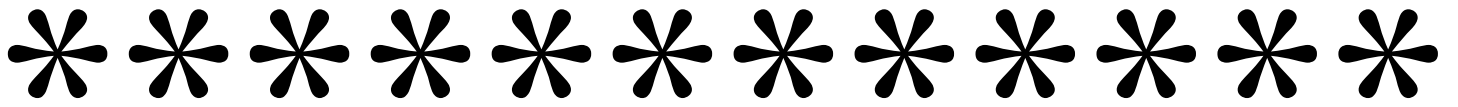


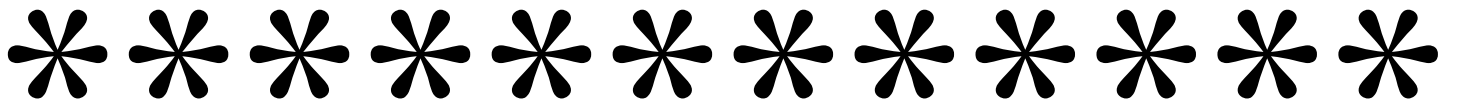


**RAMSEY-WASHINGTON**  
METRO WATERSHED DISTRICT

# **January 2020 Board Packet**



# Agenda





**Regular Board Meeting Agenda**

Wednesday, December 11, 2019

6:30 P.M.

District Office Board Room  
2665 Noel Drive, Little Canada, MN

1. Call to Order – 6:30 PM
2. **Approval of Agenda**
3. **Consent Agenda**
  - A. Approval of Regular Meeting Minutes December 11, 2019
  - B. Approval of Special Meeting Minutes December 17, 2019
4. **Treasurer’s Report and Bill List**
5. Visitor Comments (limited to 4 minutes each)
6. Permit Program
  - A. Applications
    - i. **20-01 Carver Elementary School Addition, Maplewood**
    - ii. **20-02 Conway Recreation Center Athletic Fields, St. Paul**
  - B. Enforcement Action Report
  - C. Permit Summary 2017 – 2019 and Inspection Presentation
7. Stewardship Grant Program
  - A. Applications - NONE
  - B. Budget Status Update
8. Action Items
  - A. **Board of Managers Annual Meeting**
9. Administrator’s Report
  - A. Meetings Attended
  - B. Upcoming Meetings and Dates
  - C. LMCIT Insurance Dividend
  - D. City of Maplewood Pond Maintenance Loan
  - E. Petition to Repair Ditch 16
10. Project and Program Status Reports
  - A. New Project Memo: Beltline and Battle Creek Pipe Inspection

- B. Ongoing Project and Program Updates
  - i. Twin Lake Emergency Response Management 2019
  - ii. Beltline Resiliency Study
  - iii. Point Douglas Drive Study
  - iv. Twin Lake Flood Risk Mitigation Feasibility Study
  - v. FEMA Flood Mapping
  - vi. West Vadnais Lakes Outlet Permitting
  - vii. 500-Year Atlas 14 Modeling
  - viii. Hillcrest Golf Course
  - ix. Automated Lake Monitoring Systems
  - x. Iron Aggregate Pond Research Project
  - xi. Targeted Retrofit Projects
  - xii. Kohlman Lake Macrophyte Management
  - xiii. CIP Maintenance and Repair 2020 Project
  - xiv. New Technology Review: BIPOD Stormwater Planter and Nutrient Removal Device
  - xv. Natural Resources Program
  - xvi. Education Program

11. Informational Items

12. Report of Managers

**13. Adjourn**



# Consent Agenda





**Ramsey-Washington Metro Watershed District  
Minutes of Regular Board Meeting  
December 11, 2019**

The Regular Meeting of December 11, 2019, was held at the District Office Board Room, 2665 Noel Drive, Little Canada, Minnesota, at 6:30 p.m.

**PRESENT:**

Marj Ebensteiner, President  
Cliff Aichinger, Vice President  
Dianne Ward, Treasurer  
Lawrence Swope, Manager

**ABSENT:**

Dr. Pam Skinner, Secretary

**ALSO PRESENT:**

Tina Carstens, District Administrator  
Laurann Kirschner, Attorney for District  
Nicole Soderholm, Permit Inspector  
Dave Vlasin, Water Quality Technician  
Paige Ahlborg, Project Manager  
Bill Bartodziej, Natural Resource Specialist  
Brad Lindaman, Barr Engineering  
Brandon Barnes, Barr Engineering

Steve LaBerge, Crestview Addition  
Bruce Copley, Crestview Addition  
Stan Martin, Twin Lake  
Frank Frattalone, Twin Lake  
Tim Freeman, Twin Lake  
Kelly Bopray, Bopray Environmental  
Mary Derosier, Window World  
Burt Johnson, President Twin Lake Association  
Terry Telega, Twin Lake  
Matt Woodruff, Twin Lake

**1. CALL TO ORDER**

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

**2. APPROVAL OF AGENDA**

Motion: Cliff Aichinger moved, Lawrence Swope seconded, to approve the agenda as presented.

Further discussion: Tina Carstens noted that the Board received a petition for drainage improvements, noting that will be discussed with the Twin Lake Flood Risk Mitigation Feasibility Study item on the agenda. She suggested considering that item 10A, to follow the Permit Program.

Manager Ward suggested the 10 Year Plan Update be added to the list of Programs and Projects. Tina noted that will be done in 2020 and is only included in the Project and Program Status reports when there is work completed.

Motion carried 4-0. (Skinner absent)

**3. CONSENT AGENDA**

A. Approval of Minutes from November 6, 2019

Manager Swope referenced the Visitor Presentation section, it should state, "...uniquely flat and slow drainage characteristics ~~characterization~~ of the area..."

Motion: Cliff Aichinger moved, Lawrence Swope seconded, to approve the consent agenda as amended. Motion carried 4-0. (Skinner absent)

#### **4. TREASURER'S REPORT AND BILL LIST**

Motion: Dianne Ward moved, Lawrence Swope seconded, to approve the December 11, 2019 bill list as submitted. Motion carried 4-0. (Skinner absent)

#### **5. VISITOR PRESENTATIONS**

Bruce Copley, Crestview resident, provided comments related to the Twin Lake Study that will be discussed tonight. He stated that he does not oppose the proposed overflow modifications. He stated that option four would provide improved protection to property owners, but believed that only minor attention has been given to the primary source of the problem. He stated that the data is clear that no homes would have been sandbagged or at risk of flooding if the level of West Vadnais was kept under control. He stated that residents from Crestview have come to the Board requesting a lower elevation for West Vadnais for three years and have been told that no additional water could be put through the Owasso Basin. He stated that situation has been proven untrue by the results of the Twin Lake Study. He stated that the action that has been taken at Twin Lake is to prevent flooding of a home and reminded the Board of another landlocked lake, Snail Lake, which also has homes similarly at risk of flooding. He stated that Snail Lake has been above the OHW level for at least two years and further complicating the issue is that there is not a pond nearby for pumping water into as there is for Twin Lake. He stated that the Board has chosen not to do anything for the Snail Lake issue, which is inconsistent and irresponsible. He referenced the Beltline Study, noting the information shown by Barr Engineering which would eat up more public land and increase the flood risk for the homes in that area. He asked the District to get more water out of West Vadnais.

Frank Frattalone, resident, stated that his goal is to work together with the District to see relief of the water related issues in the area.

Burt Johnson, President of Twin Lake Association, stated that he reviewed the Twin Lake Flood Risk Reduction Study from Barr Engineering. He thanked staff for the increased communication through email. He stated that he understands the study to address the outflow issue, while the bigger problem is the flooding in from West Vadnais. He stated that in the last month or so, the water level has come up a few inches. He stated that they are concerned with issues that could occur in the spring. He stated that option four would put Twin Lake back to the historical elevation, or within the range, and urged the Board to move forward with that as soon as possible. He stated that they are also awaiting results of the Beltline Resiliency Study. He noted that there are also water quality and clarity concerns that have occurred because of the flooding that has occurred.

#### **6. PERMIT PROGRAM**

##### **A. Applications**

##### **Permit #19-49: RWMWD 2020 CIP**

Nicole Soderholm noted that this is a District led project, noting that this includes standard pond cleanouts.

Motion: Cliff Aichinger moved, Lawrence Swope seconded, to approve Permit #19-49. Motion carried 4-0. (Skinner absent)

##### **Permit #19-50: Window World Expansion – North Saint Paul**

Nicole Soderholm stated that there has been a lot of discussion with this project because of the unique characteristics of the property. She stated that normally this would not trigger a permit, but the Atlas 14 figures moved this building into the 100-year floodplain. She explained that there is an existing building and in order to do an expansion, the building would not meet the freeboard requirements. She stated that staff would not

recommend approval if this action would cause impacts to the floodplain or adjacent properties. She stated that there is a statement included that the landowner is acknowledging any risk.

Motion: Cliff Aichinger moved, Dianne Ward seconded, to approve Permit #19-50.

Further discussion: Manager Aichinger asked the elevation of the building. Nicole stated that the existing first floor elevation is 939.3.

President Ebensteiner stated that in essence this request would be to build in the floodplain, which she does not think would be a good idea. She asked if there have been any modifications to the property to help in preventing flooding. Brandon Barnes stated that staff has been in discussions with the project engineer related to compensatory storage and whether the building would tie into the first floor.

Manager Aichinger clarified that it is the position of the applicant that the addition needs to tie into the floor level of the existing building to provide continuity of workspace. Mary Derosier confirmed that they would be extending the back half of the building to provide additional workspace and to raise the elevation higher would be problematic for the forklifts and storage.

Manager Aichinger confirmed that the existing building complies with the TP40 numbers. He stated that if the applicant is willing to absorb liability he would agree to the request.

Nicole stated that the parcel boundary on the west side is very close to the building and a berm would require more wetland fill and could cause additional flooding risk.

President Ebensteiner commented that the District should be very careful and look to the past at potential mistakes that have been made allowing people to build within floodplains. She cautioned the Board and suggested that remedial actions be reviewed to prevent building within the floodplain.

Manager Swope stated that when the building was constructed it was not in the floodplain. He stated that the addition would not be any different than the existing building. He stated that the applicant should be able to expand if they are willing to take on the liability.

President Ebensteiner stated that she would want to see a legal document stating that the applicant would absorb the liability. Staff confirmed that would be a condition of approval. Manager Ward stated that she would be willing to approve the request as long as there is a legal document showing that the applicant is absorbing the liability for building within the floodplain.

President Ebensteiner stated that she does not believe that this is complete enough to approve. She stated that she would like to see the other engineering options available for remediation.

Manager Swope stated that it would seem unusual to ask the applicant to embank an area where they are expanding on what already exists and there are other buildings in the area in the same situation as well.

Tina Carstens noted that additional information was presented to staff and not found feasible.

Manager Aichinger asked if there are other buildings in that area with the same elevation. Brandon Barnes replied that there are other buildings in the area at a similar elevation.

Motion carried 3-1. (Ebensteiner opposed, Skinner absent)



Permit #19-51: Margaret Street Downtown Improvements – North Saint Paul

Nicole Soderholm provided details on the street improvement project, noting the contaminated soils. She stated that the applicant would pay into the stormwater impact fund and this project will slightly decrease the impervious surface through landscaping. She confirmed that the sidewalk areas will also be replaced. She stated that the soils would preclude infiltration because of the contamination.

Motion: Cliff Aichinger moved, Lawrence Swope seconded, to approve Permit #19-51.

Further discussion: Manager Swope asked what would be done with the payment into the stormwater impact fund.

Tina Carstens explained how the funds are tracked and advised that the funds are then used for projects within the same subwatershed. She noted that she will be bringing forward additional information on the stormwater impact fund and its uses at an upcoming Board meeting.

Motion carried 4-0. (Skinner absent)

Permit #19-52: Bailey Road Reconstruction – North Saint Paul

Nicole Soderholm stated that most of this project is located in South Washington Watershed District and only a small strip of the road drains into this District. She stated that Washington County has provided volume reduction towards the treatment with the treatment being provided in South Washington Watershed District. She noted that the remaining volume reduction will be paid into the stormwater impact fund.

Motion: Dianne Ward moved, Lawrence Swope seconded, to approve Permit #19-52. Motion carried 4-0. (Skinner absent)

**10. PROJECT AND PROGRAM STATUS REPORTS**

A. Twin Lake Flood Risk Mitigation Feasibility Study

Brandon Barnes stated that this study looked at mitigating flood risk for the watershed within Twin Lake. He stated that the overview includes the history of County Ditch 16, discusses the design criteria and flood risk mitigation goals, different alternatives that were reviewed, and the recommended alternatives. He stated that, at the end, staff will be requesting input from the Managers on whether to proceed with final design of the recommended alternative, which is alternative four. He provided details on the design criteria, noting that staff had conversations with multiple other permitting agencies. He stated that flood risk mitigation goals were also discussed that go above the minimum criteria. He reviewed the different alternatives that were reviewed and the process that was used to review those options. He stated that alternative four includes grading providing a drainage swale/ditch to an inlet and pipe that would connect to Waldo Pond. He stated that there would be a gravity pipe through the embankment and described the pipes and manhole that would be used. He stated that the gate would be located outside of the right-of-way and the purpose of the gate would be to prevent water from Waldo Pond discharging into Twin Lake and would also prevent water from Twin Lake discharging into Waldo Pond in periods when there is potential for flooding downstream.

Manager Aichinger asked if the option was reviewed to install a pipe all the way through. Brandon Barnes confirmed that would be easier for maintenance, but noted that option was not reviewed because this area also accepts water from another area, and they wanted to minimize grading and impacts to the wetland. He stated that there would be a drainage easement and some form of access easement in order to operate and maintain. He noted that there would need to be some type of wetland mitigation and an operation plan that defines when the gate would be open and when it would need to be closed. He stated that the 30-year estimated cost would range between \$200,000 to \$400,000, which would include design, construction, operation, and maintenance over the 30-year period.

President Ebensteiner asked how much maintenance would be estimated annually. Brandon Barnes estimated about eight hours per year. He noted that the majority of that would be staff time opening and closing the gate when needed.

President Ebensteiner asked if the District would be responsible for operations. Tina Carstens stated that staff will discuss that with Little Canada, noting that perhaps it would make sense for the city to handle operations.

Manager Aichinger referenced the operation plan notes, specifically number four which specifies when the gate would be open.

Brandon provided additional input on the TP40 and Atlas 14 numbers for Waldo Pond and how the gate would be used under certain circumstances.

Manager Swope asked if an automated valve was reviewed rather than a manual valve. Brandon confirmed that this would be a good application of an automated valve but noted that the cost for that element falls into the range of uncertainty and would be reviewed during the final design stage. He confirmed that option could be retrofitted in the future if desired.

He stated that the estimated cost was based on the 30-year range described earlier. He asked whether the Board would authorize staff to proceed with final design for alternative four that would include coordination with MnDOT and the property owner as well as development of an operating plan.

Manager Ward referenced the variables that were mentioned during the presentation and asked if the details would come back before the Board. Tina confirmed that those variables would be worked out during the final design and those plans would come back before the Board for approval.

Manager Swope asked the risk downstream if the valve were open. He stated that it appears to be almost no risk to leaving the valve open because of the small numbers. Brandon stated that a hundredth of a foot would be above the floodplain for Gervais Lake and two homes are below that level.

Manager Swope asked if the valve could be managed using the sensors on Gervais Lake. He stated that, if Gervais Lake is at a lower level, water could be taken from Twin Lake.

Brandon explained that it would take multiple weeks for water to travel that path and the weather forecasts are not accurate that far ahead. He explained that there would then be a risk to leaving the valve open during those summer months. Brad Lindaman stated that they would do their best to articulate changes to the system based on different storm events that could occur. Manager Swope stated that he will be interested in hearing how this fits in with the resiliency plan.

Brandon explained the potential downstream system modifications on the Phalen Chain of Lakes that would affect how the gate is operated. He stated that this feasibility did not consider those options. He stated that the operating plan could be modified if changes are made downstream.

Motion: Cliff Aichinger moved, Lawrence Swope seconded, to authorize staff to proceed with preparation of design plans and alternatives for the Twin Lake outlet project, pursuing option four.

Further discussion: Brad asked and received confirmation that the motion would include working with Mr. Fratalone on necessary easements and also drafting of the operating plan.

Manager Swope asked how long this process would take. Brad Lindaman stated that this would most likely return to the Board at the February meeting, but the information could be distributed before that time for review. He

confirmed that a brief update could be provided at the January meeting. He confirmed that the project could potentially be ready for spring construction.

Motion carried 4-0. (Skinner absent)

Laurann Kirschner noted that the Board received a petition for the repair of County Ditch 16. She stated that at this time staff recommends that the item be placed on the agenda for the next meeting. President Ebensteiner asked for a brief outline on where the different responsibilities lie. Tina Carstens confirmed that staff will include that detail in the January packet.

Laurann noted that the mitigation being considered by the Board exceeds the scope of what would be available through County ditch law and therefore would provide a better result. She stated that the petition is requesting certain repairs and staff will review those and make a recommendation to the Board.

**6. PERMIT PROGRAM (Continued)**

**B. Monthly Enforcement Report**

During November, six notices were sent to address: install/maintain inlet protection (2), install/maintain perimeter control (1), stabilize exposed soils (2), and contain/dispose of liquid or solid waste (1).

**7. STEWARDSHIP GRANT PROGRAM**

**A. Applications**

**Permit #19-11 CS: Reynen – Budget Adjustment Request**

Paige Ahlborg stated that the project required additional soil work by the contractor.

Motion: Cliff Aichinger moved, Lawrence Swope seconded, to approve a budget adjustment for Permit #19-11 CS in the amount of \$1,897.20. Motion carried 4-0. (Skinner absent)

**B. Budget Status Update**

No comments.

**C. 2019 Program Overview and 2020 Program Review and Approval**

Paige Ahlborg provided a summary of the program. She stated that they are seeing less government projects and more residential projects. She stated that the majority of the funds for this year have been spent. She stated that the Snail Lake shoreline restoration project was about \$200,000. She advised that most of that work was not able to be completed this year and will be carried to the next year for completion. She stated that since the program began there has been a total of \$5,300,000 spent and 330 projects installed, which averages to \$16,000 per project. She commented that there have been some large projects over the years. She identified the amount of funds that have been spent per city, the number of projects per city, and the average project cost per city. She provided similar data shown by subwatershed. She provided a map of the targeted retrofits. She advised of the inspector intern that has been hired as a full-time inspector. She provided background on when inspections began and the improvement that has occurred on the BMPs since that time.

Manager Ward asked if that was a new position. Tina Carstens confirmed that was a new position that was included in the 2020 budget.

Paige provided information on the retrofit projects that occurred in 2019, noting that the Aldrich Arena project was the largest. She noted that site is highly visible to many different parties and educational signage will be posted to provide visitors with additional information. She provided additional details on the Snail Lake shoreline restoration project.

Manager Ward stated that she would like to see something for Owasso and Wabasso homeowners, as those property owners could benefit from similar projects.

Paige stated that the maintenance program is going well and provided an update on that program. She noted that there are three different contractors maintaining schools, churches and other sites. She advised that the maintenance grant began two years ago, and 23 applications have been received, resulting in 21 contractors hired.

Manager Aichinger stated that the CAC talked about completing rain garden maintenance in the next year and asked if the members would work with staff to identify potential areas. Paige confirmed that staff would work with the CAC to provide those details. She provided information on the Master Water Steward program, noting that there was one project this past year. She stated that from the beginning of the program in 2006, there were eight project completed. She noted the additional volunteerism that is gained through use of the Master Water Stewards. She highlighted proposed projects for 2020. She noted that the same priority watersheds would be proposed to continue for 2020 and advised that staff would propose to keep the funding for all the elements the same.

Motion: Lawrence Swope moved, Cliff Aichinger seconded, to approve the 2020 priority areas; approve 2020 coverage amounts as shown in Table 1; and approve staff to continue watershed maintenance, equity initiative, master water steward and aquatic plant harvesting grants. Motion carried 4-0. (Skinner absent)

## **8. ACTION ITEMS**

### **A. 2020 CIP Maintenance and Repair Project Bid Review and Award**

Brad Lindaman provided a summary table of the bids received. He reported that there were six bidders with a range in pricing. He reported that Fitzgerald was the low bidder. He provided background information on the history with that contractor and noted that since the meetings with staff, Fitzgerald has completed great work in a timelier manner. Dave Vlasin confirmed that he would have no problem working with Fitzgerald again this year. He commented that the work completed is high quality. Brad noted that Fitzgerald has met all requirements of the bidding process and was deemed the lowest responsible bidder.

Motion: Cliff Aichinger moved, Lawrence Swope seconded, to accept the bids and award the 2020 CIP Maintenance and Repair Project to Fitzgerald, and direct staff to prepare and mail the notice of award, prepare the draft agreements and review the required submittals.

Further discussion: Brad noted that there was language included in the bidding information that states the District can reduce the amount of work to match the budget of the cities. He stated that staff will help guide the pond work in each of the member cities.

Motion carried 4-0. (Skinner absent)

### **B. Capital Improvement Budget Fund Transfer – Resolution 19-03**

Tina Carstens noted that this is a clean-up of funds. She explained that some projects have been completed for a year or more and there are five funds ready to be closed out with funds transferred. Manager Aichinger stated that the District reports its debt service on the books and levies for debt service, which are sometimes different amounts. Tina noted that a resolution is submitted to the County showing the difference and this resolution would be included.

Motion: Dianne Ward moved, Cliff Aichinger seconded, to approve Resolution 19-03. Motion carried 4-0. (Skinner absent)

### **C. 2020 Budget and Levy Final Approval – Resolution 19-04**

Tina Carstens stated that because the funds were moved as approved in resolution 19-03, the proposed levy is less and the proposed increase is down to 0.6 percent.

Motion: Lawrence Swope moved, Cliff Aichinger seconded, to approve Resolution 19-04. Motion carried 4-0.  
(Skinner absent)

**9. ADMINISTRATOR'S REPORT**

A. Meetings Attended

Manager Aichinger asked if there are any big changes to the 2020 health insurance. Tina Carstens noted that there are no big changes and a minimal increase. She also provided an update on the other meetings that she attended.

B. Upcoming Meetings and Dates

Tina Carstens noted the upcoming holiday luncheon on Thursday, December 19<sup>th</sup> at 1:00 p.m.

C. MAWD Annual Meeting Discussion

Tina Carstens reported that the annual meeting took place the previous week, noting that it was probably one of the best programs.

Manager Swope stated that he found the MAWD meeting with resolution voting to be the most interesting part of the event. He stated that he was interested to learn that other areas experience similar problems but in a different way and with different ways to address the problem. He stated that the exhibitions were very interesting. He stated that at the awards banquet, awards of recognition were given out.

President Ebensteiner agreed that it was a great event and noted that she also enjoyed the resolution committee.

D. Special Meeting for Beltline Resiliency Study

Tina Carstens stated that hard copies of the study were provided from Barr Engineering and noted that the meeting is scheduled for the following Tuesday from 6:00 to 8:00 p.m. She stated that after the Board hears the results of the study, there will be an opportunity for the public to submit written comments. She stated that staff would then draft written responses that could be reviewed by the Board at a future meeting.

Brad Lindaman noted that part of the reason for the meeting the following week is to provide the Board with an opportunity to provide input on the draft study.

Manager Aichinger suggested allowing written input from the public following the meeting, but staff should not respond as this is still in draft format.

Manager Swope stated that he also likes the idea of the Board having the opportunity to provide input, and allowing the public to submit written comments, but not providing responses to those comments at this time.

E. January Meeting Change and Annual Meeting Reminder

Tina Carstens reported that the January meeting has been rescheduled to January 8<sup>th</sup> because of the New Years holiday. She stated that the January meeting will also be the annual meeting and reviewed some of the activities that will take place.

**10. PROJECT AND PROGRAM STATUS REPORTS (Continued)**

B. Ongoing Project and Program Updates

- i. Twin Lake Emergency Response Management 2019
- ii. Beltline Resiliency Study
- iii. Twin Lake Flood Risk Mitigation Feasibility Study
- iv. FEMA Flood Mapping
- v. West Vadnais Lakes Outlet Permitting
- vi. 500-Year Atlas 14 Modeling

- vii. Hillcrest Golf Course
- viii. Wetland Restoration Site Search
- ix. Maplewood Mall Monitoring
- x. Wakefield Park/Frost Avenue Project
- xi. Targeted Retrofit Projects
- xii. Willow Pond CMAC
- xiii. Aldrich Arena
- xiv. Kohlman Lake Macrophyte Management
- xv. CIP Maintenance and Repair 2020 Project
- xvi. Natural Resources Program
- xvii. Education Program

**11. INFORMATIONAL ITEMS** No comments.

**12. REPORTS OF MANAGERS**

Manager Swope asked if the Board wanted to open up the floor for additional public comments, as Bruce Copley previously suggested. President Ebensteiner provided an opportunity for residents to make additional comments.

Bruce Copley stated that his idea was that perhaps staff could be provided an opportunity to respond to the input received earlier in the night during the visitor presentation portion of the agenda.

The Board and staff did not have additional feedback. Manager Swope stated that perhaps it would be more productive to offer that opportunity after the visitor presentations. President Ebensteiner commented that opens the possibility of an unhealthy back and forth discussion. Manager Ward stated that perhaps it would make sense to hold the visitor presentation after the specific agenda item, using the Twin Lake report as an example.

Brad Lindaman stated that perhaps something is added to the sign in sheet which allows residents to state which item they would like to provide input on.

President Ebensteiner noted that continues to disrupt the agenda throughout the entire agenda. She commented that she has not seen an agenda setup in that format before.

Bruce Copley stated that as a frequent presenter it is unclear as to whether his concerns are being heard or have caused any additional discussion from staff or the Board.

Manager Ward commented that the Board and staff should think of a way to provide a response, in some manner, as that could actually help to shorten the length of future meetings if people's comments are addressed.

President Ebensteiner commented that the concerns are being heard. She noted that residents always have the opportunity to submit written comments as well.

Manager Aichinger stated that there are some comments that could easily be addressed by providing additional information to the resident. President Ebensteiner stated that perhaps staff would be the best option to provide that additional information. Bruce agreed that would be very helpful and would show that the Board and staff heard his concern and provided him with helpful information.

**13. ADJOURN**

Motion: Lawrence Swope moved, Cliff Aichinger seconded, to adjourn the meeting at 9:22 p.m. Motion carried 4-0 (Skinner absent).

Respectfully submitted,

Dr. Pam Skinner, Secretary

DRAFT



**Ramsey-Washington Metro Watershed District  
Minutes of Beltline Special Meeting  
December 17, 2019**

A Special Meeting of December 17, 2019, was held at the District Office Board Room, 2665 Noel Drive, Little Canada, Minnesota, at 6:30 p.m.

**PRESENT:**

Marj Ebensteiner, President  
Cliff Aichinger, Vice President  
Dianne Ward, Treasurer

Lawrence Swope, Manager  
Dr. Pam Skinner, Secretary

**ALSO PRESENT:**

Tina Carstens, District Administrator  
Brandon Barnes, Barr Engineering  
Brad Lindaman, Barr Engineering  
Lulu Fang, Barr Engineering  
Nicole Frethem, Ramsey County Commissioners

Bruce Copley, Shoreview Resident  
Matt Gray, Shoreview Resident  
Ann White Eagle, Ramsey County  
Jamie Becker-Finn, State Representative  
Tad Vezner, Pioneer Press

**CALL TO ORDER**

The meeting was called to order by President Ebensteiner at 6:00 p.m.

**DISCUSSION**

District and Barr Engineering staff provided a presentation and led discussion on the contents of the draft Beltline Resiliency Study. The District completed an evaluation to identify potential flood-prone structures based on Atlas 14 rainfall depths. Numerous structures were identified in flood risk areas upstream of the Beltline storm sewer system. The Beltline Resiliency Study evaluates potential system modifications that could be implemented in the Beltline watershed to reduce flood risk to habitable structures in those areas. Much of the study is centered on evaluating ways to optimize the use of the Beltline to lower flood levels upstream. The presentation given at the meeting as well as the draft study can be found on the watershed website on the board of manager's page.

The managers asked about next steps for the study. Staff responded that they will prepare a timeline that would include a meeting to present the study to our city, county, and state agency partners. There would also be time for the public to review and provide comments to the board on the study. Staff will also review which implementation activities should start this year with feasibility studies and/or project construction plans and present those items to the board at future meetings. The managers commented that, besides some minor edits to the study document, it was ready for those next steps to occur before it is deemed a completed study.

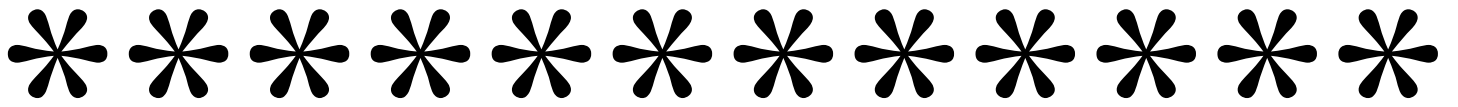
**ADJOURN**

Motion: Lawrence Swope moved, Cliff Aichinger seconded, to adjourn the meeting at 8:07 p.m. Motion carried 5-0.

Respectfully submitted,

Dr. Pam Skinner, Secretary





# Bill List



RWMWD BUDGET STATUS REPORT  
Administrative & Program Budget  
Fiscal Year 2019  
12/31/2019

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	\$6,500.00	-	1,075.00	6,497.50	\$2.50	99.96%
	Manager expenses	4360	3,500.00	-	1,047.84	1,952.30	1,547.70	55.78%
Committees	Committee/Bd Mtg. Exp.	4365	3,500.00	-	46.40	3,340.94	159.06	95.46%
Employees	Staff salary/taxes/benefits	4010	1,385,000.00	-	100,252.36	1,326,271.12	58,728.88	95.76%
	Employee expenses	4020	10,000.00	-	530.89	7,494.90	2,505.10	74.95%
	District training & education	4350	25,000.00	-	5,172.45	24,785.81	214.19	99.14%
Administration/ Office	GIS system maint. & equip.	4170	15,000.00	-	-	2,028.52	12,971.48	13.52%
	Data Base/GIS Maintenance	4171	5,000.00	-	-	2,210.00	2,790.00	44.20%
	Equipment maintenance	4305	3,000.00	-	-	-	3,000.00	0.00%
	Telephone	4310	8,000.00	-	361.48	6,442.02	1,557.98	80.53%
	Office supplies	4320	5,000.00	-	273.43	4,827.68	172.32	96.55%
	IT/Internet/Web Site/Software Lic.	4325	45,000.00	-	2,574.01	40,606.06	4,393.94	90.24%
	Postage	4330	10,000.00	-	-	739.86	9,260.14	7.40%
	Printing/copying	4335	8,000.00	-	640.87	5,708.16	2,291.84	71.35%
	Dues & publications	4338	11,000.00	-	-	9,953.00	1,047.00	90.48%
	Janitorial/Trash Service	4341	17,000.00	-	-	5,652.18	11,347.82	33.25%
	Utilities/Bldg.Contracts	4342	20,000.00	-	2,545.38	21,274.95	(1,274.95)	106.37%
	Bldg/Site Maintenance	4343	300,000.00	-	35,215.92	117,444.47	182,555.53	39.15%
	Miscellaneous	4390	5,000.00	-	-	500.00	4,500.00	10.00%
	Insurance	4480	35,000.00	-	-	36,479.00	(1,479.00)	104.23%
	Office equipment	4703	40,000.00	-	630.96	29,853.11	10,146.89	74.63%
	Vehicle lease, maintenance	4810-40	43,000.00	-	29,245.93	36,620.76	6,379.24	85.16%
Consultants/ Outside Services	Auditor/Accounting	4110	55,000.00	-	1,454.89	49,900.29	5,099.71	90.73%
	Engineering-administration	4121	93,000.00	-	5,287.00	71,008.80	21,991.20	76.35%
	Engineering-permit I&E	4122	10,000.00	-	52.50	3,076.94	6,923.06	30.77%
	Engineering-eng. review	4123	55,000.00	-	3,396.50	44,484.16	10,515.84	80.88%
	Engineering-permit review	4124	55,000.00	-	5,428.00	38,048.00	16,952.00	69.18%
	Project Feasibility Studies	4129	790,000.00	-	44,259.25	430,186.77	359,813.23	54.45%
	Attorney-permits	4130	10,000.00	-	-	-	10,000.00	0.00%
	Attorney-general	4131	40,000.00	-	3,564.00	31,589.00	8,411.00	78.97%
	Outside Consulting Services	4160	40,000.00	-	-	-	40,000.00	0.00%
Programs	Educational programming	4370	60,000.00	-	855.73	16,095.77	43,904.23	26.83%
	Communications & Marketing	4371	25,000.00	-	-	6,000.98	18,999.02	24.00%
	Events	4372	50,000.00	-	-	39,444.98	10,555.02	78.89%
	Water QM-Engineering	4520-30	300,000.00	-	8,891.06	263,681.39	36,318.61	87.89%
	Project operations	4650	160,000.00	-	1,096.70	28,010.87	131,989.13	17.51%
	SLMP/TMDL Studies	4661	68,000.00	-	-	4,115.00	63,885.00	6.05%
	Natural Resources/Keller Creek	4670-72	115,000.00	-	292.03	130,108.33	(15,108.33)	113.14%
	Outside Prog.Support/Weed Mgmt.	4683-84	67,000.00	-	-	46,729.28	20,270.72	69.75%
	Research Projects	4695	115,000.00	-	3,528.50	56,861.59	58,138.41	49.44%
	Health and Safety Program	4697	3,000.00	-	-	1,043.48	1,956.52	34.78%
	NPDES Phase II	4698	10,000.00	-	-	-	10,000.00	0.00%
<b>GENERAL FUND TOTAL</b>			<b>\$4,124,500.00</b>	<b>\$0.00</b>	<b>\$257,719.08</b>	<b>\$2,951,067.97</b>	<b>\$1,173,432.03</b>	<b>71.55%</b>
CIP's	CIP Project Repair & Maintenance	516	1,120,000.00	-	148,114.16	1,072,186.94	47,813.06	95.73%
	Targeted Retrofit Projects	518	978,760.00	-	1,001,499.24	1,294,153.97	(315,393.97)	132.22%
	District Office Building Solar Energy Retrofit	519	-	-	-	25,762.50	-	---
	Flood Damage Reduction Fund	520	2,500,000.00	-	20,225.50	334,491.74	2,165,508.26	13.38%
	Debt Services-96-97 Beltline/MM/Battle Creek	526	399,113.00	-	-	396,907.30	2,205.70	99.45%
	Stewardship Grant Program Fund	528-529	1,250,000.00	-	62,437.76	836,937.80	413,062.20	66.96%
	Impervious Surface Volume Reduction Opportunity	531	1,500,000.00	-	-	-	1,500,000.00	0.00%
	Beltline & Battle Creek Tunnel Repair	549	-	-	-	-	-	---
	Frost/Kennard Enhanced WQ BMP	550	-	-	-	-	-	---
	Markham Pond Dredging & Aeration	551	65,000.00	-	28,277.00	34,119.48	30,880.52	52.49%
	Wakefield Park Project	553	1,100,000.00	-	1,598.90	71,482.02	1,028,517.98	6.50%
	Willow Pond CMAC	554	300,000.00	-	12.39	14,383.13	285,616.87	4.79%
	District Office Bond Payment	585	194,885.00	-	-	193,453.76	1,431.24	99.27%
<b>CIP BUDGET TOTAL</b>			<b>\$9,407,758.00</b>	<b>-</b>	<b>\$1,262,164.95</b>	<b>\$4,273,878.64</b>	<b>\$5,159,641.86</b>	<b>45.43%</b>
<b>TOTAL BUDGET</b>			<b>\$13,532,258.00</b>	<b>\$0.00</b>	<b>\$1,519,884.03</b>	<b>\$7,224,946.61</b>	<b>\$6,307,311.39</b>	<b>53.39%</b>

Current Fund Balances:

Fund:	Beginning Fund Balance @ 12/31/18	Fund Transfers	Year to date Revenue	Current Month Expenses	Year to Date Expense	Unaudited Fund Balance @ 12/31/19
101 - General Fund	\$4,464,553.28	-	3,061,721.01	257,719.08	2,951,067.97	4,575,206.32
516 - CIP Project Repair & Maintenance	951,963.00	-	1,267,128.16	148,114.16	1,072,186.94	1,146,904.22
518 - Targeted Retrofit Projects	994,725.00	-	194,941.24	1,001,499.24	1,294,153.97	(104,487.73)
519 - District Office Building Solar Energy Retrofit	32,805.00	(7,042.50)	-	-	25,762.50	0.00
520 - Flood Damage Reduction Fund	1,823,918.00	-	947,000.73	20,225.50	334,491.74	2,436,426.99
526 - Debt Services-96-97 Beltline/MM/Beltline-Battle Creek Tunnel Repair	381,949.00	863,674.00	490,045.39	-	396,907.30	1,338,761.09
528/529 - Stewardship Grant Program Fund	389,152.00	-	1,218,382.73	62,437.76	836,937.80	770,596.93
531 - Impervious Surface Volume Reduction Opportunity	1,484,215.00	-	-	-	-	1,484,215.00
549 - Beltline & Battle Creek Tunnel Repair	863,674.00	(863,674.00)	-	-	-	0.00
550 - Frost/Kennard Enhanced WQ BMP	70,017.00	(70,017.00)	-	-	-	0.00
551 - Markham Pond Dredging & Aeration	110,379.00	(76,259.52)	-	28,277.00	34,119.48	0.00
553 - Wakefield Park Project	1,049,286.00	-	1,598.90	71,482.02	71,482.02	977,803.98
554 - Willow Pond CMAC	(44,588.00)	58,971.13	-	12.39	14,383.13	0.00
580 - Contingency Fund	598,985.00	94,347.89	-	-	-	693,332.89
585 - Certificates of Participation	131,513.00	-	189,955.61	-	193,453.76	128,014.85
<b>Total District Fund Balance</b>	<b>\$13,302,546.28</b>	<b>(\$0.00)</b>	<b>\$ 7,369,174.87</b>	<b>\$ 1,519,884.03</b>	<b>\$7,224,946.61</b>	<b>\$13,446,774.54</b>

RWMWD BUDGET STATUS REPORT  
 Administrative & Program Budget  
 Fiscal Year 2020  
 1/1/2020

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	-	-	-	\$8,500.00	0.00%
	Manager expenses	4360	3,500.00	-	-	-	3,500.00	0.00%
Committees	Committee/Bd Mtg. Exp.	4365	3,500.00	-	-	-	3,500.00	0.00%
Employees	Staff salary/taxes/benefits	4010	1,450,000.00	-	-	-	1,450,000.00	0.00%
	Employee expenses	4020	10,000.00	-	-	-	10,000.00	0.00%
	District training & education	4350	25,000.00	-	-	-	25,000.00	0.00%
Administration/ Office	GIS system maint. & equip.	4170	15,000.00	-	-	-	15,000.00	0.00%
	Data Base/GIS Maintenance	4171	5,000.00	-	-	-	5,000.00	0.00%
	Equipment maintenance	4305	3,000.00	-	-	-	3,000.00	0.00%
	Telephone	4310	8,000.00	-	-	-	8,000.00	0.00%
	Office supplies	4320	5,000.00	-	-	-	5,000.00	0.00%
	IT/Internet/Web Site/Software Lic.	4325	55,000.00	-	-	-	55,000.00	0.00%
	Postage	4330	5,000.00	-	-	-	5,000.00	0.00%
	Printing/copying	4335	8,000.00	-	-	-	8,000.00	0.00%
	Dues & publications	4338	11,000.00	-	-	-	11,000.00	0.00%
	Janitorial/Trash Service	4341	15,000.00	-	-	-	15,000.00	0.00%
	Utilities/Bldg. Contracts	4342	20,000.00	-	-	-	20,000.00	0.00%
	Bldg/Site Maintenance	4343	200,000.00	-	-	-	200,000.00	0.00%
	Miscellaneous	4390	5,000.00	-	-	-	5,000.00	0.00%
	Insurance	4480	40,000.00	-	-	-	40,000.00	0.00%
	Office equipment	4703	150,000.00	-	-	-	150,000.00	0.00%
	Vehicle lease, maintenance	4810-40	43,000.00	-	96.25	96.25	42,903.75	0.22%
Consultants/ Outside Services	Auditor/Accounting	4110	60,000.00	-	-	-	60,000.00	0.00%
	Engineering-administration	4121	93,000.00	-	-	-	93,000.00	0.00%
	Engineering-permit I&E	4122	10,000.00	-	-	-	10,000.00	0.00%
	Engineering-eng. review	4123	55,000.00	-	-	-	55,000.00	0.00%
	Engineering-permit review	4124	55,000.00	-	-	-	55,000.00	0.00%
	Project Feasibility Studies	4129	570,000.00	-	-	-	570,000.00	0.00%
	Attorney-permits	4130	10,000.00	-	-	-	10,000.00	0.00%
	Attorney-general	4131	40,000.00	-	-	-	40,000.00	0.00%
	Outside Consulting Services	4160	40,000.00	-	-	-	40,000.00	0.00%
Programs	Educational programming	4370	60,000.00	-	-	-	60,000.00	0.00%
	Communications & Marketing	4371	25,000.00	-	-	-	25,000.00	0.00%
	Events	4372	50,000.00	-	-	-	50,000.00	0.00%
	Water QM-Engineering	4520-30	185,000.00	-	-	-	185,000.00	0.00%
	Project operations	4650	160,000.00	-	-	-	160,000.00	0.00%
	SLMP/TMDL Studies	4661	173,000.00	-	-	-	173,000.00	0.00%
	Natural Resources/Keller Creek	4670-72	140,000.00	-	-	-	140,000.00	0.00%
	Outside Prog.Support/Weed Mgmt.	4683-84	67,000.00	-	-	-	67,000.00	0.00%
	Research Projects	4695	95,000.00	-	-	-	95,000.00	0.00%
	Health and Safety Program	4697	3,000.00	-	-	-	3,000.00	0.00%
	NPDES Phase II	4698	10,000.00	-	-	-	10,000.00	0.00%
<b>GENERAL FUND TOTAL</b>			<b>\$3,989,500.00</b>	<b>\$0.00</b>	<b>\$96.25</b>	<b>\$96.25</b>	<b>\$3,989,403.75</b>	<b>0.00%</b>
CIP's	CIP Project Repair & Maintenance	516	1,115,000.00	-	0.00	0.00	1,115,000.00	0.00%
	Targeted Retrofit Projects	518	1,012,000.00	-	-	0.00	1,012,000.00	0.00%
	Flood Risk Reduction Fund	520	4,000,000.00	-	-	0.00	4,000,000.00	0.00%
	Debt Services-96-97 Beltline/MM/Battle Creek	526	400,074.00	-	271,081.25	271,081.25	128,992.75	67.76%
	Stewardship Grant Program Fund	528-529	1,000,000.00	-	-	0.00	1,000,000.00	0.00%
	Impervious Surface Volume Reduction Opportunity	531	1,600,000.00	-	-	0.00	1,600,000.00	0.00%
	Wakefield Park Project	553	100,000.00	-	-	0.00	100,000.00	0.00%
	District Office Bond Payment	585	194,885.00	-	120,358.21	120,358.21	74,526.79	61.76%
<b>CIP BUDGET TOTAL</b>			<b>\$9,421,959.00</b>	<b>-</b>	<b>\$391,439.46</b>	<b>\$391,439.46</b>	<b>\$9,030,519.54</b>	<b>4.15%</b>
<b>TOTAL BUDGET</b>			<b>\$13,411,459.00</b>	<b>\$0.00</b>	<b>\$391,535.71</b>	<b>\$391,535.71</b>	<b>\$13,019,923.29</b>	<b>2.92%</b>

Current Fund Balances:

Fund:	Unaudited Beginning Fund Balance @ 12/31/19	Fund Transfers	Year to date Revenue	Current Month Expenses	Year to Date Expense	Unaudited Fund Balance @ 01/31/20
101 - General Fund	\$4,575,206.32	-	-	96.25	96.25	4,575,110.07
516 - CIP Project Repair & Maintenance	1,146,904.22	-	-	-	-	1,146,904.22
518 - Targeted Retrofit Projects	(104,487.73)	-	-	-	-	(104,487.73)
520 - Flood Damage Reduction Fund	2,436,426.99	-	-	-	-	2,436,426.99
526 - Debt Services-96-97 Beltline/MM/Beltline-Battle Creek Tunnel Repair	1,338,761.09	-	-	271,081.25	271,081.25	1,067,679.84
528/529 - Stewardship Grant Program Fund	770,596.93	-	-	-	-	770,596.93
531 - Impervious Surface Volume Reduction Opportunity	1,484,215.00	-	-	-	-	1,484,215.00
553 - Wakefield Park Project	977,803.98	-	-	-	-	977,803.98
580 - Contingency Fund	693,332.89	-	-	-	-	693,332.89
585 - Certificates of Participation	128,014.85	-	-	120,358.21	120,358.21	7,656.64
<b>Total District Fund Balance</b>	<b>\$13,446,774.54</b>	<b>\$0.00</b>	<b>\$-</b>	<b>\$391,535.71</b>	<b>\$391,535.71</b>	<b>\$13,055,238.83</b>

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From Dec 1, 2019 to Dec 31, 2019**

Check #	Date	Payee ID	Invoice #	Payee	Description	Amount
EFT	12/01/19	met003	Dec 2019	MetLife-Group Benefits	Employee Benefits	\$1,615.20
EFT	12/12/19	hea002	Jan 2020	HealthPartners	Employee Benefits	11,421.64
71221	12/16/19	aws001	S1335957-120119	AWS Service Center	Utilities/Bldg. Contracts	210.07
71222	12/16/19	car004	17563	Cardinal Materials Flow, Inc.	Bldg/Site Maintenance	667.41
71223	12/16/19	cit011	227405/227369	City of Roseville	IT/Website/Software	2,728.00
71224	12/16/19	del001	10354299521	Dell Marketing, L.P.	Office Equipment	630.96
71225	12/16/19	han008	1055	Hanna Enterprises	Utilities/Bldg. Contracts	450.00
71226	12/16/19	pra001	1933004700	Prairie Moon Nursery, Inc.	Educational Program	32.50
71227	12/16/19	pre003	317230441	Premium Waters, Inc.	Utilities/Bldg. Contracts	24.00
71228	12/16/19	qwe001	Dec 2019	CenturyLink	Project Operations	230.87
71229	12/16/19	usb005	401224332	US Bank Equipment Finance	Printing Expense	294.00
71230	12/19/19	cad001	16558279	Allstream	Water QM Staff	132.08
71231	12/19/19	kil001	W11134	Killmer Electric Co., Inc.	Project Operations	28,277.00
71232	12/19/19	out001	Pay App. #1	Outdoor Lab Landscape Design, Inc.	Pay App. #2	72,536.24
71233	12/31/19	ahl001	12/01/19	Paige Ahlborg	Employee Reimbursement	40.00
71234	12/31/19	att002	287256665340	AT & T Mobility - ROC	Water QM Staff	80.45
71235	12/31/19	bar001	11/16-12/20/19	Barr Engineering	11/16-12/20/19 Engineering	140,065.41
71236	12/31/19	bar002	9/2-12/16/19	Bill Bartodziej	Employee Reimbursement	333.44
71237	12/31/19	bar004	Dec 2019	Deborah Barnes	Employee Reimbursement	80.00
71238	12/31/19	blo001	12/1/19	Simba Blood	Employee Reimbursement	166.24
71239	12/31/19	che001	18-11 MTN	Cherokee Hills Association No. II	Stewardship Grant Fund	1,000.00
71240	12/31/19	che002	18-10 MTN	Cherokee Hills Association No. I	Stewardship Grant Fund	1,000.00
71241	12/31/19	cit011	227746	City of Roseville	IT/Website/Software	55.00
71242	12/31/19	com004	12/16/19	Comcast	Utilities/Bldg. Contracts	61.93
71243	12/31/19	com005	19-10 CS	CommonBond Communities	Stewardship Grant Fund	55,543.50
71244	12/31/19	don001	Nov/Dec 2019	Matthew Doneux	Employee Reimbursement	144.33
71245	12/31/19	dvs001	Feb 2020	DVS Renewal	Vehicle Expense	96.25
71246	12/31/19	ebe001	12/19/19	Marjorie J. Ebensteiner	Manager Expense	172.84
71247	12/31/19	fit002	Dec 2019	Mary Fitzgerald	Employee Reimbursement	39.00
71248	12/31/19	fle002	18-12 MTN	Fleur Royale Condominium Association	Stewardship Grant Fund	1,000.00
71249	12/31/19	gal001	12/23/19	Galowitz Olson, PLLC	December Legal Expense	3,711.00
71250	12/31/19	han008	1081	Hanna Enterprises	Bldg/Site Maintenance	470.00
71251	12/31/19	hom001	12/27/19	Home Depot Credit Services	Natural Resources/Water QM Staff	287.34
71252	12/31/19	inn002	IN2793727	Innovative Office Solutions LLC	Office Supplies	162.77
71253	12/31/19	int001	W19110506	Office of MN, IT Services	Telephone Expense	57.48
71254	12/31/19	kub001	Dec 2019	Kyle W. Kubitza	Employee Reimbursement	128.48
71255	12/31/19	mag004	6/17-12/12/19	Carrie Magnuson	Employee Reimbursement	335.26
71256	12/31/19	mbb001	Dec 2019	MBB Construction Services	Bldg/Site Maintenance	1,500.00
71257	12/31/19	mel001	Oct-Dec 2019	Michelle L. Melser	Employee Reimbursement	232.19
71258	12/31/19	met004	INV1497750	Metro Sales, Inc.	Printing Expense	346.87
71259	12/31/19	mid003	Dec0	Roseville Midway Ford	Vehicle Purchase	28,902.97
71260	12/31/19	nar001	IN00127699	Nardini Fire Equipment	Bldg/Site Maintenance	458.00
71261	12/31/19	nep001	Dec 2019	NCPERS Group Life Ins.	Employee Benefits	16.00
71262	12/31/19	nor013	37836	Northern Dewatering, Inc.	Construction-Flood Damage	19,860.00
71263	12/31/19	nor016	12/11/19	Northland Trust Services, Inc.	Debt Services	271,081.25
71264	12/31/19	nsp001	665972417	Xcel Energy	Construction/Utilities/Proj. Oper.	2,087.10
71265	12/31/19	pac001	1912013555	Pace Analytical Services, Inc.	Water QM Staff	362.00
71266	12/31/19	pas002	Dec 2019	Sage Passi	Employee Reimbursement	149.73
71267	12/31/19	pet001	41680	Peterson Companies, Inc.	Construction Imp.-Maint. & Repair	111,066.20
71268	12/31/19	pre001	653020	Press Publications	Construction Imp.-Maint. & Repair	60.80
71269	12/31/19	pro003	Dec 2019	Lyndsey R. Provos	Employee Reimbursement	63.96
71270	12/31/19	ram002	PRK-001695	Ramsey County	BMP Cost Share Program	700,000.00
71271	12/31/19	red002	150450391	Redpath & Company, Ltd	November Accounting & Payroll	1,454.89
71272	12/31/19	ric004	18-24 CS	Richardson Elementary	BMP Cost Share Program	200,000.00
71273	12/31/19	sel001	5004	Tim Melser	Bldg/Site Maintenance	200.00
71274	12/31/19	sod001	Dec 2019	Nicole Soderholm	Employee Reimbursement	241.50
71275	12/31/19	tro002	19-09	Cathy Troendle	Educational Program	812.50

**Ramsey Washington Metro Watershed Dist.**  
**Check Register**  
**For the Period From Dec 1, 2019 to Dec 31, 2019**

Check #	Date	Payee ID	Invoice #	Payee	Description	Amount
71276	12/31/19	twi003	0818008 Revised	Twin Cities Metro Painting, Inc.	Bldg/Site Maintenance	8,362.50
71277	12/31/19	uli001	115115644	Uline	Bldg/Site Maintenance	346.00
71278	12/31/19	usb002	Dec 2019	U.S. Bank	November/December Credit Card	5,982.24
71279	12/31/19	usb003	1522414	US Bank St. Paul	Debt Services-Cert. of Participation	119,833.21 <b>2020</b>
71280	12/31/19	usb004	5584532	U.S. Bank	Debt Services-Cert. of Participation	525.00 <b>2020</b>
71281	12/31/19	van001	7018	Vanguard Cleaning Systems of Minnesota	Utilities/Bldg. Contracts	550.00
71282	12/31/19	vla001	Dec 2019	Dave Vlasin	Employee Reimbursement	292.32
71283	12/31/19	voy001	869293423952	US Bank Voyager Fleet Sys.	Vehicle Fuel	342.96
71284	12/31/19	was002	4711	Washington Conservation District	Stewardship Grant Fund	1,629.00
71285	12/31/19	whe001	SPI105835	Wheeler Hardware Company	Bldg/Site Maintenance	22,933.00
71286	12/31/19	wil007	Dec 2019	Patrick Williamson	Employee Reimbursement	20.33
<b>Total</b>						<b><u><u>\$1,823,993.21</u></u></b>
EFT	11/01/19	myp001	11/01/19	November 1st Payroll Fee	4110-101-000	71.00
EFT	11/15/19	myp001	11/15/19	November 15th Payroll Fee	4110-101-000	71.00
EFT	11/29/19	myp001	11/29/19	November 29th Payroll Fee	4110-101-000	69.05
Dir.Dep.	12/13/19	---	Payroll Expense-Net	December 13th Payroll	4010-101-000	23,886.71
EFT	12/13/19	int002	Internal Rev.Serv.	December 13th Federal Withholding	2001-101-000	9,249.95
EFT	12/13/19	mnd001	MN Revenue	December 13th State Withholding	2003-101-000	1,470.97
EFT	12/13/19	per001	PERA	December 13th PERA	2011-101-000	4,979.96
EFT	12/13/19	emp002	Empower Retirement	Employee Def.Comp. Contributions	2016-101-000	2,425.00
EFT	12/13/19	emp002	Empower Retirement	Employee IRA Contributions	2018-101-000	375.00
Dir.Dep.	12/27/19	---	Payroll Expense-Net	Decemeber 27th Payroll	4010-101-000	24,055.09
EFT	12/27/19	int002	Internal Rev.Serv.	December 27th Federal Withholding	2001-101-000	8,340.68
EFT	12/27/19	mnd001	MN Revenue	December 27th State Withholding	2003-101-000	1,486.77
EFT	12/27/19	per001	PERA	December 27th PERA	2011-101-000	5,090.51
EFT	12/27/19	emp002	Empower Retirement	Employee Def.Comp. Contributions	2016-101-000	2,425.00
EFT	12/27/19	emp002	Empower Retirement	Employee IRA Contributions	2018-101-000	375.00
<b>Payroll/Benefits</b>						<b><u><u>\$84,371.69</u></u></b>
<b>Total</b>						<b><u><u>Accounts Payable/Payroll/Benefits: \$1,908,364.90</u></u></b>

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From Nov 1, 2019 - Nov 30, 2019**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
12/01/19	EFT	met003	MetLife-Group Benefits			\$1,615.20	
				4040-101-000	Employee Benefits-General		1,398.12
				2015-101-000	Employee Health-General		217.08
12/12/19	EFT	hea002	HealthPartners			11,421.64	
				4040-101-000	Employee Benefits-General		10,275.29
				2015-101-000	Employee Health-General		1,146.35
12/16/19	71221	aws001	AWS Service Center			210.07	
12/16/19	71222	car004	Cardinal Materials Flow, Inc.			667.41	
12/16/19	71223	cit011	City of Roseville			2,728.00	
				4325-101-000	IT/Website/Software		2,424.00
				4310-101-000	Telephone-General		304.00
12/16/19	71224	del001	Dell Marketing, L.P.			630.96	
12/16/19	71225	han008	Hanna Enterprises			450.00	
12/16/19	71226	pra001	Prairie Moon Nursery, Inc.			32.50	
12/16/19	71227	pre003	Premium Waters, Inc.			24.00	
12/16/19	71228	qwe001	CenturyLink			230.87	
12/16/19	71229	usb005	US Bank Equipment Finance			294.00	
12/19/19	71230	cad001	Allstream			132.08	
12/19/19	71231	kil001	Killmer Electric Co., Inc.			28,277.00	
12/19/19	71232	out001	Outdoor Lab Landscape Design, Inc.			72,536.24	
12/31/19	71233	ahl001	Paige Ahlborg			40.00	
12/31/19	71234	att002	AT & T Mobility -ROC			80.45	
12/31/19	71235	bar001	Barr Engineering			140,065.41	
				4121-101-000	Engineering Admin-General Fund		5,287.00
				4129-101-000	Project Feasability-General		544.00
				4123-101-000	Engineering-Review-General		3,396.50
				4129-101-000	Project Feasability-General		11,885.75
				4129-101-000	Project Feasability-General		443.00
				4129-101-000	Project Feasability-General		1,824.50
				4129-101-000	Project Feasability-General		950.00
				4129-101-000	Project Feasability-General		11,788.50
				4129-101-000	Project Feasability-General		809.50
				4129-101-000	Project Feasability-General		1,495.00
				4129-101-000	Project Feasability-General		12,153.50
				4129-101-000	Project Feasability-General		2,365.50
				4520-101-000	Water QM-Engineering		1,528.04
				4520-101-000	Water QM-Engineering		729.40
				4520-101-000	Water QM-Engineering		1,087.50
				4520-101-000	Water QM-Engineering		1,993.40
				4520-101-000	Water QM-Engineering		2,203.50
				4520-101-000	Water QM-Engineering		498.50

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From Nov 1, 2019 - Nov 30, 2019**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
				4122-101-000	Engineering-Permit I & E		52.50
				4124-101-000	Engineering-Flood Damage		5,428.00
				4128-520-000	Engineering-Flood Damage		365.50
				4695-101-000	Research Projects-General		3,360.00
				4695-101-000	Research Projects-General		8.50
				4650-101-000	Project Operations-General		40.50
				4128-553-000	Engineering-Wakefield		1,598.90
				4128-518-000	Engineering-School/Commer Retrofit		27,558.00
				4128-518-000	Engineering-School/Commer Retrofit		99.00
				4128-518-000	Engineering-School/Commer Retrofit		537.50
				4128-518-000	Engineering-School/Commer Retrofit		768.50
				4682-529-000	Stewardship Grant Fund		1,416.50
				4682-529-000	Stewardship Grant Fund		848.76
				4695-101-000	Engineering-Research Projects		160.00
				4128-516-000	Engineering-Maint. & Repair		14,847.00
				4128-516-000	Engineering-Maint. & Repair		540.00
				4128-516-000	Engineering-Maint. & Repair		21,453.16
12/31/19	71236	bar002	Bill Bartodziej			333.44	
				4040-101-000	Employee Benefits-General		120.00
				4020-101-000	Employee Expenses-General		213.44
12/31/19	71237	bar004	Deborah Barnes	4040-101-000	Employee Benefits-General	80.00	
12/31/19	71238	blo001	Simba Blood	4040-101-000	Employee Benefits-General	166.24	
12/31/19	71239	che001	Cherokee Hills Association No. II	4682-529-000	Stewardship Grant Fund	1,000.00	
12/31/19	71240	che002	Cherokee Hills Association No. II	4682-529-000	Stewardship Grant Fund	1,000.00	
12/31/19	71241	cit011	City of Roseville	4325-101-000	IT/Website/Software	55.00	
12/31/19	71242	com004	Comcast	4342-101-000	Utilities/Bldg. Contracts	61.93	
12/31/19	71243	com005	CommonBond Communities	4682-529-000	Stewardship Grant Fund	55,543.50	
12/31/19	71244	don001	Matthew Doneux			144.33	
				4670-101-000	Natural Resources Project-General		64.33
				4040-101-000	Employee Benefits-General		80.00
12/31/19	71245	dvs001	DVS Renewal	4840-101-000	Vehicle Miscellaneous-General	96.25	
12/31/19	71246	ebe001	Marjorie J. Ebensteiner	4360-101-000	Manager Expense-General	172.84	
12/31/19	71247	fit002	Mary Fitzgerald	4040-101-000	Employee Benefits-General	39.00	
12/31/19	71248	flo002	Fleur Royale Condominium Association	4682-529-000	Stewardship Grant Fund	1,000.00	
12/31/19	71249	gal001	Galowitz Olson, PLLC			3,711.00	
				4131-101-000	Attorney General-General		3,564.00
				4131-516-000	Attorney-Maint. & Repair		147.00
12/31/19	71250	han008	Hanna Enterprises	4343-101-000	Bldg./Site Maintenance	470.00	
12/31/19	71251	hom001	Home Depot Credit Services			287.34	
				4670-101-000	Natural Resources Project-General		139.63
				4530-101-000	Water QM Staff-General		147.71
12/31/19	71252	inn001	Innovative Office Solutions, LLC	4320-101-000	Office Supplies-General	162.77	
12/31/19	71253	int001	Office of MN, IT Services	4310-101-000	Telephone-General	57.48	
12/31/19	71254	kib001	Kyle W. Kubitza	4530-101-000	Water QM Staff-General	128.48	
12/31/19	71255	mag004	Carrie Magnuson			335.26	
				4040-101-000	Employee Benefits-General		240.00
				4020-101-000	Employee Expenses-General		48.86
				4365-101-000	Committee/Board Meeting Expense		46.40
12/31/19	71256	mbb001	MBB Construction Services	4343-101-000	Bldg./Site Maintenance	1,500.00	

**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From Nov 1, 2019 - Nov 30, 2019**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
12/31/19	71257	mel001	Michelle L. Melser			232.19	
				4040-101-000	Employee Benefits-General		80.00
				4020-101-000	Employee Expenses-General		148.71
				4343-101-000	Bldg./Site Maintenance		3.48
12/31/19	71258	met004	Metro Sales, Inc.	4335-101-000	Printing-General	346.87	
12/31/19	71259	mid003	Roseville Midway Ford	4810-101-000	Vehicle Lease-General	28,902.97	
12/31/19	71260	naroo1	Nardini Fire Equipment	4343-101-000	Bldg./Site Maintenance	458.00	
12/31/19	71261	ncp001	NCBERS Group Life Ins.	2015-101-000	Employee Health-General	16.00	
12/31/19	71262	nor013	Northern Dewatering, Inc.	4630-520-000	Construction-Flood Damage	19,860.00	
12/31/19	71263	nor016	Northland Trust Services, Inc.	4708-526-000	Debt Services-Beltline	271,081.25	
12/31/19	71264	nsp001	Xcel Energy			2,087.10	
				4650-101-000	Project Operations-General		825.33
				4342-101-000	Utilities/Bldg. Contracts		1,249.38
				4630-554-000	Construction Imp.-Willow Pond		12.39
12/31/19	71265	pac001	Pace Analytical Services, Inc.	4530-101-000	Water QM Staff-General	362.00	
12/31/19	71266	pas002	Sage Passi			149.73	
				4040-101-000	Employee Benefits-General		66.50
				4020-101-000	Employee Expenses-General		72.50
				4370-101-000	Educational Program-General		10.73
12/31/19	71267	pet001	Peterson Companies, Inc.	4630-516-000	Construction Imp.-Maint. & Repair	111,066.20	
12/31/19	71268	pre001	Press Publications	4630-516-000	Construction Imp.-Maint. & Repair	60.80	
12/31/19	71269	pro003	Lindsey R. Provos			63.96	
				4020-101-000	Employee Expenses-General		5.80
				4040-101-000	Employee Benefits-General		58.16
12/31/19	71270	ram002	Ramsey County	4682-518-000	BMP Cost Share Program	700,000.00	
12/31/19	71271	red002	Redpath & Company, Ltd.	4110-101-000	Auditor/Accounting	1,454.89	
12/31/19	71272	ric004	Richardson Elementary	4682-518-000	BMP Cost Share Program	200,000.00	
12/31/19	71273	sel001	Tim Melser	4343-101-000	Bldg./Site Maintenance	200.00	
12/31/19	71274	sod001	Nicole Soderholm			241.50	
				4040-101-000	Employee Benefits-General		237.00
				4020-101-000	Employee Expenses-General		4.50
12/31/19	71275	tro002	Cathy Troendle	4370-101-000	Educational Program-General	812.50	
12/31/19	71276	twi003	Twin Cities Metro Painting, Inc.	4343-101-000	Bldg./Site Maintenance	8,362.50	
12/31/19	71277	uli001	Uline	4343-101-000	Bldg./Site Maintenance	346.00	
12/31/19	71278	usb002	U.S. Bancorp			5,982.24	
				4320-101-000	Office Supplies-General		23.33
				4320-101-000	Office Supplies-General		13.95
				4320-101-000	Office Supplies-General		38.92
				4343-101-000	Bldg./Site Maintenance		40.00
				4325-101-000	IT/Website/Software		95.01
				4320-101-000	Office Supplies-General		17.99
				4320-101-000	Office Supplies-General		16.47
				4350-101-000	Training & Education-General		168.11
				4350-101-000	Training & Education-General		10.24
				4343-101-000	Bldg./Site Maintenance		78.49
				4350-101-000	Training & Education-General		150.00
				4343-101-000	Bldg./Site Maintenance		121.99
				4040-101-000	Employee Benefits-General		260.85
				4350-101-000	Training & Education-General		410.00
				4670-101-000	Natural Resources Project-General		67.74
				4343-101-000	Bldg./Site Maintenance		25.00



**Ramsey Washington Metro Watershed Dist.**  
**Cash Disbursements Journal**  
**For the Period From Nov 1, 2019 - Nov 30, 2019**

Date	Check #	Vendor ID	Name	Account ID	Account Description	Amount	Check Detail
				4343-101-000	Bldg./Site Maintenance		10.05
				4350-101-000	Training & Education-General		144.00
				4350-101-000	Training & Education-General		1,875.00
				4350-101-000	Training & Education-General		1,036.40
				4350-101-000	Training & Education-General		229.78
				4350-101-000	Training & Education-General		919.14
				4350-101-000	Training & Education-General		229.78
12/31/19	71279	usb003	US Bank St. Paul	4700-585-000	Debt Services-Certificate of Particip.	119,833.21	
12/31/19	71280	usb004	U.S. Bank	4700-585-000	Debt Services-Certificate of Particip.	525.00	
12/31/19	71281	van001	Vanguard Cleaning Systems of Minnesota	4342-101-000	Utilities/Bldg. Contracts	550.00	
12/31/19	71282	vla001	David Vlasin			292.32	
				4040-101-000	Employee Benefits-General		255.24
				4020-101-000	Employee Expenses-General		37.08
12/31/19	71283	voy001	US Bank Voyager Fleet Sys.	4830-101-000	Vehicle Fuel-General	342.96	
12/31/19	71284	was002	Washington Conservation District	4682-529-000	Stewardship Grant Fund	1,629.00	
12/31/19	71285	whe001	Wheeler Hardware Company	4343-101-000	Bldg./Site Maintenance	22,933.00	
12/31/19	71286	wil007	Patrick Williamson	4670-101-000	Natural Resources Project-General	20.33	
<b>Accounts Payable Total:</b>						<b>\$1,823,993.21</b>	
EFT	11/01/19	myp001	Payroll Fees	4110-101-000	November 1st Payroll Fee	71.00	
EFT	11/15/19	myp001	Payroll Fees	4110-101-000	November 15th Payroll Fee	71.00	
EFT	11/29/19	myp001	Payroll Fees	4110-101-000	November 29th Payroll Fee	69.05	
Dir.Dep.	12/13/19	---	Payroll Expense-Net	4010-101-000	December 13th Payroll	23,886.71	
EFT	12/13/19	int002	Internal Revenue Service	2001-101-000	December 13th Federal Withholding	9,249.95	
EFT	12/13/19	mnd001	MN Revenue	2003-101-000	December 13th State Withholding	1,470.97	
EFT	12/13/19	per001	PERA	2011-101-000	December 13th PERA	4,979.96	
EFT	12/13/19	emp002	Empower Retirement	2016-101-000	Employee Def.Comp. Contributions	2,425.00	
EFT	12/13/19	emp002	Empower Retirement	2018-101-000	Employee IRA Contributions	375.00	
Dir.Dep.	12/27/19	---	Payroll Expense-Net	4010-101-000	Decemeber 27th Payroll	24,055.09	
EFT	12/27/19	int002	Internal Revenue Service	2001-101-000	December 27th Federal Withholding	8,340.68	
EFT	12/27/19	mnd001	MN Revenue	2003-101-000	December 27th State Withholding	1,486.77	
EFT	12/27/19	per001	PERA	2011-101-000	December 27th PERA	5,090.51	
EFT	12/27/19	emp002	Empower Retirement	2016-101-000	Employee Def.Comp. Contributions	2,425.00	
EFT	12/27/19	emp002	Empower Retirement	2018-101-000	Employee IRA Contributions	375.00	
<b>Payroll/Benefits</b>						<b>\$84,371.69</b>	
<b>TOTAL:</b>						<b>\$1,908,364.90</b>	



**Summary of Professional Engineering Services During the Period  
November 16, 2019 through December 20, 2019**

	Total Engineering Budget (2019)	Total Fees to Date (2019)	Budget Balance (2019)	Fees During Period	District Accounting Code	Plan Implementation Task Number
<b>Engineering Administration</b>						
General Engineering Administration	\$76,000.00	\$71,008.80	\$4,991.20	\$5,287.00	4121-101	DW-13
RWMWD Health and Safety/ERTK Program	\$2,000.00	\$759.00	\$1,241.00		4697-101	DW-13
Educational Program/Educational Forum Assistance	\$20,000.00	\$15,187.60	\$4,812.40	\$544.00	4129-101	DW-11
<b>Engineering Review</b>						
Engineering Review	\$55,000.00	\$44,484.16	\$10,515.84	\$3,396.50	4123-101	DW-13
<b>Project Feasibility Studies</b>						
Owasso County Park Stormwater Master Plan and Detailed Design: Phase 1 and Phase 2	\$50,000.00	\$6,098.70	\$43,901.30		4129-101	DW-6
Beltline Resiliency and Phalen Chain Water Level Management Study	\$217,000.00	\$163,761.37	\$53,238.63	\$11,885.75	4129-101	BELT-3
Interim emergency response plan funds for top priority District flooding areas (such as Owasso Basin, Willow Creek, PCU Pond, etc)	\$50,000.00	\$324.00	\$49,676.00		4129-101	DW-19
FEMA Flood Mapping Update	\$90,000.00	\$47,795.50	\$42,204.50	\$443.00	4129-101	DW-9
Snail, Grass, and West Vadnais outlet permitting with the MndNR	\$100,000.00	\$47,674.76	\$52,325.24	\$1,824.50	4129-101	DW-9
Modeling of 500-year event Atlas 14 District-wide (Climate Change Scenario) and Generation of Flood Maps for Future Outreach Efforts	\$70,000.00	\$38,646.00	\$31,354.00	\$950.00	4129-101	DW-9
Climate Adaption Workshops with Member Cities	\$100,000.00	\$255.00	\$99,745.00		4129-101	DW-9
Hillcrest Golf Course (multi-use)	\$25,000.00	\$23,927.35	\$1,072.65	\$11,788.50	4129-101	DW-6
Wetland Restoration site search. BWSR criteria needed to help guide this idea.	\$25,000.00	\$28,299.10	-\$3,299.10	\$809.50	4129-101	DW-1, DW-8
Gold BRT planning	\$20,000.00	\$0.00	\$20,000.00		4129-101	DW-6
Priority Pond Assessment (WQ Monitor/Dredge/Treat/Leave As-Is)	\$20,000.00	\$2,288.00	\$17,712.00	\$1,495.00	4129-101	DW-5
Twin Lake Outlet	\$50,000.00	\$35,423.00	\$14,577.00	\$12,153.50	4129-101	DW-9
Point Douglas Drive Study	\$10,000.00	\$3,299.77	\$6,700.23	\$2,365.50	4129-101	DW-9
Contingency*	\$20,000.00	\$3,233.00	\$16,767.00		4129-101	
<b>GIS Maintenance</b>						
GIS Maintenance	\$5,000.00	\$341.50	\$4,658.50		4170-101	DW-13
<b>Monitoring Water Quality/Project Monitoring</b>						
Lake Water Quality Monitoring (Misc QA/QC)	\$10,000.00	\$2,753.68	\$7,246.32		4520-101	DW-2
Auto lake monitoring system for Grass Lake	\$20,000.00	\$18,813.11	\$1,186.89	\$1,528.04	4520-101	DW-18
Auto lake monitoring system for Owasso Lake	\$20,000.00	\$8,318.10	\$11,681.90	\$729.40	4520-101	DW-18
Auto lake monitoring system for Phalen Lake	\$20,000.00	\$6,949.50	\$13,050.50	\$1,087.50	4520-101	DW-18
Auto lake monitoring system for Snail Lake	\$20,000.00	\$17,648.49	\$2,351.51	\$1,993.40	4520-101	DW-18
Auto lake monitoring system for Wabasso Lake	\$20,000.00	\$10,185.02	\$9,814.98	\$2,203.50	4520-101	DW-18
Special Project BMP Monitoring (Maplewood Mall, Frost Kennard Spent Lime Filter, Willow Pond CMAC)	\$25,000.00	\$28,160.35	-\$3,160.35	\$498.50	4520-101	DW-12
<b>Permit Processing, Inspection and Enforcement</b>						
Permit Application Inspection and Enforcement	\$10,000.00	\$3,108.44	\$6,891.56	\$52.50	4122-101	DW-7
Permit Application Review	\$55,000.00	\$38,048.00	\$16,952.00	\$5,428.00	4124-101	DW-7
<b>Lake Studies/WRPPs/TMDL Reports</b>						
2019 Grant Applications	\$30,000.00	\$144.00	\$29,856.00		4661-101	--
Tanners Flood Response Tool Model Update	\$3,000.00	\$1,264.00	\$1,736.00		4661-101	TaL-1
Internal Load Management Discussions	\$10,000.00	\$2,707.00	\$7,293.00		4661-101	KL-2, GC-2, WL-3, BL-3, BCL-2, LE-4, BeL-3, LO-5
Twin Lake Public Meeting	\$20,000.00	\$13,942.12	\$6,057.88		4129-101	DW-19
Twin Lake Emergency Response Management 2019		\$80,861.43	-\$80,861.43	\$365.50	4128-520	
Contingency for Lake Studies	\$5,000.00	\$0.00	\$5,000.00		4661-101	
<b>Research Projects</b>						
New Technology Mini Case Studies (average 6 per year)	\$12,000.00	\$12,359.00	-\$359.00		4695-101	DW-12
Kohlman Permeable Weir Test System - Implement Monitoring Plan	\$15,000.00	\$14,976.52	\$23.48	\$3,360.00	4695-101	DW-12
Iron aggregate pond application research project	\$20,000.00	\$504.07	\$19,495.93	\$8.50	4695-101	DW-12
<b>Project Operations</b>						
2018 Tanners Alum Facility Monitoring	\$15,000.00	\$14,026.75	\$973.25	\$40.50	4650-101	TaL-3
<b>Capital Improvements</b>						
Wakefield Park/Frost Avenue Stormwater Project	\$175,000.00	\$71,482.02	\$103,517.98	\$1,598.90	4128-553	WL-1
Commercial Sites Retrofit Projects 2018 (Targeted Retrofits)	\$55,000.00	\$77,306.60	-\$22,306.60	\$27,558.00	4128-518	DW-6
Survey - Stonebrooke Engineering (Target and Motel 6 Retrofits)	\$230,000.00	\$29,257.70	\$200,742.30	\$99.00	4128-518	DW-6
School Sites Retrofit Projects 2018 (Targeted Retrofits)	\$55,000.00	\$15,680.50	\$39,309.50	\$537.50	4128-518	DW-6
Church Sites Retrofit Projects 2018 (Targeted Retrofit)	\$55,000.00	\$13,368.00	\$41,632.00	\$768.50	4128-518	DW-6
Roseville High School Campus Stormwater Retrofit (Bennett Lake Subwatershed)	\$125,000.00	\$19,860.26	\$105,139.74		4128-518	BeL-4
BMP Incentive Fund: GenI BMP Design Assistance and Review	\$50,000.00	\$45,813.10	\$4,186.90	\$1,416.50	4682-529	DW-6
Lowering West Vadnais Lake Outlet	\$50,000.00	\$0.00	\$50,000.00		4128-520	DW-9
Cottage Place Wetland Restoration	\$100,000.00	\$65,278.78	\$34,721.22		4128-518	DW-1, DW-8
Markham Pond Aeration Project and Grant Reporting	\$1,000.00	\$5,842.48	-\$4,842.48		4128-551	KC-1
Aldrich Arena Plans and Specifications	\$125,000.00	\$168,895.74	-\$43,895.74	\$848.76	4682-529	DW-6
Willow Pond CMAC Implementation	\$100,000.00	\$131,251.61	-\$31,251.61		4128-554	BeL-4
<b>CIP Project Repair &amp; Maintenance</b>						
Kohlman Lake Macrophyte Mgmt	\$5,000.00	\$9,312.00	-\$4,312.00	\$160.00	4695-101	KL-3
Routine CIP Inspection and Unplanned Maintenance Identification	\$75,000.00	\$171,924.46	-\$96,924.46	\$14,847.00	4128-516	DW-5
2019 CIP Maintenance and Repairs	\$150,000.00	\$95,999.35	\$54,000.65	\$540.00	4128-516	DW-5
2020 CIP Maintenance and Repairs	\$150,000.00	\$25,979.16	\$124,020.84	\$21,453.16	4128-516	DW-5

\*Final edits to Beaver, Owasso and Battle Creek Lakes Subwatershed Feasibility Studies per Board comments at the 1/2/19 meeting.

Subtotal

TOTAL PAYABLE FOR PERIOD 11/16/2019 - 12/20/2019

\$140,065.41

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

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

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

Page: 1  
December 23, 2019  
File No: 9M

	Balance
General Account	\$3,564.00
RWMWD BID SOLICITATION	\$113.00
Beltline Resiliency Study	\$34.00
	<u>\$3,711.00</u>

\* \* \* \* \*

# Permit Program

\* \* \* \* \*

# Permit Application Coversheet

Date January 08, 2020

Project Name Carver Elementary School Addition

Project Number 20-01

Applicant Name Mike Boland, ISD 622

Type of Development Institutional

## Property Description

This project is located at the existing Carver Elementary School off Upper Afton Road in the City of Maplewood. The applicant is proposing to redevelop the school including building additions, relocation of parking and drop-off locations, paths/walkways, and playground improvements. The total site area is 8.5 acres. An underground infiltration system and above-ground filtration basin are proposed to meet stormwater treatment requirements. Filtration is being proposed on the western portion of the site due to poor soils. Pretreatment will include an isolator row and Rain Guardian turret inlets.

## Watershed District Policies or Standards Involved:

- |  |   |
|--|---|
| <input 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

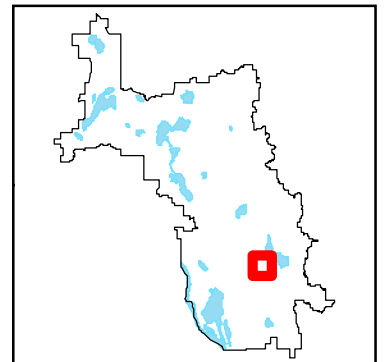
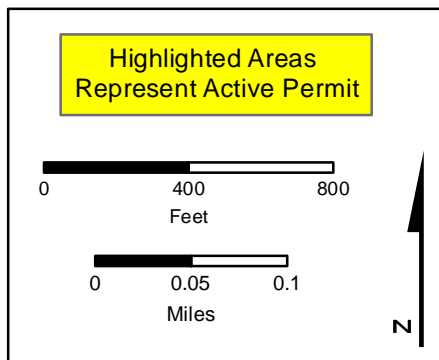
# #20-01 Carver Elementary School Addition



Copyright nearmap 2015

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

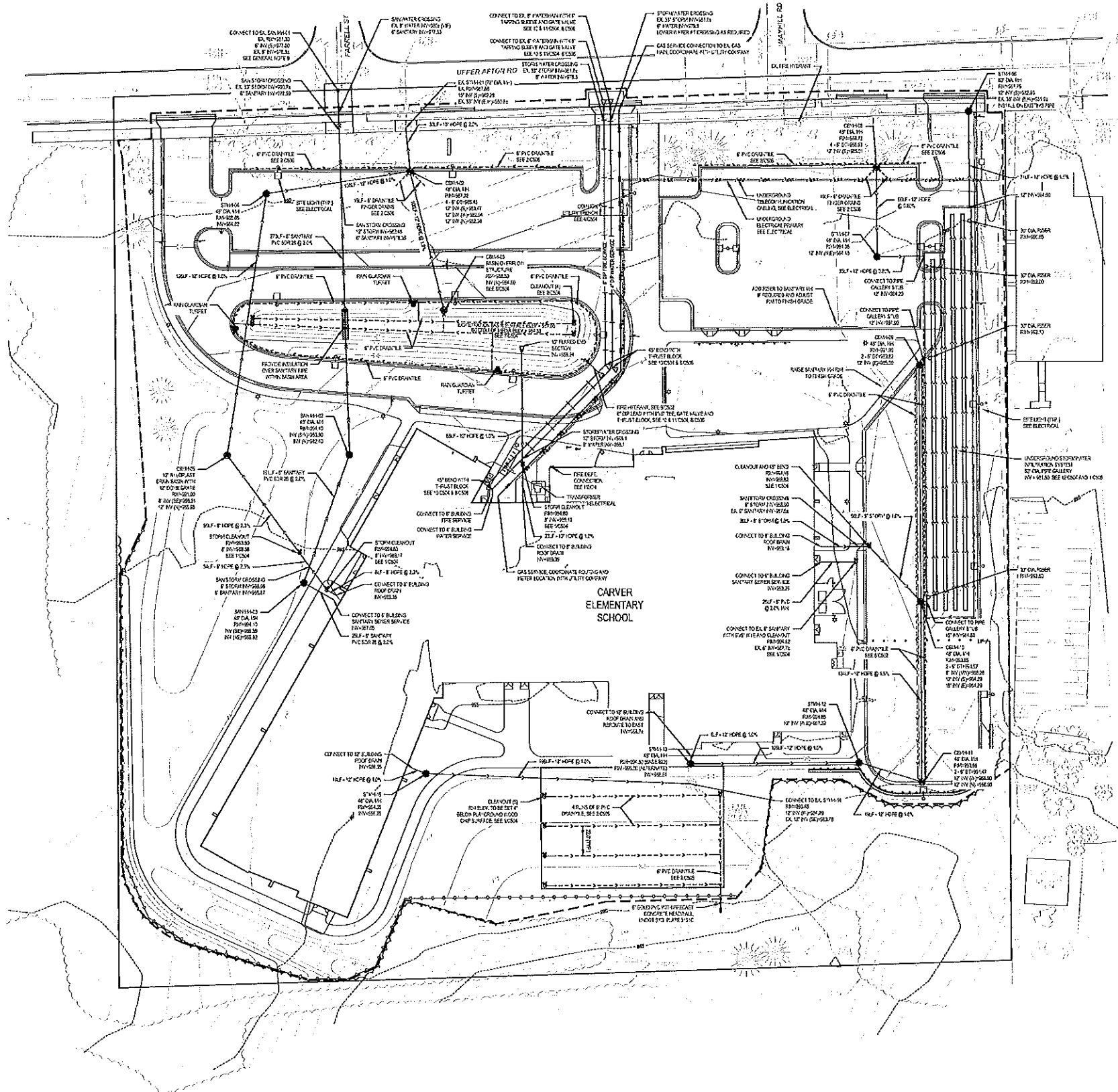
	RWMWD Boundary
	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits



20-01

### Special Provisions

1. The applicant shall submit a signed joint maintenance agreement with the City of Maplewood.
2. The applicant shall submit contact information for the trained erosion control coordinator responsible for implementing the Stormwater Pollution Prevention Plan (SWPPP).
3. The applicant shall submit a copy of the approved Minnesota Pollution Control Agency's NPDES Construction Permit for the project.



- ### LEGEND
- CONSTRUCTION UTILITY
  - STORMWATER
  - SANITARY SEWER
  - WATER SERVICE
  - GAS SERVICE
  - ELECTRICAL
  - TELECOMMUNICATIONS
  - PIPE INSTALLATION

- ### GENERAL NOTES
1. EXISTING UTILITIES ARE BASED ON RECORD DRAWINGS AND HAVE BEEN VERIFIED BY THE OWNER OR ENGINEER. IF THE CONTRACTOR SHALL FIND ANY UNRECORDED UTILITIES, THEY SHALL BE STOPPED IMMEDIATELY AND THE CONTRACTOR SHALL CONTACT THE OWNER TO LOCATE AND MARK ALL UTILITIES LOCATED WITHIN THE CONSTRUCTION LIMITS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
  2. SEE LEGEND FOR SYMBOLS AND REFER TO ELECTRICAL FOR ADDITIONAL REQUIREMENTS.
  3. UNLESS OTHERWISE NOTED, ALL UTILITY DEPTHS SHALL BE AS NOTED PER SCSA.
  4. ADJUST ALL DEPTHS AND DISTANCES TO FINISH GRADE.
  5. USE ALL PIPE METHODS ARE SHOWN IN PIPE DRAWINGS. PROVIDE ALL NECESSARY FITTINGS TO COMPLETE THE SYSTEM.
  6. PREVENT CONSTRUCTION SEEDING, DIRT AND DEBRIS FROM ENTERING ALL UTILITIES AND POLLUTATION POINTS.
  7. ALL PIPE INSTALLATION SHALL BE INSTALLED ACCORDING TO SPEC SECTION 210.1.11.
  8. TRAP AND PIPES SHALL BE INSTALLED PER SCSA AND AS SHOWN IN THE SPECIFICATIONS.
  9. SANITARY PIPE CONNECTION TO WASHOULE SHALL BE INSTALLED PER SCSA.
  10. REFER TO DETAIL A-CSSA FOR CONNECTION UTILITY FROM CHANGELocation INDICATED ON PLAN AND DETAIL SCSA FOR UTILITY TRENCH.

STRUCTURE ID	QTY	STRUCTURE DETAIL	ASST. TO DETAIL
STW-14	1	STW-14	STW-14
STW-15	1	STW-15	STW-15
STW-16	1	STW-16	STW-16
STW-17	1	STW-17	STW-17
STW-18	1	STW-18	STW-18
STW-19	1	STW-19	STW-19
STW-20	1	STW-20	STW-20
STW-21	1	STW-21	STW-21
STW-22	1	STW-22	STW-22
STW-23	1	STW-23	STW-23
STW-24	1	STW-24	STW-24
STW-25	1	STW-25	STW-25
STW-26	1	STW-26	STW-26
STW-27	1	STW-27	STW-27
STW-28	1	STW-28	STW-28
STW-29	1	STW-29	STW-29
STW-30	1	STW-30	STW-30
STW-31	1	STW-31	STW-31
STW-32	1	STW-32	STW-32
STW-33	1	STW-33	STW-33
STW-34	1	STW-34	STW-34
STW-35	1	STW-35	STW-35
STW-36	1	STW-36	STW-36
STW-37	1	STW-37	STW-37
STW-38	1	STW-38	STW-38
STW-39	1	STW-39	STW-39
STW-40	1	STW-40	STW-40
STW-41	1	STW-41	STW-41
STW-42	1	STW-42	STW-42
STW-43	1	STW-43	STW-43
STW-44	1	STW-44	STW-44
STW-45	1	STW-45	STW-45
STW-46	1	STW-46	STW-46
STW-47	1	STW-47	STW-47
STW-48	1	STW-48	STW-48
STW-49	1	STW-49	STW-49
STW-50	1	STW-50	STW-50
STW-51	1	STW-51	STW-51
STW-52	1	STW-52	STW-52
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STW-54	1	STW-54	STW-54
STW-55	1	STW-55	STW-55
STW-56	1	STW-56	STW-56
STW-57	1	STW-57	STW-57
STW-58	1	STW-58	STW-58
STW-59	1	STW-59	STW-59
STW-60	1	STW-60	STW-60
STW-61	1	STW-61	STW-61
STW-62	1	STW-62	STW-62
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STW-64	1	STW-64	STW-64
STW-65	1	STW-65	STW-65
STW-66	1	STW-66	STW-66
STW-67	1	STW-67	STW-67
STW-68	1	STW-68	STW-68
STW-69	1	STW-69	STW-69
STW-70	1	STW-70	STW-70

**School District 622**  
 NORTH ST. PAUL | HAPLEWOOD | OAKDALE  
 Ready for tomorrow

2801 UPPER AFTON ROAD, SUITE 100, ST. PAUL, MN 55119

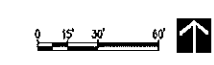
I HEREBY CERTIFY that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

DATE: 11/19/2019  
 PROJECT: CARVER ELEMENTARY SCHOOL ADDITION AND RENOVATION

No.	Revisions	Date
1	ED PROPOSED	11/19/2019
2	Issued For	

PROJECT NAME:  
**CARVER ELEMENTARY SCHOOL ADDITION AND RENOVATION**

DATE: 11/19/2019  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]





# Permit Application Coversheet

Date January 08, 2020

Project Name Conway Recreation Center Athletic Fields Project Number 20-02

Applicant Name David Ronzani, City of St. Paul Parks & Recreation

Type of Development Institutional

## Property Description

This project is located at the existing Conway Recreation Center near Ruth Street and I-94 in the City of St. Paul. The applicant is proposing to construct a synthetic turf field and seasonal dome building. The total site area is 8.4 acres. An underground filtration system below the field and an above-ground filtration basin east of the field are proposed to meet stormwater treatment requirements. Filtration is being proposed due to poor soils. Pretreatment will include a sump and vegetated swales.

## Watershed District Policies or Standards Involved:

- |  |   |
|--|---|
| <input 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.

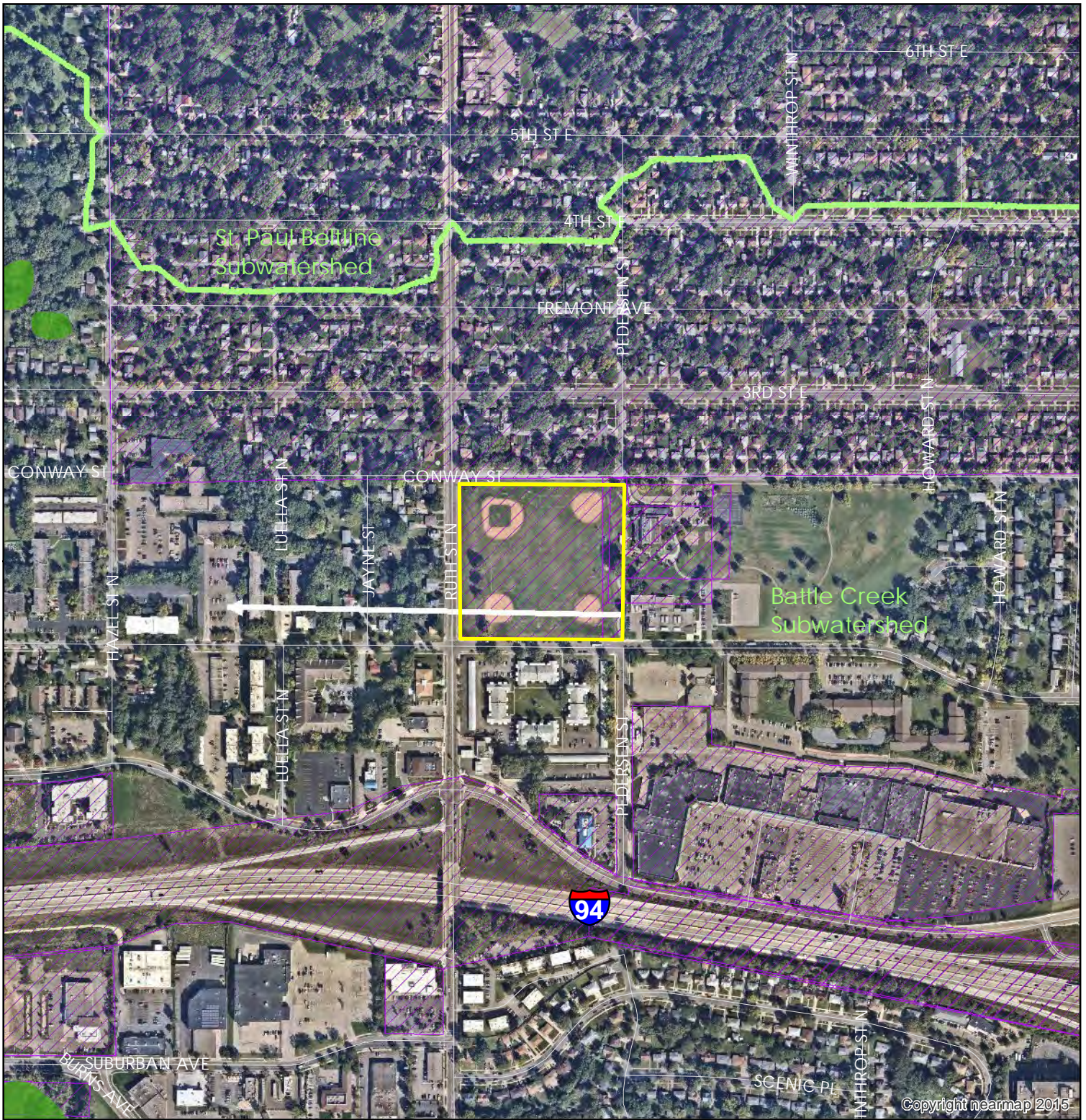
## Staff Recommendation

Staff recommends approval of this permit with the special provisions.

## Attachments:

- Project Location Map
- Project Grading Plan

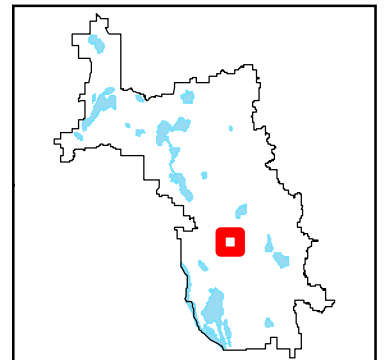
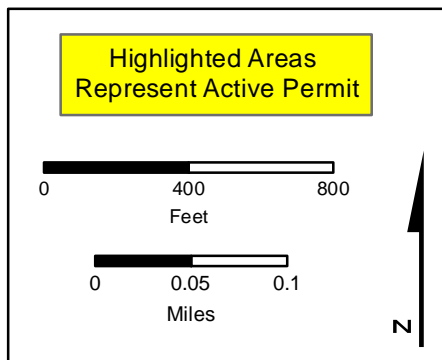
# #20-02 Conway Recreation Center Athletic Fields



**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

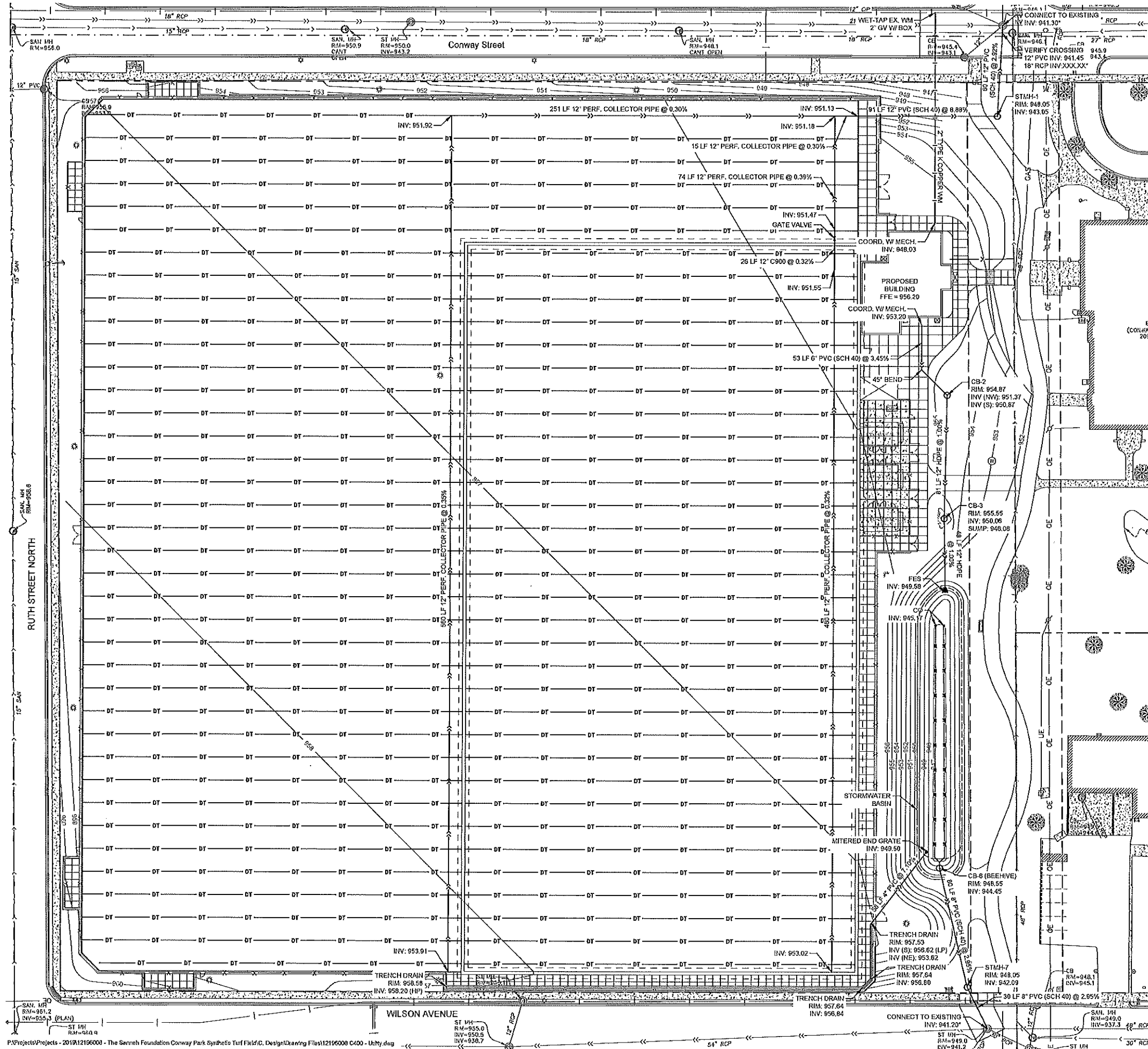
	RWMWD Boundary
	Flow Arrows
	Major Flow Arrows
	Subwatersheds
	Creeks
	Permits



20-02

### Special Provisions

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

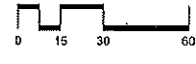


**LEGEND**

- STORM MANHOLE
- CATCH BASIN
- CURB INLET
- ▲ FLARED END
- SANITARY MANHOLE
- HYDRANT
- ⊗ GATE VALVE & BOX
- ⊗ WATER SHUTOFF
- ⊗ LIGHT POLE
- CTV
- OE
- UE
- FO
- GAS
- OAS
- DT
- CABLE UNDERGROUND LINE
- ELECTRIC OVERHEAD LINE
- ELECTRIC UNDERGROUND LINE
- FIBER OPTIC UNDERGROUND LINE
- NATURAL GAS UNDERGROUND LINE
- SANITARY SEWER PIPE
- STORM SEWER PIPE
- TELEPHONE UNDERGROUND LINE
- WATERMAIN PIPE
- DRAIN TILE PIPE

**UTILITY NOTES**

1. It is the responsibility of the contractor to perform or coordinate all necessary utility connections and relocations from existing utility locations to the proposed building, as well as to all onsite amenities. These connections include but are not limited to water, sanitary sewer, cable TV, telephone, gas, electric, site lighting, etc.
2. All service connections shall be performed in accordance with state and local standard specifications for construction. Utility connections (sanitary sewer, watermain, and storm sewer) may require a permit from the City.
3. The contractor shall verify the elevations at proposed connections to existing utilities prior to any demolition or excavation.
4. The contractor shall notify all appropriate engineering departments and utility companies 72 hours prior to construction. All necessary precautions shall be made to avoid damage to existing utilities.
5. Storm sewer requires testing in accordance with Minnesota plumbing code 47.14.1109 where located within 10 feet of waterlines or the building.
6. HDPE storm sewer piping shall meet ASTM F2308 and fittings shall meet ASTM D3212 joint pressure test. Installation shall meet ASTM C2321.
7. All RCP pipe shown on the plans shall be MNDOT class 3.
8. Maintain a minimum of 7' of cover over all water lines and sanitary sewer lines. Where 7' of cover is not provided, install 2" rigid polystyrene insulation (MNDOT 3760) with a thermal resistance of at least 5 and a compressive strength of at least 25 psi. Insulation shall be 6" wide, centered over pipe with 6" sand cushion between pipe and insulation. Where depth is less than 5', use 4" of insulation.
9. Install water lines 12" above sewers. Where the sewer is less than 12" below the water line (or above), install sewer piping of materials approved for inside building use for 10 feet on each side of the crossing.
10. All watermain piping shall be class 52 ductile iron pipe unless noted otherwise.
11. See Project Specifications for bedding requirements.
12. Pressure test and disinfect all new watermains in accordance with state and local requirements.
13. Sanitary sewer piping shall be PVC, SDR-35 for depths less than 12', PVC SDR-26 for depths between 12' and 26', and class 52 D.I.P. for depths of 26' or more.
14. A structure adjustment shall include removing and salvaging the existing casting assembly, removing existing concrete fins to the precast section. Install new rings and salvaged casting to proposed grades, cleaning casting flange by mechanical means to insure a sound surface and install an external chimney seal from casting to precast section. Chimney seals shall be Inf-Shield Uni-Band or an approved equal.
15. Connections to public sewers must be done by a Licensed House Drain Contractor under a permit from Saint Paul Department of Public Works.
16. If the pipe installed has less than 2% slope, laser equipment is required.
17. Water services to be installed according to SPRWS "Standards for the Installation of Water Mains".
18. 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 legs 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.
19. Maintain 8 feet of cover over all water mains and services.
20. Pipe material for 8" Ductile Iron Pipe must be Class 52. Pipe material for 6" and 4" Ductile Iron Pipe must be Class 53. 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.
21. Pipe must be wrapped in V-Bo Polywrap encasement.
22. Maintain 3 feet vertical separation between water and sewer pipes or a 12 inch separation with 4 inch high density insulation per SPRWS Standard Plate D-10 for typical water main offsets.
23. Refer to SPRWS "Standards for the Installation of Water Mains" Standard Plate D-11 for restrained pipe requirement.
24. All water service valve boxes within construction area must be exposed and brought to grade upon completion of construction.
25. 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.
26. All unused existing water services to be cut off by SPRWS. Excavation and restoration by owner's contractor. New water services will not be turned on until required cutoffs have been performed.
27. Water facility pipework within right of way to be installed by SPRWS. Excavation and restoration by owner's contractor.
28. The contractor providing excavation is responsible for obtaining all excavation and obstruction permits required by any governing authority.



**Larson Engineering, Inc.**  
 3324 Lakewood Road  
 White Bear Lake, MN 55110  
 651.481.9120 (F) 651.481.9201  
 www.larsonengr.com

Client  
**THE SANNEH FOUNDATION**  
 2090 CONWAY STREET  
 ST. PAUL, MN, 55119

Project Title:  
**CONWAY PARK - NEW SYNTHETIC TURF FIELDS AND DOME STRUCTURE**  
 CONWAY PARK, ST. PAUL, MN 55119

I hereby certify that this plan, specifications or report 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.

Matt V�odruff, P.E.  
 Date: XX.XX.19 Reg. No.: 41885

Rev.	Date	Description

Project #: 12106008  
 Drawn By: MJJ  
 Checked By: MWW  
 Issue Date: XXXXXX  
 Sheet Title:  
**UTILITY PLAN**  
 Sheet:  
**C400**



# RAMSEY-WASHINGTON

## METRO WATERSHED DISTRICT

### MEMORANDUM

**Date:** January 8, 2020  
**To:** Board of Managers and Staff  
**From:** Nicole Soderholm, Permit Coordinator  
**Subject:** December Enforcement Action Report

During December 2019:

<b>Number of Violations:</b>	<b>2</b>
Install/Maintain Inlet Protection	1
Install/Maintain Perimeter Control	1

#### Activities:

Permitting assistance to private developers and public entities, permit review with Barr Engineering, miscellaneous inquiries, ongoing ESC site inspections and reporting, enforcement, WCA administration/procedures, pre-application planning meetings, permit close-out inspection, preconstruction meetings, MAWD conference

#### Project Updates:

Permit #19-33 Battle Creek Playground

Staff conducted an inspection on Dec 3<sup>rd</sup> as requested by onsite contractors. This inspection was requested to ensure all necessary items were in place before work ceased for the winter. Staff noted that there was still exposed soil that needed to be temporarily stabilized before the site would be considered inactive. Communication via email verified the site has been fully temporarily stabilized, and that work will pick back up in the spring.

Permit #19-34 3M Building 301 H Annex

Staff conducted an inspection on Dec 3<sup>rd</sup> with contractors and a 3M representative. The site was found to be compliant and well-maintained. There was one inactive exposed stockpile

observed, and staff gave onsite personnel 24 hours to temporarily stabilize it. An email with photographs from the contractor on Dec 4<sup>th</sup> showed the stockpile covered with plastic (an acceptable stabilization practice). Inspections will continue during run-off events as this site anticipates working through the winter months.

#### #19-02 Valley Creek Retail

Contractors continue to grade the site in preparation for building footings and other utility work. During an inspection on Dec 3<sup>rd</sup>, excessive tracking and improper perimeter control were revealed. Staff discussed with onsite personnel the importance of maintaining perimeter control to prevent offsite impacts. Staff observed multiple contractors repairing perimeter control immediately after this conversation. Work will continue at this site through the winter months until work conditions are infeasible.

#### #19-07 Phalen Parking Lot Improvements

Work has ceased for the winter months and the project will be finished early spring. Staff conducted a routine inspection to ensure all necessary practices were in place during the winter. Staff could not verify if several small stockpiles on site had perimeter control and temporary stabilization. Staff inquired via email. A response on Dec 30<sup>th</sup> confirmed that stockpiles had been properly prepped for winter. Staff will begin inspections for this site again in the spring.

#### #18-06 Phalen Retail Development

This project is nearing completion, but all landscaping will need to be finished in the spring. During an inspection on Dec 4<sup>th</sup>, staff observed a lack of perimeter control and temporary stabilization. Both observations were reported to onsite contractors in person and via email. Staff will conduct a follow-up inspection in the month of January to check on progress.

#### Miscellaneous:

Staff continue to drive-by sites to determine who is still working through the winter months. All active sites are inspected for trackout, construction entrance maintenance, and any other erosion/sediment control practices that can be observed during frozen winter conditions.

#### **Permits Closed in December 2019:**

18-01 MnDOT Hwy 36 EB Ramp at I-35E, Little Canada



## Permit Summary 2017-2019

	2017	2018	2019
Open Permits	92	97	122
Board-Approved Applications	33	30	52
ESC Inspections	351	316	472
Violations	301	160	108
Verbal Warnings	11	1	10
Surety Deductions	\$3,480	\$1,560	\$6,045
Non-Compliant Inspection Reports	58	26	39
Permits Closed	24	27	25
Active Sites	43	52	65
WCA Applications	22	23	25

### 5 most common ESC violations observed in 2019

- Install/Maintain Inlet Protection (12 violations)
- Install/Maintain Perimeter Control (32 violations)
- Install/Maintain Construction Exit (12 violations)
- Stabilize Exposed Soils (10 violations)
- Remove Discharged Sediment (9 violations)

### Trends/Observations

1. Permit applications way up from last year (have not exceeded this number since 2004)
2. WCA applications slightly increasing
3. More active sites this year– busy season!
4. Increase in inspections
5. Less violations overall but more surety deductions due to increase in charge (\$155 per non-compliant site visit)

### Reminder on Stormwater Impact Fund, linear cost cap changes for 2020:

As a result of the board's approval of the updated District rules in June 2019, the Stormwater Impact Fund amount has increased to \$100,000 per acre of impervious. The linear cost cap has increased to \$75,000 per acre of impervious. Effective Jan 1, 2020.

\* \* \* \* \*

# Stewardship Grant Program

\* \* \* \* \*



## Stewardship Grant Program Budget Status Update

January 8, 2020

Homeowner	Coverage	Number of Projects	Funds Allocated
Habitat Restoration and rain garden w/o hard surface drainage	50% Cost Share \$15,000 Max	0	\$0
Rain garden w/hard surface drainage, pervious pavement, green roof	75% Cost Share \$15,000 Max	0	\$0
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	Funds Allocated
Habitat Restoration	50% Cost Share \$15,000 Max	0	\$0
Shoreland Restoration (below 100-year flood elevation w/actively eroding banks)	100% Cost Share \$100,000 Max	1 (Snail Lake Restoration)	\$200,000
Priority Area Projects	100% Cost Share \$100,000 Max	0	\$0
Non-Priority Area Projects	75% Cost Share \$50,000 Max	0	\$0
Public Art	50% Cost Share	0	\$0
Aquatic Veg Harvest/LVMP Development	50% Cost Share \$15,000 Max	0	\$0
Maintenance	50% Cost Share \$5,000 Max for 5 Years	23	\$19,200
Consultant Fees			\$0
<b>Total Allocated</b>			<b>\$219,200</b>

2019 Stewardship Grant Program Budget	
Budget	\$1,000,000
Total Funds Allocated	\$219,200
<b>Total Available Funds</b>	<b>\$780,000</b>

\* \* \* \* \*

# Action Items

\* \* \* \* \*

# Request for Board Action

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**Board Meeting Date:** January 8, 2020

**Agenda Item No.:** 8A

**Preparer:** Tina Carstens, Administrator

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**Item Description:** Board of Managers 2020 Annual Meeting

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## **Background:**

The following is official business for the Board to take action on at this annual meeting:

### **1. Elections of Officers**

The Board must select a president, vice president, treasurer, and secretary. The current officers are as follows:

<b>President</b>	Marj Ebensteiner
<b>Vice President</b>	Cliff Aichinger
<b>Treasurer</b>	Dianne Ward
<b>Secretary</b>	Pam Skinner

The President will serve as the chairperson for all meetings, be a signatory to the District's account and sign any contracts or correspondence.

The Vice President will perform the President duties in the event of an absence. The Vice President is also responsible for being the personnel representative from the Board. This means that the Vice President would coordinate the Administrator's review as well as consult with the Administrator on personnel issues that may arise.

The Treasurer will be a signatory on District accounts and sign the monthly checks.

The Secretary will oversee the minutes of the meetings and sign documents that require multiple signatures.

**Staff recommendation is for the Board to elect its president, vice president, treasurer and secretary for 2020.**

### **2. Consulting Staff Selection**

Every two years we are required to publish a public notice soliciting proposals for our consulting services. We do this for our engineer, attorney and accountant. The proposals are attached to this memo. We only received proposals from our three current consultants.

**Engineer:** Barr Engineering  
**Attorney:** Galowitz Olson  
**Accountant:** Redpath and Company

**Staff recommendation is to appoint Barr Engineering, Galowitz Olson, and Redpath and Company to continue as the consultants for 2020.**

**3. Official Designations**

A final item of business is to designate the District's official newspapers and banking institution. Current appointments for each of these items are as follows:

**Official Bank of Deposit**

4M Fund through the League of Minnesota Cities: US Bank

**Official Newspapers**

Ramsey County Review  
Oakdale/Lake Elmo Review  
Roseville Review

Unfortunately, the three official newspapers that we have used in the past are under the Lillie News umbrella and have recently stopped printing legal publications. That leaves us with little options for official newspapers that cover a larger portion of the district. The district has used the Pioneer Press in the past but have stopped due to the very expensive cost and difficulty in getting our notices published. We experienced that issue again when we tried to publish in the Pioneer Press for our solicitation of proposals for consultant services. To cover both Ramsey and Washington County, we published that notice in the White Bear Press and Stillwater Gazette. The Shoreview Press is another option to us. I would recommend that we go with those three newspapers for this year.

**Staff recommendation is to approve the current Official Bank of Deposit and designate the White Bear Press, Shoreview Press, and Stillwater Gazette as the official newspapers.**

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**Applicable District Goal and Action Item:**

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

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

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**Staff Recommendation:**

Staff recommends appointing the consulting staff, official bank of deposit and official newspapers as shown above.

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**Financial Implications:**

None

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**Board Action Requested:**

Appoint Board officers and designate the desired consulting staff, official bank of deposit, and official newspapers.

proposal to provide engineering consulting services for  
the **Ramsey-Washington Metro Watershed District**



**submitted by:**  
**Barr Engineering Co.**

4300 MarketPointe Drive, Suite 200  
Minneapolis, Minnesota 55435  
952-832-2600

December 18, 2019

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**above:** volunteer planting event at Central Park Elementary School in Roseville (top); Trinity Presbyterian Church rain garden in Woodbury (bottom left); construction at Aldrich Arena in Maplewood (bottom right)  
**front cover:** Keller Lake outlet control structure

December 18, 2019

Ramsey-Washington Metro Watershed District  
c/o Tina Carstens  
2665 Noel Drive  
Little Canada, Minnesota 55117

Dear managers:

After 44 years of serving the board of managers for the Ramsey-Washington Metro Watershed District (RWMWD), I am pleased to express Barr's interest in continuing to serve your organization as your engineering consultant. Since 1975, we have worked to provide the RWMWD with the highest level of engineering services and commitment to your organization. We are familiar with the board and staff's approach to watershed management and look forward to working with you to achieve your goals in 2020 and beyond.

In response to your request for proposals, we have outlined Barr's expertise in watershed management and our long history of working with the RWMWD. Some of the benefits Barr has to offer include:

- **Continuity**—Barr has provided continuity to the RWMWD's watershed management for more than four decades. In addition, the team of engineers and designers that has provided direct engineering services to the district for the past several years will remain largely the same.
- **Familiarity**—Barr understands the district's goals. We are prepared to assist you in implementing your fourth-generation watershed management plan. We also have historical familiarity with the physical characteristics of the watershed district to the extent that we think of your district as our own backyard.
- **Full service**—Our depth and breadth of staff is unmatched locally, allowing us to provide you with comprehensive water resources management services. Whether the district needs watershed modeling, water quality assessment, wetland permitting, total maximum daily load (TMDL) preparation, design, or construction administration, Barr can help. I will personally coordinate and manage staff from our talent pool of more than 100 water resources engineers, scientists, landscape architects, GIS practitioners, and graphic designers to address the specific needs of the RWMWD.
- **Credibility**—Barr has established a reputation as experts in water resources management, engineering, and design. The RWMWD will continue to benefit from Barr's strong working relationship with governmental agencies, particularly as the board of managers completes and implements the recommendations of the fourth-generation watershed management plan and helps ensure your role as a progressive leader in watershed management.

Thank you for the opportunity to provide information regarding our engineering services. We look forward to continuing our successful working relationship. If you have any questions or would like a more in-depth presentation of Barr's skills and experience, please contact me at 952-832-2808 or blindaman@barr.com. We would be happy to deliver a presentation for you.

Sincerely,



Bradley J. Lindaman, PE  
Vice President, Principal in Charge

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# contents

letter of interest

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**above:** The City of Maplewood embraced the living streets design framework for street reconstruction projects to lower long-term costs, reduce impervious surface, and treat stormwater.

## about Barr Engineering Co.

Barr's roots extend back to the early 1900s with Adolph Meyer, a renowned hydrologist of the early 20th century. Doug Barr began work with Mr. Meyer in the 1950s and built a practice of his own while learning from this skilled hydrologist.

By the time the company was incorporated as an employee-owned firm in 1966, it had 16 employees. Today, Barr Engineering Co. has 900 employees located in Minnesota, North Dakota, Missouri, Michigan, Utah, and Colorado, and in Alberta, Canada.

### a focus on water resources—and your needs

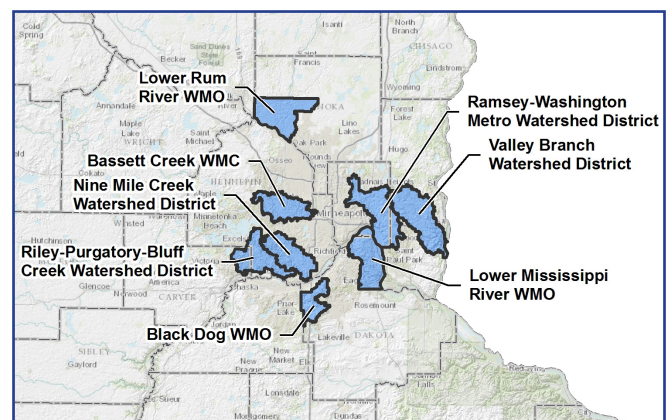
Our commitment to water resources remains strong. More than 100 engineers and scientists in our Minneapolis office are engaged in water resources engineering and planning, wetland management, ecology, and limnology.



## strong commitment to watershed management organizations

### Barr currently serves as primary consultant to:

- Nine Mile Creek Watershed District (since 1960)
- Bassett Creek Watershed Management Commission (since 1969)
- Valley Branch Watershed District (since 1969)
- Riley-Purgatory-Bluff Creek Watershed District (1969-2007, since 2013)
- Ramsey-Washington Metro Watershed District (since 1975)
- Lower Mississippi River Watershed Management Organization (since 1987)
- Lower Rum River Water Management Organization (since 1987)
- Black Dog Watershed Management Organization (since 1996)
- Cedar River Watershed District (since 2007)
- Shell Rock River Watershed District (since 2008)



*Barr serves as the primary consultant to several watershed districts and water management organizations in the seven-county metro area.*

**Barr has also assisted the following organizations:** Capitol Region Watershed District, Carver County Watershed Management Organization, Elm Creek Watershed Management Commission, High Island Creek Watershed District, Lake Pelican Water Project District, Lower Minnesota River Watershed District, Minnehaha Creek Watershed District, Mississippi Watershed Management Organization North Fork Crow River Watershed District, Prior Lake-Spring Lake Watershed District, Red Lake Watershed District, Rice Creek Watershed District, Sauk River Watershed District, Scott Watershed Management Organization, Six Cities Water Management Organization, Thirty Lakes Watershed District, Turtle Creek Watershed District, Vermillion River Watershed Joint Powers Organization, and Zumbro Watershed Partnership.

## summary of Barr's services to watershed organizations

watershed organization	watershed management and planning	stormwater management	review of development plans	stream and ravine stabilization and protection	stream and lake monitoring	water quality studies and implementation	aquatic plant management	capital improvement program assistance	innovative stormwater management (low-impact development, bioengineering)	urban planning
Bassett Creek	X	X	X	X	X	X		X	X	
Black Dog	X	X			X	X	X	X	X	
Capitol Region	X	X				X		X	X	X
Carver County	X	X				X			X	
Cedar River	X	X	X		X	X	X	X	X	X
Elm Creek	X	X	X			X		X		
Lake Pelican	X	X				X		X	X	
Lower Mississippi	X	X		X	X	X	X			
Lower Rum River	X	X		X		X		X		
Mississippi	X	X	X	X		X		X	X	X
Nine Mile Creek	X	X	X	X	X	X	X	X	X	X
North Fork Crow River	X	X		X	X					
<b>Ramsey-Washington Metro</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Prior Lake-Spring Lake	X	X			X	X				X
Riley-Purgatory-Bluff Creek	X	X	X	X	X	X		X	X	
Sauk River	X	X		X	X	X	X	X		
Scott	X	X		X	X	X		X	X	X
Shell Rock River	X	X	X	X	X	X	X	X	X	X
Thirty Lakes	X	X								
Turtle Creek	X	X			X	X				X
Valley Branch	X	X	X	X	X	X	X	X	X	
Zumbro Watershed Partnership				X	X	X		X		

# Barr's water resources team for Ramsey-Washington Metro Watershed District

## core team members

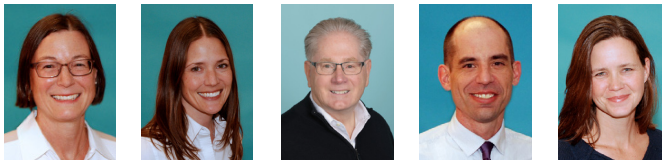
Core project team members Brad Lindaman, Erin Anderson Wenz, Jen Koehler, Brandon Barnes, Meg Rattei, Greg Nelson, Nathan Campeau, and Matt Kumka have been a part of the Barr team that has consistently served the district for many years.

The **Ramsey-Washington Metro Watershed District** will also have access to 900 engineers, scientists, and technical support staff, with more than 100 engaged in water resources engineering in our Minneapolis office. The breadth and depth of our team means that we have the capacity to tackle most any water resources or environmental challenge you might encounter. Below is only a partial list of Barr staff that have helped the district in the recent past.



## water resources planning and management

- watershed management planning
- rules and regulations preparation
- permit review
- governmental agency coordination
- stakeholder involvement
- administrative support



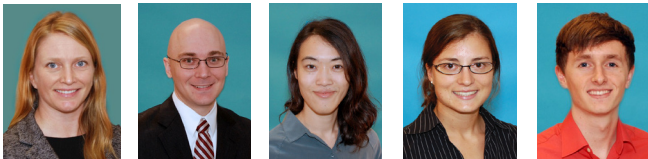
## water quality management

- lake studies and restoration
- lake and stream water quality monitoring
- watershed runoff treatment
- shoreland restoration
- ecological use classification
- hydrologic and hydraulic modeling



## stormwater management

- infiltration and filtration systems
- stormwater utility design
- hydrologic and hydraulic modeling
- NPDES permitting
- flood and erosion control
- infrastructure inventory and assessment



## ecosystem planning, landscape ecology, and landscape architecture

- rain gardens
- ecosystem restoration
- native plant communities
- master planning
- site design
- greenway planning
- restorative landscaping
- lakescaping
- natural resource inventories
- fish and wildlife management
- education and interpretive planning
- environmental review
- green infrastructure design



## groundwater

- groundwater modeling
- contaminant transport
- wellhead protection
- groundwater and surface water connection analysis
- well design and abandonment



## river and stream restoration

- channel monitoring and classification
- erosion protection
- streambank stabilization
- sediment transport
- bioengineering
- fluvial geomorphology



## wetlands

- delineation
- classification
- mitigation
- restoration
- functional assessment
- monitoring and reporting
- permitting
- protection and management



## floodplain management

- flood insurance studies
- floodplain mapping and map revisions
- flood frequency analysis
- floodplain delineation
- floodplain permitting
- dam failure analyses
- flood control structures



## infrastructure design and construction services

- dams
- channels
- sewers, pipes, and culverts
- detention basins
- flood protection measures
- geotechnical design
- construction observations
- plans and specifications
- contract documents



## information technology and communications

- geographic information systems (GIS)
- website creation, housing, and maintenance
- interpretive, scientific, and technical writing
- marketing and advertising
- grant writing
- graphic design
- database design
- public relations



## health and safety

- health and safety manual development
- employee right-to-know training
- health and safety program consulting



## Barr's leadership team for the Ramsey-Washington Metro Watershed District

We value our long-term relationship with the Ramsey-Washington Metro Watershed District. For that reason, we strive to provide you with high-quality, consistent service. The following pages include brief resumes of the Barr staff who have consistently worked on RWMWD projects, or who have served the district extensively in the past. **These same team members will continue to provide the RWMWD with the high level of service you have come to expect from Barr.**

As you know, Barr uses a project team approach that matches our expertise with the unique requirements of each project and client. Directed by Brad Lindaman, our team has been created specifically to meet the needs of the RWMWD in 2020 and beyond. In addition to the staff listed here, Barr has a water resources staff of more than 100 practitioners to provide you with comprehensive services.

### Brad Lindaman, PE, District Engineer, Principal in Charge



Brad's 32 years of experience as a civil engineer emphasize project management, including drainage and surface water quality studies, design development and review, state and local permitting assistance, contract documents development and administration, and construction management and quality control. He has served as the primary consulting engineer for the RWMWD since 1990. In this role, he oversees and manages Barr's work for the district, including engineering scheduling, administration, and cost control. Brad has reviewed grading permit applications submitted to the RWMWD managers; drafted permit provisions; and advised managers on issues related to erosion control, wetlands, surface water quality, and stormwater drainage. In addition, he oversees the RWMWD's capital improvement program and represents the RWMWD at public meetings.

As a principal and project manager at Barr, Brad has conducted numerous feasibility studies and prepared designs, plans, and specifications for projects involving stormwater runoff, water quality improvement, and flood control.

### Erin Anderson Wenz, PE, ENV SP, Principal in Charge, Senior Water Resources Engineer



Erin has more than two decades of experience with metro-area watershed management projects, including watershed and municipal stormwater management plans; lake management plans and TMDL studies, including WRAPS; stormwater and lake-water quality modeling; and a wide range of low-impact development retrofits. She has managed numerous modeling projects that help clients assess flood vulnerabilities and facilitated stakeholder workshops to develop climate-change resiliency plans. Erin has been involved in many of Barr's projects for the RWMWD since 2002. She served as project manager of the district's watershed management plan and strategic overview update, including co-facilitating community outreach workshops for the update. She also managed development of the RWMWD's WRAPS report and helped implement stormwater features across Maplewood Mall's 35-acre parking lot.

### Jen Koehler, PE, Water Quality Engineer



Jen has more than 14 years of experience in stormwater management planning, permitting, and design; hydrologic and hydraulic modeling; water quality modeling; and community facilitation. She also conducts lake diagnostic studies and has been involved in numerous TMDL and WRAPS studies. Jen conducted a watershed-side water quality assessment for the RWMWD's WRAPS project, completed the feasibility study for and conceptual design of two stormwater BMPs in the Wakefield Lake watershed, and worked with the district to determine the cost benefit for all of the RWMWD's water-quality capital improvement projects. In addition, Jen has developed several XP-SWMM and P8 models for the Mississippi Watershed Management Organization and managed the development and calibration of the Bassett Creek Watershed Management Commission's phase 2 XP-SWMM model.

### Brandon Barnes, PE, Hydrologist, Hydraulics Engineer



Brandon has more than 13 years of experience in water resources engineering. He creates detailed hydrologic and hydraulic models, integrates GIS with floodplain studies, conducts interior drainage analyses, and addresses public concerns. He also completes floodplain analyses, coincidental frequency analyses, and stormwater development reviews and develops XP-SWMM and PCSWMM models for floodplain and watershed improvement projects for cities and watershed districts. Brandon managed the update to the RWMWD's hydrologic and hydraulic models to incorporate Atlas 14 rainfall depths, as well as the Saint Paul Beltline Interceptor resiliency study.

## **Meg Rattei, Biologist, Macrophyte Control Scientist**



Meg has 45 years of experience that includes lake and stream studies, water resource management plans, aquatic plant management plans, modeling of pollutant runoff from watersheds, and biological stressor identification analyses. She has also helped the RWMWD with its water quality management program over that same time period. In particular, Meg has assisted with the Tanners Lake alum treatment facility for two decades, including NPDES permitting and reporting. She has also managed use attainability analyses for numerous Minnesota lakes, including P8 modeling of watershed phosphorus loads, in-lake modeling, analysis of the lakes' biological community, diagnosis of the lakes' problems, and development of management plans to solve current problems and prevent future degradation.

## **Greg Nelson, Engineering Technician**



Greg has more than 23 years of experience on projects involving engineering and design services. He conducts and coordinates data collection and provides bidding and contract administration, construction oversight, and project management. His projects frequently involve streambank stabilization and restoration, low-impact development, stormwater quality improvement, and watershed district facility maintenance and repairs. Greg has worked on the RWMWD's Grass Lake flood study and improvements to stormwater runoff and conveyance and has managed annual capital improvement project maintenance and repairs for the district. He was also a member of the design and construction team for the Maplewood Mall stormwater retrofit through four phases of construction.

## **Nathan Campeau, PE, CFM, ENV SP, Principal in Charge, Senior Water Resources Engineer**



Nathan has 18 years of experience in planning and feasibility analyses, hydrologic and hydraulic analysis, flood risk management design, stormwater quality analysis and improvement, storm sewer design, low-impact site design and green infrastructure, and GIS. He has led the development of tens of thousands of acres of detailed stormwater models for communities and watershed organizations throughout the Twin Cities, focusing on urban stormwater analysis. Nathan managed the inspection and design of tunnel improvement projects for the Beltline interceptor and Trout Brook interceptor; led modeling and civil design of the West Side Flats greenway in Saint Paul; and has managed and collaborated on green infrastructure projects throughout the Twin Cities, including rain garden installations in the RWMWD and along the Green Line light rail transit.

## **Matt Kumka, PLA, Green Infrastructure Designer, Landscape Architect**



Matt has 14 years of experience specializing in landscape architectural design. His areas of expertise include green infrastructure, long-lasting public sector design, and native plant community restoration. He also develops living streets initiatives and sustainable landscape master plans with an emphasis on creating durable and aesthetically beautiful sites. Matt has served as lead landscape architect and project manager on numerous landscape projects for watershed districts, cities, and private clients, with a focus on ecologically appropriate place-making and reconnecting people to the natural world. Matt has coordinated a watershed-wide site analysis project to identify commercial and school sites for best management practice (BMP) retrofits across the RWMWD. He also worked closely with both the district and the City of Maplewood to coordinate the installation of 35 rain gardens and was one of the lead designers on the Maplewood Mall stormwater retrofit project.

# 2020 fee schedule

Barr's fee schedule, presented below, summarizes the range of billing rates for each of our staffing categories. In many cases, these billing rates represent a wide range, based on varying levels of experience and expertise of staff within these categories. When building a team, appropriate staff are selected with consideration for both applicable experience and staff billing rates to make sure you receive high-value services for a reasonable cost.

description	2020 rate*
principal .....	\$145-295
consultant/advisor.....	\$185-250
engineer/scientist/specialist IV.....	\$155-180
engineer/scientist/specialist III .....	\$125-150
engineer/scientist/specialist II .....	\$95-120
engineer/scientist/specialist I.....	\$65-90
technician III.....	\$125-150
technician II .....	\$95-120
technician I.....	\$60-90
support personnel II.....	\$95-150
support personnel I.....	\$50-90

*Rates for litigation support services will include a 30-percent surcharge.*

*A 10-percent markup will be added to subcontracts for professional support and construction services to cover overhead and insurance surcharge expenses.*

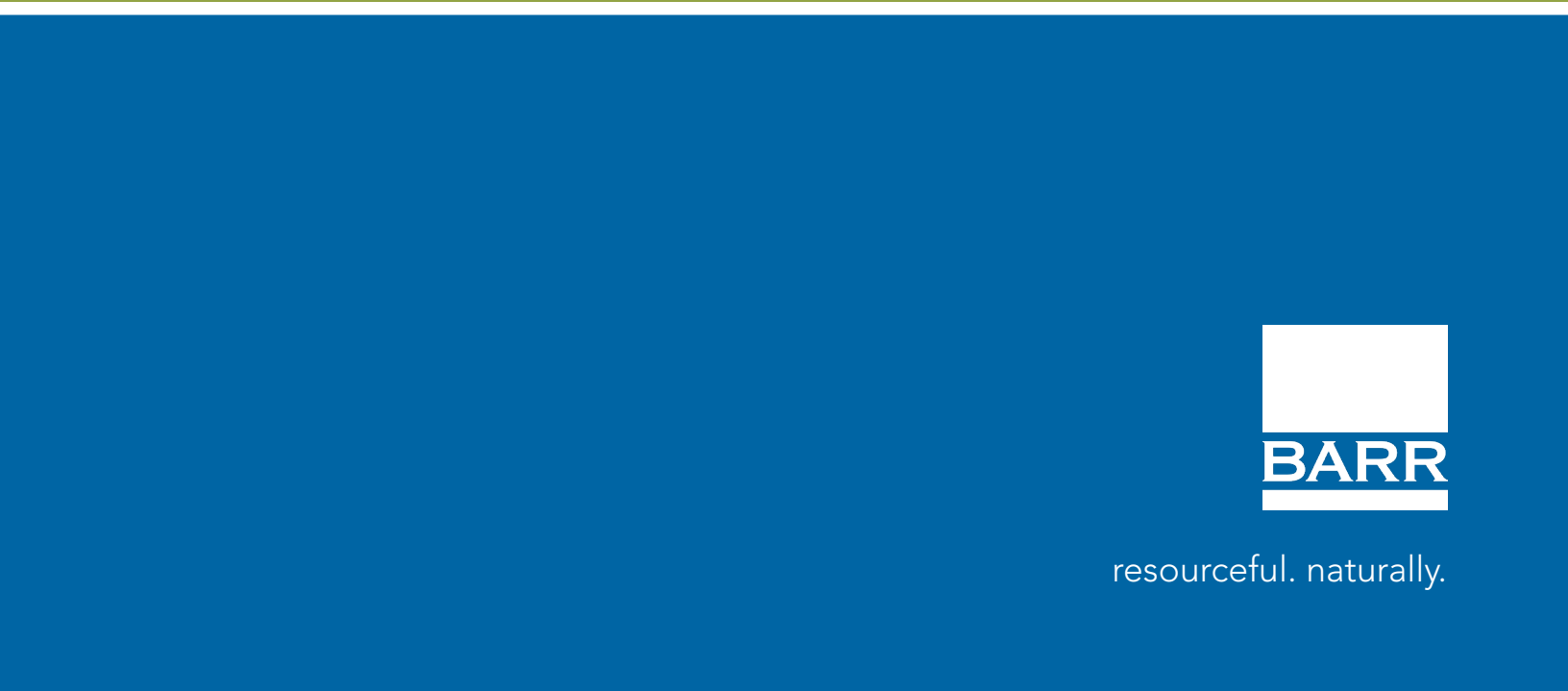
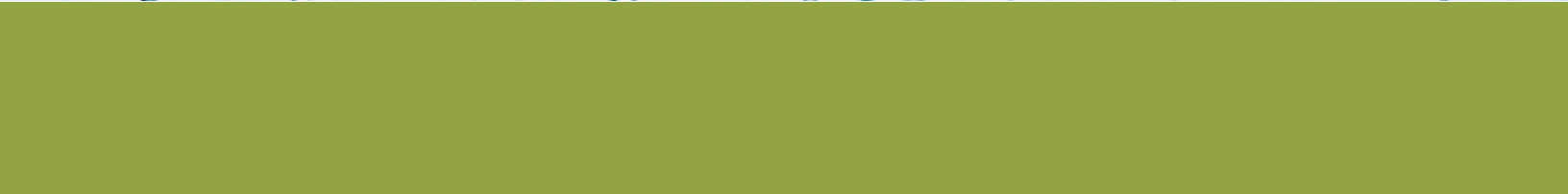
*Invoices are payable within 30 days of the date of the invoice. Any amount not paid within 30 days shall bear interest from the date 10 days after the date of the invoice at a rate equal to the lesser of 18 percent per annum or the highest rate allowed by applicable law.*

*Reimbursable expenses including, but not limited to, the actual and reasonable costs of transportation, meals, lodging, parking costs, postage, and shipping charges will be billed at actual cost. Materials and supplies charges, printing charges, and equipment rental charges will be billed in accordance with Barr's standard rate schedules. Mileage will be billed at the IRS-allowable rate.*

*\*Rates do not include sales tax on services that may be required in some jurisdictions.*

<p><b>principal category:</b> includes consultants, advisors, engineers, scientists, and specialists who are officers of the company</p> <p><b>consultant/advisor category:</b> includes experienced personnel in a variety of fields; these professionals typically have advanced background in their areas of practice and include engineers, engineering specialists, scientists, related technical professionals, and professionals in complementary service areas such as communications and public affairs</p> <p><b>engineer/scientist/specialist categories:</b> include registered professionals and professionals in training (e.g., engineers, geologists, biologists, and landscape architects), and graduates of engineering and science degree programs</p> <p><b>technician categories:</b> includes CADD operators, construction observers, cost estimators, data management technicians, designers, landscape ecologists, drafters, civil engineering technicians, interns, safety technicians, surveyors, and water, air, and waste samplers</p> <p><b>support personnel categories:</b> includes information management, project accounting, report production, word processing, and other project support personnel</p>
---





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**GALOWITZ • OLSON** PLLC  
ATTORNEYS AT LAW  
ST. CROIX TITLE  
OLSON MEDIATION CENTER

Tracey A. Galowitz  
Susan D. Olson  
John Scott McDonald  
Susannah Torseth  
Viet-Hanh Winchell  
Andrea McAlpine  
Laurann J. Kirschner

Raymond O. Marshall  
Of Counsel

December 20, 2019

Ms. Tina Carstens  
Administrator  
Ramsey-Washington Metro Watershed  
District  
2665 Noel Drive  
Little Canada, MN 55117

SENT VIA ELECTRONIC MAIL  
AND U.S. MAIL

**Re: Ramsey-Washington Metro Watershed District  
Application for District Attorney Position**

Dear Ms. Carstens:

This is to make application for the attorney position of the Ramsey-Washington Metro Watershed District. We are very interested in the opportunity to provide legal services to the Ramsey-Washington Metro Watershed District.

Galowitz • Olson, PLLC has an active general practice with over 30 years of experience representing Watershed Districts. We currently represent and have represented the following Watershed Districts since its inception:

Ramsey-Washington Metro Watershed District  
Valley Branch Watershed District  
Carnelian Marine Watershed District

Our representation of these clients covers everything from routine legal matters, land/easement acquisitions to project related legal work. Furthermore, we are a title insurance company and can assist with real estate transactions and other related matters.

The educational background information of the attorneys available to provide legal services are:

**Tracey A. Galowitz**  
Bachelor of Arts, Cornell College, 1983  
Juris Doctor, University of Minnesota Law School, 1986  
30 years of Watershed experience  
(Legal counsel for Watershed client)

Ms. Tina Carstens  
December 20, 2019  
Page Two. . . . .

**Susannah Torseth**

Bachelor of Arts, St. Olaf College, 2001  
Master of Arts, Luther Seminary, 2005  
Juris Doctor, William Mitchell College of Law, 2010  
(Legal counsel for Watershed client)

**Viet-Hanh Winchell**

Bachelor of Arts, University of Minnesota, 2004  
Juris Doctor, Hamline University School of Law, 2008  
(Legal counsel for Watershed client)

**Laurann J. Kirschner**

Bachelor of Business Administration, Belmont University, 2015  
Juris Doctor, Belmont University College of Law, 2018  
(Legal counsel for Watershed client)

The hourly rate charged by the attorneys shall be as follows:

<b>Tracey A. Galowitz:</b>	\$230.00 per hour
<b>Susannah Torseth</b>	\$210.00 per hour
<b>Viet-Hanh Winchell</b>	\$200.00 per hour
<b>Laurann J. Kirschner</b>	\$180.00 per hour

It is anticipated that Ms. Galowitz, Ms. Winchell and Ms. Kirschner will be the lead attorneys with assistance from Ms. Torseth on an as-needed basis.

In regard to conflict concerns, we do not represent any of the cities or townships within the District. I am unaware of any client of our office who has had a project within the District within the last five years.

Please let me know if there is any further information you need.

Thank you for your time and consideration of our application.

Sincerely,



Viet-Hanh Winchell

VHW:mas

**Proposal to Provide  
Accounting Services**

**RAMSEY-WASHINGTON  
METRO WATERSHED  
DISTRICT**

December 18, 2019

**Submitted By:  
Mark C. Gibbs, CPA  
Managing Partner**

Redpath and Company, Ltd.  
55 5<sup>th</sup> Street East, Suite 1400  
St. Paul, MN 55101  
651.426.7000  
mgibbs@redpathcpas.com  
www.redpathcpas.com



December 18, 2019

Ramsey-Washington Metro Watershed District  
c/o Ms. Tina Carstens  
2665 Noel Drive  
Little Canada, MN 55117

Dear Ms. Carstens:

In response to your request, we are pleased to submit a proposal to perform monthly accounting services for the Ramsey-Washington Metro Watershed District for the years ended December 31, 2020 and 2021.

### Firm Background

Redpath and Company is a leading accounting firm providing proactive, innovative and value driven CPA services. We serve closely held businesses, government and not-for-profit entities in the areas of audit & attest, tax, benefits and compensation administration, international consulting, mergers & acquisitions, succession and estate planning, and valuation services. Our offices are located in downtown St. Paul and White Bear Lake with approximately 160 employees. The work on this engagement will be performed by the White Bear Lake office.

Redpath and Company is a full-service accounting firm. We help individuals and organizations – including businesses, local governments and not-for-profits – make decisions that create value and contribute to their financial well-being. Substantial effort of our professional staff is directed toward serving Minnesota local governments. Twenty-five staff members are assigned to governmental and not-for-profit services and devote significant time and effort in providing audit and other services to Minnesota governmental entities.

Redpath and Company is prepared to continue to assist you with your monthly and quarterly accounting needs. Our objective is to make your life easier, save you time and save your staff time.

We have an extensive list of governmental clients. These clients value our service and retain our services for extended periods because we:

1. Provide professional and courteous service in a timely manner.
2. Remain in contact throughout the year to answer questions relative to funding, annual budgeting, compliance matters and other accounting issues.
3. Are available to assist in problem solving and long range planning.
4. When requested, meet with the governing board to explain financial reports and answer questions.

## Client References

Entity	Contact
Ramsey-Washington Metro Watershed District	Tina Carstens 651/792-7960
Minnehaha Creek Watershed District	James Wisker 952/471-0590
Valley Branch Watershed District	Ed Marchan 612/491-8790
Lower Minnesota River Watershed District	Linda Loomis 763/545-4659
Riley Purgatory Bluff Creek Watershed District	Claire Bleser 952/607-6512
Nine Mile Creek Watershed District	Randy Anhorn 952/835-2078
Capitol Region Watershed District	Mark Doneux 651/644-8888
Middle Mississippi Watershed Management Organization	Doug Snyder 612/465-8780
Rice Creek Watershed District	Nick Tomczik 763/398-3071
Comfort Lake-Forest Lake Watershed District	Mike Kinney 651/395-5855

## Accountant Qualifications

The Redpath and Company staff responsible for your account will be:

**Mark C. Gibbs, CPA** – *Managing Partner*. Responsible for final review. Assists staff with complex technical issues.

**Nancy M. Martinson** – *Senior Accountant*. Responsible for monthly accounting services.

Mark has extensive audit and accounting service experience with the following watershed districts: Ramsey Washington Metro Watershed District, Rice Creek Watershed District, South Washington Watershed District, Lower Mississippi River Watershed Management Organization, Lower Minnesota River Watershed District, Valley Branch Watershed District, Minnehaha Creek Watershed District, Riley Purgatory Bluff Creek Watershed District, Nine Mile Creek Watershed District, Browns Creek Watershed District.

Nancy Martinson, Senior Accountant, has worked in our not-for-profit and government area for 19 years. She has performed monthly accounting services for the following watershed districts:

- Minnehaha Creek Watershed District
- Rice Creek Watershed District
- Ramsey-Washington Metro Area Watershed District
- South Washington Watershed District
- Lower Minnesota River Watershed District

- Mississippi Watershed Management Organization
- Capitol Region Watershed District
- Valley Branch Watershed District
- Comfort Lake-Forest Lake Watershed District
- Riley Purgatory Bluff Creek Watershed District

Redpath and Company would prepare the monthly accounting as follows:

### Monthly Accounting

- District codes invoices and receipts
- District approves each check and signs them at the monthly meeting. District would mail checks to vendors.
- Redpath and Company enters invoices and receipts into Sage accounting system, generates monthly financial statements, including:
  - Cash disbursements detail listing
  - Customized check register
  - Compilation report
  - Administrative and program budget report
  - Statement of revenue, expenditures and changes in fund balance
  - Income statement/balance sheet
  - Budget to actual comparisons for all funds
  - Schedules of each fund

Redpath and Company reconciles all accounts, prepares bank reconciliations and makes journal entries to close the month, allocates interest revenue, allocates administrative expenditures and other such journal entries as may be required. Any journal entries prepared by Redpath will be approved by the District.

### Monthly Reporting

- The Watershed District Board meets on the first Wednesday of each month.
- The District will provide Redpath and Company with all monthly financial and payroll information (coded invoices, coded receipts, bank statements, etc.) at an agreed upon time by the District and Redpath. We would then return the monthly accounting packet described above at a time we both agree on.

This process allows us to maintain our independence because we will not be making any management decisions; those decisions (coding of the invoices and receipts) are made by the Administrator.

### Payroll

- Redpath and Company prepares payroll in MyPay payroll service on a bi-weekly basis in accordance with District policies.
- Redpath and Company coordinates all payroll related reports (Federal Form 941, State of Minnesota Department of Revenue, Department of Labor, etc.) and files on a timely basis.

- Redpath and Company coordinates the preparation of Federal and Minnesota Department of Revenue payroll tax deposit requirements for semi-weekly deposits.
- Redpath and Company prepares Public Employee Retirement Association Salary Deduction Report, submits payment on a timely basis and files a copy with the PERA office in accordance with District policies.
- Redpath and Company prepares Deferred Compensation listing and submits payment on a timely basis in accordance with District policies.

### Financial Review

Redpath and Company will be available for monthly/annual financial review and consulting on an as-needed basis.

### Fees

Nancy Martinson would be your primary contact for accounting and payroll services. Our fee estimate is to provide the above services for \$1,400 per month, subject to annual review. The cost of supplies (checks, copies, etc.) will be passed through to the Watershed District.

Our fee to provide financial review and consulting will be at our standard hourly rate, which is \$150 per hour.

We appreciate the opportunity to be of service to you and believe this letter accurately summarizes the significant terms of our engagement. If you have any questions, please let us know.

We are available to discuss this letter with you at any time.

Sincerely,

REDPATH AND COMPANY, LTD.



Mark C. Gibbs, CPA

MCG/bms



\* \* \* \* \*

# Administrator's Report

\* \* \* \* \*

## MEMO

**TO:** Board of Managers and Staff  
**FROM:** Tina Carstens, Administrator  
**SUBJECT:** January Administrator's Report  
**DATE:** January 3, 2020

### A. Meetings Attended

Wednesday, December 11	6:30 PM	Board Meeting
Thursday, December 12	8:00 AM	Water Resources Conference Planning
	11:30 AM	Barr Engineering – Beltline Resiliency Study
Tuesday, December 17	6:00 PM	Board Special Meeting
Thursday, December 19	1:00 PM	Staff and Board Holiday Party
Friday, December 20	11:30 AM	Barr Engineering – Target and Motel 6
Friday, January 3	10:30 AM	Woodbury Project Meeting

### B. Upcoming Meetings and Dates

February Board Meeting	February 5, 2020
Phalen Freeze Fest	February 29, 2020
March Board Meeting	March 6, 2020
April Board Meeting	April 1, 2020
May Board Meeting	May 6, 2020
WaterFest	May 30, 2020

### C. LMCIT Insurance Dividend

Each year we receive a dividend from the League of Minnesota Cities Insurance Trust based on the performance of the entire league program. This year's dividend for RWMWD is \$1,226. The attached information provides our premium history and a memo on the calculations.



December 5, 2019

Dear Member,

Enclosed is a check for your share of the \$2.5 million dividend being returned to members of the League of Minnesota Cities Insurance Trust's property/casualty program for 2019. Also enclosed is an information sheet showing the data used to calculate your dividend, and your dividend history. Your agent will also receive this information, and we encourage you to share it with the city council or other governing body.

#### **Dividend Formula**

The formula for calculating dividends is designed to return proportionally larger amounts to members with a longer history of coverage with the Trust and greater success in avoiding and controlling claims. Your share was determined based on your gross earned premiums and total adjusted claims for the past 20 years, as shown on the enclosed information sheet. As you review these numbers, keep these definitions in mind:

- *Gross Earned Premium:* This is the total of all earned premiums for the past 20 years as of May 31.
- *Adjusted Loss:* This is claim costs for the past 20 years, minus applicable deductibles, and after capping each individual large claim. Individual claims are capped at the lesser of \$200,000 or 200 percent of the annual premium for the year of the loss to lessen the impact of a catastrophic claim.

#### **Dividend Amounts**

The amount of this year's dividend reflects an increase in total incurred costs in recent years, in large part because of exceptionally high property losses and increased police and employment liability claims. Changing loss patterns like these, actuarial projections, investment results, legislative and coverage changes, and our strategic decisions about things like the most cost-effective way to structure our reinsurance purchases can all affect the availability and amount of dividends from year to year. Trust representatives will be talking with members and insurance agents over the coming year to gather information for our discussion about the relative benefits of regular dividends versus lower up-front premiums, keeping in mind our overarching goals of maintaining a healthy fund balance and preserving rate stability.

Thank you for your continued membership with the Trust. We appreciate your confidence and the chance to partner with you to serve your community. Feel free to contact Laura Honeck, Trust Operations Manager, at [lhoneck@lmc.org](mailto:lhoneck@lmc.org) or 651-281-1280 if you have any questions, comments, or need additional information.

Sincerely,

The League of Minnesota Cities Insurance Trust Board of Trustees

Jake Benson, Councilmember, Proctor  
Dave Callister, City Manager, Plymouth  
Clint Gridley, City Administrator, Woodbury  
D. Love, Councilmember, Centerville

Lisa Sova, City Administrator, Crosby  
Dave Unmacht, Executive Director, LMC  
Alison Zelms, Deputy City Manager, Mankato

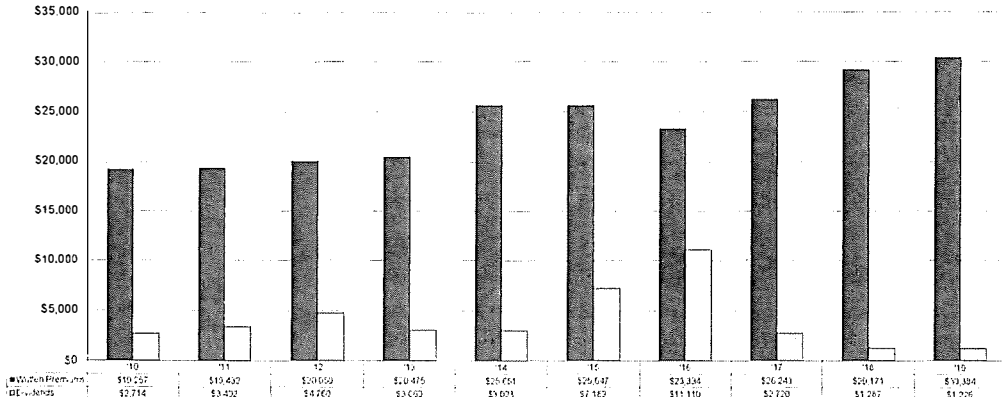
**LEAGUE OF MINNESOTA CITIES INSURANCE TRUST  
PROPERTY/CASUALTY  
2019 DIVIDEND CALCULATION  
AT MAY 31, 2019**

**Bearence Management Group LLC**  
2010 Centre Pointe Blvd  
Mendota Heights MN 55120-1200

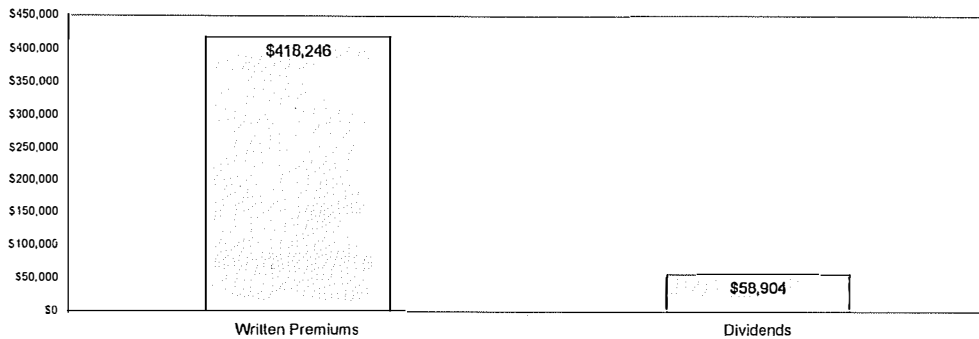
**Ramsey Washington Metro Watershed**  
2665 Noel Dr  
Little Canada, MN 55117-1237

<b>GROSS EARNED PREMIUM</b>	<b>\$355,915</b>
<b>ADJUSTED LOSSES</b>	<b>\$21,298</b>
<b>MEMBERS DIVIDEND PERCENTAGE</b>	<b>0.00049029340</b>
<b>DIVIDEND AMOUNT</b>	<b>\$1,226</b>

**Ramsey Washington Metro Watershed  
Premium and Dividend History**



**Ramsey Washington Metro Watershed  
Premiums and Dividends Since 1987**



The amount of written premium figures in this report are based on the premium for the calendar year 2019. This is the premium for the calendar year 2019. The 2019 written premium figure is the member's total premium for the member's current calendar year from May 31, 2019 (for most members, only a portion of that calendar year premium would be earned as of May 31, 2019).

**D. City of Maplewood Pond Maintenance Loan**

As you may recall, the City of Maplewood requested that three ponds be included in our CIP Maintenance and Repair project for 2020. Their budget for 2020's pond management is \$100,000. They understood that depending on the testing of the sediments, they may not be able to complete the maintenance on all three ponds. Since the bids have been received, and the unit prices received were very favorable, the City of Maplewood would like to complete all the maintenance this year but asked if we would be willing to allow deferred repayments. The total amount needed to complete all the maintenance is \$319,000. The city is proposing to submit three payments from 2020-2022. I've attached the draft joint powers agreement (JPA) that outlines the repayment terms.

The district has a strong interest in seeing maintenance done on stormwater ponds since it directly improves the water quality of downstream resources. There is a long history of the watershed partnering with our other local agencies in order to incentivize maintenance on ponds through the district. The use of these funds in 2020 and paid back over the next three years does not impact the ability of the District to complete projects and maintenance. We have adequate budget in our 2020 budget to cover the work and will include the city's payments in our income for 2021 and 2022 budgets. And we are confident the city will pay us back for this work based on the JPA. Staff's recommendation would be to enter into this JPA with the city. If the Board agrees, we will proceed.

**JOINT POWERS AGREEMENT**

**2019/2020 POND DREDGING PROGRAM**

**RAMSEY-WASHINGTON METRO WATERSHED DISTRICT**

**AND**

**CITY OF MAPLEWOOD**

This joint powers agreement (the “Agreement”) is entered into this \_\_\_\_ day of \_\_\_\_\_, 2020 by and between the Ramsey-Washington Metro Watershed District (“RWMWD”), a watershed district under the laws of Minnesota and the city of Maplewood (“Maplewood”), a municipal corporation under the laws of Minnesota, pursuant to the provisions of Minnesota Statutes, section 471.59 (the “Joint Powers Act” or “JPA”).

WHEREAS, Maplewood owns and maintains two storm water treatment basins located at the southeast corner of the intersection of McKnight Road and Larpenteur Avenue. The basins lie within a public drainage and utility easement and are depicted on Exhibit A attached hereto; and

WHEREAS, Maplewood owns and maintains one storm water treatment basin located south of Maryland Avenue and west of Ferndale Street. The basin lies within property owned by Maplewood, PID No. 252922120008, and is depicted on Exhibit B attached hereto; and

WHEREAS, RWMWD has planned a pond dredging project (the “Project”) as part of their Capital Improvement Plan; and

WHEREAS, RWMWD and Maplewood wish to enter into this Agreement for the purpose of specifying their respective obligations and responsibilities in implementing the Project.

NOW, THEREFORE, in consideration of the mutual undertakings herein expressed, the parties agree as follows:

1. Purpose. The purpose of this JPA is to specify the duties of the parties as they implement the Project.
2. Description of Project. The Project will be implemented on the three storm water treatment basins detailed above. The Project includes the winter dredging of the three basins and disposal of dredged material.
3. Cost. Maplewood shall be responsible for the actual and reasonable costs of the Project in an amount not to exceed \$319,000. Project costs include the costs of construction, disposal of removed material, site restoration and soft costs related thereto.

Maplewood agrees to make the following payments over the next three years:

- a. 2020 - \$100,000
  - b. 2021 - \$109,500
  - c. 2022 - \$109,500
4. Design and Construction of the Project. RWMWD shall be responsible for the design and construction of the Project and the parties agree as follows:
- a. RWMWD shall plan and design, advertise and receive bids, award the contract, administer the construction and conduct inspections of the Project.
  - b. Maplewood grants to RWMWD the right to access the basins through existing easements and/or on City owned property for the Project. Maplewood agrees to cooperate with RWMWD in the construction and completion of the Project.
  - c. RWMWD and Maplewood agree to notify and coordinate access and other matters with the owners of affected properties regarding the construction schedule of the Project.
  - d. RWMWD shall insure that its contractor shall name Maplewood as an additional insured.
5. Indemnity and Liability. Each party agrees to indemnify and hold harmless the other from any claims, losses, costs, expenses or damages, including reasonable attorney fees, resulting from the acts or omissions of the respective officers, agents or employees of the indemnifying party to the extent such acts or omissions relate to activities conducted by the indemnifying party under this Agreement or in the construction of the Project. Nothing herein shall be deemed a waiver of any statutory or common law limitations on liability available to either of the parties and no third party may stack claims against both parties.
6. Operations and Maintenance. Operations and maintenance of said three basins shall be the sole responsibility of Maplewood following the completion of the Project. Maplewood grants RWMWD the right to access the basins through existing easements and/or on City owned property for the Project. In exchange, RWMWD agrees not to cause any damage to the property. If damage occurs as a result of RWMWD's actions, RWMWD shall repair the property to the same or similar condition.
7. Notices. For the purpose of delivery of any notice required by this Agreement, notice shall be effective if delivered certified or registered United States mail, return receipt requested, postage prepaid or hand delivered to:

- a. As to Maplewood: City of Maplewood  
1830 County Road B East  
Maplewood, MN 55109-2702  
Attn: City Manager
  
- b. As to RWMWD: Ramsey-Washington Metro Watershed  
District  
2665 Noel Drive  
Little Canada, MN 55117

or at such other address as either party may notify the other in accordance with this section 7.

- 8. Entire Agreement. This Agreement contains the entire agreement between the parties and supersedes all oral agreements and representations between the parties relating to the subject matter thereof. Any alteration, variation, modification or amendment of this Agreement shall be valid only if in writing and executed by both parties.
  
- 9. Data Practices. All documents regarding the Project shall be handled in accordance with the Minnesota Data Practices Act.
  
- 10. Conflict of Interest. Each party, to the best of its respective knowledge, represents and agrees that no member, official or employee shall have any personal interest, direct or indirect, in this Agreement or the Project nor shall any member, official or employee participate in any decision relating to this Agreement or the Project which affects his or her personal financial interests or the interest of any corporation, partnership or association in which he or she is, directly or indirectly, interested.
  
- 11. Titles of Sections. The titles of sections of this Agreement are inserted for convenience of reference only and shall be disregarded in constructing or interpreting any of the provisions hereof.
  
- 12. Severability. If any term or provision contained in this Agreement is declared to be invalid or unenforceable by a court of competent jurisdiction, the remaining provisions of this Agreement shall not be affected thereby and shall remain in full force and effect and shall be valid and enforceable to the fullest extent permitted by law.
  
- 13. Equal Opportunity. The parties agree that in the construction, operation and maintenance of the Project they will comply with all applicable federal, state and local non-discrimination and equal employment laws and regulations.
  
- 14. Governing Law. This Agreement shall be interpreted under the laws of Minnesota.



15. Counterparts. This Agreement may be executed in any number of counterparts, each one of which will constitute one and the same instrument.
16. No Waiver. In the event that any provision contained in this Agreement should be breached by either party and thereafter waived by the other party, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other concurrent, previous or subsequent breach hereunder.

IN WITNESS WHEREOF, RWMWD and Maplewood have caused this Agreement to be executed on their behalves on the date first written above.

**RAMSEY-WASHINGTON METRO  
WATERSHED DISTRICT**

By: \_\_\_\_\_

Its: \_\_\_\_\_

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

**CITY OF MAPLEWOOD**

By: \_\_\_\_\_

Mayor

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

And by: \_\_\_\_\_

City Manager

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

This Agreement drafted by:  
Kennedy & Graven, Chartered  
470 U.S. Bank Plaza  
200 South Sixth Street  
Minneapolis, MN 55402  
(612) 337-9300

**EXHIBIT A**

McKnight Road and Larpenteur Avenue Basins



**EXHIBIT B**

Maryland Avenue and Ferndale Street Basin



**E. Petition to Repair Ditch 16**

*From District Attorney, Tracey Galowitz:*

The District received a request to repair County Ditch 16, pursuant to MN Statute Section 103E.715. The process outlined by said statute requires the "auditor" to present the petition to the drainage authority within 10 days after the petition is filed. The "auditor" is the auditor in the county where the petition for a drainage project was properly filed. As of this date, we have not received notice from the Ramsey County Auditor. It is unknown whether the Petition was filed with Ramsey County. Once properly filed, and notice given by the auditor, the drainage authority must determine whether the drainage needs repair and issue a report on its findings. Said report shall show the necessary repairs, the estimated cost of the repairs, and all details, plans and specifications necessary to prepare and award a contract for the repairs. The drainage authority may give notice and order a hearing on the petition before appointing the engineer.

Further process is outlined in the statute addressing the determination of the need for repair and the steps needed, prior to assessing all fees and costs incurred for proceedings relating to the repair of a drainage system, including inspections, engineering, viewing and publications, against the property and benefited entities.

The RWMWD managers "next steps" regarding the Petition is to admit or deny the allegations in the Petition and determine whether a separate repair report on County Ditch 16 is necessary.

*From District Administrator, Tina Carstens:*

The petition received is attached to this memo. District and Barr staff have been working with the city of Little Canada over the last couple of years to provide technical information for Twin Lake and the flood risk that exists. Last month, at the manager's December board meeting, staff presented the Twin Lake Flood Risk Feasibility Study. That study not only recommends a project to construct a lower overflow path for Twin Lake but also outlines the history of County Ditch 16. The project option that was recommended by staff and approved to move forward by the Board, provides the benefits of reconstructing the old county ditch section and also goes above and beyond in a design that protects Twin Lake from potential input from water flowing back into it from the freeway. Staff believes the feasibility study and recommended project implementation satisfies the intent of the petition. I would recommend that the district respond to the petitioner with that information.

**STATE OF MINNESOTA**  
*Before the*  
**Ramsey Washington Metro Watershed District**  
**SITTING AS THE DRAINAGE AUTHORITY FOR**  
**Ramsey County Ditch 16**

<p><b>In the Matter of:</b></p> <p><b>Petition to Repair Ramsey County Ditch 16 North of I-694</b></p>	<p><b>PETITION</b></p>
--	------------------------

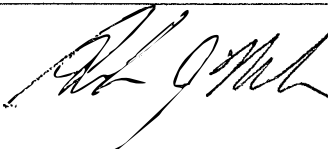
**Findings:**

1. Petitioner requests expedited repair of Ramsey County Ditch 16 pursuant to Minn. Stat. § 103E.715.
2. Ramsey County Ditch 16 provided beneficial drainage to properties on Twin Lake, Five Star Mobile Estates, West Vadnais Lake, Suzanne Pond, "Mistake Lake", Rice Street and the areas surrounding Grass Lake in Ramsey County, Minnesota.
3. Ramsey County Ditch 16 is desperately in need of repair.
4. This ditch has fallen into a state of abandonment through 1) neglect by the drainage authorities responsible to inspect and maintain it and 2) the closing of the culvert, originally installed under I-694 during the 1966-1972 construction of I-694, but sealed during the construction of Waldo Pond during unweave the weave project. The closure of the culvert defied the promises made to restore the functionality of the ditch during this project's execution.
5. Because the ditch no longer functions, the farmlands southeast of Twin Lake have been draining into Twin Lake instead of downstream to the Mississippi River. The elevation definitions in the 1966 Engineering Drawings for the I-694 culverts clearly indicate the farmlands were intended to drain away from Twin

Lake as the culvert elevation defined under I-694 is lower than the culvert installed for water to exit Twin Lake to the Southeast under the railroad tracks.

6. Because Twin Lake lost its flood protection outlet, the water levels rose rapidly from a typical elevation of 869 feet above sea level to 876+ ft above sea level, an amount that far exceeds any expectations for the higher rainfalls experienced recently. This flooding threatened damages to numerous homes and destroyed expensive landscaping for most, if not all, residents on Twin Lake.
7. Repair of Ramsey County Ditch 16 is necessary in order to restore the drainage system as nearly as practicable to the same hydraulic capacity as originally constructed and subsequently improved and to maintain the efficiency of the drainage system so that there is no future flooding risk.
8. This Petitioner requests that the Ramsey Washing Metro Watershed District expeditiously appoint an engineer to examine the drainage system and make a repair report. The report must show the necessary repairs, the estimated cost of the repairs, and all details, plans, and specifications necessary to prepare and award a contract for the repairs.

Respectfully submitted this 4th day of December, 2019 by:

<b>Owner Signature</b>	<b>Property Owned</b>	<b>Mailing Address</b>	<b>Dated</b>
	Twin Lake Shores, Lot 14, BLK 1	289 Twin Lake Trail Little Canada, Mn. 55127-4047	12/4/19

\* \* \* \* \*

# Project and Program Status Reports

\* \* \* \* \*



## Project Work Plan

December 30, 2019

**Project:** Beltline and Battle Creek Storm Sewer / 5-Year Inspection

### Project Team

District Staff: Dave Vlasin (Project Manager)

Barr Staff: Sam Redinger (Project Manager); Nathan Campeau (Technical Advisor)

### Scope of Work

RWMWD performs inspections of the entire length of the Beltline and Battle Creek Storm Sewers every 5 years. In 2015, Barr performed a detailed inspection in conformance with the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) standards. The NASSCO PACP rating system is the industry standard for identifying pipe deficiencies and rating the overall quality of pipes and stormsewer systems. The 2015 inspection report recommended several areas for rehabilitation. Based on the inspection findings, RWMWD performed rehabilitation on the Mississippi River Branch, a portion of Mainline, and a portion of the Beaver Lake Branch of the Beltline system, and on the Battle Creek system. Construction occurred in two phases from 2016-2018.

In 2020, RWMWD and Barr will perform a detailed inspection along the rehabilitation extents to re-establish the pipe condition rating of these areas. For the non-rehabilitation areas, Barr will perform a modified version of a NASSCO PACP inspection, focusing on evaluating the Grade 4 or 5 defects identified in the 2015 inspection for changes in condition. Defects that change grade will be noted.

Included in this work scope is a detailed survey of the alignment of the Battle Creek Storm Sewer. A baseline survey of the entire storm sewer alignment has not been performed. Surveying the alignment will provide useful information for future improvement and repair projects, other infrastructure projects by

others (e.g., Met Council's sanitary repair project), and provide more accurate information for locating the tunnel during utility locating requests.

Coordinating with RWMWD staff, Barr will perform the following work tasks:

### **Beltline Inspection**

1. **Gather/Review Existing Data:** Barr will review existing plansets of the Beltline Storm Sewer as well as the most recent inspection report.
2. **Perform Pre-Inspection Site Visit:** Barr will conduct site reconnaissance, as needed, to identify access and egress locations for the inspection.
3. **Conduct On-Site Condition Survey:** Barr will conduct a full-system tunnel inspection of the Beltline Storm Sewer by walking. Typically these inspections will require 4-5 Barr staff at a time (3 staff in the tunnel performing the inspection with the other 2 serving as surface attendants). A safety subcontractor is not included in this work scope, as their assistance is not anticipated at this time. However, if conditions warrant it, a safety subcontractor may be engaged for an additional cost. We assume 1-2 RWMWD staff will likely assist each inspection date. We anticipate that 6-8 days of inspection will be required to inspect approximately 33,500 feet of tunnel.
4. **Beaver Lake CCTV Review:** Included in the 2016-2018 rehabilitation scope was a CCTV inspection of the upper reaches of the Beaver Lake Branch. Barr will review the CCTV inspection footage and include these findings in Tasks 5 and 6.
5. **Compile Data:** Following the inspection, all data collected (notes and photos) will be compiled into an Excel-based table that uses the NASSCO PACP coding and rating system to generate statistical tables for 1,000-foot segments of the tunnel. GIS will be used to create figures showing the different condition ratings along the pipe alignment.
6. **Final Report:** A final report will be developed documenting the storm sewer conditions and any recommendations.

### **Battle Creek Inspection**

1. **Gather/Review Existing Data:** Barr will review existing plansets of the Battle Creek Storm Sewer as well as the most recent inspection report.
2. **Perform Pre-Inspection Site Visit:** Barr will conduct site reconnaissance, as needed, to identify access and egress locations for the inspection.
3. **Conduct On-Site Condition Survey:** Barr will conduct a full-system tunnel inspection of the Battle Creek Storm Sewer by walking. This includes the concrete box culvert that drains Battle Creek beneath Upper Afton Road. Typically these inspections will require 4-5 Barr staff at a time (3 staff in the tunnel performing the inspection with the other 2 serving as surface attendants). A safety subcontractor is not included in this work scope, as their assistance is not anticipated. 1-2 RWMWD staff will likely assist each inspection date as well. We anticipate that 1 day of inspection will be required to inspect approximately 4,500 feet of tunnel.
4. **SS MH/CCTV Insp. & Review:** A small-diameter storm sewer that is owned by the District drains storm runoff from a nearby neighborhood into the Battle Creek Storm Sewer. Barr will

locate the manhole structures along this alignment, and perform a simple visual inspection of the manhole shaft(s) to look for significant defects. A small-diameter storm sewer drains the above-ground Battle Creek beneath Highway 61 to an outfall structure. Barr will coordinate a CCTV inspection of both these small-diameter storm sewers, and review the inspection findings to include in Tasks 5 and 6.

5. **Compile Data:** Following the inspection, all data collected (notes and photos) will be compiled into an excel-based table that uses the NASSCO PACP coding and rating system to generate statistical tables for 1,000-foot segments of the tunnel. GIS will be used to create figures showing the different condition ratings along the pipe alignment.
6. **Final Report:** A final report will be developed documenting the storm sewer conditions and any recommendations.

### **Battle Creek Survey**

1. **Gather/Review Existing Data:** Barr will review existing plansets and existing survey data of the Battle Creek Storm Sewer.
2. **Site Survey:** Barr will conduct a baseline survey of the Battle Creek Storm Sewer. This includes a manual survey of the storm sewer centerline from within the storm sewer. A 2-person in-tunnel team with 2 surface attendants is anticipated to be complete this survey. We will attempt to coordinate this survey with the tunnel inspection to reduce costs.
3. **Data Processing - Updating Records:** Barr will post-process the survey data, and update the existing GIS database. Barr will provide a GIS shapefile of the storm sewer alignment for RWMWD.

### **Budget**

The approximate cost for Barr to complete the work outlined above is **\$100,000**.

### **Schedule**

The storm sewer inspections and survey tasks of the work scope above are currently scheduled to begin the week of January 27, 2020, assuming favorable and safe conditions in the tunnels. Inspections will be performed as quickly as weather and staffing allows, with a goal of completing the inspections before the end of March (snowmelt). Additional inspections, if needed, will occur as weather allows in the spring. The final report will be provided in draft format to RWMWD within 4 months of the completed inspections.

## Project Tracking

### Project Milestones

<b>Beltline &amp; Battle Creek Inspections - Milestone</b>	<b>Estimated Completion Date</b>	<b>Actual Completion Date</b>
Tasks 1 and 2 Complete	January 2020	
Task 3 Complete	March 2020	
Task 4 Complete	April 2020	
Task 5 Complete	May 2020	
Task 6 (Draft) Complete	June 2020	
Task 6 (Final) Complete	July 2020	

<b>Battle Creek Survey - Milestone</b>	<b>Estimated Completion Date</b>	<b>Actual Completion Date</b>
Task 1 Complete	January 2020	
Task 2 Complete	February 2020	
Task 3 Complete	March 2020	

### Monthly Updates

<b>Month</b>	<b>Budget Spent \$\$ / %</b>
<b>January 2020</b>	
<b>February 2020</b>	
<b>March 2020</b>	
<b>April 2020</b>	
<b>May 2020</b>	
<b>June 2020</b>	
<b>July 2020</b>	

## Memorandum

**To:** Board of Managers and Staff  
**From:** Tina Carstens and Brad Lindaman  
**Subject:** Project and Program Status Report – January 2020  
**Date:** January 3, 2020

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### **Twin Lake emergency response management 2019: (Barr project managers: Brad Lindaman and Erin Anderson Wenz; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to provide engineering assistance and technical guidance to help cities in and around Twin Lake and West Vadnais Lake determine emergency flood response options for implementation.*

As mentioned previously, the discharge pipe has been fused together and is ready for use. However, recently the pump has been removed from the site until the need for by-pass pumping occurs. District staff are monitoring the area and overflows from West Vadnais Lake continue to be minimal, and therefore no bypass pumping is needed at this time. The RWMWD will continue to monitor the area and initiate pumping, if necessary.

### **Project feasibility studies**

#### **Beltline resiliency study (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to evaluate system-level flood damage reduction options, including real-time mechanical alteration of Lake Phalen and Keller Lake channel outlet structures, as well as other critical system infrastructure, to actively manage stormwater runoff from flood-prone areas tributary to the Beltline storm sewer in an effort to reduce flood levels that would otherwise impact homes. The evaluation will use the RWMWD stormwater model to simulate system-level modifications to evaluate how adjustments to outlet structures during a flood event may be able to optimize the existing system performance to reduce flooding impacts to homes adjacent to RWMWD-managed water bodies.*

Barr led a RWMWD manager workshop on December 17 to provide an overview of the draft Beltline Resiliency report and discuss key findings with the board. During the workshop, staff provided an overview of the methodology followed for the evaluation, key system modifications, and general sequencing considerations. Next steps were also discussed.

Following the workshop, the draft report and workshop presentation were uploaded to the District website for public review and for written comments and questions. Following the receipt of comments, Barr will work with district staff to make changes and/or address comments, as appropriate.

Feasibility studies for the Owasso Basin bypass concept, Willow Creek flood reduction concept, and Ames Lake area concept (highlighted in the resiliency study report) are included in the 2020 work

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program and budget. Also, the Keller Channel control structure and the Phalen Outlet modifications, mentioned in the resiliency study, are budgeted for design and implementation in 2020, as well.

**Point Douglas Drive Study: (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to evaluate the conditions that lead to flooding of a residence along Point Douglas Drive in St. Paul, Minnesota (Blufflands Subwatershed)*

This period, Barr created a hydrologic model of existing conditions of the area and some concept-level designs that route runoff around a home and its outbuildings. Staff are currently compiling the information into a technical memo that will be shared with the City of St. Paul in order to help them determine next steps in 2020.

**Twin Lake flood-risk mitigation feasibility study (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)**

*The purpose of this study is to evaluate modifications that would reduce flood risk to habitable structures in the Twin Lake watershed in Little Canada and Vadnais Heights, Minnesota.*

Barr staff presented the Twin Lake Flood-Risk Mitigation Feasibility study at the December Board meeting. A gravity outlet at Elevation 872.2 was recommended as the most feasible flood-risk mitigation alternative evaluated. The recommended outlet includes a detailed operating plan that would describe when the valve associated with this outlet could be opened and when it should be closed. The recommended alternative is based on Twin Lake flood-risk mitigation objectives, as well as the assessment of downstream impacts, site and wetland impacts, and flexibility for long-term management.

During the December board meeting, the managers directed Barr to begin final design for modifying the outlet from Twin Lake, including development of a detailed operating plan, discussions with permitting agencies, and defining drainage and access easements necessary for the proposed modification.

**Federal Emergency Management Agency (FEMA) flood mapping updates (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to apply Minnesota Department of Natural Resources (DNR) grant funding to use the RWMWD's updated stormwater model in order to develop information required to update the FEMA floodplain maps.*

We are still waiting to receive comments from the DNR on the hydraulic model inputs. Barr provided responses to DNR comments and updated models on August 29. The resubmittal included updates to supporting documentation to address DNR comments, minor updates to the models, and plans or survey information for inundation areas shown on the FEMA floodplain maps. In addition, we submitted preliminary floodway models for Kohlman Creek and the Lake Wabasso outlet. We are still waiting for final approval from the DNR on hydraulic model input parameters. Because of the extended DNR comment period, the process for providing the DNR with information to update the floodplain maps was extended and will now continue through winter 2020.

This period Barr prepared a grant reimbursement request to the DNR for work completed in 2018 and 2019.

**West Vadnais lakes outlet permitting with the DNR (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to prepare and facilitate DNR permitting for the proposed lowering of the West Vadnais Lake outlet.*

This period, Barr began the design work, plans and specifications for the outlet lowering project. The construction cost associated with this effort is expected to be well below the \$175,000 threshold. Therefore, a formal public bidding process is unnecessary. This approach will allow a contractor to be engaged and begin the work sooner than a formal process would allow.

Also, this period, staff prepared for an upcoming stakeholder meeting to be held in early January to share more details on how the outlet lowering would be facilitated, to describe the benefits of the project and to answer any outstanding questions or concerns stakeholders may have,

**Modeling of 500-year Atlas 14 district-wide (climate change scenario): flood map generation for future outreach efforts (Barr project manager: Brandon Barnes; RWMWD project manager: Tina Carstens)**

*The purpose of this project is to use measured water-surface elevations to verify and fine-tune water surface elevations calculated by the RWMWD stormwater model. Following validation, the model will be used to simulate larger rainfall events, including the 500-year rainfall depth. The confidence limit (or uncertainty) associated with the 500-year flood elevation will be used to develop inundation maps that will allow for evaluation of how future climate change may affect flood inundation areas within the RWMWD and will be used for discussion with stakeholders when evaluating future flood-risk reduction projects.*

Barr is revising the risk-map figures to address comments provided by RWMWD staff and anticipate providing the final version for three sets of figures in January. One set illustrates the uncertainty in the 100-year floodplain, one illustrates annual flood risk, and one shows flood risk over a 30-year period. The maps will be used in community outreach activities with the cities and other entities in the RWMWD.

**Hillcrest Golf Course (multi-use) (Barr project manager: Erin Anderson Wenz; RWMWD project manager: Paige Ahlborg)**

*The purpose of this project is to identify and describe the existing land, water, and stormwater conditions throughout the former Hillcrest Golf Course site to help the City of Saint Paul create the Hillcrest master plan that embodies and integrates the district's approach to stormwater management and natural resources protection and restoration practices. The plan will determine future land uses and a new street network for the 112-acre former golf course on Saint Paul's East Side. In July, the Saint Paul city council approved bonds for the Saint Paul Port Authority to purchase the site.*

This period, Barr completed much of its evaluation of existing conditions across the site, identifying significant trees and tree stands (burr oaks), and modeling runoff across the site through wetlands and offsite into Saint Paul and Maplewood storm sewer systems. This and other existing information about

the site, including permitting implications of proposed development changes, is being compiled for use in the city's planning process.

Work will continue into 2020, and is dependent on the evolution of the project and the City's planning work and process.

### **Monitoring water quality/project monitoring**

#### **Automated lake-monitoring systems (Barr project manager: Chris Bonick; RWMWD project manager: Eric Korte)**

*The purpose of this project is to install an automated system to monitor lake levels throughout the RWMWD and allow real-time transfer of data to the RWMWD's website for public consumption.*

In November, Peterson Company and Kilmer Electric installed the remaining metal cabinets (equipment shelters) at Snail, Phalen, and West Vadnais Lakes. They also installed electrical and sensor conduit at all five sites. In addition, Peterson installed the bubbler lines and orifices at Snail and West Vadnais Lakes. This completed Peterson's part of the station installations. RWMWD staff submitted electrical power applications to Xcel Energy for each of the stations. These applications have been approved and Xcel has informed the RWMWD that design work to bring electric power to the sites began in mid-December.

Barr and RWMWD staff installed the bubbler units at Snail and West Vadnais Lakes. These units were installed by staff to expedite the process. These stations are currently being powered by 12-volt deep-cycle batteries. The power is adequate to keep air in the lines to reduce the chance of freezing. But, no measurements are currently being taken.

Barr staff has been programming, bench testing, and prepping the monitoring equipment as the installations progress and each will be ready for installation as soon as Xcel completes installation of the power lines and electrical meters.

#### **Iron-aggregate pond application research project (Barr project manager: Tyler Olsen; RWMWD project manager: Eric Korte)**

*The purpose of this project is to provide monitoring and data evaluation support for the University of Minnesota's St. Anthony Falls Laboratory's research project at Shoreview Commons Pond (on the City of Shoreview city hall campus). The project involves evaluating the effectiveness of adding iron aggregate to pond sediments to control the internal load of phosphorus from rich pond sediments.*

This month, the City of Shoreview staff cored the ice on Shoreview Commons Pond to determine the thickness of the ice. When the city believe the ice thickness is sufficient, they will inform complete the spreading of iron filings on the pond's ice. Discussion regarding the timeline of the application will occur in January 2020 and, weather depending, will hopefully be completed in February.



## Capital improvements

### **Targeted retrofit projects (Barr project manager: Matt Kumka; 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 RWMWD.*

Construction documents are being prepared for the Boys and Girls Club east St. Paul stormwater project. This project includes retrofitting highly degraded asphalt parking to include 24 stalls of permeable pavers. The project also includes two native plant beds designed for pollinator benefit.

The project will be bid during the winter of 2020 and likely constructed during the spring/summer months of 2020.

The conceptual design alternatives for the two Target retail sites were revised based on RWMWD comments. Cost and benefits were estimated for each alternative and two of the design alternatives were selected to be presented to Target representatives in January. The capacity issues of the existing storm-sewer network on and downstream of the Motel 6 property were further evaluated with a XP-SWMM hydrologic model. And, as a follow-up, the city has been contacted regarding conveyance capacity issues in the storm sewer along Old Hudson Rd downstream of the Motel 6 site.

## CIP project repair and maintenance

### **Kohlman Lake Macrophyte management (Barr project manager: Keith Pilgrim; RWMWD project manager: Bill Bartodziej)**

*The purpose of this project is to develop a calibrated model that can be used to evaluate the effect of aquatic plant growth and aquatic plant harvesting on Kohlman Lake water quality.*

This study is now complete. The outcome includes a working, calibrated model that can be used for Kohlman Lake and other RWMWD lakes to better understand the effect of aquatic plants and aquatic plant harvesting on lake water quality. In addition, the district staff is working with Barr to publish the results of this study for Kohlman Lake and potentially other RWMWD lakes. Data was also generated for inclusion in a LakeLine (North American Lake Management Society) article slated for publication in 2020.

### **CIP maintenance/repairs 2020 project (Barr project manager: Greg Nelson; RWMWD project manager: Dave Vlasin)**

*The purpose of this project is to maintain the 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 system (MS4) requirements.*

The CIP maintenance/repairs 2020 project was awarded to Fitzgerald Excavating & Trucking, Inc. at the December board meeting. Submittals are under review and contracts are being developed to allow work to begin in early January 2020. In addition, a preconstruction meeting was held on December 20, 2019.

## New technology review: BIOPOD Stormwater Planter and Nutrient Removal Device

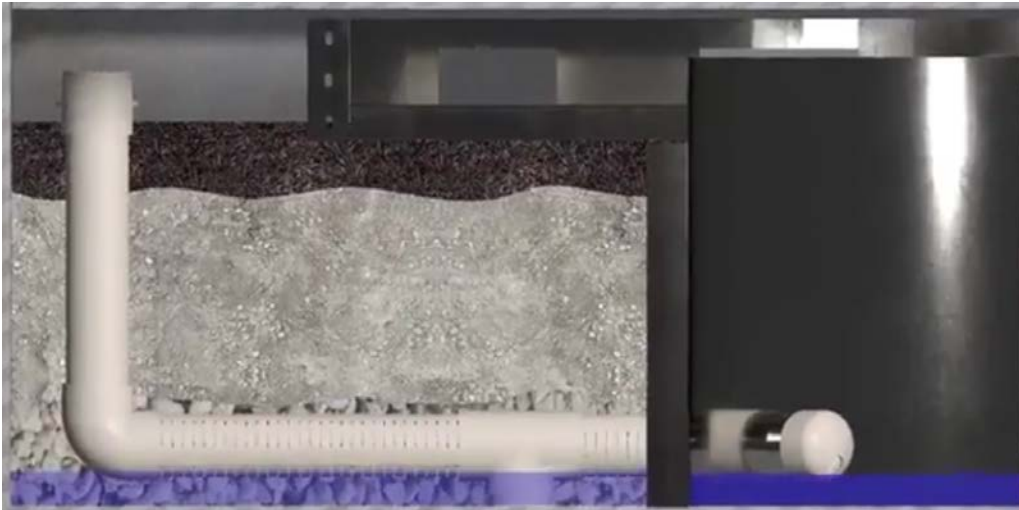
<p><b>Innovative Technology</b></p>	<ul style="list-style-type: none"> <li>• The BioPod removes nutrients, total suspended solids (TSS), dissolved metals, hydrocarbons, trash and debris using an advanced biofiltration system. BioPod systems can be implemented easily with standard site drainage and can accommodate a variety of plant species. The BioPod is available in multiple sizes to meet site-specific requirements. It can be configured with a high flow bypass, eliminating the need to implement a separate bypass structure. The BioPod also can be used as a standalone system or in conjunction with other stormwater management practices.</li> </ul>
<p><b>Use</b></p>	<ul style="list-style-type: none"> <li>• The BioPod is designed to remove a variety of pollutants with its proprietary StormMix™ media. Per the manufacturer, with biofiltration, these pollutants are removed through natural processes and the system adds aesthetic to the site with its vegetation while providing the benefit of water quality improvement.</li> </ul>
<p><b>Benefits of technology</b></p>	<ul style="list-style-type: none"> <li>• Improves water quality by removing multiple pollutants.</li> <li>• Removes pollutants through natural processes.</li> <li>• Low-impact development solution</li> <li>• Can be easily incorporated into the current drainage system.</li> <li>• Available in multiple sizes and styles.</li> <li>• Bypass can be included in the BioPod, removing the need to implement a separate bypass structure.</li> <li>• Can be used along with other stormwater management projects.</li> <li>• Aesthetically pleasing and can accommodate multiple types of plant species.</li> <li>• All-in-one unit including: vault, piping, fittings, media, and soil</li> </ul>
<p><b>Drawbacks</b></p>	<ul style="list-style-type: none"> <li>• Cold Minnesota winters will hamper the productivity of the microbes in the BioPod.</li> <li>• If vault is damaged during installation, the entire BioPod will have to be replaced.</li> </ul>
<p><b>Case Studies/ Applications</b></p>	<ul style="list-style-type: none"> <li>• BioPods are designed to be implemented on curbsides, but will function properly as long as the influent is standard site drainage.</li> <li>• Case studies:             <ul style="list-style-type: none"> <li>○ Portland, Oregon approves use of technology</li> <li>○ College Park, Georgia uses BioPods to help redevelop community</li> </ul> </li> </ul>

<b>Suppliers/Contacts</b>	<ul style="list-style-type: none"><li>• Oldcastle Infrastructure, Inc. Chris Kroynovich, Specification Consultant 10752 171<sup>st</sup> Ave NW Elk River, MN 55330 Tel: +1 (763) 323-3548 ContactInfrastructure@Oldcastle.com   www.oldcastleinfrastructure.com</li></ul>
<b>Conclusion</b>	<ul style="list-style-type: none"><li>• BioPod are an all-in-one system designed to remove TSS, hydrocarbons, nutrients, dissolved metals, trash and debris from stormwater runoff using biofiltration and their innovative StormMix™ media. They are easy to implement because they ship as a single piece unit, and provide a natural means to improve water quality while being aesthetically pleasing passersby.</li></ul>

### Technology Description

The BioPod is designed to naturally treat stormwater runoff with biofiltration and their proprietary StormMix™ media. The BioPod captures dissolved metals, hydrocarbons, nutrients, TSS, trash and debris, and can be installed standalone, or with other BioPods installed in tandem. They can be installed existing drainage networks and can host a variety of plant species. The BioPod models can come with additional features such as a high flow bypass, omitting the need for implementing a secondary bypass structure. Multiple sizes and configurations are available, so there is a BioPod model for nearly every situation to meet site-specific requirements.

The BioPods consist of a concrete vault that encases the rest of the components. Inside, water runs through a chute, where it can either enter the bypass, or begin infiltrating in the media. The media consists of topsoil and mulch, proprietary StormMix™ media, and porous gravel before entering a perforated pipe for discharge into the storm sewer. These layers are shown in Figure 1.



**Figure 1: Cross Section of a media-only BioPod™**

The BioPod units consist of four main configurations, where they can hold vegetation, tree(s), or contain only media. Finally there is the BioPod vault which only contains media and is placed entirely below ground. Figure 2 depicts these configurations.



**Figure 2: BioPod configurations and cross sections**

## Specification Information

There are 8 different standard sizes for the BioPod. The BioPods can also be custom sized for site-specific requirements. The BioPod comes as a single piece unit, with engineered high-flow media, precast concrete components, and stainless steel internals (if applicable) all inside the concrete casing, increasing the ease of installation. BioPods can be used in tandem with one another allowing for more pollutant reduction at a specific location. Drawings for each BioPod configuration can be found at the manufacturer's website. An example is shown in Figure 3.

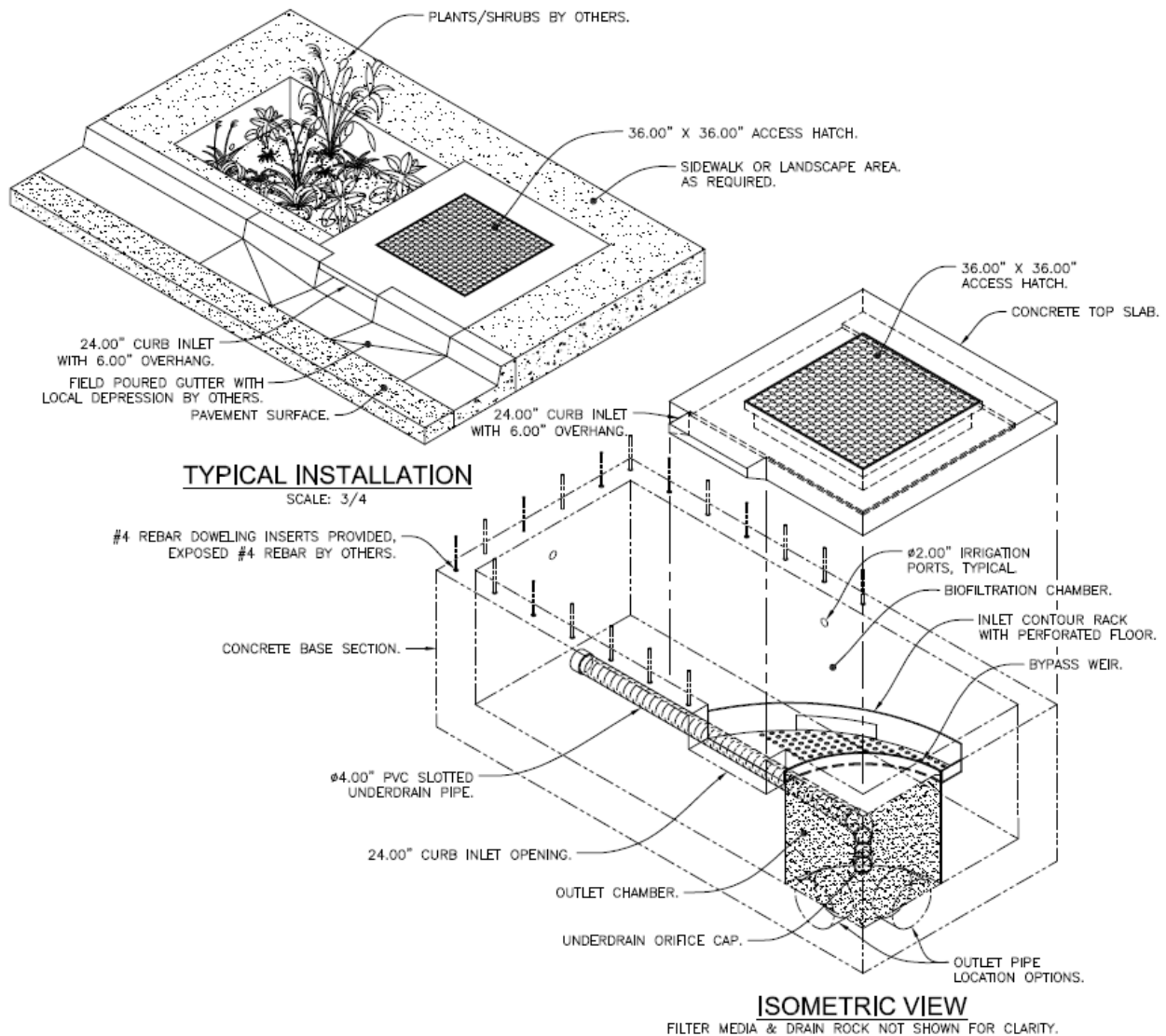


Figure 3: Drawing of a BioPod planter- side inlet and internal bypass

## Case Studies

- **BioPod™ System with StormMix™ Media Approved by City of Portland**

The BioPod treatment system was approved by Portland's Bureau of Environmental Services for use in city jurisdiction in February of 2019. This approval confirms that the BioPod meets Portland's water quality and stormwater standards. Other jurisdictions that have approved the technology include the states of Washington, Virginia, and New Jersey.

- **College Park, Georgia is Revitalizing a Neighborhood with help from BioPods**

Once an abandoned neighborhood, the City of College Park is redeveloping a 16 block corridor into a commercial district and is using the BioPod treatment system as part of their stormwater infrastructure. The project was one of the largest of its kind, with more than 100 BioPod units installed.



**Figure 4: Installation of a BioPod™ treatment system in College Park**

## Cost

Oldcastle Infrastructure is the manufacturer of the BioPod™ unit. The cost can vary based on the BioPod configuration and shipping. Example list prices from Oldcastle Infrastructure include:

- 4x8 unit: \$18,000
- 8x16 unit: \$49,000

Projects with multiple BioPods received a discount based on unit quantities.

Cost of installation, mulch, and vegetation (if applicable) are not covered by Oldcastle Infrastructure.

## Installation & Maintenance

Installation is not provided by Oldcastle Infrastructure, and would require a contractor. The contractor would be responsible for mulch and vegetation (if applicable). They are also responsible for setting the system and connecting all pipes. The basic summary of the installation is to prepare excavation and base rock, offload BioPod from delivery truck, setting the BioPod into the excavation, plumbing the inlet and outlet pipes, and back filling the excavation. More detail for this process can be found in the BioPod Installation Manual.

Maintenance is also not provided by Oldcastle Infrastructure. General inspection protocol includes checking for blockage of the inlet and for erosion, standing water, and invasive vegetation in the biofiltration chamber. If any of these conditions are met, maintenance should be conducted. A detailed manual for inspections and maintenance is provided, and is easily accessible on the manufacturer's website.

## Conclusion

The BioPod treatment system is an all-in-one product for stormwater treatment. They can be placed in any standard site drainage and can remove pollutants including TSS, hydrocarbons, and nutrients with its proprietary StormMix™ media. BioPods come with multiple configurations and sizes. The manufacturer includes all of the necessary components for the BioPod's installation. One drawback of the unit's design is that if the outer casing is damaged, the entire unit will have to be replaced. A detailed maintenance guide is provided by the manufacturer and appears relatively straightforward. BioPods have had success in previous projects though none were conducted in cold climates. BioPods are a convenient product for removing pollutants through natural means, and are an aesthetically pleasing addition to the community.

## References

*"BioPod™ Box Filters Help Reclaim a Lost Neighborhood College Park, Georgia." WaterWorld, 12 Apr. 2019, [www.waterworld.com/sponsored/oldcastle/article/16225654/biopod-box-filters-help-reclaim-a-lost-neighborhood-college-park-georgia](http://www.waterworld.com/sponsored/oldcastle/article/16225654/biopod-box-filters-help-reclaim-a-lost-neighborhood-college-park-georgia).*

## Natural Resources Update – Bill Bartodziej and Simba Blood

### **Lakeline Article on Aquatic Plant Harvesting**

In December, we submitted the paper below to the journal *Lakeline*. The editor provided some very positive feedback and suggested that we would likely see the article in the winter issue of 2020-21. This paper reports on the aquatic plant harvesting work that was conducted on Lake Kohlman a few years ago. We already shared these data with the Board, but thought it would be useful to show that this information is getting out to lake managers on a national scale.

*Here are the major take-home messages:*

1. “Strategic” harvesting is a well thought out, conservative approach to aquatic plant control supported by best available water quality and plant data.
2. Kohlman was able to withstand a 14% (peak mass) harvest of aquatic plants while preserving water quality and improving recreation.
3. This harvesting dataset is the first of its kind generated for a shallow Minnesota lake and will be useful as a guide for other lake managers.
4. Harvesting removed 73 pounds of total phosphorus (in the plant tissue), with a cost of around \$250 per pound.
5. This supports the idea that harvesting presents cost-effective opportunities for TP removal.
6. Strategic harvesting has the potential to factor into dynamic and creative lake and watershed management approaches.
7. Although staff does not recommend taking the lead on harvesting, this study provides the basis for the Watershed to partner on certain efforts through our cost-share program.



## **Strategic Aquatic Plant Harvesting as a Multi-faceted In-Lake Management Tool**

*Bill Bartodziej, Keith Pilgrim and Simba Blood*

### **Introduction**

The earliest record of aquatic plant harvesting in the Phalen Chain of Lakes Watershed, located in the Twin Cities (Minnesota), dates back to 1923. At that time, the county engineer stated that: “Weed growth has an evil effect on Ramsey County lakes in several ways” (Coates 1924). Hence, a paddle-wheel boat was customized with a mechanical cutting blade to chop vegetation under the water (Figure 1). This vegetation would then float to the surface, where it was laboriously harvested by hand, and then piled on the shore to dry. The main objectives of this operation were to create open water for navigation and improve the look of the lake. The practitioners were innovative county workers who were not privy to even the most basic concepts of limnology. The plants were just an unsightly physical barrier that had to be removed.

Fast-forward almost 100 years, and we have dramatically increased our knowledge of aquatic plant ecology in lake systems and our efficiency in harvesting, with bigger, faster, and more powerful machines. Now, government agencies find it necessary to permit aquatic plant management activities with the primary goal of preserving beneficial aquatic plant stands. Over the years, it’s become more common to see aquatic plant management as a component in comprehensive lake management plans, especially ones that address shallow systems. In addition, harvesting has recently been considered as a nutrient reduction tool in watershed and Total Maximum Daily Load (TMDL) studies.

### **What is Strategic Aquatic Plant Harvesting?**

Intensive in-lake and watershed management caused Kohlman (34 ha), the northernmost lake in the Phalen Chain of Lakes, to go from a relatively turbid to a clear water state (Figure 2). Aquatic plants responded by growing to the water surface, and the general lake condition seemed to mimic the 1920s historical accounts that prompted harvesting. This change in lake state and a comprehensive water quality monitoring dataset gave us an excellent opportunity to develop and assess a strategic aquatic plant harvesting approach (Figure 3). We set out to be methodical and have the best available data drive the aquatic plant harvesting process on Kohlman Lake. We balanced realistic management goals centering on navigation, recreation, aesthetics, water quality, and ecological function. We viewed the aquatic plant community as a critical component in the lake system and control was judicious. Available data and best professional judgement were used to set limits on the aquatic plant harvest. Data were collected during the operation to assess the control operation and the effects of harvesting on water quality. Below, we summarize our experience with this approach and detail how Kohlman Lake responded to the harvesting operation. We also discuss how this tool may be used in lake and watershed management.

## **The backstory: Kohlman Lake turning to a clear water state**

Surrounded by urban-residential land use, Kohlman Lake is relatively shallow with a maximum depth of 4 m. The littoral area covers a majority of the lake surface, but Kohlman is still popular for boating and fishing. In the 1980s and 90s, total phosphorus (TP) levels were high, with a growing season average of near 100 ug/l. Nevertheless, Kohlman supported a rooted aquatic plant community with moderate algal blooms that did not severely impede recreational use. Shoreland owners were generally happy with the overall condition of Lake Kohlman.

In 2008, the Minnesota Pollution Control Agency placed Kohlman on the 303(d) Impaired Waters List due to growing season TP levels being consistently over the state standard of 60 ug/l. This triggered the Ramsey-Washington Metro Watershed District (RWMWD) to conduct a TMDL study. It was estimated that the watershed contributed 426 kg of TP and Kohlman experienced an internal TP load of 132 kg during a normal precipitation year. Mass balance modeling suggested that growing season reductions of 95 kg (22%) of TP from the watershed and 116 kg (88%) from internal loading would be needed to meet the state standard. Alum treatment, common carp management, and watershed best management practices were used to substantially reduce TP loading. Since project implementation, transparency and TP values in Kohlman have satisfied the state standards (Figure 4). This combination of practices now seems to be a fairly standard approach for TP management in Twin Cities area shallow lakes.

## **The aquatic plant quandary in a shallow lake**

With an increase in water quality we observed a dramatic increase in the abundance of aquatic plants. A majority of the littoral zone had plants growing to the surface, and a good portion of this plant material was colonized by filamentous algae (Figure 5). This expected aquatic plant response was clearly spelled out in our educational messages at the beginning of the project. We used straightforward phrases like, “clear water grows plants” and “a lot of plants in a shallow lake is normal.” But in reality, preemptive education did not work. Once a popular recreational lake is dominated by large expanses of surfaced vegetation, most shoreland owners and lake users become frustrated and eventually turn disgruntled. Aquatic plant harvesting was then performed on an experimental basis. For more background information on the project, see Bartodziej et al. 2017a.

## **Our general approach**

Our aim was to conduct strategic harvesting as a trial and then assess performance. In taking on this sort of management, we realized that aquatic plants lie at the center of shallow lake ecosystems, as they provide several ecosystem services such as habitat, food, cover and shading, temperature moderation, and nutrient uptake and sequestration (Carpenter and Lodge 1986). With this in mind, our overall approach to aquatic plant control was conservative. In June-August 2015, the RWMWD employed a private contractor to conduct aquatic plant harvesting. A paddlewheel driven harvester with a 2 m cutting swath was used on Kohlman Lake.

In developing a harvesting plan, the first question that naturally came to the forefront was: “To what degree can we manage aquatic plants without affecting water quality?” While this question was being asked for Kohlman Lake, it was soon clear that the lake management literature did not provide solid guidelines or limits on harvest. Thus, we used our best professional judgement to determine a target control area and frequency of harvest. We mapped out a 20 ha area in the center of the lake that we wanted to keep perpetually free of surfaced aquatic plants and algae during the growing season. This is approximately 55% of the total surface area of the lake. In harvesting this area, it provided a large open-water space for power boat recreation. On average, the harvester worked 2 to 3 days per week to keep this area open. We instructed the harvester to set the cutting blade to a 1 m maximum depth. This decreased the efficiency of the harvesting operation and was more costly, but safeguarded against overharvest. It was our goal to create a balance, being conservative in plant control and preserving water quality, but still providing an ample area for recreational opportunities.

### **Data collection and water quality model construction**

We used sonar, point-intercept surveys, and plant biomass sampling to closely monitor the aquatic plant community. GPS mapping was used to track the harvesting. Harvested plant material was hauled off site to a local public works yard for composting. The total wet weight of each harvesting effort was calculated using the total number of trailer loads and the average plant material payload weight. Random plant samples were taken off the trailer and sent to a laboratory for TP and wet to dry weight analyses.

We formulated a list of data necessary to quantitatively assess the effects of harvesting. This list included: (1) phosphorus in submerged plant tissue and in attached filamentous algae, (2) total biomass of plants and algae during the growing season, (3) water quality in Kohlman Lake and in the tributaries, (e.g., phosphorus, solids, chlorophyll *a*), (4) mass of plants harvested over time, and (5) mass of phosphorus harvested in plants. To glue these data together and understand the effect of harvesting, a custom zero-dimensional, completely mixed mass balance water quality model was built that include inflows (flow and chemistry), lake temperature, climate (e.g., solar radiation), settling, phytoplankton growth and mortality, and aquatic plant growth and mortality. This model was used to quantify the Kohlman Lake phosphorus mass balance including uptake by aquatic plants and removal by harvesting, aquatic plant growth rate and deduced effects of harvesting, and the overall effects of harvesting on phytoplankton growth and abundance.

### **Effects of harvesting: plant community and water quality**

The depth of cut and the extent of harvesting can be surmised from the sonar images in Figure 6 below. Open water areas provided boaters with water skiing opportunities, and observations suggested that recreation was not substantially impeded by aquatic plants. One of our goals of the harvesting was to avoid severely setting back the native plant community through overharvest. Our measurements of aquatic plant biomass and modeling simulation suggest that aquatic plant growth was not affected by the harvesting (Figure 7). It’s reasonable to consider that this result was due to the conservative approach of only cutting to a depth of 1 m.

The role of aquatic plants in moderating phosphorus availability and phytoplankton blooms is qualitatively understood but rarely quantified by most lake managers. It is largely recognized that any management activity that measurably affects aquatic plants also has the potential to affect phosphorus, triggering phytoplankton blooms, and affecting lake clarity. Water quality monitoring data suggest that the extent of harvesting did not impact water quality as total phosphorus remained within recently observed historic ranges during harvesting (Figure 8). There was a slight decrease in Secchi disk depth at the start of harvesting, however this corresponded with a large storm event delivering high flows and phosphorus. Modeling confirms that increases in phosphorus and reduced Secchi disk depth in July was a function of external loading. Furthermore, harvesting in August corresponded to a decline in phosphorus and Secchi disk depth which were a response to lowered external loads.

### **Plant mass and phosphorus removal through harvesting**

While substantial harvesting took place to preserve recreation, the mass of plants taken out of the lake was approximately 14% of the peak mass that would be present without harvesting. Modeling was necessary to generate an estimate of plant mass without harvesting, and to account for the macrophyte dynamics, which included both growth and mortality. As a result, phosphorus uptake by plants (138 kg) was more than may be estimated by stand-alone plant biomass and phosphorus measurements. Aquatic plants were capturing a significant fraction of the phosphorus delivered by tributaries to Kohlman Lake (Table 1). The dominant plant species were coontail (*Ceratophyllum demersum*), Canada elodea (*Elodea Canadensis*), and a mix of surfaced filamentous algae. Harvesting removed 24% of the TP captured by aquatic plants, and this accounted for 4% of the TP load from external sources.

Because harvesting removes a considerable amount of TP, the idea of incorporating this activity in TMDL studies as well as using submersed plants in water treatment systems has been discussed (Reisinger et al. 2008, Evans and Wilke 2010, Souza et al. 2013,). In addition, the cost of TP removal by aquatic plant harvesting is quite economical when compared to phosphorus management practices that take place in upland watershed areas, e.g., rain gardens (Bartodziej, et al. 2017b). The cost of TP removal was \$545 per kg in Kohlman, and this is comparable to estimates generated from another RWMWD harvesting study.

### **Can harvesting be a multi-faceted lake management tool?**

Overall, we are pleased with the results of the strategic harvesting approach used on Kohlman Lake. This shallow system was able to withstand a 14% (peak mass) harvest of aquatic plants while preserving water quality and improving recreation. Best professional judgement is always a component of lake and natural resources management, and this certainly came into play when setting a harvesting plan for Kohlman Lake. At the onset, we didn't have the luxury of citing a body of literature to support our plant management approach. However, having a robust historical dataset on Kohlman and collecting data while harvesting gave us the ability to make critical assessments during the control operation. As more strategic harvesting studies become available, robust datasets will help managers determine precise harvesting objectives and relate these to water quality and other natural resources goals.

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Data from this study suggests that harvesting certainly presents cost-effective opportunities for TP removal, and has the potential to factor into dynamic and creative watershed management approaches. For instance, the RWMWD Board of Managers, recently passed a resolution supporting a cost-share grant program for aquatic plant harvesting. Although the RWMWD as an organization does not manage aquatic plants, the Board may financially support and partner on harvesting efforts that fit into comprehensive TP reduction plans. This approach may gain some momentum as resource management organizations are increasingly challenged with excessive plant growth following intensive lake and watershed management, especially in shallow systems with urban watersheds.

This study points to strategic harvesting being an effective multi-faceted tool for lake and watershed managers. Although we currently don't have many data-rich, shallow lake harvesting studies to reference, we are making progress in better understanding shallow lake ecology and aquatic plant management. Consider 100 years ago, when the managers of the Phalen Chain of Lakes considered all aquatic plants "evil" that must be destroyed. We have certainly come a long way, and we look forward to the creative ways that strategic harvesting can contribute to water resources management in the future.

## Tables and Figures

Figure 1. A 1924 Ramsey County harvester working in surfaced vegetation on Keller Lake.



Figure 2. The Phalen Chain of Lakes.

Figure 3. The main components of strategic aquatic plant harvesting.

**Strategic Aquatic Plant Harvesting**

1. Use a judicious and conservative approach to set goals and limits on harvesting
2. When possible, secure data to support the overall harvesting operation
3. Collect data and closely monitor the harvesting activity and make necessary adjustments
4. Use the final dataset to assess if specific goals were achieved and to improve on future harvesting efforts
5. Incorporate harvesting into lake and watershed management plans when feasible

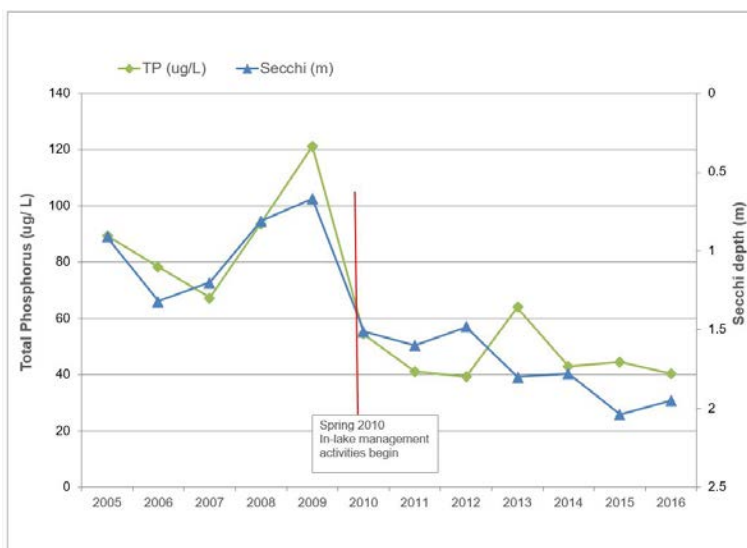
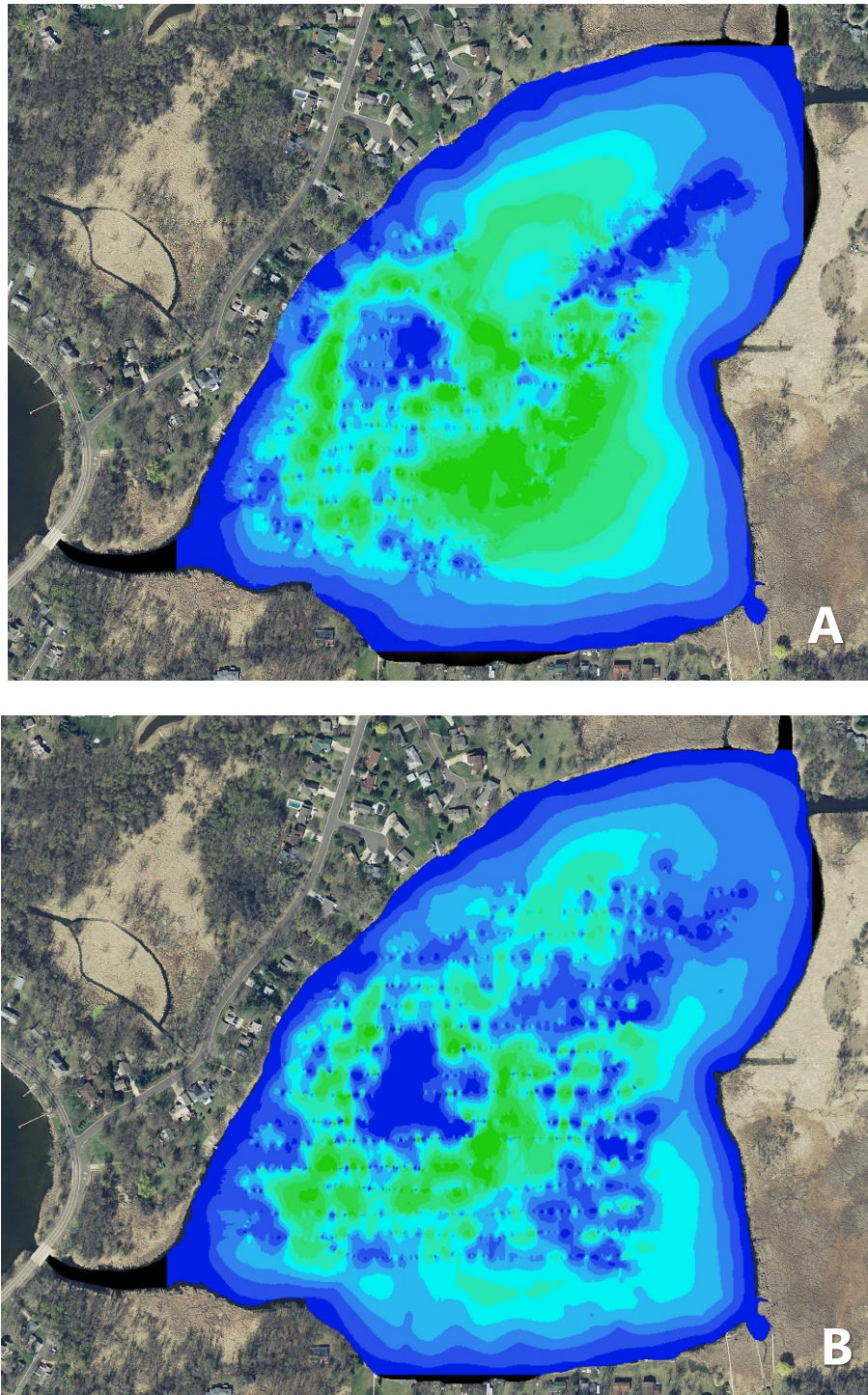


Figure 4. Lake Kohlman TP and Secchi depth before and after watershed and in-lake management activities.



Figure 5. Surfaced coontail and Canada elodea with mats of filamentous algae.



*Figure 6. Results of sonar surveys showing plant height prior to the start of harvesting on June 23<sup>rd</sup> (A) and after the completion of harvesting on August 27<sup>th</sup> (B). The blue colors represent gradations of plant height between 0 and 1.5 meters while the green colors are plant heights between 1.5 to 2.7 meters.*



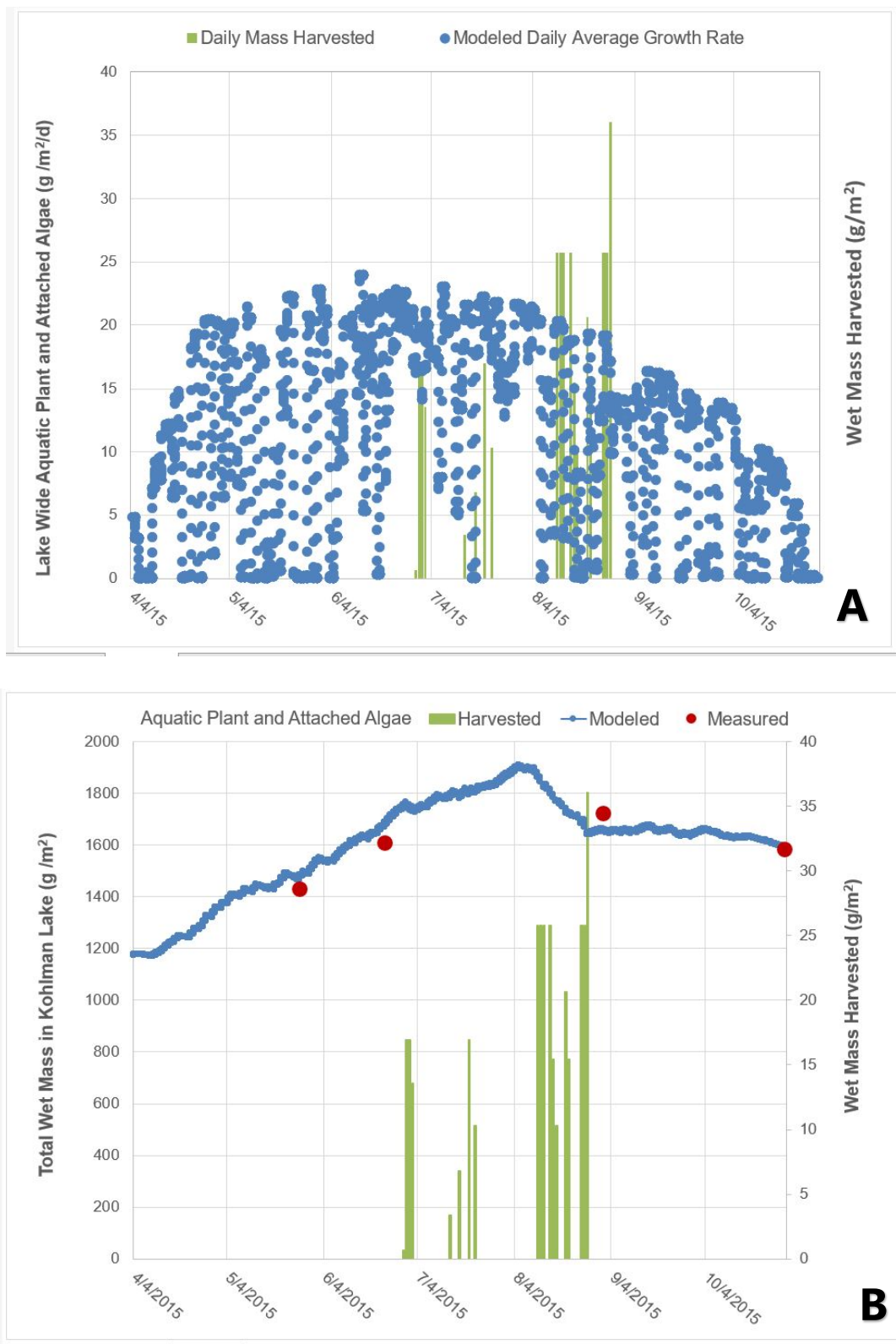


Figure 7. Modeled aquatic plant growth rate and aquatic plant mass harvested during the growing season (A), and a comparison of measured and modeled aquatic plant biomass (B).

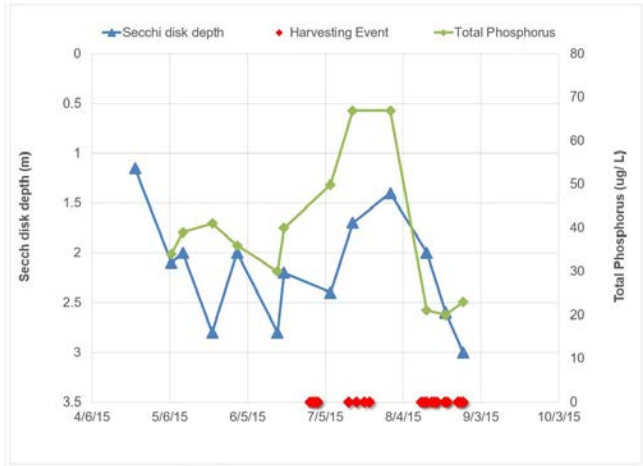


Figure 8. Secchi disk depth and total phosphorus in relation to harvesting events.

Table 1. Model estimates, total phosphorus (TP), and aquatic plant harvesting data generated from Kohlman Lake, April 15 to October 31, 2015.

Total Phosphorus and Aquatic Plant Data	Value
<b>Estimates based on Model Output</b>	
TP Total taken up by Plants (macrophytes plus attached filamentous algae)	138 kg
External TP Load from Primary Tributary	802 kg
Peak Wet Mass of Plants and Filamentous Algae - with no harvesting	2,014 g/m <sup>2</sup>
Lakewide Peak Wet Mass of Plants and Algae - with no harvesting	680,732 kg
<b>Harvesting Mass and TP in Plant Tissue</b>	
Total Wet Mass of Plants Harvested	95,254 kg
Total Dry Mass of Plants Harvested	9,144 kg
Total Mass of Plants Harvested - by unit area (wet)	282 g/m <sup>2</sup>
Peak Mass of Plants and Filamentous Algae (wet)	1,722 g/m <sup>2</sup>
Average TP in Plants (dry)	3.6 g/kg
TP in Plants Harvested	33 kg
<b>Percentages and Cost</b>	
Total Mass of Plants Harvested versus Peak Mass in the Lake	14%
TP in Plants Harvested versus TP Total taken up by Plants	24%
TP in Plants Harvested versus TP Load	4%
Total Cost of Harvesting	\$18,000
Cost of TP Removal via Harvesting	\$545/kg

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## Public Involvement and Education Program – Sage Passi

### 13 Classes/22 Master Gardeners, Stewards and Naturalists Start 2020 Cycle of Seed Starting



*Top left: Carol Mollner, Ramsey County Master Gardener (MG) stratified seeds with Farnsworth 3<sup>rd</sup> graders. Top right: Cees Duijndam (RCMG) and Farnsworth 3<sup>rd</sup> graders measured lengths of native plant roots using plant puppets. Bottom left: Mitch Thomsen, Mounds Park Academy high school science teacher shows off the large quantity and variety of native seeds collected by his ninth graders from the school's buffer restoration and rain garden areas. Bottom right. Preparing milkweed seeds is an airborne skill when separating the fluff from the seed!*

Thirteen classes stratified and scarified seeds in December at Mounds Park Academy, L'Etoile du Nord, Weaver, Farnsworth and St. Peter Schools to prepare them for growing indoors this winter. The seeds were mixed with vermiculite, a small amount of water or scarified and will be refrigerated until mid-February when they will be planted in trays of soil and tended by students until late spring. Some of these seedlings will be used for the Lawns to Legumes program, given away at WaterFest on May 30 or used for other watershed projects. Twenty Ramsey County Master Gardeners, a Master Water Steward and two Master Naturalists helped in this intensive endeavor! A puppet show, plant sketches and study about the native plants were added to the lessons. Native seeds for this activity were collected by Sage and Natural Resources staff at watershed areas and by Mounds Park Academy ninth graders at their site.

## Planning for Phalen Freeze Fest on February 29, 2020, is in Motion



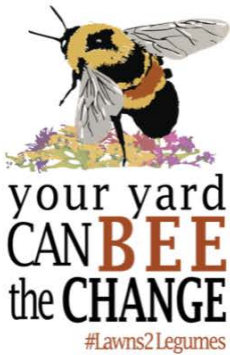
Sage met on December 20 at Lake Phalen with a group of event partners from St. Paul Parks and Recreation, Tips Outdoors, Urban Roots, Great River Passage, St. Paul Public Library, and the Minnesota DNR to begin plans for this winter celebration to be held at Lake Phalen on Saturday, February 29. Sage will recruit/coordinate Jr ROTC volunteers who will be invited to help with a variety of tasks including set-up, clean-up and other roles. Volunteers from RWMWD will be recruited to set up our watershed tent and banner to represent our watershed, provide outreach materials at the event and engage event participants and help at the info tables.

We will provide Smart Salting education and promote WaterFest at the event like in the past. Sage has begun communication with Betsy Christensen, the Statewide Health Improvement Partnership (SHIP) Grant Coordinator from the St. Paul Public Housing Agency to invite residents from several low-income family residential complexes in St. Paul and will be discussing providing transportation options to the event with her in early January. Publicity for the event is being developed by St. Paul Parks and Recreation. RWMWD will promote the event through our E-News, social media and school contacts. St. Paul Parks and Recreation is developing a PR plan and materials for the event.

**Grant Planning/Partnering for Lawns to Legumes Neighborhood Demonstration Projects is In Process with Maplewood Nature Center. Washington Conservation District also announced that they would be applying. RWMWD is also promoting the individual grant program.**

RWMWD staff, Bill Bartodziej, Sage Passi and Carrie Magnuson met with Maplewood Nature Center staff, Ann Hutchinson, Carole Gernes and Oakley Biesanz to discuss details for partnering on a demonstration grant proposal for the residential neighborhood surrounding the Maplewood Nature Center in Maplewood and in alignment with the city's green corridors. Washington Conservation District is also applying for a demonstration neighborhood grant with the intention of targeting the Lydia Alcove neighborhood in Woodbury and additional sweet spots in Washington County. The deadline is January 10 for the neighborhood demonstration grants proposals. The Lawns to Legumes program is providing a combination of workshops, coaching, planting guides and cost-share funding for installing pollinator-friendly native plantings in residential lawns. The program offers small grants of \$350 for residents. This first application period will run through February 28th. A second application period will open March 1st.

The program includes a public education campaign to raise awareness for pollinator habitat projects and will establish demonstration neighborhoods that showcase best practices. Funding is provided through the Environment and Natural Resources Trust Fund (ENRTF) and will be targeted in [priority areas](#) to benefit the Rusty Patch bumblebee and other at-risk species.



RWMWD has the possibility of providing cost-share match for the small grant Lawns-To-Legumes grantees by using funds from our Stewardship grant program or other in-kind resources such as technical design support and native plants grown in schools this winter and spring. Our educational program intends to work with Master Water Stewards/Master Naturalists and Ramsey and Washington County Master Gardeners to offer residential support in design and installation consultations. Sage is working on plans for targeted outreach in neighborhoods next to Lake Phalen, a targeted area near Casey Lake in North St. Paul, and to residents that expressed interest in partnering with us in a previous outreach campaign near Beaver Lake that was initiated by RWMWD and 'Etoile du Nord students in 2018. At that time we identified and met with over 15 homeowners and did site visits with people who expressed strong interest in implementing rain gardens and native plantings on their property. Ultimately, two curb cut rain gardens were installed in conjunction with Master Water Stewards' capstone projects, but there was strong interest in the neighborhood for doing more projects. We intend to return to these residents and offer them support via this program.

We are also open to partnering on this outreach/implementation with other cities in our watershed who want to promote and implement the individual grant projects either through the Lawns to Legumes Program or through our Stewardship grants or some combination. RWMWD will work with Blue Thumb and Washington Conservation District and in a partnership with Ramsey County Master Gardeners to offer Blue Thumb workshops in the spring to promote these kinds of projects.

Sage and Bill Bartodziej have begun discussing the idea of recruiting and engaging Bumblebee Watch volunteers in several of our large restoration projects including the Lake Phalen shoreline restoration and Keller Creek restoration to determine if there are any Rusty Patch bumble bees or other endangered bees present.

## **Solar Pontoon Boat Donated to RWMWD by Warner Nature Center**

In early December, RWMWD was contacted by Paul Smithson, the Interpretive Naturalist from Lee and Rose Warner Nature Center who expressed to us that they were interested in passing on their solar pontoon boat. For several years they brought their solar powered pontoon boat to WaterFest on Lake Phalen and they were inquiring as to our interest in "inheriting" it. They said that this fall they learned that their funders were going to close the nature center at the end of the year. They were working to close up the building and pass along their curriculum and equipment to other nature centers and organizations that work with people and the natural world. We are very saddened to see the loss of this valuable nature center that has been such an incredibly rich natural resource and institution in the community for over fifty years. The Science Museum of Minnesota and Manitou Fund worked together to operate the nature center. On September 5, 2019, the Science Museum and Manitou Fund announced the nature center would be closing, with operations winding down fully by December 31, 2019. Here is a link to an article written by Angie Hong for the White Bear Lake Press on the history and ecology of the site. [https://www.presspubs.com/white\\_bear/news/warner-nature-center-closing-offers-pristine-lakes-wildlife-corridors/article\\_c0decd8e-df07-11e9-8db8-3ff958647024.html](https://www.presspubs.com/white_bear/news/warner-nature-center-closing-offers-pristine-lakes-wildlife-corridors/article_c0decd8e-df07-11e9-8db8-3ff958647024.html)

We acknowledge our deep appreciation for the Nature Center's generosity in offering the pontoon to us. We have the boat in offsite storage now and will be working over the winter and early spring to develop plans for how we can use it for education and community building.

The "Water Strider" was the world's first solar power pontoon boat. It was built in 1999 by engineer Mert Lammi and WNC staff. The pontoon was used by staff as a research vessel so students could get out on the lakes and perform aquatic sampling. It was also used to teach about alternative energy and for quiet morning birding trips on the lake. Animals often swam quite near the boat which lacks the typical roar of engines. The pontoon features three solar panels, two electric motors, a deck hatch for aquatic sampling and seeing under the boat, mid deck light baffles and a highly modified open design to minimize wind resistance. The deck was replaced about 6 years ago and has aluminum railings around the entire edge. There are 15-20 aluminum chairs that lock onto the railing and fold up to save space.

Until it closed at the end of this month, the Lee and Rose Warner Nature Center was an outdoor education facility with a focus on natural history located in Marine on St. Croix, Minnesota, northern Washington County about 30 miles northeast of St. Paul, Minnesota. Warner was the first private nature center in the state of Minnesota. Their motto: *Building lasting relationships between people and the natural world.* We feel very fortunate to be gifted this vessel, yet we are saddened by their closing.

## **Meeting with Willow Pond homeowners to brainstorm ways to address water quality issues in their neighborhood and beyond**

Paige, Sage and Master Water Steward Linda Neilson met with four residents who live along Willow Pond to discuss ways to take action to improve the water quality of their pond, learn more about its issues and work with other residents in the neighborhood to address these problems and educate their community. Two of the residents, Phil Gelbach and Lee Bauer are Master Water Stewards will be developing their capstone by working off the momentum that has been building within this larger scale

**To:** Board of Managers and Staff  
**From:** Tina Carstens and Brad Lindaman  
**Subject:** Project and Program Status Report January 2020  
**Date:** January 3, 2020

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community activated group of residents who live along the pond who have been meeting for many years. We look forward to seeing what project and educational outcomes can emerge.

### **Tamarack Nature Preserve Boardwalk slated to be replaced in the summer of 2020**

We received news from the city of Woodbury that the city has authorized funds to replace the boardwalk through the preserve. In January 2020: Planning work will be led by Mike Adams, City of Woodbury Parks. Tamarack Nature Preserve group is invited to participate. Contractors under consideration include (<http://mnboardwalks.com> ; <https://www.wickcraftboardwalks.com>)The installation timeline: Summer 2020: Installation is estimated to take 2-4 weeks. In the fall 2020/spring 2021 the Wayfinding and Interpretive signage will be installed. RWMWD intends to be involved.