

RED LAKE WATERSHED DISTRICT
Wednesday, December 30, 2020, 9:00 a.m.

Agenda

The meeting is being held electronically, due to the current pandemic situation

Meeting Participation Information:

[Join by Zoom Meeting](#)

Telephone: 1-312-626-6799 Meeting ID: 945 1311 5027

Passcode: 544670

9:00 a.m.	Call to Order	Action
	Review and approve agenda	Action
	Requests to appear	Information
	December 10, 2020 Minutes	Action
	Financial Report dated December 29, 2020	Action
	2021 IRS Standard mileage rates	Information
	General Fund Budget	Information
	Capital Project Fund Transfers	Action
	Excess Property Disposal	Action
	Thief River Falls Westside FDR Project, RLWD Project No. 178 Pay Estimate No. 14	Action
	Black River Impoundment, RLWD Project No. 176 Pay Estimate No. 4 USACOE Wetland Banking Determination	Action Information
	Ditch 10, RLWD Project No. 161-Outlet Repair Set Bid Opening – January 14, 2021, 9:30 a.m. Pre-bid meeting – January 7, 2021, 1:30 p.m. (virtual)	Action Information
	Thief River 1W1P, RLWD Project No. 149A Thief River Streambank Study-Houston Engineering Proposal Mud River Restoration Project-HDR Engineering Proposal	Action Action
	Red Lake River 1W1P, RLWD Project No. 149 Demarais/Hanson Feasibility Study	Info./Action

Thief River Falls Oxbow Project, RLWD Project No. 46Q-Funding	Information
Brandt Impoundment, RLWD Project No. 60D Ron Salentine Flowage Easement	Action
Table Permit No. 20307, Gerald Matson	Information
Permit No. 20-314, Dacian Bienek-After the Fact Permit	Info./Action
Permits: No. 20313	Action
Letter of Resignation-Ashley Hitt	Action
Staff Request of Position Transfer	Info./Action
Job Posting Ditch Inspector/Technician II Engineer Specialist	Info./Action
RLWD Meeting Format	Info./Action
Administrators Update	Information
Legal Counsel Update	Information
Managers' updates	Information
Adjourn	Action

UPCOMING MEETINGS

December 30, 2020	RLWD Board Meeting, 9:00 a.m. (Note Change of Date)
January 1, 2021	New Year's Day-Office Closed
January 14, 2021	RLWD Board Meeting, 9:00 a.m.
January 19, 2021	RRWMB Meeting, 10:00 a.m.
January 21, 2021	Red River Basin Commission 38 th International Summit Conference-Virtual
January 28, 2021	RLWD Board Meeting, 9:00 a.m.

RED LAKE WATERSHED DISTRICT
Board of Manager's Minutes
December 10, 2020

DRAFT

President Dale M. Nelson called the meeting to order via conference call at 9:00 a.m. at the Red Lake Watershed District Office, Thief River Falls, MN.

Present in person: Dale M. Nelson, Gene Tiedemann, Allan Page, and Terry Sorenson. Present via conference call: Brian Dwight, LeRoy Ose, and Les Torgerson. Staff Present: Myron Jesme and Tammy Audette and Legal Counsel, Delray Sparby.

The Board reviewed the agenda. President Nelson requested the addition of a Subordination Agreement for the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178. Motion by Page, seconded by Sorenson, and passed by unanimous vote that the Board approve the agenda with the addition of a Subordination Agreement for the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178. Upon roll call vote, motion carried unanimously

The Board reviewed the November 24, 2020 minutes. Motion by Torgerson, seconded by Ose, to approve the November 24, 2020 Board meeting minutes. Upon roll call vote, motion carried unanimously. Motion carried.

The Board reviewed the Financial Report dated December 9, 2020. Motion by Tiedemann, seconded by Page, and passed by unanimous vote to approve the Financial Report dated December 9, 2020. Upon roll call vote, motion carried unanimously.

Staff member Arlene Novak reviewed the General Fund Budget as of November 30, 2020.

Staff member Arlene Novak reviewed the 2020-2021 League of Minnesota Cities coverage changes and premium rates, stating that the District received a \$700 dividend for 2020.

Administrator Jesme reviewed the 2019 Pay Equity Compliance Report. Motion by Tiedemann, seconded by Sorenson, to approve the 2019 Pay Equity Compliance Report. Upon roll call vote, motion carried unanimously.

Engineer Jerry Pribula, Pribula Engineering, joined the meeting via conference call. Pribula stated that construction on Ditch 16 was substantially completed and reminded the Board that the final completion date is May 18, 2021. Pribula discussed the original construction bid, and additions to the contract. Administrator Jesme stated that the additional side water inlet culverts that were installed are reimbursable through the Red Lake River 1W1P, RLWD Project No. 149 and Red River Watershed Management Water Quality funds. Pribula stated that the project is dormant seeded and will be inspected next spring. Pribula referenced a subcontractor that was problematic by delivering substandard material. The Board reviewed Pay Estimate No. 11 in the amount of \$236,108.27 to Burski Excavating, Inc. for construction of RLWD Ditch 16, RLWD Project No. 177. Motion by Tiedemann, seconded by Sorenson, to approve Pay Estimate No. 11 for \$236,108.27 to Burski Excavating, Inc., for Ditch 16, RLWD Project No. 177. Upon roll call vote, motion carried unanimously. Discussion was held on the additional work completed by

Burski Excavating, Inc., on locating telephone lines, relocation of the Marshall Polk Rural Water lines and cross over lines with PKM Electric. The Board reviewed an invoice from Burski Excavating in the amount of \$16,780 for relocation of the CenturyLink lines. Discussion was held on the \$34,341.68 deposit that the District was required to pay upfront to CenturyLink for costs associated with the assumption of moving their lines and pedestals. Pribula stated that the District also agreed to pay Olson Underground for moving CenturyLink lines located within the right of way of TH 220, which was approved by CenturyLink representative Charles Grummons and the responsibility of CenturyLink. Olson Underground indicated to Pribula that he was reluctant to bore lines for CenturyLink without the District being involved in the payment as in his past dealings with CenturyLink, they do not pay their bills in a timely manner. Jesme informed the Board that Olson Underground still has not been reimbursed by CenturyLink for that work which was to be paid back to the District. After considerable conversation about the delinquent bill, motion by Tiedemann, seconded by Page, to authorize payment in the amount of \$16,780 to Burski Excavating, Inc., for relocation of the CenturyLink utility lines. Upon roll call vote, motion carried unanimously.

Engineer Nate Dalager, HDR Engineering, Inc., stated that R.J. Zavoral & Sons, Inc., requested a reduction in the retainage from 5% to 2.5% for construction of the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178. Motion by Torgerson, seconded by Sorenson, to approve the reduction in the retainage held from R.J. Zavoral and Sons, Inc., from 5% to 2.5% for construction of the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178. Upon roll call vote, motion carried unanimously. Dalager stated that he is working on a breakdown of project constructions costs and overages, along with discussions with project partners. Legal Counsel Delray Sparby presented a Subordination Agreement and Easement with the City of Thief River Falls and Thief River Falls Regional Airport Authority. Sparby indicated that Federal Aviation Administration (FAA) had reviewed the document and recommended revisions. Sparby noted that the FAA has the right to terminate the document at any time. Motion by Tiedemann, seconded by Sorenson, to approve the easement as to form and content and authorize President Nelson to sign the Subordination Agreement with the City of Thief River Falls and Thief River Falls Regional Airport Authority for the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178. Upon roll call vote, motion carried unanimously.

Engineer Tony Nordby, Houston Engineering, Inc., reported that construction on the Black River Impoundment, RLWD Project No. 176, has proceeded extremely well with the good weather conditions. Nordby stated that the concrete in the outlet structure is in-place. Discussion was held on a clay liner that was installed on the emergency spillway to reduce the risk of erosion and discussion with a landowner's concern regarding the diversion ditch around the church and potential of erosion. The Board reviewed Pay Estimate No. 3 in the amount of \$631,576.10 to R.J. Zavoral & Sons, Inc., for construction of the Black River Impoundment, RLWD Project No. 176. Motion by Sorenson, seconded by Tiedemann, to approve Pay Estimate No. 3 in the amount of \$631,576.10 to R.J. Zavoral & Sons, Inc., for construction of the Black River Impoundment, RLWD Project No. 176. Upon roll call vote, motion carried unanimously. The Board reviewed a Special Construction Proposal in the amount of \$16,947.56, from CenturyLink, for work along CSAH 3 and County Road 67. Motion by Tiedemann, seconded by Page, to approve the Special

Construction Proposal with CenturyLink, in the amount of \$16,947.56, for the Black River Impoundment Project, RLWD Project No. 176. Legal Counsel Sparby stated that signed easements with the landowners along the diversion ditches are not required prior to the start of construction. The District has given notice to the public that the land is encumbered. Nordby noted that once construction is completed on the dike, the contractor would like to do some clearing and snagging along the diversion ditches. Administrator Jesme will contact the landowners and pay out their damages. Sparby will draft a template for the easements.

Administrator Jesme discussed hiring Engineer Services for two projects for the Thief River 1W1P, RLWD Project No. 149A. Jesme recommended hiring HDR Engineering, Inc., to complete a reconnaissance report on the restoration of the Mud River in Agassiz National Wildlife Refuge which was diverted during the construction of Judicial Ditch 11 Main. Motion by Ose, seconded Tiedemann, to retain HDR Engineering, Inc., for the draft proposal of services to complete the Mud River/JD 11 Reconnaissance Report for the Thief River 1W1P, RLWD Project No. 149A. Upon roll call vote, motion carried unanimously. Jesme recommend retaining Houston Engineering, Inc., to complete a study to prioritize areas for the Thief River Streambank Project. Motion by Page, seconded by Sorenson, to retain Houston Engineering, Inc., for completion of the Thief River Streambank Study, RLWD Project No. 149A. Upon roll call vote, motion carried unanimously. Both engineering firms will submit proposals to the Board.

Administrator Jesme reviewed the Work Plan that was approved for the 2020 biennium for the Red Lake River 1W1P, RLWD Project No. 149. Discussion was held on the repairs to the outlet of Pennington County Ditch 96, west of the old railroad bed south of St. Hilaire, and additional items that need attention. President Nelson stated that he will contact the Pennington County Commissioners and Engineer regarding potential repairs to the system.

The Board reviewed Pay Estimate No. 2 to Davidson Construction in the amount of \$50,000 for the installation of a box culvert for the Agassiz National Wildlife Refuge/Ditch 11 Project, RLWD Project No. 180B. Motion by Ose, seconded by Torgerson, to approve Pay Estimate No. 2, in the amount of \$50,000, to Davidson Construction for the Agassiz National Wildlife Refuge/Ditch 11 Project, RLWD Project No. 180B. Administrator Jesme indicated, that once the final payment is made, the Final Report to the MnDNR will be completed to close out the Conservation Partners Legacy Grant.

The Board reviewed an itemized worksheet for the installation of side water inlet (SWI) culverts located in Marshall County. The Marshall SWCD is requesting their 2020 Erosion Control Funds, RLWD Project No. 164, appropriation for the installation of SWI's. Motion by Dwight, seconded by Page, to approve payment in the amount of \$12,500 from the District's 2020 Erosion Control Funds, RLWD Project No. 164, to the Marshall SWCD. Upon roll call vote, motion carried unanimously.

The Board reviewed the Project Evaluation Worksheet that will be submitted to the RRWMB as part of the Step 1 funding submittal for the Pine Lake Flood Damage Reduction and Fish Passage Project, RLWD Project No. 26B. Motion by Torgerson, seconded by Sorenson, to authorize

President Nelson, sign the Project Evaluation Worksheet and Step 1 funding submittal to the RRWMB for the Pine Lake Flood Damage Reduction and Fish Passage Project, RLWD Project No. 26B. Upon roll call vote, motion carried unanimously.

The Board reviewed a proposal from Rinke Noonan for 2021 Legal Services. Administrator Jesme stated that there are two options: Option 1 is a \$200 monthly retainer and hourly services; Option 2 is hourly services only. Both hourly services will use rates for governmental clients. Motion by Dwight, seconded by Tiedemann, to authorize President Nelson to sign the Rinke Noonan Retainage Renewal, with Option 2. Upon roll call vote, motion carried unanimously.

The Board reviewed a letter drafted by Staff member Nick Olson, to landowner Monte Casavan, regarding the completion of unsatisfactory work along a Louisville Township road in Red Lake County, RLWD Permit No. 20189. Motion by Page, seconded by Tiedemann, to authorize the submittal of the letter to landowner Monte Casavan, regarding unsatisfactory work as it relates to work completed under RLWD Permit No. 20189, stating that work shall be satisfactorily completed by June 1, 2021, or the District will hire a contractor to complete the work, with the landowner responsible for all costs incurred.

Motion by Torgerson, seconded by Ose, to table RLWD Permit No. 20286, George Proulx, Lake Pleasant Township, Red Lake County, to allow for further survey and review. Upon roll call vote, motion carried unanimously.

The Board reviewed the permits for approval. Motion by Ose, seconded by Tiedemann, to approve the following permits with conditions sated on the permit: No. 20301, Gene Schmitz, Red Lake Falls Township, Red Lake County; No. 20304, David N. Bertils, Godfrey Township, Polk County; No. 20308, Curtis Funk, Wylie Township, Red Lake County; No. 20310, Alex Hinrichs, Browns Creek Township, Red Lake County; No. 20311, Duane Stroot, Belguim Township, Polk County; and No. 20312, Stanley Skibicki, Highlanding Township, Pennington County. Upon roll call vote, motion carried unanimously.

Discussion was held on the District's internet service. Motion by Sorenson, seconded by Tiedemann, to install internet service through Garden Valley Technologies in the amount of \$73.90 per month. Upon roll call vote, motion carried unanimously.

The 38th Annual Red River Basin Land and Water International Summit Conference will be a virtual event held on January 21, 2021. Engineer Tony Nordby, Houston Engineering, Inc., reported that the Black River Project, RLWD Project No. 176, will be featured at the conference.

Administrators Update:

- Jesme and Manager Ose will participate in the virtual RRWMB meeting on December 15, 2020, where the Step 1 submittal for the Pine Lake Project will be submitted.
- Jesme and Manager Ose attended the virtual Red River Basin Flood Damage Reduction Work Group meeting on December 9, 2020.
- The BWSR Annual meeting will be held December 17, 2020. Part of the agenda is the approval of the 2021 Clean Water Funds Competitive Grants Award, which includes

\$250,000 for the TRF Oxbow Project. Of the 61 applicants, this project rated 13th and is tentatively in line for funding.

- Jesme and Staff members Hanson and Slowinski and Manager Tiedemann, participated in the virtual MAWD Annual Conference.
- Jesme will participate in a meeting with the U.S. Fish and Wildlife Service for a potential project under the Thief River 1W1P on June 15th.
- The first Clearwater River 1W1P Planning Work Group meeting will be held later today to review details of the development of the plan.
- Jesme attended the MAWD Legislative Committee meeting held on December 8th. Included in the packet was the 2020 MAWD Legislative Platform for review.
- The District was informed from the US Corps of Engineers regarding the release of waters from the Upper and Lower Red Lakes. Recent flooding concerns downstream of the dam, from the Kratka Bridge to the City of Thief Rivers Falls have been stressed. The USCOE reduced the flows to alleviate downstream flooding.
- Jesme participated in a zoom open house on December 2, 2020, regarding the FEMA DFIRM mapping developed for the Red Lake River within Pennington County and the City of Thief River Falls.
- Included in the packet was an August 2020 Water Quality Report.

Administrator Jesme informed the Board that Staff member Ashley Hitt has a pending offer for employment with the NRCS. Discussion was held on offering Hitt's position to a staff member within the District or advertising. The Board authorized Administrator Jesme to bring back options to the Board for future employment hiring.

Legal Counsel Sparby discussed a scheduling conference for the appeal on Ditch 17, RLWD Project 179.

Legal Counsel Sparby stated that he has not heard any additional information on the appeal for the abandonment of Judicial Ditch 5 (Four-Legged Lake), RLWD Project No. 102.

Manager Tiedemann reported that he was appointed to serve an additional 3-year term, representing West Polk County.

Manager Torgerson reported that he applied for an additional 3-year term serving Clearwater County, but has not heard on his confirmation.

Discussion was held on using Zoom for future Board meetings. District staff will set up a practice run with the Board President.

Motion by Ose, seconded by Tiedemann, to adjourn the meeting. Motion carried.

LeRoy Ose, Secretary

RED LAKE WATERSHED DISTRICT
Financial Report for December 29, 2020

Ck#	Check Issued to:	Description	Amount
online	EFTPS	Withholding for FICA, Medicare, and Federal taxes	336.10
online	MN Department of Revenue	Withholding taxes	51.61
online	EFTPS	Withholding for FICA, Medicare, and Federal taxes	3,717.64
online	MN Department of Revenue	Withholding taxes	649.38
online	Public Employees Retirement Assn.	PERA	2,316.52
online	EFTPS	Withholding for FICA, Medicare, and Federal taxes	3,855.16
online	MN Department of Revenue	Withholding taxes	694.62
online	Public Employees Retirement Assn.	PERA	2,360.50
online	EFTPS	Withholding for FICA, Medicare, and Federal taxes	581.01
online	MN Department of Revenue	Withholding taxes	73.47
38582	Burksi Excavating, Inc.	Pay estimate #11 & Centurylink	252,888.27
38583	Centurylink	Bore new fiber-Black River Impoundment	16,947.56
38584	Marshall County SWCD	2020 Streambank Erosion Control Funds	12,500.00
38585	Janet Osborn Julie Ann Osborn	Temporary and permanent easements-Black River Imp.	3,153.90
38586	R.J. Zavoral & Sons, Inc.	Pay estimate #3-Black River Impoundment	631,576.10
38587	Raynold & Kathryn Ulrich	Temporary and permanent easements-Black River Imp.	8,692.21
38588	John & Myrna Erickson Trustee JEEMMEIT	Temporary and permanent easements-Black River Imp.	39,381.62
38589	Fair Creek LLP	Temporary and permanent easements-Black River Imp.	4,333.30
38590	Gary Mosbeck	Temporary and permanent easements-Black River Imp.	2,369.89
38591	Sorvig Family LLP	Temporary and permanent easements-Black River Imp.	14,468.36
38592	Brault Construction LLC	*See below for explanation	1,250.00
38593	Centex Credit Card	Gas for vehicles	77.28
38594	Corporate Technologies LLC	Managed IT, MS Office 365, 6 computer cameras & 3 headsets	1,633.94
38595	Delta Dental	Dental insurance premium	437.45
38596	Fastenal Company	(4) Safety eyewear	29.70
38597	HDR, Inc.	**Engineering fees-see below for explanation	55,675.66
38598	Houston Engineering, Inc.	Black River Impoundment engineering fees	38,686.45
38599	Ihle Sparby & Haase PA	***Legal fees (Aug. 12 to Dec. 10, 2020)	8,954.37
38600	Marco	Monthly telephone expense	343.30
38601	NCPERS	Life insurance premium	112.00
38602	Arlene Novak	Reimburse for Wellness program	50.00
38603	Northern Technologies, LLC	Density testing at Black River Impoundment site	7,492.50
38604	Northwest Beverage, Inc.	H2O for office	30.75
38605	LeRoy Ose	Mileage	450.82
38606	Pennington Co. Hwy. Dept.	Cost share of CD 96-per Board approval	26,313.00
38607	Pennington SWCD	****See below	57,769.95
38608	Polk County Hwy. Dept.	Burnham Creek 29"x42"Arch	3,914.80
38609	Quill Corporation	Labels,markers,adding tape,ballpoint pens,printer ribbons	99.73
38610	RMB Environmental Laboratories, Inc	Lab analysis of water quality samples	224.00
38611	Jake Salentine	Debris removal on Brandt Impoundment	560.00
38612	Madison Salentine	Mowing Brandt Impoundment	522.50
38613	Nick Salentine	5 beaver removal and debris removal-Brandt Impoundment	591.00
38614	Speedee Delivery	Shipment of water quality samples	10.36
38615	Sun Life Financial	Life insurance premium	125.36
online	Cardmember Services	**See below for explanation	1,217.42
online	Blue Cross Blue Shield	Health insurance premium	5,661.50
online	Terry Sorenson	Mileage	127.66
online	Further	Medical FSA	257.00
	Payroll		
	Check #12113-12128 & 7458		26,206.80
	Total Checks		<u>\$ 1,239,772.52</u>

To approve payment when calculated:
RRWMB for second half of taxes

***Brault Construction LLC**

Pjt. 43B Burnham Creek Dig out 2 culverts	700.00
Pjt.119 Install 3 culvert traps	300.00
Proj. 25 Black River Impoundment	<u>250.00</u>
Total	<u>1,250.00</u>

****HDR, Inc.**

Proj. 178 TRF Westside-Const.serv.	12,198.16
Proj. 26B Pine Lake FDR	<u>43,477.50</u>
Total	<u>55,675.66</u>

***** Ihle Sparby & Haase, PA**

General Fund-Admin.	4,338.00
Pine Lake FDR (Proj. 26B)	180.00
Burnham Creek BR6 (Pjt. 43A)	72.00
Four Legged Lake (Pjt. 102)	54.00
4 Legged Lake (#102) Mail fee adj.	4.37
Black River Impoundment (#176)	2,160.00
Black River Imp. (#176) recording fee	46.00
RLWD Ditch 16 (#177)	522.00
TRF Westside FDR (#178)	378.00
RLWD Ditch 17 (#179)	900.00
RLWD Ditch 17 (#179) filing fee	<u>300.00</u>
Total	<u>8,954.37</u>

****** Pennington SWCD**

PTMapp Grant reimb.(149AA)	720.45
JD 25 RL1W1P 2018 grant	15,787.50
CD96 Outlet-T&E RL1W1P 2018 gran	10,835.95
CD96 Outlet T&E RL1W1P 2020 gran	14,263.55
RL1W1P 2020 grant-Cost share const.	<u>16,162.50</u>
Total	<u>57,769.95</u>

Banking**Northern State Bank**

Balance as of December 9, 2020	\$ 2,574,707.21
Total Checks Written	(1,239,772.52)
Receipt #989876 State of MN-Market Valu Aid, Disparity Aid and Prior Year Market Valu	<u>95,378.35</u>
Balance as of December 29, 2020	<u>\$ 1,430,313.04</u>

Current interest rate is .20%

American Federal Bank-Fosston

Balance as of December 9, 2020	\$ 1,602,278.23
Receipt #989874 Roseau County-Current tax settlement	43.00
Receipt #989875 Red Lake County-2019 Buffer aid	8,853.00
Receipt #989877 Clearwater County-second half of 2020 Buffer aid	<u>6,425.00</u>
Balance as of December 29, 2020	<u>\$ 1,617,599.23</u>

Current interest rate is .65%



IRS issues standard mileage rates for 2021

WASHINGTON — The Internal Revenue Service today issued the 2021 optional standard mileage rates used to calculate the deductible costs of operating an automobile for business, charitable, medical or moving purposes.

Beginning on Jan. 1, 2021, the standard mileage rates for the use of a car (also vans, pickups or panel trucks) will be:

- 56 cents per mile driven for business use, down 1.5 cents from the rate for 2020,
- 16 cents per mile driven for medical or moving purposes for qualified active duty members of the Armed Forces, down 1 cent from the rate for 2020, and
- 14 cents per mile driven in service of charitable organizations, the rate is set by statute and remains unchanged from 2020.

The standard mileage rate for business use is based on an annual study of the fixed and variable costs of operating an automobile. The rate for medical and moving purposes is based on the variable costs.

It is important to note that under the [Tax Cuts and Jobs Act](#), taxpayers cannot claim a miscellaneous itemized deduction for unreimbursed employee travel expenses. Taxpayers also cannot claim a deduction for moving expenses, unless they are members of the Armed Forces on active duty moving under orders to a permanent change of station. For more details see [Moving Expenses for Members of the Armed Forces](#).

Taxpayers always have the option of calculating the [actual costs](#) of using their vehicle rather than using the standard mileage rates.

Taxpayers can use the standard mileage rate but must opt to use it in the first year the car is available for [business use](#). Then, in later years, they can choose either the standard mileage rate or actual expenses. Leased vehicles must use the standard mileage rate method for the entire lease period (including renewals) if the standard mileage rate is chosen.

[Notice 2021-02](#) contains the optional 2021 standard mileage rates, as well as the maximum automobile cost used to calculate the allowance under a fixed and variable rate (FAVR) plan. In addition, the notice provides the maximum fair market value of employer-provided automobiles first made available to employees for personal use in calendar year 2021 for which employers may use the fleet-average valuation rule in or the vehicle cents-per-mile valuation rule.

**Red Lake Watershed District
For the year 2020**

**Excess Property
Includes items destroyed**

Name of Item	Date acquired	Amount
Items fully depreciated		
		Amt. on Asset sche
H2O Logger Ser#9896205 lost in ice storm	May 2011	534.28
Kemmer-WQ equipment (UMC)	Oct. 1999	538.19
ProWest GIS/GPS hardware (item disposed of)	March 2003	2,496.36
Water Quality Probe (no longer working)	Dec. 2004	3,360.95
Sales tax on wq probe	Dec. 2004	216.66
Water level loggers with software (lost in strong currents)	Dec. 2007	1,217.00
Sales tax on level loggers	Dec. 2007	79.00
HP Pavilion laptop computer SN#CNF7358DK2 (Lab)	Dec. 2007	1,379.14
Troll 9500 Sonde (no longer in use)	Apr. 2008	6846.93
Troll 9500 Sonde (no longer in use)	Apr. 2008	6846.93
(2) Troll9500 w/ sensors-Proj. 157C	Nov. 2011	8986.12
HP Desktop Computer (Gary) S#S28A13706DG	Dec. 2011	1073.41
HP Laptop 17.3" (Loren) SER#CNU129076G	Dec. 2011	1607.78
Cellular Phone-Corey Serial #38GC0335XA (destroyed)	Jan. 2016	673.31
Cellular Phone-Ashley-Serial #38G908BQBL	Jan. 2016	673.31
Cellular phone-Nick S#38GB05B53T (destroyed)	Jan. 2016	673.31
Q&A Software (not used)	Jul. 1991	315.00
Port switch, router and install	Sept. 2007	1,104.34
HP Pavilion Elite with large monitor Ser #2MD04414X2	Nov. 2010	1,677.91
HP Probook Laptop 2.3G 4GB S#CNU129076G (Myron)	Dec. 2011	1,277.16
HP6000P 250GB 4 GB Ser#MXL101RW9 (Tammy)	Nov. 2011	1,074.03
HP6000P 250GB 4 GB Ser#S2UA13706DG (Arlene)	Nov. 2011	1,063.41
Canon IR-C5045 Copier and V2 Base	Jul. 2012	10,153.13
HP Elite 17.3 Notebook Ser#CNU3169SIG (Loren)	Jul. 2013	2,088.88
(3) MS Office 2013 Professional Plus (not in use-have monthly sub.)	Jun. 2014	1,628.77



Contractor's Application and Certificate for Payment Summary

To (Owner): Red Lake Watershed District	From (Contractor): R.J. Zavoral & Sons, Inc.	Via (Engineer): Nathan P. Dalager
Owner's Project No.: 178	Contractor's Project No.:	Engineer's Project No.: 10134290
For (Contract): Thief River Falls Westside Flood Damage Reduction Project	Application No.: Retainage Payment #14	Application Period: 12/23/2020

Application for Payment

Change Order Summary

Change Orders Approved by Owner:			
Number	Date Approved	Additions	Deductions
1	5/5/2020	\$ 173,944.09	\$ -
2	5/14/2020	\$ -	\$ 27,577.00
3	5/28/2020	\$ 12,204.00	\$ -
4	6/8/2020	\$ 15,594.00	\$ -
5		\$ 30,000.00	\$ -
6		\$ -	\$ -
7		\$ -	\$ -
TOTALS		\$ 231,742.09	\$ 27,577.00
NET CHANGE BY CHANGE ORDERS		\$ 204,165.09	

1. ORIGINAL CONTRACT PRICE	\$ 6,632,761.68
2. NET CHANGE BY CHANGE ORDERS	\$ 204,165.09
3. CONTRACT SUM TO DATE (Line 1 ± 2)	\$ 6,836,926.77
4. TOTAL COMPLETED AND STORED TO DATE (Column F on Progress Estimate)	\$ 6,528,604.08
5. RETAINAGE: 2.5% of Completed Work and Stored Material	\$ 163,904.53
6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5)	\$ 6,364,699.56
7. LESS PREVIOUS PAYMENTS	\$ 6,200,795.05
8. AMOUNT DUE THIS APPLICATION	\$ -
9. BALANCE TO FINISH	\$ 308,322.69
10. PERCENT COMPLETE	95.49%

Contractor's Certification

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief, the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

Contractor:

By: 	Date: 12/28/2020
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Payment of:

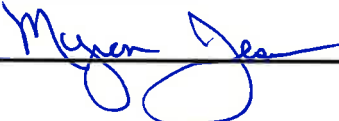
\$ 163,904.53 is recommended.

HDR Engineering, Inc.

By: 

Date: 12/23/2020

Red Lake Watershed District

By: 

Date: 12-30-20

PARTIAL PAYMENT ESTIMATE

Client Project No.
176

HEI Project No.
3655-0091

PAYMENT NUMBER: 4

Project: Black River Impoundment Project

PERIOD OF ESTIMATE:

Location: Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty

FROM **12/8/2020** TO **12/23/2020**

CONTRACT CHANGE ORDER SUMMARY				ESTIMATE	
Change Order		AMOUNT			
NO.	DATE	ADDITIONS	DEDUCTIONS		
				1. Original Contract	\$ 4,374,457.66
				2. Change Orders	\$ -
				3. Revised Contract (1+2)	\$ 4,374,457.66
				4. Work Completed*	\$ 2,192,725.25
				5. Stored Materials*	\$ 35,161.40
				6. Adjustments*	\$ -
				7. Subtotal (4+5+6)	\$ 2,227,886.65
				8. Retainage 5.00%	\$ 111,394.33
				9. Previous Payments	\$ 1,790,963.83
				10. Amount Due (7-8-9)	\$ 325,528.49
TOTALS		\$ -	\$ -	*Detailed Breakdown Attached if Non-Zero Value	
NET CHANGE		\$ -			

CONTRACT TIME

Completion Date Contract

Original (days)	N/A	On Schedule? Yes	Starting Date: <u>10/23/2020</u>
Revised	N/A		
Remaining	N/A		Final Completion: <u>8/31/2022</u>

CONTRACTOR'S CERTIFICATION:

The undersigned Contractor certifies, to the best of his/her knowledge, the following:

- (1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;
- (2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and
- (3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor: R.J. Zavoral & Sons, Inc.
 By: *[Signature]*
 Date: 12/29/2020

ENGINEER'S RECOMMENDATION:

I have reviewed the progress of the work, and to the best of my knowledge, information and belief, in accordance with the terms of the Contract, the Contractor is entitled to a partial payment in the amount requested.



Engineer: *[Signature]*
 By: Tony A. Nordby
 Date: 12/29/2020

OWNER'S APPROVAL:

Owner: Red Lake Watershed District
 By: _____
 Date: _____

REMIT PAYMENT TO:

R.J. Zavoral & Sons, Inc.
 1706 Bygland Rd SE
 P.O. Box 435
 East Grand Forks, MN 56721



Client Project No. 176
 HEI Project No. 3655-0091
 Project: Black River Impoundment Project
 Location: Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty
 Contractor: R.J. Zavoral & Sons, Inc.

PAY ESTIMATE

PAY ESTIMATE #:	4
SUBMITTED:	12/30/2020
BEGIN DATE:	12/8/2020
END DATE:	12/23/2020

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE	
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
Original Contract Items											
2021.501	MOBILIZATION	Lump Sum	1	\$ 100,000.00	\$ 100,000.00		\$ -	1.	\$ 100,000.00	1.	\$ 100,000.00
2101.501	CLEARING AND GRUBBING	Lump Sum	1	\$ 30,000.00	\$ 30,000.00	0.5	\$ 15,000.00	0.3	\$ 9,000.00	0.8	\$ 24,000.00
2104.502	SALVAGE SIGN	Each	7	\$ 225.00	\$ 1,575.00		\$ -		\$ -		\$ -
2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	Lin. Ft.	496	\$ 2.25	\$ 1,116.00		\$ -		\$ -		\$ -
2104.503	REMOVE PIPE CULVERTS	Lin. Ft.	1,445	\$ 10.00	\$ 14,450.00	54.	\$ 540.00		\$ -	54.	\$ 540.00
2104.503	SALVAGE AND INSTALL PIPE CULVERT	Lin. Ft.	110	\$ 95.00	\$ 10,450.00		\$ -		\$ -		\$ -
2104.504	REMOVE BITUMINOUS PAVEMENT	SY	1,304	\$ 7.80	\$ 10,171.20		\$ -		\$ -		\$ -
2105.507	COMMON EXCAVATION (P)	C.Y.	286,438	\$ 1.78	\$ 509,859.64		\$ -	4,641.	\$ 8,260.98	4,641.	\$ 8,260.98
2105.601	DEWATERING	Lump Sum	1	\$ 14,905.00	\$ 14,905.00		\$ -		\$ -		\$ -
2105.602	TEST HOLE	Each	10	\$ 265.00	\$ 2,650.00		\$ -	10.	\$ 2,650.00	10.	\$ 2,650.00
2105.607	TOPSOIL EXCAVATION (P)	C.Y.	211,673	\$ 1.75	\$ 370,427.75	6,688.	\$ 11,704.00	59,246.	\$ 103,680.50	65,934.	\$ 115,384.50
2106.507	COMMON EMBANKMENT (CV) (P)	C.Y.	557,799	\$ 2.63	\$ 1,467,011.37	71,239.	\$ 187,358.57	486,560.	\$ 1,279,652.80	557,799.	\$ 1,467,011.37
2112.601	SUBGRADE PREPARATION (CV) (P)	C.Y.	61,542	\$ 2.00	\$ 123,084.00	4,003.	\$ 8,006.00	57,539.	\$ 115,078.00	61,542.	\$ 123,084.00
2118.509	AGGREGATE SURFACING CLASS 1	Ton	249	\$ 15.00	\$ 3,735.00	17.	\$ 255.00		\$ -	17.	\$ 255.00
2123.510	DOZER	Hour	46	\$ 145.00	\$ 6,670.00		\$ -		\$ -		\$ -
2123.610	CRAWLER MOUNTED BACKHOE	Hour	14	\$ 175.00	\$ 2,450.00		\$ -		\$ -		\$ -
2211.509	AGGREGATE BASE CLASS 5	Ton	1,602	\$ 14.25	\$ 22,828.50		\$ -		\$ -		\$ -
2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,B)	Ton	330	\$ 105.00	\$ 34,650.00		\$ -		\$ -		\$ -
2411.601	CONCRETE OUTLET STRUCTURE	Each	1	\$ 195,000.00	\$ 195,000.00	0.05	\$ 9,750.00	0.6	\$ 117,000.00	0.65	\$ 126,750.00
2411.607	CONCRETE PIPE CRADLE	C.Y.	43	\$ 1,230.00	\$ 52,890.00		\$ -	47.	\$ 57,810.00	47.	\$ 57,810.00
2412.502	12X5 PRECAST CONCRETE END SECTION	Each	2	\$ 8,070.00	\$ 16,140.00		\$ -		\$ -		\$ -
2412.502	14X7 PRECAST CONCRETE END SECTION (TYPE III)	Each	2	\$ 17,615.00	\$ 35,230.00		\$ -		\$ -		\$ -
2412.503	12X5 PRECAST CONCRETE BOX CULVERT	Lin. Ft.	62	\$ 950.00	\$ 58,900.00		\$ -		\$ -		\$ -
2412.503	14X7 PRECAST CONCRETE BOX CULVERT	Lin. Ft.	90	\$ 1,130.00	\$ 101,700.00		\$ -		\$ -		\$ -
2451.507	GRANULAR BACKFILL (CV) (P)	C.Y.	727	\$ 21.50	\$ 15,630.50		\$ -		\$ -		\$ -
2451.507	GRANULAR BEDDING (CV) (P)	C.Y.	1,573	\$ 21.50	\$ 33,819.50	79.	\$ 1,698.50		\$ -	79.	\$ 1,698.50
2452.618	VINYL SHEET PILING	SQ. FT.	8,250	\$ 9.50	\$ 78,375.00		\$ -		\$ -		\$ -
2501.502	18" GS APRON	Each	4	\$ 150.00	\$ 600.00		\$ -		\$ -		\$ -
2501.502	24" GS APRON	Each	2	\$ 200.00	\$ 400.00		\$ -		\$ -		\$ -
2501.502	36" GS APRON	Each	2	\$ 430.00	\$ 860.00		\$ -		\$ -		\$ -
2501.502	60" RC PIPE APRON	Each	2	\$ 2,300.00	\$ 4,600.00	2.	\$ 4,600.00		\$ -	2.	\$ 4,600.00
2501.502	FLAP GATE FOR 18" CS PIPE CULVERT	Each	33	\$ 615.00	\$ 20,295.00		\$ -		\$ -		\$ -
2501.502	FLAP GATE FOR 24" CS PIPE CULVERT	Each	6	\$ 680.00	\$ 4,080.00		\$ -		\$ -		\$ -
2501.502	FLAP GATE FOR 36" CS PIPE CULVERT	Each	1	\$ 1,000.00	\$ 1,000.00		\$ -		\$ -		\$ -
2501.502	35" SPAN GS PIPE-ARCH APRON	Each	6	\$ 355.00	\$ 2,130.00		\$ -		\$ -		\$ -
2501.502	42" SPAN GS PIPE-ARCH APRON	Each	8	\$ 470.00	\$ 3,760.00		\$ -		\$ -		\$ -
2501.502	57" SPAN GS PIPE-ARCH APRON	Each	4	\$ 965.00	\$ 3,860.00		\$ -		\$ -		\$ -
2501.502	64" SPAN GS PIPE-ARCH APRON	Each	6	\$ 1,170.00	\$ 7,020.00		\$ -		\$ -		\$ -
2501.502	71" SPAN GS PIPE-ARCH APRON	Each	10	\$ 1,470.00	\$ 14,700.00		\$ -		\$ -		\$ -
2501.502	73" SPAN GS PIPE-ARCH APRON	Each	8	\$ 2,300.00	\$ 18,400.00		\$ -		\$ -		\$ -
2501.502	65" SPAN RC PIPE-ARCH APRON	Each	2	\$ 2,100.00	\$ 4,200.00		\$ -		\$ -		\$ -
2501.503	18" CS PIPE CULVERT	Lin. Ft.	1,474	\$ 30.00	\$ 44,220.00		\$ -		\$ -		\$ -
2501.503	24" CS PIPE CULVERT	Lin. Ft.	328	\$ 35.00	\$ 11,480.00		\$ -		\$ -		\$ -
2501.503	36" CS PIPE CULVERT	Lin. Ft.	72	\$ 54.00	\$ 3,888.00		\$ -		\$ -		\$ -
2501.503	35" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	132	\$ 53.00	\$ 6,996.00		\$ -		\$ -		\$ -



Client Project No. 176
 HEI Project No. 3655-0091
 Project: Black River Impoundment Project
 Location: Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty
 Contractor: R.J. Zavoral & Sons, Inc.

PAY ESTIMATE

PAY ESTIMATE #:	4
SUBMITTED:	12/30/2020
BEGIN DATE:	12/8/2020
END DATE:	12/23/2020

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE		
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	
2501.503	42" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	172	\$ 60.00	\$ 10,320.00		\$ -		\$ -		\$ -	
2501.503	57" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	78	\$ 85.00	\$ 6,630.00		\$ -		\$ -		\$ -	
2501.503	64" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	136	\$ 115.00	\$ 15,640.00		\$ -		\$ -		\$ -	
2501.503	71" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	300	\$ 140.00	\$ 42,000.00		\$ -		\$ -		\$ -	
2501.503	73" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	158	\$ 130.00	\$ 20,540.00		\$ -		\$ -		\$ -	
2501.503	87" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	170	\$ 160.00	\$ 27,200.00		\$ -		\$ -		\$ -	
2501.503	103" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	159	\$ 190.00	\$ 30,210.00	90.	\$ 17,100.00		\$ -	90.	\$ 17,100.00	
2501.503	117" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	68	\$ 225.00	\$ 15,300.00		\$ -		\$ -		\$ -	
2501.503	142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	134	\$ 355.00	\$ 47,570.00		\$ -		\$ -		\$ -	
2501.503	65" SPAN RC PIPE-ARCH CULVERT	Lin. Ft.	76	\$ 230.00	\$ 17,480.00		\$ -		\$ -		\$ -	
2501.503	60" RC PIPE CULVERT DESIGN 3006 CLASS II	Lin. Ft.	82	\$ 215.00	\$ 17,630.00	82.	\$ 17,630.00		\$ -	82.	\$ 17,630.00	
2501.503	60" RC PIPE CULVERT DESIGN 3006 CLASS III	Lin. Ft.	52	\$ 235.00	\$ 12,220.00	52.	\$ 12,220.00		\$ -	52.	\$ 12,220.00	
2501.602	PLUG AND ABANDON PIPE CULVERT	Each	8	\$ 775.00	\$ 6,200.00		\$ -		\$ -		\$ -	
2511.507	RANDOM RIPRAP CLASS II	C.Y.	259	\$ 95.00	\$ 24,605.00		\$ -		\$ -		\$ -	
2511.507	RANDOM RIPRAP CLASS III	C.Y.	3,941	\$ 95.00	\$ 374,395.00	553.	\$ 52,535.00	507.	\$ 48,165.00	1,060.	\$ 100,700.00	
2563.601	TRAFFIC CONTROL	Lump Sum	1	\$ 25,000.00	\$ 25,000.00		\$ -		\$ -		\$ -	
2573.501	STABILIZED CONSTRUCTION EXIT	Lump Sum	1	\$ 3,500.00	\$ 3,500.00		\$ -		\$ -		\$ -	
2573.503	SILT FENCE TYPE MS	Lin. Ft.	2,020	\$ 1.20	\$ 2,424.00		\$ -	165.	\$ 198.00	165.	\$ 198.00	
2573.503	SEDIMENT CONTROL LOG TYPE STRAW	Lin. Ft.	370	\$ 5.00	\$ 1,850.00		\$ -		\$ -		\$ -	
2573.503	FLOTATION SILT CURTAIN TYPE WORK AREA	Lin. Ft.	120	\$ 20.00	\$ 2,400.00		\$ -		\$ -		\$ -	
2573.607	ROCK DITCH CHECK	C.Y.	114	\$ 120.00	\$ 13,680.00	19.	\$ 2,280.00	19.	\$ 2,280.00	38.	\$ 4,560.00	
2574.508	FERTILIZER, TYPE 1	Pound	53,876	\$ 0.45	\$ 24,244.20		\$ -		\$ -		\$ -	
2575.504	RAPID STABILIZATION METHOD 4	S.Y.	1,983	\$ 1.10	\$ 2,181.30		\$ -	1,994.	\$ 2,193.40	1,994.	\$ 2,193.40	
2575.504	EROSION CONTROL BLANKET CATEGORY 3	S.Y.	5,999	\$ 1.00	\$ 5,999.00		\$ -		\$ -		\$ -	
2575.505	SEEDING	Acre	289.6	\$ 100.00	\$ 28,960.00		\$ -		\$ -		\$ -	
2575.505	DISK ANCHORING	Acre	289.6	\$ 20.00	\$ 5,792.00	18.9	\$ 378.00	39.	\$ 780.00	57.9	\$ 1,158.00	
2575.508	SEED MIXTURE 22-111	Pound	8,833	\$ 2.50	\$ 22,082.50		\$ -		\$ -		\$ -	
2575.508	SEED MIXTURE 25-141	Pound	17,086	\$ 3.00	\$ 51,258.00		\$ -		\$ -		\$ -	
2575.509	MULCH MATERIAL TYPE 1	Ton	579.2	\$ 85.00	\$ 49,232.00	18.9	\$ 1,606.50	39.	\$ 3,315.00	57.9	\$ 4,921.50	
2582.503	4" SOLID LINE PAINT (WHITE)	Lin. Ft.	686	\$ 2.20	\$ 1,509.20		\$ -		\$ -		\$ -	
2582.503	4" BROKEN LINE PAINT (YELLOW)	Lin. Ft.	90	\$ 2.20	\$ 198.00		\$ -		\$ -		\$ -	
Totals												
					Original Contract Amount	\$ 4,374,457.66						
					Extra / Change Order Amount	\$ -						
							Work Completed	\$ 342,661.57		\$ 1,850,063.68		\$ 2,192,725.25



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT
180 FIFTH STREET EAST, SUITE 700
ST. PAUL, MN 55101-1678

DECEMBER 22, 2020

Regulatory File No. MVP-2018-00095-LSP

Red Lake Watershed District
Myron Jesme
1000 Pennington Avenue
Thief River Falls, Minnesota 56701

Dear Mr. Jesme:

We have completed our evaluation of your prospectus for the proposed Black River Impoundment bank, located in Pennington County, Minnesota. Based on our review of your prospectus, Interagency Review Team (IRT) comments, and other information reviewed in response to our public notice we have determined that the proposal has limited potential for hydrologic and vegetative restoration or enhancement in some basins. The location of the easement within the Black River flood damage reduction impoundment would make it difficult to successfully meet current vegetation and hydrology performance standards for commercial wetland banks. As a result, areas eligible for credit may not receive full credit and credit ratios may be increased if the project should proceed. The function of the overall project is flood damage reduction as part of the Black River FDR project. A wetland bank must be a separate, independent easement subject to the conditions of the MBI. The functions and performance standards of a mitigation bank cannot be integrated into another project with functions and standards that are in conflict, as we believe they may be with a flood control project. If you choose to continue with this proposal, please consider the comments in the paragraphs below.

1. This project may conflict with 33 CFR 332.3(j)(2), which states that federal funds cannot be used to provide compensatory mitigation unless that funding is specifically authorized for compensatory mitigation projects or otherwise maximizes the ecological benefits of other federally funded restoration or conservation projects. Please provide information on any federal funds associated with the flood damage reduction portion of the project and how those funds were used to establish the project.
2. Due to the location of the bank within a proposed flood damage impoundment, there is uncertainty as to the ultimate success of this proposal. Uncertainty surrounding several aspects of this bank may require extended monitoring to ensure that performance standards are met. Any bank plan submitted must include a detailed long-term management plan and long-term management funding may be required to ensure the continued success of this site in perpetuity if the bank should proceed.
3. Hydrology within the bank easement is uncertain and is not adequately assessed in the prospectus. The site is assumed to receive contributions from precipitation and groundwater, although the prospectus states that the contribution from groundwater cannot be quantified. Another source of hydrology is proposed to be provided by diversion ditches. Maps on pages 19 and 20 of the prospectus show that the diversion ditches would be located entirely outside of the wetland bank boundary and would supply water to the lowest elevation in the impoundment, most of which is outside of the wetland bank easement. This suggests that the diversion ditches

would contribute hydrology to the bank site only during the highest water levels within the impoundment and during the largest flood events. Hydrologic models in the prospectus (Pages 19 and 20) show that the proposed bank easement is located above the 25 year flood elevation. These models show that basins in the western portion of the bank would be inundated during the 50 and 100 year events for a short time, but not at under other conditions. Some of the basins on the eastern side of the easement appear to be located above the 50 and 100 year elevations and would be completely outside of any inundation elevation of the impoundment. This raises questions as to the source of hydrology in these basins. A map showing the location of the proposed basins in relation to inundation elevations is necessary to fully complete our review the project.

Our experience with banks that rely on overland flow or inundation as the primary source of hydrology suggests significant challenges meeting both hydrology and vegetative performance standards. Before we can fully evaluate this proposal, sources of hydrology for all proposed wetland basins must be identified and described.

4. Hydrology monitoring. The map on page 34 of the prospectus identifies 48 basins that would be restored/enhanced as part of this project. If the project proceeds, you must provide a hydrology monitoring plan that would describe the hydrology monitoring method proposed to ensure that the basins meet hydrology performance standards.
5. Undesirable, invasive plants, particularly Hybrid Cattail and Reed Canary Grass are common in FDR impoundments and are likely to be a persistent problem for the bank to meet vegetative performance standards. According to information in the prospectus, this site will receive runoff from an approximately 11.70 square mile watershed. This runoff is likely to contain Hybrid Cattail and Reed Canary Grass seeds and other materials which would lead to infestation with these species whenever the impoundment functions as designed. Once these species are established within the impoundment, they would present a persistent source of materials that could lead to repeated infestation of the basins within the bank. These species, and in particular Hybrid Cattail, are difficult to manage once they become established within a wetland system. If this project proceeds, you will be required to prepare a vegetation management plan specific to these, and possibly other, invasive species to ensure long term viability of the site. You may also be required to provide long term management funding mechanism to provide for long term maintenance of the site.
6. Baseline information about the site. The prospectus describes 37 areas that would be excavated to establish wetland basins. As part of our evaluation of this proposal, information must be provided that clearly demonstrates that these areas were historically wetland basins and that these basins retain enough of their original soil and substrate to achieve the long term, successful re-establishment of these basins. Page 5, Section 4 describes the historic condition of this property as having been extensively drained and the micro topography leveled for farming. Leveling activities can significantly alter the existing soil properties and microflora which are essential for the successful establishment and functioning of many plant communities, including wetland communities. If the proposed excavation areas cannot be shown to have contained historic wetlands, these areas would be evaluated as created basins and subject to performance standards for wetland creation.

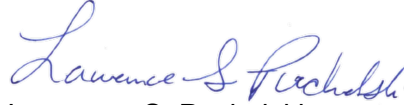
7. Adjacent Land Use and Long-Term Management. The overall project associated with this bank is a flood damage reduction impoundment. Adjacent land use, primarily as a flood control impoundment, may conflict with the site's development as a bank and will likely result in long-term management problems within the wetland bank portion of the overall development.
8. The numbers and ratios proposed in the prospectus are estimates only and are subject to revision during the evaluation of any DMBI and bank plan submittal. Because these wetland establishment efforts are unlikely to meet typical performance standards for wetland banks, as described in these paragraphs, it is unlikely that the site would qualify for maximum crediting at 1:1 as described in the prospectus. Total potential credits would be calculated only after all comments are addressed and the Corps agrees in writing that this project has potential to generate wetland mitigation credits.
9. The operational plan for the impoundment must be provided prior development of any final performance standards. The operational plan must include an assessment of the duration and frequency of ponding/flooding within the impoundment and any effects that the operational plan may have on the wetland bank.
10. Before we can consider this proposal further, all comments from BWSR and the EPA in addition to the comments above, must be fully addressed. We have attached correspondence received in response to our public notice to this letter for your review.
11. District Guidance Documents. We have enclosed a District guidance document that describes the requirements for a complete mitigation plan for your reference should you decide to continue with the development of a bank plan and DMBI.

If you have other information not provided to our office in reaching this determination or if you would like to submit a revised Prospectus addressing the concerns identified in this letter, you must also ensure that the issues with the Prospectus identified above and all issues raised by IRT members are addressed in the revised Prospectus submittal. Once a revised Prospectus is submitted, a revised public notice would be issued and IRT comments would be solicited. The Corps would then review the revised Prospectus and all comments received and provide you with a second letter assessing the site's potential.

Within 60 calendar days from the date of this letter, please notify us whether you intend to submit a revised prospectus. If a revised prospectus is submitted, we will continue our review of the proposed bank. If the project is abandoned or if additional problems arise, please let us know.

If you have any questions, please contact Larry Puchalski in our Bemidji office at (651) 290-5339 or Lawrence.S.Puchalski@usace.army.mil. In any correspondence or inquiries, please refer to the Regulatory file number shown above.

Sincerely,



Lawrence S. Puchalski
Project Manager, Minnesota North Branch
Corps of Engineers

Enclosure:

cc with enclosures:

Kerryann Weaver/, EPA, Region 5
Jennie Skancke, DNR
John Overland, BWSR
Hannah Passolt, Houston Engineering

cc w/o enclosures:

Leslie Day, COE

Conditions and Restrictions for Upland Buffer Credits

- 1) When restored upland acres deposited in the state's bank are used to compensate for Corps-regulated wetland impacts, wetland compensation credits may be approved at a ratio of up to 1 wetland compensation credit for 4 acres of successfully restored or preserved upland with native, non-invasive, species as dominant vegetation;
- 2) Should wetland compensation credit be sought for perennial-dominated upland with one or more non-native dominants, a ratio of up to 1 credit for 10 acres of upland may be applied;
- 3) No more than 25% of the total credits approved for this bank site can be derived from uplands, i.e., the buffer;
- 4) Credits derived from upland buffer will be deposited in the bank as wetland compensation credits, assigned proportionally to the wetland credit types for your project.



Requirements for submitting a complete Mitigation Plan to the U.S. Army Corps of Engineers, St. Paul District

**US Army Corps
of Engineers®**

St. Paul District

All proposed compensatory mitigation plans submitted after June 9, 2008 must include a discussion of the following items. This requirement applies to all mitigation banks, in-lieu fee programs and permittee-responsible mitigation proposals. A compensatory mitigation plan cannot be approved by the Corps until the following items are included. These requirements are the result of the federal regulations entitled Compensatory Mitigation for Losses of Aquatic Resources released on April 10, 2008. These regulations are found at 33 CFR Part 332. Please provide the following information and a completed copy of this checklist with the submittal of a compensatory mitigation plan:

- Mitigation objectives:** A description of the resource type(s) and quantities that will be restored, created, enhanced or preserved. A discussion of the resource functions and how these functions address the needs of the watershed or other geographic area of interest. The watershed approach is defined in the new Compensatory Mitigation for Losses of Aquatic Resources regulation at 33CFR Part 332.3(c).
- Site selection:** A description of the factors considered during the site selection process. This should include consideration of the watershed needs, on-site alternatives where applicable and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation site.
- Site protection instrument:** A description of the legal arrangements and documents including verification of site ownership that will be used to ensure the long-term protection of the compensatory mitigation site.
- Baseline information:** A description of the ecological characteristics of the proposed compensatory mitigation site and, in the case of an application for a DA Permit, the impact site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and the mitigation sites(s) or the geographic coordinates for those site(s), and other site characteristics appropriate to the type of resource proposed as compensation. The baseline information should also include a delineation of the waters of the United States on the proposed compensatory mitigation project site. A perspective permittee planning to secure credits from a mitigation bank or an in-lieu fee program only needs to provide baseline information about the impact site, not the mitigation bank or the in-lieu fee project site.
- Determination of credits:** A description of the number of credits to be provided, including a brief explanation of the rationale for this determination (stream or wetland assessment method). For permittee-responsible mitigation, this should include an explanation of how the compensatory mitigation project will provide the required compensation for the unavoidable impacts to aquatic resources resulting from the permitted activity. For permittees intending to secure credits from an approved mitigation bank or in-lieu fee program, it should include the number and the resource type of credits to be secured and how these credit needs were determined.
- Mitigation work plan:** Detailed written specifications and work descriptions for the

compensatory mitigation project, including, but not limited to, the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water, including connections to existing waters and uplands; methods for establishing the desired plant community; plans to control invasive plant species; the proposed grading plan, including elevations and slopes of the substrate; soil management; and erosion control measures. For stream mitigation projects, the mitigation work plan may also include other relevant information, such as plan form geometry, channel form (e.g., typical channel cross-section), watershed size, design discharge, and riparian area plantings.

- Maintenance plan:** A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed.
- Performance standards:** Ecologically-based standards (hydrology, plant survival, habitat features, etc.) that will be used to determine whether the compensatory mitigation project is achieving its objectives.
- Monitoring requirements:** Provide a description of the parameters to be monitored and a monitoring schedule. The site attributes to be monitored and level of monitoring effort proposed should be sufficient to determine if the compensatory mitigation project is on track to meet the performance standards and provide the functional improvements described in the site objectives. The monitoring plan should also have provisions for determining whether adaptive management is needed at various points throughout the monitoring period. A schedule for reporting monitoring results to the district Corps must also be included.
- Long-term management plan:** A description of how the compensatory mitigation project will be managed after performance standards are achieved to ensure the long-term sustainability of the resource. The party responsible for the long-term management must be identified. In addition, if the nature of the long-term management proposed is sufficient to warrant funding dedicated to that task, a long-term financing mechanism must also be identified.
- Adaptive management plan:** This plan should address strategies to address unforeseen issues associated with site conditions or other components of the compensatory mitigation plan. This plan will guide decisions for revising the original construction plan and implement measures to address both foreseeable and unforeseen circumstances that adversely affect the success of the compensatory mitigation project. The plan must identify the party or parties responsible for implementing the adaptive management plan.
- Financial assurances:** A description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the compensatory mitigation project will be successfully completed and managed for the long-term, in accordance with the required ecological performance standard. The financial assurance can be in the form of performance bonds, escrow accounts, casualty insurance, letters of credit or other appropriate instruments approved by the Corps. For government agencies or a public authority, the Corps may accept a formal, documented commitment to funding the project or bank program as an acceptable assurance on a case-by-case basis (e.g., documentation that funds allocated by a legislature or from bonding are encumbered for a specific project).
- Other Information:** Refer to the Prospectus' initial evaluation letter. Any information listed as having to be addressed in a DMBI must be provided for the DMBI to be determined to be complete.

December 18, 2020

Red Lake Watershed District
Attn: Myron Jesme
1000 Pennington Ave. S
Thief River Falls, MN 56701

via email: Myron.Jesme@redlakewatershed.org

**Subject: Scope and Fee Proposal – Summary of Engineering Services
Thief River/State Ditch (SD) 83 Streambank Stabilization 2020**

Dear Myron,

We thank you for this opportunity in providing engineering services to the Red Lake Watershed District (RLWD). Please review the information provided and let us know your thoughts. We are open to your ideas in making this process a success while conducting the work efficiently and economically. Considering the water quality efforts, we are involved with related to the Thief River, and the thorough knowledge our local staff has developed in the area, we are confident that we will deliver a quality project which will represent the District's interests very well.

It is our understanding that the RLWD has requested Houston Engineering, Inc. (HEI) to provide engineering services related to Streambank Stabilization at the locations shown on the attached map. These referenced locations of Thief River/ SD 83 have significant erosion occurring at outer bends of the river, deteriorating the riverbank, threatening SD 83 spoil banks, and roads. The primary objectives of the project are generally as follows:

- 1) Stabilize the riverbank at five locations along the Thief River/SD 83 at the approximate locations identified on the attached map.
- 2) Direct river flows away from the riverbank toward the channel centerline and or stabilize the riverbank.
- 3) Reduce erosion causing sediment transfer downstream in the Thief River and Red Lake River.

The project deliverable ultimately includes developing construction documents and administering the construction phase for each streambank stabilization site, under a single construction contract.

The proposed scope and fee schedule attachment includes a detailed breakdown of proposed tasks and associated hours/fees. The construction tasks and associated hours/fees outlined are provided for budgeting purposes and can be unpredictable based on construction conditions, contractor awarded, and assistance from the RLWD staff. A 2021 Fee Schedule is also attached for your reference. It is proposed that the fee for services reflect a time and materials basis with an estimated total fee of \$34,759.00. Considering the dynamics of this project, agency involvement in the design and permitting phases, an hourly time and materials basis of compensation reflecting the attached scope of services appears appropriate. We will monitor and update the District regularly regarding progress and anticipated completion of the tasks allowing for proper management of project funds. We are committed to this communication effort.

Proposed Scope and Fee for Engineering Services
December 18, 2020
Page 2

The proposed scope of services does not include provisions for services involving the following:

- Legal survey or right of way acquisition proceedings including preparation of easement descriptions, documents, or acquisition process
 - o Appraisals for land acquisition, eminent domain proceedings, or other right of way proceedings requirements not specifically identified in the scope
 - o We will recommend project limits for construction to minimize impacts to adjacent properties
- Water quality analysis
- Cultural resources reviews
- Wetland delineation and mitigation services
- Geotechnical investigations
- Development of an EAW
- LGU reporting requirements to the BWSR
- Finalize and signoff of Project to BWSR
- Public meetings related to the project

These services may be provided for an additional fee if requested by the District, and in the project's best interest.

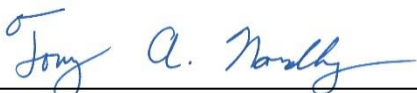
A proposed project schedule is provided for your reference. It is planned that the construction of this project be executed during the 2021 construction season. We are committed to perform the proposed scope of services as provided in the attached schedule. However, the project development tasks may require extended agency and LGU review time which will affect the overall project schedule and could extend the construction phase later than anticipated. We will communicate regularly with the District to assure adequate notice is provided to plan appropriately for the construction phase of the project.

Please consider the proposal provided and inform me of any questions, concerns or comments which should be addressed prior to proceeding with the proposed work.

Again, we appreciate this opportunity to work with the district in completing this project.

Sincerely,

HOUSTON ENGINEERING, INC.



Tony A. Nordby, P.E.

TAN: bi

Enclosures

H:\JBN\3600\3655\3655-0099 Thief River SD 83 Streambank Stab 2020\Admin\Proposal Letter.doc



AGREEMENT FOR ENGINEERING SERVICES

This AGREEMENT, entered into on the 30th of December, 2020, by and between Red Lake Watershed District hereinafter called "CLIENT" and Houston Engineering, Inc. hereafter called HEI. The CLIENT wishes to engage the services of HEI for surveying and/or engineering services. This Agreement sets forth the terms and conditions to which CLIENT and HEI agree.

Houston Engineering, Inc. agrees to provide and perform certain professional services for CLIENT as described as follows: See attached Proposal Letter, Scope and Fee Schedule, Anticipated Project Schedule, HEI 2021 Hourly Rates, and Project Location Map. Also included are General Terms and Conditions dated January 24, 2017

Client agrees to pay Houston Engineering in accordance with the: (check one)

Hourly fee schedule (Attached) by employee classification in effect at the time this Agreement is executed. The estimated fee for services is \$34,759.00.

Lump Sum in the amount of _____.

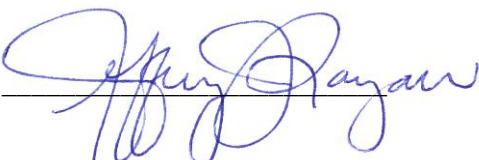
INVOICES - will be submitted periodically (monthly), and are due and payable upon receipt. Unpaid balances shall be subject to an additional charge at a rate of one (1.0) percent per month from the date of invoice, if the unpaid balance is not paid within 30 days.

PROJECT SITE - CLIENT shall provide HEI access to the site and furnish or cause to be furnished to HEI all documents and information known to CLIENT that relate to the identity, location, quantity, nature, or characteristics at, on, or under the site.

CONFIDENTIALITY - Houston Engineering, Inc. shall maintain as confidential and not disclose to others without CLIENT's prior written consent all information obtained from CLIENT that was not otherwise previously known to HEI or in the public domain and is expressly designated by CLIENT in writing to be "CONFIDENTIAL."

IN WITNESS WHEREOF, the parties hereto have accepted, made and executed this agreement upon the terms, conditions, and provisions above stated.

Houston Engineering, Inc.
125 3rd Street East
Thief River Falls, MN 56701

By: 
Date: December 18, 2020

Client: Red Lake Watershed District
(Name)
Address: 1000 Pennington Ave. S
Thief River Falls, MN 56701
Email: Myron.Jesme@redlakewatershed.org
Phone No.: 218-681-5800
By (Print): _____
Signature: _____
Date: _____

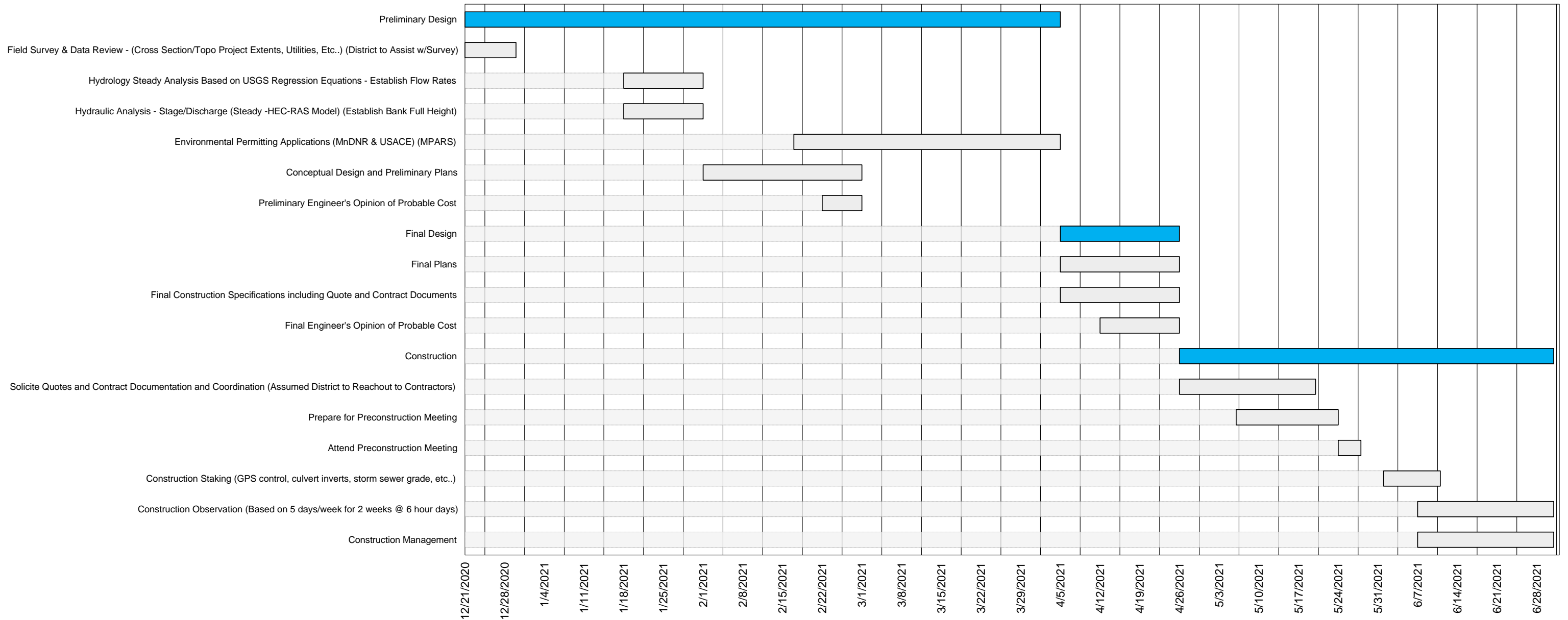
SCOPE AND FEE SCHEDULE
 THIEF RIVER/SD 83 STREAMBANK STABILIZATION 2020 - RED LAKE WATERSHED DISTRICT
 PREPARED BY: HOUSTON ENGINEERING, INC.



	Project Manager \$ 196 per hour	Project Engineer \$ 179 per hour	Engineer I \$ 129 per hour	Technician I \$ 101 per hour	Administrative Assistant \$ 83 per hour	Scientist I \$ 129 per hour	One-person crew (plus equipment) \$ 157 per hour	Mileage \$ 0.77 per mile	GPS Equipment \$ 25 per hour	Total Cost
1. Preliminary Design										
Field Survey & Data Review - (Cross Section/Topo Project Extents, Utilities, Etc..) (District to Assist w/Survey)			0.5							\$ 64.50
Hydrology Steady Analysis Based on USGS Regression Equations - Establish Flow Rates		2	8							\$ 1,390.00
Hydraulic Analysis - Stage/Discharge (Steady -HEC-RAS Model) (Establish Bank Full Height)	1	4	16							\$ 2,976.00
Environmental Permitting Applications (MnDNR & USACE) (MPARS)		2	16			12				\$ 3,970.00
Conceptual Design and Preliminary Plans	1	12	30							\$ 6,214.00
Preliminary Engineer's Opinion of Probable Cost		2	4							\$ 874.00
<i>Subtotal</i>	2	22	74.5	0	0	12	0	0	0	
<i>Subtotal Cost</i>	\$ 392	\$ 3,938	\$ 9,611	\$ 0	\$ 0	\$ 1,548	\$ 0	\$ 0	\$ 0	\$ 15,489.00
2. Final Design										
Final Plans	1	8	30		1					\$ 5,581.00
Final Construction Specifications including Quote and Contract Documents		12	4		2					\$ 2,830.00
Final Engineer's Opinion of Probable Cost		1	2							\$ 437.00
<i>Subtotal</i>	1	21	36	0	3	0	0	0	0	
<i>Subtotal Cost</i>	\$ 196	\$ 3,759	\$ 4,644	\$ 0	\$ 249	\$ 0	\$ 0	\$ 0	\$ 0	\$ 8,848.00
3. Construction										
Solicit Quotes and Contract Documentation and Coordination (Assumed District to Reachout to Contractors)		1								\$ 179.00
Prepare for Preconstruction Meeting		4								\$ 716.00
Attend Preconstruction Meeting		2		2						\$ 560.00
Construction Staking (GPS control, culvert inverts, storm sewer grade, etc..)							8	20	4	\$ 1,371.40
Construction Observation (Based on 5 days/week for 2 weeks @ 6 hour days)				60				200	10	\$ 6,464.00
Construction Management		2	6							\$ 1,132.00
<i>Subtotal</i>	0	9	6	62	0	0	8	220	14	
<i>Subtotal Cost</i>	\$ 0	\$ 1,611	\$ 774	\$ 6,262	\$ 0	\$ 0	\$ 1,256	\$ 169	\$ 350	\$ 10,422.00
Category Total	3	52	116.5	62	3	12	8	220	14	
Total Cost	\$ 588	\$ 9,308	\$ 15,029	\$ 6,262	\$ 249	\$ 1,548	\$ 1,256	\$ 169	\$ 350	\$ 34,759.00

5 Project Locations Included in Scope and Fee Schedule

Anticipated Project Schedule
Thief River/SD 83 Streambank Stabilization 2020 - Red Lake Watershed District
12/18/2020



Note:
Anticipated Project Schedule contingent on permitting and other potential agency responses



2021 FEE SCHEDULE

The following is a schedule of hourly rates and charges for engineering and surveying services offered by Houston Engineering, Inc. These rates are subject to a modest increase on January 1st of each year (typically no more than 5%).

Category	2021 Rates
Engineer I	\$129
Engineer II	142
Engineer III	161
Project Engineer	179
Project Manager	196
Sr Project Manager	215
Scientist I	\$129
Scientist II	142
Scientist III	162
Project Mgr – Environmental	190
Sr Project Mgr – Environmental	215
Hydrogeologist I	\$129
Hydrogeologist II	143
Hydrogeologist III	162
Sr Hydrogeologist	202
Construction Engineer	\$148
Sr Construction Engineer	175
Land Surveyor I	\$129
Land Surveyor II	148
Land Surveyor III	163
Project Mgr – Land Surveying	175
Sr Project Manager – Land Surveying	196
Survey Crews:	
1-Person Crew (+ equipment)	\$157
2-Person Crew (+ equipment)	191
3-Person Crew (+ equipment)	237
4-Person Crew (+ equipment)	265
Landscape Architect	\$137
CAD Technician I	\$88
CAD Technician II	101
CAD Supervisor	116
Designer I	\$135
Designer II	145
Sr Designer	156
Engineering Specialist	165
Technician Intern (all areas)	\$88
Technician I	\$101
Technician II	116
Sr Technician	129

Category	2021 Rates
Right-of-Way Technician	\$118
Right-of-Way Specialist	196
GIS Analyst I	\$96
GIS Analyst II	112
GIS Analyst III	129
Sr GIS Analyst	148
Project Manager – GIS	163
Sr Project Manager – GIS	190
Software Engineer I	\$112
Software Engineer II	129
Software Engineer III	148
Sr Software Engineer	162
Computer Technician	\$156
Communications Specialist	\$88
Sr Communications Specialist	98
Administrative Assistant	\$83
Sr Administrative Assistant	88
Planner	\$142
Senior Planner	196
Legislative/Grant Specialist	\$182
Expert Witness	236
Drone Pilot	\$137
Drone Visual Observer	54

Chargeable Expenses	Rate
Subsistence	Actual Cost
Mileage-Vehicles:	
2-Wheel Drive	IRS Standard Rate
4-Wheel Drive	IRS Standard Rate + \$0.20/Mile
GPS Equipment	\$25/hour/unit
Robotic Total Station	\$40/hour
ATV/Snowmobile/Boat	\$15/hour
ATV with Tracks	\$30/hour
Hydrone RCV	\$50/hour
Small UAS/Large UAS	\$25/hour / \$50/hour
Delivery, Postage, Printing	Actual Cost
Surveying Materials, Special Equipment, and other Materials required	Actual Cost
Subconsultants	Actual Cost + 10%

Thief River/SD 83 Streambank Stabilization 2020

Red Lake Watershed District

Legend

- Site Locations



CR 7 Failure

CR 117 Gully

Site A
Site B
Site D



General Terms and Conditions

1. STANDARD OF CARE

Houston shall perform its Services in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances in the region where the Project is located.

2. PAYMENT TERMS

Invoices will be submitted periodically (customarily on a monthly basis) and are due and payable upon receipt. Client agrees to pay a service charge on all accounts 30 days or most past due at a rate equal to one percent (1%) each month but in no event shall such service charge exceed the maximum amount allowed by law. Acceptance of any payment from Client without accrued service charges shall not be deemed to be a waiver of such service charges by Houston. In the event Client is past due with respect to any invoice Houston may, after giving five (5) days written notice to Client, suspend all services without liability until Client has paid in full all amounts owing Houston on account of services rendered and expenses incurred, including service charges on past due invoices. Payment of invoices is not subject to discount or offset by Client.

3. CHANGES OR DELAYS

If the Project requires conceptual or process development services, such services often are not fully definable in the initial planning. If, as the Project progresses, facts develop that in Houston's judgment dictate a change in the Services to be performed, Houston shall inform Client of such changes and the parties shall negotiate, in good faith, with respect to any change in scope and adjustment to the time of performance and compensation and modify the Agreement accordingly. In the event the parties are unable to reach an agreement, either party may terminate this Agreement without liability by giving fourteen (14) days written notice to the other party. In the event of termination, the final invoice will include all Services and expenses associated with the Project up to the effective date of termination, and will also include equitable adjustment to reimburse Houston for any termination settlement costs incurred relating to commitments that had become firm before termination plus a 10 percent markup on those settlement costs.

4. PAYMENT

Where the method of payment under the Agreement is based upon cost reimbursement (e.g., hourly rate, time and materials, direct personnel expense, per diem, etc.), the following shall apply: (a) the minimum time segment for charging work is one-quarter hour; (b) labor (hours worked) and expenses will be charged at rates commensurate with the attached fee schedule or, if none is attached, with Houston's current fee schedule (at the time of the work); (c) when applicable, rental charges will be applied to cover the cost of pilot-scale facilities or equipment, apparatus, instrumentation, or other technical machinery. When such charges are applicable, Client will be advised at the start of an assignment, task, or phase; and (d) invoices based upon cost reimbursement will be submitted showing labor (hours worked) and total expense. If requested by Client, Houston shall provide supporting documentation at Client's cost, including labor and copying costs.

5. TERMINATION

Either party may terminate this Agreement, in whole or in part, by giving fourteen (14) days written notice to the other party, if the other party fails to fulfill its obligations under this Agreement through no fault of the terminating party. In such event, and subject to the limitations set forth in this Agreement, the non-defaulting party may pursue its rights and remedies as contemplated by this Agreement and as allowed by law.

6. LIMITATION OF LIABILITY

In no event shall Houston be liable for incidental, indirect or consequential damages of any kind. Houston's maximum cumulative liability with respect to all claims and liabilities under this Agreement, whether or not insured, shall not exceed the greater of \$50,000 or the total compensation received by Houston under this Agreement. The disclaimers and limitations of liability set forth in this Agreement shall apply regardless of any other contrary provision set forth and regardless of the form of action, whether in contract, tort or otherwise. Each provision of this Agreement which provides for a limitation of liability, disclaimer of warranty or condition or exclusion of damages is severable and independent of any other provision and is to be enforced as such. Client hereby releases Houston from any and all liability over and above the limitations set forth in this paragraph.

7. INSURANCE

Houston shall obtain and maintain during the term of this Agreement, at its own expense, workers' compensation insurance and comprehensive general liability insurance in amounts determined by Houston and will, upon request, furnish insurance certificates to Client. The existence of any such insurance shall not increase Houston's liability as limited by paragraph 6 above.

8. HAZARDOUS SUBSTANCES

Client shall furnish or cause to be furnished to Houston all documents and information known by Client that relate to the identity, location, quantity, nature, or characteristics of any asbestos, pollutant or hazardous substance, however defined ("Hazardous Substances") at, on or under the Project site. Houston is not, and has no responsibility as a handler, generator, operator, treater, storer, transporter, or disposer of Hazardous Substances found or identified at the Project. Client agrees to bring no claim for fault, negligence, breach of contract, indemnity, or other action against Houston, its principals, employees, agents, and consultants, if such claim in any way would relate to Hazardous Substances in connection with the Project. Client further agrees, to the fullest extent permitted by law, to defend, indemnify, and hold harmless Houston, its principals, employees, agents, and consultants from and against all claims, damages, losses, and expenses, direct or indirect, or consequential damages, including but not limited to fees and charges for attorneys and court and arbitration costs, arising out of or resulting from the performance of Houston's Services hereunder, or claims brought against Houston by third parties arising from Houston's Services or the services of others and/or work in any way associated with Hazardous Substance activities. This indemnification shall survive termination of this Agreement.

9. INDEMNIFICATION

Client shall indemnify, and hold harmless Houston, together with its officers, directors, agents, consultants and employees from and against any and all claims, costs, losses and damages, including attorneys' fees and other costs of litigation or dispute resolution arising directly or indirectly from Client's breach of this Agreement or Client's fault, negligent acts or omissions or intentional misconduct in connection with this Agreement or the Project. Subject to the limitations set forth in this Agreement, Houston shall indemnify and hold harmless Client, together with its officers, directors, agents, consultants and employees from and against any and all claims, costs, losses and damages, including attorneys' fees and other costs of litigation or dispute resolution arising directly or indirectly from Houston's breach of this Agreement or Houston's fault, negligent acts or omissions or intentional misconduct in connection with this Agreement or the Project. The indemnification obligations set forth in this paragraph shall survive termination of this Agreement.

10. WARRANTY

Except as specifically set forth in this Agreement, Houston has not made and does not make any warranties or representations whatsoever, express or implied, as to Services performed or products provided including, without limitation, any warranty or representation as to: (a) the merchantability or fitness or suitability of the Services or products for a particular use or purpose whether or not disclosed to Houston; and (b) delivery of the Services and products free of the rightful claim of any person by way of infringement (including, but not limited to, patent or copyright infringement) or the like. Houston does not warrant and will not be liable for any design, material or construction criteria furnished or specified by Client and incorporated into the Services provided hereunder.

11. PROJECT SITE

Client shall furnish such reports, data, studies, plans, specifications, documents, and other information regarding surface and subsurface site conditions required by Houston for proper performance of its Services. Houston shall be entitled to rely upon Client provided documents and information in performing the Services required under this Agreement. Houston assumes no responsibility or liability for the accuracy or completeness of any such documents or information. Houston will not direct, supervise, or control the work, means or methods of contractors or their subcontractors in connection with the Project. Houston's Services will not include a review or evaluation of the contractor's or subcontractor's safety measures. The presence of Houston, its employees, agents or subcontractors on a site shall not imply that Houston controls the operations of others nor shall it be construed to be an acceptance by Houston of any responsibility for job-site safety.

12. CONFIDENTIALITY

Houston shall maintain as confidential and not disclose to others without Client's prior consent all information obtained from Client that was not otherwise previously known to Houston or in the public domain and is expressly designated by Client in writing to be "CONFIDENTIAL." The provisions of this paragraph shall not apply to information in whatever form that (a) is published or comes into the public domain through no fault of Houston, (b) is furnished by or obtained from a third party who is under no obligation to keep the information confidential, or (c) is required to be disclosed by law on order of a court, administrative agency, or other authority with proper jurisdiction. Client agrees that Houston may use and publish Client's name and a general description of Houston's services with respect to the Project in describing Houston's experience and qualifications to other clients or potential clients.

13. RE-USE OF DOCUMENTS

All documents, including drawings and specifications, prepared or furnished by Houston (and Houston's affiliates, agents, subsidiaries, independent professional associates, consultants, and subcontractors) pursuant to this Agreement are instruments of service in respect of the Project, and Houston shall retain ownership thereof, whether or not the Project is completed. Client may make and retain copies for information and reference in connection with the Project; however, such documents are not intended or represented to be suitable for re-use by Client or others on extensions of the Project or on any other project. Any re-use without written verification or adaptation by Houston for the specific purpose intended will be at Client's sole risk and without liability to Houston or Houston's affiliates, agents, subsidiaries, independent professional associates, consultants, and subcontractors with respect to any and all costs, expenses, fees, losses, claims, demands, liabilities, suits, actions, and damages whatsoever arising out of or resulting therefrom. Any such verification or adaptation will entitle Houston to further compensation at rates to be agreed upon by Client and Houston.

14. REMEDIES

Subject to the limitations set forth in this Agreement, in the event any party is in default of this Agreement, the non-defaulting party shall be entitled to pursue all rights and remedies available to it under this Agreement or as allowed by law.

15. PROPRIETARY DATA

The technical and pricing information in connection with the Services provided by Houston is confidential and proprietary and is not to be disclosed or otherwise made available to third parties by Client without the express written consent of Houston.

16. GOVERNING LAW

The validity, construction and performance of this Agreement and all disputes between the parties arising out of or related to this Agreement shall be governed by the laws, without regard to the law as to choice or conflict of law, of the State of Minnesota. Client consents to jurisdiction as to all issues concerning or relating to this Agreement or the Project with the federal or state district courts designated for Pennington County, Minnesota.

17. DATA PRACTICES ACT REQUESTS

Houston considers certain information developed during the execution of services as "not public" and "protected" from public disclosure under the various local, state and federal data practices laws. Client shall reimburse Houston for any and all costs and expenses, including attorneys' fees associated with any requests for release of information under any such laws.

18. FORCE MAJURE

Houston shall not be liable for any loss, damage or delay resulting out of its failure to perform hereunder due to causes beyond its reasonable control including, without limitation, acts of nature or the Client, acts of civil or military authority, terrorists threats or attacks, fires, strikes, floods, epidemics, quarantine restrictions, war, riots, delays in transportation, transportation embargos, extraordinary weather conditions or other natural catastrophe or any other cause beyond the reasonable control of Houston. In the event of any such delay, Houston's performance date(s) will be extended for that length of time as may be reasonably necessary to compensate for the delay.

19. WAIVER OF JURY

In the interest of expediting any disputes that might arise between Houston and Client, Client hereby waives its rights to a trial by jury of any dispute or claim concerning this Agreement, the Services, the Project and any other documents or agreements contemplated by or executed in connection with this Agreement.

20. NOTICES

Any and all notices, demands or other communications required or desired to be given under this Agreement shall be in writing and shall be validly given or made if personally served; sent by commercial carrier service; or if deposited in the United States Mail, certified or registered, postage prepared, return receipt requested. If such notice or demand is served personally, notice shall be deemed constructively made at the time of such personal service. If such notice, demand or other communication is given by mail or commercial carrier service, such notice shall be conclusively deemed given three (3) days after deposit thereof in the United States Mail or with a commercial carrier service. Notices, demand or other communications required or desired hereunder shall be addressed to the individuals indicated in this Agreement at the addresses indicated in this Agreement. Any party may change its address or authorized recipient for purposes of this paragraph by written notice given in the manner provided above.

21. MISCELLANEOUS

This Agreement shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice-to-proceed, or like document regarding the Services. If any provision of this Agreement is determined to be invalid or unenforceable in whole or part by a court of competent jurisdiction, the remaining provisions hereof shall remain in full force and effect and be binding upon the parties hereto. The parties agree to reform this Agreement to replace any such invalid or unenforceable provision with a valid and enforceable provision that as closely as possible expresses the intention of the stricken provision. This Agreement, including but not limited to the indemnification provisions, shall survive the completion of the Services under this Agreement and the termination of this Agreement. This Agreement gives no rights or benefits to anyone other than Houston and Client and has no third party beneficiaries except as may be specifically set forth in this Agreement. This Agreement constitutes the entire agreement between the parties and shall not in any way be modified, varied or amended unless in writing signed by the parties. Prior negotiations, writings, quotes, and understandings relating to the subject matter of this Agreement are merged herein and are superseded and canceled by this Agreement. Headings used in this Agreement are for the convenience of reference only and shall not affect the construction of this Agreement. This Agreement and the rights and duties hereunder may not be assigned by Client, in whole or in part, without Houston's prior written approval. No failure or delay on the part of Houston in exercising the right, power or remedy under this Agreement shall operate as a waiver thereof; nor shall any single or partial exercise of any rights, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. The remedies provided in this Agreement are cumulative and not exclusive of any remedies provided by law.



December 30, 2020

Mr. Myron Jesme, Administrator
Red Lake Watershed District

<delivered via email>

RE: Proposal – Mud River Restoration – Concept Report

Dear Mr. Jesme,

HDR Engineering, Inc. (HDR) is pleased to provide the following proposal for Task Order #1 – Preliminary Concept Report. HDR will be determining feasibility for mitigating sediment deposition within the Agassiz Pool and improving water quality downstream in the Lower Thief River to investigate the viability of the restoration of a reach of the Mud River (JD 11). Future project tasks and services required to successfully complete the project will be identified separately as they arise, under additional task orders.

We look forward to the opportunity to work with you on this project. If you have any questions regarding the attached scope of services, please contact me at (218) 681-6100.

Sincerely,

HDR Engineering, Inc.

Nathan Dalager, P.E.
Project Manager

Christine Wiegert, Vice President
MN/WI Area Manager

Encl: Proposal, Task Order #1
HDR Engineering, Inc. Terms and Conditions for Professional Services
Budget Spreadsheet



Project Understanding and Scope of Services

HDR understands that the Red Lake Watershed District (RLWD) and other state and federal agencies are interested in restoring the Mud River (JD 11), as the RLWD works towards resolving sediment deposition within the Agassiz Pool resulting in degraded waterfowl habitat and downstream water quality concerns. This scope of work includes tasks and deliverables deemed necessary to complete the initial stage of the project. These tasks include the following:

- Data Collection
- Hydrologic Analysis
- Concept Report

Task Order #1 does not include future necessary steps for the project including:

- Engineering Reports
- Permitting
- Hydrologic/Hydraulic Design
- Final Design
- Plans and Specifications
- Construction Administration

These above tasks will be included with future task orders.

Proposed Project Team

The project team will consist of HDR staff that has experience in developing engineering and environmental documentation in addition to well established relationships with agency experts that will likely be involved in this process. The team may consist of the following staff:

Role	Staff
Client/Project Manager	Nate Dalager, PE
Water Resources Engineers	Glen Krogman, PE Jacob Huwe, PE Brendon Gearhart, EIT
Design Technician	Randy Knott
Project Accountant	Kristy Jungers
Project Controller	Tracy Lee

Scope of Services

1.0 Project Management & Coordination Meetings

This task consists of the overall management of the project, project communication, coordination of conferences/meetings, and contacting of funding partners.

- 1.1 **Project Management.** Monitor and control the Project budget, scope of work, and schedule; management of the Project goals and objectives; management and coordination of resources including staff scheduling and invoicing.
- 1.2 **Meetings.** Schedule, review, prepare, participate, and help conduct meetings.



DELIVERABLES:

- Monthly invoices and coordination with RLWD Administrator
- Attendance at 3 RLWD Board meetings, presentations, and updates to the Board
- Attendance at 1 stakeholder meeting to discuss the concept report and feasibility of the Project

ASSUMPTIONS:

- Duration of the task is ~3 months
- All meetings will be held in Thief River Falls and attended by up to 2 HDR staff persons

2.0 Data Collection

This task includes surveying reaches of the Mud River (JD 11) to determine if the project is feasible and to provide insight into potential benefits to the Agassiz Pool and downstream in the Lower Thief River. HDR will utilize the work completed in this investigation to construct a design if we find that the project is worth pursuing farther. The following steps will be included:

- 2.1 **Survey.** HDR will survey approximately 27 miles of ditch to get a better understanding of the Mud River (JD 11) and its tributaries. We plan to take cross sections of the existing ditches every 1,000 feet, ensuring to also obtain information on structures, confluences of rivers, and other miscellaneous project features we deem necessary. Surveying will consist of two person crews requiring 10 full days at the project site to collect data needed.
- 2.2 **Data Processing.** Plot survey points in CAD and build an existing ground surface for the project. Collect and process data from other available sources. Results of data collection will be documented in Task 3.0.

DELIVERABLES:

- Field survey

ASSUMPTIONS:

- No more than two full weeks of surveying will be required to collect the information we need to determine project feasibility
- Sheets will be developed in a future task order

3.0 Concept Report

This task involves documentation of the survey and hydrology for the proposed restoration of the Mud River (JD 11). HDR will determine the feasibility of this project and build a scope of work to move forward into the next phase of the project.

- 3.1 **Concept Report.** Future recommendations for the project and the benefits we believe the Mud River Restoration can have on the surrounding landscape. Use graphs and mapping tools (ArcGIS) to build a report and present it to the RLWD Board.
- 3.2 **Hydrologic Analysis.** Determine drainage areas and peak flows for the 2- and 10-year storm events.

DELIVERABLES:

- Concept Report





ASSUMPTIONS:

- The report will be distributed to the Minnesota DNR, RLWD, and the US Fish and Wildlife Service
- Any comments received will be addressed in future task orders as needed

Cost Estimate

The estimate for the completion of Tasks 1 through 3 is \$40,800, as outlined in the attached breakdown of tasks, hours, and expenses. This work will be performed on a time and materials not-to-exceed basis. HDR will invoice monthly based on work progress. Our estimated costs are based upon our local experience and understanding of the scope of work and assumptions listed. Should the scope of work be modified, it may be necessary to review scope changes and our cost estimate.

Future Task Orders – Final Design

The following tasks are anticipated for future phases of this project. *These tasks are not included in the price proposal provided herein*, and would be provided separately at such time as RLWD elects to initiate them.

- Engineering Reports
- Permitting
- Hydrologic/Hydraulic Design
- Final Design
- Final Plans and Specifications
- Construction Administration

Please indicate your acceptance of this proposal by signing the Notice to Proceed (below) and returning one copy of the signed proposal to HDR. If you have any questions, please contact me at 218.681.6100.

Regards,
HDR Engineering, Inc.

Nathan Dalager, PE
Project Manager/Engineer

Christine Wiegert, Vice President
MN-WI Area Manager

NOTICE TO PROCEED

Owner: **Red Lake Watershed District**

Consultant: **HDR Engineering, Inc.**

By: _____

By: _____

Name: _____

Name: Christine Wiegert, Vice President

Title: _____

Title: MN-WI Area Manager



Business Group:	Water	Business Class:	Dams, Levees, Civil Works	River restoration to improve downstream water quality and waterfowl habitat in Aggasiz Pool.
Project Name:	Mud River Restoration	Project Manager:	Nathan Dalager	
Client:	Red Lake Watershed District			

TASKS AND DESCRIPTION				RESOURCE CATEGORIES						HRS	FEE	
TASK NO.	Employee/Staff Name			Dalager	Accountant	Knott	Huwe	Krogman	Gearhart	Controller	TOTAL HOURS	Labor Fee
Billing Rates				\$195.00	\$105.00	\$140.00	\$135.00	\$205.00	\$100.00	\$90.00		
		Start Date	End Date									
1	Project Management	1/4/2021	4/1/2021									
1.1	Project Management				5.0		6.0			5.0	16.0	\$ 1,785
1.2	Coordination Meetings			8.0			6.0				14.0	\$ 2,370
Task Subtotal				8.0	5.0	0.0	12.0	0.0	0.0	5.0	30.0	\$ 4,155
2	Data Collection	1/4/2021	4/1/2021									
2.1	Survey					80.0			80.0		160.0	\$ 19,200
2.2	Data Processing								25.0		25.0	\$ 2,500
Task Subtotal				0.0	0.0	80.0	0.0	0.0	105.0	0.0	185.0	\$ 21,700
3	Concept Report	1/4/2021	4/1/2021									
3.1	Concept Report			4.0		5.0	10.0	20.0	5.0		44.0	\$ 7,430
3.2	Hydrologic Analysis			4.0		10.0	10.0		10.0		34.0	\$ 4,530
Task Subtotal				8.0	0.0	15.0	20.0	20.0	15.0	0.0	78.0	\$ 11,960
TOTAL FEE												
GRAND TOTAL LABOR HOURS & COSTS				16.0	5.0	95.0	32.0	20.0	120.0	5.0	293.0	\$ 37,815
											GRAND TOTAL EXPENSES	\$ 2,989
GRAND TOTAL ESTIMATED COST and FEE \$ 40,804												

DIRECT EXPENSES				COSTS	Total fee per Task
Mileage	Survey Gear	GPS Equipment	Printing / Plotting	Total Expenses	
MILE	DAY	DAY	LS		
\$0.575	\$70	\$350	\$50		
1 Project Management					
0	0	0	0	\$ -	
50	0	0	0	\$ 29	
50	0	0	0		
\$ 29	\$ -	\$ -	\$ -	\$ 29	\$ 4,184

2 Data Collection					Total fee per Task
800	10	5	0	\$ 2,910	
0	0	0	0	\$ -	
800	10	5	0		
\$ 460	\$ 700	\$ 1,750	\$ -	\$ 2,910	\$ 24,610

3 Concept Report					Total fee per Task
0	0	0	1	\$ 50	
0	0	0	0	\$ -	
0	0	0	1		
\$ -	\$ -	\$ -	\$ 50	\$ 50	\$ 12,010

					HDR Cost	
\$ 489	\$ 700	\$ 1,750	\$ 50	\$ 2,989		\$ 40,804

HDR Engineering, Inc.

Terms and Conditions for Professional Services

1. STANDARD OF PERFORMANCE

Notwithstanding any other provision of any contract term between the ENGINEER and the CLIENT, the standard of care for all professional engineering, consulting and related services performed or furnished by ENGINEER and its employees under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under the same or similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.

ENGINEER and CLIENT agree that no other party is an intended or unintended third-party beneficiary of this contract, and that ENGINEER's duties run solely to CLIENT.

2. INSURANCE/INDEMNITY

ENGINEER agrees to procure and maintain, at its expense, Workers' Compensation insurance as required by statute; Employer's Liability of \$250,000; Automobile Liability insurance of \$1,000,000 combined single limit for bodily injury and property damage covering all vehicles, including hired vehicles, owned and non-owned vehicles; Commercial General Liability insurance of \$1,000,000 combined single limit for personal injury and property damage; and Professional Liability insurance of \$1,000,000 per claim for protection against claims arising out of the performance of services under this Agreement caused by negligent acts, errors, or omissions for which ENGINEER is legally liable. Upon request, OWNER shall be made an additional insured on Commercial General and Automobile Liability insurance policies and certificates of insurance will be furnished to the OWNER. ENGINEER agrees to indemnify OWNER for claims to the extent caused by ENGINEER's negligent acts, errors or omissions.

3. OPINIONS OF PROBABLE COST (COST ESTIMATES)

Any opinions of probable project cost or probable construction cost provided by ENGINEER are made on the basis of information available to ENGINEER and on the basis of ENGINEER's experience and qualifications, and represents its judgment as an experienced and qualified professional engineer. However, since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s)' methods of determining prices, or over competitive bidding or market conditions, ENGINEER does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost ENGINEER prepares.

4. CONSTRUCTION PROCEDURES

ENGINEER's observation or monitoring portions of the work performed under construction contracts shall not relieve the contractor from its responsibility for performing work in accordance with applicable contract documents. ENGINEER shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction. ENGINEER shall not be responsible for the acts or omissions of the contractor or other parties on the project. ENGINEER shall be entitled to review all construction contract documents and to require that no provisions extend the duties or liabilities of ENGINEER beyond those set forth in this Agreement. OWNER agrees to include ENGINEER as an indemnified party in OWNER's construction contracts for the work, which shall protect ENGINEER to the same degree as OWNER. Further, OWNER agrees that ENGINEER shall be listed as an additional insured under the construction contractor's liability insurance policies.

5. CONTROLLING LAW

This Agreement is to be governed by the law of the state where ENGINEER's services are performed.

6. CLIENT-PROVIDED SERVICES AND INFORMATION

CLIENT will provide all criteria and information pertaining to the project in CLIENT's possession, and any requirements or budgetary limitations. The CLIENT agrees to bear full responsibility for the technical accuracy and content of CLIENT-furnished documents, information and services.

In performing services hereunder, it is understood by CLIENT that ENGINEER is not engaged in rendering any type of legal, insurance or accounting services, opinions or advice. Further, it is the CLIENT's sole responsibility to obtain the advice of an attorney, insurance counselor or accountant to protect the CLIENT's legal and financial interests.

7. SUCCESSORS AND ASSIGNS

OWNER and ENGINEER, respectively, bind themselves, their partners, successors, assigns, and legal representatives to the covenants of this Agreement. Neither OWNER nor ENGINEER will assign, sublet, or transfer any interest in this Agreement or claims arising therefrom without the written consent of the other.

8. RE-USE OF DOCUMENTS

All documents, including all reports, drawings, specifications, computer software or other items prepared or furnished by ENGINEER pursuant to this Agreement, are instruments of service with respect to the project. ENGINEER and CLIENT retain joint ownership of all such documents. OWNER may retain copies of the documents for its information and reference in connection with the project; however, none of the documents are intended or represented to be suitable for reuse by OWNER or others on extensions of the project or on any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER's sole risk and without liability or legal exposure to ENGINEER, and OWNER will defend, indemnify and hold harmless ENGINEER from all claims, damages, losses and expenses, including attorney's fees, arising or resulting therefrom.

9. TERMINATION OF AGREEMENT

OWNER or ENGINEER may terminate the Agreement, in whole or in part, by giving seven (7) days written notice, if the other party substantially fails to fulfill its obligations under the Agreement through no fault of the terminating party. Where the method of payment is "lump sum," or cost reimbursement, the final invoice will include all services and expenses associated with the project up to the effective date of termination. An equitable adjustment shall also be made to provide for termination settlement costs ENGINEER incurs as a result of commitments that had become firm before termination, and for a reasonable profit for services performed.

10. SEVERABILITY

If any provision of this agreement is held invalid or unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term or condition shall not be construed by the other party as a waiver of any subsequent breach of the same provision, term or condition.

11. INVOICES

ENGINEER will submit monthly invoices for services rendered and OWNER will make prompt payments in response to ENGINEER's invoices.

ENGINEER will retain receipts for reimbursable expenses in general accordance with Internal Revenue Service rules pertaining to the support of expenditures for income tax purposes. Receipts will be available for inspection by OWNER's auditors upon request.

If OWNER disputes any items in ENGINEER's invoice for any reason, including the lack of supporting documentation, OWNER may temporarily delete the disputed item and pay the remaining amount of the invoice. OWNER will promptly notify ENGINEER of the dispute and request clarification and/or correction. After any dispute has been settled, ENGINEER will include the disputed item on a subsequent, regularly scheduled invoice, or on a special invoice for the disputed item only.

OWNER recognizes that late payment of invoices results in extra expenses for ENGINEER. ENGINEER retains the right to assess OWNER interest at the rate of one percent (1%) per month, but not to exceed the maximum rate allowed by law, on invoices which are not paid within thirty (30) days from the date of the invoice. In the event undisputed portions of ENGINEER's invoices are not paid when due, ENGINEER also reserves the right, after seven (7) days prior written notice, to suspend the performance of its services under this Agreement until all past due amounts have been paid in full.

12. CHANGES

The parties agree that no change or modification to this Agreement, or any attachments hereto, shall have any force or effect unless the change is reduced to writing, dated, and made part of this Agreement. The execution of the change shall be authorized and signed in the same manner as this Agreement. Adjustments in the period of services and in compensation shall be in accordance with applicable paragraphs and sections of this Agreement. Any proposed fees by ENGINEER are estimates to perform the services required to complete the project as ENGINEER understands it to be defined. For those projects involving conceptual or process development services, activities often are not fully definable in the initial planning. In any event, as the project progresses, the facts developed may dictate a change in the services to be performed, which may alter the scope. ENGINEER will inform OWNER of such situations so that changes in scope and adjustments to the time of performance and compensation can be made as required. If such change, additional services, or suspension of services results in an increase or decrease in the cost of or time required for performance of the services, an equitable adjustment shall be made, and the Agreement modified accordingly.

13. CONTROLLING AGREEMENT

These Terms and Conditions shall take precedence over any inconsistent or contradictory provisions contained in any proposal, purchase order, requisition, notice-to-proceed, or like document. In resolving inconsistent or contradictory provisions between this Agreement and any other document or understanding, the terms of these Terms and Conditions shall control.

14. EQUAL EMPLOYMENT AND NONDISCRIMINATION

In connection with the services under this Agreement, ENGINEER agrees to comply with the applicable provisions of federal and state Equal Employment Opportunity for individuals based on color, religion, sex, or national origin, or disabled veteran, recently separated veteran, other protected veteran and armed forces service medal veteran status, disabilities under provisions of executive order 11246, and other employment, statutes and regulations, as stated in Title 41 Part 60 of the Code of Federal Regulations § 60-1.4 (a-f), § 60-300.5 (a-e), § 60-741 (a-e).

15. CERTIFICATIONS

The use of the word "certify" or "certification" by a registered professional engineer in the practice of professional engineering or land surveying constitutes an expression of professional opinion regarding those facts or findings which are the subject of the certification, and does not constitute a warranty or guarantee, either expressed or implied. Certification of analyses is a statement that the analyses have been performed correctly and in accordance with sound engineering practices. Certification of structural works is a statement that the works are designed in accordance with sound engineering practices and client approved design loads. Certification of "as built" conditions is a statement that the structure(s) has been built according to specifically identified drawings, specifications and contract documents to the extent the structure(s) is readily observable, is in place, and is fully functioning. The definition and legal effect of any and all certifications shall be limited as stated herein.

16. EXECUTION

This Agreement, including the exhibits and schedules made part hereof, constitute the entire Agreement between ENGINEER and OWNER, supersedes and controls over all prior written or oral understandings. This Agreement may be amended, supplemented or modified only by a written instrument duly executed by the parties.

17. LIMITATION OF LIABILITY

In the event that any damage, loss, or claim is asserted by a third party, and said damage, loss, or claim arises out of or is in connection with the performance of ENGINEER'S services, including ENGINEER and its employees professional negligent acts, errors, or omissions, each party (ENGINEER and CLIENT) shall release, indemnify, and hold the other harmless, together with their agents, employees and assigns, PROVIDED THAT, said damage, loss, or claim is within the parties' combined limits of applicable insurance. In the event that any damage, loss or claim exceeds the parties' combined available limits of applicable insurance, then each party shall bear their own liability in direct proportion to their own individual fault.

18. LITIGATION SUPPORT

In the event ENGINEER is required to respond to a subpoena, government inquiry or other legal process related to the services in connection with a legal or dispute resolution proceeding to which ENGINEER is not a party, CLIENT shall reimburse ENGINEER for reasonable costs in responding and compensate ENGINEER at its then standard rates for engineering services when gathering information and documents and shall pay ENGINEER its standard rates for providing expert witness services when attending depositions, hearings, and trial.

If ENGINEER and CLIENT are made a party to any litigation concerning CLIENT's flood control structures, CLIENT and ENGINEER shall each bear their own costs and expenses for defense pending a final determination of each party's liability. Upon a finding by a court of competent jurisdiction of any negligence, all of the parties' reasonable total costs for defense of the matter shall be combined, and the total reasonable defense costs of both parties shall be pro-rated between the parties based on their respective shares of fault.

19. MAINTENANCE OF STRUCTURES AND SYSTEMS

CLIENT agrees that structures and systems studied, reviewed, analyzed or designed by the ENGINEER's are dependent upon CLIENT's continued operation and maintenance of the project structures and systems in accordance with all, permits, laws and regulations that permit the construction and operations of the structure(s) and systems including any Engineer prepared operations and maintenance plans. Should CLIENT fail to maintain the structures to be in full compliance permits, approvals, and operations and maintenance plans, ENGINEER shall have no liability to CLIENT, and CLIENT shall indemnify, release and hold ENGINEER and its employees harmless from any liability resulting from any direct or consequential damage resulting from such non-compliance, including but not limited to claims made by third-parties against ENGINEER.

20. VISUAL INSPECTIONS

For visual inspections, CLIENT hereby releases, holds harmless, indemnifies and agrees to defend ENGINEER against any claims, damages, losses, liabilities, expenses or costs arising out of any failure to detect hidden, covered, inaccessible, or internal structural or material defects, corrosion, or damages in components, embedment, reinforcing, anchorages and parts of equipment, structures, or mechanisms being inspected, that are not readily discernible by external visual inspection through reasonable efforts.

Red Lake River One Watershed One Plan: Demarais-Hanson Project

The 2020-21 Biennial Work Plan includes \$100,000 for Phase I of a multi-phase project for in Sections 26/27 of Louisville Township (6 miles east of Red Lake Falls along CSAH 11, Demarais and Hanson are the bordering landowners' names) that may be considered a capital project by the RLWD. Phase I would include survey, design, geotechnical work, and an assessment to determine how much sediment is reaching the River.



#	Grant ID	Title of Proposal	Organization	County	Request (\$)	Recommended (\$)	Abstract	Score
1	C21-4482	Rice Lake Wetland Restoration Construction	Pelican River WD	Becker	\$ 830,108	\$ 830,108	Project funding is requested to construct an on-the-ground implementation project to restore function to the partially drained Rice Lake wetland, which will reduce phosphorous loading to downstream Detroit Lake. By restoring the wetland's hydrology, the District will be able to reduce the annual phosphorous load (1,200-2500 pounds/yr) from this wetland. This project will focus on the Upper Pool Restoration Area, consisting of: a rock fishway water control structure with 15 foot wide low-water crossing and draw-down capability, improvements to the existing access, removal of a two road culverts within the vacated township road section to restore the stream channel within the wetland, replacement of the historic Rice Lake outlet channel culverts with a rock weir grade control structure.	90.55
2	C21-4336	Lake Ida Targeted Phosphorus Reduction Project	Douglas SWCD	Douglas	\$ 683,867	\$ 683,867	A feasibility study was completed to determine the best options for addressing phosphorus loading to Lake Ida, and will be completed through this grant. These practices include: construction of a 1,899 feet of channel along the wetland edge, repair 741 feet of existing channel, construct one stilling basin, and repair an existing sediment pond. Implementation will prevent loading of 240 pounds/year of phosphorus to Lake Ida. The wetland is leaching phosphorus from legacy pollution and is a major component of the phosphorus load. A subwatershed assessment was also completed for the lake in order to identify other sources of phosphorus. However, none are as significant as the wetland. The DNR lists Lake Ida as highest priority in terms of phosphorus sensitivity, high in biological significance, and is a first ranked waterbody.	86.77
3	C21-4070	The City of Baxter Stormwater Project reduces 50 Tons TSS to the Mississippi River	Crow Wing SWCD	Crow Wing	\$ 890,000	\$ 890,000	The City of Baxter will develop a 14 acre-feet vegetated stormwater wetland with a multi-stage outlet and restoration of upland habitats. The project site has been determined to be the City's highest performing treatment opportunity within the 400-acre drainage area. This project will reduce 50 tons per year of sediment and 211 pounds per year of phosphorous to the Mississippi River. In the first 400 miles of the upper Mississippi River, this specific subwatershed has the highest percent of developed land use.	86.68
4	C21-5161	Whiskey Creek "Enhancement Project"	Wilkin SWCD	Wilkin	\$ 340,000	\$ 340,000	The Wilkin Soil and Water Conservation District will partner with the Buffalo Red River Watershed District, Natural Resources Conservation Service and landowners to install 75 grade stabilization structures to stabilize priority gullies that are contributing sediment to Whiskey Creek. We will also restore over five miles of stream through the construction of a two-stage meandering channel. When the 75 gullies are stabilized and five miles of channel is restored sediment loading to Whiskey Creek will be reduced by 1,524 tons/year and total phosphorus reduced by 839 pounds/year. Total sediment reduction associated with this project is 30% of the 5,175 tons/year goal set by the TMDL for Whiskey Creek during high flows.	86.45
5	C21-6176	Little Comfort Lake Phosphorus Reduction Implementation	Comfort Lake-Forest Lake WD	Chisago	\$ 354,600	\$ 354,600	The proposed project addresses phosphorus reductions to Little Comfort Lake, a 36-acre impaired lake that is hydrologically connected to Comfort Lake. While the phosphorus improvements of this project are directly for Little Comfort Lake, it also reduces phosphorus to Comfort Lake. The proposed projects include implementation of a variable height weir to impound water in a large wetland complex, a series of beaver dam analogs along the School Lake outlet channel to Little Comfort Lake, and an in-lake alum treatment. These projects are expected to remove 80 pounds/year of phosphorus loads from the east wetland impoundment, 60 pounds/yr of phosphorus from the School Lake outlet channel improvements, and 56 pounds/yr of phosphorus from the in-lake alum treatment. This is a total load reduction of 206 pounds/yr which will achieve the remaining reductions needed for Comfort Lake to be removed from the impaired waters list.	86.05
6	C21-2082	South Branch Buffalo River Restoration - Phase 2	Buffalo-Red River WD	Wilkin	\$ 300,000	\$ 300,000	The Buffalo-Red River Watershed District will partner with the Wilkin Soil and Water Conservation District, the Natural Resource Conservation Service, and landowners to install 54 grade stabilization structures to stabilize gullies that are contributing sediment to the South Branch Buffalo River and complete 4.5 miles of stream restoration, through the construction of a two-stage meandering channel. With these practices implemented, sediment will be reduced by 1,599 tons/year and total phosphorus reduced by 692 pounds/year. This project continues an ongoing effort over the past decade to improve water quality, manage erosion, reduce sediment and enhance natural resources throughout the watershed.	85.50
7	C21-8494	Pleasure Creek South BIESF	Coon Creek WD	Anoka	\$ 330,000	\$ 330,000	In partnership with the City of Coon Rapids, this project will address Pleasure Creek's aquatic life and recreation impairments by reducing nutrient and bacteria loading attributable to urban stormwater runoff. We will retrofit an existing in-line rate control pond with a 7,000 square foot biochar- and iron-enhanced sand filter to reduce total phosphorus and bacteria loading to Pleasure Creek by 19 pounds and 270 billion organisms per year, respectively. Paired with a similar filtration practice constructed two miles upstream in 2020, this project will achieve the phosphorus reduction goals established for Pleasure Creek as part of the Total Maximum Daily Load study approved in 2016.	85.09
8	C21-4566	2021 Lower Clearwater River Subwatershed Water Quality Agricultural Practices	Red Lake SWCD	Red Lake	\$ 268,525	\$ 268,525	The City of East Grand Forks pulls its drinking water from the Red Lake River. The Red Lake County Soil and Water Conservation District has targeted ten sites based on data analysis and conducted an erosion site inventory which found landowners in these priority areas that were eager to fix the erosion problems on their fields. The structural agricultural practices will include, but are not limited to, grade stabilization structures, grassed waterways, and water and sediment basins. The implementation of these practices is estimated to reduce sediment loading to the Clearwater River by 793 tons/year. This will improve water quality, recreation, fish habitat, and aesthetics, also making these projects a regional concern.	84.86
9	C21-3515	Rosland Park Stormwater Filtration BMP Project	Nine Mile Creek WD	Hennepin	\$ 750,000	\$ 750,000	The proposed project is a stormwater filtration practice on city park property to remove phosphorus from runoff before it reaches Lake Cornelia. Lake Cornelia, listed as impaired for excess nutrients, has documented toxic blue-green algae blooms in recent years. A study was completed in 2019 identifying internal and external nutrient loads to the lake and potential projects to reduce those loads to work toward meeting state nutrient standards and reduce the frequency of algal blooms. This project will address external loads coming from a 410-acre urban subwatershed that drains to the lake. This practice will pump water from an existing pond (which outlets to Lake Cornelia) through an above ground filtration system, after which the treated water will be discharged to Lake Cornelia. Anticipated phosphorus removal 22 pounds annually.	84.32
10	C21-7914	Moore Lake Enhancement Project	Fridley, City of	Anoka	\$ 400,000	\$ 400,000	The purpose of this project is to improve water quality and recreation suitability in East Moore Lake. East Moore is impaired for excess nutrients, and water conditions, including periodic high bacteria concentrations, negatively impact the use of the lake and associated park. The proposed project aims to install a biochar- and iron-enhanced sand filter to treat runoff from a 94-acre urban catchment with minimal treatment draining directly into the lake. The project also includes converting shoreline turf into a native plant buffer to discourage geese aggregation and filter runoff. The expected outcomes are improved water quality and clarity, reduced instances of elevated bacteria concentrations in the beach area, and enhanced recreational suitability. Reductions are anticipated to be 18 pounds/year phosphorus and 0.6 tons/year of sediment.	84.00
11	C21-1051	Lake Traverse Water Quality Project Phase 2	Bois de Sioux WD	Traverse	\$ 418,235	\$ 418,235	This project will stabilize approximately 1,600 feet of channel and reduce approximately 450 tons per year of sediment transport to Lake Traverse. The Bois de Sioux Watershed District, in partnership with the Traverse County Soil and Water Conservation District, is proposing to resolve severe downcutting and bank failure in the drainage ditch that directly connects to Traverse County Ditch (TCD) 52. The project will reduce bed and bank scour, stabilize side slopes, and minimize erosion, resulting in a significant reduction in non-point source sediment and nutrient loading to Lake Traverse. The project will have water quality benefits to Lake Traverse and downstream waterbodies and have natural resource benefits to fisheries and wildlife.	83.82
12	C21-7520	2021 Priority Implementation Targeting Lawrence Creek, Dry Creek, and Direct Drainage to the St. Croix River	Chisago SWCD	Chisago	\$ 250,000	\$ 250,000	The St. Croix River escarpment has been a focal point for the Chisago Soil and Water Conservation District over the past eight years in a multi-phase targeted plan to reduce phosphorus and sediment loading to the St. Croix River and Lake St. Croix. Through this application, the focal area will be subwatersheds in the rural area, which are upstream of the escarpment, or drain directly to the St. Croix River. Lawrence Creek and an unnamed direct drainage stream are the County's only listed trout streams and are Regionally Significant Streams for pollution reduction. A minimum of 20 projects will reduce the phosphorus loading by at least 140 pounds/year and sediment loading by at least 140 tons/year.	83.68
13	C21-5270	Thief River Falls Oxbow Restoration and Stormwater Treatment Project	Red Lake WD	Pennington	\$ 250,000	\$ 250,000	The project will restore three acres of an oxbow wetland by removing 17,000 cubic yards of accumulated sediment to restore the wetland's habitat, filtration, and retention qualities. A rock structure will be constructed at the outlet of the restored wetland to stabilize the outlet, improve detention, and oxygenate water as it flows out of the pond. In line hydrodynamic separator structures will be installed to trap pollutants and trash from future stormwater runoff before it enters the wetland or the Red Lake River. A settling pond will be constructed to intercept runoff from a portion of the wetland's drainage area. This project will reduce loading rates for sediment by 4 tons/year and of phosphorus by 28 pounds/year from stormwater runoff as part of a coordinated effort to restore downstream impairments of the Red Lake River.	83.55

#	Grant ID	Title of Proposal	Organization	County	Request (\$)	Recommended (\$)	Abstract	Score
14	C21-8059	Bone Lake Northeast Wetland Restoration	Comfort Lake-Forest Lake WD	Washington	\$ 171,200	\$ 171,200	The Bone and Moody Lake drainage areas are the headwaters of the Comfort Lake-Forest Lake Watershed District northern flow network, and as such, their water quality sets the stage for downstream waters, many of which are impaired. This project proposes to remove accumulated phosphorus-rich sediment from the northern portion of a wetland directly adjacent to Bone Lake that had a history of receiving direct livestock manure runoff from the dairy farm barnyard located on the same wetland. This project is estimated to reduce watershed phosphorus loads to Bone Lake by 15 pounds/yr. Modest phosphorus reductions to Bone Lake are needed to maintain its recent achievement of state water quality standards and remove Bone Lake from the impaired waters list, making this a statewide priority lake.	81.59
15	C21-0191	County Ditch 96 Outlet Stabilization - Phase 2	Pennington SWCD	Pennington	\$ 516,000	\$ 516,000	Sediment entering a high priority reach of the Red Lake River will be reduced by repairing the south slope of Pennington County Ditch 96 (CD96). The Red Lake River from CD96 in Pennington County to the Clearwater River becomes impaired for aquatic life due to high levels of sediment. Upstream of the CD96 outlet, it is no longer impaired for aquatic life. The Red Lake River WRAPS estimates 54% of the sediment load comes from instream erosion. This reach has been identified as the highest priority in the middle planning zone for restoration and this project will provide an estimated 559 tons/year of sediment reduction by stabilizing the eroding bank and preventing further erosion resulting in improved water quality, drinking water, recreation, fish habitat and aesthetics.	81.36
16	C21-6115	Bayview Elementary Reuse Expansion	Carver County WMO	Carver	\$ 150,000	\$ 150,000	The City of Waconia is a pioneer for the way it is approaching stormwater reuse, tapping into stormwater as a utility to irrigate business parcels to meet goals of reducing potable water usage. This project is included as part of the City improvement plan. Two tanks and an updated pretreatment system will be added to the existing Bayview Elementary Underground Reuse System located within a subwatershed of Burandt Lake. The two tanks will increase the annual stormwater reuse by 400,000 gallons and 3 pounds of phosphorus reduction per year being discharged to Burandt Lake.	81.09
17	C21-5583	Plum Creek Subwatershed Turbidity Reduction	Redwood-Cottonwood Rivers Control Area	Redwood	\$ 400,805	\$ 400,805	Plum Creek watershed is a highly productive agricultural area in Murray and Redwood Counties. This project will install five grade stabilization structures, three grass waterways, two water and sediment control basins, and one streambank restoration. These practices will be used to capture sediment from excessive overland flows and provide up to 75% cost-share for landowners. Anticipated goals will annually reduce 1,470 tons of sediment through implementation of these shovel-ready projects.	80.91
18	C21-5927	2021 Lake Minnewaska Targeted Subwatershed Implementation Project Phase IV	Pope SWCD	Pope	\$ 235,000	\$ 235,000	This project will focus on protection of Lake Minnewaska by reducing sediment and phosphorus which are a result of massive gully erosion and eroding ravines that have been converted to row crop production. Pope Soil and Water Conservation District has four landowners ready to implement 10 water and sediment control basins, one lined waterway, one grassed waterway, and one shoreline protection project. These projects have the potential to reduce sediment by 412 tons/year, and 330 pounds/year of phosphorus from entering the lake. We have targeted 54 implemented practices since 2014; this grant would continue this effort.	80.82
19	C21-6961	2021 Goose Creek Watershed TMDL Implementation	Chisago SWCD	Chisago	\$ 250,000	\$ 250,000	East Rush Lake, West Rush Lake, and Goose Lake are impaired for excess nutrients and have some of the lowest water quality Chisago County, yet they are also some of the most heavily used for recreation. Projects have been prioritized by their potential reduction in total phosphorus loading per year and will be targeted in that order to achieve the greatest reduction per project. The goal of this grant is to provide technical and financial assistance in the Goose Creek watershed for the targeted implementation of at least 20 practices to reduce watershed runoff phosphorus loading to Goose, East Rush, and West Rush Lakes and the St. Croix River by a minimum of 140 pounds/year.	80.09
20	C21-8244	Net River Watershed Sediment Reduction Project - Stormwater and the Road Stream Interface	Carlton SWCD	Carlton	\$ 596,300	\$ 596,300	The Nemadji Watershed is characterized by its red clay soils and steep slopes, with streambanks that are prone to slumping and erosion and is a major contributor of sediment and phosphorus into Lake Superior. Our project works towards targeting erosion on the Little Net River, a tributary to the Nemadji River and a high-quality trout stream. An undersized culvert was recently completed to improve fish passage to over six miles of stream, but stormwater runoff near the bridge has contributed to a major gully formation upstream of the bridge project, resulting in contributions of 3,517 tons of sediment and 4,045 pounds of phosphorus per year. Our project will address the stormwater runoff and stabilize the failing bank based on recommendations from geotechnical and stormwater engineers. It will also protect the stream bank using fish passage friendly designs. The result will be reduced sediment and phosphorus to the Little Net River, protection of the valuable trout resource and improved public safety.	79.50
21	C21-1850	JD 6 Water Quality Retrofit	Bois de Sioux WD	Traverse;Wilkin	\$ 356,359	0 (funded w/MDM)	This project proposes installation of 62 grade stabilization structures and eight miles of continuous berms to be constructed as a permanent part of Judicial Ditch 6. This project will reduce sediment loading to the south fork of the Rabbit River by 417 tons per year and total phosphorus by 384 pounds per year. The overall, long-term benefit of these efforts include reduced soil erosion and sedimentation of the drainage system, reduced pollutant loading, increased ditch functionality, reduced peak flows, and a sustainable solution to the issues that results in lower drainage system maintenance costs while providing water quality benefits.	78.95
22	C21-1745	Lake St. Croix Small Communities Urban Phosphorus Reductions Phase II	Middle St. Croix River WMO	Washington	\$ 158,000	\$ 158,000	This project will address stormwater discharge from a 1,852 acre pipe shed that is directly discharging to Lake St. Croix. This will be done through the installation of targeted stormwater treatment best management practices prioritized in the Lake St. Croix Direct Discharge Stormwater Retrofit Analysis. The goal of this project is to reduce urban pollutant loading to Lake St. Croix by at least seven pounds of phosphorus, one ton of sediment and one acre-foot of stormwater per year through the installation of up to 15 Low Impact Development stormwater best management practices.	78.68
23	C21-7338	2021 Big Elk and Mayhew Lakes Phosphorus Reduction Program	Benton SWCD	Benton	\$ 150,000	\$ 150,000	Spring time phosphorus loading has been identified as the main concern for Mayhew Lake, whereas summer loads dominate the Big Elk Lake nutrient impairment and Elk River turbidity impairment. Locations have been pinpointed within the watershed where the phosphorus originates from, as well as strategies that may be undertaken to reduce nutrient loading. Practices were strategically chosen to achieve maximum pollution reduction benefits. Some example practices include, nutrient management, feedlot runoff control, manure storage, riparian pasture management, & cropland & streambank erosion control projects. An estimated 673 pounds per year of phosphorus, 274 pounds per year of nitrogen and 684 tons per year of sediment will be reduced by implementing seven projects.	78.64
24	C21-2155	City of Hugo County Road 8 Stormwater Reuse Project	Hugo, City of	Anoka	\$ 392,400	\$ 392,400	The City of Hugo is requesting funding to construct a stormwater reuse system that will reconnect irrigation systems, resulting in improved surface water quality through phosphorus reduction, decreased groundwater demand, and volume reduction of stormwater for downstream ditch systems and Peltier Lake. The reuse system will pump water from a stormwater pond to existing irrigation accounts, conserving 14 million gallons of water annually. The existing stormwater pond discharges to Judicial Ditch 3 and connects into Clearwater Creek and Peltier Lake. Peltier Lake is impaired for phosphorus. This reuse project will provide water quality benefits by removing phosphorus and provide stormwater volume reduction, positively impacting water quality and water levels in Peltier Lake.	78.59
25	C21-5134	Grow As You Know- Sauk River	Todd SWCD	Douglas;Todd	\$ 38,351	\$ 38,351	The goal of this project is to reduce total phosphorus and sediment in lakes within the headwater and upper regions of the Sauk River Watershed. Our mission, along with our partners and farmers, will be to assist landowners with consultation guidance and costs associated with planting, managing, and maintaining effective cover crops on the landscape. There are three zones of cover crop priority within the Sauk River Headwater and Upper Watershed Management Units. The two most critical zones in which the majority of promotion and technical efforts will be targeted are the Lake Osakis Management District and the Todd and Douglas County portions of the Sauk Lake Management District. The third zone, the Adley District, serves as a protection area. The work plan will provide selected landowners with ongoing consultation, mentorship, and differentiated training in cover crops and field assessment, while placing a minimum of 600 new acres under successful cover crops on the ground. Reductions of 33 pounds per acre per year phosphorus and 8 tons per acre per year sediment is anticipated to be achieved.	78.41

#	Grant ID	Title of Proposal	Organization	County	Request (\$)	Recommended (\$)	Abstract	Score
26	C21-7856	2021 East Branch Chippewa River Targeted Subwatershed Implementation Project	Pope SWCD	Pope;Swift	\$ 345,000	\$ 345,000	This project targets restoration and protection of the East Branch Chippewa River and will address non-point source pollution from agricultural lands, specifically those on steep, erodible slopes and ravines that are delivering sediment and phosphorus to the river. Pope and Swift Soil and Water Conservation Districts have partnered and have 10 landowners ready to implement 65 erosion and sediment control practices. These SWCDs partnered and completed a Water Quality Decision Support Application to target projects for the East Branch of the Chippewa River. Based on averages calculated from recently constructed erosion and sediment control practices, these proposed projects have the potential to reduce sediment by 1,462 tons/year, and 1,260 pounds/year of phosphorus.	78.32
27	C21-1048	Lower Mississippi River Targeted Ravine Stabilization Project	Dakota County	Dakota	\$ 452,277	\$ 452,277	Dakota County is partnering with the Dakota Soil and Water Conservation District and the Vermillion River Watershed Joint Powers Organization to stabilize two severely eroded ravines and bluff areas within Spring Lake Park Reserve affecting Spring Lake and the Mississippi River. Spring Lake is a portion of Pool 2 of the Mississippi River located three miles upstream of U.S. Lock and Dam No. 2 at Hastings. The proposed project will include finalization of preliminary engineering plan drawings and construction of a variety of ravine stabilization practices along 3,900 linear feet. Stabilization will be accomplished using a combination of practices including retention, regrading of the ravine, hard armoring, and establishment of vegetation to reduce erosion and soil loss within the ravine. The proposed project prevents soil loss by 525 tons/year, and achieves a 13.8 ton annual reduction in TSS and 11.7 pound annual reduction in phosphorus toward the South Metro Mississippi River and Lake Pepin TSS TMDL.	77.82
28	C21-2669	Phase 1: Targeted Rum River Bank Stabilization 2021	Anoka CD	Anoka	\$ 440,000	\$ 440,000	The Rum River is on the brink of impairment for phosphorus. The Rum River Watershed Restoration and Protection Strategy report identifies riverbank stabilization as one of the top strategies for reducing phosphorus and protecting this important regional resource. The 10-year milestone for this strategy is the stabilization of one mile of eroding riverbank. Anoka Conservation District identified over seven miles of eroding streambank on the Rum River in Anoka County. This project will stabilize up to 500 linear feet, targeting the most severe erosion, and reducing total phosphorus loading by 200 pounds/yr and sediment loading by 200 tons/yr.	76.68
29	C21-1088	2021 Sunrise River Phase II Lower St. Croix CWMP Implementation	Chisago SWCD	Chisago	\$ 200,000	\$ 200,000	The Sunrise River subwatershed has been identified as the top source of phosphorus loading to Lake St. Croix. Due to the large size of the Sunrise River subwatershed, the Chisago Soil and Water Conservation District has implemented a phased approach to prioritize and target the next smaller size subwatersheds within the larger Sunrise River subwatershed. This application targets the North Branch of the Sunrise River subwatershed which receives runoff from both rural and urban areas. A Stormwater Retrofit Assessment is underway to identify the best locations for stormwater projects, including rain gardens, vegetated swales, pervious pavement, infiltration basins, and iron enhanced sand filters. Priority will be given to projects closest to the river and its tributaries. At least 10 conservation projects will be installed, preventing at least 50 pounds/year of phosphorus and 50 tons/year sediment from entering the river.	76.50
30	C21-0949	Meadow Lake Management Plan	Shingle Creek WMC	Hennepin	\$ 153,510	\$ 153,510	Meadow Lake is listed as an impaired water for excess nutrients and suffers from nuisance levels of curly-leaf pondweed and fathead minnows. Reducing watershed phosphorus loading to the lake has been a priority and many practices have been installed; however, internal phosphorus loading to the lake is still significant and preventing improvement in the lake's condition. In this project, internal phosphorus loading will be reduced by approximately 110 pounds per year through a lake drawdown and two aluminum sulfate treatments. Other outcomes of the project include increased water clarity, reduced chlorophyll-a concentrations, and a diverse native aquatic vegetation community.	76.18
31	C21-9903	Shingle Creek Connections II Stream Restoration	Shingle Creek WMC	Hennepin	\$ 328,000	\$ 328,000	The purpose of this project is to improve water quality and biotic integrity in Shingle Creek, which is an impaired water for low dissolved oxygen, excess bacteria, and macroinvertebrate community. Approximately 1,750 linear feet will be improved by thinning trees, establishing native vegetation in the buffer and on the banks, repairing erosion, enhancing habitat, and introducing low-flow sinuosity and reaeration opportunities with rock vanes and root wads. Reaches upstream and downstream have been restored; this is a "missing link" segment that will complete a continuous 2.5-mile corridor of urban stream restoration. It is anticipated that annual stream bank sediment loss will be reduced by 20 tons/year and phosphorus loss reduced by 4 pounds/year. The outcome will be enhanced habitat for aquatic and upland wildlife, improved water quality, and improved stream aeration.	75.55
32	C21-2364	Kanabec - Knife River Clean Up	Kanabec SWCD	Kanabec;Mille Lacs	\$ 70,000	\$ 70,000	practices. Targeted projects include pasture management practices and streambank erosion protection practices including livestock fencing exclusions with the option of providing alternative watering facilities and/or enhancing buffer strips in pasture stream corridors. These projects are well supported by the members of the Knife Lake Sportsman's Club and the Knife Lake Improvement District and are estimated to reduce sediment and phosphorus by eight tons per year and 40 pounds per year, respectively.	74.55
Total Funding Recommendation					\$	11,112,176		

EASEMENT

Date: December __, 2020.

For and in consideration of the sum of Eleven Thousand Three Hundred Twenty and 66/100ths Dollars (\$11,320.66), and other valuable consideration to them in hand paid, receipt of which is hereby acknowledged, Ronald Salentine, and Paula Salentine, husband and wife, hereinafter referred to as "Grantors", do hereby grant and convey to the Red Lake Watershed District, a political subdivision under the laws of the State of Minnesota, Chapter 103D, hereinafter referred to as "Grantee", a flowage and channel easement under and over the following described real property located in the County of Polk and State of Minnesota, to-wit:

That part of the Northwest Quarter (NW1/4) of Section Eight (8), Township One Hundred Fifty-two (152) North of Range Forty-six (46) West of the Fifth Principal Meridian being at or below elevation 917 feet (NAVD 88), mean sea level and as shown in **Exhibit A**.

Subject to existing reservations, restrictions and easements of record.

TERM. This easement shall be permanent and perpetual.

USE OF EASEMENT BY GRANTEE. Grantee and its successors shall have the full and complete right, power, privilege, and easement to overflow, flood, and cover such real property with such water as may be created by erection and operation of the Red Lake Watershed District Brandt Impoundment, Project No. 60D, and to provide drainage and/or flow channels on or over said real property. Grantee shall have the right to enter on said real property from time to time and clear, destroy, or otherwise dispose of any timber or other natural growth and any obstructions, accumulations, or any other thing that would in any way interfere with said flowage, storage, construction and channel easement. Grantee shall have the right to remove or prevent the construction of any buildings located on that portion of said real property described above, and any other structures or appurtenances located on that portion of said real property described above, if any. Grantee shall have the right to enter upon, remove and dispose of all trees, natural or artificial structures or obstructions, to deposit soil and/or other excavated material, and to remove

and/or excavate soil and/or other types of material, install dikes, dams, culverts, and other controls, or structures and to do any other act as may be necessary or convenient in direct connection with the operation, and maintenance of the Red Lake Watershed District Brandt Impoundment Project 60D.

GRANTOR'S USE. Grantors' use of the easement area is subordinate and subject to Grantee's use of the easement area and Grantors shall not disturb the easement area or erect any structures thereon without the prior written consent of Grantee (except for agricultural cropping uses of non-ditched, buffer strips, non-diked areas, and any wetlands now existing or hereafter created by construction of said project, which agricultural cropping uses shall specifically include enrollment in the Conservation Reserve Program).

Grantee agrees that it will hold Grantors harmless and indemnify Grantors from any damage to third parties and/or third-party crops by reason of overflow or seepage of water within the flowage easement, maintenance, impoundment, drainage, or flow channel areas caused by the negligent operation of said project on Grantors' premises. Grantee hereby assuming all risk of such negligent damage.

Grantors agree that Grantee shall not be liable or responsible for any damage to crops by reason of overflow or seepage of water within the flowage easement area, Grantors hereby assuming all risk of such damage.

GOVERNING LAW. This conveyance shall be governed and construed in accordance with the laws of the State of Minnesota.

ENTIRE AGREEMENT, INVALIDITY. This conveyance sets forth the entire arrangement between the parties and there are no representatives or warranties except as expressly set forth herein. No amendment or modification of this conveyance shall be valid unless in writing and signed by the parties hereto. Should any clause or provision of this conveyance become invalid for any reason, such invalidity shall not result in the invalidity or unenforceability of any other clause or provision of this conveyance.

TITLES AND HEADINGS. The titles and headings used herein are for convenience only and do not constitute any part of this conveyance.

BINDING. This easement shall bind the parties hereto, their heirs, personal representatives, successors, and assigns and is a covenant running with the land for the term set forth above.

IN WITNESS WHEREOF, Grantors have executed this Easement the day and year first above written.

Ronald Salentine

Paula Salentine

STATE OF MINNESOTA)
COUNTY OF _____) ss.

The foregoing instrument was acknowledged before me this ____ day of December, 2020 by Ronald Salentine, and Paula Salentine, husband and wife.

Notary Public

This instrument was drafted by
Ihle, Sparby & Haase
312 North Main Avenue
P.O. Box 574
Thief River Falls, MN 56701



Permit # 20-307

Status Report: **Tabled**

Applicant Information

Name	Organization	Address	Email	Phone Number(s)
Gerald Matson		38457 350th Avenue SE Fosston, MN 56542		tel:218-779-9981 mobile: fax:

General Information

(1) The proposed project is a:

Tiling

(2) Legal Description

(3) County: **Polk** Township: **Bransvold** Range: **40** Section: **23 1/4: NW1/4**

(4) Describe in detail the work to be performed. **Install random tile with gravity outlet.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Drainage**

Status

Status	Notes	Date
Tabled		Dec. 28, 2020
Received		Nov. 12, 2020

Conditions

I recommend this permit be tabled to provide time for the East Polk Soil and Water Conservation District to review the tile permit for wetland concerns. N.J.O.

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.



Permit # 20-314

Status Report: **Approved**

Applicant Information

Name	Organization	Address	Email	Phone Number(s)
Dacian Bienek		PO Box 65 Warren, MN 56762		tel: mobile: fax:

General Information

(1) The proposed project is a:

Surface Drainage (New Ditch or Improvement)

(2) Legal Description

(3) County: **Pennington** Township: **Norden** Range: **44** Section: **36 1/4: SW1/4 NW1/4**

(4) Describe in detail the work to be performed. **Clean road ditch on east side of road.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Road ditch was filled with sediment and needed to be cleaned.**

Status

Status	Notes	Date
Approved		Dec. 21, 2020
Received		Dec. 16, 2020

Conditions

Applicant must be aware that this is an after-the-fact permit, as work was completed prior to the Red Lake Watershed District (RLWD) receiving a permit. RLWD approves cleaning of the east county road ditch bottom. All excavation shall be consistent with the existing road and ditch slopes, there shall be no vertical excavation faces. Applicant shall ensure that all disturbed areas are seeded. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) N.J.O.

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Red Lake Watershed District

President

Dale M. Nelson

Vice President

Gene Tiedemann

Treasurer

Terry Sorenson

1000 Pennington Avenue South

Thief River Falls MN, 56701

218-681-5800

218-681-5839 FAX

E-mail: RLWD@redlakewatershed.orgwww.redlakewatershed.org**Secretary**

LeRoy Ose

Managers

Les Torgerson

Allan Page

Brian Dwight

December 30, 2020

Dacian Bienek

P.O. Box 65

Warren, MN 56762

Re: Non-permitted work (NW ¼ Sec. 36 Norden Twp.)

Dear Dacian:

As directed by the Red Lake Watershed District (RLWD) Board of Managers, this letter is a first, and only warning, pertaining to unauthorized/unpermitted work.

Our office was notified that the Pennington County Road 72 ditch, along your property, was cleaned and an 18" diameter field entrance culvert was installed; we were questioned as to whether or not a permit was applied for and/or approved. We have reviewed our files and have no record of a permit application for the work.

Furthermore, the work is un-satisfactory; with a vertical face in the road slope and the field entrance installed is not approved by the highway engineer. Please contact the Pennington County Engineer, Mike Flaagan, to correct all work to his satisfaction.

I have enclosed a copy of the RLWD permit and drainage rules for your future reference. In the future, if you plan to do any work that requires a permit application, submit them in a timely manner so appropriate inspection and review can be completed prior to the actual work. Permit applications are available on our web site at www.redlakewatershed.org

Please keep in mind, that if there is a second violation of work being done without a proper permit application, the RLWD Board of Managers permitting policy states, in part, that work done without a permit may be subject to Administrative fees and/or, that the work already done, be restored to its recent original condition.

If you have any questions, please call our office and speak to myself or Administrator Myron Jesme.

Sincerely,



Nick Olson

Engineering Specialist

Enclosure

APPLICATION FOR PERMIT
RED LAKE WATERSHED DISTRICT

1000 Pennington Avenue South, Thief River Falls, MN 56701
RLWD@redlakewatershed.org
218-681-5800

TO THE BOARD OF MANAGERS:

Landowner Name: <i>Dacian Bierenk</i>	Telephone Number: <i>218-201-0287 (Mike)</i>
Address (Street, RFD, Box No., City, State, Zip): <i>P.O. Box 65 Wadena, MN 56762</i>	
Project Location: Government Lot _____ Quarter Section(s) <i>SW 1/4 NW 1/4</i> Section(s) <i>36</i>	
Township (Name & #) <i>Norden 154</i> Range # <i>44</i> County <i>Pennington</i>	
Type of Work Proposed: <input type="checkbox"/> Excavate <input type="checkbox"/> Fill <input type="checkbox"/> Drain <input type="checkbox"/> Construct	<input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Culvert (Size _____) <input type="checkbox"/> Bridge (Size _____) <input type="checkbox"/> Dam <input type="checkbox"/> Install <input type="checkbox"/> Remove <input type="checkbox"/> Other <input type="checkbox"/> Dike <input type="checkbox"/> Erosion Control <input type="checkbox"/> Tile <input type="checkbox"/> Other

Be sure to attach all necessary reports, maps, drawings, photos, other data, etc., to support permit application.

Description of work to be done: <i>"After the fact Permit"</i> <i>Clean road ditch on east side of road 1/8 mile</i>
Estimated drainage area: acres <i>40</i> or sq. mile(s) _____
Work is necessary because: <i>Road ditch was filled with sediment and needed to be cleaned</i>

I hereby make application for a permit to proceed with the proposal described above and have attached all supporting maps, plans, and other information submitted with this application. The information submitted and statements made concerning this application are true and correct to the best of my knowledge. Obtaining a permit from the Managers does not relieve the applicant from the responsibility of obtaining any other additional authorization or permits required by law.

Signature of landowner: <i>Dacian Bierenk</i>	Date: <i>12/16/20</i>
--	--------------------------

DEC 16 2020

MS

For Office Use Only P.A. No. <i>20-314</i>



CD96 26

25

State Hwy 1

State Hwy 1

XDRY

18" CAP

72

15" CAP E

18" CAP FE - NEW DR PERMITTED
18" CAP FE - CROSHED

Cleared OB
Un-Permitted

Norden

35

Center Ave N

Pennington

15" CAP E

15" CAP PLUGGED

15" CAP E

XDRY

CD96

160th St NW

160th St NE

Sanders

2

0 265 530 1,060 1,590 2,120

Legend

- PennintonCounty_Ditch
- PWI watercourse
- PWI basins



Permit # 20-313

Status Report: **Approved**

Applicant Information

Name	Organization	Address	Email	Phone Number(s)
Raynold Ulrich		14707 130th Street NW Thief River Falls, MN 56701		tel:218-964-5427 mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **Sanders** Range: **44** Section: **19 1/4: NW1/4**

(4) Describe in detail the work to be performed. **Increase culvert size and lower in driveway.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Water backs up into the filed causing overland flooding.**

Status

Status	Notes	Date
Approved		Dec. 21, 2020
Received		Dec. 11, 2020

Conditions

Red Lake Watershed District (RLWD) approval to clean & re-grade the south road ditch, and to remove an 18" diameter driveway culvert and replace it with a 24" diameter culvert, as per approval of Pennington County Highway Department; proposed work is within CSAH #59 right-of-way. A survey of the ditch bottom profile has been completed by the RLWD and a copy of the profile has been sent to the applicant. Applicant shall ensure that all disturbed areas are seeded and that rock riprap with filter fabric is placed at the outlet end of the permitted culvert. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) N.J.O.

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Ashley Hitt
23627 State Hwy 219 NE
Goodridge, MN 56724

12/14/2020
Myron Jesme/Board of Managers
Red Lake Watershed Board of Managers
1000 Pennington Ave South
Thief River Falls, MN 56725

Dear Myron/Board of Managers:

Please accept this letter as notice of my resignation from my position as Natural Resource Specialist. My last day of employment will be Tuesday January 12th, 2021.

I have received a job offer as a Wetland Biologist with the Natural Resource Conservation Service, after careful thought and consideration, accepting this job offer is the best decision for my career and future.

It has been my pleasure working at the Red Lake Watershed District these past 6 years. I appreciate being given the opportunity to mold this job into what best fit my interests and passions, without hurting the integrity of the position. My biggest joy, and what I will miss the most, is working with the local schools through the River Watch program. It has been inspiring watching students grow and develop their passion for natural resources during their years participating in River Watch. When a River Watch senior messaged me to ask where I attended college and what degree I received because she could see herself doing what I do and having a job like mine someday was the biggest highlight of my career with RLWD.

Again, I am grateful for having had the opportunity to work at the Red Lake Watershed District and appreciate all the opportunities I have been given within my position. I wish the staff and board of managers the best and look forward to staying in touch.

Sincerely,



Ashley Hitt
(573)321-0109
a_hitt99@yahoo.com

DEC 15 2020

MJ

Red Lake Watershed District - Administrators Report

December 30, 2020

Red River Watershed Management Board – LeRoy and I attended the RRWMB December 15, 2020 via Microsoft Teams. Some of the highlights at this meeting was the submittal of the Pine Lake Step 1 Submittal, attendance by Kent Lokkesmoe, who recently retired from the MnDNR was presented a plaque from the Board thanking him for all his efforts over his career which spanned 45 years. There was also discussion with Troy Daniels, Minnesota State Conservationist regarding RCPP Alternative funding and what it would look like in the future, along with expressing our frustration on how the program is working presently.

I will be attending a meeting with the RRWMB Administrators and Rob Sip at 1:00 pm January 4th to discuss Water Quality and FDR funding needs for the upcoming fiscal year. I also have a RRWMB Budget and Finance Committee meeting which is scheduled for 1:00 pm January 5th.

Board of Water and Soil Resource Annual Meeting – The BWSR Board held their annual meeting at 9:00 am December 17, 2020. Part of the action items was the approval of 2021 CWF Competitive Grants Award which included \$250,000 for the TRF Oxbow Project. Of the 61 applications submitted by local governments, the TRF Oxbow was rated 13th and is tentatively in line for funding.

Thief River 1W1P – A meeting was held at 2:00 December 15th with USFWS employees to discuss the restoration of the old channel within the refuge that was cutoff since JD 11 main was constructed. In restoring this channel, it is assumed we could see significant reduction of sediment that presently enters Agassiz National Wildlife Refuge and ultimately is deposited into SD 83/Thief River.

Clearwater River 1W1P – The first meeting of the Planning Workgroup/Steering Committee for Clearwater River 1w1p met at 1:00 pm this afternoon to go over basic details as we move forward into the development of this watershed plan.

Bois de Sioux Watershed NRCS Funding – I was asked by Bois de Sioux Watershed District, Jami Beyer, to attend a meeting at 9:00 am December 18th, with her, their engineering consultant Chad Engels and Keith Westin, Red River Retention Coordinator, to discuss NRCS RCPP funding and explain some of the details that occurred on our failed attempt to secure funding. They have their Red Path Project which could be a candidate for funding and wanted some assistance in better understanding the application process and explain some of reasons NRCS gave us for pulling our funding package.

Water Quality Report – We have included in your packet, Corey's Water Quality Report dated August 2020.

By Corey Hanson, Red Lake Watershed District Water Quality Coordinator. 12/10/2020

Long-Term Water Quality Monitoring Program

Round four of 2020 sampling for the District's long-term monitoring program was completed in June.

The amount of sediment that is carried by a stream is measured by collecting and analyzing samples for **total suspended solids**. Fish and aquatic macroinvertebrates (bugs, worms, crustaceans, etc.) are harmed by high concentrations of total suspended solids. In September 2020, high total suspended solids concentrations (>65 mg/l, >30 mg/l, or >15 mg/l, depending on the site's location) were found at:

- Grand Marais Creek at 110th Street Northwest
- Murray Bridge in East Grand Forks
- Polk County Ditch 20 at CSAH 20

Water quality was exceptionally good in the Red Lake River east of Thief River Falls. Total suspended solids were so low that the laboratory couldn't report the precise value (<1 mg/L) in the headwaters of the Clearwater River at CSAH 25 and CSAH 2. The Red Lake River also notably met the total suspended solids standard at crossings along the impaired portion:

- CSAH 13 near Red Lake Falls

High concentrations of *E. coli* bacteria indicate an increased risk of gastrointestinal illness from aquatic recreation activities (swimming) that involve contact with water. High *E. coli* concentrations (>126 MPN/100ml) were found in the following waters (alphabetical order) during September 2020 sampling:

- Beau Gerlot Creek at CR 114
- Branch A of Judicial Ditch 21 at CSAH 48
- Burnham Creek at 320th Avenue SW
- Burnham Creek at CSAH 48
- Chief's Coulee at Dewey Avenue
- Clear Brook at CSAH 92
- Darrigan's Creek at CSAH 23
- Gentilly River at CSAH 11 in Gentilly
- Hill River at CSAH 35
- Kripple Creek at CSAH 53
- Lost River at CSAH 8
- Lost River at CSAH 28, north of Trail
- Lower Badger Creek at CR 114
- Mud River at CSAH 54
- Nasset Creek
- North Cormorant River at CSAH 36
- O' Briens Creek at Harvest Road NE
- Polk County Ditch 1 at County Road 61
- Polk County Ditch 14 near the Maple Lake outlet
- Silver Creek at 159th Ave

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- Terrebonne Creek at CSAH 92
- Thief River at CSAH 7
- Thief River at CSAH 6

The state's water quality standard for **total phosphorous** varies by river nutrient region. Rivers and tributaries in the western part of the District have to meet a 0.150 mg/l standard in the South River Nutrient Region. Rivers and tributaries assigned to the Central River Nutrient region have to meet a 0.100 mg/l standard. Rivers and tributaries in the eastern part of the District have to meet a more protective standard of 0.050 mg/l in the North River Nutrient Region. High total phosphorus concentrations relative to the State of Minnesota's new regionalized river eutrophication nutrient criteria were recorded in samples collected at the following sites in September 2020:

- Burnham Creek at 320th Avenue SW
- Chief's Coulee at Dewey Avenue
- Coburn Creek at CSAH 30
- Cyr Creek at 220th Street SW
- Grand Marais Creek at 130th Street Northwest
- Grand Marais Creek at 110th Street Northwest
- Heartsville Coulee at 13th Street Southeast
- Hill River at CSAH 35
- North Cormorant River at CSAH 36
- O' Briens Creek at Harvest Road NE
- Pennington County Ditch 21 at 135th Ave NE
- Polk County Ditch 1 at County Road 61
- Polk County Ditch 2 at Polk County Road 62
- Poplar River at CR 118

Low dissolved oxygen concentrations were found at:

- Clear Brook at CSAH 92
- Clearwater River at CSAH 25, near Bagley
- Grand Marais Creek at 110th Street NW
- Pennington County Ditch 21 at 135th Ave NE
- Ruffy Brook at CSAH 11
- Walker Brook at CSAH 19

Continuous Dissolved Oxygen Monitoring

The HOBO DO loggers were then deployed at the following sites in September:

- Branch A of Judicial Ditch 21 at CSAH 48 (440th Street NE)
- Grand Marais Creek at 110th Street Northwest
- Lost River at 109th Ave
- Moose River at CSAH 54
- Mud River at Highway 89

- Moose River at Moose River Road NW
- Marshall County Ditch 20 at Magnum Road NW
- Ruffy Brook at CSAH 11

Discrete field measurements (dissolved oxygen, temperature, pH, specific conductivity, and stage) were recorded near the midpoint of each deployment to aid the data review and correction process. The DO loggers were retrieved, cleaned, re-calibrated, and re-deployed after two weeks of deployment.

Samples were collected from Long Lake, near Pinewood. The water quality in Long Lake met water quality standards again. Though there have been a few high concentrations of chlorophyll-a (>9 µg/L) and total phosphorus (>0.030 mg/L), the average sampling results for total phosphorus (nutrients), chlorophyll-a (algae), and Secchi disk (clarity) met the stringent water quality standards for lakes in the Northern Lakes and Forest ecoregion. The lake has met the state's water quality standards during the District's sampling effort that began in September 2018. Though water quality statistics have improved with the addition of 2018-20 data, the 10-year summer averages (basis for the state's water quality standards) for chlorophyll-a and total phosphorus still exceed the standards due to high concentrations that were recorded in 2011 and 2012. If the District could sample through another summer, water quality conditions remain similar to 2018-2020 conditions, and the 2011 data is cycled out of the assessment period, the lake could officially, without-a doubt be recommended for delisting from the 303(D) List of Impaired Waters.

After a belated delivery of a backordered plankton sampling net, District staff collected a sample from the Red Lake River to be tested by RMB Environmental Laboratories, Inc. for the presence of zebra mussel veligers. No veligers were present in the sample. Stationary zebra mussel samplers were retrieved from the Red Lake River, as well. The samples showed no evidence of zebra mussels. The samplers were cleaned thoroughly prior to over-winter storage.

Blue-Green Algae

District staff answered questions from Maple Lake residents about the blue-green algae blooms in the lake. A sample was collected from the Polk County Park beach and tested for algal toxins. No toxins were detected in the sample. The blue-green algae bloom in the marina had disappeared. District staff were interviewed by the KROX radio station about the summer's blue-green algae problems in Polk County lakes.

<https://www.kroxam.com/2020/09/02/no-measurable-blue-green-algae-found-on-open-water-on-maple-lake-blooms-along-shore-shrinking/>

September 3, 2020 update: With the arrival of cooler temperatures, the blue-green algae bloom at the Polk County Park boat launch has disappeared. No (0 parts per billion) algal toxins were detectable in water sampled from the beach at the Polk County Park.



Polk County Park marina on Maple Lake: the blue-green algae had disappeared by September 3, 2020.

River Watch and Public Education

District staff created a worksheet and a video for the water quality station portion of the 2020 Northwest Minnesota Virtual Water Festival. This year's festival will include a lesson packet for teachers and students (activities, etc.) along with educational videos for each station's topic. District staff developed an activity that students can do at home or in their classroom. The worksheet includes instructions for an activity that the kids can do in their classroom or at home. Video clips were recorded at Hartz Park and at the District office. The video was pieced together and edited by District staff and uploaded to YouTube: <https://youtu.be/RzQRPhBCXHE>

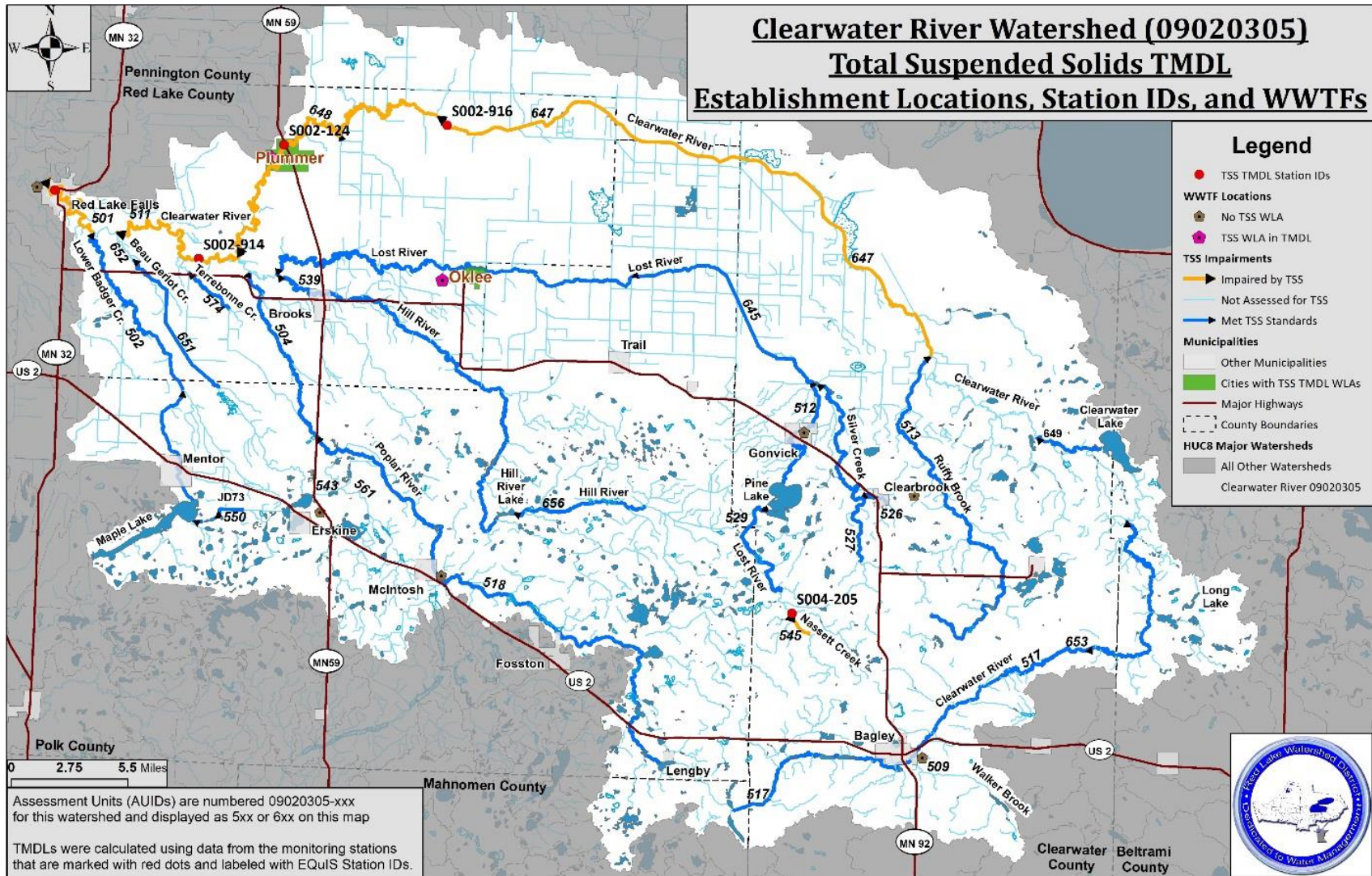
Ashley Hitt helped the Red Lake Falls River Watch team complete a round of water quality monitoring in September.

Clearwater River Watershed Restoration and Protection Strategy (WRAPS)

District staff helped MPCA staff with responses to EPA comments on the Clearwater River Watershed Total Maximum Daily Load as well as some edits to maps and figures to add details that were suggested by the EPA. District staff helped MPCA staff with editing and providing information for a WRAPS summary document. The MPCA completed another internal review of the WRAPS document to get it ready for the public notice process. District staff also answered some additional questions from the MPCA review.

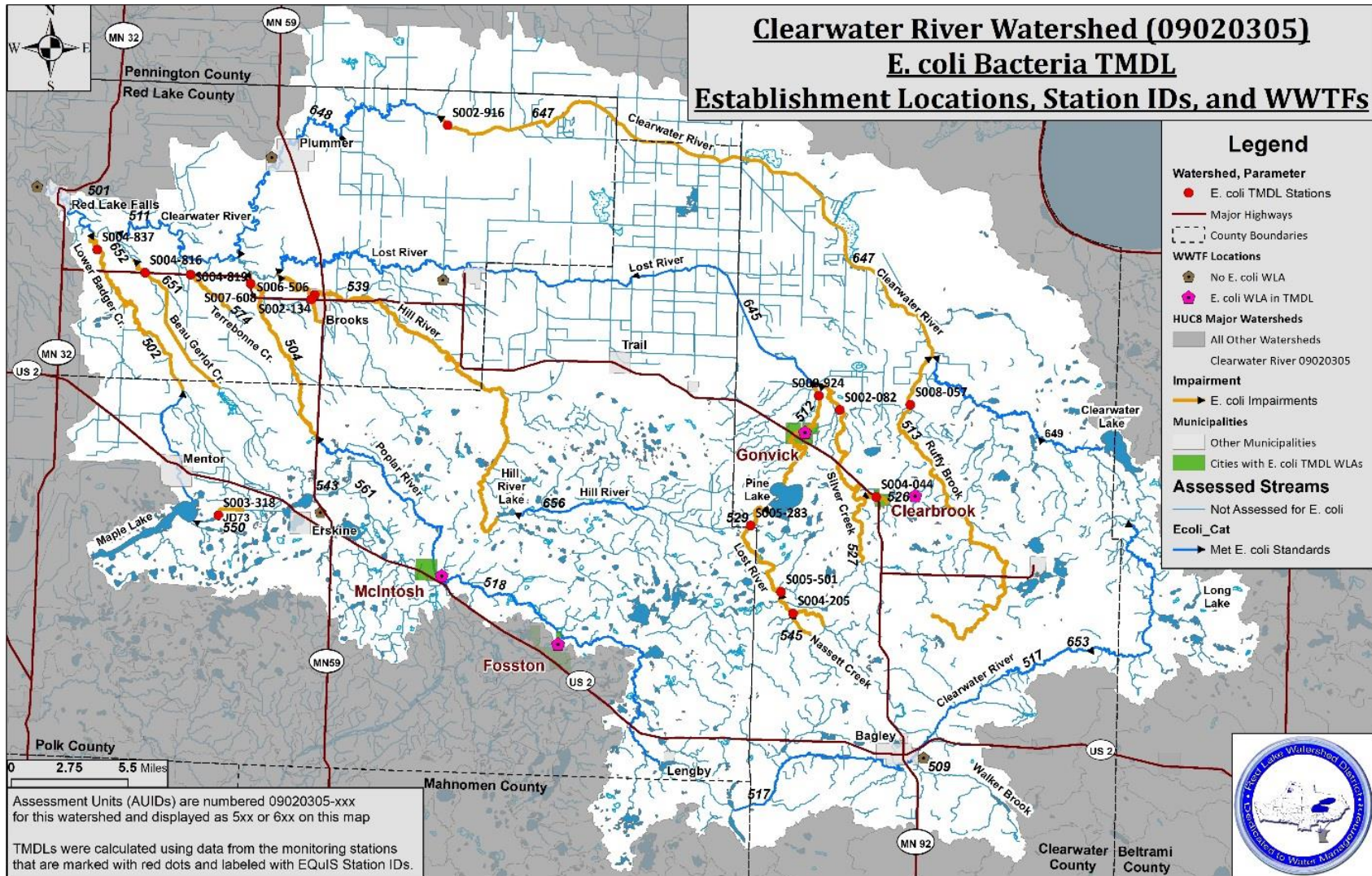
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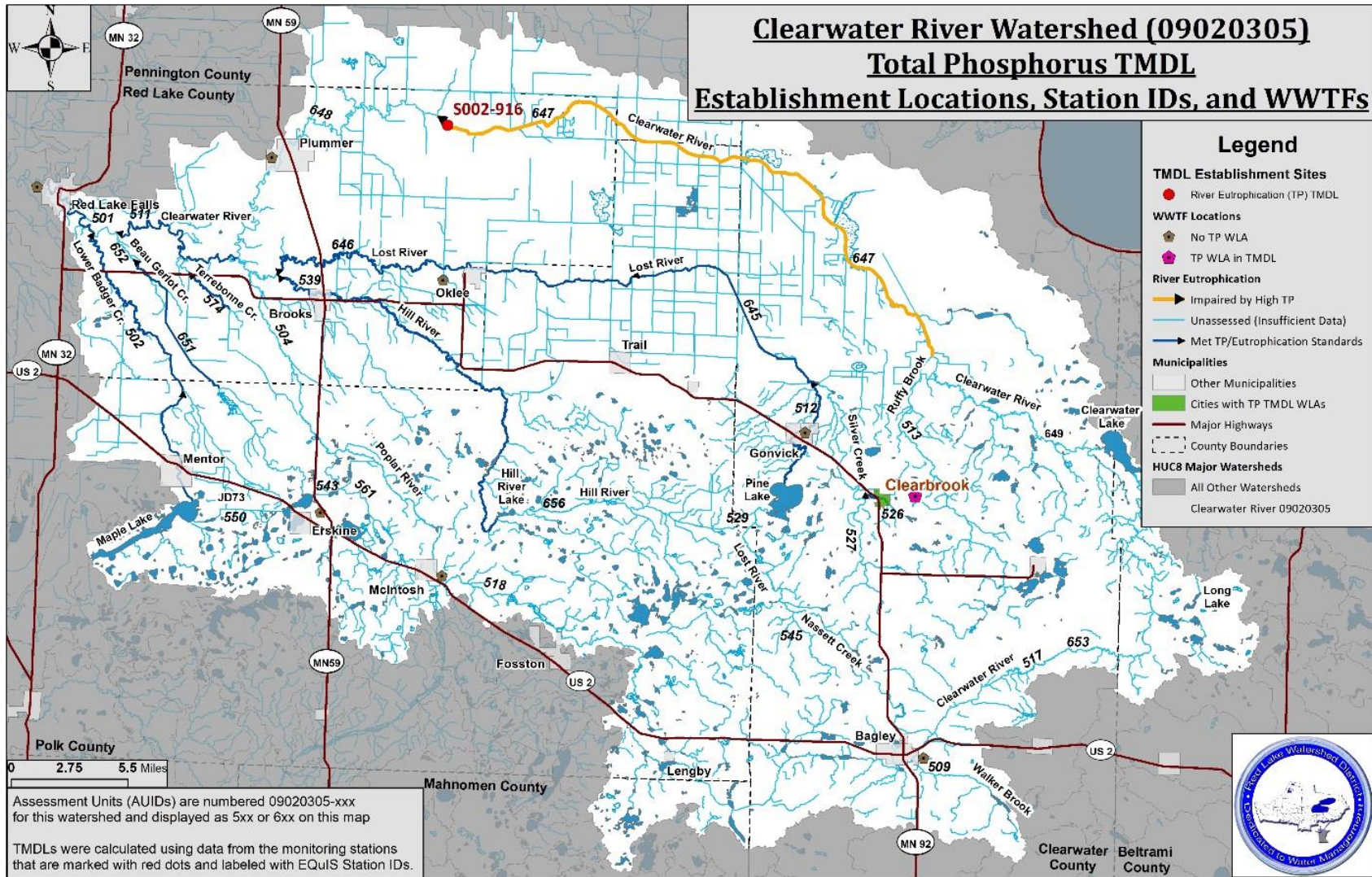
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Red Lake River Watershed One Watershed One Plan

Progress had been made on the stabilization of the Thief River Falls Westside Flood Damage Reduction Project outlet. The following photo shows a rock structure and turf establishment near the Highway 32 crossing.



Clearwater River One Watershed One Plan (1W1P)

Clearwater SWCD staff have been working on a workplan and a budget for the Clearwater River 1W1P process. District staff reviewed the budget line item tasks and projected plan sections and provided thoughts on what parts of the plan writing process could be completed by local staff and what parts would benefit from the assistance of a consultant.

Other

Water quality related notes and minutes from the September 10, 2020 Red Lake Watershed District Board of Managers meeting.

- Manager Sorenson discussed the beaver dams upstream of Pine Lake. Administrator Jesme stated that the Project Work Team will look at existing streams going into the lake and what is the present inflows.

Water quality related notes and minutes from the September 24, 2020 Red Lake Watershed District Board of Managers meeting.

- Discussion was held of the Pine Lake Project Work Team (PWT) meeting held on Friday, September 18, 2020, at the Red Lake Watershed District office. The consensus of the PWT was to move forward with the concept presented and present their recommendations to the RLWD Board. Following discussion of the concept from the Pine Lake PWT, Torgerson moved to

establish Pine Lake as a project and move forward with the design. Motion was seconded by Sorenson and unanimously passed. Watershed district should continue to monitor the Lost River, as well as the water quality and water temperature.

- Staff member Nick Olson gave an update on the Moose River pool. There is a Minnesota Department of Natural Resources Conservation Partners Legacy Grant which was awarded in partnership with the RLWD and Agassiz National Wildlife Refuge to complete the work within the Agassiz NWR. Construction was to be completed last Fall but due to large rainfall events, construction was delayed until this Fall. The project is scheduled to begin the first part of October. The gates at Moose River have been closed and water has moved from the North Pool to the South Pool, which will allow better working conditions for the contractor.
- Red Lake SWCD has requested 2020 Project 164, Erosion Control Funds, for the following individual projects:
 - The total cost for the Ray Delorme Grade Stabilization Project is \$7,335.59 with a request from RLWD for \$1,000 cost share for the Project. Motion by Page, seconded by Ose, and passed unanimously to approve the cost share of \$1,000 to Red Lake SWCD for the Ray Delorme project.
 - The total cost for the Dave Ste Marie Grade Stabilization Project is \$10,921.43 with a request from RLWD for \$1,630.00 cost share for the Project. Motion by Page, seconded by Dwight, and passed unanimously to approve the cost share of \$1,630.00 to Red Lake SWCD for the Dave Ste Marie project.
 - The total cost for the Ralph Perreault, Gervais Township, Grade Stabilization Project is \$12,621.12 with a request from RLWD for \$7,521.00 cost share for the Project. Motion by Page, seconded by Tiedemann, and passed unanimously to approve the cost share of \$7,521.00 to Red Lake SWCD for the Ralph Perrault project.
- District staff reviewed and commented on the District's COVID-19 Preparedness Plan
- District staff completed a water quality report for the month of [March 2020](#).
- District staff were contacted by MPCA public information staff to talk about examples of projects that were accomplished through the cooperation among agencies (gave examples of projects completed through cooperation among Red Lake River 1W1P project partners). District staff also reviewed a draft of the [article](#).
- The Clearwater Lake Area Association shared their [Fall 2020 Newsletter](#)
- Excavation within Agassiz Pool was planned for October 1-20. District staff collected a pre-project sample at the end of September and made plans to collect weekly samples during the excavation project.

September 2020 Meetings and Events

- **September 17, 2020** – Red Lake River 1W1P Planning Work Group Zoom conference
 - Financial updates
 - Project updates
 - The Russia 13 Project has been completed.
 - Construction work for the Pennington County Ditch 96 stabilization project is planned for October 2020.
 - The first 1.3 miles of RLWD Ditch 16 has been constructed and seeded. The outlet look really nice.

- The construction of the stabilization structures at the outlet of the Thief River Falls Westside Flood Damage Reduction Project is nearing completion.
- The Red Lake County SWCD was likely able to free-up funding for additional side water inlets in the Black River subwatershed by finding funding from other sources to install grade stabilization structures in that management area.
- Install additional Black River subwatershed side water inlets with remaining funding that was designated for that subwatershed. There was also some discussion about stabilization projects that are needed downstream of the Shirrick Dam outlet.
- Two Black River grade stabilization structures from the 2020-21 work plan are ready to construct. Construction will likely be completed in the spring of 2021.
- Show progress on completed projects during the October 21, 2020 Policy Committee meeting.
- Cover crop policy discussion
- Look for georeferenced photos of gully erosion problems from Red Lake River WRAPs windshield surveys that could be fixed with side water inlets.
- Discussion of ArcOnline project tracking
- **September 17, 2020** – BWSR Input Sessions for Evaluating Implementation of Comprehensive Watershed Management Plans, Zoom conference
 - Reasons for evaluation:
 - Clearing away the dust, evaluating changes in conditions
 - Coordination – which things have been done and what is left to do
 - Are we on track? Have we focused on the right areas?
 - Telling good stories about the work that is being done
 - One reason for hesitation may be that some are worried about backlash for “tooting our own horn” about a project.
 - “Status of the Watershed” Report – North Fork is trying this approach and can share a template with other watersheds once it has been completed. The summary document will be geared toward an audience of county boards and the general public.
 - Bring in a consultant to develop a format for newsletters that report progress on the comprehensive watershed management plan actions.
 - Use ArcGIS StoryMaps
 - Evaluation and Reporting – LGUs provided some feedback to BWSR about reporting requirements
 - Make sure reporting requirements are consistent and clearly stated
 - Don’t move goal posts
 - How do we properly use PTMApp for tracking purposes? PTMApp and the pollutant reduction estimator spreadsheets likely return different results.
 - It works best for us to use winter months for most of the evaluation and reporting work but tracking things as we go would also have benefits (spread out the effort).

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Red Lake Watershed District Monthly Water Quality Reports are available online:
<http://www.redlakewatershed.org/monthwq.html>.

Learn more about the Red Lake Watershed District at www.redlakewatershed.org.

Learn more about the watershed in which you live (Red Lake River, Thief River, Clearwater River, Grand Marais Creek, or Upper/Lower Red Lakes) at www.rlwdwatersheds.org.

“Like” the Red Lake Watershed District on [Facebook](https://www.facebook.com/redlakewatershed) to stay up-to-date on RLWD reports and activities.

By Corey Hanson, Red Lake Watershed District Water Quality Coordinator. 12/11/2020

Stage and Flow Monitoring

The District's water level loggers were retrieved from flow monitoring locations in late October, when temperatures started to regularly drop below freezing. The retrieval could have been delayed until the first week of November (the return of warm weather in early November wasn't anticipated at the time), but it was still good to get the loggers retrieved before the water began to freeze and before deer hunting season. Loggers were cleaned and data was downloaded.

Grand Marais Creek at 110th Street NW



District staff measured flows at two locations along the Clearwater River in early October to help with wild rice water allocation.

The U.S. Army Corps of Engineers notified the District that they were increasing the Red Lake Dam outflow from 650 cubic feet per second (cfs) to approximately 800 cfs on October 6, 2020.

Water Quality Monitoring

District staff collected weekly water quality samples before, during, and after an excavation project along Judicial Ditch 11 within Agassiz Pool. Samples were collected from the Thief River at CSAH 7 (downstream of the excavation work), Mud River at Highway 89 (upstream of the excavation) and Thief River at CSAH 6 (upstream of the excavation). In general, water was very clear at the upstream sites and cloudier at the downstream crossing of the Thief River. Though the water was cloudy, most of the total suspended solids concentrations at the CSAH 7 fell under the 30 mg/L threshold of the state water quality standard. One of the six samples collected at the CSAH 7 of the Thief River, near the end of the

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excavation work (October 19, 2020), exceeded the total suspended solids water quality standard (37.8 mg/L).

Date	Upstream		Downstream
	Thief River at CSAH 6 Total Suspended Solids (mg/L)	Mud River at Hwy. 89 Total Suspended Solids (mg/L)	Thief River at CSAH 7 Total Suspended Solids (mg/L)
9/30/2020	1.6	2.8	15
10/7/2020	1.3	2.5	5.5
10/14/2020	<1	2.1	7.8
10/19/2020	<1	2.3	37.8

Cloudy water in the Thief River at CSAH 7



District staff investigated a complaint about grayish green water in Lower Badger Creek. The water was indeed very cloudy with a strange, milky gray/green color. The cloudy water was traced upstream to a section of the river that included the confluence with County Ditch 64. Very cloudy water was found in Polk/Red Lake County Ditch 64 at County Road 14. The cloudy water in CD 64 was traced upstream to discharge from a gravel pit near Highway 2. Samples were collected the next day. Though the rate of discharge from the gravel pit had decreased, the total suspended solids concentration was still very high (188 mg/L). The results of the sampling and photographic investigation were shared with MPCA permitting staff.

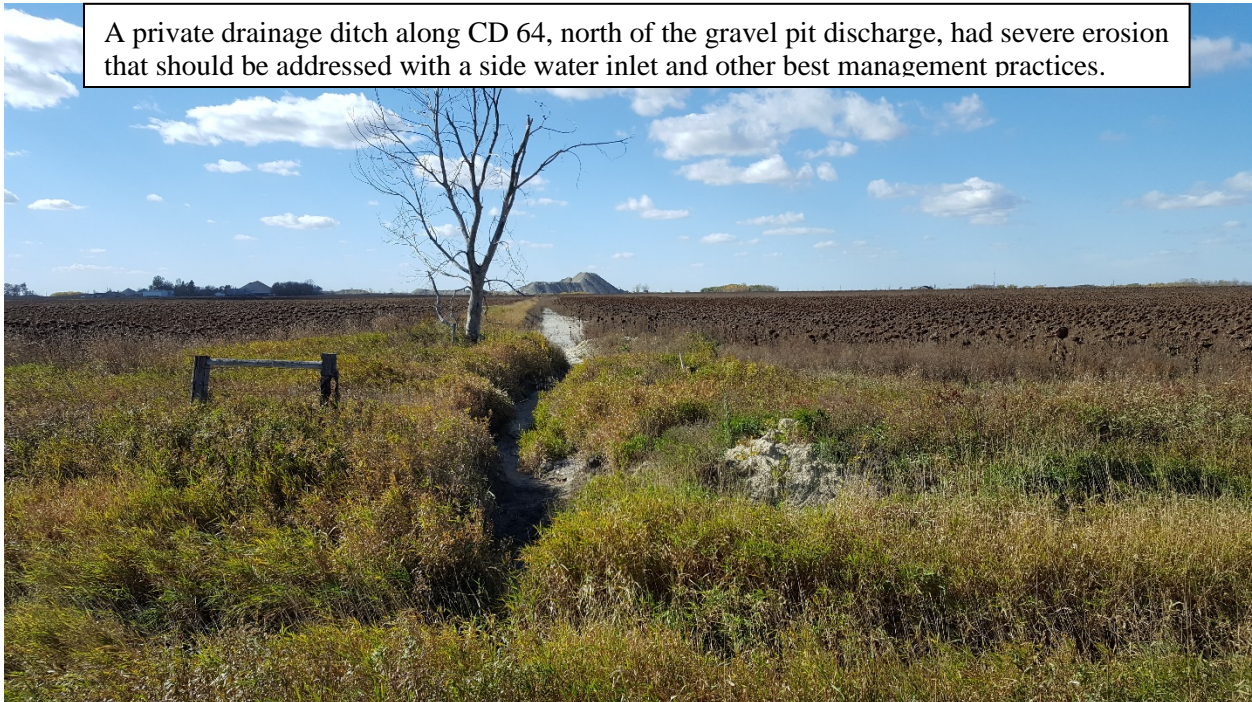
Very cloudy water in Lower Badger Creek at County Road 114 (top) and CSAH 92 (bottom)



Discharge into Polk County
Ditch 64 from a gravel pit



A private drainage ditch along CD 64, north of the gravel pit discharge, had severe erosion that should be addressed with a side water inlet and other best management practices.



High total suspended solids concentrations and/or turbidity levels were found at:

- Thief River at CSAH 7
- Discharge from a gravel pit, into Polk County Ditch 64

Exceptionally low (<1 mg/L) concentrations of total suspended solids were found on multiple occasions in the Thief River at CSAH 6, upstream of Agassiz National Wildlife Refuge.

District staff began working on data entry and station establishment for field data that will be submitted to the MPCA and (EQulS).

River Watch and Public Education

The Red Lake Falls River Watch Team from Lafayette Secondary (along with District staff and International Water institute staff) spent a few hours at Riverside Park collecting macroinvertebrates out of the Clearwater River, building quite a diverse collection!



Ashley Hitt also met with the new Red Lake County Central River Watch teacher to provide an introduction to the program and helped the Red Lake County Central students with a round of water quality monitoring.

District staff created a worksheet and a video for the water quality station portion of the 2020 Northwest Minnesota Virtual Water Festival. This year's festival will include a lesson packet for teachers and students (activities, etc.) along with educational videos for each station's topic. District staff developed an activity that students can do at home or in their classroom. Video clips were recorded at Hartz Park and at the District office. The video was pieced together and edited by District staff and uploaded to YouTube. The worksheet includes instructions for an activity that the kids can do in their classroom or at home.

Northwest Minnesota Virtual Water Festival!!



Normally, water resource professionals from northwest Minnesota collaborate on two Northwest Minnesota Water Festival events in mid-to-late September. Many fourth-grade students from the area take part in the events, which are typically held in Warren and Fertile. Students travel from station to station to learn from presenters about water quality, watersheds, groundwater, aquatic invasive species. Most of the stations have activities for the kids, like fish painting and casting, so that they can have fun while learning.

The COVID-19 pandemic forced a change of plans for 2020. Instead of canceling the festival and missing the opportunity to provide this educational event to many students in this year's fourth-grade class, the festival has gone virtual. To allow more time to develop lessons, activities, and videos, the virtual water festival will take place around one month later than usual (in late October, or whenever it works well for the teacher).

Teachers and students will receive packets with information and activities. The packets and activities will be accompanied by educational videos. Existing videos were available in some cases (groundwater model demonstrations, for example). Some of the presenters were able to make their own videos for the festival. Some of the activities were modified so that they could be easily done in a classroom or at home. Here is a link to download the student packet for the Northwest Minnesota Water Festival:

http://www.redlakewatershed.org/waterquality/NWMN_Water_Festival_Student_Packet.pdf

Red Lake Watershed District water quality staff created a video based on the introductory presentation and activities that are typically part of the Water Quality Station at the Northwest Minnesota Water Festivals. Here is a direct link to our video: <https://youtu.be/RzQRPhBCXHE>

Red Lake River Watershed One Watershed One Plan (1W1P)

Progress has been made, in 2020, on construction and planning of projects for the Red lake River 1W1P. District staff photographed completed side water inlets along RLWD Ditch 16 for use in Red Lake River 1W1P ArcOnline project tracking. Progress on the Westside Flood Damage Reduction Outlet Stabilization work was also documented. District staff wrote a draft article/press release to publicize the 319 Small Watershed Focus Grant funding that was awarded to the Red Lake River Watershed (to be released when the contract is executed). There has also been discussion about future projects, including erosion concerns and potential grade stabilization projects in Polk Center Township, near the Black River. The West Polk SWCD submitted a request for funding for a project that would install side water inlets or other best management practices to stop gully erosion at several locations along Burnham Creek, southwest of Crookston. The Red Lake County SWCD was able to bring in additional funding sources to pay for some of their work and make room in the 1W1P budget for additional side water inlet installations in the Black River subwatershed.

Stabilization of the Thief River Falls Westside Flood Damage Reduction Project outlet was nearing completion in October.





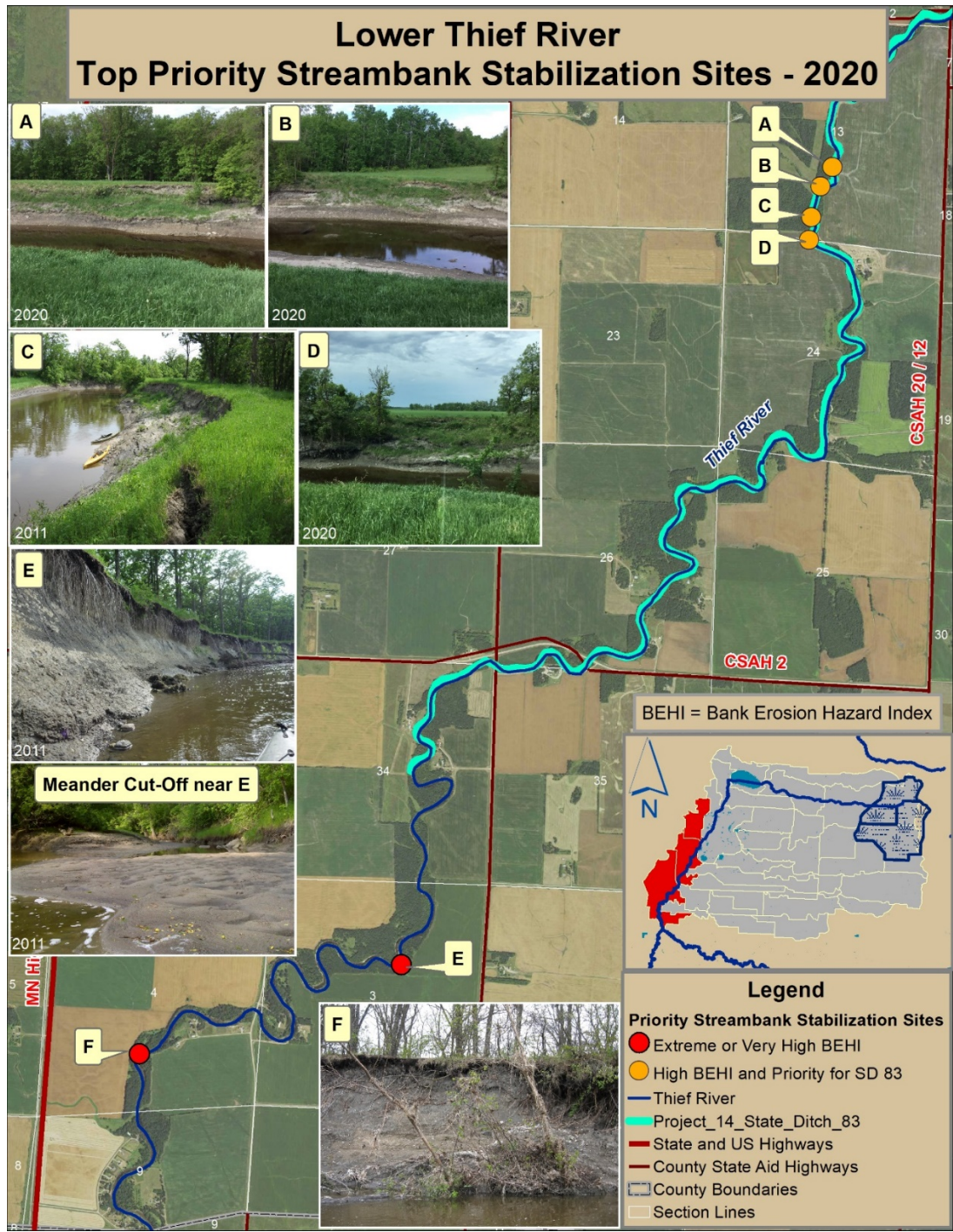
Examples of RLWD Ditch 16 Side Water Inlets



Thief River Watershed One Watershed One Plan (1W1P)

A map of priority Thief River 1W1P streambank stabilization sites along the Thief River was created. A Bank Erosion Hazard Index (BEHI) rating was completed for an additional eroding bank along State Ditch 83 that is threatening a road/trail along the top of the bank. Portions of that streambank, upstream of

CSAH 7, received just a moderate rating (possibly due to the persistence of vegetative cover despite the bank failure. Though the BEHI rating is an objective way to rank and prioritize streambank sites, that particular erosion problem sparks some thought about using other factors (like threats to infrastructure or buildings) that could factor into the prioritization of streambank stabilization work. A portion of the bank upstream of the slump had a higher BEHI score (still within the moderate range) due to the lack of vegetative cover.



Spoilbank slough along the State Ditch 83 portion of the Thief River, a short distance north of the CSAH 7 crossing

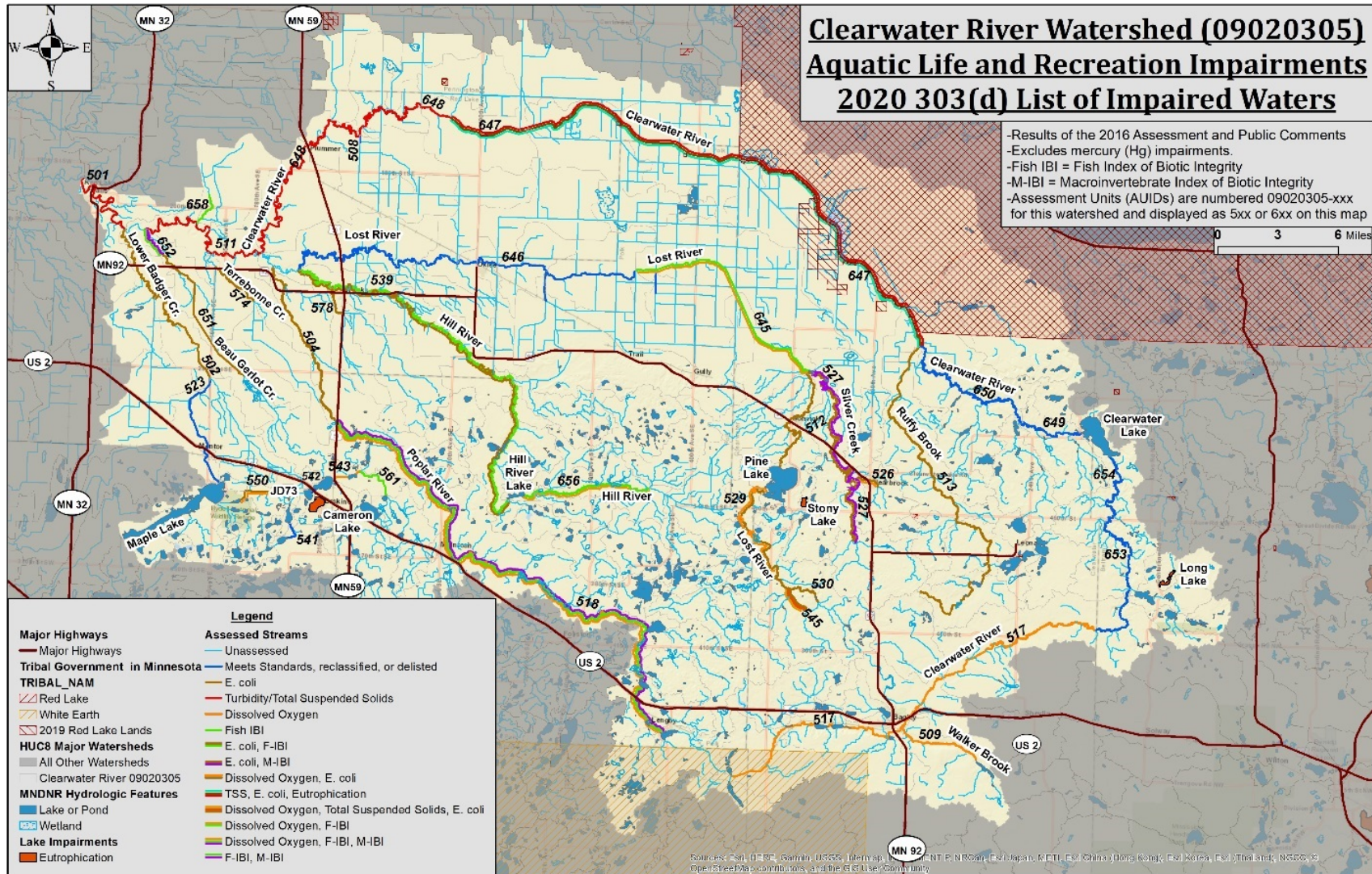


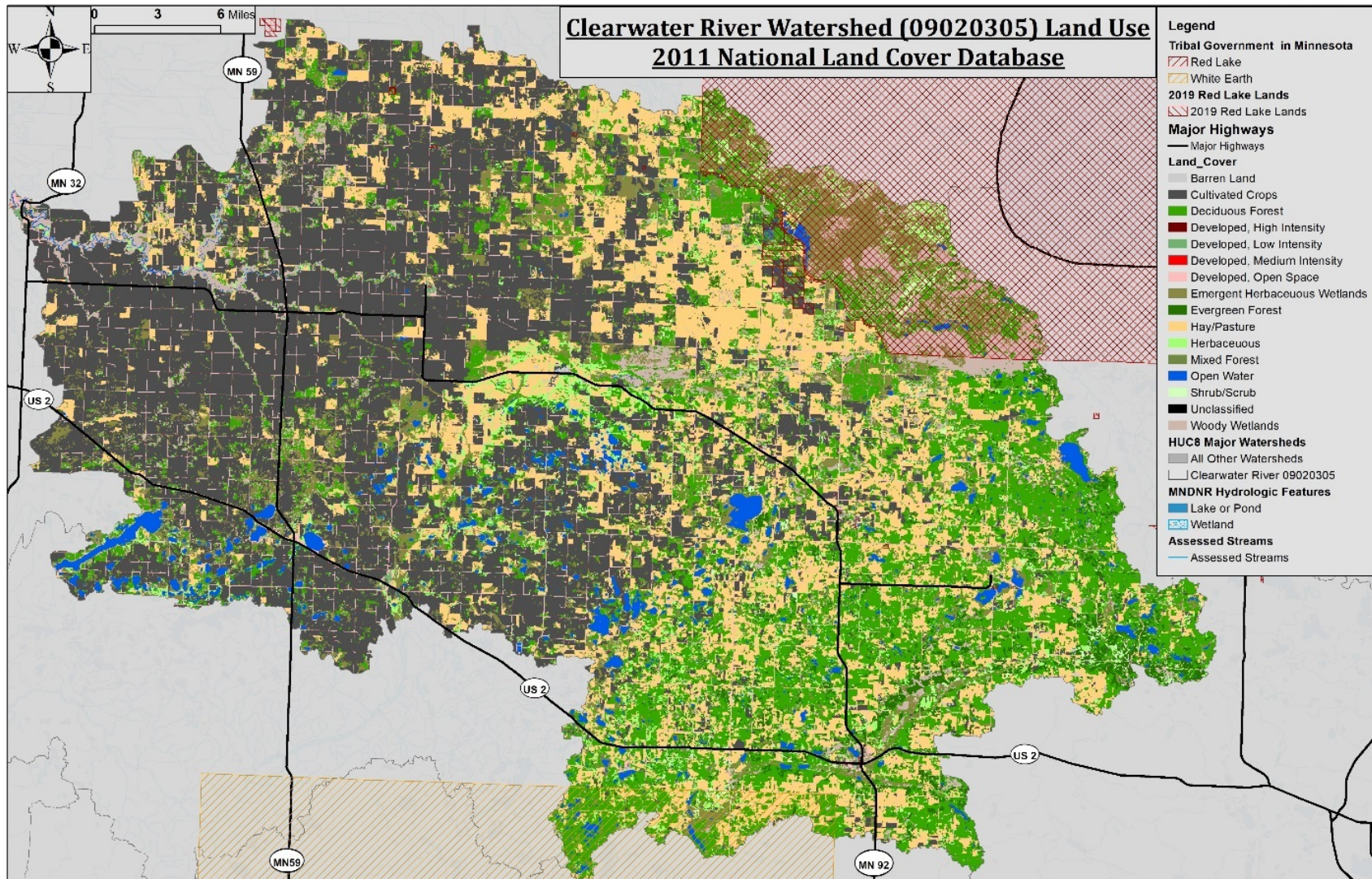
Clearwater River Watershed Restoration and Protection Strategy (WRAPS)

District staff sent trend analysis Excel files for each analyzed long-term monitoring station to the MPCA Project Manager so she could make some changes to the appearance of the tables. Some revisions were made to the trend analysis and discussion for the Bee Lake inlet and outlet monitoring stations. Some of the WRAPS and Total Maximum Daily Load (TMDL) maps were edited to include a newly acquired GIS layers that show a more complete picture of where tribal lands are located within the watershed. District staff answered additional questions for the MPCA Project Manager as the WRAPS, TMDL, and press release documents were being prepared for the public notice period.

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Other

- Northwest Minnesota (Virtual) Water Festival materials (student packets and teacher packets) and videos were finalized and distributed to teachers along with any materials/supplies that were necessary for the activities.
- District staff worked on water quality reports for the months of [June](#), [July](#), [August](#), and [September](#).
- A landowner contacted the District to discuss a failing dam at the outlet of South Connection Lake. District staff researched the history of the dam and tried to determine the entity that is responsible for the dam.
- Construction of the Black River Impoundment began in early October.
- District staff provided some input on an article written by MPCA staff ([Red River Basin Partnerships Deliver Solutions](#)) about how the partnerships formed during the Watershed Restoration and Protection Strategy and One Watershed One Plan processes are leading to projects that will reduce pollutant loading.
- The MPCA provided an [updated schedule](#) for anticipated MPCA monitoring and assessment activities. Intensive Watershed Monitoring of the Thief River Watershed was scheduled for 2021. Some planning and meetings with local partners had been completed prior to COVID-19 restrictions. The start of monitoring will be delayed for one calendar year to allow biological monitoring staff to get caught up on work that wasn't completed during the 2020 social distancing work stoppage. Start dates for all remaining watersheds (2021 and on) will also be delayed by one full year.
- Lack of a buffer is causing erosion along Polk County Ditch 14, near the confluence with Lower Badger Creek.



- While retrieving water level loggers, District staff saw that Polk County had stabilized an eroding bank of Kripple Creek, just downstream of the 180th Avenue SW crossing.

Kripple Creek at 180th Ave SW, April 2020 (Before)



Kripple Creek at 180th Ave SW, October 2020 (After)



Water quality related notes and minutes from the October 8, 2020 Red Lake Watershed District Board of Managers meeting.

- Motion by Ose, seconded by Tiedemann, to authorize President Nelson, the authority to sign the RRWMB Water Quality Program Grant Agreement for the Thief River Falls Oxbow Project, RLWD Project No. 46Q. Motion carried.
- Discussion was held on the need to appoint Board members to the Clearwater River 1W1P, RLWD Project No. 149B Policy and Advisory Committee. Motion by Ose, seconded by Tiedemann, to appoint Manager Torgerson as the Delegate and Manager Sorenson as the Alternate to the Clearwater River 1W1P, RLWD Project No. 149B Policy Committee. Motion by Torgerson, seconded by Sorenson, to appoint Manager Page to the Clearwater River 1W1P, RLWD Project No. 149B Advisory Committee.

October 2020 Meetings and Events

- **October 6, 2020** – Northwest Minnesota (Virtual) Water Festival virtual meeting to review the student packet and videos.
- **October 13, 2020** – Red Lake River 1W1P conference call
 - Red Lake County SWCD is working with a landowner to complete a grade stabilization project – survey and design has already been requested.
 - Consultants will probably be needed to help LGUs complete survey and design work for 1W1P projects – will reach out on an as-needed basis.
- **October 20 – 21** – Minnesota Water Resource Virtual Conference
 - “Collaboration in Water Resource Management”
 - Sometimes communication helps you find potential project partners that you didn’t know about.
 - The presentation included a video about NOAA’s work in the Great Lakes, that could be an idea for a future, similar RLWD public information video:
https://www.youtube.com/watch?v=ZcF07_fPmJ8
 - “Unregulated Contaminants in Source and Treated Drinking Water (PFAS)”
 - “Lake Management Strategies for Harmful Algal Bloom Management”
 - Harmful Algal Blooms (blue-green algae) are symptomatic of ecosystem imbalance and are expected to worsen with climate change (increased temperature, reduced water column mixing, longer droughts, high intensity precipitation events, habitat loss, changes in weather patterns)
 - Bi-weekly monitoring was recommended for lakes that have experienced HABs.
 - Alum treatments are used as a long-term treatment where external (watershed) nutrient sources have been addressed.
 - Elizabeth Crafton of Hazen and Sawyer shared some good resources of blue-green algae information. Apparently, hydrogen peroxide has been a successful treatment for blue-green algae blooms. It stops the proliferation of the blue-green algae without killing it (killing the algae with algaecides can lead to “side effects” from the dying algae like nutrient release and dissolved oxygen depletion.
 - [Algae and cyanotoxins resources](#)
 - [Combating algae growth and increased nutrient loadings](#)
 - [Horizons Newsletters](#)

- “A Holistic Adaptive Management Plan for Improving Como Lake over the Next 20 Years”
- “Satellite Remote Sensing for Water Quality Spatial/Temporal Trend Analysis in 10,000+ Minnesota Lakes Using and Automated High-Performance Computing Environment”
 - LCMAP (Land Change Monitoring, Assessment, and Projection)
- “Learning from Leaders of Successful Water-Quality Case Studies in the Minnesota River Basin “
- “River Nutrient Trends over the Past 20 Years”
- “Bridging the Gap between Science and the Public through Watershed Education and Engagement”
- ‘Aquatic Invasive Species: Boater Behavior and Willingness to Pay for Local Management”
- “Tracking Watershed BMP Adoption Progress Throughout Minnesota”
- “Slope Stabilization in Unprecedented Wet Times”
- “Sand Creek Bluff Erosion Mitigation Projects“
 - The Sand Creek Bluff Erosion Mitigation Projects used some prioritization considerations that may be useful for prioritizing streambank erosion projects within the RLWD ([Sand Creek Near Channel Sediment Reduction](#), 2015).

Prioritization Matrix, Weights, and Values for Streambank Stabilization Projects					
Parameter	Weight	1	3	5	7
Sediment/ nutrient loading	2	No significant load reduction to priority resource	Minor reduction in sediment loading (<X cubic yards/year), sediment is managed or deposited before reaching priority resource	Moderate reduction in sediment yield to priority resource, reduced yields to perennial tributaries (X-Z CY/YR)	Significant reduction in sediment yield to priority resources and perennial tributaries (>Z CY/YR)
Erosion/channel stability	1.5	Minimal improvement to erosion and stability	Low to moderate improvement (<X cubic feet/foot/year	Moderate improvement (<Y CF/FT/YR)	Significant improvement to overall stream stability (<Z CF/FT/YR)
Project cost	1	>\$300K	\$200K - \$300K	\$50K - \$200K	\$0 - \$50K
Project complexity	1	Geotechnical considerations, specialty design services required, difficult access, heavy oversight, major earthwork, EAW/EIS permitting	Geotechnical considerations, difficult access, engineering plans required, earthwork, significant permitting	Moderately complex, no specialty engineering required, some access issues, minor earthwork, basic permitting	Elementary solution, shelf design, volunteer and hand labor implementation, no permits
Infrastructure risk	0.5	No risk to infrastructure with no action, or no infrastructure present	Low to moderate infrastructure risk (100-150 ft away) and minimal risk to public safety with no action or value <\$100,000	Infrastructure at moderate but not immediate risk (50-100 ft away), moderate public safety risk or value <\$200,000	Infrastructure at high or imminent risk of failure with no action (<50 ft away). Public safety at risk or value >\$200,000

- “What Affects Farmer Decision-Making About the Use of Cover Crops”
- “Down the Drain: Successful Collaborations and Emerging Issues for Decentralized Wastewater Management”
- “Comprehensive and Systematic Approach to Stormwater Treatment (St. Cloud)”
- “Freshwater Mussels and Clean Water Regulation in Minnesota: The Importance of Water Quality Standards in Sustaining Ecosystem Services by Protecting Freshwater Mussels”
 - The Red Lake River and Clearwater River watersheds were among best in the state for mussel abundance, especially captured/minute.
- Some attendees watched a screening of the movie Brave Blue World, a documentary that is now available on Netflix.
- “Watershed Scale Planning and River Restoration in a Changing Climate”
 - Despite billions of dollars spent on flood damage reduction projects throughout the country, flood damages have increased.
 - Climate change is contributing to more frequent flooding events.
 - Development within floodplains is also a problem when it comes to flood damage expenses (the development of the Oxbow community along the Red River, even after the 1997 flood, comes to mind).
 - Resistance to conserving/restoring floodplains instead of developing them is often based on property tax revenue.
 - There are benefits that come from floodplain restoration:
 - Reduced storm/flood damage
 - Increase in property values
 - Business development around the restoration project
 - Increase in aquifer recharge
 - Recreation access and quality of life
 - Water quality
 - Habitat
 - Improve communication with floodplain managers (zoning authorities, state agencies, watershed districts, and FEMA) about climate (and flooding) considerations.
 - “Don’t pitch your tent in the middle of the highway, even if there are no cars coming.”
 - Allow floodplains to have natural functions.
 - Introducing fill for development reduces floodplain storage.
 - “Today’s 500-year floodplain is tomorrow’s 100-year floodplain.”
 - Compensatory storage: every acre of fill within a floodplain requires 2 acres of storage.
 - A proper channel restoration will increase floodplain capacity/connectivity instead of hard armoring so that it does not transfer energy and erosion potential downstream. Re-meandering a straightened channel reduces energy both by decreasing the slope, and the riffle pool sequencing acts to dissipate energy. Applying roughening bank protection, like toe wood structures, help to dissipate energy better than smooth rip rap and also improves fish habitat. Reaches downstream of unstable channels are often severely impacted by the

excess sediment entering the reach, so a restoration that reduces erosion will reduce sediment transport to downstream reaches.

- For incised channels, partners will need to decide if the goal is to raise the channel up to the abandoned floodplain, excavate a floodplain at the current elevation, or create a hybrid of these strategies.
 - “Putting flood prevention levees in floodways is bad – it passes the problem on to someone else (and probably makes it worse).”
 - Streams that are stable and connected to a flood plain sustained much less damage during extreme events.
 - A big problem is when dissent to climate change science is based on some form of variability (if climate change was happening, why was it so cold yesterday).
 - Variability needs to be recognized. There may be swings toward drought sometime in the future, even if we are wetter on average. The possibility of drought needs to be a consideration, even though it is wet now and getting wetter over the long term.
 - “Stream Restoration in Minnesota”
 - Evaluation program for restoration projects funded by the Clean Water Fund.
 - Adapting watershed planning and modeling for a changing climate
 - Joe Magner spoke of the benefits of 2-stage ditches.
 - Increase adoption of conservation tillage and cover crop practices on cultivated land.
 - Using Climate Tools for Adaptation and Planning in Minnesota
- **October 21, 2020** – Red Lake River 1W1P Policy Committee meeting
- **October 27 – 29** – BWSR Academy
 - Project Management
 - LGU One Watershed One Plan Retrospect to Help Others Plan Ahead
 - The Pine River 1W1P looked for lakes with declining trends in water quality and used Paul Radomski’s Phosphorus Sensitivity model to prioritize lakes for protection.
 - The Crow Wing SWCD created “mini” lake plans that took information from the 1W1P and created small informational documents for each lake association.
 - Tips and Techniques for Meetings with the Public
 - Mike Kennedy (MPCA) discussed strategies that could be used before and during a meeting:
 - “5 W’s and an H” to consider before a meeting (Who, What, Where, When, Why, How)
 - ORID method (Objective, Reflective, Interpretive, and Decisional; or “what,” “gut,” “so what,” and “now what”)
 - SWOT examination (Strengths, Weaknesses, Opportunities, and Threats).
 - Write a realistic goal/objective as an outcome statement for each meeting. That goal can be something that you can get back to if the conversation goes astray.
 - The most important part of the meeting planning process is to determine WHY you are doing the meeting.
 - “Harry Potter and the Ghostly Grant Application”

- Presenters compared grant writing to story writing (plot, resolution, conflict, characters, setting). Good story telling in a grant application can take the science and make it memorable, understandable, and relatable.

Red Lake Watershed District Monthly Water Quality Reports are available online:
<http://www.redlakewatershed.org/monthwq.html>.

Learn more about the Red Lake Watershed District at www.redlakewatershed.org.

Learn more about the watershed in which you live (Red Lake River, Thief River, Clearwater River, Grand Marais Creek, or Upper/Lower Red Lakes) at www.rldwatersheds.org.

“Like” the Red Lake Watershed District on [Facebook](#) to stay up-to-date on RLWD reports and activities.

Photo of the Thief River taken by Pennington SWCD

