


1 PLAN: FLOC READINGS OCT. 5, 2021

<p><b>BARR</b> Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277</p>	Project Office:	BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435 Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com	
	Scale	AS SHOWN	BARR PROJECT No.
	Date	MAY 16, 2022	23/62-0981.00 2022 001
	Drawn	GGN	CLIENT PROJECT No.
	Checked	MRR	
Designed	GGN	DWG. No.	REV. No.
Approved	MRR	EXHIBIT A	

Figure 8. Tanners Alum Floc Pond Floc Readings October 5, 2021

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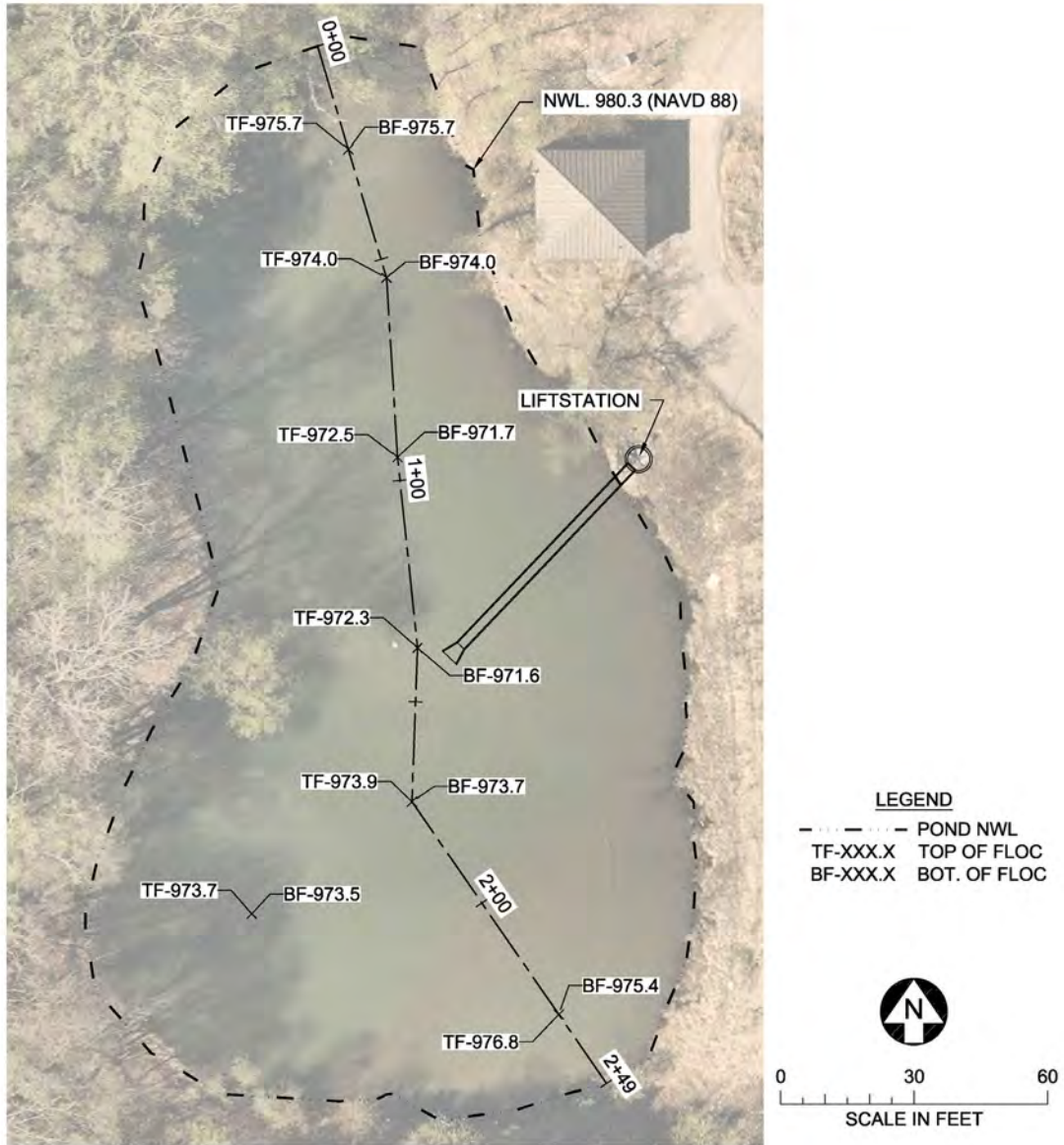
 Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277	Project Office:	BARR ENGINEERING CO.	
		4300 MARKETPOINTE DRIVE	
		Suite 200	
		MINNEAPOLIS, MN 55435	
		Ph: 1-800-632-2277	Fax: (952) 632-2601
		www.barr.com	
	Scale	AS SHOWN	BARR PROJECT No.
	Date	MAY 16, 2022	23/62-0981.00 2022 001
	Drawn	GGN	CLIENT PROJECT No.
	Checked	MRR	
	Designed	GGN	DWG. No.
	Approved	MRR	EXHIBIT B
			REV. No.

Figure 9. Tanners Alum Floc Pond Profile Floc Readings October 5, 2021

CADD USER: Greg Nelson FILE: M:\DESIGN\23620282.00\TANNERS LAKE ALUM TREATMENT MAINTENANCE\2022\FLOC REMOVAL REPORT.DWG PLOT SCALE: 1:1 PLOT DATE: 5/16/2022 4:20 PM

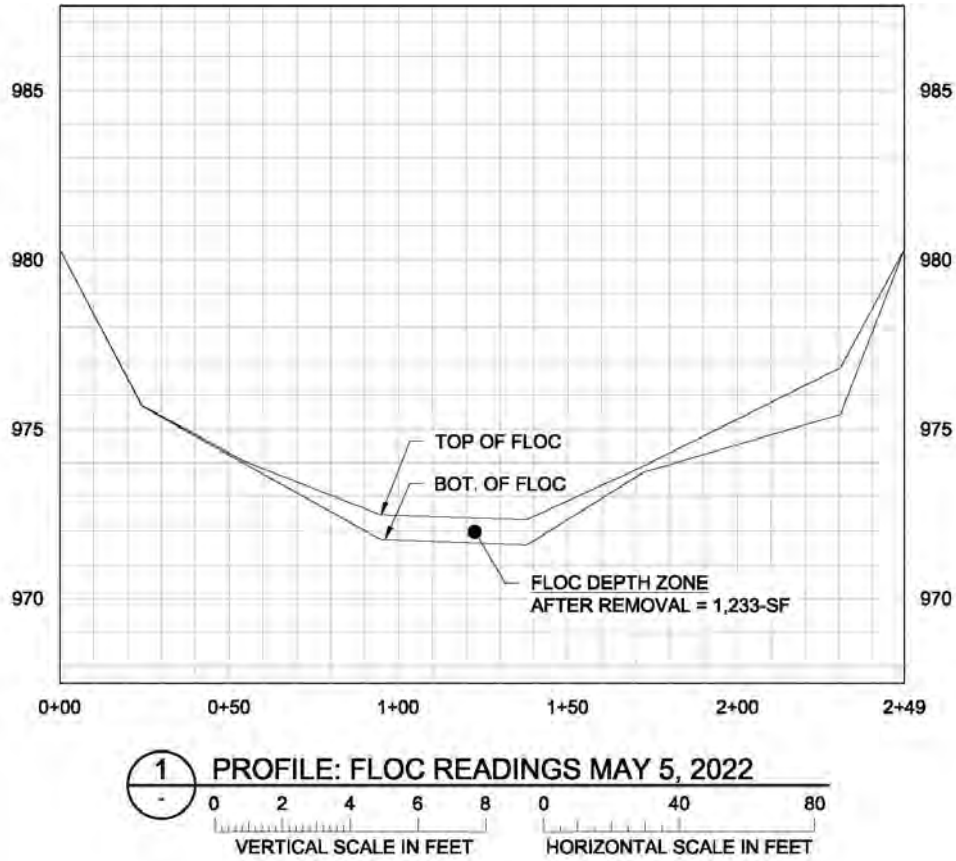


1 PLAN: FLOC READINGS MAY 5, 2022

<p><b>BARR</b> Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277</p>	Project Office:	BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435 Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com	
	Scale	AS SHOWN	BARR PROJECT No.
	Date	MAY 16, 2022	23/62-0981.00 2022 001
	Drawn	GGN	CLIENT PROJECT No.
Checked	MRR		
Designed	GGN	DWG. No.	REV. No.
Approved	MRR	EXHIBIT C	

Figure 10. Tanners Alum Floc Pond Floc Readings May 5, 2022

CADD USER: Greg Nelson FILE: M:\DESIGN\23620282.00\TANNERS LAKE ALUM TREATMENT MAINTENANCE\2022\FLOC REMOVAL REPORT.DWG PLOT SCALE: 1:1 PLOT DATE: 5/16/2022 4:20 PM




 Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277	Project Office:	BARR ENGINEERING CO.	
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		Ph: 1-800-632-2277	Fax: (952) 632-2601
		www.barr.com	
	Scale	AS SHOWN	BARR PROJECT No.
	Date	MAY 16, 2022	23/62-0981.00 2022 001
	Drawn	GGN	CLIENT PROJECT No.
	Checked	MRR	
	Designed	GGN	DWG. No.
	Approved	MRR	EXHIBIT D
			REV. No.

Figure 11. Tanners Alum Floc Pond Profile Floc Readings May 5, 2022



\* \* \* \* \*

New Reports

&

Presentations

\* \* \* \* \*

## Memorandum

**To:** Ramsey-Washington Metro Watershed District (RWMWD) board of managers  
**From:** Erin Anderson Wenz, Gabrielle Campagnola, and Greg Williams, Barr Engineering Co.  
Tina Carstens, RWMWD administrator  
**Subject:** Documentation of wetland management in the 2017 RWMWD watershed management plan  
**Date:** May 25, 2022  
**Project:** 23621006.00-220-009

### 1 Background

The RWMWD board of managers seeks to better understand the district's current management roles with respect to wetlands and determine whether revisions to its management roles are appropriate. As a first step, Barr Engineering Co. reviewed the current (2017-2026) RWMWD watershed management plan with respect to wetland management. This memorandum summarizes the following, as related to wetland management:

- RWMWD plan references:
  - o Plan goals (from strategic overview)
  - o Priorities, action items, and "signs of success" (from strategic overview)
  - o District-wide inventory (plan section 1 and section 1.11—wetlands)
  - o RWMWD roles and responsibilities (plan section 3)
  - o RWMWD programs and implementation activities (plan section 4)
- RWMWD rule E
- Definitions of wetland-related terms

### 2 References to wetland management

#### 2.1 RWMWD plan goals

The goals included in the RWMWD plan are high level and precede the Board of Water and Soil Resources' recent emphasis on more quantitative, measurable goals. None of the six goals included in the RWMWD plan specifically address wetlands. The most relevant are goals 1 and 2:

- **Goal 1: achieve quality surface water**—*Maintain or improve surface water quality to support healthy ecosystems and provide the public with a wide range of water-based benefits.*
- **Goal 2: healthy ecosystems**—*Manage water and related natural resources to create and preserve healthy ecosystems.*

Goals 1 and 2 both reference supporting healthy ecosystems, which often include wetlands. In discussing goal 2, the strategic overview states:

*Clean water and healthy wetland, shorelands, and associated upland ecosystems are critical components of the natural environment.*

*Managing wetland, shoreland, and associated upland areas with consideration for their ecological functions is necessary to prevent degradation of these resources.*

A wetland-related goal is mentioned in the district-wide inventory (section 1) of the plan. (See section 2.3 of this technical memorandum.)

## 2.2 Strategic-overview priorities, action items, and signs of success

Priorities included in the strategic overview do not specifically reference wetlands but do include *partnering to perform ecological restoration*, which could include restoration of wetlands. Associated with this priority is action item EC-3: *lead ecological restoration projects to improve water resources and associated upland habitat*.

The strategic overview does include an action item specifically targeting wetlands:

- **Action item EC-1:** *implement the district's wetland permitting program.*

This action item references the RWMWD's role as local governmental unit (LGU) responsible for administering the Wetland Conservation Act (WCA) in all cities except Saint Paul (see section 2.4 of this memorandum) and referencing the RWMWD rules (see section 2.6 of this memorandum).

The strategic overview includes two "signs of success" that specifically reference wetlands and are a mixture of goal and policy:

- *The quantity of ecologically diverse aquatic, wetland, and associated upland habitats is increased.*
- *Wetlands are preserved and protected, as measured by their net area (no net loss) and the continued viability of their functions and value.*

## 2.3 District-wide inventory (section 1)

Section 1 of the plan contains several references to wetlands. At the beginning of the section, the plan seeks to distinguish between lakes and wetlands for management purposes:

*The RWMWD manages lakes differently than wetlands, so it is important for the district to distinguish between the two. The district uses a water body's Cowardin classification (Cowardin, 1979) to categorize a water body as a lake or a wetland. The RWMWD categorizes as lakes those water bodies classified as*

*lacustrine under the Cowardin system. Lacustrine systems include wetlands and deep-water habitats with all of the following three characteristics:*

- *Situated in a topographic depression or a dammed river channel.*
- *Lacking trees, shrubs, persistent emergents, emergent mosses, or lichens with greater than 30-percent areal coverage.*
- *Total area exceeds 20 acres.*

*...Several water bodies within the district are often referred to as lakes by the public but are not categorized as lacustrine. The RWMWD manages these water bodies, including Casey Lake, Grass Lake, Pigs Eye Lake, and others, as wetlands. The district may pursue activities in water bodies (or their watersheds) not included in the above list on a case-by-case basis as necessary to achieve district goals.*

Section 1.11 includes more specific information about WCA, the district's wetland inventory, and district wetland classifications. Relevant statements within this section include:

*The wetlands in the RWMWD are an important community and ecological asset. These resources provide significant wildlife habitat and refuge, while also supplying aesthetic, recreational, and water quality treatment benefits. It is the goal of the RWMWD to manage wetlands and the associated natural resources to create and preserve healthy ecosystems. To protect these valuable resources, the RWMWD continues to manage wetlands to achieve no net loss of acreage, functions, and value.*

*It is important to understand the extent, function, and value of existing wetlands to provide a basis for wetland protection, management, and restoration efforts.*

*The wetlands within the district are classified for management purposes, based on the observations and conclusions of the 2003-2005 wetland inventory and assessment...The four RWMWD wetland categories (and corresponding MnRAM categories) are defined as follows:*

- **Manage A** (MnRAM 3.0 Preserve) – This category is for exceptional and highest-functioning wetlands or those sensitive wetlands receiving conveyed stormwater runoff that have yet retained a medium level of vegetative diversity/integrity. These wetlands are those that should be preserved in (or improved to) their most pristine or highest functional capacity with wide, natural buffers, in perpetuity.
- **Manage B** (MnRAM 3.0 Manage 1) – In this category are high-quality wetlands that should be protected from development and other pressures of increased use, including indirect effects. Maintaining natural buffers will help to retain the significant function these wetlands provide.
- **Manage C** (MnRAM 3.0 Manage 2) – Manage C wetlands provide medium functional levels and the wetland extent should be maintained. Maintaining natural buffers will help to retain the significant function these wetlands provide. These wetlands often provide optimal restoration opportunity.

Note that while the plan text refers to four RWMWD classifications, the third and fourth classifications are combined into the manage C classification. Section 1.11 also presents, in table 1-8, the district’s wetland buffer and stormwater treatment requirements as a function of management classifications.

**Table 1-8 RWMWD Wetland Buffer and Water Quality Requirements**

RWMWD Wetland Classification	Buffer Requirements <sup>1</sup>		Water Quality Pretreatment Requirements
	Minimum "No Disturb" Buffer (ft)	Average "No Disturb" Buffer (ft)	Total Suspended Sediment (TSS)
Manage A	37.5	75	90% removal <sup>2</sup>
Manage B	25	50	90% removal <sup>2</sup>
Manage C	12.5	25	90% removal <sup>2</sup>
Water Quality Pond	10	10	NA

<sup>1</sup> Cities may have more stringent wetland buffer requirements than those required by the District.  
<sup>2</sup> Pretreatment must achieve 90% TSS removal from the runoff generated by a NURP water quality storm (2.5" rainfall). Runoff volume reduction BMPs may be considered and included in this requirement.

## 2.4 Plan roles and responsibilities (section 3)

Section 3 of the plan summarizes the RWMWD’s roles and responsibilities and describes the RWMWD’s role in administering the WCA:

*As the LGU, the district has taken on the responsibility of managing the wetlands in the watershed, including the permitting of projects with potential wetland impacts (see section 4.1.2). As part of this management responsibility, the RWMWD completed a wetland inventory, functional assessment, and classification of the district’s wetlands (see section 1.11.2 for more information about this effort). The RWMWD shares this wetland assessment information with the LGUs in the district.*

The district’s responsibilities with respect to the WCA include confirming that impacts to wetlands as a result of new development and redevelopment are avoided, minimized, or mitigated according to the requirements and impact sequencing of the WCA. The WCA does not address management of wetlands outside of a development/redevelopment context.

## 2.5 Plan programs and implementation actions (section 4)

Section 4 of the plan describes the district’s WCA role and permit program as related to wetlands:

*The WCA requires that all wetlands be protected regardless of type or size. As part of administering the WCA rules, the RWMWD is responsible for making determinations about the accuracy of wetland delineations, wetland functions and values assessments, and wetland replacement plans, often with*

*review and input by the technical evaluation panel. The district also issues certificates of exemption or replacement when appropriate.*

*The RWMWD also requires wetland buffer protection and pretreatment of stormwater prior to discharge to a wetland. These requirements vary depending on the classification of the wetland (see section 1.11.3). The district provides a method for challenging the RWMWD wetland classification, if necessary. The classification system is based on a scientific assessment methodology, which provides an accurate and quantifiable ranking of the wetland function and values.*

The district's 10-year implementation program also includes six projects targeting specific wetlands:

Activity ID	Activity description	Tier (priority)
KC-3	Manage macrophytes in Casey Lake wetland	Tier 2 (medium)
BeL-6	Evaluate carp population in Lake Owasso-Central Park wetlands/Bennett Lake chain	Tier 2 (medium)
BeL-7	Manage carp population in Lake Owasso-Central Park wetlands/Bennett Lake chain	Tier 2 (medium)
LO-3	Perform feasibility study of retrofit opportunities throughout Lake Owasso subwatershed to improve water quality, such as reducing phosphorus load from tributary wetland systems	Tier 1 (high)
LO-6	Evaluate carp population in Lake Owasso-Central Park wetlands/Bennett Lake chain	Tier 2 (medium)
LO-7	Manage carp population in the Lake Owasso-Central Park wetlands/Bennett Lake chain	Tier 2 (medium)

## 2.6 RWMWD rule E: wetland management

The RWMWD rules include rule E, which addresses wetland management. Rule E states that 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.*

Rule E further includes criteria for projects disturbing one acre or more adjacent to a water body. Briefly, these criteria include:

- (a) *All stormwater must be treated to water quality standards outlined in RWMWD rule C.*
- (b) *Wetland delineations and other LGU decisions shall be completed and submitted to the district on existing wetlands on the entire parcel for development.*
- (c) *Wetlands in the district have been classified using MnRAM 3.4; classifications are used to establish required buffer widths.*
- (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. *Minimum buffer widths based on classification are included in rule E.*
  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 that mitigation of buffer disturbance is also provided adjacent to wetland replacement.*
  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 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.*
  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, consistent with additional criteria included in rule E.*

### 3 Terms and definitions

The discussion of wetland management in the RWMWD plan and rules references some reoccurring terms. These terms are not consistently defined in context; intended definitions are summarized herein.

**Functions and values:** specific factors that are evaluated as part of a wetland assessment to determine the MnRAM or RWMWD wetland classification; wetland functions and values include:

- Vegetative diversity and integrity
- Maintenance of hydrologic regime
- Flood and stormwater attenuation
- Downstream water quality
- Maintenance of wetland water quality
- Shoreline protection
- Maintenance of characteristic wildlife habitat structure
- Maintenance of characteristic fish habitat
- Maintenance of characteristic amphibian habitat
- Aesthetics/recreation/education/cultural
- Commercial uses
- Groundwater interaction
- Wetland restoration potential
- Wetland sensitivity to stormwater and urban development
- Additional stormwater treatment needs

**No-net loss:** a WCA term referencing the program's goal to avoid impacts to the quantity, quality, or biological diversity of Minnesota's wetlands and, if losses are unavoidable, to replace affected wetlands.

**Preserve:** to maintain the quantity, quality, and biological diversity of a wetland; plan "signs of success" note that this is measured by net area and continued viability of functions and values

**Protect:** used interchangeably with "preserve" and alluding to the RWMWD rules and permit program

**Restoration:** increasing the area and/or improving the quality of an existing or previously drained wetland (improving quality of existing wetland and/or increasing area that was formerly wetland)

**Quality:** refers to the functions and values of a wetland, as quantified by its MnRAM or RWMWD wetland classification; note that individual functions and values of a wetland may be improved or degraded without changing the overall classification

**Quantity:** refers to the acreage of wetland of a given MnRAM or RWMWD classification as measured by wetland delineation

## 4 Summary

The RWMWD's wetland management roles are described in the plan and listed in the policies of rule E. These roles generally fall into two categories:

- Protecting the quantity, quality, and biological diversity of wetlands via regulation of development activity
- Increasing the quantity, quality, and biological diversity of wetlands via restoration projects

Quality and biological diversity of wetlands are generally quantified by the MnRAM or RWMWD classification. MnRAM and RWMWD wetland classifications are based on functions and values assessments that consider multiple functions of wetlands.



## Technical memorandum

**To:** Ramsey-Washington Metro Watershed District (RWMWD) board of managers  
**From:** Sam Redinger, Lulu Fang, Brandon Barnes, Erin Anderson Wenz and Brad Lindaman  
**Subject:** Owasso Basin and North Star Estates flood risk reduction study update  
**Date:** May 25, 2022  
**Project:** 23/62-1200.22 - 005  
**c:** Tina Carstens, RWMWD administrator

This technical memorandum summarizes Barr's recent flood risk reduction efforts for the RWMWD to lower 100-year water surface elevations at homes, businesses, and infrastructure in the Gervais Creek subwatershed. These efforts are a continuation of the findings and recommendations provided to the RWMWD in the Beltline resiliency study (Barr, 2019) and the Owasso Basin bypass pipeline feasibility study (Barr, 2020). This document updates the RWMWD board of managers on recent efforts, informs them of stakeholder feedback regarding flood risk reduction for manufactured homes, and helps the managers determine the design criteria to mitigate flood risk for North Star Estates (a manufactured home park in Little Canada) that will be used as the basis for further analysis and design.

### 1.0 Background

Atlas 14 modeling updates in 2015 identified Owasso Basin and its surrounding areas (i.e., the Gervais Creek subwatershed) as the highest concentration of flood-prone habitable structures in the RWMWD. A desktop study revealed that 77 homes and businesses are located within the flood zone, and that an additional 54 homes and businesses are very near the flood zone. A 2018 study of the Owasso Basin area showed that redirecting flows south from a drainage area east of North Star Estates would significantly lower flood levels in the area. That, in combination with other modifications near Owasso Basin such as raising Ryan Drive and making other adjustments to the storm sewer system, would remove several structures in this area from the flood zone. Figure 1 below provides an overview of this study area.

In 2020, the RWMWD began the Owasso Basin bypass study, in which flood risk reduction options were further developed and a phased approach to implementation was recommended. In 2021, the RWMWD finished construction of the raising of Ryan Drive, storm sewer modifications, maintenance along Gervais Creek and the Owasso berm, and drainage improvement at Keller Parkway (phases 1 and 2 of the implementation strategy). The City of Little Canada also collected survey information for several of the lowest homes in North Star Estates.

To: Ramsey-Washington Metro Watershed District (RMMWD) board of managers  
 From: Sam Redinger, Lulu Fang, Brandon Barnes, Erin Anderson Wenz and Brad Lindaman  
 Subject: Owasso Basin and North Star Estates flood risk reduction study update  
 Date: May 25, 2022  
 Page: 2

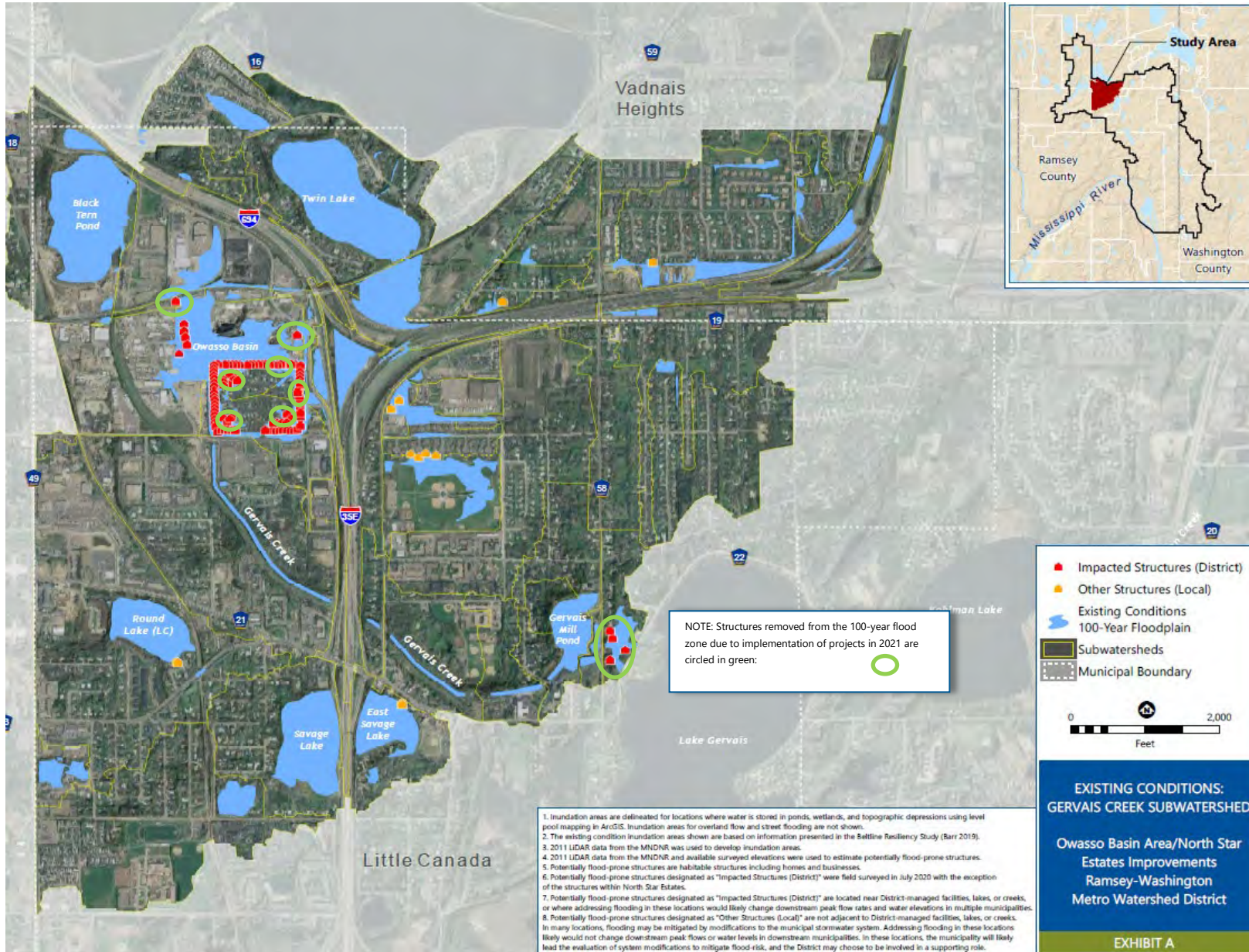


Figure 1: overview of study area (referenced from the 2020 Owasso Basin bypass pipeline feasibility study)

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**Date:** May 25, 2022  
**Page:** 3

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## 2.0 Impact of recent construction efforts

Completion of phases 1 and 2 of the implementation strategy discussed above yielded a tangible reduction in flood risk in the Gervais Creek subwatershed, particularly for structures upstream of Keller Parkway and around Owasso Basin. Based on model results reflecting the completion of phases 1 and 2, approximately 34 homes within North Star Estates, three businesses north of Ryan Drive, and four homes immediately upstream of Keller Parkway have been removed from the 100-year inundation extent (removed structures are circled in green in Figure 1). The infrastructure now in place due to phases 1 and 2 are also critical to providing additional hydraulic capacity in the Gervais Creek subwatershed and supporting subsequent improvements.

## 3.0 Recent analysis efforts

Prior studies evaluating flood risk around North Star Estates utilized publicly available LiDAR, which has inherent accuracy limitations (i.e., topographic elevations are not as accurate as in-field surveys). Manufactured homes like those in North Star Estates are constructed differently than typical single-family dwellings. Prior evaluations of flood risk in and around North Star Estates were thereby limited in the count of structures within the 100-year floodplain on a macro-assessment of the inundation extents intersecting a building footprint. Acknowledging that this as a limiting factor in prior studies and considering the high-volume of potentially impacted structures within North Star Estates based on prior study findings, Barr and the RWMWD conducted a micro-assessment of the homes in North Star Estates to better understand structures at risk of flooding in this area.

Industry-recommended best practices and local government ordinances stipulate the installation of a manufactured home such that the finished floor elevation of the structure is constructed above existing grade. The elevated structure rests on a foundation support system and provides needed clearance between existing grade and the underside of the building for utility terminal connections. It is important to note that while current city codes and ordinances may provide specific dimensions for construction above existing grade, many North Star Estates homes have been in place for years and likely precede the adaptation of today's current building codes and ordinances.

Partnering with the City of Little Canada, a detailed site survey was performed in late 2021 to sample a small set of homes in North Star Estates. This survey included obtaining accurate grade and low-entry elevations of the presumably (based on LiDAR) 10 lowest homes. The intent was to also sample the existing elevation of the home utility connections; however, this was not achieved since most connections are hidden behind skirting material along the perimeter of the homes and were therefore inaccessible at the time of survey. This survey data was used to evaluate the accuracy of the LiDAR data and provide a baseline to evaluate flood risk relative to the finished floor elevation of the homes in North Star Estates. The survey data verified that the finished floor elevation of the manufactured North Star Estates homes is above existing grade.

#### 4.0 Manufactured-home flood risk guidance

The Federal Emergency Management Agency (FEMA) is an agency of the U.S. Department of Homeland Security and manages the National Flood Insurance Program. FEMA provides guidance for evaluating flood risk of habitable homes and businesses. One publication (*Protecting Manufactured Homes from Floods and Other Hazards, FEMA P-85, Second Edition, Nov. 2009*) provides guidance focused on manufactured homes. Figure 2 below illustrates the FEMA-recommended best practice in defining the minimum flood elevation for manufactured homes. The base flood elevation (BFE) is equal to the water surface elevation resulting from the 100-year flood event.

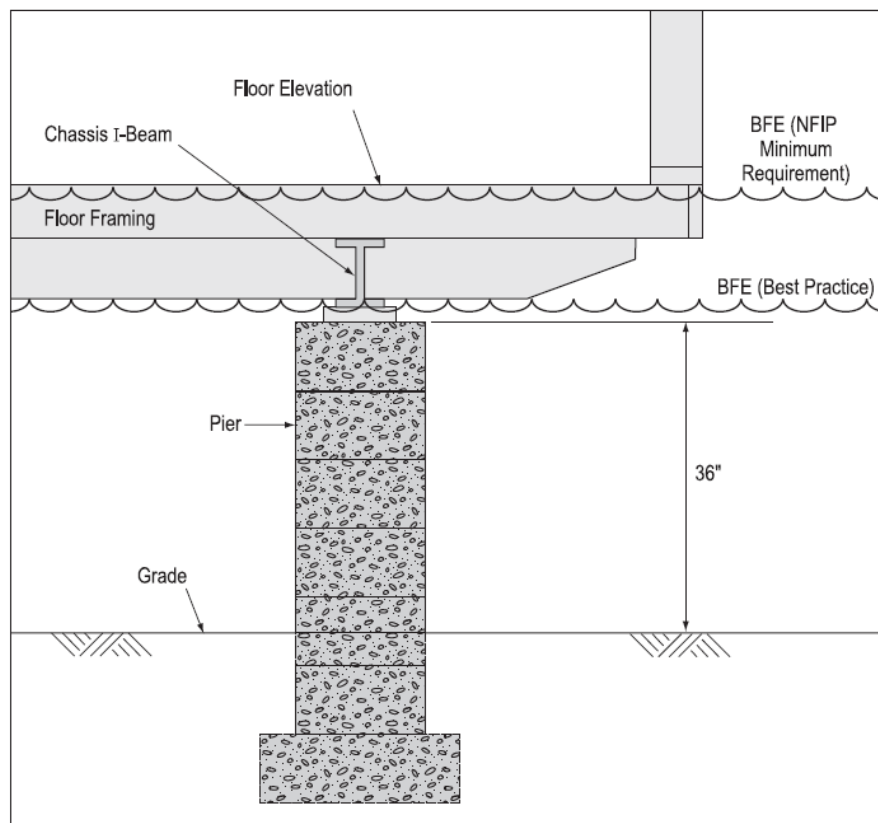


Figure 2: excerpt from FEMA P-85, Second Edition (Nov. 2009)

*FEMA P-85, Second Edition* provides guidance on the placement and installation of manufactured homes relative to the BFE and the height and anchoring of the structures foundation system: "...The lowest floor of the manufactured home is to be at or above the BFE, or [the structure] chassis is supported by reinforced piers or other...that are no less than 36 inches in height above grade and be securely anchored...".

Further, this document stipulates that: "...all parts of a manufactured home that are below the BFE must be constructed with flood damage-resistant materials and utility systems must either be elevated or made watertight to the BFE."

## 5.0 Update on current findings and stakeholder feedback

The finished floor elevation of manufactured homes elevated above existing grade reduces the risk of flood waters entering the home. Based on model results of the 96-hour, 100-year design storm event, most homes in North Star Estates are not at risk of flooding in the finished space of the home; however, given the elevated nature of the home, flood risk remains from other perspectives. One example includes the depth of floodwater surrounding the home, making the home impassable or inaccessible to emergency personnel.

Referencing FEMA and similar disaster response government agency guidelines, the following figure was developed to illustrate the impact of different flood levels relative to the finished floor elevation of a manufactured home (assuming that installation and recommended best practices as described by FEMA are applicable). Flood levels greater than six inches in depth impede the ability of first responders and emergency personnel to carry out their duty. Flood levels greater than 12 inches in depth impede the ability of vehicles to safely travel in flood-impacted areas. Flood levels greater than 26 inches in depth are the point at which utility terminal connections are underwater. Flood levels greater than 36 inches in depth result in the homes' floors becoming inundated with water.

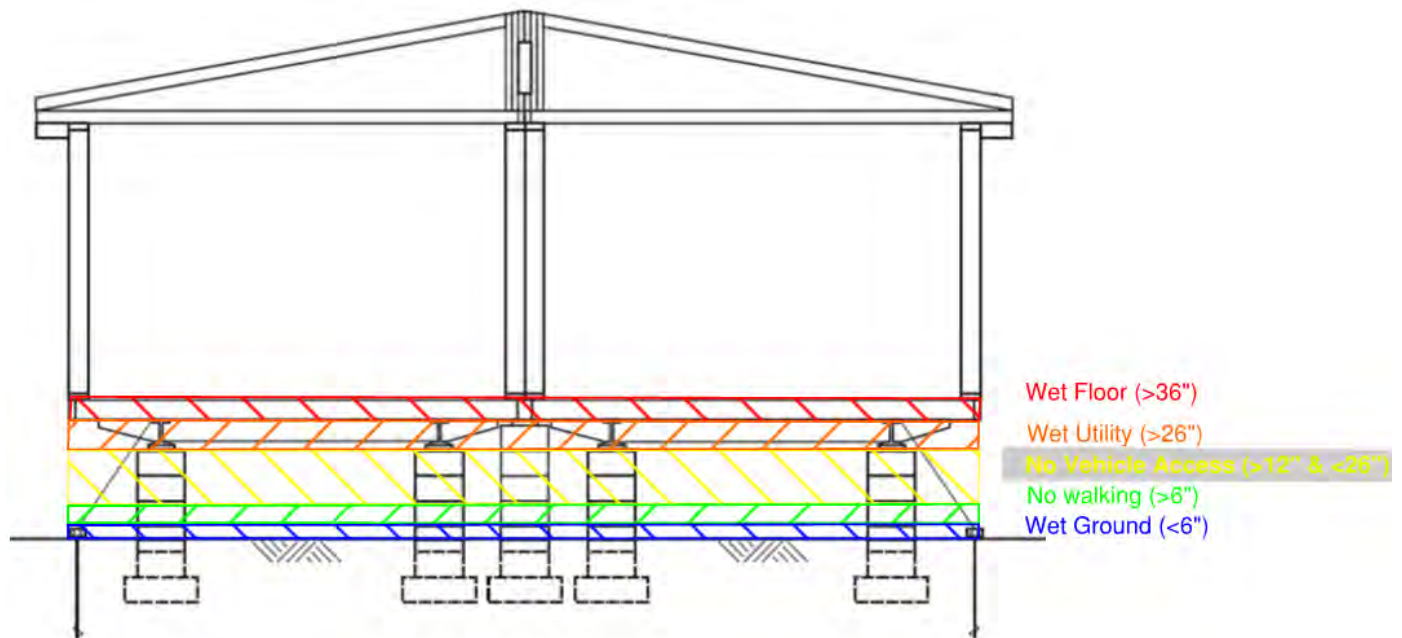


Figure 3: illustration of flood level impact to manufactured home

## 6.0 Stakeholder feedback and recommendation

Barr, the RWMWD, and the City of Little Canada met on May 9 to review these findings and discuss the target level of flood risk for North Star Estates. The following bullet list summarizes the resulting recommendation from this meeting to use as the basis for evaluating flood risk in North Star Estates:

- Evaluate flood risk for the homes in North Star Estates relative to the FEMA-recommended BFE (i.e., distance from the ground to the underside of the structure chassis support system)
- Confirm that emergency-response personnel vehicle access is maintained/provided to impacted homes (i.e., benchmark elevation of flood water depth less than or equal to 12 inches above the access roadway surface)
- Develop emergency response plans for homes within the 100-year floodplain

The meeting with Little Canada involved discussion of various flood risk reduction options around Owasso Basin to be included in the next phase (phase 3) of the flood risk reduction efforts in the Gervais Creek subwatershed. The city expressed a willingness to continue supporting the RWMWD in the continued efforts, providing aid where possible. Flood risk reduction options discussed included expansion of storage areas onto various land parcels around Owasso Basin, diversion berm/pipeline alignments, and beginning conversations with additional stakeholders (e.g., City of Little Canada council, North Star Estates property manager, etc.).

Figures 4 to 6 illustrate the inundation extent of the 96-hour, 100-year storm event in North Star Estates for the following conditions:

- Pre-2021 flood risk reduction efforts (i.e., prior to the recent construction activity)
- Current conditions (i.e., reflecting the recent construction projects and updated survey information)
- Proposed 100-year inundation extent design goal. If the Board of Managers support and adopt the stakeholder recommendation for evaluating flood-risk outlined above. In this scenario, flood risk reduction would be achieved under this inundation extent under the following assumptions:
  - A regional solution (the specifics of which would be determined during the next steps of this project) would lower the current 100-year water surface elevation by 0.43 feet (5.1 inches).
  - Portions of the access roads in North Star Estates would need to be raised to maintain emergency vehicle access.
  - One home in the northwest corner of North Star Estates (shown as the only red-colored structure in Figure 6) is especially low relative to others nearby. We assume that a singular approach would be taken toward this home to remove it from the floodplain (e.g., replacement, buyout, etc.).

To: Ramsey-Washington Metro Watershed District (RWMWD) board of managers  
 From: Sam Redinger, Lulu Fang, Brandon Barnes, Erin Anderson Wenz and Brad Lindaman  
 Subject: Owasso Basin and North Star Estates flood risk reduction study update  
 Date: May 25, 2022  
 Page: 7

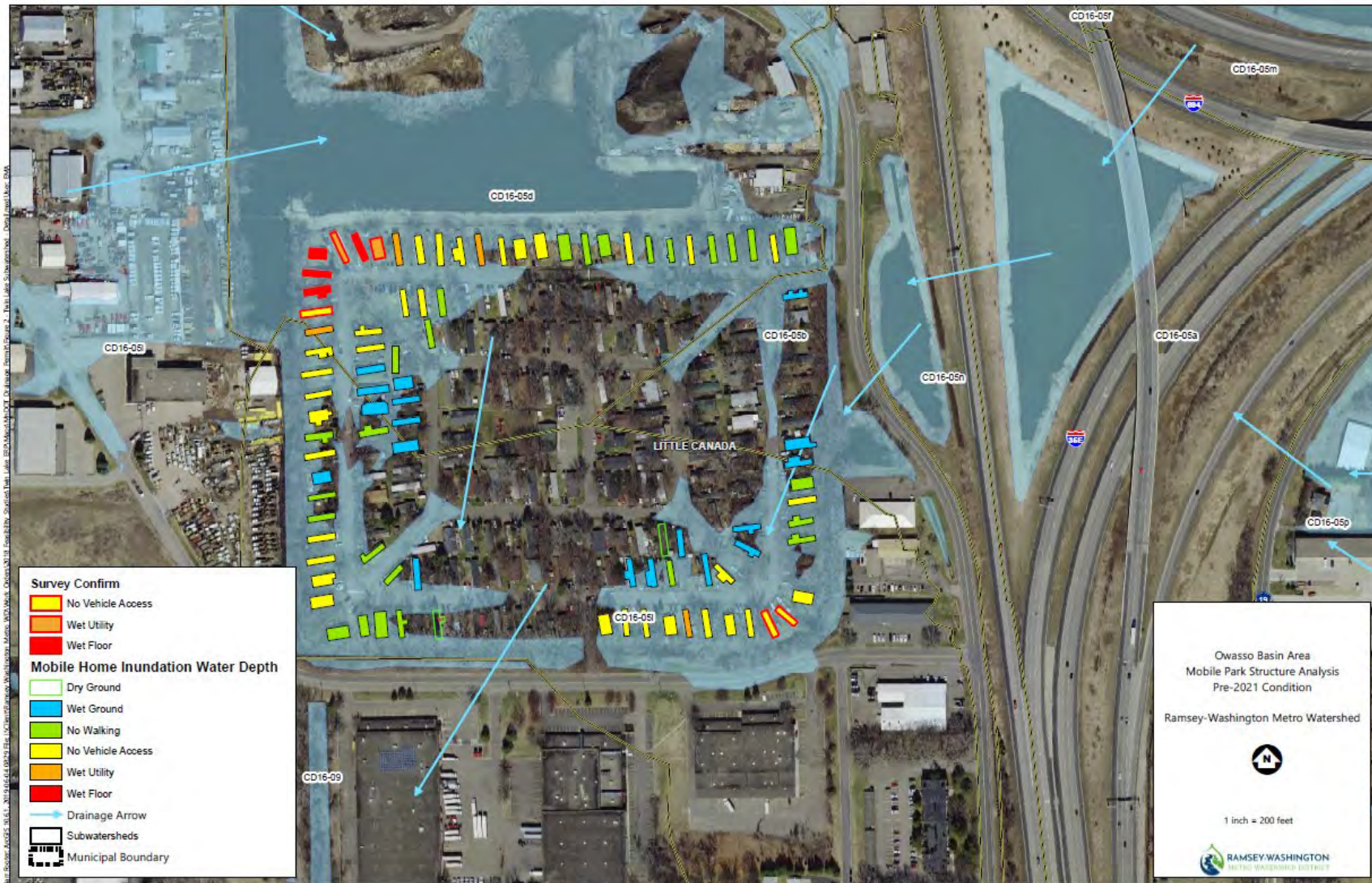


Figure 4: pre-2021 100-year inundation extent

To: Ramsey-Washington Metro Watershed District (RWMWD) board of managers  
From: Sam Redinger, Lulu Fang, Brandon Barnes, Erin Anderson Wenz and Brad Lindaman  
Subject: Owasso Basin and North Star Estates flood risk reduction study update  
Date: May 25, 2022  
Page: 8



Figure 5: current 100-year inundation extent



To: Ramsey-Washington Metro Watershed District (RMMWD) board of managers  
 From: Sam Redinger, Lulu Fang, Brandon Barnes, Erin Anderson Wenz and Brad Lindaman  
 Subject: Owasso Basin and North Star Estates flood risk reduction study update  
 Date: May 25, 2022  
 Page: 9



Figure 6: proposed 100-year inundation extent design goal

## Project work plan

Original date: May 25, 2022  
Project: Lake Emily subwatershed regional BMP

### Project team

District staff: Paige Ahlborg  
Barr staff: Erin Anderson Wenz, Leslie DellAngelo, Tyler Olsen, Gabrielle Campagnola, Greg Nelson

### Barr team roles

Project management: Leslie DellAngelo  
H&H modeling: Tyler Olsen, Gabrielle Campagnola  
Design: Gabrielle Campagnola, Greg Nelson  
Engineering review: Leslie DellAngelo, Erin Anderson Wenz

### District staff

Project manager: Paige Ahlborg

### Shoreview staff

City engineer: Tom Wesolowski

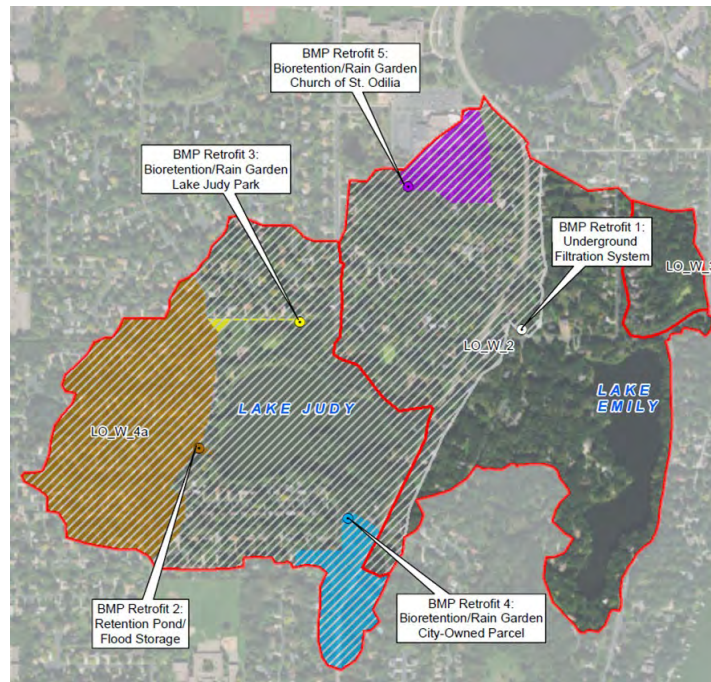
## Scope of work

In 2016, the Ramsey-Washington Metro Watershed District (RWMWD) and Barr completed a feasibility study of potential water quality best management practices (BMPs) throughout the Lake Emily subwatershed (*Concept Design Report—Lake Emily BMP Systems; November 28, 2016*). As a part of this study, five potential projects were identified and evaluated (figure 1).

At the time that the Lake Emily subwatershed feasibility study was conducted, **BMP 1 (underground filtration system)** had the lowest cost per pound of total phosphorus removed (\$2,400 to \$3,200 per pound per year) and was perceived to be the most important BMP to pursue first in the subwatershed due to its proximity to Lake Emily. However, since the prioritization tool was developed for RWMWD water quality projects, **BMP 4 (bioretention/rain garden on city-owned parcel)** is now considered the highest-priority project of the group shown in figure 1. Its annualized cost per pound of total phosphorus removed is higher (\$7,600 to \$10,000 per pound per year), but it has other qualities that the prioritization tool recognizes as valuable.

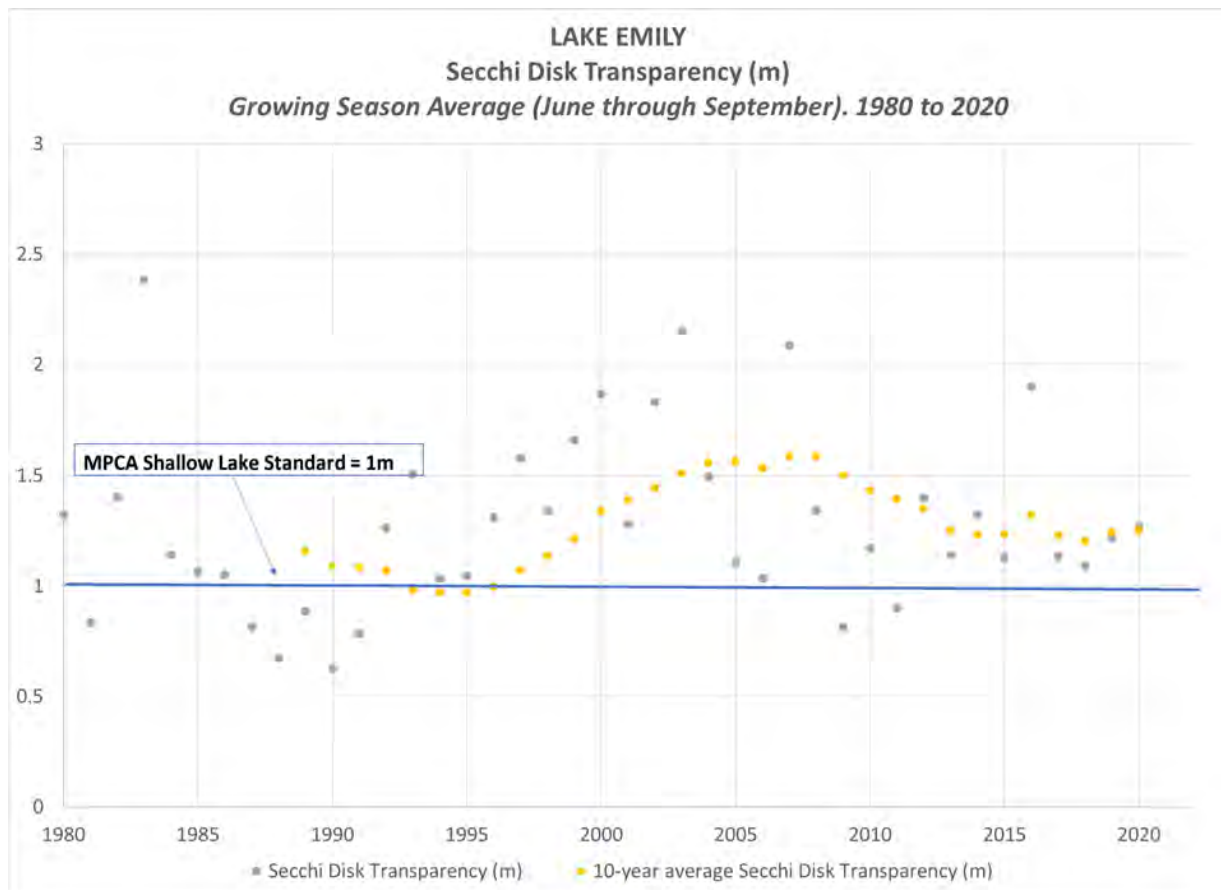
A note on the other BMPs shown in figure 1:

- BMP 5 (bioretention/rain garden at the Church of St. Odilia) was explored further in 2019 as part of the district's outreach to churches, which ultimately led to partnering with the City of Shoreview on developing a conceptual design that would restore a wetland in the city-owned property south of the church of St. Odilia. The design was called Cottage Place wetland. This project has not been implemented.
- To date, BMP 3 (bioretention/rain garden in Lake Judy Park) and BMP 2 (retention pond/flood storage) have not been pursued further.



**Figure 1: potential BMP retrofit locations identified throughout the Lake Emily subwatershed**

As a reminder, the Lake Emily subwatershed feasibility study was pursued in 2016 in recognition of the fact that although the Minnesota Pollution Control Agency (MPCA) has not officially categorized the lake as “impaired” by excess nutrients, the Minnesota Department of Natural Resources’ Lake Finder citizen monitoring data consistently shows that its growing-season Secchi disk transparency depths are consistently lower than the state standard for shallow lakes (1 meter), indicating a degraded water quality condition (figure 2). In addition, historic RWMWD monitoring data has frequently shown elevated phosphorus concentrations in the lake, though the number of measurements over recent years is not adequate for the MPCA to make a formal impairment judgement.



**Figure 2: Lake Emily growing-season Secchi disk transparency, 1980 to 2020**

The purpose of this project is to gauge the City of Shoreview’s interest in these projects (in particular, BMPs 1 and 4) and to prepare final design, plans and technical specifications for implementation of a project in 2023. The deliverables will be preliminary design plans as well as complete and final plans, technical specifications, and bidding documents. This project will also include three coordination meetings with the City of Shoreview and presentations to the RWMWD board of managers.

### Budget

Barr will complete the work outlined above on a time-and-expense basis for an estimated **\$78,400.\***

### Schedule

We propose the following schedule, milestones, and deliverables.

**Task 1 (June 2022): meeting 1 with City of Shoreview**—Barr will present concept designs for the two regional BMPs (BMP 1 and BMP 4) that were developed in 2016 as part of the Lake Emily feasibility study. The purpose of the presentation is to inform stakeholders about the proposed project and to obtain buy-in from the city to proceed with further site investigation and design.

**Task 2 (July 2022): topographic survey**—A topographic survey will be conducted to establish existing grades and elevations as well as locations of existing infrastructure and utilities. The survey will be conducted using a total station and/or survey-grade GPS with horizontal and vertical accuracy of +/-0.2 feet.

**Task 3 (August 2022): soil borings**—A geotechnical investigation will be conducted to evaluate soil conditions for infiltration capabilities and for structural design of the regional BMP. The geotechnical investigation will contain up to three borings.

**Task 4 (August-September 2022): preliminary design**—A preliminary design and 30-percent design plans for the regional stormwater BMP will be developed. The plans will be submitted to the city and district for review.

**Task 5 (September 2022): meeting 2 with City of Shoreview**—Barr will present the 30-percent design to the city. The purpose of the meeting is to inform the city about design details and solicit feedback that will be important to final design of the project. The project will also be presented to the RWMWD board for review and approval to complete the plans and specifications.

**Task 6 (October-November 2022): engineering and design**—All contract and bidding documents will be completed. This task includes all hydrologic and hydraulic modeling and calculations as well as design development. If the city and RWMWD board approve the plans and specifications, the project will be put out to bid in late 2022/early 2023 in anticipation of 2023 construction.

## Project tracking

### Project milestones

Milestone	Estimated completion date	Actual completion date
Meeting 1 with City of Shoreview	June 2022	
Topographic survey	July 2022	
Geotechnical investigation	August 2022	
30% design plans	September 2022	
Meeting 2 with City of Shoreview	September 2022	
Final design and hydraulic analysis	October 2022	
100% plans, specifications, and cost estimate for city and district review	November 2022	

### Project budget tracking (engineering)

Project objectives	Estimated budget*	Spent to date
Meetings with City of Shoreview	\$3,900	\$0
Topographic survey	\$7,600	\$0
Geotechnical investigation	\$8,600	\$0
Engineering and design	\$58,400	\$0
<b>Total</b>	<b>\$78,500</b>	<b>\$0</b>

*\*Barr budget only. These totals do not include RWMWD project budgets. This budget assumes that only one BMP will be pursued in 2022. If the City of Shoreview is interested in more than one project, and the district agrees that more than one project should be pursued, these budgets could be doubled and would still be within the originally budgeted amount for this project in 2022.*

### Monthly updates

Month	Budget spent \$\$/%
<b>April 2022</b>	\$XXXX.XX (X%)

Month	Budget spent \$\$/%

## Project Work Plan

Original Date: May 23, 2022

Updated: May 23, 2022

**Project:** Carver Ponds Improvements Feasibility Study

### Project Team

District Staff: Tina Carstens (District Administrator), Eric Korte

Barr Staff: Tyler Olsen (Project Manager), Katie Turpin-Nagel, Kevin Menken, Joe Bischoff, Erin Anderson Wenz

### Scope of Work

This project involves the evaluation of three stormwater ponds, nicknamed Carver Ponds, in the Fish Creek subwatershed. The Carver Ponds location is shown in Figure 1 below. These ponds receive drainage from approximately 56 acres, most of which is comprised of single-family residential land use. While these ponds have not been evaluated or maintained in the past by the Ramsey-Washington Metro Watershed District (RWMWD), they were identified in the Fish Creek Subwatershed Feasibility Study (Barr, 2020) as potential contributors of excess nutrient loading to Fish Creek based on their appearance during a field inspection.

The scope of the Carver Ponds Improvements Feasibility Study is to (1) gather background information on the ponds, (2) characterize the existing water quality and investigate the extent of internal phosphorus loading from the sediment and (3) identify potential remediation strategies for reducing internal phosphorus loading. Types of remediation strategies may include dredging of phosphorus-rich sediment, chemical treatment of the pond sediment, installation of a pre-treatment filtration BMP, or a combination of any of these strategies.





**Figure 1. Carver Ponds location**

Barr has prepared a scope of work below for the Carver Ponds Project:

### **Task 1: Gather background information on the Carver Ponds and summarize data**

This task will include the collection of pertinent information on Carver Ponds including, but not limited to: as-built drawings, maintenance activities, survey, or other data collected by the City of Maplewood or Ramsey County. With this data, Barr will be able to inform potential improvements in the future, and augment any additional data collected as part of this study.

### **Task 2: Carver Ponds field investigation (water quality sampling, sediment sampling, utility and bathymetry survey)**

This task will include field investigation of Carver Ponds to characterize water and sediment chemistry, as well as the bathymetry and hydraulics of the ponds. The field investigation services will be broken out into the following subtasks:

#### ***Water quality sampling***

Barr staff will conduct 4 water quality sampling events for the Carver Ponds for during the summer of 2022. These events will occur from June to September. This will give an indication of the pond's frequency of anoxia (low oxygen levels) and sediment phosphorus release. During the sampling events, grab samples of the pond water will be taken in each of the Carver Ponds and analyzed for the following parameters:

- Total phosphorus
- Total dissolved phosphorus
- Soluble reactive phosphorus
- Total and volatile suspended solids
- Total Kjeldahl Nitrogen
- Nitrate+Nitrite
- Ammonia
- 5-day BOD
- Total iron

Additionally, profile measurements at 1-foot intervals will be taken in-situ for the following parameters:

- Temperature
- Dissolved oxygen
- Specific conductivity
- pH

#### ***Sediment Sampling and Release Experiments***

For this task, Barr will collect and analyze sediment core samples from the Carver Ponds (2 cores in the primary pond, 1 core in each of the smaller ponds) to further evaluate the nutrient saturation conditions

that may exist in the ponds. Barr would then set up each core in its laboratory and monitor phosphorus release and sediment oxygen demand of the sediment over time.

After the release rate experiment, Barr will analyze each sediment core for phosphorus fractions (Fe-P, Al-P, Ca-P, Org-P), total iron, total aluminum, and total calcium at selected intervals in the sediment core. Typically, Barr uses intervals every 2 cm for the top 10 cm of the sediment core, and then one composite sample from 10 to 15 cm and another composite sample from 15 cm to 20 cm.

### ***Utility and bathymetric survey***

Barr staff will conduct a bathymetric survey of the three (3) Carver Ponds. The bathymetric survey will be compared to any existing data (i.e. as-builts), if available, to determine the total sediment accumulation in the ponds. Barr will also conduct a survey of storm sewer and relevant structures around the Carver Ponds to accurately inform the hydraulics of the system.

All data collected in the field will be provided to RWMWD and other project partners (City of Maplewood, Ramsey County).

### **Task 3: Implementation Plan**

Using the data collected in the field over the summer of 2022, Barr will prepare a recommendation for improving the Carver Ponds. Specifically, the plan will address improving both upstream and internal nutrient loading from Carver Ponds to Fish Creek downstream. The plan will be presented to RWMWD staff and other project partners. Based on the recommendations and partner interest, the recommendation(s) may be implemented in the future.

### **Budget**

Barr will complete the work outlined above on a time and expense basis for an estimated \$46,600.

We propose the following milestone schedule:

<b>Milestone</b>	<b>Estimated Completion Date</b>	<b>Actual Date</b>
Project Start	June 1, 2022	June 1, 2022
Task 1: Gather background information	July 1, 2022	
Task 2: Field investigation	September 31, 2022	
Task 3: Implementation Plan	November 1, 2022	

### Project Budget Tracking

Project Tasks	Estimated Budget
Task 1: Gather Background Information	\$1,900
Task 2: Field Investigation	\$37,800
Task 3: Implementation Plan	\$6,900
<b>Total</b>	<b>\$46,600</b>

### Monthly Updates

Month	Budget Spent \$ / %
June 2022 <ul style="list-style-type: none"> <li><i>Brainstorming for scope of the project, including new pond maintenance strategies</i></li> </ul>	\$2,449.00 / 5.3%
July 2022	
August 2022	
September 2022	

## Project Work Plan

Original Date: May 23, 2022

Updated: May 23, 2022

**Project:** Double Driveway Pond Improvements Feasibility Study

### Project Team

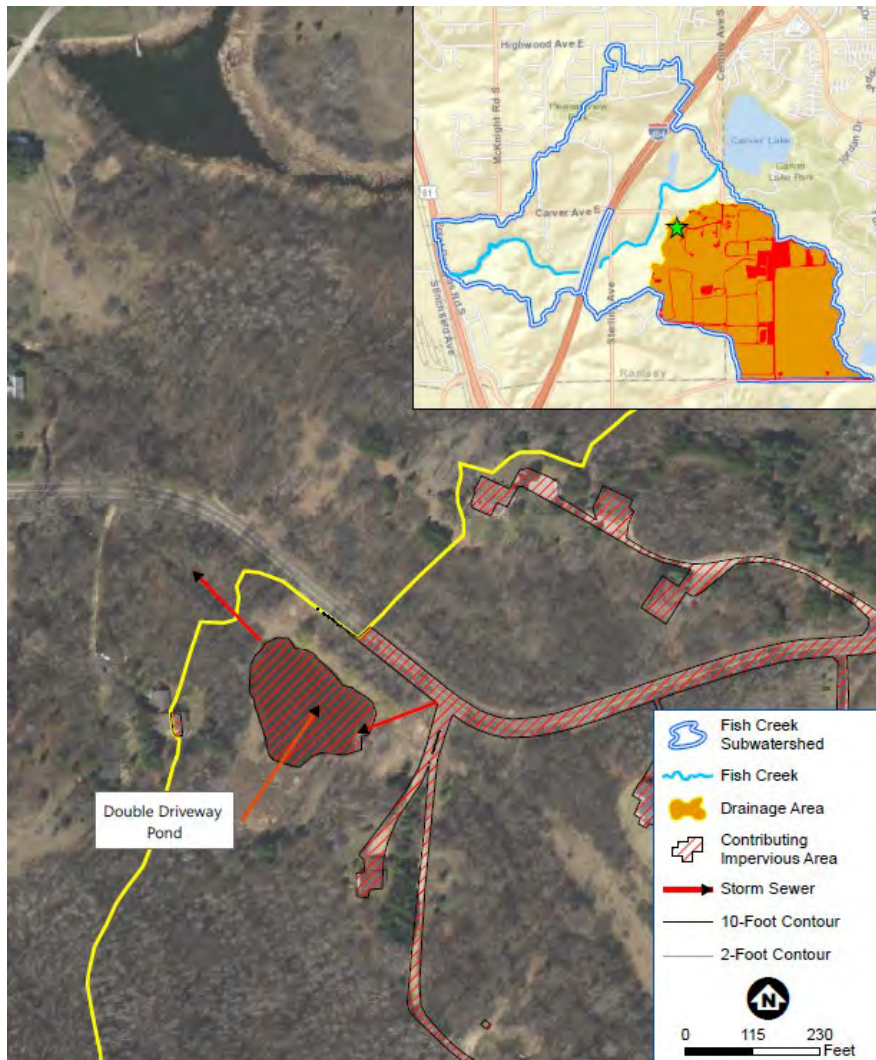
District Staff: Tina Carstens (District Administrator), Eric Korte

Barr Staff: Tyler Olsen (Project Manager), Katie Turpin-Nagel, Kevin Menken, Joe Bischoff, Erin Anderson Wenz

### Scope of Work

This project involves the evaluation of a stormwater pond, nicknamed Double Driveway Pond, in the Fish Creek subwatershed. The pond location is shown in Figure 1 below. This pond receives drainage from approximately 308 acres, most of which is comprised of Bailey Nurseries in Maplewood, MN. Historically, Double Driveway Pond has accumulated sediment at a significantly faster rate than a typical stormwater pond, triggering maintenance needs every few years including dredging and re-design of the pond. In 2014, the pond's permanent pool volume was increased and a forebay was installed at the inlet to the pond. In recent years, sediment deltas formed at the pond inlet have been removed through dredging activities.

In 2021, the Minnesota Department of Agriculture (MDA) required Bailey Nurseries to investigate sediments accumulated in both Double Driveway Pond and Fish Creek for accumulation of pesticides that were previously used on the nursery property. A report was prepared and submitted to the MDA for review in early 2022, and a decision on any required remediation is being awaited by Bailey Nursery.



**Figure 1. Double Driveway Pond location**

Originally, the scope of this project was intended to be a feasibility study of stormwater best management practices (BMPs) that would improve the water quality of Double Driveway Pond and its outflows to Fish Creek. However, given the status of the MDA report and potential future remediation activity in the pond, Barr has amended the scope to include the following tasks in this interim period:

**Task 1: Gather background information on Double Driveway Pond and summarize data**

This task will include the collection of pertinent information on Double Driveway Pond including, but not limited to: as-built drawings, maintenance activities, survey, or other data. With this data, Barr will be able to create any necessary design plan sheets and inform potential improvements in the future. Barr will create a summary of the available data to document for future need when remediation action or future design takes place.

## Task 2: Coordinate with MDA and Bailey Nursery staff

This task will involve the coordination and communication with both MDA and Bailey Nursery staff in order to stay informed on any required remediation that the nursery will be required to perform on Double Driveway Pond. This will allow the RWMWD to comment on or provide design guidance on the remediation.

### Budget

Originally, \$25,000 was budgeted for 2022 for this feasibility study. With the change in scope, Barr proposes that the work outlined above be completed on a time and expense basis for an estimated \$14,000.

We propose the following milestone schedule:

Milestone	Estimated Date	Actual Date
Project Start	May 1, 2022	May 1, 2022
Task 1 (Gather background information) complete	July 1, 2022	
Task 2 (Coordinate with MDA and Bailey Nursey) complete	TBD	

### Project Budget Tracking

Project Tasks	Estimated Budget
001	\$8,600
002	\$5,400
<b>Total</b>	<b>\$14,000</b>

### Monthly Updates

Month	Budget Spent \$ / %
June 2022 <ul style="list-style-type: none"> <li><i>Brainstorming for scope of the project, including new pond maintenance strategies</i></li> <li><i>Meeting regarding Department of Agriculture work</i></li> </ul>	\$2,356.50 / 16.8%
July 2022	
August 2022	
September 2022	

## Project work plan

**Original date:** May 25, 2022  
**Updated:** May 25, 2022

**Project:** Kohlman Creek flood risk reduction feasibility study  
**Project #:** 23/62-1200.21 002 002

**Project team:**  
**RWMWD staff:** Tina Carstens (project manager), Paige Ahlborg  
**Barr staff:** Erin Anderson Wenz, Michael McKinney, Lulu Fang, Brandon Barnes, Parker Brown

## Scope of work

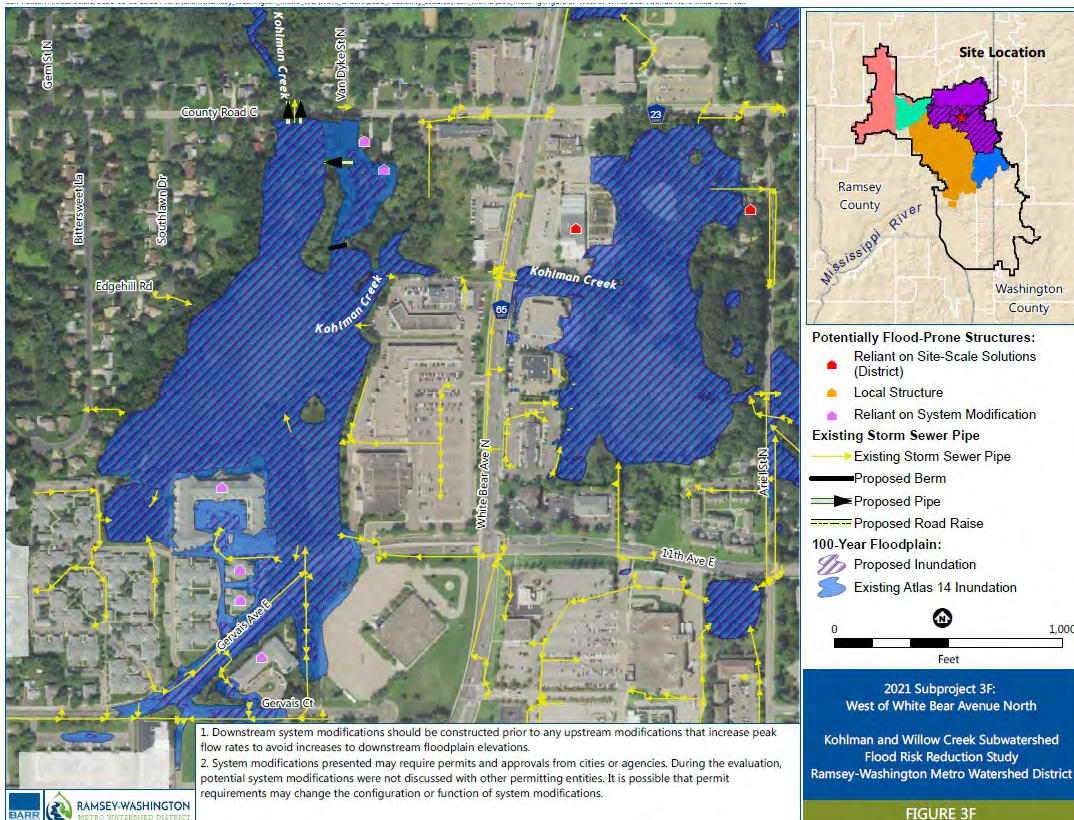
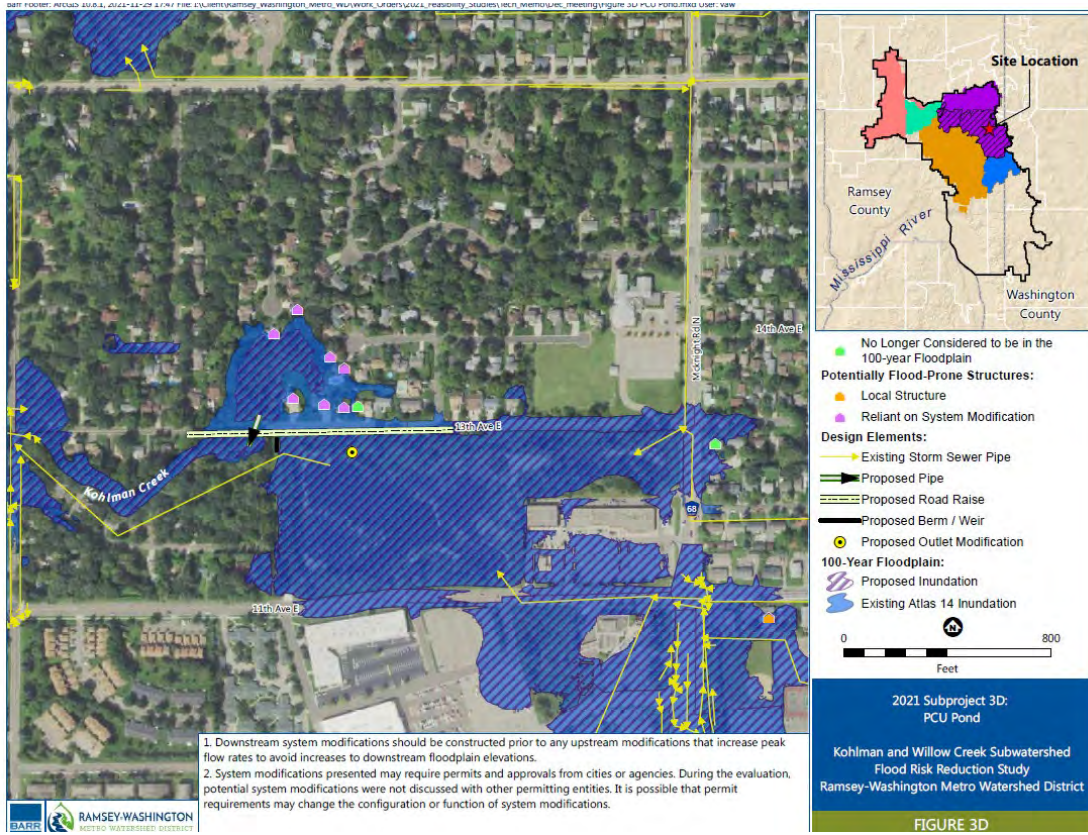
The purpose of this project is to identify strategies or combinations of strategies and system modifications that would remove habitable structures on Kohlman Creek from the 100-year floodplain—specifically, structures located near PCU Pond in North Saint Paul and those located west of White Bear Avenue in Maplewood, as shown in the maps below. This scope continues the feasibility work that began in 2021, which included collection of survey information for low homes and initial evaluation of storm sewer modifications to remove structures from the 100-year floodplain. The work completed in 2021 is summarized in memorandums dated October 28, December 2, and December 30, 2021.

The 2021 feasibility work considered a range of system modifications. Modifications necessary to remove structures from the floodplain depend on the feasibility and resulting size of the diversion of flows from Kohlman Creek (diverting flows south of the North Saint Paul Urban Ecology Center) through the Goodrich Golf Course, discharging into County Ditch 17 and eventually to Wakefield Lake. A larger diversion will result in fewer modifications (or modifications that are smaller in scale) to achieve the objective of removing structures from the 100-year floodplain. The Kohlman Creek-Wakefield Lake diversion study began in spring 2022 and is scheduled to continue through summer 2023. As a result, a detailed feasibility study and preliminary sizing of system modifications cannot be completed until the diversion is further defined.

Work in 2022 will focus on coordinating with the cities of North Saint Paul and Maplewood regarding concepts for proposed modifications, including reviewing capital improvement plans (CIPs) for planned street and utility improvements, gathering underground utility information, and gaining consensus on strategies that were identified in 2021 to reduce flood risk along Kohlman Creek. In addition, the City of North Saint Paul received resiliency grant funding and plans to review system modifications to reduce flood risk within the city. We will coordinate so that the Ramsey-Washington Metro Watershed District's (RWMWD) feasibility study complements work the city pursues using grant funding.

The project will allow the RWMWD to proceed with a detailed feasibility study that considers a few potential system modifications (which have been discussed with each city) after design flows on Kohlman Creek are established following completion of the Kohlman Creek-Wakefield Lake study.





Barr proposes the following work tasks in 2022:

**Task 1: data collection:** This task involves requesting current storm sewer information from the Cities of Maplewood and North Saint Paul, including as-built drawings and geographic information system (GIS) files not already collected in 2021. As part of this task, we will submit a Gopher State One Call (GSOC) non-excavation ticket to gather utility information that will be used to understand potential conflicts with proposed system modifications.

**Task 2: stakeholder engagement:** This task includes regular coordination meetings with the Cities of North Saint Paul and Maplewood to review system modification concepts identified in 2021, discuss upcoming opportunities and city projects, consider conflicts that could prevent system modifications, and review results. For example, Barr understands that North Saint Paul has received resiliency grant funds and has identified the intersection of McKnight Road and Highway 36 as a priority area. We will coordinate with the city to verify that system modifications the RWMWD considers complement city work.

The primary goal for stakeholder engagement in 2022 is to build consensus around the approach and types of system modifications being considered, allowing for a streamlined feasibility study in 2023 when the design flows on Kohlman Creek are better defined following completion of the Kohlman Creek-Wakefield Lake diversion.

**Task 3: evaluate flood risk reduction options:** This task involves using the RWMWD stormwater model to evaluate revisions to flood risk reduction options identified in 2021 based on feedback from the cities of Maplewood and North Saint Paul. We anticipate that system modifications can be refined based on general feedback from the cities (even if specific design flows are not known). The additional evaluation will be used to inform discussions with city staff. Flood risk to structures during lesser but more frequent events than the 100-year storm event (such as the five-year, 10-year and 25-year) will also be evaluated as a part of this task, especially in areas where protecting structures from the 100-year storm event is not feasible and site-scale solutions are unlikely to be pursued.

**Task 4: documentation:** This task involves documenting stakeholder coordination, including meeting notes and documentation of ongoing discussion and decisions. This task also includes updating the board about ongoing coordination.

## Budget

The 2022 budget included \$75,000 for this project. However, initial stakeholder coordination for the Kohlman Creek-Wakefield Lake diversion has identified several potential opportunities that could affect the design flows on Kohlman Creek. As such, we recommend proceeding with only the stakeholder coordination task in 2022 and reserve the additional funds until 2023 when design flows for Kohlman Creek are better defined. The approximate cost for Barr to complete the work outlined above is **\$15,000**.

## Schedule

Stakeholder coordination will continue throughout 2022. Updates to the board can be provided on request.

## Project tracking

### Project milestones

Milestone	Estimated date	Actual date
Project start	June 2022	
Task 1: data collection	July 2022	
Task 2: stakeholder engagement	Ongoing	
Task 3: evaluate flood risk reduction options	As needed <sup>1</sup>	
Task 4: documentation	December 2022	

<sup>1</sup> Evaluation of flood risk reduction options defined in 2021 will be completed as needed based on comments and feedback from the cities of Maplewood and North Saint Paul.

### Monthly updates

Month	Budget spent (\$/%)
June 2022	
July 2022	
August 2022	
September 2022	
October 2022	
November 2022	
December 2022	

\* \* \* \* \*

# Administrator's Report

\* \* \* \* \*

# MEMO

**TO:** Board of Managers and Staff  
**FROM:** Tina Carstens, Administrator  
**SUBJECT:** May Administrator's Report  
**DATE:** May 27th, 2022

## A. Meetings Attended

Monday, May 2nd	12:00 PM	Meet with Manager Eisele
Tuesday, May 3	9:00 AM	MAWA Executive Meeting
	1:30 PM	St. Paul Water Resources Group Meeting
Wednesday, May 4th	6:30 PM	Board Meeting
Friday, May 6th	10:00 AM	Kohlman/Wakefield Diversion Project Meeting
Monday, May 9th	10:30 AM	Owasso Basin/North Star Meeting
	1:00 PM	Metro Inet Meeting
Tuesday, May 10th	1:00 PM	Leadership Network Event Webinar
Monday, May 16th	11:00 AM	Meet with Manager Ward
Tuesday, May 17th	5:30 PM	Vadnais Heights City Council Workshop
Thursday, May 19th	9:00 AM	Water Resources Conference Planning
Tuesday, May 24th	11:00 AM	Audit Exit Meeting
Friday, May 27th	9:00 AM	Meet with Managers Ward and Swope
	10:30 AM	Meet with Manager Eisele

## B. Upcoming Meetings and Dates

WaterFest	June 4, 2022
CAC Meeting	June 14, 2022
July Board Meeting	July 6, 2022
Metro MAWD Meeting	July 19, 2022
August Board Meeting	August 2, 2022
MAWD Summer Tour	August 24, 2022

## C. Ongoing Project Update

**Board Action Log** – I haven't drafted this log of items, but I understand this is the "parking lot" for the board for issues and topics of interest. If you have items that you want to be sure are included in this log, please send them to me. I will place this list in a cloud location.

#### **D. West Vadnais Lake Boundary Change Update**

On May 17th, Manager Swope and I attended the City of Vadnais Heights City Council workshop meeting. VLAWMO asked the city council to weigh in on whether or not they had any questions or major concerns that could hold up the boundary change process. The council first discussed it at their May 3<sup>rd</sup> workshop meeting and then requested that we attend to answer their questions.

The questions related mostly to the District's permitting program and the city's development requirements. Both district and city staff discussed the similarities in the requirements that would mean not a big change in permitting requirements if the boundary changed. Since VLAWMO doesn't have permitting authority, we explained a little more on how our permitting authority works and that we don't regulate land use or zoning decisions. We also pointed out that we currently permit projects over an acre in disturbance in other parts of Vadnais Heights within our boundary.

There were also questions regarding our approach to water quality and flood control projects. We highlighted the work we have done in other parts of our District and the work done in the West Vadnais Lake area. We discussed how the TMDL would work for WVl if the boundary change didn't happen vs. if it did. The council asked why RWMWD would want to take on that liability. We answered that WVl is in the middle of two chains of lakes for RWMWD and, therefore, would be a higher priority than VLAWMO.

In the end, the council didn't have any major objections to the idea of a boundary change and asked VLAWMO's board to consider the request first, and then the council would give an official decision at a regular meeting.

VLAWMO's subcommittee is meeting on Monday, June 6<sup>th</sup>. Manager Swope and I will attend to answer the subcommittee's questions. That subcommittee will recommend it to the full VLAWMO board at their June 22<sup>nd</sup> meeting. I would anticipate having a decision from VLAWMO at that time.

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# Project and Program Status Reports

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## Memorandum

**To:** Board of Managers and Staff  
**From:** Tina Carstens and Brad Lindaman  
**Subject:** Project and Program Status Report – June 2022  
**Date:** May 27, 2022

**Note: The location, brief description, and current status of each project described below can be found on the [2022 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.*

Last period, Barr held meetings with the cities of Maplewood and Saint Paul to discuss flood risks and potential mitigation strategies. More meetings with these cities, as well as with North Saint Paul and White Bear Lake, have been or are being scheduled. In the meantime, site-scale solutions continue to be developed, including a look at hydrographs to determine response times at specific sites. Additionally, regional system modifications are being added to models and plans. A May 19 meeting with the RWMWD outlined how this project ties into other ongoing projects.

#### **B. Kohlman Creek flood risk reduction feasibility study (Barr project manager: Brandon Barnes; 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 study will be conducted concurrently with the Kohlman Creek-Wakefield Lake diversion feasibility study described below, as the magnitude of diverted flow affects the level of flood risk reduction that will be required in the North Saint Paul Urban Ecology Center, PCU Pond, and the wetland complex west of White Bear Avenue. A scope summary for this project is included in this month's board packet for manager review.



This month, Barr, the RWMWD, and the City of North Saint Paul briefly discussed opportunities for system modifications near PCU Pond and the intersection of McKnight Road and Highway 36. The city received grant funding and will further evaluate opportunities in the area. Our first step will be to meet with North Saint Paul to identify collaboration opportunities and identify system modifications that will accomplish both RWMWD and city goals and objectives. If the board approves the scope, the initial collaboration meeting will be scheduled for mid-June.

**C. Kohlman Creek/Wakefield Lake diversion feasibility study (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to complete a feasibility evaluation of modifications to reduce flood risk on Kohlman Creek by diverting high flows to the historic County Ditch 17. Work includes coordination with stakeholders, evaluation of alternatives to reduce flood risk, preparation of cost estimates for each alternative, and identification of permitting requirements. This feasibility study is a follow-up study of a flood-prone area identified in the Beltline resiliency study.*

Barr and the RWMWD facilitated a virtual stakeholder kickoff meeting on May 6 with representatives from Ramsey County Parks, Ramsey County Public Works, the City of Maplewood, the City of North Saint Paul, and the Minnesota Department of Natural Resources (DNR). All stakeholders were excited about the potential to partner on the project, which aligns well with many of their goals. System modifications will mitigate flooding in North Saint Paul and Maplewood, and Ramsey County is starting a project in Goodrich Golf Course that includes a potential irrigation reuse system and is open to providing additional floodplain storage on the golf course.

Following the kickoff meeting, we facilitated an on-site meeting on May 17 with the same stakeholders, during which Ramsey County identified numerous opportunities/locations for storing floodwater on the golf course. During a second meeting on May 23, North Saint Paul walked through potential alignments for the diversion pipe.

Barr has been reviewing responses to the non-excavation Gopher State One call (GSOC) ticket as well as developing figures showing the alignments and locations of underground utility information. These figures will be used to inform alignments selected for further



*On May 17, the RWMWD, Barr, Minnesota DNR, and Ramsey County Parks toured Goodrich Golf Course to discuss project opportunities.*

evaluation and to verify that all utilities are marked in the field when collecting survey information (which will occur later in the project).

Next month, Barr will begin evaluating potential diversion alignments and capacities, including options for additional floodplain storage on the golf course. We will communicate regularly with stakeholders during the evaluation, which will take place over several months, to gather additional information and solicit feedback on the options/alignments being considered.



*Brandon Barnes (Barr) and Gus Blumer (Ramsey County Parks) review a map of potential project sites (including Kohlman Creek-Wakefield Lake diversion alignment).*



*The site visit covered the whole golf course; led by the course superintendent, participants drove golf carts to potential project areas.*

Stakeholder feedback will be used to guide the identification and evaluation of potential system modifications. The feasibility study is anticipated to extend through summer 2023.

#### **D. County Ditch 17 improvements feasibility study (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to complete a feasibility evaluation of modifications to reduce flood risk northeast of Wakefield Lake along historic County Ditch 17 to remove structures from the 100-year floodplain. Work includes coordination with the City of Maplewood, evaluation of alternatives to reduce flood risk, preparation of cost estimates for each alternative, and identification of permitting requirements. This feasibility study is a follow-up study of a flood-prone area identified in the Beltline resiliency study.*

This month, Barr focused on post-processing utility information received following the GSOC non-excavation ticket, including preparing figures showing the alignment and location of underground utilities, which will be used to inform potential alignment of storm sewer modifications. Surveyors will also use this figure later in the project to verify that all utilities have been marked with field surveying utilities.

Barr is updating the district's stormwater model with as-built plans and GIS information from the City of Maplewood. Model updates have included revised subwatershed divides and updates to pipe diameters and inverts. The updated model will be the basis for evaluating system modifications.

Next month, Barr will start identifying potential alignments and system modifications. We anticipate that options will include upsizing the existing system along the current alignment and diverting high

flows along Frost Avenue to Prosperity Avenue. After preliminary sizing and evaluation of system modifications, we will solicit input from the City of Maplewood.

The County Ditch 17 feasibility study is anticipated to extend through summer 2022.

**E. Phalen Village feasibility study (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to complete a feasibility evaluation of modifications to reduce flood risk near Phalen Village north of Lake Phalen to remove structures from the 100-year floodplain. Work includes coordination with the City of Maplewood, evaluation of alternatives to reduce flood risk, preparation of cost estimates for each alternative, and identification of permitting requirements. This feasibility study is a follow-up study of a flood-prone area identified in the Beltline resiliency study.*

This month, Barr focused on updating the RWMWD's stormwater model with information from the City of Maplewood. The city provided as-built drawings and GIS files for the stormwater system near the study area. Model updates included revising subwatershed divides, updating storm sewer information, and confirming emergency overflow elevations.

Next month, following updates to the stormwater model, Barr will start evaluating system modifications to reduce flood risk to existing structures. We anticipate that updates could include increasing storm sewer capacity into Lake Phalen or Kohlman Creek and providing additional storage volume below city streets.

Following the initial evaluation, we will meet with the city to solicit input on potential modifications. The feasibility study will extend through summer 2022.

**F. Ames Lake area flood risk reduction planning study (Barr project manager: Brandon Barnes; 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.*

Barr and the RWMWD met with the Saint Paul Water Resource Work Group on May 3. This group consists of Saint Paul staff from various departments who coordinate projects that may have an impact on water resources. Following the meeting, Barr submitted a list of questions to the city regarding potential locations for storing stormwater, the city's goals and objectives, planned storm sewer system modifications, and potential parcels/city property that could be considered for a flood risk reduction project. The city is reviewing the questions and developing answers based on input from the Water Resource Work Group. We anticipate responses in early June.

Barr has also been updating the district's stormwater model based on as-built drawings from the city. Updates include verifying storm sewer alignments, diameter, and invert elevations. The updated model will be used to simulate system modifications that the city supports.

This planning-level study will extend through summer 2022. The Beltline resiliency study identified modifications to the stormwater system that cities typically implement, such as additional catch basins

and storm sewer pipes. However, if potential system-scale modifications are identified, a feasibility study could be completed in 2023.

**G. Owasso Basin area/North Star Estates improvements (Barr project manager: Sam Redinger; 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.*

This period, Barr met with the City of Little Canada and RWMWD to discuss updated flood maps for Owasso Basin and flood risk for North Star Estates homes. The city and RWMWD provided feedback on defining the recommended approach for evaluating flood risk in North Star Estates. Barr will present these findings and recommendation to the board at the June meeting. Next period, we will use manager feedback to guide further evaluation of flood risk reduction projects in and around Owasso Basin and North Star Estates and transition this project to design and analysis.

**H. Double Driveway Pond optimization study (Barr project manager: Tyler Olsen; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to evaluate the benefit-cost of water quality improvements in Double Driveway Pond in the Fish Creek subwatershed. These improvements will be targeted at sediment reduction strategies that will benefit downstream Fish Creek, which is considered impaired by excess sediment. An important part of this study is tying strategies to the findings of a current Department of Agriculture study (currently under review) that is assessing the water quality of runoff from upstream areas.*

This period, Barr continued gathering past maintenance efforts and as-built design information on Double Driveway Pond. A new scope summary is included in this month's board packet for manager review and approval. The new scope has been reduced given ongoing coordination with the Minnesota Department of Agriculture. Because future remediation efforts (i.e., dredging) may be required, Barr will wait to perform any monitoring or design.

**I. Carver Ponds improvements study (Barr project manager: Tyler Olsen; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to characterize the water quality in the Carver Ponds in the Fish Creek subwatershed and to evaluate the benefit-cost of water quality improvements to the ponds. These improvements will be targeted at internal loading of nutrients in the pond, as well as potential external sediment and nutrient loading. The goal will be to inform design solutions to be implemented in the ponds.*

This period, Barr conducted brainstorming sessions for the scope of pond maintenance and improvements that may be used for Carver Ponds. We identified the information that needs to be gathered to inform the solutions and created a scope summary for the project, which is included in this month's board packet for manager review and approval.

## Monitoring water quality and special projects

### **J. Annual water quality report assistance (Barr project manager: Keith Pilgrim; RWMWD project manager: Eric Korte)**

*The purpose is to update and report on lake and stream water quality, monitoring of selected best management practices (BMPs), and other water quality improvement projects that highlight district efforts.*

Primary activities during this period included organizing water quality data for lakes, streams, and BMPs and developing tables and graphs for the 2021 report.

### **K. Special project BMP monitoring (Barr project manager: Chris Bonick; RWMWD project manager: Eric Korte)**

*The objective is to monitor specific water quality BMPs that the RWMWD has implemented, particularly those that include filtration media such as iron-enhanced sand, spent lime, or CC17 crushed limestone aggregate, and/or that leverage continuous monitoring and adaptive control (CMAC) technology.*

This period, Barr and the RWMWD continued to discuss 2022 monitoring needs across the district, identifying the areas where monitoring activities are warranted and discussing which parameters should be evaluated at each location. Also, this period, staff worked on putting the Willow Pond CMAC spent lime filter online. As a reminder, the valve that brings water into the filter from Willow Pond is controlled by water levels in the pond and the filter to optimize filtration capacity and function.

## Research projects

### **L. Kohlman permeable weir test system (Barr project manager: Keith Pilgrim; RWMWD project manager: Bill Bartodziej)**

*The objective of this current investigation is to design a full-scale permeable weir treatment system for installation in the Kohlman Basin.*

Barr and the RWMWD are moving forward with broader implementation of the permeable weir pilot project. A kickoff meeting was held on April 26. This period, we developed a plan for next steps: 1) conceptual design development; 2) cost-benefit analysis (e.g., cost per pounds of phosphorus removed) for the selected design; 3) evaluation of wetland considerations; 4) floodplain modeling; and 5) design development.

### **M. Shallow lake aeration study (Barr project manager: Keith Pilgrim; RWMWD project manager: Bill Bartodziej)**

*The purpose of this study is to evaluate the potential effectiveness of aeration in shallow lakes by studying the effect of aeration in three smaller shallow systems (Markham Pond, Bennett Lake, and Gervais Mill Pond) in detail during 2021 and 2022. This approach is being pursued as an alternative to whole-lake alum treatments.*

Barr presented the data collected in 2021 to the RWMWD staff and discussed it with Bill Bartodziej. The data offers a good baseline from which to evaluate the capacity of aeration to reduce internal loading in shallow lakes in general.

This study is moving ahead with Markham Pond, Bennett Lake, and Gervais Mill Pond as the study sites. The aerator in Markham Pond operated all winter and will operate through the fall. The City of Roseville plans to install a limited aeration system in the east bay of Bennett Lake, and Gervais Mill Pond will have an aerator installed in the north bay in 2022 when equipment is available (currently backordered). Dissolved oxygen meters have been installed, and the first round of monitoring was conducted during the week of May 9.

This experimental design will provide comparison of:

- Internal loading in Markham Pond without (2021) and with (2022) aeration
- Internal loading in Gervais Mill Pond for a bay with aeration to a bay without aeration (2022)
- Internal loading in the west bay of Bennett Lake (no aeration) to the east bay of Bennett Lake (with aeration) in 2022

## Capital improvements

### **N. 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.*

At the East Saint Paul Target project, the one-year plant warranty was set to expire on May 15. Due to the late spring arrival, plant survival could not be confirmed. A change order, included in the consent agenda in the board packet, extends the contract for one additional month to confirm plant survival and enable the contractor to meet specification requirements for replacement.

### **O. Ryan Drive and Keller Parkway conveyance (Barr project manager: Sam Redinger; RWMWD project manager: Dave Vlasin)**

*The purpose of this project is to implement improved conveyance through Gervais Creek, as recommended by the Owasso Basin bypass feasibility study. This CIP is an implementation item from the study recommended in the Beltline resiliency study.*

The contractor has finished its scope; construction and restoration are now complete. The final payment application (Pay App. no. 4) is included in this month's packet for board review and approval. The project will be closed out over the next few periods, including developing record drawings and compiling construction documentation for turnover to the City of Little Canada and Ramsey County (who will own and be responsible for maintenance of the new infrastructure).

### **P. Targeted retrofit projects (Barr project manager: Marcy Bean; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to design, provide bid assistance for, and oversee construction of BMP retrofits on previously identified commercial, school, and faith-based properties throughout the district.*

In May, the board approved award of the construction contract for the 2022 retrofit sites to Shoreline Landscaping, LLC. The project contract has been completed, and the preconstruction meeting will be held on May 26. We anticipate that construction will begin in mid-June after the school year ends at Mounds Park Academy.

**Q. Woodbury Target stormwater retrofits (Barr project manager: Katie Turpin-Nagel;  
RWMWD project manager: Paige Ahlborg)**

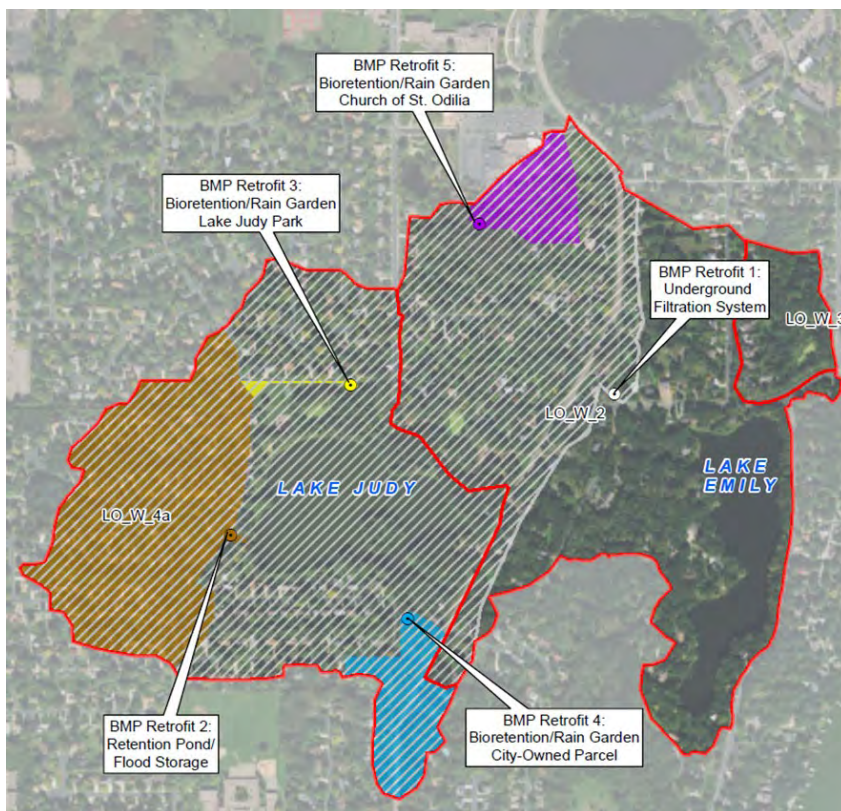
*The purpose of this project is to create concept-level designs for Woodbury's Valley Creek Target shopping complex.*

This period, Barr continued discussing the potential scope of a future project at the Woodbury Target with Target management and other stakeholders. A scope summary will be presented to the managers in the coming months.

**R. Lake Emily Subwatershed Regional 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.*

In June, the RWMWD and Barr will meet with the City of Shoreview to discuss the projects identified in the Lake Emily subwatershed feasibility study (2016) to coordinate upcoming projects that might help Shoreview choose between BMP 1 (an underground filtration system) and BMP 4 (a bioretention/rain garden), shown in the map below. When the Lake Emily subwatershed feasibility study was conducted, BMP 1 had the lowest cost per pound of total phosphorus removed (\$2,400 to \$3,200 per pound per



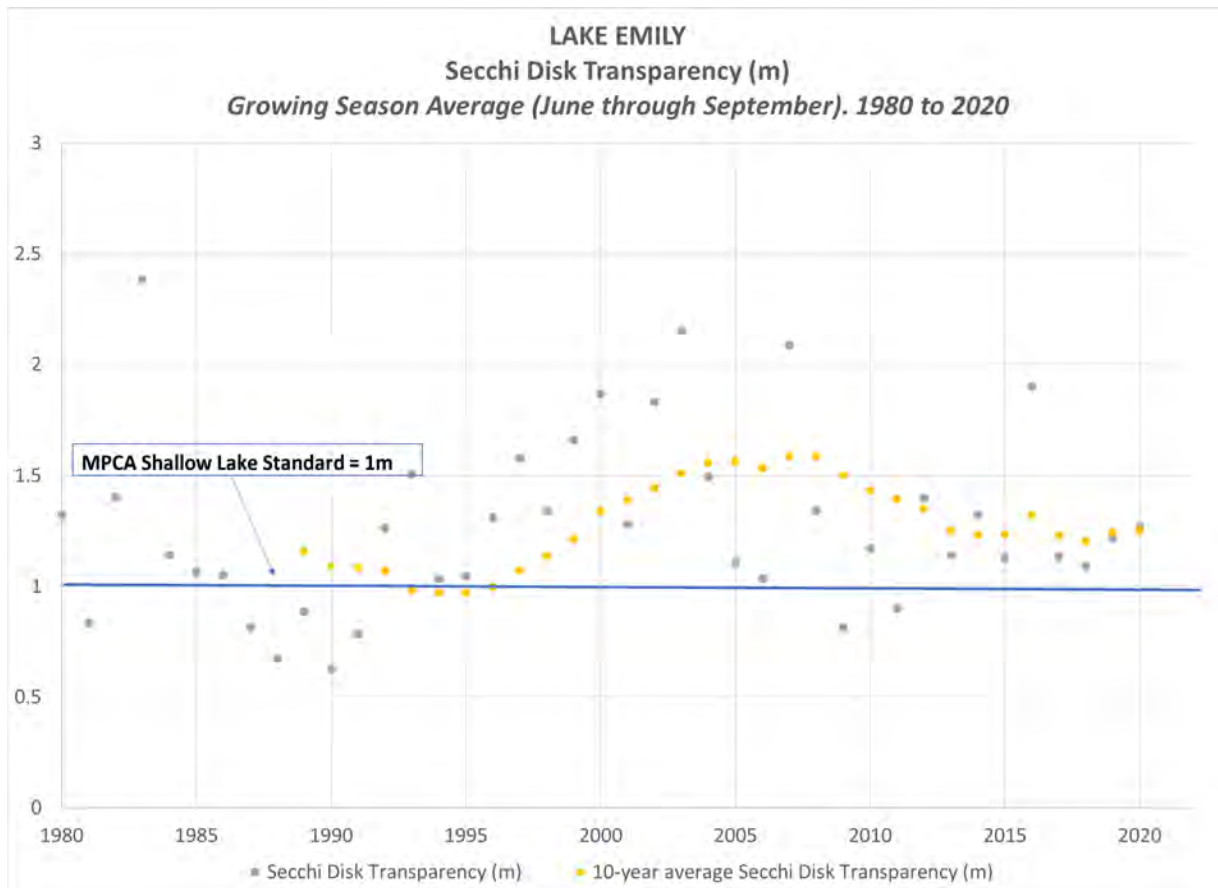
year) and was perceived to be the most important BMP to pursue first in the subwatershed due to its proximity to Lake Emily.

However, since the prioritization tool was developed for RWMWD's water quality projects, BMP 4 is now considered the highest-priority project of the group shown in the map below. Its annualized cost per pound of total phosphorus removed is higher (\$7,600 to \$10,000 per pound per year) but has other qualities the prioritization tool recognizes as valuable. BMPs 2 and 3 were not evaluated beyond the 2016 study and are currently on hold due to their removal efficiencies being lower than BMPs 1 and 4. They may be necessary at a later date, to meet total phosphorus removal goals. BMP 5 was considered

several years ago, and the concept evolved into the Cottage Place Wetland restoration project that has been on hold since 2020, at the request of the board.

As a reminder, the Lake Emily subwatershed feasibility study was pursued in 2016 because although the Minnesota Pollution Control Agency (MPCA) has not officially categorized the lake as "impaired" by

excess nutrients, the Minnesota DNR’s Lake Finder citizen monitoring data consistently shows that the lake’s growing-season secchi disk transparency depths are consistently lower than the state standard for shallow lakes (1 meter), indicating a degraded water quality condition (see the chart below). In addition, historic RWMWD monitoring data has frequently shown elevated phosphorus concentrations in the lake, although the number of measurements in recent years is not adequate for the MPCA to make a formal impairment judgment.



A scope summary to further explore and develop BMPs 1 and 4 with the City of Shoreview is included in this month’s board packet for manager consideration.

## CIP project repair and maintenance

### S. Beltline five-year inspection (Barr project manager: Sam Redinger, RWMWD project manager: Dave Vlasin)

*The purpose of this project is to maintain the existing Beltline and Battle Creek tunnel systems and infrastructure owned and operated by the RWMWD.*

This period, Barr continued compiling the inspection findings. Inclement weather (a wet, rainy spring) has prevented us from completing the remaining in-pipe work (baseline survey of Battle Creek and upstream pipe inspection). We will continue to monitor weather over the next period, with the intent of



finishing the remaining inspection and survey work in the Battle Creek tunnel and evaluate findings to develop the inspection report.

**T. District inspection standardization (Barr project manager: Tyler Olsen; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to standardize the district’s creek and facilities inspection process, evaluation, and related data collection effort. Work includes review of current methods, development of a scoring system, and implementation of mobile data collection.*

This period, Barr worked with the RWMWD to coordinate the field test of the Field Maps and Survey123 inspection survey. Currently, the survey is planned for May 25 and will be conducted by both RWMWD and Barr staff. The collected information will be downloaded and reviewed at a desktop level. We will simulate how the gathered information will be used to score and prioritize maintenance efforts.

The field testing will also be used to identify any “bugs” or missing data fields in the applications. Barr will make any updates to the iPad applications prior to the full inspection in the fall. We will include the results of the field test in a subsequent board packet for manager review.

**U. CIP maintenance/repairs 2022 project (Barr project manager: Greg Nelson; RWMWD project manager: Dave Vlasin)**

*The purpose of this project is to maintain existing systems and infrastructure owned and operated by the RWMWD and to assist and facilitate stormwater pond cleanouts to allow other public entities to meet their municipal separate storm sewer systems (MS4) requirements.*



This period, the Gervais Creek/daycare site reached 90-percent completion, to the delight of the daycare children. Crews have finished clearing and grubbing at the County Road D site and plan to begin work there the week of May 23. The contractor is confident that work on these and other remaining sites will be complete by the contract deadline.

**Topic of emerging concern**

**V. Topic of emerging concern: jumping worms (Barr project manager: Marcy Bean; RWMWD project manager: Tina Carstens)**

<p><b>What are jumping worms?</b></p>	<ul style="list-style-type: none"> <li>• A non-native, eastern Asian earthworm introduced to Minnesota through worm composting and released to the environment</li> <li>• Live in duff and litter layer (O horizon) of soil, which also serves as a food source</li> <li>• Aggressively consume organic matter above and below the soil surface, leaving soil the consistency of coffee grounds (often to a depth of six inches) and highly susceptible to erosion; also disturb plant roots and limit the anchoring ability of trees</li> <li>• Are muscular and very active, disturbing soil</li> <li>• Can easily be transported and inadvertently spread across the landscape by people transporting plants, mulch, and soil</li> <li>• No known control methods</li> </ul>
<p><b>Impacts</b></p>	<ul style="list-style-type: none"> <li>• Alter structural, physical, and chemical soil characteristics</li> <li>• Alter the composition of topsoil by consuming the top mineral layer and natural organic layers (litter and duff layers), quickly decomposing leaf litter, and</li> </ul>

	<p>altering soil structure to a loose black layer of worm castings; this rapid decomposition of organic matter can result in increased nutrient runoff</p> <ul style="list-style-type: none"> <li>• Cause soil erosion and nutrient loss due to the loss of soil cover and loose soil structure</li> <li>• Destroy soil fungi hyphae networks and other microorganisms, limiting the ability of plants (including trees) to take up nutrients and water</li> <li>• Prevent the reproduction of plants, limiting their diversity, distribution, and abundance</li> <li>• Weaken plant performance and survival</li> <li>• Alter animal populations (including insects, macroinvertebrates, and vertebrates) that utilize leaf litter and duff layer of soil for habitat</li> </ul>
<p><b>Life cycle</b></p>	<ul style="list-style-type: none"> <li>• Hatch in spring from cocoons that overwinter; live worms cannot overwinter</li> <li>• Worm reproduction can be asexual; they can reproduce without a mate, exacerbating their spread</li> <li>• A 60-day maturity period is required after hatching; juvenile worms are hard to distinguish from other earthworms but can be identified after they mature in July</li> <li>• Achieve higher populations faster than other earthworms; each worm can produce approximately 60 cocoons with one to two eggs per cocoon, and a second generation can reach maturity and start producing cocoons within one season</li> </ul>
<p><b>Management and prevention</b></p>	<ul style="list-style-type: none"> <li>• Eradication is currently not possible</li> <li>• No products are effective in the control of jumping worms</li> <li>• Preventing worm introduction is the only method to slow their spread</li> <li>• People are the primary vector for spreading, which occurs through the transport of plants, soil, compost, and mulch; worm cocoons can also stick to shoes, shovels, and equipment</li> <li>• Mulch, compost, or soil can be heat treated to kill jumping worms and cocoons</li> <li>• Stockpiling of mulch, compost, soil piles, and potted plants should be physically separated from contaminated (worm-infested) areas</li> <li>• Equipment (boots, shovels, or machinery) should be cleaned before and after being moved to a site to ensure that the worms or cocoons do not spread</li> <li>• Report to the Minnesota Department of Agriculture if you find jumping worms</li> </ul>
<p><b>Conclusion</b></p>	<p>Jumping worms (<i>Amyntas spp.</i>) are an invasive species to Minnesota and greatly contribute to ecosystem disturbance through their impact to soil structure. Jumping worms degrade vital nutrients and deplete the organic layers of topsoil, which kills plants and increases erosion. Jumping worms are a serious threat to Minnesota’s water quality and ecosystems. Since there are no management options for jumping worm infestations, <b>preventing their spread should be a priority in all watershed district projects.</b></p>

<b>Identification</b>	<h2 style="text-align: center;">■ How to Identify Jumping Worms?</h2> <div style="text-align: center; background-color: #e0e0e0; padding: 5px; margin-bottom: 10px;">Invasive Worm Comparison</div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Nightcrawler Worm (<i>Lumbricus terrestris</i>)  <small>Image Source: PetSmart LLC - petsmart.com</small></p> </div> <div style="background-color: #e0e0e0; padding: 10px; border: 1px solid #ccc;"> <p><b>Nightcrawler Worm (<i>Lumbricus terrestris</i>)</b></p> <p><b>Color:</b> Pink/Reddish</p> <hr/> <p><b>Body:</b> Thick, Slimy, Floppy</p> <hr/> <p><b>Size:</b> 6-8 inches long</p> <hr/> <p><b>Clitellum:</b> Slightly raised from body, partially encircles body, and red/pink in color</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Jumping Worm (<i>Amyntas agrestis</i>)  <small>Image Source: The Oregonian - oregonlive.com</small></p> </div> <div style="background-color: #e0e0e0; padding: 10px; border: 1px solid #ccc;"> <p><b>Jumping Worm (<i>Amyntas agrestis</i>)</b></p> <p><b>Color:</b> Brown/Gray</p> <hr/> <p><b>Body:</b> Sleek, dry, smooth, and firm</p> <hr/> <p><b>Size:</b> 4-5 inches long</p> <hr/> <p><b>Clitellum:</b> Flush with body, relatively close to head, encircles body, and light (compared to body) in color</p> </div> </div>
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**Description:**

Earthworms in the *Amyntas* genus are native to eastern Asia. In fact, no earthworms are native to Minnesota. Since 2016, several species of *Amyntas* (jumping worms) have been found in Minnesota, including Ramsey and Washington counties. Jumping worms are different from other non-native earthworms found in the northern United States because they 1) originate from East Asia, not Europe; 2) inhabit the soil surface directly below the leaf litter layer, rather than dwelling in deeper soil layers; 3) can reproduce asexually; and 4) have an annual life cycle and mature near the end of summer. Each new generation begins with the production of hardened egg capsules, known as cocoons, that overwinter in the soil to hatch the following spring. Jumping worms create one to two eggs with each cocoon and can create about 60 cocoons in a season. Jumping worms also mature about twice as fast as European earthworms, completing two generations per season.

Jumping worms are extremely efficient ecosystem engineers. Due to their fast reproductive traits, lack of known management measures, and ferocious appetite, jumping worms can eliminate the litter and duff layers in a soil profile, which is cause for great concern in Minnesota. Through the consumptive process of eating soil, jumping worms negatively impact herbaceous and woody plant establishment, performance, distribution, abundance, survival, and diversity. Jumping worms can also negatively impact

**To:** Board of Managers and Staff  
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**Subject:** Project and Program Status Report June 2022  
**Date:** May 27, 2022

Page 13

microorganisms and fungi (including mycorrhizal fungi) that form important and symbiotic relationships with the plants. Additionally, jumping worms consume the leaf litter and duff layer that many forest animals (including insects, macroinvertebrates, and vertebrates) and plants feed on or utilize for habitat. The dramatic change to the forest soil simply means that the forest can't support the same plant and animal species it did before jumping worm invasion.

Forest communities infested with jumping worms see a reduction in litter layers between 84 and 95 percent (Minnesota DNR, Jumping Worm Classification Summary). Within a few (three to five) years of introduction, they can consume the entire leaf litter and duff layers of a soil profile, as well as all the microscopic organisms that live within those layers. Litter and duff layers in a forest ecosystem act as a mulch layer, regulating soil temperatures, organic matter content, soil structure, water infiltration, soil moisture status, gas exchange, soil stabilization, and nutrient availability. Numerous woodland plants, specifically seedlings, rely on these layers for germination, rooting, and other soil conditional benefits. A drastic reduction in litter and duff layers from a worm infestation results in a decrease of understory plants and can leave large areas of bare soil open to erosion.

In addition to large areas of bare soil, forest floor nutrients can be drastically altered through worm infestation. In Minnesota, the standard process of decomposition (breaking down organic matter into nutrients available for plants and animals) happens slowly. Over time, native insects, macroinvertebrates, and fungi break down the litter and duff layers of our soil and allow nutrients to become available to the forest ecosystem. This allows plants to establish and act as a protective barrier against soil erosion. In a jumping worm invasion, this process is greatly accelerated. Instead of a slow release of nutrients over time, worms consume the litter and duff layers and leave behind bare soil consisting of worm castings (small pellets of nutrient-loaded worm excrement). This results in a nutrient excess within the ecosystem and can injure plants and run off into streams and lakes, contributing to nutrient pollution within the watershed. In a jumping worm infestation, **the combination of plant loss, high rapid release of organic material, and potential higher rates of erosion and nutrient loss is cause for concern.** Jumping worms are a serious threat to Minnesota's ecosystems and watersheds. Since there are no management options for control of jumping worm infestations, **prevention of spread should be a priority in all watershed district projects.**

**Case study:**



**Figure 1: Understory without jumping worms**



**Figure 2: After jumping worm invasion**



Figure 3: Jumping worm castings

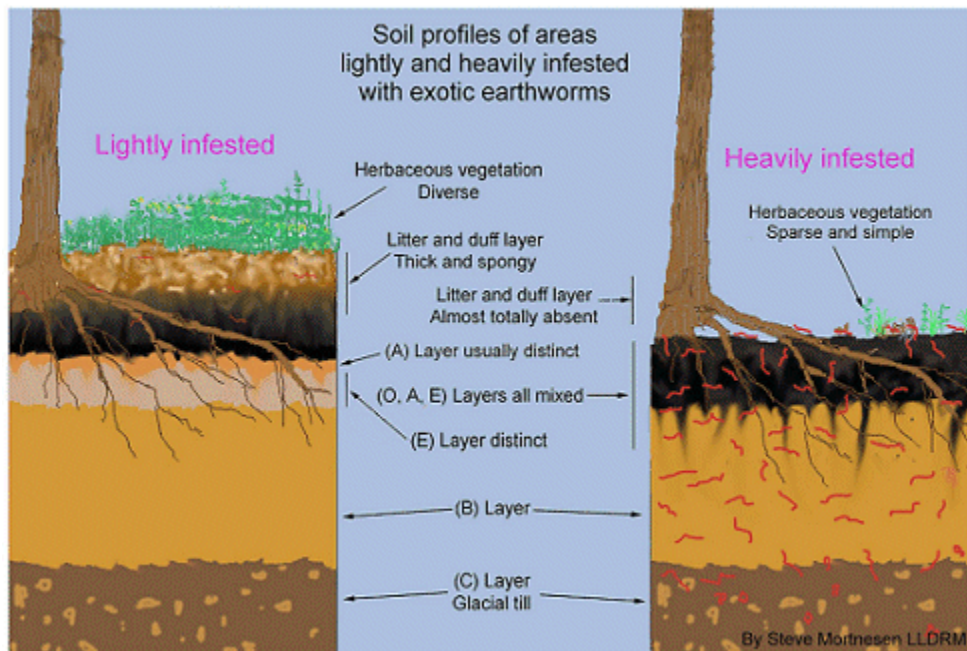


Figure 4: Diagram of soil layer change in a jumping worm invasion

### **Prevention and management:**

Like all earthworms, there are no research-based management options, so preventing their introduction and reducing their spread are the only two proven forms of management. No products are labeled for the control of earthworms in nursery and landscape settings in the United States. **Currently, the best prevention method is education.** People are the primary way jumping worms spread. Therefore, learning to identify jumping worms and asking the appropriate questions to slow their spread are critically important.

Methods to prevent the spread of jumping worms are similar to other pathogens found within mulch or compost. Mulch, compost, or soil can be heat treated to kill jumping worms and cocoons (eggs). In addition, storage piles for mulch, soil, and compost should be kept separate from contaminated jumping worm sources. All piles should be checked for worms before transferring or selling as a product. Finally, all equipment should be cleaned before and after a job to ensure that the worms or cocoons do not travel via boots, shovels, or machinery. If a jumping worm is found on site or in soil or mulch, report it to Minnesota Department of Agriculture to better understand and slow the spread.

### **Jumping worm identification:**

- Jumping worms can be 1.5 to 8 inches or more in length.
- They are similar in size to other earthworms such as nightcrawlers or some of the larger-angle worms, but their clitellum (collar-like ring) and coloring are different.
- The clitellum is located one-third down the worm from the head, and it is smooth, cloudy white, and constricted, unlike the swelled saddle-like clitellum of European earthworms.
- These worms may jump and wiggle noticeably when disturbed. They can move across the ground in an “S” pattern like a snake.
  - Link to Wisconsin DNR video of jumping worms’ snake-like movement:  
<https://www.youtube.com/watch?v=jrGnUFDXuyQ>
- Minnesota DNR jumping worm ID:
  - [https://www.dnr.state.mn.us/invasives/terrestrialanimals/jumping-worm/index.html#:~:text=Jumping%20worms%20\(Amynthas%20species\)%20are,into%20the%20environment%20in%20Minnesota.](https://www.dnr.state.mn.us/invasives/terrestrialanimals/jumping-worm/index.html#:~:text=Jumping%20worms%20(Amynthas%20species)%20are,into%20the%20environment%20in%20Minnesota.)

### **Additional references:**

1. Minnesota distribution map by county:
  - a. <https://www.eddmaps.org/distribution/uscounty.cfm?sub=58695>
2. How to report a jumping worm:
  - a. <https://extension.umn.edu/identify-invasive-species/jumping-worms#reporting-1883161>
3. Additional jumping worm ID and facts:
  - a. <https://extension.umn.edu/identify-invasive-species/jumping-worms>
4. Jumping worm brochure:  
[https://jwp.cfans.umn.edu/sites/jwp.cfans.umn.edu/files/2021-12/Jumping%20Worm\\_Flyer\\_version\\_2.pdf](https://jwp.cfans.umn.edu/sites/jwp.cfans.umn.edu/files/2021-12/Jumping%20Worm_Flyer_version_2.pdf)

## W. Natural Resources Update – Bill Bartodziej and Matt Doneux

### Carp Management in the Owasso Chain

To complement the unusually cool spring weather, the carp migration began extremely early this year. Typically, over the last ten years, we have seen spawning migrations take place in late May and early June in both the Phalen and Owasso Chain of Lakes systems. This year, the first carp run began on May 5<sup>th</sup>, even though water temperatures will substantially below normal for this time period. Although, the carp were early, we were able to set our nets in time, ready the barriers, and capture a large number of fish during these early spawning runs. We are extremely pleased with the results so far this year.



We removed 672 adult carp from the Owasso outlet, 637 from the Wabasso outlet, and 26 from the Bennett outlet. It is likely that additional runs will take place in the next couple of weeks. We are keeping track of the number of previously tagged carp that were captured. Later this year, we will compile the data to determine revised population estimates, and the percentage of adults removed from the overall population. In addition to the adult carp removal, we are preventing carp from moving into prime spawning grounds. This is critical in effectively managing this invasive species and helping to improve water quality.



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## Prescribed Burns

We were able to navigate the cool and wet spring and complete a majority of the burns slated for this year. In total, we address eight restoration sites and a total of 18 acres.



## X. Public Involvement and Education Program – Sage Passi



**Left: Bird watching at Lake Wabasso with new binoculars.**



**Right: Shoreline Planting at Lake Owasso.**



**Left: Exploring the wilds of Battle Creek.**



**Right: Rain garden clean-up at Weaver Elementary.**

The end of April and the month of May have been keeping us hopping with pre-lessons, rain garden clean-ups and field trips for Farnsworth, Battle Creek, Weaver, L’Etoile du Nord, Central Park Schools and planning for Hazel Park Academy, American Indian Magnet and Island Lake School trips coming up in early June. Our new binoculars purchased with funds from the Minnesota DNR No Child Left Inside grant arrived just in time for our first visits to Lake Wabasso. Ramsey and Washington County Master Gardeners and Water Stewards jumped on board again to assist classes with their school rain garden maintenance and our shoreline restoration project at Lake Owasso in Shoreview. They are helping fifteen classes who are scheduled to plant at the lake between May 17 and June 7. Schools and Watershed Education staff are growing native seedlings to give away at WaterFest on June 4.

In late April we kicked off our return to the outdoors by organizing a clean-up around Ames Lake and a wetland scavenger hunt with two fourth grade classes from L'Etoile du Nord.



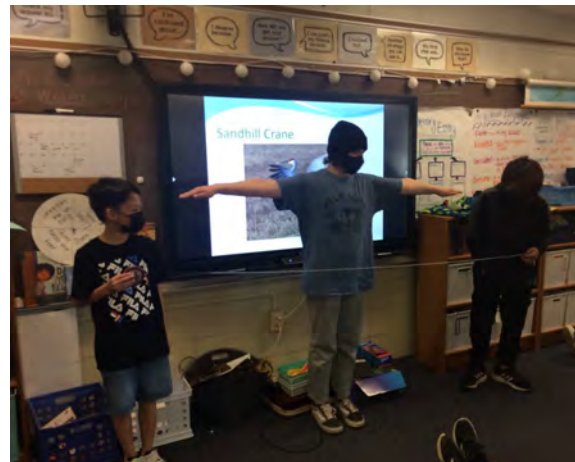
We spent two mornings in early May working with 2 classes at Central Park Elementary and 4 Weaver classes cutting down the vegetation and cleaning out the inlets in their rain gardens. Below are photos from our work at Central Park Elementary. They have a huge rain garden and they got it all cut down and bagged up in several hours. It took three trips in our van to the Frank and Sims compost site to transport all their cut down vegetation! Weaver's garden is smaller and we got it done in about 75 minutes. Below are photos from Central Park's rain garden clean-up.



Battle Creek Elementary fourth graders explored the wilds of Battle Creek in a journey from their school grounds down to the park at Fort Douglas Road and back. Tracy Leavenworth, our educational consultant led the way on these excursions on May 5 and May 13. She gave these three classes the opportunity to see where the creek goes underground, view the county's efforts to address erosion, examine the spring growth of different types of trees and vegetation and get a good workout going up and down all the hills!



### Lake Owasso Shoreline Planting and Bird Watching at Lake Wabasso



Prior to their trips to the lakes, the 15 classes involved in the restoration project were introduced to the basics about Minnesota birds and bird watching using a slide show. We also gave them the opportunity to practice with binoculars in the classroom before their field trips. In the photo above on the right, Weaver students demonstrated the seven-foot wingspan of a sandhill crane. The classes watched a slide show that helped them understand the purpose for the planting and studied some of the plants they will be installing in the shoreline project.



**Fifteen classes from Weaver, Farnsworth, American Indian Magnet, Central Park, Island Lake and Hazel Park Schools will be planting at Lake Owasso this spring**

## **Y. Communications Program Report – Lauren Hazenson**

### **Website Redesign**

This month marked the bulk of website work for RWMWD staff, as we worked to meet the content upload deadline. More information is provided in the separate website report below.

### **WaterFest**

We created a media kit for exhibitors, submitted a PSA for KFAI, placed banner signage at high traffic intersections, and completed electronic promotion at School District 622 elementary and middle schools. Each of these promotion methods is new this year. Additional information is available in the WaterFest report below.

### **MS4 Roundtable**

Lauren met with Rice Creek Watershed District and Vadnais Lake Area Water Management Organization to plan a second brown bag session for city, county, and county commission staff. This session will focus on the education and outreach plan requirements of the MS4 permit and is scheduled for July.

### **Volunteer Management**

This month Lauren edited the volunteer manual to create a consistent tone and ensure the language was public-facing. She also reviewed the existing tabling materials and created a tentative plan to update them to reflect the newer RWMWD brand and content.

### **E-newsletter**

The May newsletter metrics were not available when this report was submitted. May metrics will be provided in the June report.

### **Social Media (Facebook, Twitter, Instagram)**

#### **Numbers as of 5/25 :**

#### **Facebook**

Reach: 7,128

Engagement(likes, shares, comments): 679

Audience: 1,154

#### **Instagram**

Reach: 751

Engagement: 22

Audience: 685

#### **Twitter**

Reach: 146

Engagement: 11

Audience: 1,014

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**Resident Communications/Professional Development/ Public Meetings, Misc.**

- St. Pascal's Church project communication assistance
- Casey Lake community partners communication assistance
- Kohlman/Wakefield Lake diversion project kickoff meeting (5/6)

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## **Website Redesign Report**

### **Content Creation**

RWMWD staff worked this month to create and finalize all content for the new website. Simba Blood, Emily Simmons, Jazmine Ngwu, and Sage Passi dedicated time and effort to help create and edit new education materials for the site and assisted with the library material excerpts.

### **New content created for the website, finalized this month:**

- Searchable excerpts for all library documents dating back to 2018. This includes the option to search by any permit or project listed in a Board agenda. We will continue to expand the excerpts available after the website launches
- A history of Minnesota watershed organizations, including links to all major state and federal legislation that impacts the operation or formation of watershed districts
- An RWMWD history timeline, including links to key projects or research
- A "Watershed 101" page, which provides simple explanations of key watershed and watershed district concepts
- Twelve individual education resource pages cover simple actions residents can do to improve onsite drainage, local water quality, or install a rain garden or rain barrel. These are searchable by season and will be added to periodically
- A glossary that defines 39 terms and acronyms to better audience understanding of watershed policy and projects
- A financials section that shows our budget and financial information in an accessible format
- A page that outlines our increasingly warm and wet climate and the impacts it has on stormwater and water quality, similar to content found on the Mississippi Watershed Management Organization
- Individual staff pages outlining their backgrounds and education. We also hope to add a "contact for" section that will outline common questions that can be directed to this staff person. Individual contact cards will be displayed on each project page

### **Design Module**

This month, the last call to action, contact, event landing page, and blog post modules were created and reviewed.



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Page 26

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### **June Project Schedule:**

Final usability testing: *all Board members will receive an invite to participate in testing the design and content and provide input before it is finalized*

Quality assurance testing

Final launch planning

WordPress Training for Additional Staff

Website Launch (late June or early July, date dependent on usability testing scheduling)

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## **Waterfest Report**

**June 4, 2022**

**11- 4 pm**

**Lake Phalen Park**

### **Exhibitor and Sponsor Coordination**

- 52 exhibitors and 17 sponsors are registered
- Connected with in-kind sponsors and sponsors to coordinate payments and in-kind donations
- Followed up with last-minute exhibitors to ensure registration by the due date

### **Printed Materials and Signage**

- Distribute postcards and promote the event to local businesses (email flyer, drop off postcards)
- Installed large banner signage at intersections
- Finalized passport and map materials

### **Volunteers and Event Support**

- Secure vendors, games, sponsors, volunteers, and staff
- Organized event layout and communicated with vendors
- Confirmed city, utility, and food truck permits

### **Marketing**

- WaterFest social media account posts and marketing
- District 622 Peachjar online flyer promotion to all elementary and middle schools
- RWMWD WaterFest event ad update posts
- Created a media kit to encourage exhibitors and sponsors to promote the event on social media