MAY

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JUNE

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REGULAR MEETING OF THE BOARD OF MANAGERS

Wednesday, May 14, 2003, 7:00pm

Shoreview City Hall Council Chambers
4600 North Victoria Street, Shoreview, Minnesota

Agenda

ROLL CALL

Present:
Absent:

Staff Present: District Administrator Hobbs, Office Manager Stasica
Consultants: District Engineer Emmons, EOR, District Attorney
Visitors:

CALL TO ORDER

SETTING OF THE AGENDA

READING OF THE MINUTES AND THEIR APPROVAL

1. Minutes of April 23, 2003, Board of Managers Regular Meeting.

PUBLIC HEARING: RICE CREEK WATERSHED DISTRICT NPDES PHASE II PERMIT

PERMIT APPLICATIONS REQUIRING BOARD ACTION

The following applications have been reviewed by the District Engineer and Staff and will be acted upon without discussion in accordance with the Engineer's Recommendation unless a Manager or the Applicant or another interested person requests opportunity for discussion:

No.	Applicant	#Plan Type	Description/Location	*Recommendation
03-035	Ronald Lehrke	FSD	S. of Gateway Circle & E. of CR 54, Centerville	CAPROC pro 3 items
03-046	Mark & Roberta Thompson	FSD	3413 Snelling Avenue North, Arden Hills	CAPROC pro 3 items

CONSENT AGENDA

It was moved by _____ and seconded by _____ to Approve, Conditional Approval Pending Receipt Of Changes, or Table the Permit Applications noted in the following Table of Contents in accordance with the District Engineer's Findings and Recommendations, as contained in the Engineer's Report dated April 23, 2003:

#KEY:	APW=Approp. of Public Waters	LD=Land Development	S&UC=Street & Utilities Construction
	BC=Bridge Construction	NPR=No Permit Required	UC=Utility Construction
	CC=Culvert Construction	PDS=Pub./Priv. Drng. Sys.	UDC=Utility Ditch Crossing
	CSM=Comp.Stormwater Mgmt.	RG=Rough Grading	WA=Wetland Alteration
	FSD=Final Site Drainage	SA=Shoreland Alteration	WB=Wetland Banking

*CAPROC = Conditional Approval Pending Receipt Of Changes pro = pending receipt of

OPEN MIKE

Individuals may address the Board of Managers about any item not included on the regular agenda. Speakers are requested to come to the podium, state their name and address for the record, and limit their remarks to five minutes. Generally, the Board of Managers will not take official action on items discussed at this time, but may refer the matter to staff for a future report or direct that the matter be scheduled on an upcoming agenda.

ADDITIONAL ITEMS REQUIRING BOARD ACTION

1. Consider purchase of company truck for the RCWD
2. Consider approval of cost share for Peltier Lake project (see Advisory Committee Recommendation)
3. Consider Check Register dated 5/14/03, in the amount of $13,078.18, Prepared by HLB Tautges Redpath.

ITEMS FOR DISCUSSION AND INFORMATION

1. Review Hardwood Creek Nutrient Study report
2. EOR Project Memo and Timeline Updates

ADJOURNMENT

READING OF THE MINUTES AND THEIR APPROVAL

1. Minutes of April 23, 2003, Board of Managers Regular Meeting.

For Consideration of Approval at the 5-14-03 Board Meeting.
Use these minutes only for reference until that time.

MINUTES OF
REGULAR MEETING OF THE RICE CREEK
WATERSHED DISTRICT BOARD OF MANAGERS
Shoreview City Hall Council Chambers
4600 North Victoria Street, Shoreview, Minnesota
April 23, 2003

ROLL CALL

Present: 1st Vice-Pres. Leroux, 2nd Vice-Pres. Haake, Secretary Aiken, Treasurer Doege
Absent: President Cardinal was absent with prior notice

Staff Present: Administrator Hobbs, Office Manager Stasica, and Permit Coordinator Hammers
Consultants: District Engineers Brett Emmons, Carl Almer, and Ian Baldry of EOR; Attorney Chuck Holtman, Smith Parker
Visitors: John Waller, Tim Gillette, Jason McCary, and Joe Niemczyk

CALL TO ORDER

1st Vice-Pres. Leroux called the meeting to order, a quorum being present, at 7:02 p.m.

SETTING OF THE AGENDA

Under ACTION ITEMS,
Under ITEMS FOR DISCUSSION, Manager Aiken would like an additional item Number 4- Discuss personnel issues the Board still needs to address from their March 10, 2003 workshop. Manager Haake would like an additional item Number 4 to discuss the status of the EIS/EAW for the Blaine-Anoka County Airport.
The Board adopted the amended Agenda by consensus.

READING OF THE MINUTES AND THEIR APPROVAL

Minutes of the April 9, 2003, Board of Managers Meeting. ***Motion by Doege, seconded by Haake to approve the minutes as presented. Motion carried 4-0.***

PERMIT APPLICATIONS REQUIRING BOARD ACTION

The following applications have been reviewed by the District Engineer and Staff and will be acted upon without discussion in accordance with the Engineer's Recommendation unless a Manager or the Applicant or another interested person requests opportunity for discussion:

No.	Applicant	#Plan Type	Description/Location	*Recommendation
02-129	Gary M. Uhde	LD	N. of Palomino Lane & E. of Sunset Ave., Lino Lakes	CAPROC pro 9 items

District Engineer Almer presented information to the Board regarding the project. Manager Doege questioned if it was appropriate to approve the permit before the disposition of the ditch on the property as a public or private structure is resolved. Administrator Hobbs replied that there would not be a problem.

Motion to adopt the District Engineer's Findings and Recommendation as contained in the Engineer's Report dated 4/23/03 to CAPROC PA02-129 pro 9 items: Doege/Haake. Carried 4-0.

03-039	POA/Scherer, LLC	LD	S. of CSAH 8 (Frenchman Rd N) & E. of the Vacated Elmcrest Rd, Hugo	CAPROC pro 1 items

District Engineer Almer presented information to the Board regarding the project.

Motion to adopt the District Engineer's Findings and Recommendation as contained in the Engineer's Report dated 4/23/03 to CAPROC PA03-039 pro 1 items: Haake/Aiken. Carried 4-0.

No.	Applicant	#Plan Type	Description/Location	*Recommendation
03-038	Joseph Niemczyk	WA	N. of 170th St. N. & 1,500± ft E. of Henna Ave. (7666-170th St. N.), Hugo	CAPROC pro 3 items

District Engineer Almer presented information to the Board regarding the project. Administrator Hobbs asked the Board to waive the surety because the of applicant will be required to complete and record a Declaration of Restrictions For Impacted Wetland Under Agricultural Exemption in accordance with the Wetland Conservation Act which is 10-year agreement where the applicant will use the land for agricultural.

Motion to adopt the District Engineer's Findings and Recommendation as contained in the Engineer's Report dated 4/23/03 to CAPROC PA03-038 pro 3 items as well as waiving the surety requirement: Aiken/Doege. Carried 4-0.

CONSENT AGENDA

It was moved by Haake and seconded by Doege to Approve, Conditional Approval Pending Receipt Of Changes, or Table the Permit Applications noted in the following Table of Contents in accordance with the District Engineer's Findings and Recommendations, as contained in the Engineer's Report dated April 23, 2003:

No.	Applicant	#Plan Type	Description/Location	*Recommendation
03-032	Rice Creek Trail Association	BC	Upper Rice Creek S. of I-35W, Lino Lakes	CAPROC pro 4 items
03-033	Jim & Karen Quaday	FSD	N. of Peninsula Rd & W. of Lakeside Ave., Dellwood	CAPROC pro 3 items
03-034	Mark Hanson	PDS	20280 Enfield Court, Forest Lake	CAPROC pro 2 items
03-037	Paul & Robin Green	WA	N. of 165th Street N. & E. of Henna Ave. (7600-165th Street N), Hugo	CAPROC pro 4 items

#KEY: APW=Approp. of Public Waters; BC=Bridge Construction; CC=Culvert Construction; CSM=Comp.Stormwater Mgmt.; FSD=Final Site Drainage; LD=Land Development; NPR=No Permit Required; PDS=Pub./Priv. Drng. Sys.; RG=Rough Grading; SA=Shoreland Alteration; S&UC=Street & Utilities Construction; UC=Utility Construction; UDC=Utility Ditch Crossing; WA=Wetland Alteration; WB=Wetland Banking

*CAPROC = Conditional Approval Pending Receipt Of Changes pro = pending receipt of

Motion carried 4-0.

OPEN MIKE *Individuals may address the Board of Managers about any item not included on the regular agenda. Speakers are requested to come to the podium, state their name and address for the record, and limit their remarks to three minutes. Generally the Board of Managers will not take official action on items discussed at this time, but may typically refer the matter to staff for a future report or direct that the matter be scheduled on an upcoming agenda.*

John Waller discussed several items concerning the District.

ADDITIONAL ITEMS REQUIRING BOARD ACTION

1. Consider company vehicles.

Administrator Hobbs explained to the Board the reasons why it would be beneficial for the District to have vehicles available for employees.

Motion by Doege, seconded by Haake requested Administrator Hobbs to develop information on purchase or lease of vehicles so the board can take action at their May 14, 2003 regular board meeting. Motion carried 4-0.

2. Consider HLB Tautges Redpath as auditor for 2002 books.

Administrator Hobbs explained to the Board that the 2002 audit would be best performed by HLB Tautges Redpath because the District changed accountants in the middle of 2002.

Motion by Haake, seconded by Doege to hire HLB Tautges Redpath to do the Districts 2002 audit not to exceed $7,000. Manager Aiken asked for a friendly amendment to have the District do a request for proposals for the District 2003 audit. Manager Haake and Doege accepted the friendly amendment. Motion carried 4-0.

3. Consider Check Register dated 4/23/03, in the amount of $238,454.08, Prepared by HLB Tautges Redpath.

Motion by Doege, seconded by Haake to approve the check register for period 4/10/03 thru 4/23/03, in the amount of $238,454.08, Prepared by HLB Tautges Redpath. **Motion carried 4-0.**

4. Evaluation of District Administrator.

Manager Leroux proposed that Managers Aiken and Doege summarize each manager's review into an executive summary and then present the summary to the Managers at the Boards May 14 scheduled workshop. Managers Aiken and Doege agreed.

ITEMS FOR DISCUSSION AND INFORMATION

1. Staff Reports.

The reports were reviewed and questioned were answered by staff present.

2. Review of RCWD Advisory Committee May 7, 2003 agenda.

The Board reviewed the agenda with no changes. Manager Leroux is scheduled to be the Board Liaison for the May 7, 2003 meeting.

3. Middle Rice Creek and Minnesota Commercial Railway correspondence.

Manager Aiken discussed the idea of the District doing small-scale engineering projects on Anoka Ditch 1 in Mounds View. Brett Emmons of EOR replied that they have put together a work plan that needs to be reviewed by District Staff. The managers also asked questions regarding Minnesota Commercial Railway's correspondence regarding their claim that the District should pay to repair one of their railway crossing over a waterway. Administrator Hobbs informed the Board that staff is working with Minnesota Commercial Railway to resolve the problem.

4. EIS/EAW for Blaine-Anoka County Airport.

Manager Haake had questions regarding the Blaine-Anoka County Airport EIS/EAW report. District Engineer Almer informed the Board that they had reviewed the EIS/EAW report and provided written comments and that the District has not reviewed any plans or issued any permits for the project.

ADJOURNMENT

Motion by Doege, seconded by Leroux to adjourn at 8:35 p.m. Motion carried 4-0.

PUBLIC HEARING:
RICE CREEK WATERSHED DISTRICT NPDES PHASE II PERMIT

MS Word Template

Notice of intent to obtain coverage

General Storm Water Permit Application (MN R 040000) for Small Municipal Separate Storm Sewer Systems (MS4s)

(Noticed as MN R 580000)

Minnesota Pollution Control Agency
520 Lafayette Road North, St. Paul, MN 55155-4194
Application deadline: **March 10, 2003**

Minnesota Pollution Control Agency

Please read the instructions carefully and use the "tab" key to move through the fields of this form. Enter responses using drop down menus, check boxes and text as indicated. Use the "save as" feature in MS Word to save this template as a document.

I. MS4 Information

A. Application Type

Application type: Single site or administrative area If multiple sites, number of attached application forms:

MS4s with multiple sites such as campuses, dispersed facilities, or state agency regions/districts, must attach a completed application for each site or administrative area. An authorized person with overall responsibility or an officially delegated representative must sign each application form.

B. MS4 Owner

Rice Creek Watershed District

Community, municipality, agency or other party having ownership or operational control of the MS4.

4325 Pheasant Ridge Drive, Suite 611

Mailing Address

Blaine	MN	55449
City	State	Zip Code

Anoka, Ramsey, Washington, Hen	Rice Creek
County	Major Watershed (see enclosed map)

41-1231599	6467450
Federal Tax ID	State Tax ID

C. General Contact

Hobbs	Steve	District Admin.
Last Name	First Name	Title

General contact (official, staff member, consultant or other) for permit compliance issues.

4325 Pheasant Ridge Drive

Mailing Address

Blaine	MN	55449
City	State	Zip Code

763-398-3071	shobbs@ricecreekwd.com
Telephone (include area code)	E-Mail Address

II. Certification of the Storm Water Pollution Prevention Program (SWPPP)

A. Have you developed a Storm Water Pollution Prevention Program for your MS4? ☒Yes ☐No

*Municipalities must demonstrate how their **Storm Water Pollution Prevention Program** will be implemented and enforced over the term of the five-year permit. **SWPPPs** must incorporate appropriate educational components, **BMPs** and measurable goals.*

Provide a brief description of the plan to complete the SWPPP if "No" is marked above.

We are in the final stages of completing our SWPPP for the drainage ditches within the jurisdiction of the Rice Creek Watershed District and we will be able to have the final, fully-signed application by May 9, 2003.

B. Summary of the six minimum control measures. Complete items B. 1. through B. 6.

Storm Water Pollution Prevention Programs *must address the specific requirements contained in Part V. G. of the permit.* ***SWPPPs*** *must outline how the six minimum control measures will be addressed, the contact person, department in charge, time frame and measures that will be implemented to meet the schedules required by the permit.*

1. Public education and outreach measures

Hobbs	Steve	Rice Creek WD
Contact Last Name	First Name	Department

4325 Pheasant Ridge Drive, Suite 611
Mailing Address

Blaine	MN	55449
City	State	Zip Code

7633983071	shobbs@ricecreekwd.com
Telephone (include area code)	E-Mail Address

a) Have **Best Management Practices (BMPs)** that will be implemented for this minimum control measure been planned or developed? ☒**Yes** ☐**No**

b) Have measurable goals for each **BMP** for this minimum control measure been planned or developed? ☒**Yes** ☐**No**

c) Has an estimated timeline for implementing each **BMP** for this minimum control measure been planned or developed? Timelines should include, in narrative or numerical form, the months and years required actions will occur, interim milestones, and frequency of action, as appropriate. ☒**Yes** ☐**No**

d) Have the educational components for this minimum control measure been planned or developed? ☒**Yes** ☐**No**

e) Provide a brief description of the plan to complete any requirements marked "No" above.

2. Public participation and involvement measures

Hobbs	Steve	Rice Creek WD
Contact Last Name	First Name	Department

4325 Pheasant Ridge Drive, Suite 611
Mailing Address

Blaine	MN	55449
City	State	Zip Code

7633983071	shobbs@ricecreekwd.com
Telephone (include area code)	E-Mail Address

a) Have **Best Management Practices (BMPs)** that will be implemented for this minimum control measure been planned or developed? ☒**Yes** ☐**No**

b) Have measurable goals for each **BMP** for this minimum control measure been planned or developed? ☒**Yes** ☐**No**

c) Has an estimated timeline for implementing each **BMP** for this minimum control measure been planned or developed? Timelines should include, in narrative or numerical form, the months and years required actions will occur, interim milestones, and frequency of action, as appropriate. ☒**Yes** ☐**No**

d) Have the educational components for this minimum control measure been planned or ☒**Yes** ☐**No**

developed?

e) Provide a brief description of the plan to complete any requirements marked "No" above.

3. Illicit discharge detection and elimination

Hobbs	Steve	Rice Creek WD
Contact Last Name	First Name	Department

4325 Pheasant Ridge Drive, Suite 611		
Mailing Address		
Blaine	MN	55449
City	State	Zip Code

7633983071	shobbs@ricecreekwd.com
Telephone (include area code)	E-Mail Address

a) Have **Best Management Practices (BMPs)** that will be implemented for this minimum control measure been planned or developed? ☒Yes ☐No

b) Have measurable goals for each **BMP** for this minimum control measure been planned or developed? ☒Yes ☐No

c) Has an estimated timeline for implementing each **BMP** for this minimum control measure been planned or developed? Timelines should include, in narrative or numerical form, the months and years required actions will occur, interim milestones, and frequency of action, as appropriate. ☒Yes ☐No

d) Have the educational components for this minimum control measure been planned or developed? ☒Yes ☐No

e) Provide a brief description of the plan to complete any requirements marked "No" above.

4. Construction site storm water runoff control measures

Hobbs	Steve	Rice Creek WD
Contact Last Name	First Name	Department

4325 Pheasant Ridge Drive, Suite 611		
Mailing Address		
Blaine	MN	55449
City	State	Zip Code

7633983071	shobbs@ricecreekwd.com
Telephone (include area code)	E-Mail Address

a) Have **Best Management Practices (BMPs)** that will be implemented for this minimum control measure been planned or developed? ☒Yes ☐No

b) Have measurable goals for each **BMP** for this minimum control measure been planned or developed? ☒Yes ☐No

c) Has an estimated timeline for implementing each **BMP** for this minimum control measure been planned or developed? Timelines should include, in narrative or numerical form, the months and years required actions will occur, interim milestones, and frequency of action, as appropriate. ☒Yes ☐No

d) Have the educational components for this minimum control measure been planned or developed? ☒Yes ☐No

e) Provide a brief description of the plan to complete any requirements marked "No" above.

5. Post-construction storm water management measures

Hobbs	Steve	Rice Creek Watershed District

Contact Last Name	First Name	Department
4325 Pheasant Ridge Drive, Suite 611		
Mailing Address		
Blaine	MN	55449
City	State	Zip Code
7633983071	shobbs@ricecreekwd.com	
Telephone (include area code)	E-Mail Address	

a) Have **Best Management Practices (BMPs)** that will be implemented for this minimum control measure been planned or developed? ☒Yes ☐No

b) Have measurable goals for each **BMP** for this minimum control measure been planned or developed? ☒Yes ☐No

c) Has an estimated timeline for implementing each **BMP** for this minimum control measure been planned or developed? Timelines should include, in narrative or numerical form, the months and years required actions will occur, interim milestones, and frequency of action, as appropriate. ☒Yes ☐No

d) Have the educational components for this minimum control measure been planned or developed? ☒Yes ☐No

e) Provide a brief description of the plan to complete any requirements marked "No" above.

6. Pollution prevention and good housekeeping measures

Hobbs	Steve	Rice Creek WD
Contact Last Name	First Name	Department
4325 Pheasant Ridge Drive, Suite 611		
Mailing Address		
Blaine	MN	55449
City	State	Zip Code
7633983071	shobbs@ricecreekwd.com	
Telephone (include area code)	E-Mail Address	

a) Have **Best Management Practices (BMPs)** that will be implemented for this minimum control measure been planned or developed? ☒Yes ☐No

b) Have measurable goals for each **BMP** for this minimum control measure been planned or developed? ☒Yes ☐No

c) Has an estimated timeline for implementing each **BMP** for this minimum control measure been planned or developed? Timelines should include, in narrative or numerical form, the months and years required actions will occur, interim milestones, and frequency of action, as appropriate. ☒Yes ☐No

d) Have the educational components for this minimum control measure been planned or developed? ☒Yes ☐No

e) Provide a brief description of the plan to complete any requirements marked "No" above.

C. Reporting and record keeping requirements.

Have reporting and record keeping requirements for implementation of the **Storm Water Pollution Prevention Program** been planned or developed? ☒Yes ☐No

Provide a brief description of the plan to complete the reporting and record keeping requirements if "No" is marked above.

III. Summary of Storm Water Pollution Prevention Program (SWPPP)

Required Application Attachments

Complete a one page **SWPPP Summary Sheet** and a **BMP Description Sheet** for each type of **BMP** that will be implemented. (See last two pages of the application form.)

A. Is the **SWPPP** Summary Sheet attached? ☒Yes ☐No

B. Is one **BMP** Description Sheet attached for each **BMP**? ☐Yes ☒No

C. How many **BMP** Description Sheets are attached?

IV. Limitations of Coverage

A. Part II Limitations on Coverage and Appendix C

I have read Part II Limitations on Coverage and Appendix C of the MS4 general permit and certify that we intend to comply with the applicable requirements of those sections. ☒Yes

B. Special Waters

Please refer to the *Guidance Manual for Small Municipal Separate Storm Sewer Systems (MS4s)* and the enclosed map to complete this section.

1. Does the MS4 discharge into **Prohibited Waters** as defined in Minn. R. 7050.0180, subp. 3, 4, and 5? See Attachment Four of the *Guidance Manual for Small Municipal Separate Storm Sewer Systems (MS4s)* for further information. If yes, please list below and contact Lou Flynn at (651) 296-6575 or louis.flynn@state.mn.us. Be advised that you will be required to obtain an individual permit versus a general permit. ☐Yes ☒No

2. Does the MS4 discharge into waters with a **Restricted Discharge** as defined in Minn. R. 7050.0180, subp. 6, 6a, and 6b? If yes, please list below and comply with Part IX, Appendix C, Item B. See Attachment Four of the *Guidance Manual for Small Municipal Separate Storm Sewer Systems (MS4s)* for further information. ☐Yes ☒No

3. Does the MS4 discharge into **Trout Waters** as defined in Minn. R. 6264.0050 subp. 2 & 4? If yes, please list below and comply with Part IX, Appendix C, Item C. See Attachments Two and Three of the *Guidance Manual for Small Municipal Separate Storm Sewer Systems (MS4s)* for further information. ☐Yes ☒No

4. Does the MS4 discharge into **Wetlands** as defined in Minn. R. 7050.0130, subp. F? See Attachment Four of the *Guidance Manual for Small Municipal Separate Storm Sewer Systems (MS4s)* for further information. ☒Yes ☐No

5. Does the MS4 have a process to evaluate discharges that require applicable **Environmental Review** as required by State or federal laws? See Part IX of the *Guidance Manual for Small Municipal Separate Storm Sewer Systems (MS4s)* for further information. ☒Yes ☐No

6. Does the MS4 have a process to evaluate discharges whose direct, indirect, interrelated, interconnected, or independent impacts may jeopardize a listed **Endangered or Threatened Species** or adversely modify a designated critical habitat? See Part IX of the ☒Yes ☐No

Guidance Manual for Small Municipal Separate Storm Sewer Systems (MS4s) for further information.

7. Does the MS4 have a process to evaluate discharges which may adversely affect properties listed or eligible for listing in the National Register of **Historic Places** or affecting known or discovered **archeological sites**? See Part IX of the *Guidance Manual for Small Municipal Separate Storm Sewer Systems (MS4s)* for further information. ☐Yes ☒No

If you answered "No" to Item 5, 6, or 7, briefly explain how the MS4 will come into compliance with the requirements of Appendix C.
Rice Creek Watershed District will amend rules to ensure that historic and archeological sites are addressed as well.

V. Owner or Operator Certification

The person with overall, site or administrative area SWPPP implementation responsibility must sign the application. This person must be duly authorized to sign the application (mayor, designated public works director, president of the university, etc.).

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

I also certify under penalty of law that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES) General Storm Water Permit for MS4s that authorizes storm water discharges identified in this application form.

I understand that as a permittee, I am legally accountable under the Clean Water Act to ensure compliance with the terms and conditions of the NPDES General Storm Water Permit for MS4s.

I also understand that MPCA enforcement actions (pursuant to Minn. Stat. §115.07, 116.072, and Section 309 of the Clean Water Act) may be taken against me or the MS4 if the terms and conditions of the NPDES General Storm Water Permit for MS4s are not met.

Authorized Signature | Date

Last Name	First Name	Title
Cardinal	Andrew	President

Official notices will be sent to person indicated here.

Mailing Address			
4325 Pheasant Ridge Drive, Suite 611			
City	**State**	**Zip Code**	
Blaine	MN	55449	

Telephone (include area code)	E-Mail Address
7633983070	shobbs@ricecreekwd.com

Attachment 1 SWPPP Summary Sheet

Develop a unique identification number for each **BMP** Description Sheet (Attachment 2) completed. List the unique identification number for each **BMP** under the following seven areas.

A. Public Education and Outreach Measures
BMP unique identification numbers: V.G.2.a;V.G.2.b;V.G.2.K;V.G.2.J

B. Public Participation and Involvement Measures
BMP unique identification numbers: V.G.2.c;V.G.2.I;V.G.2.d.4

C. Illicit Discharge Detection and Elimination Measures
BMP unique identification numbers: V.G.3.a.4;V.G.3.c

D. Construction Site Storm Water Runoff Control Measures
BMP unique identification numbers:
V.G.4.a.1;V.G.4.a.2;V.G.4.a.11;V.G.4.b.1;V.G.4.c.1:V.G.4.c.2;V.G.4.c.3;V.G.4.c.6;V.G.4.c.9;V.G.4.d.1;V.G.4.e.1;V.G.4.e.2;V.G.4.f.1

E. Post-Construction Storm Water Management Measures
BMP unique identification numbers: V.G.5.g.1;V.G.5.g.2

F. Pollution Prevention and Good Housekeeping Measures
BMP unique identification numbers: V.G.6.b.2.a;V.G.6.b.3.a;V.G.6.b.4.a;V.G.6.b.6

G. Other portion of the permit (such as Record Keeping or Appendix C).
Portion of the permit that the **BMP**s addresses. **BMP** unique identification numbers.

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 2.a
(Assign a number.)

B. Name or type of **BMP**: Follow applicable public notice requirement

C. **BMP** description: Prepare public notice of meeting at least 30 days in advance

D. Minimum control measure addressed: Public Education and Outreach

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Meeting noticed

F. Describe the timeline or implementation schedule for this **BMP**: 4/03

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:General Public

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 2.b
(Assign a number.)

B. Name or type of **BMP**: Get public opinion about the adequacy of the SWPP

C. **BMP** description: Conduct annual meeting to review SWPPP

D. Minimum control measure addressed: Public Education and Outreach

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Meeting held

F. Describe the timeline or implementation schedule for this **BMP**: annually

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:General Public

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 2.K.
(Assign a number.)

B. Name or type of **BMP**: Distribute Public Participation Information

C. **BMP** description: RCWD will maintain educational program that distributes brochures and one-page summaries of BMPs

D. Minimum control measure addressed: Public Education and Outreach

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Information distributed routinely and feedback solicited and effect of information on implementation of BMPs tracked through database

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:General Public with emphasis on landowners adjacent to waterbodies

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 2.J.
(Assign a number.)

B. Name or type of **BMP**: Conduct workshops

C. **BMP** description: RCWD will conduct educational workshops regarding BMPs

D. Minimum control measure addressed: Public Education and Outreach

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: At least three workshops conducted annually

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:General Public with emphasis on landowners adjacent to waterbodies

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 2.c
(Assign a number.)

B. Name or type of **BMP**: Consider Public Input

C. **BMP** description: Analyze comments received

D. Minimum control measure addressed: Public Education and Outreach

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Appropriate adjustments to SWPPP made

F. Describe the timeline or implementation schedule for this **BMP**: annually

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:General Public

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 2.I
(Assign a number.)

B. Name or type of **BMP**: Public Opinion

C. **BMP** description: Conduct polls and surveys

D. Minimum control measure addressed: Public Education and Outreach

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Input analyzed and appropriate adjustments to SWPPP made

F. Describe the timeline or implementation schedule for this **BMP**: every two years

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:General Public

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 2.d.4
(Assign a number.)

B. Name or type of **BMP**: Volunteer Wetland Restoration

C. **BMP** description: Use volunteers to monitor and restore wetlands

D. Minimum control measure addressed: Public Education and Outreach

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Targeted wetlands monitored and at least one wetland restoration project initiated annually

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:General Public

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 3.a.4
(Assign a number.)

B. Name or type of **BMP**: Map the location of all outfalls

C. **BMP** description: GIS map

D. Minimum control measure addressed: Illicit Discharge Detection and Elimination

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Map completed and updated on ongoing basis as identified through RCWD permitting program

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4.a.1
(Assign a number.)

B. Name or type of **BMP**: Review of current rules for RCWD

C. **BMP** description: Analyze current RCWD rules for compliance with BMPs

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Rules reviewed

F. Describe the timeline or implementation schedule for this **BMP**: annually

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4.a.2
(Assign a number.)

B. Name or type of **BMP**: Non-compliance penalty defined

C. **BMP** description: Establish procedures for non-compliance with RCWD rules

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Appropriate penalties clearly defined for public

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4a11
(Assign a number.)

B. Name or type of **BMP**: Inspection program

C. **BMP** description: Establish procedures for inspections and timelines for action

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Inspection program reviews sites in timely manner and appropriate mesures taken when violaitons occur

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4.b.1
(Assign a number.)

B. Name or type of **BMP**: Connect erosion program to MPCA minimums

C. **BMP** description: Use MPCA construction site manual to ensure that RCWD rules meet at least min. standards

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: At least minimum standards are met with RCWD rules

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4.c.1
(Assign a number.)

B. Name or type of **BMP**: Construction site entrance and perimeter standard

C. **BMP** description: RCWD permit rules address construction site requirements for entrances and perimeter of site

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Rules for entrance and perimeter protection are addressed at permit review process and enforced during inspection phase

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 4.c.2
(Assign a number.)

B. Name or type of **BMP**: Construction site debris storage and maintenance

C. **BMP** description: RCWD permit rules address removal and storage of construction site debris

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Construction debris is disposed in timely and responsible manner stored in a manner that does not impact the surrounding natural resources

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 4.c.3
(Assign a number.)

B. Name or type of **BMP**: Construction site debris disposal

C. **BMP** description: RCWD permit rules address removal of construction site debris

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Construction debris is disposed in timely and responsible manner

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4.c.6
(Assign a number.)

B. Name or type of **BMP**: Ramifications developed for violation of "4.c"

C. **BMP** description: RCWD permit rules address violation of rules describing the storage, maintenance and removal of construction waste

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Penalities are clearly articulated and enforced

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 4.c.9
(Assign a number.)

B. Name or type of **BMP**: Provide regular inspection program

C. **BMP** description: RCWD has ongoing and effective construction inspection program

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Fully staffed construction inspection program with defined goals and procedures to ensure adequate monitoring of construction within the RCWD

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4.d.1
(Assign a number.)

B. Name or type of **BMP**: Define site plan review process

C. **BMP** description: RCWD has effective permit review program

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Permit review program is adequately staffed to ensure timely and accurate review of permit applications

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4.e.1
(Assign a number.)

B. Name or type of **BMP**: Develop database for tracking permits

C. **BMP** description: RCWD has database that tracks and maintains information regarding construction permits, their progress and all issues related to their inspection

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Database adequately tracks construction permits to ensure effective tracking of all permit issues

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4.e.2
(Assign a number.)

B. Name or type of **BMP**: Determine staff that will be responsible

C. **BMP** description: RCWD will make clear the staff members responsible for construction site inspection and their duties and measurable goals will be publically known

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Staff and public are aware of who is responsible for construction site permits and enforcement of rules

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 4.f.1
(Assign a number.)

B. Name or type of **BMP**: Develop criteria for inspections

C. **BMP** description: RCWD will develop criteria for inspections be publically known

D. Minimum control measure addressed: Construction Site Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Staff and public are aware inspection criteria and their enforcement procedures

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 **BMP Description Sheet**

A. Unique Identification Number: 5.g.1
(Assign a number.)

B. Name or type of **BMP**: Timed BMP Inspections

C. **BMP** description: RCWD will develop timeline for inspections of BMPs

D. Minimum control measure addressed: Post-Consturction Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: BMPs inspected on prescribed schedule and report generated noting performance and needed corrections

F. Describe the timeline or implementation schedule for this **BMP**: ongoing and annual report

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 5.g.2
(Assign a number.)

B. Name or type of **BMP**: Maintenance Agreements

C. **BMP** description: RCWD requires legally binding maintenance agreements for BMPs with appropriate parties

D. Minimum control measure addressed: Post-Consturction Runoff Controls

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: BMPs maintained in accordance with agreements and appropriate measures taken when maintenance is not in accordance with agreeements

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 6b3a
(Assign a number.)

B. Name or type of **BMP**: Establish an inspection program

C. **BMP** description: RCWD will inspect 20% of outfalls annually

D. Minimum control measure addressed: Pollution Prevention and Good Housekeeping

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: 20% of outfalls inspected and appropriate party notified of any needed repair of maintenance

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 6b4a
(Assign a number.)

B. Name or type of **BMP**: Establish criteria for determination

C. **BMP** description: RCWD will criteria for determining what is out-of-repair for all BMPs

D. Minimum control measure addressed: Pollution Prevention and Good Housekeeping

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Criteria established leading to effective maintenance program

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

Use the BMP Description template and "save as" feature in MSWord to complete this page for each BMP. Alternate formats are acceptable as long as all the requested information is provided.

Attachment 2 — BMP Description Sheet

A. Unique Identification Number: 6b6
(Assign a number.)

B. Name or type of **BMP**: Establish record keeping system to track activitie

C. **BMP** description: RCWD will maintain adequate paper and electronic records of activities

D. Minimum control measure addressed: Pollution Prevention and Good Housekeeping

E. Describe the measurable goals that will be used to determine success or benefits of this **BMP**: Well-kept databases and paper files allow for timely retrieval of information

F. Describe the timeline or implementation schedule for this **BMP**: ongoing

G. Person or department in charge of implementing this **BMP**: RCWD

Hobbs	Steve	RCWD
Last Name	First Name	Department

H. If this **BMP** is an educational component of your **SWPPP,** briefly describe the audience and educational goals for this minimum control measure:

PERMIT APPLICATIONS REQUIRING BOARD ACTION

RICE CREEK WATERSHED DISTRICT

CONSENT AGENDA

May 14, 2003

It was moved by _____ and seconded by _____ to approve, conditionally approve pending receipt of changes, or deny the Permit Applications noted in the following table of contents in accordance with the District Engineer's Findings and Recommendations, as contained in the Engineer's Report dated May 7, 2003.

TABLE OF CONTENTS

* To be presented

Rice Creek Watershed District Permit Application Number 03-035

Applicant:	Ronald K. Lehrke 3561 Centerville Road Vadnais Heights, MN 55127 Ph: 612-270-5550 Fx: 651-483-3733 rlehrke@msn.com	Consultant:	John Faraci Development Engineering 1296 Hudson Road St. Paul, MN 55106 Ph: 651-776-6211 Fx: 651-776-6711 devengpa@qwest.net

Purpose: Final Site Drainage Plan for an office-warehouse, 21,000± SF, 2.0± acres.

Location: South of Gateway Circle and east of County Road 54, Centerville.

T-R-S: 31-22-24 ccc

Recommendation: **Conditional approval pending receipt of changes** and outstanding items related to:

Administrative

1. Draft Declaration For Maintenance of Stormwater Facilities acceptable to District engineer and attorney for proposed onsite stormwater management features.

2. Copy of receipt from County Recorder and signed/notarized legal document(s). Note that legal document(s) are to be submitted by Applicant to County for recording only after approval by District.

3. Cash surety in the amount of $1,500.

Exhibits:

1. Permit Application undated, received March 26, 2003.

2. Plan Set (3 sheets) prepared by Development Engineering P.A., last revised April 18, 2003, received April 24, 2003.

3. Infiltration Worksheet prepared by Development Engineering P.A., dated February 24, 2003, received March 25, 2003.

4. RCWD Permits 02-045, 99-75, 98-61, and 97-141.

Findings:

1. The proposed project entails a 21,000± SF office warehouse and associated parking resulting in 1.5± acres of impervious surface.

2. This proposed stormwater management plan routes runoff to stormsewer that discharges to a regional pond approved under RCWD Permit 97-141. This pond was designed to provide rate control and water quality treatment for this site. The land use proposed under this permit is consistent with the previously approved hydrologic calculations for the regional pond.

   A rain garden designed to capture runoff from the warehouse rooftop complies with the District's infiltration standard.

3. Wetland issues for this site were addressed under RCWD permit 97-141. No addition wetland impacts are proposed.

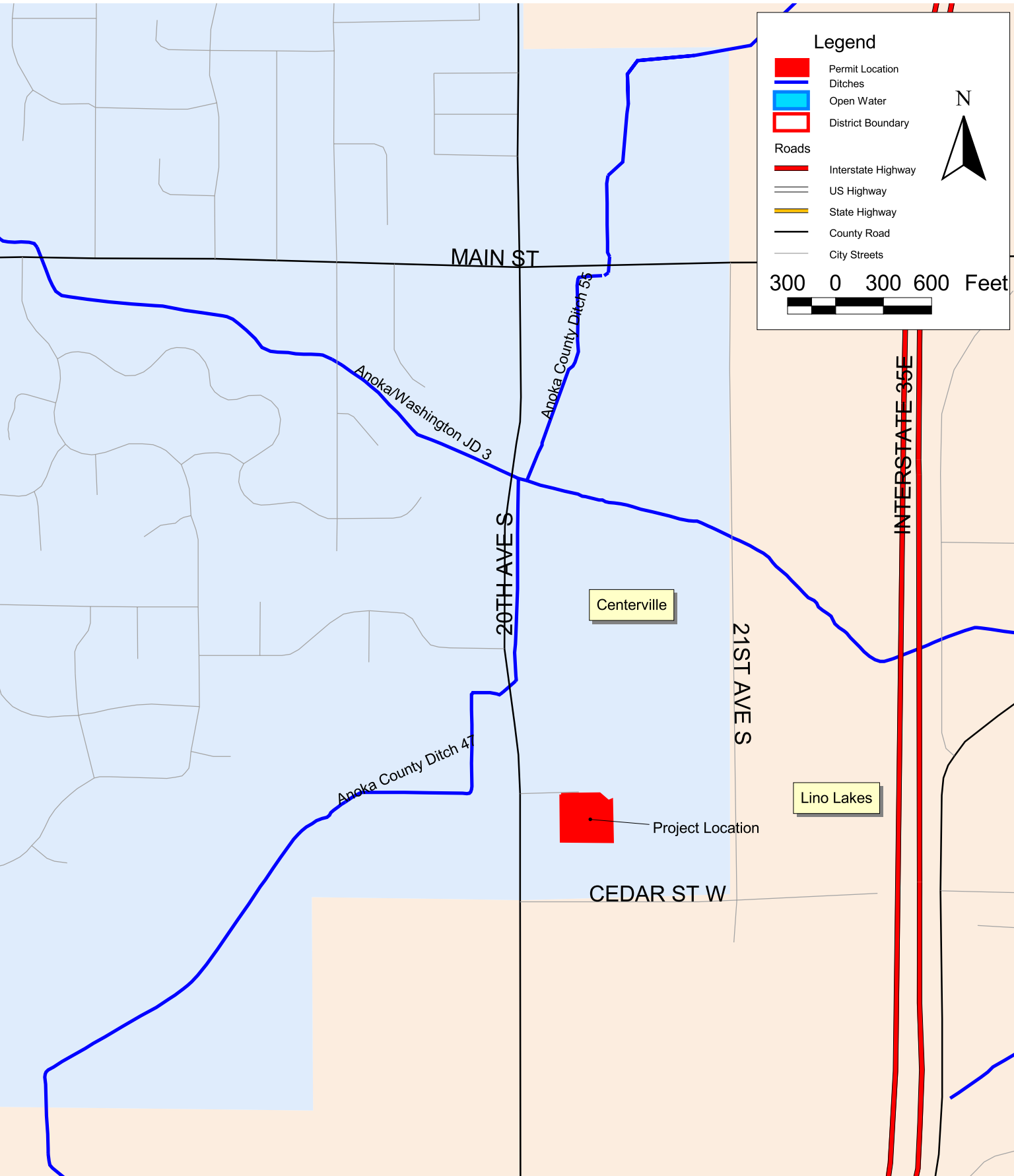
4. The FEMA-FIS elevation for this site is 904.2. There is a small amount of floodplain fill (25 yards), which is easily compensated for by the proposed infiltration area.

   The proposed minimum floor elevation is 906.2, thereby satisfying District freeboard requirements.

5. An erosion control plan including silt fence downstream of graded areas, a rock construction entrance, riprap at storm sewer outlets, revegetation specifications, and an implementation schedule has been submitted.

Board Action:

J&L Office Warehouse
03-035



Rice Creek Watershed District Permit Application Number 03-046

Applicant:	Mark Thompson 3413 Snelling Avenue N Arden Hills, MN 55112 Ph: Fx:	Consultant:	Paul Schimnowski KBH Consulting, Inc. 7226 39th Street N Suite 100 Oakdale, MN 55128 Ph: 651-779-7700 Fx: 651-779-7114 pschimno@kbh-consulting.com

Purpose: Final Site Drainage Plan for landscaping improvements on a lot riparian to Lake Johanna.

Location: 3413 Snelling Avenue North, Arden Hills.

T-R-S: 30-23-34 bca

Recommendation: **Conditional approval pending receipt of changes** and outstanding items related to:

Erosion & Sediment Control

1. Erosion Sock Control detail and disturbed area revegetation specifications.

Administrative

2. Permit Application signed by Owner.

3. Cash surety in the amount of $250.

Exhibits:

1. Permit Application, unsigned, undated, received May 2, 2003.

2. Retaining Wall Drawings (3 Sheets) prepared by KBH Consulting, Inc., dated March 25, 2003, received May 5, 2003.

Findings:

1. The proposed landscaping improvements include 160±LF of retaining wall, 300± SF of paver patio, a 125± SF deck expansion and paver sidewalks on a lot riparian to Lake Johanna.

2. The proposed grading plan indicates that there will be no work below the 100-year elevation of Lake Johanna (879.6, 1998 Calibration Study), therefore floodplain impact is not a concern.

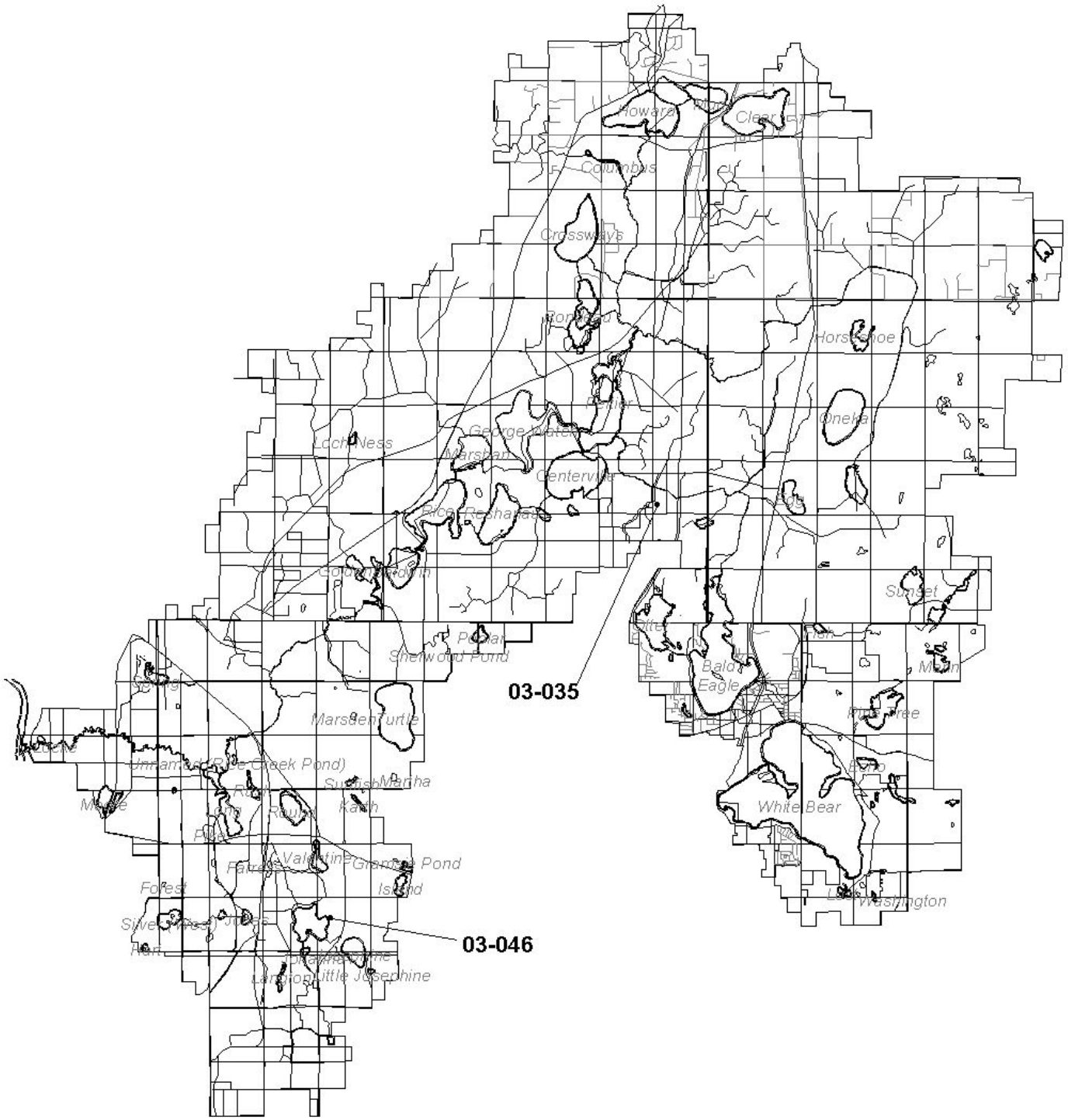
3. The proposed grading plan indicates that an Erosion Control Sock will be utilized down slope of all disturbed areas. A detail of this Erosion Control Sock and revegetation specifications is required.

Board Action:

Thompson Residence
03-046

Rice Creek Watershed District

2003 Permit Location Map



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EMMONS & OLIVIER RESOURCES

2 0 2 Miles

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5/14/03 Agenda

ADDITIONAL ITEMS REQUIRING BOARD ACTION

1. Consider purchase of company truck for the RCWD

Agenda Item #1
Revisiting Vehicle Issue
May 14, 2003

To: Board of Managers **Date:** 5/6/03

From: Steve Hobbs

Subject: Company vehicles

Issue

After looking at a variety of vehicles, several different consumer advocacy organizations' evaluations, and evaluating our needs, we focused on the Dodge Dakota as the best choice for us. It is a mid-size truck that can haul a fair amount, but can still get around tight places easily and isn't too hard on the gas mileage.

We have gotten quotes from six different dealerships and we are separately enlisting the help of a car broker at no cost to us.

We are getting a government fleet discount and the rebate that Dodge currently has going for new vehicles. We can get a new vehicle for less than one that is 1-2 years old because of the rebates and with the difficulty in getting a used "vanilla" pickup; all the lease returns are the fancier versions.

The prices range from $13,600-14,200 for the 4x2 version and $16,600-16,800 for the 4x4 version. Our broker is still working on getting other quotes.

Recommendation

Purchase one 4x4 vehicle now for a price not to exceed $16,800 excluding tax and license.

Rice Creek Watershed District Vehicle Usage

Rice Creek Watershed District maintains a fleet of vehicles for conducting company business. Employees who drive Rice Creek Watershed District vehicles for any reason must possess a valid driver's license and cannot be under the influence of drugs or alcohol when driving a Rice Creek Watershed District vehicle (see "Alcohol and Drug Abuse," policy). An employee who is convicted of driving a Rice Creek Watershed District vehicle while under the influence of drugs or alcohol may be disciplined up to and including termination of employment. Smoking is not allowed in Rice Creek Watershed District vehicles. Operators of Rice Creek Watershed District vehicles must have a valid driver's license and must report any moving violations to the District Administrator.

Use of Pool Vehicles

Employees who need to drive on company business may use pool vehicles when available. Pool vehicle usage is to be scheduled on Microsoft Outlook. If any damage occurs to the vehicle while it is signed out to you, immediately file a property damage report with the District Administrator. Failure to report damage could result in disciplinary action. Vehicle shall be returned to Rice Creek Watershed District premises at the end of each workday.

Violations

Drivers of vehicles must have a valid driver's license. Moving violations, which occur in a company vehicle, must be reported immediately to the District Administrator. If an employee's driver's license is revoked, suspended or expired, the employee shall notify the District Administrator immediately and their vehicle use shall be revoked until a valid license has been reissued. Failure to notify the District Administrator of a license suspension and use of a Rice Creek Watershed District vehicle without a valid license shall result in disciplinary action including the possibility of termination.

Semi-Annual Checks

Semi-annual checks will be conducted for all employees that drive company vehicles to verify that they possess a valid driver's license.

Purchase of Fuel or Other Necessary Items For the Vehicle

Vehicles shall not be returned to the Rice Creek Watershed District Office with fuel levels less than ¼ tank. Employees will be reimbursed for fuel and other necessary purchases upon receipt of valid proof of purchase. Necessary purchases shall constitute those items that must be purchased immediately for the continued use of the vehicle and shall not exceed $100 unless the District Administrator has granted approval. Other items shall be part of the ongoing maintenance of the vehicle and shall be coordinated by the District Administrator.

Maintenance and Servicing of Vehicles

Vehicles will be brought in for an oil change every 3,000 miles. It is the responsibility of the person driving the vehicle when this occurs to take the vehicle to the predetermined service center as soon as possible. The District Administrator must approve all other service, beyond routine maintenance.

ADDITIONAL ITEMS REQUIRING BOARD ACTION

2. Consider approval of cost share for Peltier Lake project (see Advisory Committee Recommendation)

2003 Rice Creeks Watershed District Grants Program Application

Incomplete applications will be returned to the applicant.

APPLICANT INFORMATION
Organization (to be named as Grantee): Peltier Lake Association

Street: 1677 Peltier Lake Drive

City, State, Zip: Centerville, MN 55038

E-mail or Home Page: wayne.leblanc@unisys.com

Project Contacts:

Project Officer: Wayne LeBlanc	Financial Officer: see Project Officer
Tele: 651-635-6519 w, 651-426-0168 h	Tele:
Fax:	Fax:
E-mail: wayne.leblanc@unisys.com	E-mail:

Tax Status: non-profit ___ Tax JD#: 41-0257103 Fiscal Year: 1/1 to 12/31
(e.g., local government, *501(c)(3)* etc.) (month/day) (month/day)

PROJECT INFORMATION Project Name: Peltier Lake Plant Management Plan

Location(s) of Project:
City: Centerville
State: Minnesota
County: USA
Watershed: Rice Creek Watershed District
Congressional District(s): 6th US, 52 (Mn Senate), 52A (Mn House)

Dates: Project Start Date: May 2003 Project End Date: April 2004
Application Submission Date: May 1, 2003

Project Type (check only those that directly apply):

Innovative Best Management Practice	X
Shoreland/Streambank Restoration	□
Lake Restoration	X

GRANT REQUEST

Grant Funds requested:	$ 5,000
Total Contributions from Partners:	$ 2,000* + 3,000 **
Total:	$ 10,000

Project Partner Contributions:

Please list the names of all organizations contributing funds, goods or services to this project and value of the contribution:

Organization name; designate as (F)ederal or (N)on-Federal	*Dollar value of contribution*	*Indicate nature of contribution (e.g, cash or specific goods and services*	*Indicate whether contribution is (A)pplied for, (P)ledged or (I)n hand*
Peltier Lake Association Non-Federal	$2,000 *	Pay for permits, new equipment and supplies	In hand
Peltier Lake Association Non-Federal	$3,000 **	Estimate 10 people at 10 hours at $30 per hour time contribution	Estimate of participation in program. Other years has shown this level of effort.

PROJECT BUDGET

A) Budget Guidelines

The proposed budget must be in compliance with Office of Management and Budget circulars (www.whitehouse.gov/omb/circulars/index.html). Budget requests must conform to the following line items that specifically describe project costs, not program items or acronyms. Program categories such as "Education," "Restoration" or "Workshops" are too vague and do not indicate what is being paid for. These categories must be broken down into specific line items such as "Salaries," "Supplies," or "Equipment."

Line Item	Additional Information the Applicant Must Provide
Salaries & Benefits*	List individual positions and the percentage of each individual's annual salary to be covered. Benefits must be a separate line item. Rice Creek Watershed District Grant Funds cannot cover the salaries of federal or state employees.
Travel	Travel must be project related - give a brief explanation.
Equipment	Describe each item.
Supplies/Materials	Provide examples of types of supplies/materials for which funding is requested. Supplies should include expendable items only.
Contractual Services	Prove a description of each service being contracted with a justification for the requested level of funding.
Printing/Promotion	Provide description of printing or promotional materials.
Other	List other direct project expenses (e.g., postage, long distance phone charges). Please note that Rice Creek Watershed District Grant Funds CANNOT be used for general administrative overhead or indirect costs of any kind.

* Given the competitive nature of this grant program, organizations should not rely on this program for continued staff salary support.

B) Budget Form

Use U.S. dollars (rounded to the nearest hundred) for all amounts listed below.

NOTE: List only financial line items under the column "budget Category. " Contributed goods and services should be included under Partner Contributions based on the estimated dollar value of the contribution.

budget Category	Funds Requested from Small Watershed Grant	Anticipated Partner Contributions	Total	Justification
Management Plan Report	$5,000		$5,000	After all data is assembled (already budgeted), a management plan is to be written by an outside consultant (current plan is to use Steve McComas at Blue Water Science who charges $80 per hour). Chuck Johnson estimates that RCWD will be doing plant surveys and sediment analysis for both Peltier Lake and Centerville Lake. This data plus other data then will be analyzed by Steve McComas and Chuck Johnson estimates that it will take Steve McComas 60 hours to produce a management plan for Peltier Lake.

If this space is not adequate, please use the same format on a separate sheet of paper.

SIGNATURE OF APPLICANT

(An original signature page must be received with this application)

I certify that the above information is true and accurate

Wayne LeBlanc — *Signature of Executive Director or Project Officer*

5-8-03 — *Date*

Wayne LeBlanc — *Name, Title*

2003 Rice Creek Watershed District Grants Program
Proposal Narrative

Address each line item below in your proposal narrative. Clearly identify each item in a separate section. Total narrative length is not to exceed four pages of single-spaced text (12 point font).

I. Project Abstract:

A. Project description - provide a 2-3 sentence description of the project

B Final product(s) - identify specific outcomes expected of the project (e. g., # of acres of wetlands restored, linear feet of buffer established, target audience reached through education or outreach programs)

II, Proposal:

A. Project need - describe the specific watershed management, water quality or living resource need(s) the project will address and its impact on local communities.

B. Objectives - provide a bulleted or numbered list of the project's specific objectives.

C. Overall context:
- describe how the anticipated project results/outcome of your project address the specific commitments identified in the *Rice Creek Watershed District Strategic Plan;* -describe how this project relates to a local or regional watershed initiative or plan; - indicate whether this project is a continuation or expansion of an existing project and provide information on the status and results/outcome of the previous work

D. Methodology:
- describe in detail the project's methodology, including provisions for long-term management and protection;
- indicate the anticipated timetable for implementation *(note: for successful applicants, this information will be used to generate a payment schedule for grant funds);*
- describe your organization's experience in conducting similar types of projects (please indicate if this is your organization's first project of this type).

E. Evaluation - describe the strategy for monitoring and evaluating program results, including how success will be defined and measured.

F. Dissemination - describe how the results of the project will be communicated to appropriate audiences.

G. Partner Justification and Community Involvement
- describe the strength, qualifications and nature of the contribution of your organization and other collaborating organizations;
- describe how the project will involve the local community(s);
- indicate whether the proposed project has been reviewed by or otherwise involves the participation of appropriate state or federal agencies

ADVISORY COMMITTEE MINUTES

Wednesday, May 7, 2003, 5:00pm

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

Minutes

ROLL CALL

Members Present: Betty Cowie, David Schumann, John Waller, Mary Jo Truchon, and Richard Gwynn

Members Absent:

Also Present: District Administrator Hobbs

CALL TO ORDER

Meeting called to order at 5:04 p.m.

SETTING OF THE AGENDA

Addition of status of bylaws and election of officers.

APPROVAL OF THE MINUTES

1. Minutes of March 5, 2003 Meeting. Motion by Truchon, second by Cowie. Approved 4-0.

ITEMS FOR DISCUSSION

1. Reports:
    a. District Financial Reports dated: April 23, 2003.
    b. Six Staff Activity Reports for Months of Feb/March/April, 2003.
    c. Board Meeting Liaison Reports: March 12, 2003:March 26, 2003:
    d. AC Attendance at Board Meetings: April 9, 2003: April 23, 2003:

AC Members are encouraged to peruse District reports before the meeting begins.

Hobbs and Waller gave brief overview of passed board meetings. No discussion. No specific assignments for board meetings, but members will attend as best they can.

OLD BUSINESS AND REPORTS

1. Update on LCMR process, overall picture of project, and JD2 culverts summary

Hobbs briefed members on status of LCMR grant for Hardwood Creek that looks positive and there was a good deal of discussion about the future direction of the project. Waller briefed members on status of culverts and pointed out some of the problems that have been confronted.

2. Update on 5362

Hobbs updated members on status of comprehensive wetland management plan and possible expansion of this planning effort. Members were supportive of the process.

3. Update on 2003 priorities

Motion by Schumann, seconded by Gwynn to table discussion until next meeting. Motion passed.

4. Bylaws for AC

Hobbs informed members that bylaws that AC has approved are sufficient. Previous discussion on this topic also pointed out that bylaws for the AC are not really necessary and the AC is not governed by such things as the open meeting law.

NEW BUSINESS AND CORRESPONDENCE

1. Review Peltier Lake Association grant application for a lake management plan for Peltier Lake in the city of Centerville.

Hobbs went over proposal and new procedure asking lake residents to develop a comprehensive lake management plan before proceeding with plans to eradicate vegetation. Motion by Truchon, second by Gwynn to approve Peltier Lake proposal as submitted. Motion passed.

2. Election of Officers for AC

Truchon nominated Schumann for Chair and Gwynn for Vice Chair. Second by Cowie. No further nominations. Nominees were elected and accepted their respective duties.

ADJOURNMENT

Motion by Truchon, second by Cowie to adjourn. Motion passed. Adjourned at 6:20 p.m.

ADDITIONAL ITEMS REQUIRING BOARD ACTION

3. Consider Check Register dated 5/14/03, in the amount of $13,078.18, Prepared by HLB Tautges Redpath.

Rice Creek Watershed District
Check Register
April 24, 2003 - May 14, 2003
To Be Approved at May 14, 2003 Board Meeting

Check #	Date	Payee	Description	Amount
12049	05/15/03	PERA	Employee Benefits	1,256.76
Dir.Dep.	05/15/03	Lee N. Daleiden	05/15 Payroll	1,168.48
Dir.Dep.	05/15/03	Karl J. Hammers	05/15 Payroll	1,098.92
Dir.Dep.	05/15/03	Steven C. Hobbs	05/15 Payroll	2,192.35
Dir.Dep.	05/15/03	Charles G. Johnson	05/15 Payroll	1,339.20
Dir.Dep.	05/15/03	Edmund P. Phillips	05/15 Payroll	925.61
Dir.Dep.	05/15/03	Theresa M. Stasica	05/15 Payroll	1,186.13
EFT	05/15/03	EFT Payment	05/15 Federal Withholding	3,313.17
EFT	05/15/03	EFT Payment	05/15 State Withholding	597.56
Total				**$13,078.18**

Transfer from the Administrative Savings Account: $13,000.00

Rice Creek Watershed District
Check Register
April 24, 2003 - May 14, 2003
To Be Approved at May 14, 2003 Board Meeting

Check #	Date	Vendor	Amount	YTD Vendor	G/L Code	G/L Account Description	YTD G/L Amount	2003 Budget	Remaining Balance	% Budget Expended
Payroll, Benefits & Expense Reimbursements:										
Dir.Dep.	05/15/03	05/15 Payroll	7,910.69	---	4100	Salaries	104,514.09	330,000.00	225,485.91	31.7%
12049	05/15/03	PERA	1,256.76	8,614.86	4110	Benefits	23,631.72	68,000.00	44,368.28	34.8%
EFT	05/15/03	MN Department of Revenue	597.56	---	2230	Payroll Tax Liability	--	--	--	--
EFT	05/15/03	Wells Fargo Bank	3,313.17	---	2210	Payroll Tax Liability	--	--	--	--
Total Payroll, Benefits & Expense Reimbursements:			**$13,078.18**				**$128,145.81**	**$398,000.00**	**$269,854.19**	**32.2%**
Total Checks Issued 04/24/03 - 05/14/03:			**$13,078.18**							

ITEMS FOR DISCUSSION AND INFORMATION

1. Review Hardwood Creek Nutrient Study report

Rice Creek Watershed District

2002 Hardwood Creek Nutrient Study Report

May 2003

RICE CREEK WATERSHED DISTRICT

EMMONS & OLIVIER RESOURCES

Rice Creek Watershed District

2002 Hardwood Creek Nutrient Study Report

May 2003

Rice Creek Watershed District
4325 Pheasant Ridge Drive NE, Suite 611
Blaine, MN 55449
(763) 398-3070

2002 Hardwood Creek Nutrient Study Report

INTRODUCTION

This study was a follow-up to the Centerville/Peltier Clean Water Partnership Study (Montgomery Watson, 1993) and the Hardwood Creek Outlet Treatment System – Option Analysis (Emmons and Olivier Resources, 2001). Results of the Centerville /Peltier Clean Water Partnership Study showed high phosphorus loading from Hardwood Creek to Peltier Lake. Results of the Hardwood Creek Outlet Treatments System – Option Analysis suggested that Rice Creek Watershed District (RCWD) better identify phosphorus sources within the Hardwood Creek Watershed before constructing an end of the pipe water quality treatment facility at the mouth of Hardwood Creek. To investigate the primary sources of phosphorus and sediment loading at the subwatershed level, Hardwood Creek was divided into seven subwatersheds and each outlet was monitored for continuous flow and water quality samples. In addition, this study is also the beginning of a monitoring program to supplement a Total Maximum Daily Load Study (TMDL) on Hardwood Creek.

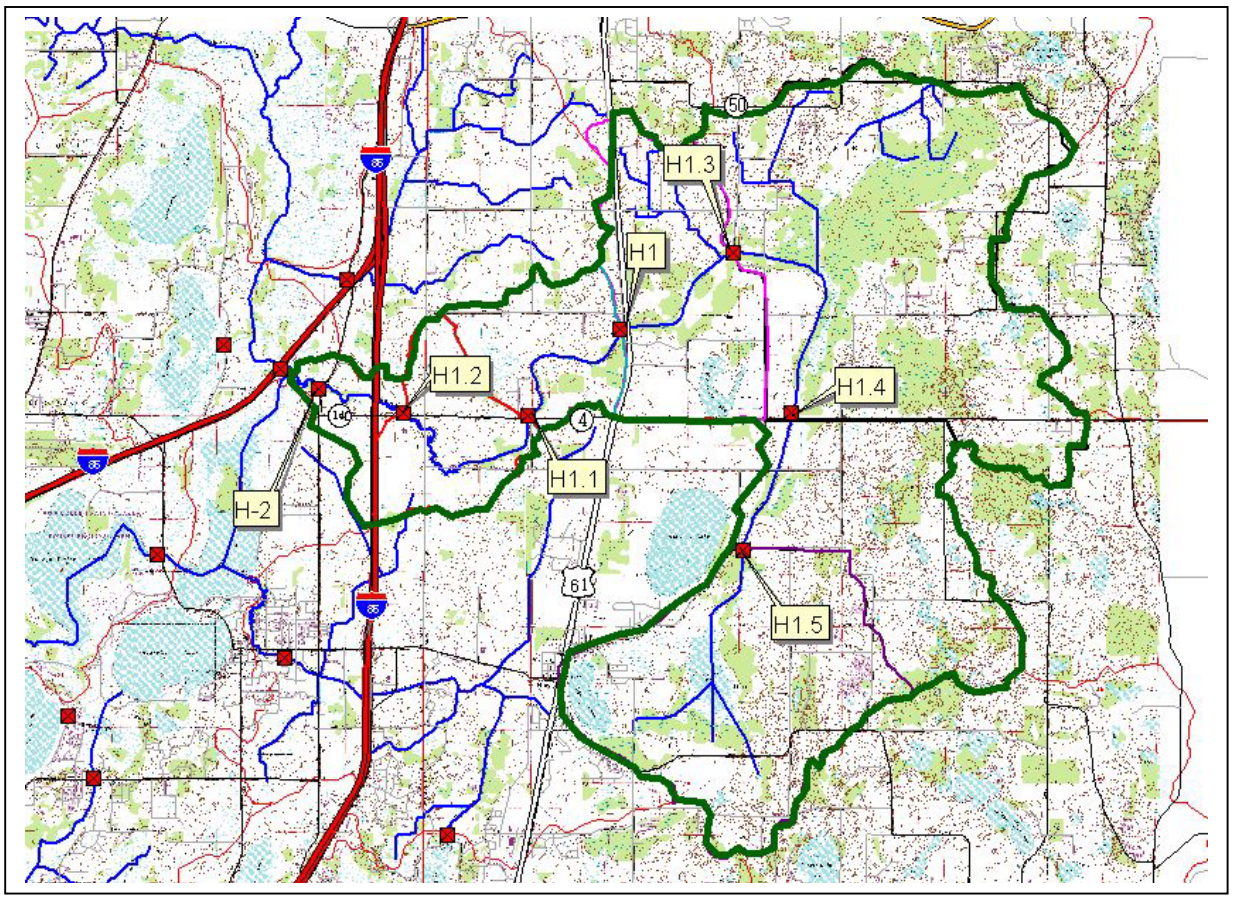
A large portion of the Total Phosphorus (TP) in the creek was identified as Soluble Reactive Phosphorus (SRP). In addition, it was concluded that the SRP component may be derived from wetland discharge. The Hardwood Creek watershed has numerous large wetlands and the upper portion of Hardwood Creek flows through large wetlands. The wetlands along Hardwood Creek have the potential to be sources of phosphorus. Most of these wetlands have been ditched as part of the county and judicial ditch systems. Ditching may have altered wetland function such that materials historically accumulated in the past, could be released. Another mechanism for phosphorus release relates to the size and type of the wetland. Some of the wetlands along Hardwood Creek are large and shallow. During the summer, water temperatures can rise significantly. High water temperature combined with oxygen consumption from decomposition can create anoxic conditions (i.e., DO concentrations less than 1 mg/L) in the wetland. Under anoxic conditions, soluble phosphorus can be released from the sediments.

METHODS

Seven stream sites were monitored **(Figure 1)**. All seven sites were monitored for continuous flow, along with grab samples for Total Kjeldahl Nitrogen (TKN), Total Suspended Solids (TSS), Volatile Suspended Solids (VSS), TP, SRP, Dissolved Oxygen (DO), Specific Conductance, pH, and temperature. Monitoring was conducted 16 times between April and October 2002. Stream site-specific rating curves were developed to convert stage readings into flow. Data was analyzed using the FLUX model (USACE, 2000).

FIGURE 1

2002 Hardwood Creek Monitoring Sites/Subwatershed Boundaries

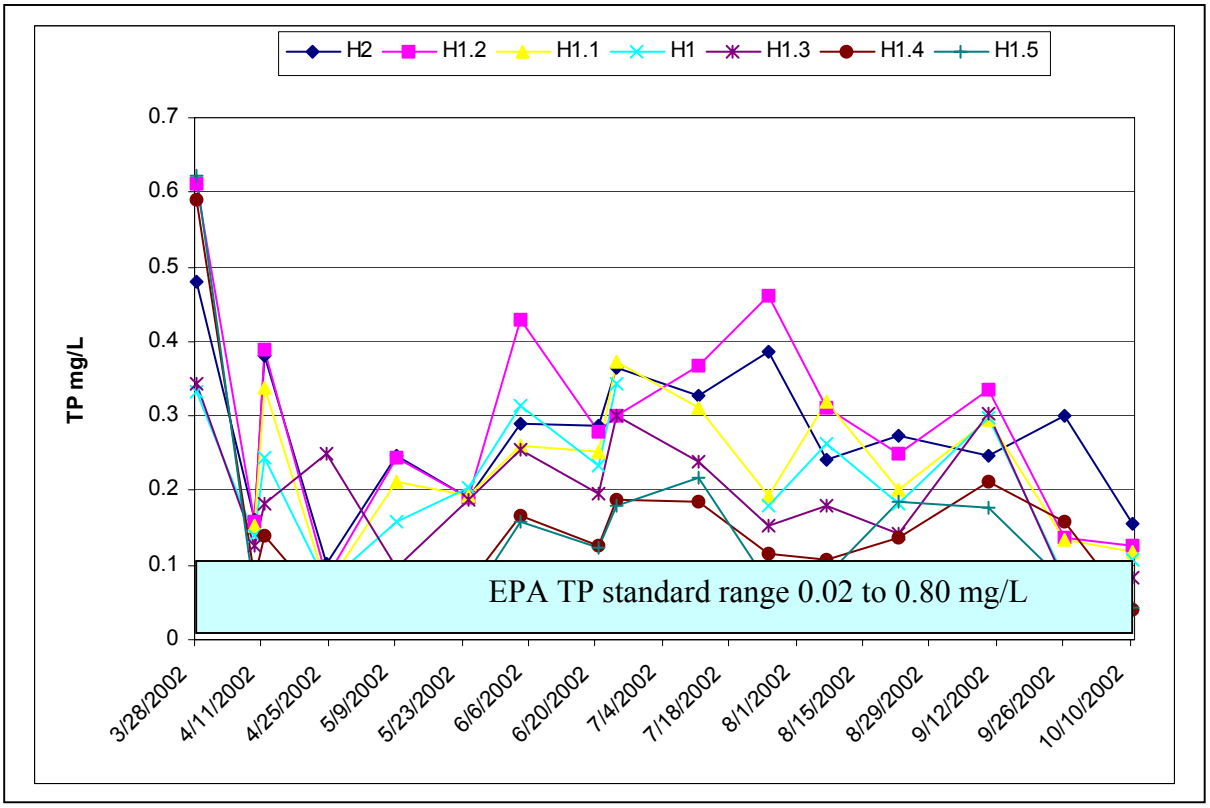


RESULTS

FLUX modeling results are listed in Appendix 1. Monitoring results are shown in Appendix 2. Stream site H1.2 consistently had the highest TP concentrations and TSS concentrations. In general, however, a seasonal pattern of TP concentrations was observed at all seven stream sites (**Figure 2**). All sites showed an increase in TP concentrations from May 9 to June 27, 2002. These increases correspond with a major flow event that occurred in early May followed by a relatively dry June. The strong rain pattern in 2002 did not begin until late June and continued throughout September.

FIGURE 2

TP concentrations measured during 2002



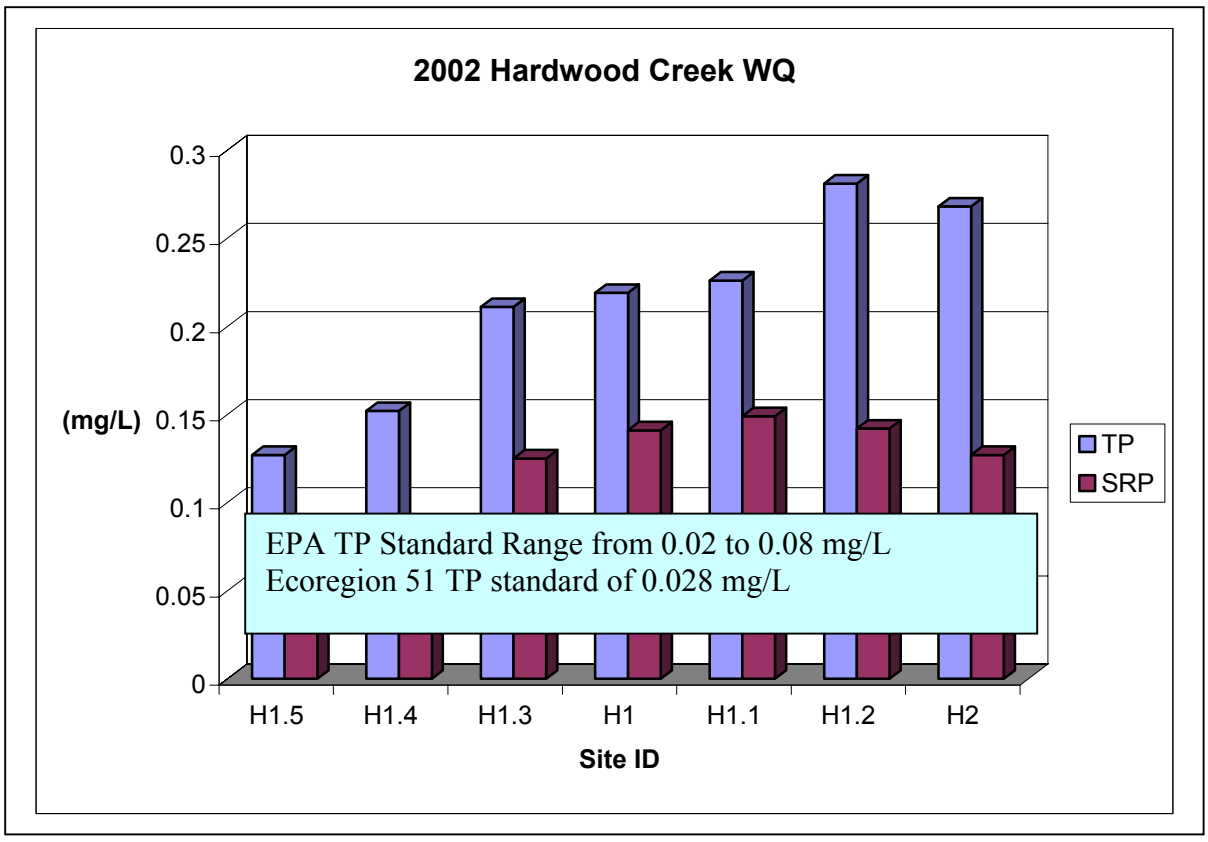
In-stream nutrient and sediment concentrations increased as the watershed size increased and the flow rate increased (**Figure 3 and Figure 4**). In-stream TP concentrations remain relatively constant and show a steady increase in a downstream direction until we get to site

H1.2. At site H1.2 there is a large jump in both the modeled and monitored TP and TSS concentrations. **Figure 3** shows some TP and SRP recovery at site H2.

The creek is primarily ditched through the H1.1 monitoring site. The ditched condition has disconnected Hardwood Creek from its floodplain and does not allow for certain areas of the creek to deposit materials during high flows. Natural creek systems depend on the existence of an adequate floodplain to help mitigate the sediment and nutrient loads created from creek channel scour. Therefore without a floodplain, the sediment and associated particulate phosphorus does not have a chance to settle out and is carried downstream. This is explains there is a slight increase in nutrient and sediment concentrations as we move downstream.

FIGURE 3

FLUX Modeled TP and SRP Concentrations for Hardwood Creek in 2002

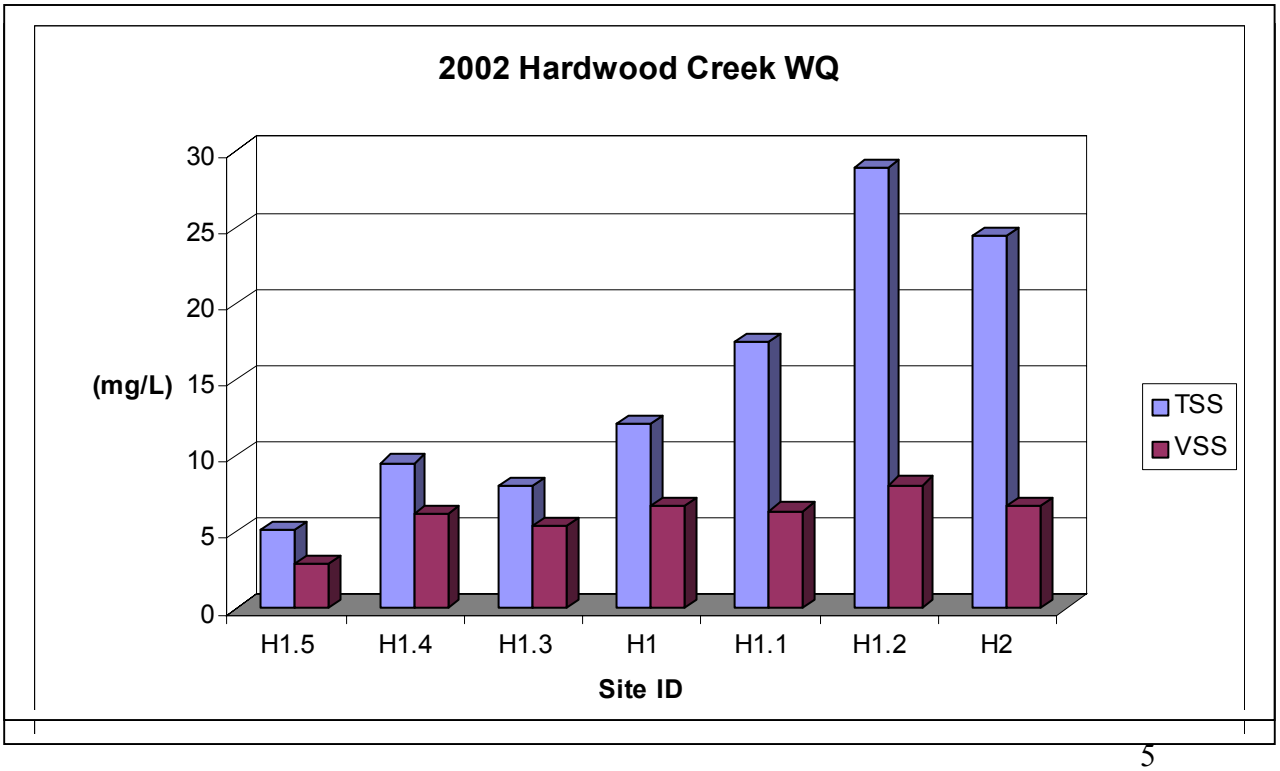


Review of the monitoring data shows that site H1.2 has a significantly higher concentration of both nutrients and sediment concentrations (**Figure 3 and Figure 4**). Site H1.2 is downstream of some agricultural land that is directly connected to the creek. Further investigation of this subwatershed should be done to determine the sources of high TP and TSS loading. It is suspected that the high TP and TSS loads are associated with stream bank failure and the loss of stream riparian habitat. Without riparian habitat, the stream banks are highly susceptible to erosion. Bank erosion is directly related to high sediment and the associated particulate phosphorus. Bank stabilization and the creation of a riparian buffer along the creek channel should reduce the TSS and TP loads in that reach.

As stated above, there was some nutrient and sediment recovery at site H2. This reach of creek has a mixture of pools, riffles, and runs along with the associated floodplain and the riparian corridor is in relatively good condition in the downstream reach. The natural sinuosity and contact with some floodplain areas in subwatershed H2 allows the creek to settle out some of the TP and TSS. This is evident by the decrease in nutrient and sediment concentrations.

FIGURE 4

FLUX Modeled Total Suspended Sediment and Volatile Suspended Sediment Concentrations for Hardwood Creek in 2002

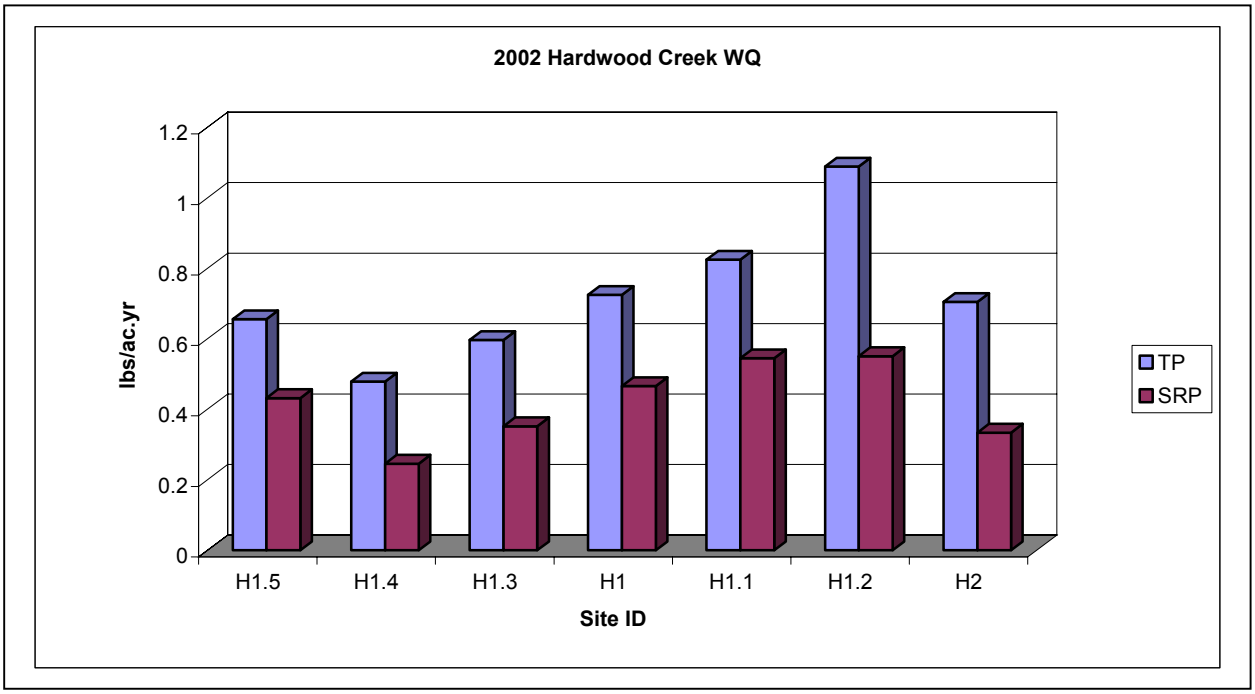


Average stream concentrations published by MPCA in 1990 reveal that mean TP concentrations for streams in the North Central Hardwoods Ecoregion is 0.158 mg/L. Review of the literature also revealed that the U.S. Environmental Protection Agency (USEPA) has published a document listing the range of certain parameters for the Country (EPA 822-B-00-018; 2000). The EPA published standards are 0.02875 mg/L TP for the North Central Hardwoods Forest Ecoregion (sub ecoregion 51). This is the Ecoregion that Hardwood Creek lies in. This published standard is for TP concentrations falling within the 25th percentile for monitored creeks. Data was compiled by reviewing over 7800 TP records within the sub ecoregion 51area. From Figure 3, it is obvious that Hardwood Creek exceeds this standard. There is no published standard for the other parameters analyzed. Without a published standard to compare concentrations with we are forced to compare pollutant export rates. Below is a discussion on Hardwood Creek export rates versus the mean Twin Cities export rates published by the Metropolitan Council.

Pollutant export increased significantly as we moved downstream. This pattern was evident for all analytes. **Figure 5** and **Figure 6** graphically present the annual pollutant export rate in lbs/acre/year from each monitoring site. TP export rates for the seven sub-watersheds vary from 0.4 lbs/acre/year to over 1 lbs/acre/year. There is a gradual increase in export rates for all parameters as sampling progressed in a downstream direction. Review of a study conducted by the Metropolitan Council in 1990 (Phosphorus Export in the Twin Cities Metro Area) revealed that the regional average TP export for the Twin Cities area is 0.41 lbs/ac./year. The regional average TSS export is 38.5 lbs/ac/yr.

FIGURE 5

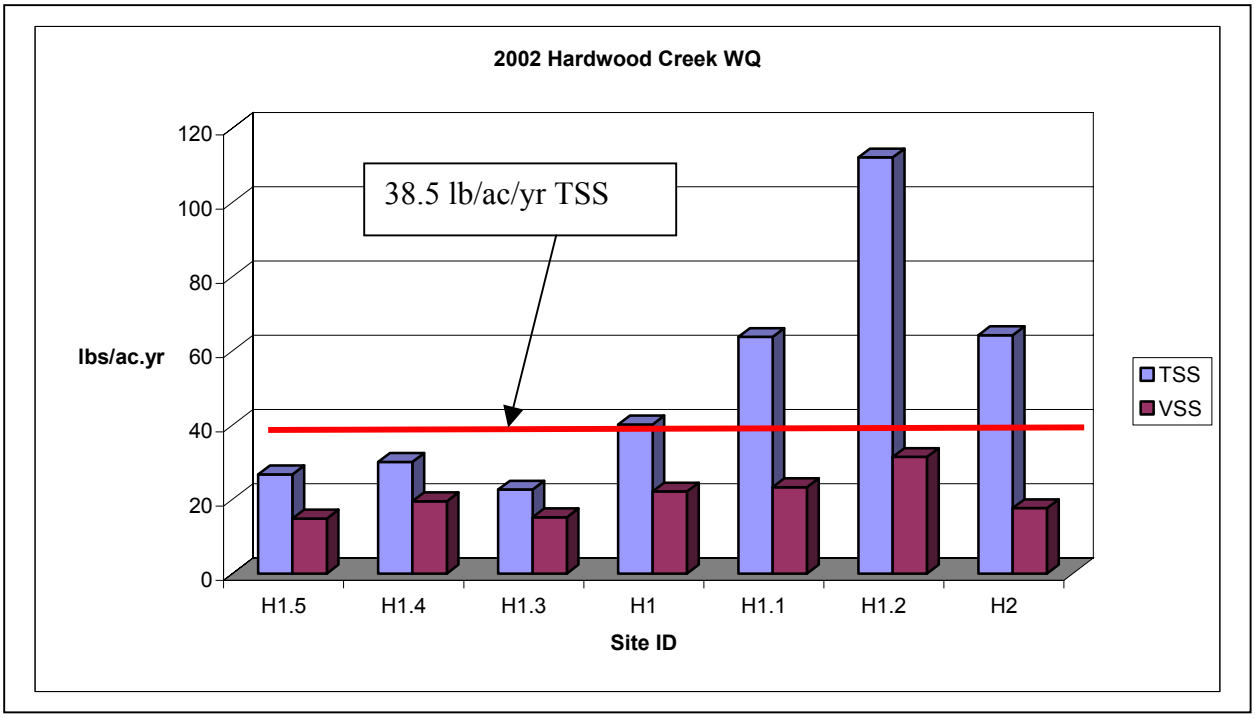
TP and SRP Export rates from FLUX Model



TSS export rates for the seven sub-watersheds vary from 20 to over 100 lbs/acre/year. **Figure 6** shows an increase in sediment load as sampling was conducted in a downstream direction. As subwatershed size increases and the ditch profile becomes steeper, flow velocity increases. This increase in velocity increases the amount of bank scour and potential bank failure. Loss of stream bank material due to poor riparian habitat is believed to be the primary cause of some of the sediment load. Streams that are functioning optimally will experience some bank failure and some point bar deposition in the channel. This does appear to occurring in the upper reaches of Hardwood Creek (where the creek is primarily ditched with very low gradient). In the upper reaches, there are very few places within the channel to deposit accumulated sediment so it continues to be transported downstream. As water moves downstream, it appears to be accumulating more sediment in the downstream areas.

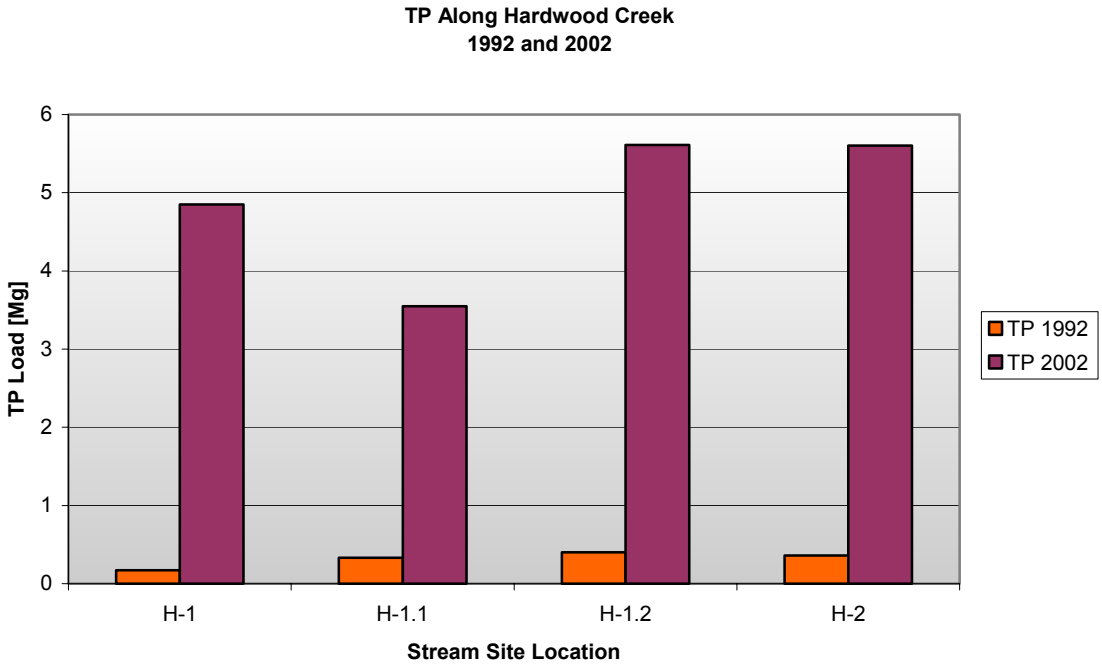
FIGURE 6

TSS and VSS Export rates from FLUX Model



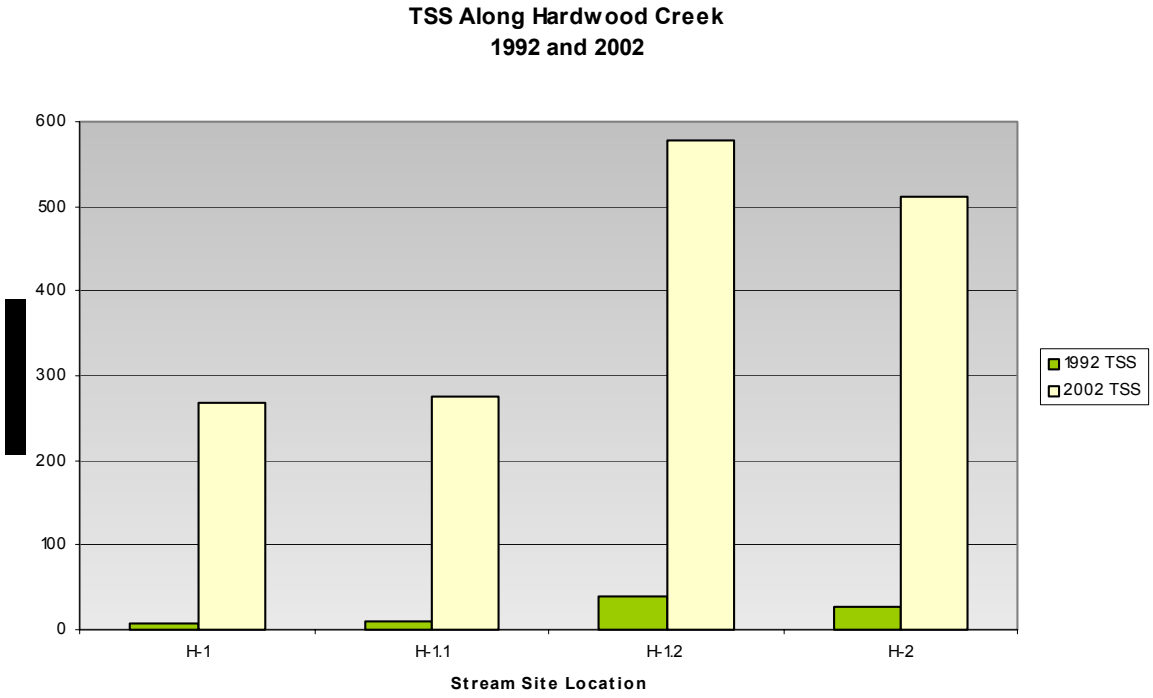
Monitoring at sites H2, H1.1, H1.2, and H1 have occurred in previous years. The data collected from these previous studies is presented in **Figures 7** and **8**.

Figure 7



Review of the complete historical dataset reveals that the trend for high phosphorus loading at site H1.2 is real. During the 1992 Hardwood Creek special study (Montgomery Watson), stream discharge was very low compared to stream discharge in 2002. This difference in flow explains the difference in the total loads that were monitored. However, looking at the graph does verify that the same trend is evident from the two datasets. Not only is the phosphorus trend similar but the TSS data also reveals a very similar and significant trend in TSS loads. Figure 8 presents both the and current TSS loadings. Further investigation will be needed to help determine the source for the nutrient and sediment spikes at site H1.2. After sources are determined, a mitigation plan will follow which will outline the steps necessary for lowering the TSS and TP loads within Hardwood Creek.

Figure 8



CONCLUSIONS

Review of the current and historical datasets reveal that there is a significant trend for higher TSS and TP loads coming into the Hardwood Creek between sites H1.1 and H1.2. There is also data from the 2002 study that shows a significant increase in nutrient and sediment export from downstream of site H1.3. Further investigation will be conducted in 2003 to narrow down the pollutant sources. A mitigation plan will then be developed and implemented to reduce pollutant loads entering Hardwood Creek.

In 2002, water quality sampling was conducted to help better understand the sources of nutrient and sediment loading entering Hardwood Creek. Results from this first year of monitoring show that the pollutant load gradually increases until we get to site H1.2. At this site, there is a jump in load concentrations for all monitored parameters. Also at site H1.2, the in-stream concentrations are the highest for TP, TSS, and TKN. Sampling sites H1.3 through H2 all exceed the Twin Cities average TP export rates. Sampling site H1.1 through H2 exceed the Twin Cities average TSS export rate. Sample concentrations for both monitored and modeled phosphorus results exceed the MPCA standard of 0.158 mg/L for streams in the

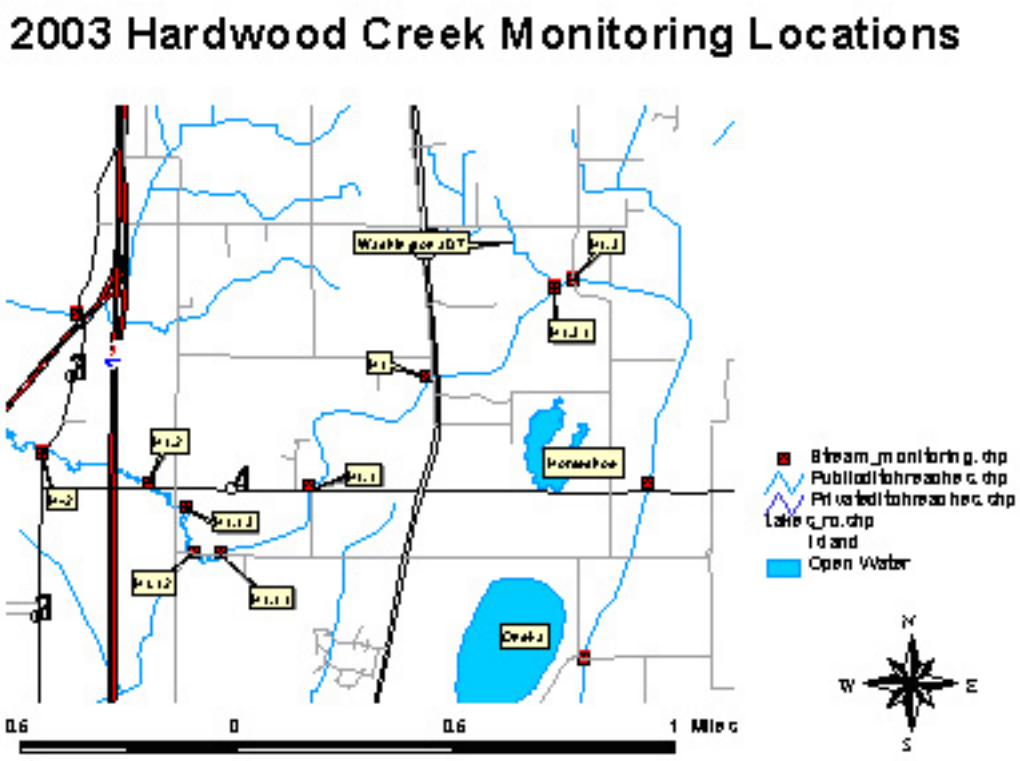
North Central Hardwoods Forest Ecoregion. It is notable to report that there is a naturally occurring recovery of both phosphorus and sediment load downstream of site H1.2 where the stream channel becomes more stabile and the riparian corridor is stabile. The increased stream sinuosity promotes longer travel time for the stream. This in turn promotes settling of solids and the associated attached nutrients. A stream restoration project that would return the ditched portion of the creek into a naturally meandering channel would provide the same type of pollutant reduction that is experienced at sampling point H2. A stream that is stabile is either aggrading or degrading. For a stream to be stabile it must be able to consistently transport its sediment load, both in size and type, associated with local deposition and scour (Rosgen, 1994).

Monitoring of the seven sites will continue into 2003. Both continuous flow and event based automated sampling will be used in 2003. This will help determine at which point during storm events the majority of the pollutant load is coming from. The 2002 data helped us understand where the loads are generated and will become important in investigating mitigation strategies to meet the goals set by the Minnesota Pollution Control Agency.

RECOMMENDATION

Proposed monitoring for 2003 includes isolating the stream section between site H1.1 and H1.2 so we can determine exactly the source of the high TP, TKN, and sediment loads. Three additional sites will be located on the creek (**Figure 9**). Sampling will be conducted at sites H2, H1.2, H1.13, H1.12, H1.11, H1.1, H1, JD7 tile outlet, and H1.3. Samples will be collected at least twelve times throughout the season. Samples will be analyzed for TP, SRP, TSS, TKN, Nox, and NH3.

FIGURE 9



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Rosgen, D. L. (1994): Applied River Morphology; pp 1-4

U.S. Environmental Protection Agency (2000): Ambient Water Quality Criteria Recommendations, Rivers and Streams in Ecoregion VII. EPA-822-B-00-018, pp15.

U.S. Environmental Protection Agency (2000): Ambient Water Quality Criteria Recommendations, Rivers and Streams in Ecoregion VII. EPA-822-B-00-018, pp15.

ITEMS FOR DISCUSSION AND INFORMATION

2. EOR Project Memo and Timeline Updates

M E M O R A N D U M

To: Board of Managers
Rice Creek Watershed District

From: EOR Staff

Subject: Project Status & Timeline Update **Date:** May 7, 2003

The purpose of this memorandum is to brief the Board on the ongoing District projects and programs. The table below itemizes recent and future actions for each project and highlights specific efforts for the programs. The attached figure provides updated, general project timelines.

Project	Recent Action(s)	Next Action(s)
Highway 61 Water Quality Improvement Wetland Project	• Final grading, seeding, and mulching complete. • Fish screen installed.	• Fish screen punch-list items. • Final planting scheduled for late May.
Clearwater Creek Bank Stabilization Project	• None.	• Finalize plans and specifications. • Coordinate access.
AnCoD 53-62 Drainage-Wide Comprehensive Wetland Management Plan	• Attended 2nd Mediation meeting. • Revised CWMP based on historic ditch review. • Prepared revised maps. • Administrator presented to Blaine City Council potential to expand CWMP to entire 53-62 drainage area within RCWD.	• Attend 3rd mediation hearing. • Meet with Plaintiff's engineer and Attorney. • Meet with defendants.
2000 Long Lake Sediment Removal Project	• Communications with Tom Post to remove fallen trees from Rice Creek.	• Waiting for project close-out paper work from Veit. • After project close-out, submit invoice to New Brighton.
Wash. Co. JD2 Culverts Construction Project	• 170th Street and Harrow Avenue completed. • 157th Street paved and re-opened to traffic. • Design modifications for 165th Street completed.	• Continue weekly progress meetings and construction observation. • Repair 165th Street culvert. • Complete paving at 165th Street. • Negotiate final change orders.
Hardwood Creek TMDL Workplan	• Met will MPCA to discuss workplan revisions.	• Await final approval from and submittal by MPCA to EPA for 319 funding.

Project	Recent Action(s)	Next Action(s)
Rules Revisions	• Prepared comprehensive summary of potential revisions. • Applied potential stormwater management standards to example developments.	• Continue to provide assistance as requested by Administrator.
Hardwood Creek Restoration Plan (& JD2 Engineer's Repair Report)	• Purchased 2-foot topo. • Started H&H Modeling. • Drafted Initial Feasibility Study.	• Submit Initial Feasibility Study and present at Board meeting. • Begin analysis of restoration options.
Natural Resources Inventory	• Organized existing data and ordered photography. • Began photo interpretation. • Initiated database development.	• Complete photo interpretation for Hardwood Creek Subwatershed. • Field assessment and verification. • MLCCS digitizing.
Rice Creek Meander Restoration	• Developed scope of work and reviewed with District staff.	• Project kick-off meeting and surveying work.
GIS Floodplain Mapping	• Developed scope of work and reviewed with District staff.	• Beginning mapping of existing FEMA floodplain and elevations.

cc: District Office

Attachments: Project Timeline
Program/Project Budget Summary

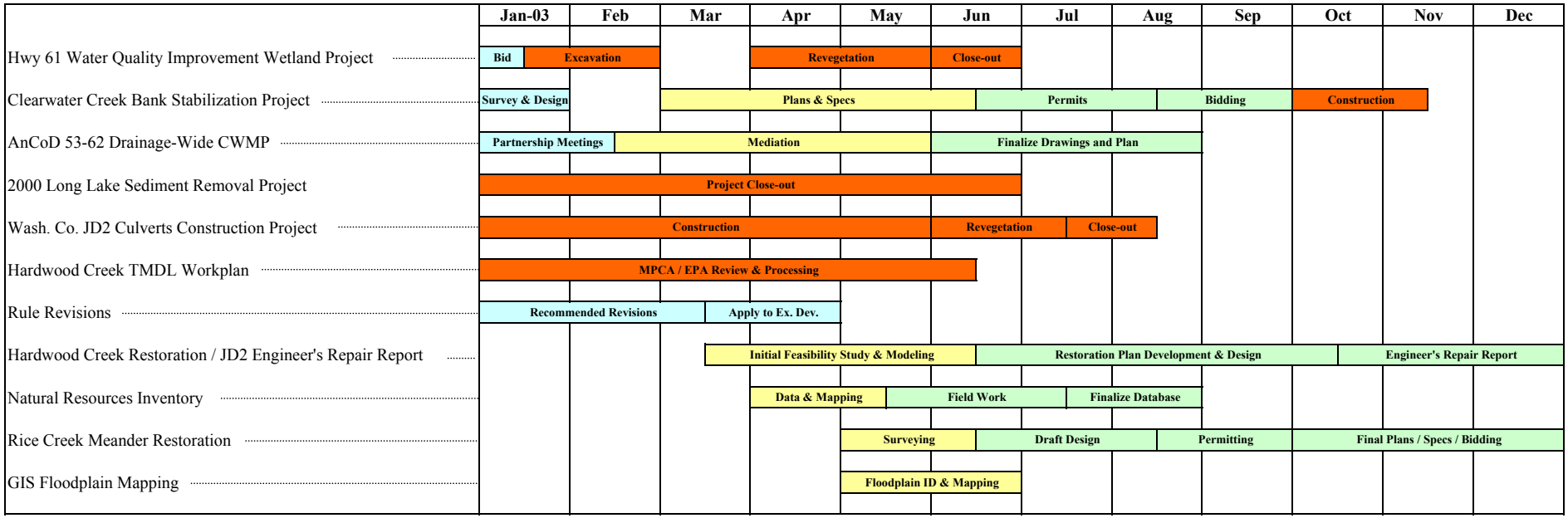
Rice Creek Watershed District

Budget Summary for Engineering Expenses*

Project / Program	Billed	Budget	Balance	% Budget
2003 Permit Program	26,763.99	100,000	73,236.01	27
2003 Administration	9,354.96	30,000	20,645.04	31
2003 General Engineering	5,790.11	25,000	19,209.89	23
2003 Local Plan Review	3,072.25	30,000	26,927.75	10
2003 SBBS Program	499.92	5,000	4,500.08	10
2003 MRSQ BMP Program	2,123.95	5,000	2,876.05	42
2003 Ditch Inspection & Maintenance	109.80	10,000	9,890.20	1
PROGRAM SUBTOTAL	**47,714.98**	**205,000.00**	**157,285.02**	**23**
Highway 61 Water Quality Improvement Wetland	33,361.32	34,900	1,538.68	96
Clearwater Creek Bank Stabilization	6,031.84	17,500	11,468.16	34
Hardwood Creek Monitoring	2,957.50	3,500	542.50	85
JD 2 - 157th Street Construction	14,584.01	15,800	1,215.99	92
JD 2 - 165th Street Construction	20,380.27	20,400	19.73	100
JD 2 - 170th Street Construction	15,248.47	21,500	6,251.53	71
JD 2 - Harrow Ave. Construction	20,100.00	20,100	0.00	100
ACD 53-62 Drainage-wide CWMP Phase 1	40,244.45	45,800	5,555.55	88
Rule Revisions	9,609.78	12,000	2,390.22	80
Hardwood Creek Restoration (JD2 Engineer's Repair Report)	13,890.30	135,300	121,409.70	10
Natural Resources Inventory	4,347.75	50,000	45,652.25	9
Rice Creek Meander Restoration	0.00	60,000	60,000.00	0
GIS Floodplain Mapping	0.00	8,000	8,000.00	0
PROJECT SUBTOTAL	**180,755.69**	**444,800.00**	**264,044.31**	**41**
OVERALL TOTAL	**228,470.67**	**649,800.00**	**421,329.33**	**35**

* Summary of expenses for work through March 28, 2003

Rice Creek Watershed District - Project Timelines
May 7, 2003



- Work completed
- Engineering work in progress
- Proposed schedule for engineering work
- Estimated contractor/outside agency schedule