



SEPTEMBER						
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OCTOBER						
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RCWD BOARD OF MANAGERS WORKSHOP

Monday, September 11, 2017, 1:00 p.m.

Rice Creek Watershed District Conference Room
4325 Pheasant Ridge Drive NE, Suite 611, Blaine, Minnesota

Agenda

ITEMS FOR DISCUSSION (times are estimates only)

- 1:00 Follow-up Discussion on Upper Anoka County Ditch 10-22-32.
- 1:20 Update on Local Water Planning Review.
- 1:40 Discussion on Potential 2018 Clean Water Fund Grant Partnerships.
- 1:55 Update/Discussion on Hansen Park Project.
- 2:10 Discussion on Natural Channel Maintenance Policy/Tree Removal.
- 2:30 Discussion on ProCom Pay Request #1 for Carp Management Project.
- 2:45 Update on Wetland Conservation Act Special Considerations Administration.
- 3:00 Discussion on Delegated Permit Authority to the Administrator.
- 3:10 Discussion on MAWD Resolutions Packet.

1:00 Follow-up Discussion on Upper Anoka
County Ditch 10-22-32.



— ACD 10-22-32 Alignment

▭ RCWD Boundary

Public Water Extent Within the RCWD based on OHW

▭ PW2-529 - OHW 901.6'

▭ PW2-529 - OHW 902.4'

▭ PW2-536 - OHW 902.9'

DNR Public Waters Inventory Polygons

▨ PW2-529

▨ PW2-536

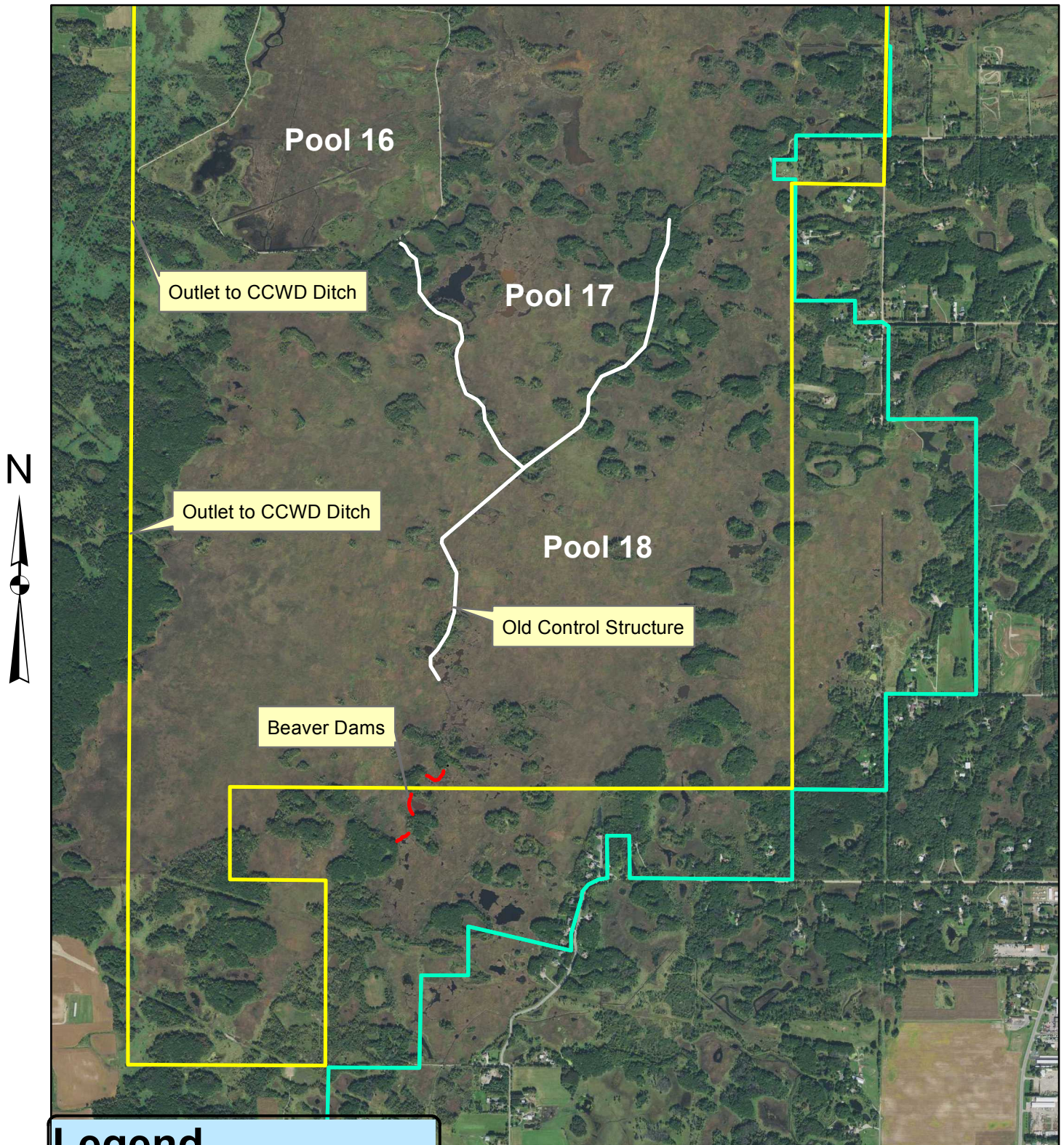
Elevation values are in feet (1988 NAVD)



Public Waters Extent as mapped by OHW

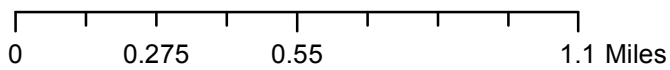
Scale: AS SHOWN	Drawn by: BRG	Checked by:	Project No.:	Date: 8/18/2017	Sheet:
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Carlos Avery State Wildlife Management Area Anoka County, MN



Legend

- Carlos Avery WMA Bdry.
- Rice Creek WD Bdry



1:20 Update on Local Water Planning
Review.

Update on Local Water Planning Review/Process



Photo Credit: Ed Nater

September 11, 2017
Board Workshop

Background

- **MN Rules 8410 & 103B.235**
- **Plan Review Timeline & Staff Role**
- **New Plan Amendment Timeline**
- **All 28 of our cities must update their Local Water Management Plans (LWMP) by December 31, 2018**
- **LWMPs will help Board select projects in upcoming Watershed Management Plan (WMP)**

RCWD Schedule for Cities

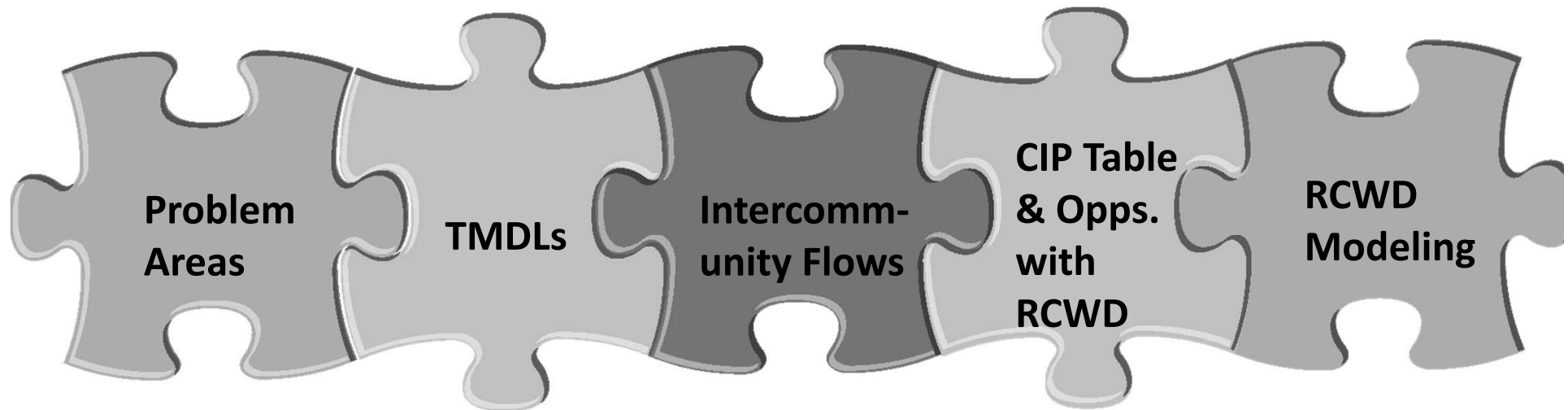
- Asked Cities to sign up for a staggered submittal deadline to give RCWD time to review all 28 plans:



*Plans will be presented to the Board as they are completed; not all at one time.

Requirements for Plans

- Some key areas staff look for in their review:



- RCWD Checklist-meant as an advisory document for use by cities.

*CIP Example That Fulfills Requirements

Project Description	MS4 Permit Requirement	Initial 12 Month Requirement	Annual Requirement	Projects, Programs, & Studies	10 Year Cost Estimate ¹	Possible Funding Sources ³	Proposed Cost By Year ^{1,2}										
							2014	2015	2016	2017	2018	2019	2020	2021	2022		
<u>Feasibility Study</u> - Evaluate localized drainage issues in Wildridge Court, Griffin Avenue between Juniper and Hanson, the Intersection of Hallam and Briarwood, rear yards along Bichner Lane, and the rear yards between Edith and Florence to assess possible improvement options.				✓	\$12,000	Local Water Management Fund		\$12,000									
<u>Water Level Management Plan</u> - Plan to address landlocked basins throughout the City. Pumping and outlet construction will be investigated as part of this management plan.				✓	\$10,000	Local Water Management Fund				\$10,000							
<u>Feasibility Study</u> - Evaluate the potential for constructing a stormwater reuse system in Wedgewood Park to irrigate the park with stormwater.				✓	\$11,000	Local Water Management Fund, RCWD, Grant Funding			\$11,000								
<u>Vegetation Management on South Long Lake</u> - Work with VBWD to develop a vegetation management plan for select water bodies throughout the City.				✓	\$5,000	Local Water Management Fund, VBWD					\$5,000						
<u>Mahtomedi Beach Outfall Sedimentation</u> - The City will provide maintenance on this area to ensure the outfall continues to function as intended. In addition, the City will investigate source of sediment and possible sump locations to help localize maintenance efforts.				✓	\$5,000	Local Water Management Fund	\$5,000										
<u>Maintenance of Tamarack Street Drainage Channel</u> - The city will complete a channel stabilization project to address erosion and downstream sedimentation concerns. In addition, the outlet from Hamline Lake will be analyzed to verify it is functioning properly.				✓	\$50,000	Local Water Management Fund, RCWD, Grant Funding		\$50,000									

*Full Example in Workshop Packet

What Have We Done for Cities Thus Far?

- Amended WMP to include additional RCWD requirements
- 3 City County Partner Meetings with Local Water Plan Discussion
- 2 Local Water Plan Workshops that Included discussion of requirements and RCWD Modeling
- Preliminary review of plans prior to formal agency review
- Individual meetings with 10 Cities

Highlights for Board Memo

- Existing and Potential Problem Areas
- CIP/Implementation Table
 - Do some of these projects address the regional existing/potential problems?
 - Are there collaboration opportunities with RCWD? Reuse?
- TMDLs & Strategies to Address TMDLs
- Volume Debits
- Intercommunity flows
- Ordinances consistent with RCWD Rules

Staff Recommendation

- **When plans are ready for Board consideration, present with a memo containing highlights of the plan with the following attachments:**
 - Executive Summary
 - CIP/Implementation Table
 - Problem Areas/Map (if available)
 - Resolution
- **Lauren will continue highlighting status in monthly Staff Report**



LOCAL WATER PLAN REVIEW CHECKLIST

(Created from Chapter 8, Section 8.3.1 of 2010 RCWD Watershed Management Plan (WMP) & references requirements listed in Minnesota Statute 103B.235 Subd. 2 & Minnesota Rule 8410.0160. Please note that this checklist is meant to be a tool & should not replace the requirements as listed in rule/statute or the District's WMP)

GENERAL STANDARDS AND STATUTE/RULE REQUIREMENTS

- ___ Provide an executive summary that includes the highlights of the local water plan.
- ___ Describe any water resource management related agreements that have been entered by your community. This includes joint powers agreements related to water management that the community may be a party to between itself and watershed management organization(s), adjoining communities, or private parties.
- ___ Include a section on amendment procedures that defines the process by which amendments may be made. The amendment procedure must be consistent with the amendment procedures in the watershed organization (s) plans that affect your community.
- ___ Describe the existing and proposed physical environment and land use.
- ___ Include land use and zoning maps for present and future conditions.
- ___ Include land cover classification map, such as MLCCS (Minnesota Land Cover Classification System).
- ___ Define drainage areas and the volumes, rates, and paths of stormwater runoff.
- ___ Include a map of the stormwater system that shows stormwater ponds, streams, lakes and wetlands, structural pollution devices (grit chambers, separators), pipes and pipe sizes, ditches, any other conveyances, outfalls/discharge points (note that these items can be included as separate figures).
- ___ Include inspection and maintenance system schedule of stormwater features (can include MS4 portion by reference).
- ___ Discuss or identify approaches, methods, means, procedures, ordinances, or plans being used to achieve compliance w/RCWD rules or reliance on RCWD for municipal review and compliance with stormwater management requirements.
- ___ Provide a specific statement that the community requests the RCWD to continue to implement its rules and regulations and issue permits within the community.
- ___ Describe methods that will be used to control and manage post-construction stormwater associated with development and re-development (can include MS4 SWPPP permit by reference).
- ___ Provide proof that the community discharge is equal to or less than the community rates established in the RCWD Modeling.
- ___ Acknowledge and identify locations where flows leave the community and are transferred downstream, with some assessment of the estimated rate assuming full build-out conditions, and describe measures being implemented to reduce flows if necessary. Identify whether these flows are



problematic to manage, generally describe one or more methods for managing these flows, and identify whether assistance from RCWD is needed.

___ Identify regulated areas such as Resource Management Plan (RMP) areas, Wetland Protection Zones, Ecological Management Corridor, High Quality Wetlands, MN County Biological Survey.

___ Set forth an implementation program, including a description of official controls and, as appropriate, a capital improvement program. Clearly define responsibilities of the local government unit (LGU) from that of RCWD for carrying out implementation components.

___ Include a table that briefly describes each component of the implementation program and clearly details the schedule, estimated cost, and funding sources for each component including annual budget totals.

___ Include an assessment of the existing water resource related problems in your community.

___ Include an assessment of the potential water resource related problems in your community.

___ Include a prioritized nonstructural, programmatic, and structural solutions to identified problems.

___ Include a list or map of impaired waters within your community as shown on the most current 303d impaired waters list.

OTHER WATERSHED REQUIREMENTS

(Please note these requirements are for RCWD. There may be other watershed organizations within your community with different requirements)

___ Identify land-locked sub-watershed units and basins and strategies to manage water volumes in land-locked areas to minimize flooding.

___ Identify impaired water bodies and establish policies and actions to address TMDL goals.

___ Identify Key Conservation Areas in your community and assess the adequacy of local policies and regulatory control in place to conserve hydrology and ecologic value of the resources in the area. The plan must set forth a strategy and schedule for the amendment of those policies and controls as necessary to meet performance standards established in plans.

___ Discuss geologic features, groundwater sensitivity, groundwater dependent natural resource, and groundwater discharge and recharge areas including the identification of potential land uses affecting groundwater.

___ Identify ideas and opportunities for projects and programs intended to improve resource management, which many be jointly implemented with the RCWD.

___ Describe the conformance of the municipality with NPDES requirements for MS4 permits, including TMDL and Non-degradation (if applicable) requirements. Must include the SWPPP or a summary of its content and incorporate the plan by reference.

___ Identify erosion and sediment ordinances for sites less than 1 acre in size.



___ Describe housekeeping requirements such as street sweeping, snow plowing, salt and snow storage, and public land maintenance. (Can use MS4 by reference).

___ Describe the Best Management Practices employed by the City/Town that reduce or control pollutants. (Can use MS4 by reference).

___ Demonstrate a public information and education plan related to managing sediment and erosion control, runoff and water quality. (Can use MS4 by reference).

___ Include a groundwater protection component consistent with the county groundwater management plan. (At this time, relevant to Washington County only. Ramsey County does not have an approved groundwater management plan).

___ Discuss conflict between infiltration requirements and wellhead protection.

___ Adopt & include copies of MnDNR approved Floodplain & Shoreland when mandated by state law.

___ Include a discussion on stormwater reuse opportunities.

___ Utilize RCWD resources to identify and describe problem areas, such as floodplain increases or stormwater capacity limitations.

___ Identify and acknowledge future changes in peak elevation at critical road crossings for critical structure maximum water elevations, modeling shows potential for overtopping. (see HEI, 2016 Appendix A, Figure 15). Describe management needs and strategies, and identify necessary RCWD management assistance.

___ Identify and acknowledge the impacts of future land use changes on peak water elevation at storage areas near current flooding problem areas (see HEI, 2016 Figures 12-14, Table 13). Describe management needs and strategies, and identify necessary RCWD management assistance.

___ Identify and acknowledge changes in floodplain elevation and regulatory floodplain boundaries (see HEI, 2016 Figure 20). Describe management needs and strategies, and identify necessary RCWD management assistance.

___ Identify the amount, if any, of remaining volume control debit previously incurred through the regulatory program, and describe previous and future activities to ensure reasonable progress toward eliminating the volume control debit within the next plan cycle.

LEVEL 2 CITIES

(In addition to the requirements above, cities wishing to adopt official controls to pursue permitting authority must include the additional information and detail below, see WMP 8.3.1)

___ The local plan must include information on existing and proposed stormwater rates and volumes based on full build-out taking into account implementation of the local regulatory control. The information should be related to those volume and rate control locations within the District and include analyses on Regional Assessment Locations.



___ Identify the methods and means to achieve Rule C, Part 5, *Water Quality and Volume Control* of the RCWD rules.

___ Identify areas and elevations for stormwater storage adequate to meet Rule C, Part 6, *Peak Stormwater Runoff Control* and RCWD Rules.

___ Include specific local ordinances and demonstrate that they're in compliance with RCWD rules or include at a minimum that the City adopts RCWD rules and regulation by reference. (see Ch. 8.3.2)

___ Acknowledge and identify those locations where flows leave the City and are transferred downstream, with an assessment of how the rules applied by the City under current full build-out conditions to reduce flows if necessary. Identify whether these flows are problematic to manage, generally describe one or more methods for managing these flows, and identify whether assistance from the RCWD is needed.

SUBMITTALS

___ Met Council (45-day review period)

___ Watershed Districts (60-day review period, incorporates comments of Met Council)

___ Washington County (45-day review period)

Please contact Lauren Sampedro at 763-398-3078 or at lsampedro@ricecreek.org for any questions, or to set up a pre-submittal meeting to discuss the plan requirements and any known problem areas within your community. To aid in a timely review, the District asks that you complete this checklist prior to submitting your local plan.

Meant as a possible example of what a CIP table could look like.

SECTION VI

TABLE 6.1																		
LOCAL WATER MANAGEMENT IMPLEMENTATION PLAN																		
No.	Project Description	MS4 Permit Requirement	Initial 12 Month Requirement	Annual Requirement	Projects, Programs, & Studies	10 Year Cost Estimate ¹	Possible Funding Sources ³	Proposed Cost By Year ^{1,2}									Comments	
								2014	2015	2016	2017	2018	2019	2020	2021	2022		2023
1-A	<u>Education Activity Implementation Plan</u> - Complete outline of education activity implementation program and implementation schedule for the upcoming permit year by June 30th. Include procedures to meet requirements for the following stormwater educational programs: -Printed Brochures at City Hall -Green Talk Newsletter (quarterly) -Environmental Webpage -Support Wash County CD, RCWD, and VBWD education and public engagement programs (see SWPPP) -Other	✓	✓	✓		\$30,000	Local Water Management Fund	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	See SWPPP Application for Reauthorization (Appendix B)
1-B	<u>Annual SWPPP Assessment & Annual Reporting</u> City staff will conduct an annual SWPPP assessment in preparation of each annual report. Proposed SWPPP modifications are subject to Part II.G of the MS4 permit. The final annual report will be posted on the Water Resources webpage. City staff will submit the annual report to the MPCA prior to June 30th for the previous calendar year.	✓		✓		\$20,000	Local Water Management Fund	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	See SWPPP Application for Reauthorization (Appendix B)
2-A	<u>Annual Public Meeting/Event</u> Present the draft MS4 annual report to one public event per year to solicit public input regarding the adequacy of the City's SWPPP. Public input received (oral and written) will be recorded in a record of decision and evaluated by the City's MS4 General Contact. City responses (if relevant) will be made in writing to each commenter. Hold one event per calendar year of the MS4 permit cycle.	✓		✓		\$10,000	Local Water Management Fund	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	See SWPPP Application for Reauthorization (Appendix B)
2-B	<u>Online Availability of the Stormwater Pollution Prevention Plan (SWPPP) Program Document</u> - The City will make the SWPPP and 2013 annual report available on the Water Resources webpage within 12 months from the date the MS4 permit coverage is extended to the City.	✓	✓	✓		\$5,000	Local Water Management Fund	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	See SWPPP Application for Reauthorization (Appendix B)
3-A	<u>IDDE Inspections</u> - The City will continue to annually conduct IDDE inspections concurrently with stormsewer outfall, and ponds inspections per the IDDE inspection program.	✓	✓	✓		\$30,000	Local Water Management Fund	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	See SWPPP Application for Reauthorization (Appendix B)

Meant as a possible example of what a CIP table could look like.

SECTION VI

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								2014	2015	2016	2017	2018	2019	2020	2021	2022		2023
3-B	<u>Employee Training</u> - Continue to host a minimum of one staff training event per year to discuss illicit discharge recognition and reporting. City staff will develop an annual training schedule, record the employee names, topics covered, and date of each event, annually through the end of the MS4 permit cycle (July 31, 2018)	✓	✓	✓		\$5,000	Local Water Management Fund	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	See SWPPP Application for Reauthorization (Appendix B)
3-C	<u>Sanitary Sewer/Stormsewer Televis</u> e - The City will continue to inspect 25 percent of all stormwater structures annually.	✓		✓		\$50,000	Local Water Management Fund	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	See SWPPP Application for Reauthorization (Appendix B)
3-D	<u>IDDE Priority Inspection Map</u> - Develop IDDE inspection map in 2014. Utilize map for inspections within 12 months from the date MS4 permit coverage is extended.	✓	✓			\$2,000	Local Water Management Fund	\$2,000										See SWPPP Application for Reauthorization (Appendix B)
3-E	<u>Public Works & Environmental Webpage updates</u> - The City will update the Environmental webpage of the City Website to include city contact information for construction site non-compliance. The update will also include construction site erosion and sediment control related public education information. This update will occur within 12 months from the date MS4 permit coverage is extended.	✓	✓	✓		\$2,500	Local Water Management Fund	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	See SWPPP Application for Reauthorization (Appendix B)
4-A	<u>City Erosion Control Permit</u> - Continue to implement as defined by City Code Chapter 15.08 Storm Water Management throught the MS4 Permit cycle.	✓		✓		\$75,000	Local Water Management Fund, Developer's Agreement	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	See SWPPP Application for Reauthorization (Appendix B)
4-B	<u>Employee Training</u> - Building or Engineering Department staff (a minimum of one staff member) will maintain valid certification in NPDES Construction Stormwater Permit related training per NPDES-CSW training requirements.	✓		✓		\$1,500	Local Water Management Fund	\$300		\$300		\$300		\$300		\$300		See SWPPP Application for Reauthorization (Appendix B)
4-C	<u>Review Building Dept. Inspection Checklist</u> - The City will update the existing Erosion and sediment control checklist to meet current NPDES Construction Stormwater Permit requirements. This update will occure in 2014 and be implemented within 12 months from the date MS4 permit coverage is extended.	✓	✓	✓		\$2,000	Local Water Management Fund	\$2,000										See SWPPP Application for Reauthorization (Appendix B)
4-D	<u>Develop Priority Site Inspection Procedures</u> - Develop internal procedures for identifying priority sites for inspections in 2014.	✓	✓	✓		\$2,500	Local Water Management Fund	\$2,500										See SWPPP Application for Reauthorization (Appendix B)

Meant as a possible example of what a CIP table could look like.

SECTION VI

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								2014	2015	2016	2017	2018	2019	2020	2021	2022		2023
5-A	<u>City Stormwater Management Permits</u> - The City will continue to review land disturbance activities and collaborate with the Rice Creek Watershed District and the Valley Branch Watershed District who review and issue stormwater permits within the applicable watershed boundary through the end of the MS4 permit cycle.	✓		✓		\$75,000	Developer's Agreement	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	\$7,500	See SWPPP Application for Reauthorization (Appendix B)
5-B	<u>Updated City Ordinance Chapter 15.08 Storm Water Management</u> - City code Chapter 15.08 will be revised to include MS4 regulatory standards. The final ordinance language will be formally adopted and implemented within 12 months from the date MS4 permit coverage is extended to the City.	✓	✓	✓		\$4,000	Local Water Management Fund	\$4,000										See SWPPP Application for Reauthorization (Appendix B)
6-A	<u>Street Sweeping</u> - The City will continue to conduct street sweeping operations of all public streets a minimum of twice annually (record the sweeping route and date per occurrence). Review and revise (as needed) street sweeping operations (including schedule, equipments, and disposal), stormwater quality priority areas, and routes annually through the end of the MS4 permit cycle (July 31, 2018).	✓		✓		\$450,000	Local Water Management Fund	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	See SWPPP Application for Reauthorization (Appendix B)
6-B	<u>Structural Stormwater BMP Inspections</u> - Continue to inspect 100% of all SPCD's each year of the MS4 permit cycle (July 31, 2018)	✓	✓	✓		\$25,000	Local Water Management Fund	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	See SWPPP Application for Reauthorization (Appendix B)
6-C	<u>Inspect MS4 Outfalls and Ponds</u> - Continue to inspect 20% of all MS4 outfalls each year, until 100% of all MS4 Outfalls and Ponds have been inspected within the MS4 permit cycle (until July 31, 2018)	✓				\$30,000	Local Water Management Fund	\$15,000				\$15,000						See SWPPP Application for Reauthorization (Appendix B)
6-D	<u>Review Inspection Reports</u> - Annually, review all pond, outfall, and SPCD inspection records to determine if maintenance, repair, or replacement is needed. Include a description of the findings and any maintenance, repair, or replacement as a result of the inspection findings. Evaluate each SPCD's inspection frequency and adjust as needed per MS4 Permit Part III.D.6.e(1.). Evaluate and update inspection records annually through the end of the MS4 permit cycle (July 31, 2018)	✓	✓	✓		\$20,000	Local Water Management Fund	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	See SWPPP Application for Reauthorization (Appendix B)

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								2014	2015	2016	2017	2018	2019	2020	2021	2022		2023
6-E	<u>Employee Training</u> - Continue to host a minimum of one staff training event per year to discuss stormwater related topics. City staff will develop an annual training schedule, record the employee names, topics covered, and date of each event, annually through the end of the MS4 permit cycle (July 31, 2018).	✓	✓	✓		\$10,000	Local Water Management Fund	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	See SWPPP Application for Reauthorization (Appendix B)
6-F	<u>Anti-Icing Program</u> - The Public Works department has reduced the City-wide road salt application by half, and eliminated all sand use. The City will continue to annually evaluate and implement this program throughout the MS4 permit cycle.	✓		✓		\$5,000	Local Water Management Fund	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	See SWPPP Application for Reauthorization (Appendix B)
6-G	<u>Pond Sediment Excavation and Removal Projects</u> - The City will develop a reporting component for pond sediment removal projects within 12 months from the date MS4 permit coverage is extended to the City. Reporting will consist of documenting the date, pond ID, project limits/construction plans, volume of sediment removed, test results (if any), and disposal location. Begin reporting in 2015.	✓	✓			\$7,500	Local Water Management Fund	\$7,500										See SWPPP Application for Reauthorization (Appendix B)
6-H	<u>Stockpiles, Storage and Material Handling Area Inspections</u> - Conduct quarterly written inspections of all stockpile, storage and material handling areas (per the 2014 facility inventory), through the end of the MS4 permit cycle (July 31, 2018).	✓	✓	✓		\$10,000	Local Water Management Fund	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	See SWPPP Application for Reauthorization (Appendix B)
6-I	<u>Update Public Works MS4 Program</u> - Update existing BMPs to coincide with new/revised MS4 permit requirements (refer to question #9).	✓	✓	✓		\$10,000	Local Water Management Fund	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	See SWPPP Application for Reauthorization (Appendix B)
	<u>Stormwater Improvement Projects</u> - Includes storm sewer and stormwater improvements constructed in conjunction with City Reconstruction Projects, Historic District Improvements, and other roadway/redevelopment projects.				✓	\$2,500,000	Local Water Management Fund, Special Assessments, Grant Funding	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	See Historic District Study and City's Capital Improvement Plan for more information.
	<u>Feasibility Study</u> - Evaluate the stormwater issues in the Lost Lake subwatershed and identify improvement options to improve stormwater management and ultimately water quality in Lost Lake.				✓	\$8,000	Local Water Management Fund, Grant Funding			\$8,000								4.1.B
	<u>Katerine Abbot Park Pond Maintenance</u> - Project to remove accumulated sediment. Additional investigation to identify if pond improvements could be completed in conjunction with maintenance efforts to improve water quality, aesthetics, and treatment.				✓	\$20,000	Local Water Management Fund, VBWD, Grant Funding		\$20,000									4.1.C

Meant as a possible example of what a CIP table could look like.

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								2014	2015	2016	2017	2018	2019	2020		2021	2022	2023
	<u>Feasibility Study</u> - Evaluate enhanced treatment efficiency of the pond/wetland located northeast of Lost Lake using flocculation or iron enhancement techniques coupled with off peak pumping and treatment.				✓	\$12,000	Local Water Management Fund, Grant Funding					\$12,000						4.1.D
	<u>Feasibility Study</u> - Evaluate an active infiltration/irrigation BMP in Wildwood Park.				✓	\$9,000	Local Water Management Fund, Grant Funding	\$9,000										4.1.D
	<u>Feasibility Study</u> - Where possible install water quality manholes in ROW at downstream end prior to outlet into White Bear Lake.				✓	\$100,000	Local Water Management Fund	\$20,000		\$20,000		\$20,000		\$20,000		\$20,000		4.1.D (For incorporation into street projects where feasible)
	<u>Feasibility Study</u> - Evaluate localized drainage issues in Wildridge Court, Griffin Avenue between Juniper and Hanson, the Intersection of Hallam and Briarwood, rear yards along Bichner Lane, and the rear yards between Edith and Florence to assess possible improvement options.				✓	\$12,000	Local Water Management Fund		\$12,000									4.2.A
	<u>Water Level Management Plan</u> - Plan to address landlocked basins throughout the City. Pumping and outlet construction will be investigated as part of this management plan.				✓	\$10,000	Local Water Management Fund				\$10,000							4.2.B
	<u>Feasibility Study</u> - Evaluate the potential for constructing a stormwater reuse system in Wedgewood Park to irrigate the park with stormwater.				✓	\$11,000	Local Water Management Fund, RCWD, Grant Funding			\$11,000								4.3.A
	<u>Vegetation Management on South Long Lake</u> - Work with VBWD to develop a vegetation management plan for select water bodies throughout the City.				✓	\$5,000	Local Water Management Fund, VBWD					\$5,000						4.4.A
	<u>Mahtomedi Beach Outfall Sedimentation</u> - The City will provide maintenance on this area to ensure the outfall continues to function as intended. In addition, the City will investigate source of sediment and possible sump locations to help localize maintenance efforts.				✓	\$5,000	Local Water Management Fund	\$5,000										4.6.A
	<u>Maintenance of Tamarack Street Drainage Channel</u> - The city will complete a channel stabilization project to address erosion and downstream sedimentation concerns. In addition, the outlet from Hamline Lake will be analyzed to verify it is functioning properly.				✓	\$50,000	Local Water Management Fund, RCWD, Grant Funding		\$50,000									4.6.B
	<u>Update Pond Maintenance Inspection Program</u> - The City will need to modify its current pond program to allow for an updated prioritization of pond inspection and maintenance activities. Also, the program will estimate the current treatment provided by each basin to determine if the desired amount of treatment is being achieved.				✓	\$17,600	Local Water Management Fund	\$12,000	\$1,400	\$1,400	\$1,400	\$1,400						4.9.B

Meant as a possible example of what a CIP table could look like.

SECTION VI

No.	Project Description	MS4 Permit Requirement	Initial 12 Month Requirement	Annual Requirement	Projects, Programs, & Studies	10 Year Cost Estimate ¹	Possible Funding Sources ³	Proposed Cost By Year ^{1,2}									Comments	
								2014	2015	2016	2017	2018	2019	2020	2021	2022		2023
	Complete City-wide MnRAM (Minnesota Routine Assessment Method) - Assessment to determine the functions and values of each wetland. Until completed the City will need to complete a site by site MnRAM assessment.				✓	\$25,000	Local Water Management Fund						\$25,000					4.10.B
	Update Floodplain Ordinance - The City will update its floodplain ordinance to meet the requirements of the VBWD and RCWD				✓	\$2,000	Local Water Management Fund	\$2,000										4.5.B
	Update Storm Sewer GIS Database - As development occurs the City will incorporate all associated storm sewer improvements into its GIS Database.				✓	\$50,000	Local Water Management Fund	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	4.10.C
	TOTAL					\$3,718,600		\$419,550	\$421,650	\$378,950	\$349,650	\$376,950	\$378,250	\$358,550	\$338,250	\$358,550	\$338,250	

¹ Cost estimates are preliminary and subject to review and revision as engineer's reports are completed and more information becomes available. Table reflects 2014 costs and do not account for inflation. Costs generally include labor, equipment, materials, and all other costs necessary to complete each activity. For City completed activities, staff time is included in the cost. Some of the costs outlined above may be included in other operational costs budgeted by the City.

² 10 Year cost projections are based upon 2 MS4 Permit Cycles with year 1 program updates occurring again in 2019

³ Funding for stormwater program activities projected to come from following sources - Surface Water Management Fund, Developers Agreements, Grant Funds, General Operating Fund, or Special Assessments

1:40 Discussion on Potential 2018 Clean
Water Fund Grant Partnerships.



Projects and Practices Application

Grant Name - Forest Lake Enhanced Street Sweeping Implementation

Grant ID - C18-5904

Organization - Forest Lake, City of

Allocation	Projects and Practices 2018	Grant Contact	Dave Adams
Total Grant Amount Requested	\$220,000.00	County(s)	Washington
Grant Match Amount	\$55,000	12 Digit HUC(s)	070102060301 ,070102060302 ,070300050401 ,070300050402 ,070300050403 ,070300050404 ,070300050906
Required Match %	25%	Applicant Organization	Forest Lake, City of
Calculated Match %	25%	Application Submitted Date	8/9/2017
Other Amount			
Project Abstract	<p>This project will support implementation of the draft Forest Lake Enhanced Street Sweeping Plan developed by the CLFLWD for the City of Forest Lake through funding from the FY16 CWF Accelerated Implementation Grant Program. The draft Plan identified road-specific street sweeping timing and frequency, quantified expected phosphorus load reductions, itemized costs of enhanced street sweeping (including purchase and subcontract options), and recommended funding options (including utilization of the CLFLWD Municipal Cost Share Program) to the City of Forest Lake. Key findings from the draft Plan indicate that bimonthly regenerative air sweeping in the City of Forest Lake has the potential to reduce loading to Forest, Clear, Comfort, Shields, and Sylvan Lakes by an additional 136.9 lb/yr TP and 169,793 lb/yr TS compared to the existing contract sweeping. Based on the findings from the draft Plan, the City of Forest Lake is pursuing purchase of a regenerative air street sweeper so that an Enhanced Street Sweeping program can be adopted as part of the City's regular street maintenance program. The</p>		

	City of Forest Lake will commit to implement enhanced street sweeping for at least 10 years with the purchase of a regenerative air street sweeper. The City will also implement targeted street sweeping and increase sweeping frequency throughout the City, improving phosphorus removal efficiencies to lakes in both the Rice Creek Watershed District and the Comfort Lake-Forest Lake Watershed District.
Proposed Measurable Outcomes	The City sweeps 240 curb miles twice annually. Purchase of a new sweeper supports an in-house program of 2 sweeps monthly, which could remove an additional 96 lb-P/yr to Forest Lake, 18 lb-P/yr to Comfort Lake, and 18 lb-P/yr to Clear Lake.

Narrative

Questions & Answers	
Does your organization have any active CWF grants? If so, specify FY and percentage spent. Also, explain your organization's capacity (including available FTEs or contracted resources) to effectively implement additional Clean Water Fund grant dollars.	The City of Forest Lake is currently administering the Forest Lake High School Stormwater Reuse Project (C17-7163) FY 2017. As of the date of this application, no reimbursement has been made. However, the City is a financial partner only. City staff are not being used for the design or construction administration of the project. Further, this grant does not include engineering analysis, design or construction. City staff will be dedicated to operating and maintaining the regenerative street sweeper purchased through this grant.
Water Resource: Identify the water resource the application is targeting for water quality protection or restoration.	Shields Lake, Forest Lake, Comfort Lake, Sylvan Lake, Sunrise River (CLFLWD) and Clear Lake (RCWD) all receive surface water from City streets. Some streets discharge untreated directly into the receiving waters and others enter the City's stormwater management systems prior to discharge. Along Forest Lake, approximately 46 curb-miles of drain directly into the lake. Sweeping is currently the only BMP to reduce pollutant loading. Similar can be said for streets adjacent to Clear and Shields Lake. All three lakes have comprehensive diagnostics studies that identify total phosphorus (TP) and total solids (TS) as pollutants of concerns and define discharge limits to ensure that beneficial uses are maintained. Shields Lake is impaired for excess nutrients. Forest and Clear Lakes are approaching their pollutant standards, but are not yet impaired. Both lakes reside in the headwaters of their respective watersheds and improvements to the lakes will be far reaching in terms of improving downstream water quality. Reducing pollutant discharge to the City's stormwater management infrastructure will extend the treatment capacity, increase BMP efficiency, and compound treatment effectiveness into the Lakes. An in-house street sweeping program with a targeted and prioritized approach will help the City allocate stormwater management funds to new water quality improvement projects.

Questions & Answers

Overall Project Description 1. (5 points) : A) What nonpoint pollution concerns will be the focus of this application and how do you intend to address those concerns? B) Describe how the resource of concern aligns with at least one of the statewide priorities referenced in the “Projects and Practices” section of the RFP. C) Describe the public benefits resulting from this proposal from both a local and state perspective.

This project will implement the draft Forest Lake Enhanced Street Sweeping Management Plan. Increased street sweeping frequency has been identified as a cost-effective urban BMP for the direct drainage area of Forest Lake. Research suggests that the extent of tree canopy cover, street connectivity to downstream water resources, and sweeping frequency strongly influence the cost-effectiveness of this practice. The draft Plan identified road-specific sweeping timing and frequency, quantified expected solids and phosphorus load reductions and itemized the cost/benefit of enhanced street sweeping. The City understands the benefits of modifying the existing street sweeping program by increasing sweeping frequency and purchasing a regenerative air vacuum sweeper. Further, the City understands that an adaptive plan defining the optimal timing and frequency of sweeps and the additional staff required to implement the program is necessary. The receiving waters all collect stormwater discharge, either directly or indirectly through the storm sewer, from the City’s streets. Shields Lake and Comfort Lake are impaired for excess nutrients and the Forest Lake and Clear Lake Diagnostics Studies indicate that nutrients and solids are a significant concern. Forest Lake and Clear Lake are at high risk of becoming impaired without significant reductions in pollutant loading. The CLFLWD, RCWD, City of Forest Lake, and Lake Associations are committed to establishing effective partnerships and implementing water quality practices that will make the most substantial impact to pollutant reductions. The proposed project goes above and beyond existing CLFLWD and RCWD operations by defining street sweeping activities eligible for Municipal Cost Share funds and above and beyond existing City operations by increasing the frequency and type of street sweeping utilized.

Relationship to Plan: 2a. (15 points) Describe why the water resource was identified in the plan as a priority resource. For the proposed project, identify the specific water management plan reference by plan organization plan title, section, and page number. In addition to the plan citation, provide a brief narrative description that explains whether this application fully or partially accomplishes the referenced activity.

RCWD and CLFLWD have developed stormwater rules that include non-degradation policies for water quality and volume control. An enhanced street sweeping program will reduce pollutant loading rates and reserve capacity in the City’s stormwater system. The Forest Lake Enhanced Street Sweeping Management Plan Key Preliminary Findings summarizes the background and research used to quantify the measurable pollutant reductions for multiple sweeping schedules and sweeper types. The Preliminary Findings were the foundation for this application and will lead to the final Enhanced Street Sweeping Management Plan. CLFLWD and City staff met to discuss the preliminary findings and the City agrees with the preliminary study outcomes. The Clear Lake Diagnostics Study and Management Plan identified specific pollutant reduction goals to reduce and eliminate further degradation. Increased frequency and extent of street sweeping is identified as a high priority BMP in the Study. Page 5-

Questions & Answers

15 identifies the anticipated load reduction and operation costs of an enhanced street sweeping program in the Clear Lake watershed.

The Forest Lake Diagnostic Study and the Forest Lake North Shore Subwatershed Assessment identified enhanced street sweeping as the most cost effective BMP in the direct drainage area of Forest Lake.

The 2010 Six Lakes TMDL Study identifies Shields Lake and Comfort Lake as impaired for excess nutrients. An adaptive street sweeping program in the Forest Lake and Shields Lake subwatersheds will reduce the phosphorus loading that otherwise discharges directly into those lakes untreated, and subsequently flow downstream to Comfort Lake.

2013 Stormwater Watershed Management Plan, Forest Lake, adopted September, 2013, Implementation, Section 6, Pages 6.61

2010 Watershed Management Plan, RCWD, adopted January 4, 2010

2008 Watershed Management Plan, CLFLWD, adopted 2008, Amendments 2011 and 2015, Section 5228B Forest Lake Diagnostic Study Implementation (page 50)

Relationship to Plan: 2b. Provide web links to all referenced plans.

2013 Forest Lake Surface Water Management Plan - <http://www.ci.forest-lake.mn.us/DocumentCenter/View/714>

Clear Lake Diagnostics Study - http://www.ricecreek.org/vertical/Sites/%7BF68A5205-A996-4208-96B5-2C7263C03AA9%7D/uploads/Clear_Lake_Diagnostic_Study_Report_final_draft_v5.pdf

Forest Lake Diagnostics Study - http://www.clflwd.org/Forest_Lake_Diagnostic_Study.php

Forest Lake North Shore Subwatershed Assessment - http://www.clflwd.org/documents/FORESTLAKENORTH-SWAREPORT_final.pdf

Forest Lake Enhanced Street Sweeping Management Plan Key Preliminary Findings -

<http://www.clflwd.org/documents/Agendaitem7c-ForestLakeStreetSweepingManagementPlanFindings.pdf>

Rice Creek Watershed District Watershed Management Plan - http://www.ricecreek.org/vertical/Sites/%7BF68A5205-A996-4208-96B5-2C7263C03AA9%7D/uploads/2010_WMP_2016_amendments.pdf

Comfort Lake Forest Lake Watershed District Watershed Management Plan -

http://www.clflwd.org/documents/CLFLWDWMPRevisionJuly2008_000.pdf

Targeting Procedure: 3. (15 points) Describe the methods used to identify, inventory, and target the most critical pollution sources or threats (root cause) and describe any additional efforts that will be completed prior to installing the projects or practices identified in this proposal.

The City, RCWD and CLFLWD teamed to apply for and secure funding through the Accelerated Implementation Program to develop the Forest Lake Enhanced Street Sweeping Plan. The Plan is currently in draft format and a Preliminary Findings memo is available. The City currently contract sweeps twice per year. The Street Sweeping Planning Calculator developed by the University of Minnesota was used to calculate the current pollutant reduction from sweeping and determine the increase in removals based on a number of sweeping frequencies. The draft Plan developed an enhanced street sweeping strategy for the City that optimizes phosphorus removal from increasing sweeping frequency with the cost of additional sweeps. The draft Plan also identified road-specific street sweeping timing and frequency; quantified expected phosphorus load reductions; and

Questions & Answers

itemized costs of enhanced street sweeping (including purchase and subcontract options).

The draft Enhanced Street Sweeping Plan resulted in two primary findings. A regenerative air sweeper will increase total phosphorus removal from 45.4 lb-P/yr (current contract sweeping, twice per year) to 126.9 lb-P/yr (regenerative air sweeper, twice per month). The draft Plan assessed tree canopy influence to provide individual sweeping plans for target subwatersheds throughout the City. Sweeping is most cost effective when solids (and therefore nutrient) loading is greatest. Since loading varies throughout the sweeping months, the draft Plan identified additional sweeping during the spring and fall months to maximize load reductions.

This project does not require any additional analysis above and beyond the Forest Lake Enhanced Street Sweeping Plan.

Further, this project does not require engineering or construction administration. Upon receipt of the grant, the City will secure one additional staff to operate a new air regenerative vacuum sweeper.

Targeting: 4. (10 points) A) How does this proposal make progress toward an overall groundwater, watershed protection, and/or restoration strategy being implemented by your organization and your partners? Listing an activity in a plan does not necessarily constitute an overall strategy. B) Describe activities other than those in this proposal that you and other partners have or will implement that affect the same water resource including but not limited to: other financial assistance or incentive programs, easements, regulatory enforcement, or community engagement activities that are indirectly related to this proposal.

The City of Forest Lake, RCWD and CLFLWD have developed extensive planning documents and diagnostic studies of Clear Lake, Shields Lake, and Forest Lake to identify pollutants and resources of concern, target areas of highest pollutant concentration inflows, and develop implementation strategies to improve water quality. Shields Lake resides just upstream of Forest Lake. Reducing the phosphorus loading into Shields Lake will also reduce the concentration entering Forest Lake. Further, Clear Lake and Forest Lake reside in the headwaters of their respective watersheds and improvements to these lakes will be far reaching in terms of improving downstream water quality.

Street sweeping will serve three purposes in the City of Forest Lake's approach to water quality improvements. First, the adaptive approach of increased sweeping frequency will dramatically improve TP and TS removal efficiencies in subwatersheds immediately adjacent to the receiving waters. In many of these cases, street sweeping is the only feasible BMP available. Second, the enhanced street sweeping program will enhance the City's treatment train strategy by providing effective pretreatment upstream of stormwater management BMPs. Third, increased street sweeping will reduce the City's long term maintenance costs by reducing sediment accumulation in ponds and restoration of vegetative surfaces disturbed during pond access.

The City of Forest Lake, RCWD and CLFLWD have successfully secured BWSR Clean Water Funds. The Clear Lake Water Quality Improvement Project and Forest Lake High School Reuse Project removes enough phosphorus to nearly meet the reduction goals defined in the Clear Lake Diagnostic Study. CLFLWD has executed a multitude of projects around Forest Lake to improve water quality and will begin implementing the Stormwater Reuse Project at Forest Hills Golf Course.

Questions & Answers

Measureable Outcomes: 5. (10 points) A) What pollutant(s) (For groundwater: bacteria, untreated sewage, nitrate, pesticides, etc.; For surface water: dissolved phosphorus, nitrogen, sediment, etc.) does this application specifically address? B) Has there been a pollutant reduction goal set (via TMDL or other study) in relation to that pollutant or the water resource that is the subject of this application? C) If so, please state that goal (as both an annual pollution reduction AND overall percentage reduction, not as an in-stream or in-lake concentration number) and identify the process used to set the goal. If no pollutant reduction goal has been set, describe the water quality trends associated with the water resource or other management goals that have been established. D) For protection projects, indicate measurable outputs such as acres of protected land, number of potential contaminant sources removed or managed, etc

This project will address total solids and total phosphorus. The 2010 Comfort Lake-Forest Lake Watershed District Six Lakes TMDL identified TP reduction goal of 952 lb/yr, or 83%, to Shields Lake and a TP reduction goal of 123 lb/yr, or 5%, to Comfort Lake. (<http://www.cflwd.org/documents/CLFLWDTMDLFinalReport.pdf>).

The Clear Lake Diagnostic Study identified a TP reduction goal of 140 lb/yr, or 13%, to Clear Lake.

(http://www.ricecreek.org/vertical/Sites/%7BF68A5205-A996-4208-96B5-2C7263C03AA9%7D/uploads/Clear_Lake_Diagnostic_Study_Report_final_draft_v5.pdf).

The DRAFT Forest Lake Diagnostic Study identified a TP reduction goal of 96 lb/yr, or 26%, in the direct drainage area to the lake. (http://cflwd.org/documents/ForestLakeDiagnosticPreliminaryResults_TACMtg_4-26-2017.pdf).

The DRAFT Forest Lake Diagnostic Study identified a TP reduction goal of 96 lb/yr, or 26%, in the direct drainage area to the lake. (http://cflwd.org/documents/ForestLakeDiagnosticPreliminaryResults_TACMtg_4-26-2017.pdf).

Measureable Outcomes: 6. (10 points) A) Describe the effects this proposed project will have on the root cause of the most critical pollution problems or threats. B) Please quantify the water quality benefits that would result from this proposal. Where applicable, identify the annual reduction in pollutant(s) that will be achieved or avoided for the water resource after this project is completed?

The Street Sweeping Planning Calculator developed by the University of Minnesota was used to estimate the average solids and phosphorus recovery based on the timing and frequency of sweeping and the density of tree canopy over the street. Additional consideration was given to other forms of load reduction, such as existing stormwater management BMPs, to determine the total load reduction to Forest, Clear, Comfort, Shields, and Sylvan Lakes. For example, if the amount of phosphorus recovered from street sweeping in a subwatershed was 100 lb/yr, but is treated by an existing detention basin with a phosphorus removal efficiency of 50%, it was assumed that the total phosphorus reduction to the Lake was 50 lb/yr.

Bimonthly regenerative air sweeping, compared to the existing contract sweeping, was estimated to reduce loading to: A) Shields Lake by an additional 1.9 lb/yr TP and 2,5256 lb/yr TS, B) Comfort Lake by an additional 17.9 lb/yr TP and up to 24,753 lb/yr TS, C) Clear Lake by an additional 18 lb/yr TP and 6,602 lb/yr TS, D) Forest Lake by an additional 96.4 lb/yr TP and 132,321 lb/yr TS, and E) Sylvan Lake by an additional 2.7 lb/yr TP and 3.591 lb/yr TS. Note that purchase of a regenerative air sweeper and implementation of bimonthly sweeping, combined with load reductions from constructed or in-progress Clean Water Fund Projects, have the potential to achieve the entire TP reduction goal defined for Clear Lake. The project will also include a GPS unit secured to the sweeper to track paths taken by the sweeper. This data can be used to correlate pounds of sediment and phosphorus removed per lineal foot of curb line and record the history of sweepings over the life of the project.

Questions & Answers

Overall, bimonthly regenerative air sweeping in the City of Forest Lake has the potential to reduce loading to the lakes by an additional 136.9 lb/yr TP and 169,793 lb/yr TS compared to the existing contract sweeping.

Measureable Outcomes: 7. (10 points) Will the overall project have additional specific secondary benefits, including but not limited to measured or estimated hydrologic benefits, enhancement of aquatic and terrestrial wildlife species, drinking water protection, enhancement of pollinator populations, or protection of rare and/or native species? If so, specifically describe, (quantify if possible), what those benefits will be.

The City of Forest Lake considers street sweeping to be the first line of defense in their comprehensive stormwater management and treatment train system. The City owns and operates wet sedimentation basins, iron enhanced sand filtration systems, stormwater wetlands, infiltration basins and hydrodynamic separators. Enhanced and targeted street sweeping will reduce the pollutant loadings to the City's traditional stormwater BMPs resulting in reserved removal capacity for untreated inflows and prolonged sediment storage.

An added benefit of regenerative air sweeping is greater recovery of fine solids and residual chloride that are difficult to capture with traditional stormwater BMPs. Fine solids impact fish and macroinvertebrate feeding behaviors and habitat, while high levels of chloride in lakes impacts lake stratification with long-term impacts on phosphorus cycling and water quality.

Clear Lake and Forest Lake reside in the headwaters of their respective watersheds and improvements to the lakes will be far reaching in terms of improving downstream water quality. With this and other projects in the Clear Lake subwatershed, the overall Clear Lake water quality goals will essentially be met. The headwaters of Rice Creek will see significant benefit through this pollutant reduction.

Cost Effectiveness: 8. (15 points) Describe why the proposed project(s) in this application are considered to be the most cost effective and reasonable means to attain water quality improvement or protection benefits within the proposed project area. Has any analysis been conducted to help substantiate this determination? Factors to consider include, but are not limited to: BMP effectiveness, timing, site feasibility, practicality, and public acceptance. If your application is proposing to use incentive payments to landowners, please include incentive rates and the rationale why this approach is seen to have a high cost-benefit.

This Grant Application is for the purchase of a new regenerative air sweeper GPS unit secured to the sweeper to track paths taken by the sweeper. The City will provide labor, fuel and maintenance costs over the life of the sweeper. The grant does not include engineering or construction costs. The grant will be executed and closed immediately upon receipt of the new sweeper. The 25% cost share will be split between the City, RCWD, and CLFLWD.

A full cost benefit analysis was performed to estimate the cost per pound of TP removed for the current, monthly and bi-monthly sweeping scenarios. The cost per curb-mile was calculated using the total cost of spring sweeping services divided by the total curb-miles swept. Cost estimates for City-owned vehicles in terms of cost per curb mile is not constant. Rather, it depends on the sweeper type and financing and cost of vehicle maintenance, labor, and fuel. For a bimonthly sweeping program using a City owned, regenerative air sweeper, the average City-wide cost benefit is \$469/lb-phosphorus removed. To implement a bimonthly sweeping program using the current contract sweeping, the total cost benefit is \$2,405/lb-phosphorus removed. Purchase and in-house operation of a City-owned sweeper results in an 80% reduction in cost per pound phosphorus removed.

Questions & Answers

Moreover, street sweeping is particularly beneficial in areas direct draining to lakes, where capture and treatment of stormwater by traditional BMPs is not feasible. In fact, the North Stormwater Retrofit study identified enhanced street sweeping as the most cost-effective BMP in the direct drainage area to Forest Lake.

Project Readiness: 9. (8 points) Describe steps and actions already taken to ensure that project implementation can begin soon after grant award. This may include: preliminary discussions with permitting authorities (if applicable) and the status of any state, federal or local permits that may be required for the project (Conditional use, NPDES, WCA, EAW, USACE, Public Waters, archeological surveys, etc.). Also, describe any preliminary discussions with landowners/occupiers, status of agreements/contracts, contingency plans, and other project development activities to date that will ensure a smooth start to the project and minimize administrative or other critical delays.

In 2016, the CLFLWD and City of Forest Lake were successful in securing Accelerated Implementation funds to develop the Forest Lake Enhanced Street Sweeping Plan. The draft Plan has proven that the City can cost effectively own and operate a new regenerative air sweeper and reduce total phosphorus (TP) and total solids (TS) loading to the lakes by an additional 136.9 lb/yr TP and 169,793 lb/yr TS compared to the existing contract sweeping program. The City intends to secure a new position in public works to operate the sweeper according to the sweeping frequency schedule and target subwatersheds identified in the draft Plan. Upon notice of award, the City will immediately finance the new sweeper, secure the new public works position, and begin routine sweeping. Given equipment lead times, the City of Forest Lake anticipates being prepared to begin targeted sweeping as soon as the fall of 2018. Full benefit and pollutant removals will be realized in 2019.

Project Readiness: 10. (2 points) Newsletters, signs and press releases are standard communication tools. In addition to these basics, describe additional project activities that would be added to the grant work plan aimed at engaging your local community on the need, benefits, and long term impacts of this project.

The City will provide individual mailings to the property immediately adjacent to the most sensitive areas affected by an increased frequency of sweeping. Further, the City will implement a catch basin stamping program to help inform residents as to where their stormwater discharges.

The Constitutional Amendment requires that Amendment funding must not substitute traditional state funding. Briefly describe how this project will provide water quality benefits to the State of Minnesota without substituting existing funding.

The purchase of a regenerative air sweeper and Enhanced Street Sweeping Plan implementation will provide significant water quality benefits without substituting existing funding. The project will be executed in a very short time frame upon notice of award. No additional design, engineering, property acquisition, or construction will be required. The City intends to utilize funds to secure the equipment and will cover long term staffing and maintenance needs through their traditional budgeting process.

Application Budget

Activity Name	Activity Description	Category	State Grant \$ Requested	Activity Lifespan (yrs)
Purchase Air Regenerative Street Sweeper	Forest Lake will purchase a Air Regenerative Street Sweeper immediately upon award of the grant. Given equipment lead times, the City expects to sweep in Fall of 2018.	NON-STRUCTURAL MANAGEMENT PRACTICES	\$217,000.00	10
Public Education	Develop education materials to inform the public of the importance of increased sweeping frequency.	EDUCATION/INFO RMATION	\$3,000.00	10

Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
Purchase Air Regenerative Street Sweeper	PHOSPHORUS (EST. REDUCTION)	18 LBS/YR	Comfort Lake	Other	
Purchase Air Regenerative Street Sweeper	PHOSPHORUS (EST. REDUCTION)	18 LBS/YR	Clear Lake	Other	
Purchase Air Regenerative Street Sweeper	PHOSPHORUS (EST. REDUCTION)	96 LBS/YR	Forest Lake	Other	

Activity Details

Activity Name	Question	Answer
Purchase Air Regenerative Street Sweeper	Are you interested in applying for CWP Loans for this project?	No
Purchase Air Regenerative Street	Dollar amount requested for Ag BMP Loan Program:	0

Activity Name	Question	Answer
Sweeper		
Public Education	Are you interested in applying for CWP Loans for this project?	No
Public Education	Dollar amount requested for Ag BMP Loan Program:	0

Project Name	Forest Lake Street Sweeping Management Plan	Date	7/20/2017
To / Contact info	Comfort Lake Forest Lake Watershed District Board of Managers		
Cc / Contact info	Mike Kinney, District Administrator		
From / Contact info	Paula Kalinosky, EIT Meghan Funke, PhD Greg Graske, PE		
Regarding	Key Preliminary Findings from the Forest Lake Street Sweeping Management Plan		

In 2016, the CLFLWD successfully applied for a Clean Water Fund Grant to develop a Street Sweeping Plan for the City of Forest Lake. Street sweeping can be an effective source control BMP for reducing solids and nutrient loads to waterbodies which receive runoff from roadways – especially where runoff is not intercepted by stormwater BMPs. The objective of the Street Sweeping Plan included identification of areas that would most benefit from enhanced street sweeping based on the length and type of roadway, tree canopy cover, and presence of downstream BMPs; and to estimate the potential phosphorus load reduction to downstream waterbodies for different sweeping frequencies. A sample of the results is included as an Appendix to this memo.

The goal of this project is to develop a formal agreement between the CLFLWD and the City of Forest Lake to implement enhanced street sweeping for the protection of Forest Lake and other resources in the City of Forest Lake. Findings of the analysis will be used by the City of Forest Lake to develop a 2018 Clean Water Fund Grant application for purchase of a regenerative air street sweeper. The City currently uses a contract sweeping service for sweeping. The analysis indicates that in-house sweeping would be significantly more cost-effective than continued use of a contract service. Key findings of the analysis are summarized below.

Key Findings

- Street sweeping is an effective source control BMP:
 - The City of Forest Lake currently has all paved streets swept once each in the spring and fall, recovering a total of approximately 128 pounds of phosphorus from the streets. Adding one additional sweep in the spring and fall can increase phosphorus recovery by about 56%, to 200 pounds per year. This includes portions of the City within the Comfort Lake Forest Lake Watershed District and the Rice Creek Watershed District.
 - The City of Forest Lake has approximately 23 miles of street (46 curb-miles) that drain directly to Forest Lake.
 - The 2017 Forest Lake Diagnostic study estimated that the total phosphorus load to Forest Lake from the direct drainage area is approximately 370 lb/yr, with a 26% reduction needed to achieve long-term District goals for Forest Lake. Current street sweeping operations are estimated to reduce loading to Forest Lake from these areas by about 28 lb/yr. Increasing sweeping frequency to once per month in these areas could decrease phosphorus loading to Forest Lake by 64 lb/yr, or 17% of the total direct drainage load.

- For in-house sweeping, phosphorus reduction through street sweeping can be very cost-effective. For streets draining directly to Forest Lake, phosphorus may be recovered for as little as \$167/ lb for spring and fall sweeping.
- In-house sweeping is significantly more cost effective than using a contract service:
 - In-house sweeping could reduce the cost of current sweeping operations (spring/fall sweeping) by about half compared to the cost of contract sweeping. This calculation is based on a 10-year depreciation valuation of the street sweeper (Figure 1).
 - With an in-house program, the City could increase sweeping frequency to monthly, or more, for the same cost as the current street sweeping service contract.
 - An in-house sweeping program would better enable the City to target streets that act as pollutant 'hot spots' (e.g. drain directly to a lake or resource, are heavily canopied, or susceptible to sediment tracking).
 - For an in-house program, the annual cost of sweeping may be comparable, or less, than the cost to design and install new structural BMPs.

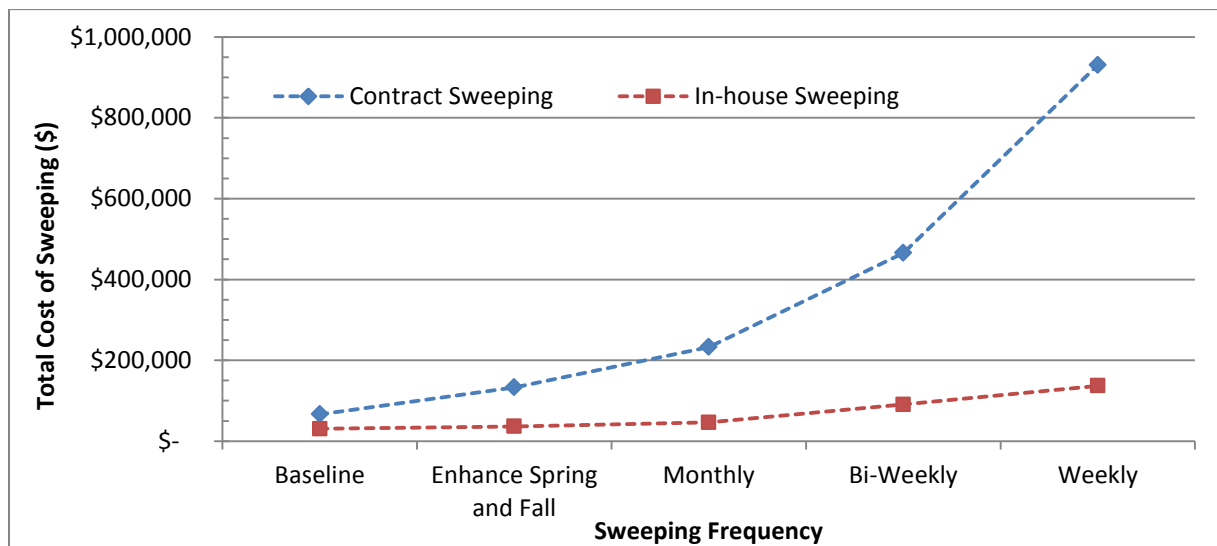


Figure 2. Estimated total cost of sweeping vs. number of sweepings for contract and in-house street sweeping (all swept streets).

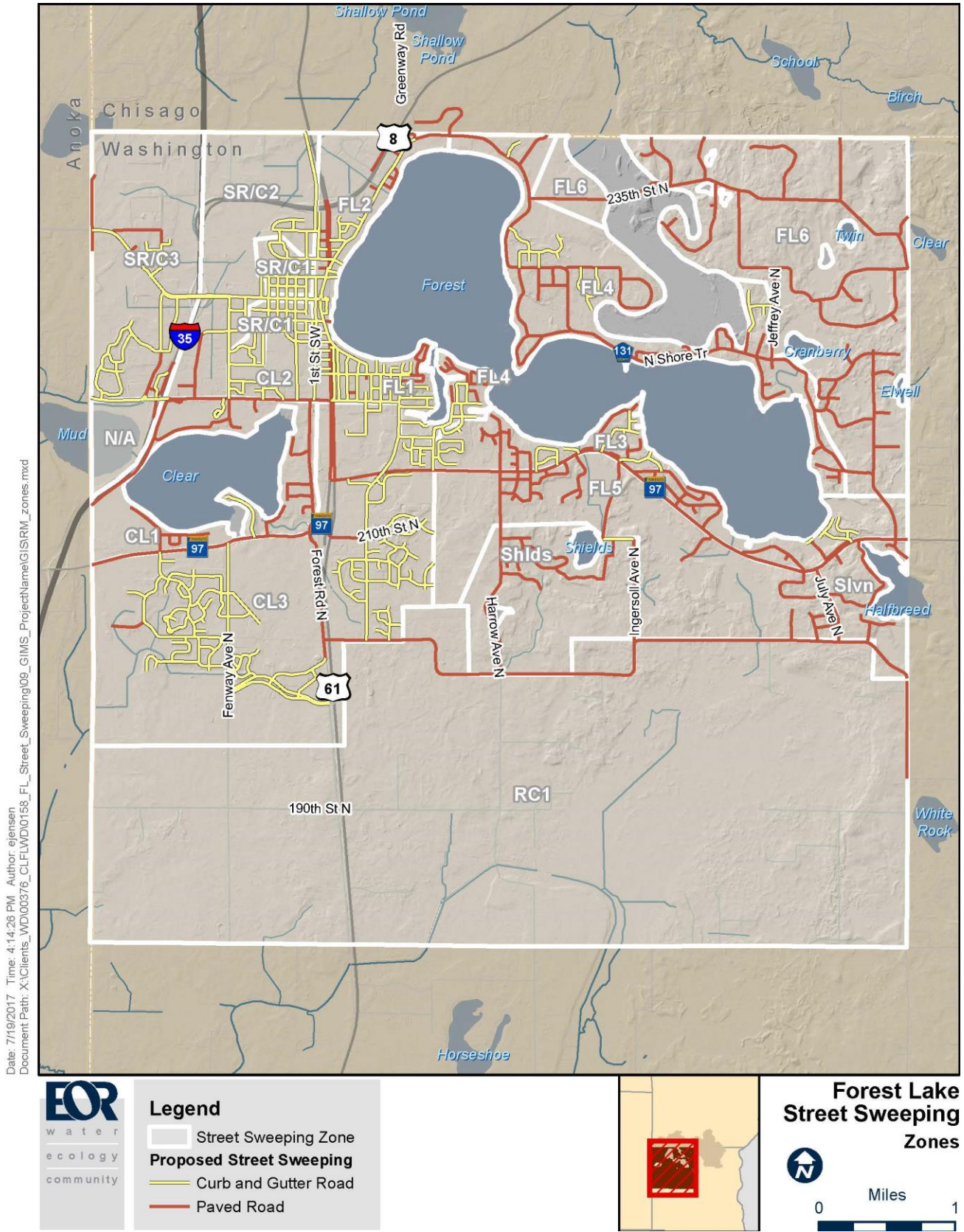


Figure 2. Map of proposed street sweeping zone, Draft City of Forest Lake Street Sweeping Plan

APPENDIX A– Sample of preliminary load reduction and cost estimates for baseline, enhanced baseline, and monthly sweeping scenarios.

		LOAD REDUCTION				COSTS			
		Reduction to Waterbody through Sweeping (lb/yr)				Contract Sweeping		City-Owned Sweeper	
		Mechanical Broom Sweeper		Vacuum/Regen Air Sweeper					
Waterbody	Curb-miles	TS	TP	TS	TP	\$	\$/lb-P (REDUCTION)	\$	\$/lb-P (REDUCTION)
BASELINE Sweeping (once each spring and fall)									
Clear Lake	70.2	1,768	5.7	2,210	7.1	\$ 19,544	\$ 2,758	\$ 8,899	\$ 1,256
Forest Lake	115.9	36,822	32.6	46,028	40.8	\$ 32,293	\$ 791	\$ 14,736	\$ 361
Shields Lake	5.4	676.4	0.6	845.5	0.7	\$ 1,504	\$ 2,074	\$ 685	\$ 946
Sylvan Lake	5.4	961.6	0.8	1202.0	1.0	\$ 1,512	\$ 1,467	\$ 690	\$ 669
Sunrise River/Comfort Lake	41.8	6,629	5.7	8,286	7.1	\$ 11,648	\$ 1,643	\$ 5,305	\$ 749
TOTAL		46,857	45.4	58,571	56.7	\$ 66,500	\$ 1,172	\$ 30,315	\$ 534
ENHANCED BASELINE Sweeping twice each spring and fall)									
Clear Lake	70.2	2,721	8.4	3,572	11.0	\$ 39,087	\$ 3,542	\$ 10,737	\$ 973
Forest Lake	115.9	56,966	48.9	74,804	64.0	\$ 64,585	\$ 1,010	\$ 17,795	\$ 278
Shields Lake	5.4	1041.3	0.9	1366.8	1.1	\$ 3,007	\$ 2,673	\$ 827	\$ 736
Sylvan Lake	5.4	1480.3	1.2	1943.1	1.6	\$ 3,025	\$ 1,891	\$ 832	\$ 520
Sunrise River/Comfort Lake	41.8	10,203	8.4	13,393	11.0	\$ 23,295	\$ 2,120	\$ 6,402	\$ 583
TOTAL		72,412	67.8	95,079	88.7	\$ 133,000	\$ 1,499	\$ 36,594	\$ 413
MONTHLY Sweeping									
Clear Lake	70.2	4,096	11.8	5,536	15.9	\$ 68,403	\$ 4,307	\$ 13,531	\$ 852
Forest Lake	115.9	85,308	67.9	115,293	91.2	\$ 113,024	\$ 1,239	\$ 22,440	\$ 246
Shields Lake	5.4	1567.2	1.2	2118.0	1.6	\$ 5,262	\$ 3,238	\$ 1,043	\$ 642
Sylvan Lake	5.4	2228.0	1.7	3011.1	2.3	\$ 5,294	\$ 2,291	\$ 1,049	\$ 454
Sunrise River/Comfort Lake	41.8	15,357	11.8	20,755	15.8	\$ 40,767	\$ 2,578	\$ 8,069	\$ 510
TOTAL		108,556	94.5	146,713	126.9	\$ 232,750	\$ 1,835	\$ 46,133	\$ 364



Projects and Practices Application

Grant Name - West Shadow Lake Drive Improvement Project

Grant ID - C18-7007

Organization - Lino Lakes, City of

Allocation	Projects and Practices 2018	Grant Contact	Katy Thompson
Total Grant Amount Requested	\$381,750.00	County(s)	Anoka
Grant Match Amount	\$1,817,250	12 Digit HUC(s)	070102060304
Required Match %	25%	Applicant Organization	Lino Lakes, City of
Calculated Match %	476%	Application Submitted Date	
Other Amount			
Project Abstract	<p>The City of Lino Lakes is proposing improve the quality of the Lino Lakes Chain of Lakes by implementing an integrated approach that includes stormwater quality treatment, reduction of internal loading via rough fish management, and eliminating the potential for pollution from septic systems by installing municipal sewer to riparian residential properties. The project will be in partnership with the Rice Creek Watershed District (RCWD) and Anoka County, and will be completed in concurrence with the City's street reconstruction project of West Shadow Lake Drive, which serves shoreland properties along Reshanau Lake.</p> <p>In existing conditions, untreated runoff enters Reshanau Lake, via overland flow. Reshanau Lake flows through a wetland channel to Rice Lake, which then outflows into Rice Creek and ultimately to the Mississippi River. The Lino Lakes Chain of Lakes has been identified as a key nursery for carp, and Reshanau Lake's high internal loading of phosphorous and shallow nature make it susceptible to internal nutrient loading when large rough fish populations such as carp are introduced. There are 107 individual subsurface sewage treatment systems (SSTS) along West Shadow Lake Drive within 600 feet of the shoreline along, many of which will expire and replacement</p>		

	<p>will be limited in many cases due to the lot size. This project takes on the task of nutrient reduction in the Lino Chain of Lakes using three approaches, each targeting a different source of pollution. The concurrence with the City's street reconstruction project increases this project's cost effectiveness, and provides the opportunity to meet nutrient reduction goals for Reshanau Lake.</p> <p>The City is seeking Clean Water Funds to support the portions of this project that are maximizing water quality treatment to the greatest extent feasible for the project area.</p>
Proposed Measurable Outcomes	<p>The project will remove approximately 7lbs of phosphorous loading from runoff to Reshanau Lake annually, prevents up to 600 kg/ha of carp biomass from entering Reshanau Lake, and prevents 107 riparian lot septic systems from infiltrating nutrients..</p>

Narrative

Questions & Answers	
Does your organization have any active CWF grants? If so, specify FY and percentage spent. Also, explain your organization's capacity (including available FTEs or contracted resources) to effectively implement additional Clean Water Fund grant dollars.	
The City of Lino Lakes does not have any active CWF grants.	
Water Resource: Identify the water resource the application is targeting for water quality protection or restoration.	
<p>Reshanau Lake (02-0009), the primary water of concern, is identified as a Tier II Lake within RCWD's Watershed Management Plan, has been on the State's Section 303(d) impaired waters list since 2006, and has had an approved TMDL plan since 2013. Reshanau Lake has a surface area of 372 acres and an average depth of 5.8 feet. Reshanau Lake is considered a game fishing lake. The watershed area tributary to Reshanau Lake is approximately 3,465 acres, of which the sole tributary is Anoka County Ditch 25, which carries limited flows from two smaller lakes upstream: Wards Lake and Sherman Lake. The direct contributing area for Reshanau Lake is 381 acres, and consists of mostly developed and developing suburban watershed.</p> <p>Rice Lake (02-008) is the downstream outlet for Reshanau Lake, and is identified as a Tier II lake within the RCWD Watershed Management Plan. Rice Lake is also on the State's Section 303(d) impaired waters list for nutrient impairment, listed since 2010. Reducing nutrient levels in Reshanau Lake via stormwater treatment and removal of SSTS along the riparian lots will have a positive impact on Rice Lake, as well as the many of impaired downstream within the greater Rice Creek Watershed.</p>	
Overall Project Description 1. (5 points) : A) What nonpoint pollution concerns will be the focus of this application and how do you intend to address those concerns? B) Describe how the resource of concern aligns with at least one of the statewide priorities referenced in the "Projects and Practices" section of the RFP. C) Describe the public benefits resulting from this proposal from both a local and state perspective.	
Reshanau Lake is part of a nutrient impairment TMDL study. Within the project area there is no stormwater treatment for existing runoff, SSTS on riparian lots will be expiring with many lots' replacement limited due to inadequate lot size, and a large carp population is reported downstream, with Reshanau Lake determined as a potential key nursery for carp breeding. Treating stormwater runoff reduces phosphorous	

Questions & Answers

loading to Reshanau Lake, the replacement of SSTS with municipal sewer provides protection from infiltration of nutrients to the lake from failing septic systems, and the prevention of carp migrating into Reshanau Lake will prevent internal loading from occurring within the shallow lake.

The Lino Lakes Chain of Lakes is an important regional resource, providing boating, swimming and fishing to the public. Poor water quality inhibits the opportunities for these activities. Additionally, the residential lots with existing SSTS will need a solution for their wastewater once their systems expire and/or fail. With no municipal sewer extension to these properties, the potential for pollution of Reshanau Lake will increase, leaving the public with limited options for replacement and decreased water quality.

The proposed project aligns with all three statewide priorities. Implementing this project 1) pushes the City, RCWD, and the County towards fulfilling the TMDL wasteload allocations for Reshanau Lake, 2) provides protection for Reshanau Lake from an increase in carp biomass from downstream threats, provides protection for Reshanau Lake from potential failing SSTS along riparian residential lots, and 3) works towards direct restoration of the intended public uses of a major waterbody, as well as the indirect restoration of impaired waterbodies downstream within Upper Mississippi River Watershed.

Relationship to Plan: 2a. (15 points) Describe why the water resource was identified in the plan as a priority resource. For the proposed project, identify the specific water management plan reference by plan organization plan title, section, and page number. In addition to the plan citation, provide a brief narrative description that explains whether this application fully or partially accomplishes the referenced activity.

Lino Lakes Resource Management Plan 2008

The key outcomes of this study is the establishment of a cooperation between the City of Lino Lakes and RCWD to provide strategies and implementation plans for their joint natural resources, which included strategies for impaired waters and TMDL projects.

Table 4: Both Reshanau Lake and Rice Lake are listed as a Resource Management Unit (RMU). Loading reduction to remove the lake from TMDL list is noted as a strategy for Reshanau Lake, and loading reduction is listed as a strategy for Rice Lake.

Rice Creek Watershed District 2010 Watershed Management Plan (amended 2016)

Section 4.3.2.2: Reshanau Lake is classified as a Tier III shallow lake in Table 4-6 on page 4-19. Tier III lakes' resource management goal is to assist others in managing lake conditions, including collaborating with municipalities and other program partners.

Lino Lakes Chain of Lakes TMDL 2013

The MPCA expanded upon the RCWD's Lino Lakes Nutrient Reduction Study

Section 3.5.1, page 3-24: Rough fish management, including common carp, is noted as a key factor in managing nutrient levels in lakes, especially in shallow lakes.

Section 7.3.3, page 7-9, 7-10: Source area control (carp barriers) as a means of rough fish management is noted to be included in

City of Lino Lakes Comprehensive Surface Water Management Plan (2015)

Figure 11: There has been a 0% reduction of pollutants in both Rice Lake and Reshanau Lake TMDL since the TMDL plan approval in 2013.

Questions & Answers

Table 9: Addressing pollutant loads to Reshanau Lake is listed as a water quality action specific to the Reshanau Resource Management Unit

Relationship to Plan: 2b. Provide web links to all referenced plans.

Lino Lakes Resource Management Plan 2008

<http://www.ricecreek.org/vertical/Sites/%7BF68A5205-A996-4208-96B5-2C7263C03AA9%7D/uploads/%7BFF3A9FA1-37C4-4CD6-B713-98FAF0BFC3D0%7D.PDF>

Rice Creek Watershed District 2010 Watershed Management Plan (amended 2016)

http://www.ricecreek.org/vertical/Sites/%7BF68A5205-A996-4208-96B5-2C7263C03AA9%7D/uploads/2010_WMP_2016_amendments.pdf

Lino Lakes Chain of Lakes TMDL 2013

<https://www.pca.state.mn.us/sites/default/files/wq-iw11-13e.pdf>

City of Lino Lakes Comprehensive Surface Water Management Plan (2015)

http://www.ci.lino-lakes.mn.us/vertical/Sites/%7B92EFCBF5-B800-4B28-AD6A-B8C3B7009FB0%7D/uploads/Lino_Lakes_SWMP_FINAL_12.28.2015.pdf

Targeting Procedure: 3. (15 points) Describe the methods used to identify, inventory, and target the most critical pollution sources or threats (root cause) and describe any additional efforts that will be completed prior to installing the projects or practices identified in this proposal.

The Reshanau Lake watershed is mostly developed, therefore opportunities for practices to reduce pollutant loading are limited. The City of Lino Lakes Comprehensive Plan shows that Reshanau Lake has had no pollutant reductions since the implementation of their TMDL, therefore makes it an excellent candidate to address phosphorous loads with an approach that integrates

The City of Lino Lakes, RCWD and Anoka County have worked towards pollutant reduction Reshanau Lake since its addition to the impaired waters list in 2006. A regional stormwater treatment pond that addresses both the existing untreated runoff from the lake as well as the improving the treatment of runoff from the adjacent golf course. The existing golf course pond was selected as a potential regional stormwater basin due to Anoka County's (existing pond's owner) readiness to participate and agree to an access agreement as well as the lack of major grading modifications needed to prepare the site.

Prior to installing the proposed fish barrier, the City of Lino Lakes plans to collaborate with the RCWD and use their developing carp management plan to implement an effective barrier based on the most up to date research results.

There are 107 individual subsurface sewage treatment systems (SSTS) along West Shadow Lake Drive within 600 feet of the shoreline along, many of which will expire and replacement will be limited in many cases due to the lot size. The groundwater table during the feasibility stage of this project was observed approximately 4 to 8 feet below existing ground along the entire length of the West Shadow Lake Drive, making the area susceptible to pollution from non-conforming STSS.

Questions & Answers

Targeting: 4. (10 points) A) How does this proposal make progress toward an overall groundwater, watershed protection, and/or restoration strategy being implemented by your organization and your partners? Listing an activity in a plan does not necessarily constitute an overall strategy. B) Describe activities other than those in this proposal that you and other partners have or will implement that affect the same water resource including but not limited to: other financial assistance or incentive programs, easements, regulatory enforcement, or community engagement activities that are indirectly related to this proposal.

The City of Lino Lakes and the RCWD have shown their commitment to partnering on water resource planning and management, notably since the implementation of the Lino Lakes Resource Management Plan in 2007. The City of Lino Lakes enforces stormwater standards that follow RCWD rules for stormwater management, and the implementation of regional projects such as the one proposed, which addresses multiple nonpoint pollutant sources, hastens the ability to see meaningful improvements in water quality in developed communities such as the Reshanau Lake watershed.

Measureable Outcomes: 5. (10 points) A) What pollutant(s) (For groundwater: bacteria, untreated sewage, nitrate, pesticides, etc.; For surface water: dissolved phosphorus, nitrogen, sediment, etc.) does this application specifically address? B) Has there been a pollutant reduction goal set (via TMDL or other study) in relation to that pollutant or the water resource that is the subject of this application? C) If so, please state that goal (as both an annual pollution reduction AND overall percentage reduction, not as an in-stream or in-lake concentration number) and identify the process used to set the goal. If no pollutant reduction goal has been set, describe the water quality trends associated with the water resource or other management goals that have been established. D) For protection projects, indicate measurable outputs such as acres of protected land, number of potential contaminant sources removed or managed, etc

The proposed project will address three pollutants of concern: 1) remove phosphorous loads from stormwater runoff to Reshanau Lake via a regional stormwater treatment basin, 2) prevent internal phosphorous loading in Reshanau Lake via rough fish management, and 3) protect Reshanau Lake from pollutants from potential untreated sewage by installing municipal sewer to riparian residential lots. Reshanau Lake was added to the MPCA impaired waters list in 2006, listed for nutrient impairments (excess phosphorus). The MPCA completed a TMDL study that was approved by the EPA in 2013. The TMDL study refined phosphorus load reduction goals which are now used today. The Lino Lakes Chain of Lakes Nutrient TMDL has set the total phosphorus load reduction goal at 259.15 pounds per year, or 10% of the total existing annual load. Of this, the wasteload allocation assigned to the surrounding municipal stormwater authorities is 10.95 pounds per year. The TMDL study utilized BATHTUB and P8 models to generate the goals. No goal has been set for internal loading specific to rough fish management. Data is being continually gathered for a carp management plan for the RCWD, however, in the Lino Lakes Chain of Lakes TMDL, rough fish management via fish barriers is noted as a potential management activity. Removing SSTS from the riparian lots protects Reshanau Lake and its downstream resources from the potential of septic system failure or infiltration. There are currently a total of 107 SSTS within 600 feet of the shoreline of Reshanau Lake that would be replaced with municipal sewer.

Questions & Answers

Measureable Outcomes: 6. (10 points) A) Describe the effects this proposed project will have on the root cause of the most critical pollution problems or threats. B) Please quantify the water quality benefits that would result from this proposal. Where applicable, identify the annual reduction in pollutant(s) that will be achieved or avoided for the water resource after this project is completed?

The proposed regional stormwater treatment pond is located within Anoka County property and will greatly reduce the loading from stormwater into Reshanau Lake. The proposed project is expected to provide an annual reduction in total phosphorus loading of 7 pounds per year, which accounts for approximately 10% of the reduction in wasteload allocation recommended by the Lino Lakes Chain of Lakes 2013 TMDL Study. According to the City's Surface Water Management Plan, there has been 0% reduction of wasteload allocation to Reshanau Lake since the TMDL implementation.

Excess phosphorus from internal loading is the most critical source of nutrient loading to Reshanau Lake according to the Lino Lakes Chain of Lakes 2013 TMDL Study. By preventing the migration of carp into the lake there is the potential to greatly reduce the internal loading caused by carp in shallow lakes. By implementing a carp barrier, 600 kg/ha of carp biomass is expected to be prevented from migrating into Reshanau Lake. Note that this is six times greater than the threshold value of 100 kg/ha, which is known to be damaging to even deep, stable basin environment.

Measureable Outcomes: 7. (10 points) Will the overall project have additional specific secondary benefits, including but not limited to measured or estimated hydrologic benefits, enhancement of aquatic and terrestrial wildlife species, drinking water protection, enhancement of pollinator populations, or protection of rare and/or native species? If so, specifically describe, (quantify if possible), what those benefits will be.

The proposed project will provide reductions in total suspended sediments (TSS) discharged to Reshanau by sedimentation in the regional stormwater basin. Reductions estimates for TSS are not available at this time, and are considered supplementary to the main objective of phosphorous reduction. Preventing invasive fish species such as carp will enhance and protect Reshanau Lakes resources. Lastly, reducing the loads from SSTS into the riparian soils and groundwater may provide drinking water protection as well along with the surface water protection discussed.

Cost Effectiveness: 8. (15 points) Describe why the proposed project(s) in this application are considered to be the most cost effective and reasonable means to attain water quality improvement or protection benefits within the proposed project area. Has any analysis been conducted to help substantiate this determination? Factors to consider include, but are not limited to: BMP effectiveness, timing, site feasibility, practicality, and public acceptance. If your application is proposing to use incentive payments to landowners, please include incentive rates and the rationale why this approach is seen to have a high cost-benefit.

The integration of the three proposed actions into the City of Lino Lakes street reconstruction project results in the most cost effective project at this time. There are no proposed projects within the Reshanau watershed in the foreseeable future, and maintaining the treatment, protection and prevention of Reshanau Lake's water quality as a priority during the approved street reconstruction project is the best opportunity to implement cost effective solutions for an impaired lake and its downstream waterbodies. Due to the developed land use within the Reshanau Lake watershed, area for treatment and project implementation is limited. Partnering with Anoka County to enhance an existing pond to create a useful regional stormwater treatment pond is a chance to make the first mark towards meeting Reshanau Lake's TMDL.

Questions & Answers

Project Readiness: 9. (8 points) Describe steps and actions already taken to ensure that project implementation can begin soon after grant award. This may include: preliminary discussions with permitting authorities (if applicable) and the status of any state, federal or local permits that may be required for the project (Conditional use, NPDES, WCA, EAW, USACE, Public Waters, archeological surveys, etc.). Also, describe any preliminary discussions with landowners/occupiers, status of agreements/contracts, contingency plans, and other project development activities to date that will ensure a smooth start to the project and minimize administrative or other critical delays.

The City of Lino Lakes has completed a feasibility study to assess the cost effectiveness and need for the improvement project, and has the desire to maximize stormwater treatment and protection of Reshanau Lake via removal of SSTS on riparian lots due to the fact that Reshanau Lake and its downstream water bodies are listed as impaired waters and have completed TMDL implementation plans. The City of Lino Lakes has already invested into the project's basic design, and cooperation with the RCWD and Anoka County has been established. The City of Lino Lakes anticipates discussing design and access agreements for the regional stormwater basin with Anoka County during final design. The City also expects to work with the RCWD and use their expertise to partner in constructing an effective fish barrier. Anticipated required permits and approvals for the West Shadow Lake Drive Improvement Project include Anoka County Right of Way Permit, RCWD Stormwater Management Permit, MnDNR Public Waters Work Permit, MPCA NPDES Permit, US Army Corps of Engineers Section 10 and 404 Permit, MCES State Disposal System Permit, and MPCA Sewer Extension Permit.

Project Readiness: 10. (2 points) Newsletters, signs and press releases are standard communication tools. In addition to these basics, describe additional project activities that would be added to the grant work plan aimed at engaging your local community on the need, benefits, and long term impacts of this project.

The proposed project will require cooperation from the public as it continues towards construction, particularly in the removal of SSTS and implementation of municipal sewer, and the City of Lino Lakes would like to include an educational component for the project by an outreach discussion on the environmental benefits of the West Shadow Lake Improvement Project via meetings and information sessions.

The Constitutional Amendment requires that Amendment funding must not substitute traditional state funding. Briefly describe how this project will provide water quality benefits to the State of Minnesota without substituting existing funding.

The proposed West Shadow Lake Drive Improvement Project will provide the first load reductions for Reshanau Lake since its TMDL implementation, in addition to water quality benefits to downstream impaired waters. The City of Lino Lakes is proposing to maximize stormwater treatment where feasible, recognizing that the opportunity for this scale of stormwater treatment within the developed watershed of Reshanau Lake is valuable, and may not arise in the near future. The City of Lino Lakes, the RCWD, and Anoka County are seeking State support for this project to augment the significant local contributions that have been put forth. Without additional support, the project partners do not have sufficient available budgets to implement the project activities to the extent discussed.

Application Budget

Activity Name	Activity Description	Category	State Grant \$ Requested	Activity Lifespan (yrs)
Sanitary Sewer Improvements	This activity includes approximately 25% of the cost for extension of municipal sewer along the West Shadow Lake Drive Improvement Project.	SUBSURFACE SEWAGE TREATMENT SYSTEMS	\$87,250.00	
Carp Barrier	This activity includes the costs for the design and installation of a carp barrier on the downstream end of the Reshanau Lake outlet culvert	URBAN STORMWATER MANAGEMENT PRACTICES	\$20,000.00	
Regional Stormwater Treatment Basin	This activity includes approximately 15% of the construction cost of a regional stormwater management system for the West Shadow Lake Drive Project Area. The City seeks these funds to help subsidize the regional water quality treatment, which is maximizing treatment to the most feasible extent for the project area.	URBAN STORMWATER MANAGEMENT PRACTICES	\$274,500.00	20

Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
Regional Stormwater Treatment Basin	PHOSPHORUS (EST. REDUCTION)	7 LBS/YR	Reshanau Lake	Other	

Activity Details

Activity Name	Question	Answer
Regional Stormwater Treatment Basin	Are you interested in applying for CWP Loans for this project?	No
Regional Stormwater	Dollar amount requested for	Not Entered

Activity Name	Question	Answer
Treatment Basin	Ag BMP Loan Program:	
Sanitary Sewer Improvements	Are you interested in applying for CWP Loans for this project?	Not Entered
Sanitary Sewer Improvements	Dollar amount requested for Ag BMP Loan Program:	Not Entered
Carp Barrier	Are you interested in applying for CWP Loans for this project?	Not Entered
Carp Barrier	Dollar amount requested for Ag BMP Loan Program:	Not Entered

2:10 Discussion on Natural Channel
Maintenance Policy/Tree Removal.

Memorandum



To: Board of Managers

Date: September 6, 2017

From: Tom Schmidt, Public Drainage Inspector

Matt Kocian, Lake and Stream Specialist

Subject: Discussion on RCWD Natural Channel Maintenance Policy

Background

The purpose of this discussion is to clarify the Board's current and future position on the provisions contained in the RCWD Natural Channel Maintenance Policy, specifically as it pertains to downed trees.

Per the existing policy, RCWD currently partners with Anoka and Ramsey County parks departments to promote recreational use of Rice Creek through the canoe trail. The Parks Departments use CCM crews to remove downed trees within park boundaries while RCWD periodically hires those crews to remove trees within the creek banks on privately owned sections as crew availability and ability allows.

This summer, there have been several requests from private property owners to have RCWD remove downed trees from the creek/their property. Staff is asking for direction from the Board as to whether it wishes to continue the current implementation of the policy, which is hiring crews on a cycle of every 2-3 years for tree removal or move to a "request for service" model.

1. 2011 RCWD Natural Channel Maintenance Policy

MEMORANDUM

Rice Creek Watershed District

Board Approved: December 7, 2011

To: RCWD Board of Managers **Date:** November 21, 2011
From: Matt Kocian, Lake and Stream Specialist
Tom Schmidt, Drainage Inspector
Subject: RCWD Natural Channel Management Policy

Background

Rice Creek Watershed District staff received an increased number of requests for maintenance on Rice Creek in 2011. In most cases, the requests were for removal of downed trees. High water levels in the spring, a significant July flooding event, and a number of summer storms with high wind may have contributed to the increased number of requests. Considerable financial and staff resources would be required to comply with these requests.

The District maintains a comprehensive policy on the maintenance of the public drainage system. However, in reviewing the District's 2010 Watershed Management Plan, there is little reference to the policy of maintenance of natural channels. Section 6.3.2.4 states: *The primary management responsibility of the District for the Trunk Drainage System [including Rice, Hardwood, and Clearwater Creeks] is to ensure conveyance capacity by using a stable channel.*¹ The point at which a fallen tree or a debris jam becomes an impediment to "conveyance capacity" is uncertain, and subject to a wide degree of interpretation by landowners. Also open to interpretation is the reference to "stable channel". Often times the primary concern of a landowner requesting tree removal is stream bank erosion.

The purpose of this memo is to summarize a proposed set of criteria that could be used to craft a Rice Creek Watershed District policy on the management of natural waterways. This policy would NOT pertain to the public drainage system. Also, the policy would NOT pertain to emergency situations where the Board may choose to act directly. **Appendix A** depicts natural stream channels and public ditches within the Rice Creek Watershed.

Stable Channel, Bank Erosion, and Stream Ecology

Stream systems are, by nature, always changing. Over time, streams move without human influence; in-stream erosion and sediment deposition work together as streams evolve. However, when the balance between sediment erosion and deposition is altered, stream channels may become *unstable*. A significant increase in downstream sediment transport is often a key effect of channel instability. Alternatively, while stream bank erosion may transport significant amounts of sediment downstream, it will not lead to greater stream instability. Smaller bank erosion issues (i.e. associated with fallen trees) may not have any negative impact. In some

¹ There is no reference in the 2010 Watershed Management Plan to the District's responsibility for management of Rice Creek as part of the Rice Creek Water Trail.

MEMORANDUM

Rice Creek Watershed District

Board Approved: December 7, 2011

cases, fallen trees may act as temporary sediment trap. Fallen trees and woody debris also provide critical habitat for fish and aquatic invertebrates.

The District policy for maintenance of natural channels should recognize the difference between bank erosion and channel instability, as well as the ecological benefits of some woody debris.

Landowner Cooperation

In some instances, landowners along natural waterways may not desire management activities. For example, Ramsey County Parks does not have concerns about beaver dams on Middle Rice Creek, and would not want District Staff to cross park property for removal². Similarly, while a landowner may like the District to removal a fallen tree, they would not be willing to allow contractor equipment to cross their property.

The District policy for maintenance of natural channels should recognize the importance of landowner cooperation. When maintenance activities would require crossing private property, the District might consider requiring a temporary easement, or statement of indemnification.

RCWD Policy on Natural Waterway Management – Board Approved 12/07/11

Maintenance activities performed by the District as part of the Natural Waterway Management Program include, but are not limited to the removal of fallen trees, debris jams, and beaver dams.

The primary goals of the District relating to natural waterways, as reflected in its mission statement, are flood control, water quality enhancement, and recreational use.

Thus, the following are a set of criteria under which the Rice Creek Watershed District would consider maintenance of natural waterways (non-public drainage) within the Watershed:

1. Maintenance Pertaining to Channel Capacity and Bank Erosion
 - a. As determined by District Staff, an obstruction exists in the channel that is directly contributing to persistent or prolonged and significant flooding;
 - b. As determined by District Staff, non-action would result in significant downstream sediment transport due to stream bank erosion;
 - c. As determined by District Staff, non-action would result in stream instability, such as significant stream down cutting, or meander (oxbow) cutoff.

2. Maintenance Pertaining to Recreational Use

² Under State Watershed Law (103B), the District maintains the right to access waterways for inspection, and to conduct projects for the greater good. However, the District would be liable for any damages caused (e.g. with heavy machinery).

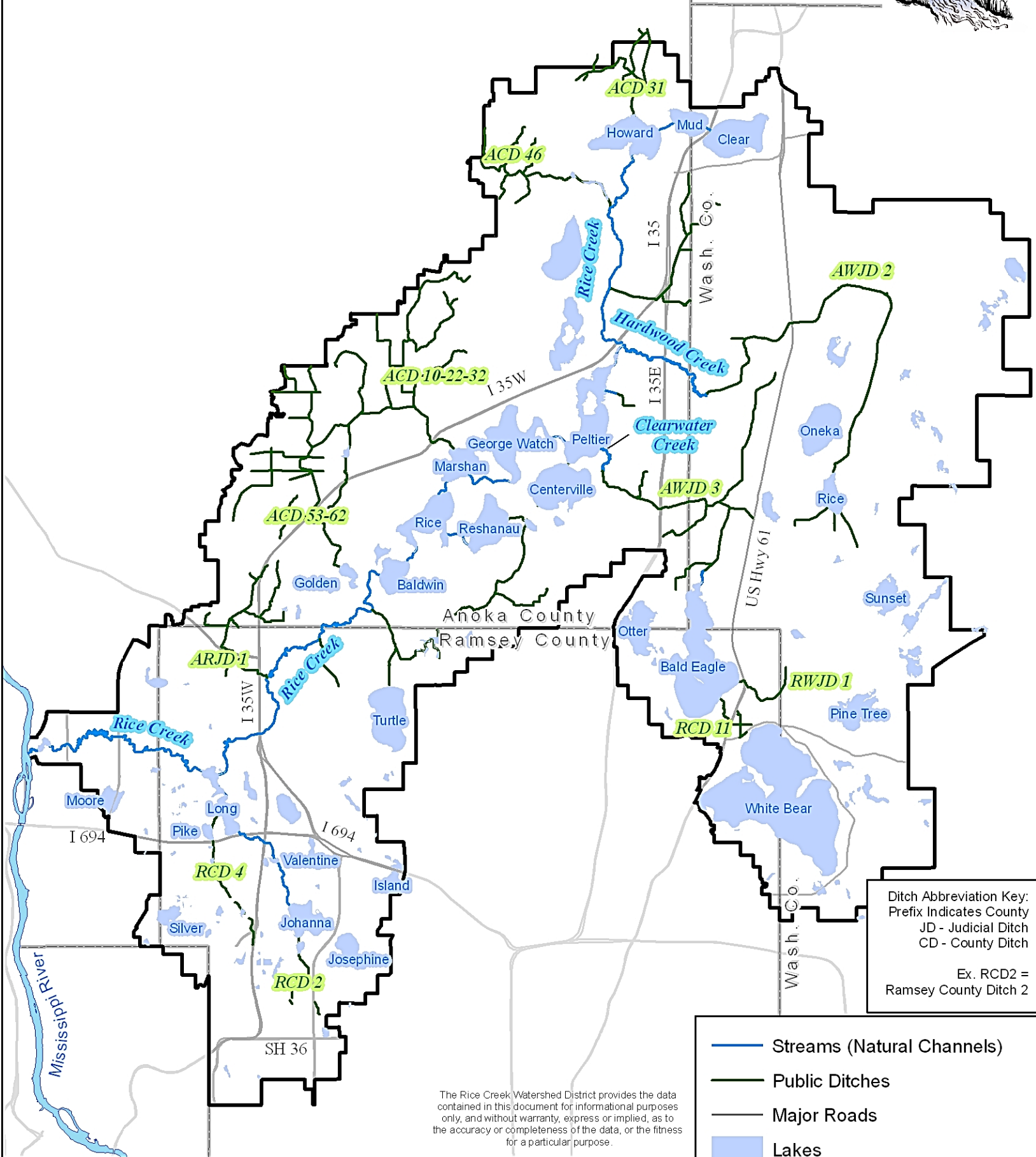
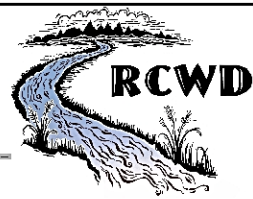
MEMORANDUM

Rice Creek Watershed District

Board Approved: December 7, 2011

- a. Maintenance on natural channels to benefit canoe/kayak passage as part of the Rice Creek Water Trail will occur:
 - i. In partnership with other Rice Creek Water Trail management agencies (Anoka County Parks, Ramsey County Parks, the National Park Service, and the Friends of the Mississippi River);
 - ii. As funding is available from other Rice Creek Water Trail management agencies.
 - b. The District will not assume responsibility for maintenance on natural channels to benefit motorized recreational use (i.e. motorboats).
3. Property Owner Considerations
- a. Maintenance that requires access over land will require the support of the landowner;
 - b. Before maintenance that requires access over land, the District will obtain a statement of indemnification from the landowner.

Streams and Public Ditches of the Rice Creek Watershed



Ditch Abbreviation Key:
 Prefix Indicates County
 JD - Judicial Ditch
 CD - County Ditch

 Ex. RCD2 =
 Ramsey County Ditch 2

- Streams (Natural Channels)
- Public Ditches
- Major Roads
- Lakes
- Rice Creek Watershed District
- County

The Rice Creek Watershed District provides the data contained in this document for informational purposes only, and without warranty, express or implied, as to the accuracy or completeness of the data, or the fitness for a particular purpose.



Map Production Date: 21 Nov 2011
 Datum/Proj: NAD83 UTM 15N
 Scale: 1:148,000
 Data Sources: RCWD, MNDNR

MJK

2:30 Discussion on ProCom Pay Request #1
for Carp Management Project.

MEMORANDUM
Rice Creek Watershed District

To: RCWD Board of Managers
From: Matt Kocian, Lake and Stream Spec.
Subject: Pay Request for ProCom

Date: March 22, 2017

Background

On March 22, 2017, the RCWD Board of Managers entered into a professional services agreement with ProCom System, S.A. of Poland, for the installation and testing of two portable low-voltage carp guidance and barrier systems on Rice Creek. The total approved cost of the contract was \$138,800.00

Beginning in mid-July, ProCom fabricated, installed, and tested the two barriers on Rice Creek. The equipment was delivered or fabricated as described in the contract. Other than a few minor field modifications, the installation and testing process very closely followed what was described in the contract.

ProCom has submitted two invoices that cover the equipment and services rendered to this point. They are attached. A detailed cost breakdown by item and invoice is below.

Original ProCom Contract Items and Costs			Actual Costs - Invoice Number and Date					Remaining Budget
Item	Desc	Cost	Customs cost, paid to import agent 7/12/2017	ProCom invoice 1 7/21/2017	ProCom invoice 2 9/5/2017			
1	Hodgson Design	\$12,400.00			\$12,400.00			\$0.00
2	Long Lake Design	\$12,400.00			\$12,400.00			\$0.00
3	NEPTUN Rental	\$40,000.00			\$20,000.00			\$20,000.00
4	Electrode 1	\$19,200.00		\$9,516.00	\$9,684.00			\$0.00
5	Electrode 2	\$16,400.00		\$8,156.00	\$8,244.00			\$0.00
6	Project Management	\$8,000.00			\$8,000.00			\$0.00
7	Field Verification, fall 2017	\$10,000.00						\$10,000.00
8	Field Verification, spring 2018	\$10,000.00						\$10,000.00
9	Rent to Own (option)	\$60,000.00						n/a
10	Customs (estimate, direct cost)	\$10,400.00	\$3,256.22					n/a
	Total Contract Amount	\$138,800.00						\$40,000.00

Recommended Approach

Staff recommend paying invoices 1 and 2, submitted by ProCom for services and equipment rendered. The total payment for both invoices is \$88,400.00.

Proposed Motion:

Manager _____ moves to approve partial payment to ProCom System S.A. for the installation and testing of two portable, low-voltage fish guidance and barrier systems on Rice Creek, in the amount of \$88,400.00

MEMORANDUM
Rice Creek Watershed District

- Attachment 1: Services Agreement for ProCom System S.A.
- Attachment 2: Proposal and Scope for ProCom System S.A.
- Attachment 3: ProCom Invoice 1/ZSH/2017 (received July 12, 2017)
- Attachment 4: ProCom Invoice 3/ZSH/2017 (received Sept 5, 2017)

**AGREEMENT BETWEEN
RICE CREEK WATERSHED DISTRICT
and PROCOM SYSTEM S. A.**

**Design, Installation, Commissioning and
Verification of Portable Low-Voltage Fish-Guidance
Systems**

This Agreement is entered into between the Rice Creek Watershed District, a public body with powers set forth at Minnesota Statutes chapters 103B and 103D (RCWD), and PROCOM SYSTEM S. A., a private business incorporated under the laws of Poland and with principal business address 8a, Stargardzka Street, 54-156 Wroclaw, Poland ("CONSULTANT"). CONSULTANT is certified to transact business in the State of Minnesota under Minnesota Statutes chapter 303, with a registered agent established. In consideration of the mutual terms and conditions set forth herein, including the obligations of mutual consideration, the sufficiency of which is hereby acknowledged, RCWD and CONSULTANT agree as follows:

1. Services

CONSULTANT will design and supply the Portable Low-Voltage Fish-Guidance Systems ("Systems") and perform the work described in the March 13, 2017 Commercial Offer attached as Attachment A (all together, the "Services"). Attachment A is incorporated into this agreement and its terms and schedules are binding on CONSULTANT as a term hereof. In the event of specific conflict between Attachment A and this Agreement, the Agreement will control. RCWD, at its discretion, in writing may at any time suspend work or amend the Services to delete any task or portion thereof. Authorized work by CONSULTANT on a task deleted or modified by the RCWD will be compensated in accordance with Paragraphs 5 and 6. The Services are subject to the following terms:

a. Design.

CONSULTANT will design two Systems for applications described by RCWD. RCWD will supply data requested by CONSULTANT concerning the applications and CONSULTANT will be responsible to confirm that RCWD has supplied all data needed to properly design the applications. CONSULTANT has determined that RCWD has supplied data sufficient to define the electric field, and has determined that both systems will be designed to generate heterogeneous modulated pulsed electric field in the range of 0,09V - 0,3V/cm.

CONSULTANT understands that the Systems will be in locations on public recreational land to which members of the public may have access. As between CONSULTANT and RCWD, CONSULTANT is knowledgeable as to performance as well as any safety and operational considerations related to electrical, physical or other features of the Systems. Accordingly, CONSULTANT warrants the design as provided in section 4, below, and will include with its design a description of such considerations, as well as



installation and maintenance practices for the purpose of limiting any described safety or operational risks.

CONSULTANT'S design will include: (i) specifications for both direct and alternate current power supply; and (ii) specifications for pillars and any other elements of the systems that will be affixed to channel bed or banks and their installation.

b. Installation and Commissioning.

RCWD will be responsible to install CONSULTANT-supplied pillars, lockable control boxes and any other support elements not requiring specialized expertise, supply electrical power, and acquire all approvals required to install and maintain the Systems. CONSULTANT, itself or through a qualified subcontractor, will install and commission the control unit and electrode system. RCWD will provide non-specialized personnel to assist in transport and installation at CONSULTANT's direction. RCWD and CONSULTANT will coordinate scheduling for efficient installation.

Furthermore, regarding security matters, RCWD will be responsible to install fencing in the immediate vicinity of the site where the electric barrier will be installed. RCWD will install warning signage to inform third persons about the electric field in the water and that it is prohibited to approach the barrier. RCWD will design and install fencing, warning and any related measures as it judges proper to implement CONSULTANT's guidance under paragraph 1.a, above.

c. Verification.

CONSULTANT will provide on-site inspection and testing to verify performance on two occasions as specified in Attachment A.

2. Independent Contractor

CONSULTANT is an independent contractor under this Agreement. CONSULTANT will select the means, method and manner of performing the Services. Nothing herein contained is intended or should be construed to constitute CONSULTANT as the agent, representative or employee of RCWD in any manner. Personnel performing the Services on behalf of CONSULTANT or a subcontractor will not be considered employees of RCWD and are not entitled to any compensation, rights or benefits of any kind from RCWD.

3. Subcontract and Assignment

CONSULTANT will not assign, subcontract or transfer any obligation or interest in this Agreement or any of the Services without the written consent of RCWD. Written consent to any subcontracting will not relieve CONSULTANT from its responsibility to perform the Services or any part thereof, nor in any respect its warranty, insurance, indemnification, duty to defend or release with respect to the Services. CONSULTANT will incorporate this Agreement in any



assignment, subcontract or transfer agreement.

4. Duty of Care and Indemnification

a. CONSULTANT will perform design, commissioning, verification and support Services in accordance with due professional care and warrants that the Systems as designed are merchantable and fit for the use as described by RCWD pursuant to paragraph 1.a, above. CONSULTANT warrants that for a period of two years from commissioning, each System, including operational features, will function as designed and will produce the electric field described in paragraph 1.a, above, and as further described in Attachment A.

b. CONSULTANT will perform all Services with ordinary due care.

c. CONSULTANT will indemnify and release RCWD, its board members, employees and agents from any and all actions, costs, damages and liabilities of any nature, including reasonable attorney fees, to the degree they are the result of CONSULTANT's or a subcontractor's professional or ordinary negligence or other action or inaction by CONSULTANT or a subcontractor that is the basis for CONSULTANT's or the subcontractor's liability in law or equity.

d. RCWD will indemnify, defend and release CONSULTANT, its officers, employees and agents, from any and all actions, costs, damages and liabilities of any nature to the degree they are the result of any action or inaction by RCWD that is the basis for RCWD's ordinary negligence or other action or inaction by RCWD that is the basis for RCWD's liability in law or equity.

e. Notwithstanding the preceding or any other term of this Agreement, RCWD waives no immunity in tort. This Agreement creates no right in and waives no immunity, defense or limitation on liability with respect to CONSULTANT or any third party.

5. Compensation

RCWD will compensate CONSULTANT for the Services in United States dollars in accordance with the fee amounts and schedule in Attachment A. Prices stated in Attachment A include all costs whatsoever in providing the Systems and performing the Services, except as Attachment A explicitly states otherwise. The following terms clarify and, where in conflict, supersede the terms of Attachment A ("Rental option"):

a. Lines 1, 2, 6, 7 and 8 are design and field service work to be paid as lump sum fixed price.

b. Line 3 is equipment rental to be paid as fixed price per year, shipped from outside of the United States.

c. Lines 4 and 5 are equipment to be purchased, paid as fixed price, sourced and shipped from within the United States.



- d. Line 9 is a lump sum payment for transfer of ownership of Line 3 equipment.
- e. Line 12 is estimated cost. The District will pay actual cost for this described item based on CONSULTANT's invoice, up to but not exceeding \$10,400 USD.
- f. With respect to any other direct costs for which the District is responsible under this Agreement, if any, the District will pay actual cost based on CONSULTANT's invoice.
- g. CONSULTANT is responsible to properly classify equipment and other elements of the transaction for the purpose of determining but not overpaying customs costs, taxes and any other similar direct costs.

Payment for undisputed Services will be dispatched within 30 days of receipt of invoice pursuant to pay transmittal instructions of the CONSULTANT representative identified in section 13, below, with CONSULTANT bearing any transaction costs thereof.

CONSULTANT will maintain all records pertaining to the Services for six years from the date of completion of the Services. CONSULTANT agrees that any authorized representative of RCWD or the State Auditor may examine, audit, and copy any such records.

6. Term and Termination

This Agreement is effective when fully executed by the parties and remains in force until December 31, 2018, unless earlier terminated as set forth herein.

RCWD may terminate this Agreement at its convenience, by a written termination notice stating specifically what prior authorized or additional services CONSULTANT is to complete. CONSULTANT will receive full compensation for all authorized work performed, except that CONSULTANT will not be compensated for any part performance of a specified task if termination is due to CONSULTANT's breach of this Agreement.

7. Waiver

The failure of either party to insist on the strict performance by the other party of any provision or obligation under this Agreement, or to exercise any option, remedy or right herein, does not waive or relinquish the party's rights in the future to insist on strict performance of any provision, condition or obligation, all of which will remain in full force and affect. The waiver of either party on one or more occasion of any provision or obligation of this Agreement will not be construed as a waiver of any subsequent breach of the same provision or obligation, and the consent or approval by either party to or of any act by the other requiring consent or approval will not render unnecessary the party's consent or approval to any subsequent similar act by the other.

8. Insurance

At all times during the term of this Agreement, CONSULTANT will have and keep in force the following insurance coverages:



- A. General: \$1.0 million each occurrence and aggregate, covering both CONSULTANT's work and completed operations on an occurrence basis and including contractual liability.
- B. Professional liability: \$1.0 million each claim and aggregate; coverage may be on a claims-made basis, in which case CONSULTANT must maintain the policy for, or obtain extended reporting period coverage extending, at least three (3) years from completion of the Services.
- C. Workers' compensation: in accordance with legal requirements applicable to CONSULTANT.

The underwriter of each policy will hold a Minnesota Department of Commerce certificate of authority covering the policy type issued. CONSULTANT will not commence work until it has filed with RCWD a certificate of insurance clearly evidencing the required coverages and naming RCWD as an additional insured for general liability, along with a copy of the additional insured endorsement establishing coverage for CONSULTANT's work and completed operations as primary coverage on a noncontributory basis. The certificate will name RCWD as a holder and will state that RCWD will receive written notice of policy change under the same terms as CONSULTANT."

During the rental period, RCWD will bear the risk of damage, loss or theft and will maintain such casualty insurance as it deems appropriate for that risk.

9. Compliance with Laws

CONSULTANT will comply with the laws and requirements of all national, state, local and other governmental units in connection with its performance under this Agreement. CONSULTANT is responsible to hold all registrations, certificates, licenses, permits and other rights necessary to fulfill this Agreement in accordance with the laws of the United States and the State of Minnesota.

10. Materials

All documents provided to CONSULTANT by RCWD, including documents in hard and electronic copy, software, and all other forms, are the property of RCWD. On termination of the agreement, CONSULTANT may maintain a copy of some or all of said materials except for any materials designated by RCWD as confidential or non-public under applicable law, a copy of which may be maintained by CONSULTANT only pursuant to written agreement with RCWD specifying terms.

RCWD acknowledges that CONSULTANT's design methods, plans and specifications, and other work products are instruments of professional service. Nevertheless, RCWD has an unlimited,



non-exclusive license to receive, possess, reproduce and use all plans and specifications and other documents, such as but not limited to permit files, engineering reports and other materials, produced or acquired by CONSULTANT to perform the Services. RCWD will release, indemnify and defend CONSULTANT from all damages, claims, expenses and losses arising out of its reuse of said documents outside of the scope of use of this Agreement without CONSULTANT'S written authorization.

11. Data Practices; Confidentiality

The Minnesota Data Practices Act applies to this Agreement as set forth at Minnesota Statutes §13.05, subdivision 11.

12. Continuation of Obligation

It is understood and agreed that insurance obligations; warranties; duties of care, releases and obligations to defend and indemnify; and document retention requirements will survive completion of the Services and the term of this Agreement.

13. Notices

Any written communication required under this Agreement to be provided in writing will be directed to the other party as follows:

To RCWD:

Administrator
Rice Creek Watershed District
4325 Pheasant Ridge Drive
Suite 611
Blaine, MN 55449-4539 USA

To PROCOM SYSTEM S.A.:



One or both of the following, as appropriate:

Mr. Emil Kukulski
ProCom System S. A.
Ul. Stargardzka 8a
54-156 Wroclaw, Poland
Emil.kukulski@procomsystem.pl

Registered Agent:
Registered Agents Inc.
1660 S. Highway 100
STE 500A
St. Louis Park, MN 55416

The RCWD or PROCOM representative may in writing designate another individual to receive communications under this Agreement. A PROCOM change of registered agent will be effective only as evidenced by a revised certificate of authority issued by the Minnesota Secretary of State and transmitted to RCWD.

14. Choice of Law, Venue and Jurisdiction

This Agreement will be construed under and governed by the laws of the State of Minnesota and, in matters not governed by State law, of the United States. Venue and jurisdiction for any action under this Agreement will lie in Anoka County, Minnesota.

15. Whole Agreement

The entire agreement between the two parties is contained herein and this Agreement supersedes all oral agreements and negotiations relating to the subject matter hereof. Any modification of this Agreement is valid only when reduced to writing as an amendment to the Agreement and signed by the parties hereto. The RCWD may amend this Agreement only by action of the Board of Managers acting as a body.

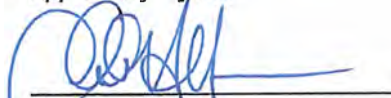
16. Time Is of the Essence

Two handwritten signatures in blue ink are located at the bottom right of the page. The first signature is a stylized, cursive 'M' or similar character. The second signature is a more complex, cursive scribble.


Time is of the essence in the fulfillment of the terms of this Agreement.

IN WITNESS WHEREOF, intending to be legally bound, the parties hereto execute and deliver this Agreement.


Approved for form & execution


RCWD Attorney

PROCOT SYSTEM S. A. PREZES ZARZADU RICE CREEK
CZŁONEK ZARZADU DYREKTOR NACZELNY WATERSHED DISTRICT
DYREKTOR FINANSOWY

By  Bogdan Dolński

 Andrzej Wójciszewski

By  _____

Its Administrator

Date 4/19/17

PROCOT SYSTEM S.A.
54-156 Wrocław, ul. Stargardzka 8a
tel. 71 77 66 700, fax 71 77 66 702
Regon 008044238, NIP 899-02-04-851
Date _____
(5)



Commercial offer

nr 60b/02/2017

13.03.2017r.

For:

Matt Kocian

Rice Creek Watershed District

Title:

Delivery, installation and commissioning of two portable NEPTUN low-voltage DC fish-guidance systems in Rice Creek

Prepared by:



Emil Kukulski, Tel. [+48 71 77 66 780](tel:+48717766780) Mob. [+48 782 710 010](tel:+48782710010)

Email: emil.kukulski@procomsystem.pl

PROCOM SYSTEM S.A.
Ul. Stargardzka 8a
54-156 Wrocław, Poland
Tel +48 71 77 66 700
Fax +48 71 77 66 702
info@procomsystem.pl
www.procomsystem.pl

Tax Identification No. (NIP) 899-02-04-851
National Business Registry No. (REGON) 008044238
KRS (National Court Register no.) 0000050817 District Court
for Wrocław, 6th Commercial Department
Share capital: PLN 3,300,000 fully paid up.

**ATTACHMENT A
PROCOM SYSTEM S.A.
SERVICES**



1. General Information

This quotation has been drawn up on the basis of the knowledge and experience gathered by PROCOM SYSTEM S.A. (hereinafter referred to as PROCOM).

The implementation of the Neptun system must be preceded by the design phase which takes into account many details specific to the place of installation. Through this approach the Neptun system reaches very high effectiveness.

2. Deliverables

This proposal includes the following deliverables:

Rice Creek at Hodgson Road:

- a. Pillars required to fix the underwater installation to the riverside.
- b. Set of electrode system for underwater installation designed to stop downstream movement of carp 10-70 cm in length and guide them to the trap – max 35m length.
- c. Portable control unit – NEMO2.





Rice Creek near Poppyseed Dr in New Brighton:

- d. Pillars required to fix the underwater installation to the riverside.
- e. Set of electrode system for underwater installation designed to stop upstream movement of carp > 30 cm in length and guide them to the trap – max 30m length.
- f. Portable control unit – NEMO2.



Furthermore:

Supervision of installation of the barriers on the sites.

Commissioning of both systems.

Tests and calibration of the parameters.

Participation in the field tests:

- 1 week of tests carried out directly after first installation
- Verification of the barriers and their settings, 1 week of tests – autumn 2017
- Verification of the barriers and their settings, 1 week of tests – spring 2018

Spare parts for electronic control box and training for Rice Creek Watershed District personnel on how and when it should be used.

User manual.

Training for operators and users of the Neptun system.



3. PROCOM's responsibilities

PROCOM shall be responsible for:

- Design of the electric barrier to achieve high effectiveness of blocking of common carp. The barriers will be designed to generate an electric field in the range of 0,09V - 0,3V/cm.
- Supplying of components required for installation.
- Providing of the guidelines and detailed documentation.
- Commissioning and calibration of the system before effectiveness tests.
- Participation and supervision over the testing of the effectiveness of the Neptun system on site within suggested periods of time.
- Remote supervision of the systems and monitoring of the operating parameters.
- Substantive support in field tests over a 2 year period.

4. Ordering Party's responsibilities

The Ordering Party shall be responsible for providing the necessary equipment to unload and transport the items upon delivery.

The Ordering Party shall provide or otherwise arrange for the following:

- Technicians to assist with transport to and installation of the system at the selected site;
- Technicians to help install the system and learn to operate and monitor the system.
- Two SIM cards with static IP address required for remote monitoring.
- Installation of pillars required to fix the underwater installation to the riversides.
- Power supply to the control box (110V(60Hz) + ground)(max power 4kVA).
- Trap to catch carps.
- fence mounted at immediate vicinity of the site where electric barrier is installed.

RCWD will install warning boards which inform third persons about prohibition of approaching to the barrier and electricity in the water.

Any future implementation of the NEMO 2 system at other sites will require adaptation of the settings in order to obtain expected effectiveness, therefore the Ordering Party is obligated to involve PROCOM for proper design and support in implementation.

5. Technical assumptions

The minimum water level in Rice Creek (at Hodgson Road and near Poppyseed Dr in New Brighton) amounts to 80cm, so in order to obtain the required stability of the underwater



installation, the electrodes cannot be longer than 110cm measured from the bottom. Consequently the electric field generated by such electrodes will cover a space corresponding to the max 140cm of depth during floods.

In order to increase the depth up to 2m we offer elongation of the electrodes by appending ~40cm pieces to each base electrode. This operation should be performed manually when the water level is no less than 110cm.

6. Quotation - rental option

The rental option applies only to the electronic control box (Item 3) because of the underwater components are degradable and made specifically for the particular site.

Item	Description	Quantity	Price	Discount	Total price (2 years)
1	• Design of the electric barrier for Rice Creek at Hodgson Road	1 set	15 500 USD	20%	12 400 USD
2	• Design of the electric barrier for Rice Creek near Poppyseed Dr in New Brighton	1 set	15 500 USD	20%	12 400 USD
3	• Rental of the electronic control and power supply system – portable version (NEMO2).	2 pcs.	10 000 USD/ year	-	40 000 USD
4	• Set of positive and negative electrodes (max 35m barrier length). • Installation of the system. • Commissioning and calibration.	1 set	24 000 USD	20%	19 200 USD
5	• Set of positive and negative electrodes (max 30m length). • Installation of the system. • Commissioning and calibration.	1 set	20 500 USD	20%	16 400 USD
6	• Project management and personnel for 1 week of the tests after installation.	1 set	8 000 USD	-	8 000 USD
7	• Verification of the barrier and their settings, 1 week of the tests – autumn 2017	1 set	10 000 USD	-	10 000 USD
8	• Verification of the barrier and their settings, 1 week of the tests – spring 2018	1 set	10 000 USD	-	10 000 USD
9	• Rent to own option - possible after two years of rental.	2 pcs.	30 000 USD	-	60 000 USD
10	US Customs costs – 10% value of equipment		10 400 USD*	-	10 400 USD**

* These are estimated US Customs costs which will be covered by Ordering Party based on the invoice issued by U.S. Customs and Border Protection.



The above quotation includes:

- Labour and accommodation costs of PROCOM's personnel during the installation work and launching of the NEPTUN System.
- Travel costs of PROCOM's representatives.
- Insurance - General & Professional liability: \$1.0 million each occurrence and aggregate.
- Transport cost of the equipment from Poland to the Minneapolis (destination address indicated by Ordering Party).

Ordering Party has the right to cancel an order of rental the electronic control and power supply box after 1 year of testing. In that case Ordering Party will pay for services as they are rendered. The minimum rental period is one year.

The quotation does not include any costs related to any other relevant U.S. taxes.

7. Payment conditions


Rental option:

- 24,800 USD - after submission of design documents for both sites. Payment deadline – four weeks after signing acceptance protocol.
- 63,600 USD - after system delivery, installation and commissioning. Payment deadline – four weeks after signing acceptance protocol.
- 10,000 USD - after verification of the barriers and their settings, 1 week of tests – autumn 2017. Payment deadline – four weeks after sign off an acceptance protocol.
- 10,000 USD - after verification of the barriers and their settings, 1 week of tests – spring 2018. Payment deadline – four weeks after sign off an acceptance protocol.
- 20,000 USD – (2nd year rental cost) – within 1 month after 1st year of system operation if Ordering Party decide to extend rental agreement for second year.
- ~10 400 USD – based on US Customs invoice.

Procom will issue invoice for each executed stage of the contract, Ordering Party will pay the invoice through bank transfer.

8. Delivery schedule

Dispatch of the components of the Neptun system to USA – max 9 weeks after reception the order and execution of the agreement.

 PROCOM SYSTEM	Commercial offer	nr 60b/02/2017
	Delivery, installation and commissioning of two portable NEPTUN low-voltage DC fish-guidance systems in Rice Creek	

Installation of the Neptun system on site: within 10 days after reception of the consignment in the US.

9. Guarantee

The NEPTUN System is covered by a 24-month guarantee from the date of installation and commissioning.

Note: Damage to the installation as a result of force majeure are not subject to warranty.

CZŁONEK ZARZĄDU
DYREKTOR FINANSOWY

Bogdan Dołński

PREZES ZARZĄDU
DYREKTOR NACZELNY

Artur Wójcikowski

Approval (date & signature)



PROCOM SYSTEM

COMMERCIAL INVOICE

Date: 23.06.2017

Invoice #: 1/ZSH/2017

TERMS OF SALE	CURRENCY
DAP	US Dollar

SHIPPER/EXPORTER:

PROCOM SYSTEM S.A.
 ul. Stargardzka 8a
 +48 71 77 66 700
 54-156 Wrocław
 Poland

CONSIGNEE:

Rice Creek Watershed District
 4325 Pheasant Ridge Dr. NE, Suite 611
 Blaine, MN 55449-4539
 USA

COUNTRY OF ULTIMATE DESTINATION

United States of America

DELIVERY ADDRESS:

Rice Creek Watershed District
 4325 Pheasant Ridge Dr. NE, Suite 611
 Blaine, MN 55449-4539
 USA

COUNTRY OF MANUFACTURE

POLAND Manufacturer is the same as Exporter

List of the Parts for item 4 & 5 from the agreement	Quantity	Quantity	Unit net weight kg	UNIT VALUE \$	TOTAL VALUE \$
Cables	8	EA	11 kg	\$ 375,00	\$ 3 000,00
Isolators (POM-C + Stainless steel)	165	EA	0,727 kg	\$ 48,00	\$ 7 920,00
Fastening components (Stainless steel)	1	SET	39 kg	\$ 500,00	\$ 500,00
C-channels - pillars (steel)	8	EA	8,3 kg	\$ 100,00	\$ 800,00
C-channels - covers (Stainless steel)	169	SET	0,077 kg	\$ 2,00	\$ 338,00
Floats (EVA- ethylene-vinyl acetate)	142	EA	0,66 kg	\$ 18,00	\$ 2 556,00
Chain link (steel)	164	SET	0,25 kg	\$ 2,00	\$ 328,00
Shackle (steel)	167	EA	0,23 kg	\$ 5,00	\$ 835,00
Silicone paste H	1	EA	1 kg	\$ 100,00	\$ 100,00
Blocking rings (POM-C)	165	EA	0,1 kg	\$ 7,00	\$ 1 155,00
PU 500 Polyurethane cementing-sealing material	14	EA	0,33 kg	\$ 10,00	\$ 140,00

Special Notes and Instructions

These are components of underwater part of the Neptun system (electric barrier).

TOT NET Weight 520Kg
 TOTAL gross Weight 560Kg
 Shipment VIA: AIR

Subtotal	\$ 17 672,00
Sales Tax Rate:	% 0,00
Sales Tax:	\$ -
S&H	\$ -
Discount	\$ -

Total \$ 17 672,00

SIGNATURE

PROCOM SYSTEM S.A.
 54-156 Wrocław, ul. Stargardzka 8a
 tel. 71 77 66 700, fax 71 77 66 702
 Regon 008044238, NIP 899-02-04-851
 (15)

PROCOM SYSTEM S.A.
 Stargardzka 8A, 54-156 WROCŁAW
 NIP: PL 899-02-04-851
 Raiffeisen Bank Polska S.A.
 67 1750 1064 0000 0000 2027 7386
 SWIFT CODE: RCBWPLPW

Transaction location:	WROCŁAW
Date of supply completion	2017-08-04
Invoice date:	2017-08-04

Seller:
 PROCOM SYSTEM S.A.
 Stargardzka 8a
 54-156 WROCŁAW
 TIN: 899-02-04-851

Customer:
 Rice Creek Watershed District
 4325 Pheasant Ridge Dr. NE, Suite 611 Suite 611
 Blaine, MN
 TIN: 55449-4539

Invoice 3/ZSH/2017 original

No.	Description	Quantity	Unit	Net price	Net value	Tax rate	Tax value	Gross value
1	Design, Installation, Commissioning and Verification of the Portable Low-Voltage Fish-Guidance System. Agreement 19.04.2017 Item 1 from the contract - Design of the electronic barrier at the Hodgson Read	1,000	szt.	12 400,00	12 400,00	0	0,00	12 400,00
2	Design, Installation, Commissioning and Verification of the Portable Low-Voltage Fish-Guidance System. Agreement 19.04.2017 Item 2 from the contract - Design of the electronic barrier near Poppyseed Dr in New Brighton	1,000	szt.	12 400,00	12 400,00	0	0,00	12 400,00
3	Design, Installation, Commissioning and Verification of the Portable Low-Voltage Fish-Guidance System. Agreement 19.04.2017 Item 4 from the contract - final payment	1,000	szt.	9 684,00	9 684,00	0	0,00	9 684,00
4	Design, Installation, Commissioning and Verification of the Portable Low-Voltage Fish-Guidance System. Agreement 19.04.2017 Item 5 from the contract - final payment	1,000	szt.	8 244,00	8 244,00	0	0,00	8 244,00
5	Design, Installation, Commissioning and Verification of the Portable Low-Voltage Fish-Guidance System. Agreement 19.04.2017. Item 6 from the contract	1,000	szt.	8 000,00	8 000,00	0	0,00	8 000,00
6	Rental of the electronic control power supply system until end of July 2018 (Item 3)	1,000	szt.	20 000,00	20 000,00	0	0,00	20 000,00

Tax rate	Net value	Tax value	Gross value
Podatek VAT 0%	70 728,00	0,00	70 728,00
Total:	70 728,00	0,00	70 728,00

Total **70 728,00**

In words: seventy thousand seven hundred twenty eight USD
0/100

Amount due: 70 728,00

Due in: 30 days = 2017-09-03

Notes: 036/17

Sales person:
Sylvia Michałowska
Specjalista ds. umów i zakupów
Sylvia Michałowska

Signature of the authorized seller

Buyer:

Signature of the authorized buyer

3:00 Discussion on Delegated Permit
Authority to the Administrator.

MEMORANDUM
Rice Creek Watershed District

To: Board of Managers

Date: September 6, 2017

From: Nick Tomczik

Subject: Update/Revision of Board Regulatory Delegation

Resolution 2009-09 delegates certain permitting authorities to the administrator. The resolution has become outdated by way of adopted changes to the District's rules. Staff is proposing for board consideration and comment a revised resolution, consistent with the current rules, to replace resolution 2009-09. The language of the resolution has been revised without substantive change for alignment with the current rule and to provide clarity. From that point the delegation was written to include the following revisions:

- First "therefore"
 - Item 1 - Rule C delegating authority for single-family residential subdivision meeting the criteria of Rule C.2(g) and delegate the associated Rule F wetland management corridor establishment requirements as imposed by Rule C.10(d).
 - Item 6 – Delegation of CAPROC assignment
- Third "therefore" item 1 is explicit in authority to sign escrow agreements.

Attachment: Draft Resolution 2017-23

RESOLUTION 2017-23

**RICE CREEK WATERSHED DISTRICT
BOARD OF MANAGERS**

**DELEGATING PERMITTING AUTHORITY to the ADMINISTRATOR
(Superseding Resolution 2009-09)**

Manager _____ offered the following resolution and moved its adoption, seconded by
Manager _____:

WHEREAS the Rice Creek Watershed District (“District”), pursuant to Minnesota Statutes §103D.341, has adopted and implements rules governing permits for work within the watershed that may affect water resources;

WHEREAS Rule B, paragraph 3, of the adopted rules provides that the Board, by resolution, may delegate permitting authority to the Administrator;

WHEREAS as the body ultimately responsible for the water resource management decisions of the District and accountable to District constituents and stakeholders for those decisions, the Board finds that it should retain permitting authority for projects that have the potential for significant water resource impacts, are of significant public interest or raise significant policy questions;

WHEREAS, conversely, it is beneficial to the District, its constituents and its stakeholders, including regulated property owners, that the regulatory program be implemented efficiently and that permit decisions be made without undue delay when circumstances cited in the preceding paragraph are not present;

WHEREAS this resolution replaces and supersedes Resolution 2009-09, previously adopted to delegate permitting authority to the Administrator.

THEREFORE BE IT RESOLVED that the District Board of Managers hereby delegates to the District Administrator the authority to make permit decisions on behalf of the Board under the following circumstances:

1. Rule C: An application for construction of a single-family detached dwelling, in any case where a permit or approval is required; or single-family residential subdivision meeting the criteria of Rule C.2(g). This delegation includes the authority to administer Rule F requirements as imposed by Rule C.10(d).
2. Rule D: All applications for an erosion and sediment control permit.
3. Rule E: All applications for a floodplain alteration permit.
4. Rule I: Applications for a permit for work affecting an existing public or artificial private drainage system (open and tiled elements) that does not alter design hydraulic

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capacity; risk significant wetland or water quality impact; or require an individual permit from the DNR or the U.S. Army Corps of Engineers, or wetland replacement under the Wetland Conservation Act.

5. Application for a previously approved but expired CAPROC or permit, if project scope and applicable rules have not changed substantially (as defined in item 7).
6. Application to assign a CAPROC, or assign or renew a permit.
7. Amendment of an outstanding CAPROC or permit that does not exceed any of the following (these items define “no substantial change”):
 - Changes in the on-site drainage patterns or stormwater network (private) on site, provided there is no change in what is treated by the BMPs and no change in what leaves the site.
 - Changes to proposed buildings (locations, layouts, alignments, dimensions and footprint) provided drainage patterns are not affected and stormwater treatment is not diminished (i.e. do not diminish volume control or water quality treatment and do not increase peak runoff rates).
 - Changes to proposed BMPs (locations, layouts, alignments, dimensions and footprint) provided stormwater treatment is not diminished (i.e. do not diminish volume control or water quality treatment and do not increase peak runoff rates).
 - Changes to proposed BMP pretreatments (locations, layouts, alignments, dimensions and footprint) provided stormwater pre-treatment is not diminished.
 - Changes to proposed BMP proprietary brand provided that stormwater treatment is not diminished.
 - Changes to erosion control plan components (e.g. type, location, dimension, etc) provided that overall function is not diminished.
 - Changes to proposed project feature locations, alignments and dimensions provided there is no net increase in floodplain fill and no increase in water surface elevations.
 - Amendments to Board-approved wetland replacement plans adjusting wetland replacement design (layouts, alignments, dimensions and footprint) provided replacement requirements are met.
 - Amendments to Board-approved wetland replacement plans reflecting changes to wetland impact (layouts, alignments, dimensions and footprint) provided that there is no increase in wetland impact or change to type of wetland impacted.

THEREFORE BE IT FURTHER RESOLVED that permitting delegations 1 through 5, above, will be subject to the following procedures:

1. The delegation does not apply if a variance is required.
2. Staff should provide public notice for staff-issued permits to the same extent as for Board-issued permits.

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3. On determining that an application is complete and subject to a delegated Administrator decision, staff will provide email notice (applicant's name, project location, and general proposed project) to the Board. A Board member will have 48 hours in which to comment on the application. The Administrator will make no decision on the application until the expiration of the 48-hour time frame.

4. On timely written request of an interested party, a permit application otherwise suitable for staff determination will be brought before the Board. In advance of Board consideration, staff will make reasonable attempts to determine and address the concerns of the requesting party.

5. On request of a Board member, or on the Administrator's determination that an application raises a technical, policy or legal question that should be considered by the Board, a permit application otherwise subject to the Administrator's delegated authority will be brought before the Board.

6. On written request of an interested party addressed to District staff and received by staff within seven days after the date of a final staff determination on a permit application, the determination shall be brought before the Board for reconsideration, unless the timing of the next regular Board meeting would not allow Board reconsideration within the deadline established by Minnesota Statutes §15.99.

7. The Administrator quarterly shall present to the Board a report on District permitting activity describing permit applications submitted, disposition of applications, types of permits issued, locations of permitted activities, significant policy and programmatic issues arising under the permit program and constituent satisfaction with staff-issued permit procedures.

8. In implementing staff permitting authority, the Administrator will identify policy issues that arise and periodically bring those issues to the Board for consideration.

THEREFORE BE IT FINALLY RESOLVED that the Administrator is delegated the following additional authorities to implement the District regulatory program on behalf of the Board:

1. Authority to sign maintenance agreements, maintenance declarations, easements, escrow agreements and amendments to these.
2. Issuance of compliance orders (including stop work orders) with a duration of up to 15 calendar days or the next scheduled regular RCWD Board meeting, whichever greater. The delegation is limited to cases where:
 - a. Substantial harm to the environment, public safety or property is occurring or threatened;
 - b. The harm is or will result from the violation of a District statute, rule, permit, order or stipulation; and

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- c. If the harm is threatened, it is likely to occur before the Board can meet to deliberate and issue an order.

The Administrator may subdelegate this authority to staff but is responsible to the Board to ensure it is used in accordance with the delegation.

The question was to adopt the Resolution and there were ___ yeas and ___ nays as follows:

	<u>Yea</u>	<u>Nay</u>	<u>Absent</u>
WALLER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HAAKE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BRADLEY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WAGAMON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PREINER	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Upon vote, the Chair declared the Resolution _____..

Dated: September 13, 2017

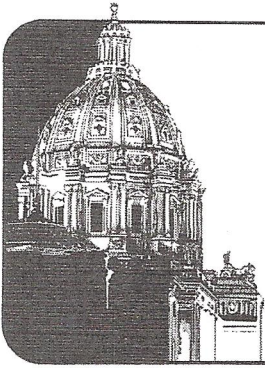
Michael Bradley, Secretary

I, Michael Bradley, Secretary of the Rice Creek Watershed District, hereby certify that I have compared the above resolution with the original thereof as the same appears of record and on file with the District and find it to be a true and correct transcript thereof.

IN TESTIMONY WHEREOF, I set my hand this 13th day of September, 2017.

Michael Bradley, Secretary

3:10 Discussion on MAWD Resolutions
Packet.



Media & Government Affairs

540 Diffley Road, St. Paul, MN 55123
Office: 651-452-8506 Fax: 651-686-8679 E-mail: raybohnmg@aol.com

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2017 MAWD Annual Meeting Resolution Process

August 16, 2017

TO: Watershed Districts

FROM: Barb Haake
MAWD Policy/Resolutions Committee Chair

SUBJECT: 2017 Resolution Process and Time Line

Enclosed is your 2017 Resolution packet for the MAWD Annual Meeting. The Policy/Resolutions Committee will work under the following process for the upcoming 2017 MAWD Annual Meeting Nov 30 – Dec 2, 2017.

* Resolutions passed by the membership at Annual Meetings will remain MAWD policy from year to year unless MAWD members, the Board of Directors, or the Policy/Resolutions Committee brings that policy back to the full membership during the resolutions process for updating and discussion at any regular annual meeting. There will be no need to keep revisiting MAWD standing policy on issues like flood mitigation, problem beaver control, etc. once a policy decision has been made by the membership.

* Proposed resolutions submitted by members will be reviewed by the Policy/Resolutions Committee and policy recommendations will be made to the membership and Board of Directors at the Annual Meeting.

Outlined below is the process and time line for resolutions to be considered at the 2017 Annual Meeting. For resolutions to be considered, you must meet the time line outlined below and they must be submitted in resolution format accompanied by the resolution background information sheet (see sample – we encourage submission in this format via e-mail to the MAWD office), both attached to this memo. All resolutions received by the MAWD office will be acknowledged.

Any resolution proposed after the deadline may only be brought to the floor if considered and forwarded to the membership by the MAWD Board of Directors. No floor resolutions will be considered.

1. Aug-Sept.-Oct. 2017 Districts discuss and approve resolutions.
Complete background information sheet on
each resolution.

2. Forward proposed resolutions E-mail resolutions to
no later than Friday, October 20th. raybohnmg@gmail.com

Note: Resolutions received after October 20th will not be presented to the membership by the Policy/Resolutions Committee.

3. Resolution Review - Oct. 20 The Policy/Resolutions Committee will organize and
review resolutions, garner further information when
necessary, and make recommendations on the proposed
resolutions by the end of October.

4. November 1, 2017 Proposed resolutions with committee recommendations
will be mailed to each watershed district by Nov. 1st.
Districts should work with their MAWD Regions and
MAWD Board concerning education and awareness of
their proposed resolutions.

5. Nov 30-Dec2, 2017 Consideration of proposed resolutions at MAWD Annual
Meeting.

It will be the responsibility of each district to provide their board members with copies of the proposed resolutions.

Please call the MAWD office at 651-452-8506 or email Ray Bohn at raybohnmg@gmail.com if you have any questions. Thank you.

Attachments: Sample resolution and resolution background worksheet.

2017 MAWD Resolutions

Background Information

Proposing District: _____

Contact Name: _____

Phone Number:

(day) _____ (cell) _____ (evening) _____

Email Address: _____

Resolution Title (brief subject statement): _____

Factual points which provide background to, or a basis for, the issue addressed by Resolution:

Based upon the above facts, what is the proposed solution to the problem discussed above:

Likely Reaction by the Public or Other Governmental Units?

This issue is of importance (Check one):

To just our District: _____

To just our Region: _____

To the entire State: _____

Resolution

Watershed District Input on MN DNR Buffer Protection Map

Whereas, the Minnesota Department of Natural Resources (MN DNR) has been tasked with the creation of a buffer protection map that will include public waters subject to the statewide 50' average width buffer requirement and the public drainage system ditches that are subject to the statewide 16.5 minimum width buffer requirement by July 2016, under MN Statutes 103F.48; and

Whereas, local government units, including watershed districts, are conducting activities that improve water quality and assist with water quantity control, on both public & non-public waters; and

Whereas, local government units, including watershed districts, have experience in determining buffer needs for water quality;

NOW, THEREFORE, BE IT RESOLVED that the Minnesota Association of Watershed Districts call for the MN DNR to offer opportunities for local government units to offer input on the creation of the buffer protection map.

Submitted by the Clearwater River Watershed District

2017 MAWD Resolutions

Background Information

Proposing District: _____

Contact Name: _____

Phone Number:

(day) _____ (cell) _____ (evening) _____

Email Address: _____

Resolution Title (brief subject statement): _____

Factual points which provide background to, or a basis for, the issue addressed by Resolution:

Based upon the above facts, what is the proposed solution to the problem discussed above:

Likely Reaction by the Public or Other Governmental Units?

.

This issue is of importance (Check one):

To just our District: _____

To just our Region: _____

To the entire State: _____

2015 MAWD Resolutions Background Information

Proposing District: Clearwater River Watershed District

Contact Name: Cole Loewen, Administrator

Phone Number:
(day) 320.274.3935 (cell)

(evening)

Email Address: cole.loewen@cwd.org

Resolution Title (brief subject statement): Watershed District Input on MN DNR Buffer Protection Map

Factual points which provide background to, or a basis for, the issue addressed by Resolution:

MN Statutes 103F.48 provides for the MN Dept. of Natural Resources (MN DNR) to develop a "buffer protection map" in order to determine where buffers will be required under the law. However, the statute does not require the MN DNR to solicit or provide opportunity for input on the creation of this map from the entities that are mostly intimately involved with buffer, local government units (i.e. counties, soil & water conservation districts, watershed districts). There has been little to no indication that the MN DNR plans to provide these opportunities.

By not providing these opportunities, the state misses out on a deep well of information on public waters and drainage systems from the local level. This also creates opportunities for misunderstandings, especially if the MN DNR makes a determination on what is a public water or drainage system that conflicts with said local knowledge.

Based upon the above facts, what is the proposed solution to the problem discussed above:

By providing ample opportunity for local government units to offer input on the MN DNR's creation of the buffer protection map, the state gains local knowledge, while providing more transparency to a process that will be subject to scrutiny from a multitude of angles.

Likely Reaction by the Public or Other Governmental Units?

It is expected that local government units will appreciate the opportunity to provide input. The public would likely appreciate having all of their government units providing input. The MN DNR may oppose it on the grounds that they are using existing public waters inventory and public drainage records to create said map, thereby making additional input unnecessary.

This issue is of importance (Check one):

To just our District: _____

To just our Region: _____

To the entire State: _____