

# RED LAKE WATERSHED DISTRICT

May 9, 2019

Agenda

9:00 a.m.

9:00 a.m.	Call to Order	Action
	Review and approve agenda	Action
	Requests to appear	Information
	April 25, 2019 Minutes	Action
	Financial Report dated May 8, 2019	Action
	Investment Summary dated May 8, 2019	Information
	Pine Lake Project, RLWD Project No. 26	Information
	Thief River Falls West Side FDR Project, RLWD Project No. 178	Information
9:30 a.m.	Red Lake County Central – River Watch Students	Information
	May 23, 2019 Board Meeting – Change meeting time	Action
	Ditch 16, RLWD Project No. 177-Set Bid Opening Time Bond Purchase – Update	Action Information
	Improvement to Polk Co. Ditch 39, RLWD Ditch 17, RLWD Project No. 179	Information
	Thief River 1W1P, RLWD Project No. 149A	Information
	Water Quality Update – Corey Hanson	Information
	Boundary Sandhill River Watershed District	Information
	Impoundment Update	Information
	Permits: No. 19006, 19014-19026	Action
	Deny Permit No. 19013, Dan Johnson, Huntsville Twp., Polk County	Action
	Telephone Quotes	Info./Action
	Vehicle Quotes	Info./Action

Legal Counsel Update

Information

Managers' updates

Information

Adjourn

Action

UPCOMING MEETINGS

May 21, 2019

RRWMB Meeting, UMC-Crookston, 9:30 a.m.

May 23, 2019

RLWD Board Meeting, 9:00 a.m.

May 23, 2019

TRF Westside FDR Hearing, Quality Inn, TRF, 6:00 p.m.

June 13, 2019

RLWD Board Meeting, 9:00 a.m.

June 26-28, 2019

2019 MAWD Summer Tour

June 27, 2019

RLWD Board Meeting, 9:00 a.m.

# DRAFT

RED LAKE WATERSHED DISTRICT  
Board of Manager's Minutes  
April 25, 2019

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

Present were: Managers Terry Sorenson, Gene Tiedemann, Brian Dwight, Dale M. Nelson, Allan Page, LeRoy Ose, and Les Torgerson. Staff Present: Myron Jesme and Tammy Audette and Legal Counsel Sparby.

The Board reviewed the agenda. A motion was made by Page, seconded by Dwight, and passed by unanimous vote that the Board approve the agenda. Motion carried.

The Board reviewed the April 11, 2019 minutes. Motion by Sorenson, seconded by Ose, to approve the April 11, 2019 Board meeting minutes with corrections. Motion carried.

The Board reviewed the Financial Report dated April 24, 2019. Motion by Tiedemann, seconded by Ose, to approve the Financial Report dated April 24, 2019 as presented. Motion carried.

Staff member Arlene Novak stated that Unity Bank requested a Release of Pledged Collateral. Motion by Sorenson, seconded by Tiedemann, to approve the Release of Pledged Collateral with Unity State Bank. Motion carried.

The Board reviewed a letter from the Clearwater County Auditor/Treasurer regarding notification they received that the Tax Court issued an order for Judgement between Great Lakes Gas Transmission LTD and the MN Commissioner of Revenue. The recomputed tax statement in Clearwater County has a reduction of taxes in the amount of \$113,760, with the District receiving a reduction of \$4,199 in our May settlement for taxes paid in 2019.

The Board reviewed a quote from ESRI for a maintenance subscription for ArcGIS in the amount of \$675.00. Administrator Jesme stated that Staff member Ashley Hitt applied for and received a grant from ESRI which reduced the yearly rate from \$3,374.93 to \$675.00. Motion by Torgerson, seconded by Page, to approve the quote in the amount of \$675.00 from ESRI for a maintenance subscription for ArcGIS. Motion carried.

Engineer Tony Nordby, Houston Engineering, Inc., stated that staff from Houston Engineering will be on-site at the proposed Black River Impoundment, RLWD Project No. 176, on May 7<sup>th</sup> to complete wetland delineation near the Black River Church and an area near one of the diversion ditches. Nordby indicated that these are the two locations that were questioned by members of WACA. Nordby stated that once the findings are submitted to WACA, a determination should be made on the submitted permit applications.

The Board reviewed the Findings of Fact and Order Concerning the Preliminary Hearing for Ditch 17, RLWD Project No. 179. Discussion was held on part of the resolution that names three disinterested viewers. Jesme indicated that he has reached out to three viewers, but they have not accepted the project yet so listing their names is premature. Discussion was held on not listing individual names of the viewers, rather stating the appointment of three disinterested viewers. Motion by Ose, seconded by Tiedemann, to approve the Findings of Fact and Order Concerning the Preliminary Hearing for Ditch 17, RLWD Project No. 179, with corrections stated. Motion carried.

Engineer Jerry Pribula, Pribula Engineering, PLLC, presented the Plans and Specifications for Ditch 16, RLWD Project No. 177. Pribula stated that the project contract will have a start date of on or before July 8, 2019, with completion date of on or before July 8, 2020. The awarded Contractor will also be required to complete installation of the State Highway 220 culvert prior to the pre-haul of beets this fall. Motion by Tiedemann, seconded by Page, to approve the Plans and Specifications for construction of Ditch 16, RLWD Project No. 177, and set the Bid Opening for May 23, 2019 at the District office, with the time to be determined at the May 9, 2019 Board meeting. Motion carried.

The Board reviewed a proposal from Tinjum Appraisal Company, Inc., to complete appraisal of property for the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178 in the amount of \$8,500. Motion by Torgerson, seconded by Tiedemann, to approve the proposal from Tinjum Appraisal Company, Inc. for the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178. Motion carried. Administrator Jesme stated that he will request a timeframe for completion of the appraisal.

Engineer Nate Dalager, HDR Engineering, Inc., discussed the proposed Watershed Management District (WMD) for the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178. Dalager reviewed the estimated project costs and funding sources. The District will need to determine the maximum amount for assessment under the WMD. The WMD will also need to have a maintenance fund. Discussion was held on the location of the hearing. Administrator Jesme updated the Board on a hearing Pennington County held regarding the transferring County Ditch 70 to the City of Thief River Falls. Jesme understood the hearing went very well with the County approving the transfer of Pennington County Ditch No. 70, contingent on the Thief River Westside FDR Project being completed.

The Board reviewed the permits for approval. Motion by Sorenson, seconded by Dwight, to approve the following permits with conditions stated on the permit: No. 19007, Ken & Randy Wagner, Lowell Township, Polk County; No. 19008, Minnesota Department of Transportation, Bridge Township, Koochiching County; No. 19009, River Falls Township, Pennington County; No. 19011, Owen Peterson, Keystone Township, Polk County; and No. 19012, Pennington County Highway Department, Cloverleaf Township. Motion carried.

Administrator Jesme reviewed a draft Government Data Practices Policy and Data Request Form for the District, which was submitted for review by the Board. It was the consensus of the Board to have the document reviewed by legal counsel and bring back to the Board at a later meeting.

Staff member Loren Sanderson updated the Board on operation of the District impoundments. Sanderson stated that a substantial amount of water was already stored within the Euclid East, Brandt and Parnell Impoundments prior to closing of the gates on April 6, 2019. Discussion was held on the length of time to hold water, with consideration given to the integrity of the levies/embankment, if water is stored for a longer duration than 30 days. Sanderson noted that in compliance with the operating plan, Schirrick Dam should be empty today.

Manager Torgerson presented photos of area flooding on Pine Lake, and a photo of the outlet of Judicial Ditch 5, (Four-Legged Lake). Discussion was held on the elevation of cabins on Pine Lake.

Manager Tiedemann discussed the concerns of landowner Ron Salentine, regarding the elevation of the emergency spillway on the Brandt Impoundment. It was the consensus of the Board, to have District staff work with Mr. Salentine, to review the elevations.

Discussion was held on the potential of purchasing an additional vehicle for District staff use. The Board directed Administrator Jesme to request quotes for an additional vehicle and report back to the Board.

Manager Dwight discussed photos he took of tile pumps running into an already flooded ditch system. Discussion was held regarding tile pumps running and not allowing for downstream maintenance of a ditch system.

Motion by Dwight, seconded by Ose, to set the maximum Watershed Management District assessment in the amount of \$500,000 for the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178 and schedule the public hearing for, Thursday, May 23, 2019, at 6:00 p.m. at the meeting rooms of the Quality Inn, 1060 Highway 32 South, Thief River Falls, MN 56701. Motion carried. It was the consensus of the Board, to wait until the public hearing is held, to receive public input for the length of time to schedule the Watershed Management District assessment payback time period.

Motion by Torgerson, seconded by Page, to adjourn the meeting. Motion carried.

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Terry Sorenson, Secretary

**RED LAKE WATERSHED DISTRICT**  
**Financial Report for May 8, 2019**

<b>Ck#</b>	<b>Check Issued to:</b>	<b>Description</b>	<b>Amount</b>
online	EFTPS	Withholding for FICA, Medicare, and Federal taxes	4,211.37
online	MN Department of Revenue	Withholding taxes	779.29
online	Public Employees Retirement Assn.	PERA contributions	2,756.18
37441	Ameripride Services Inc.	Office rug rental	37.93
37442	Tammy Audette	Clean offices in April	320.00
37443	Mark Beito	Remove beaver from Moose River Impoundment pools	1,575.00
37444	Voided		-
37445	Centurylink	Telephone expense	275.19
37446	City of Thief River Falls	Electricity, water, sewer, etc.	512.94
37447	ESRI	ArcGIS Desktop Basic maintenance	675.00
37448	Farmers Union Oil Company	Gas for vehicles	345.74
37449	Fleet Supply	Ratchet straps	19.23
37450	Holthusen Construction Co.	Snowplow out to Moose River Dike	200.00
37451	Houston Engineering, Inc.	Engineering fees for Thief River 1W1P	1,326.00
37452	Hugo's #7	Building maintenance, meeting supplies, & Board mtg. supp.	520.90
37453	Ihle Sparby & Haase PA	*Legal services from Dec. 31 to May 3	8,679.00
37454	Myron Jesme	Mileage and per diem-WQ meeting	331.60
37455	Les's Sanitation Inc.	Garbage pickup	34.70
37456	Marco	**See below for explanation	2,347.27
37457	NCPERS	Life insurance premium	112.00
37458	Dale Nelson	Mileage	73.66
37459	Northwest Beverage, Inc.	H2O for office	70.75
37460	Northwestern Mutual Financial	Deferred Compensation	715.72
37461	Northwest Service Cooperative	Registration for Administrative seminar	55.00
37462	Olson Construction	Snow plow parking lot in April	60.00
37463	O'Reilly Automotive, Inc.	Battery for 2015 Ford pickup	114.33
37464	LeRoy Ose	Mileage	567.24
37465	Purchase Power	Postage	150.00
37466	Rinke Noonan	Monthly legal services retainer	200.00
37467	Gerald Rychlock	Read, observe and operate gates at Moose River Impoundment	225.00
37468	Sjobergs Cable TV	Internet expense	106.95
37469	Sun Life Financial	Life insurance premium	128.56
37470	Thibert Chevrolet & Buick Co.	Rotate tires, air filter and oil change	125.40
37471	Thief River Falls Times	1500 No. 10 RLWD envelopes	120.40
online	Further	Medical FSA	20.00
direct	Blue Cross Blue Shield	Health insurance premium	4,076.00
direct	Brian Dwight	Mileage	534.18
direct	Al Page	Mileage	107.88
direct	Terry Sorenson	Mileage	130.50
	<b>Payroll</b>		
	Check #11650-11663 & 7446		15,218.11
	<b>Total Checks</b>		<b>\$ 47,859.02</b>

**\*Ihle Sparby & Haase PA**

Proj. 01 Administrative	4,305.00
Proj. 102 Four Legged Lake	1,746.00
Proj. 122A Challenger Dt. Realign.	342.00
Proj. 149A TR 1W1P	558.00
Proj. 177 RLWD Ditch No. 16	936.00
Proj. 178 TR Westside FDR	<u>792.00</u>
<b>Total</b>	<b>8,679.00</b>

**\*\* Marco**

Monthly Managed IT Services	1,441.43
Copier maintenance for April	452.92
Copier maintenance for May	<u>452.92</u>
<b>Total</b>	<b>2,347.27</b>

**Banking****Northern State Bank**

Balance as of April 24, 2019	\$ 128,861.77
Total Checks Written	(47,859.02)
Receipt #414531 State of MN-Payment for Agassiz Wetland Habitat Grant	23,781.54
Receipt #414532 Northern State Bank-Monthly interest	124.01
Receipt #414536 State of Minnesota -Reimbursement for cost share of TR Westside FDR	<u>73,907.64</u>
Balance as of May 8, 2019	<u>\$ 178,815.94</u>

**Border State Bank**

Balance as of March 31, 2019	\$ 18,223.86
Receipt #414533 Border State Bank-Monthly interest	<u>8.12</u>
Balance as of April 30, 2019	<u>\$ 18,231.98</u>

**American Federal Bank-Fosston**

Balance as of April 24, 2019	\$ 2,151,131.96
Receipt #414530 American Federal-Interest added directly to CD (receipt only)	-
Receipt #414534 American Federal-Monthly interest	3,067.44
Receipt #414535 Unity Bank (CDARS) Monthly interest on CDs	<u>1,456.08</u>
Balance as of May 8, 2019	<u>\$ 2,155,655.48</u>

# Red Lake Watershed District

as of May 9, 2019

<u>Name of Institution</u>	<u>Purchase/ Current Value</u>	<u>Int. Rate</u>	<u>Mat. Date</u>	<u>*Maturity Amount</u>
10010 Northern State Bank (checking)	\$ 178,815.94	0.80%		\$ 178,815.94
10020 Border State Bank (Investor savings) Thief River Falls	\$ 18,231.98	0.50%		\$ 18,231.98
10030 American Federal Bank Fosston	\$ 2,155,655.48	1.59%		\$ 2,155,655.48
10740 CDARS-Signature Bank, New York monthly interest payment via check	\$ 200,000.00	2.05%	7/18/2019	\$ 200,000.00
10740 CDARS-Valley National Bank monthly interest payment via check	\$ 159,000.00	2.05%	7/18/2019	\$ 159,000.00
10740 CDARS-Signature Bank, New York monthly interest payment via check	\$ 41,000.00	2.05%	7/18/2019	\$ 41,000.00
10660 CDARS-Bank of America 6 mos. CD, int. paid monthly	\$ 44,500.00	2.45%	7/18/2019	\$ 44,500.00
10660 CDARS-St. Louis Bank 6 mos. CD, int. paid monthly	\$ 155,500.00	2.45%	7/18/2019	\$ 155,500.00
10870 American Federal-Fosston-12 month monthly interest compounded	\$ 203,157.69	2.10%	7/26/2019	\$ 203,157.69
10260 CDARS-SmartBank, Pigeon Forge, TN (int.pd quarterly via check)	\$ 200,000.00	2.05%	9/5/2019	\$ 202,050.46
10710 CDARS-BOKD, National Assn., Tulsa (int.pd monthly via check)	\$ 200,000.00	2.33%	10/3/2019	\$ 200,000.00
10880 Ultima Bank-Fosston (int. compounded sem-annually)	\$ 600,000.00	2.52%	10/22/2019	\$ 615,120.00
RiverWood Bank-Bemidji (Bagley) Interest paid at maturity	\$ 200,000.00	2.35%	11/8/2019	\$ 204,700.00
Edward Jones	<u>\$ 200,000.00</u>	2.75%	12/27/2019	<u>\$ 200,000.00</u>
	<u>\$ 4,555,861.09</u>			<u>\$ 4,577,731.55</u>

April 30, 2019:

General Fund balance (includes +\$652.39 in payroll liabilities and +\$100 petty cash)	244,415.80
Special Revenue fund balance	71,448.10
Capital Projects fund balance	<u>4,240,097.19</u>
	4,555,961.09





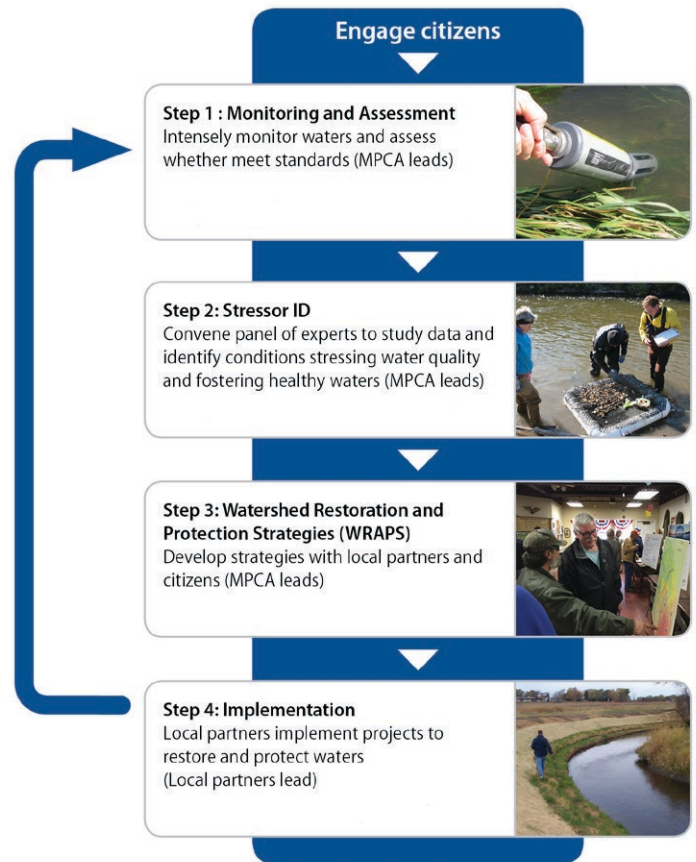
# Grand Marais Creek Watershed

## Watershed approach

Minnesota has adopted a watershed approach to address the state's 80 major watersheds (denoted by 8-digit hydrologic unit code or HUC). This approach looks at the drainage area as a whole instead of focusing on lakes and stream sections one at a time, thus increasing effectiveness and efficiency. This watershed approach incorporates the following activities into a 10-year cycle:

- Water quality monitoring and assessment
- Watershed analysis
- Public participation
- Planning
- Implementation
- Measurement of results

The Grand Marais Creek Watershed process began in 2012. The watershed assessments incorporated biology (fish and macroinvertebrates) along with the traditional chemistry and flow for a comprehensive watershed health assessment. The watershed approach adds a protection component for water resources that currently meet standards rather than focusing entirely on restoration of impaired waters.



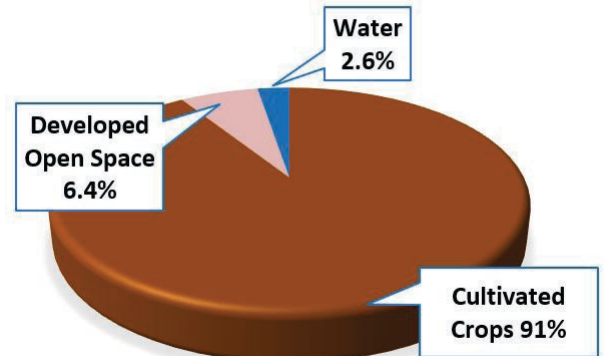
## Watershed characteristics

- Size: 592 square miles.
- Water: One lake >25 acres and 69 perennial river miles.
- Counties: Polk, Pennington and Marshall.
- Land use: Predominantly cultivated crops including spring wheat, soybeans and sugar beets.
- The 8-digit HUC for the Grand Marais Creek Watershed is 09020306.

Cultivated crops are the dominant land use and cover more than 91% of the watershed. The next largest land use is developed open space with 6.4% of the watershed area. Spring wheat, soybeans, corn, and sugar beets are the main crops grown in the watershed.

Some of the larger pools in the watershed are artificial impoundments including the Euclid, Parnell, and Brandt impoundments which provide

## LAND USE - GRAND MARAIS CREEK WATERSHED



flood mitigation for downstream agricultural land. Several large wetland complexes exist that are important resources as they provide wildlife habitat, flood storage, and water quality protection.

Artificial and altered natural watercourses are common in the Grand Marais Creek Watershed. Overall, 70% of the streams in the watershed have been channelized, ditched, or impounded. Recent water resources projects in the Grand Marais Creek Watershed have made great progress toward restoring natural hydrology. The upstream end of Grand Marais Creek is now an oversized channel that resembles a wetland or an oxbow lake more than it resembles a stream. Grand Marais Creek begins near the town of Fisher and flows northwest for 44.6 miles to the Red River. The cut-channel that once diverted Grand Marais Creek, through a straight channel, west to the Red River of the North has been stabilized and now only carries local runoff and excess flow from the Grand Marais Creek watershed.

## Assessments: Are waters meeting standards?

During the first phase of the watershed approach – intensive watershed monitoring – the Minnesota Pollution Control Agency (MPCA) and local partners collect data about biology such as fish populations, chemistry such as pollutant levels, and flow to determine if lakes and streams are meeting water quality standards.

Waters are “impaired” if they fail to meet standards. This map shows the impairments in the watershed.

Using data from these sampling efforts, it was determined that three stream reaches were impaired for recreation due to excessive levels of *E.coli* bacteria and required Total Maximum Daily Load (TMDL) studies.

TMDL studies identify sources of pollution in a watershed causing a particular impairment and then determine the reductions in those sources that are needed in order for the water body to meet state standards.



Impairments were also found for total suspended solids, fish and aquatic insect (macroinvertebrate) communities, low dissolved oxygen, and chloropyrifos (a pesticide). These impairments will be addressed at a later time.

## Stressors: What factors are affecting fish and bugs?

To develop strategies for restoring or protecting water bodies with biological impairments, agencies and local partners must first identify the possible causes, or stressors, of the impairments. The table below summarizes the predominant stressors in the indicated streams in the watershed.

AUID	Stream Name Description	Biological Impairment	Primary Stressor				
			Loss of Physical Connectivity	Lack of Base Flow	Lack of instream habitat	High Suspended Sediment	Low Dissolved Oxygen
09020306-515	<b>County Ditch 2</b> CD66 to Grand Marais Creek	F-IBI	●	●	●		○
		M-IBI		●		○	○
09020306-517	<b>County Ditch 43</b> Unnamed Ditch to County Ditch 7	F-IBI	●	●	●	○	○
		M-IBI		●		○	○
09020306-520	<b>Judicial Ditch 75</b> CD 7 to Red River	Fish	●	●	●		○

● = Primary stressor; ○ = Secondary stressor; *Source: 2015 Grand Marais Creek Watershed Stressor ID Report*

## Restoration and protection strategies

Based on output from modeling tools, One Watershed One Plan priority areas and input from the Grand Marais Creek WRAPS technical advisory committee, locations of watershed implementation efforts were prioritized as follows:

Priority 1 – Restoration of Grand Marais Creek and protection of the headwaters (approximately east of Highway 75).

Priority 2 – Restoration of Judicial Ditch 75 and County Ditch 2.

Priority 3 – Restoration of the lake plain ditch system, JD 1, and the direct drainage of the Red Lake River

The following implementation strategies will be used in the watershed to help restore and protect priority waterbodies:

- Restore stream and ditch connectivity to increase base flow, and remove/modify migration barriers such as beaver dams and flood control structures that are improperly sized or designed.
- Increase buffer widths adjacent to waterbodies. Promote/encourage more crop rotation.
- Restore the natural channel of Grand Marais Creek through habitat enrichment and erosion control projects.

## Next steps and measuring results

The restoration and protection strategies listed in the WRAPS report will be the basis for developing local implementation plans to restore and protect water resources. The report lays out goals, milestones and responsible entities to address protection and restoration priorities in the watershed. The targets are intended to provide guidance and “measuring sticks” to assess the watershed’s health and success of actions taken.

Water quality in some areas in Minnesota has declined over many decades. While restoration activities continue, new problems develop, such as converting land to intensive cropping that negatively impacts water quality. The perpetual challenge is to make improvements and keep up with new problems. Impacts from other factors such as climate change are still not completely understood. Consequently, it may take decades to fully restore impaired waters. For these reasons, it is much more cost-effective to protect clean waters while we can, such as those in the watershed.

## Key conclusions of first cycle

- The watershed is dominated by agriculture, with nearly 92% of the land use in crop production. Approximately 72% of streams have been altered from their original course in an effort to increase drainage rates to better suit the current land use practices of the area. These alterations have resulted in heavy sedimentation and lowered levels of oxygen in many streams, reducing the abundance and diversity in both fish and aquatic insect (macroinvertebrate) communities.
- Widespread changes in land use practices will need to occur to bring about significant improvement in most indicators. Increased public understanding and interest in these conditions is also needed since the vast majority of land in the watershed is privately owned and improvements will require a change in agricultural practices that are largely voluntary.
- Though the watershed is largely impaired, there were a few sensitive aquatic insects collected such as mayflies. There are likely additional communities that would repopulate if suitable habitat conditions were re-established; for example, a recently completed project that re-established meanders in Grand Marais Creek for a distance of about six miles. Coarse substrates, woody debris, re-meandering, depth variability, and more permanent flows will be vital for recolonization in these systems.
- Practices such as increased buffers, crop rotation and stream restoration are recommended to protect and restore waterbodies.



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### Full report

To view the full report, go online and search for “MPCA Grand Marais Creek Watershed WRAPS report.”

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### Contact person

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Minnesota Pollution Control Agency  
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218-846-8119



# Red Lake River Watershed

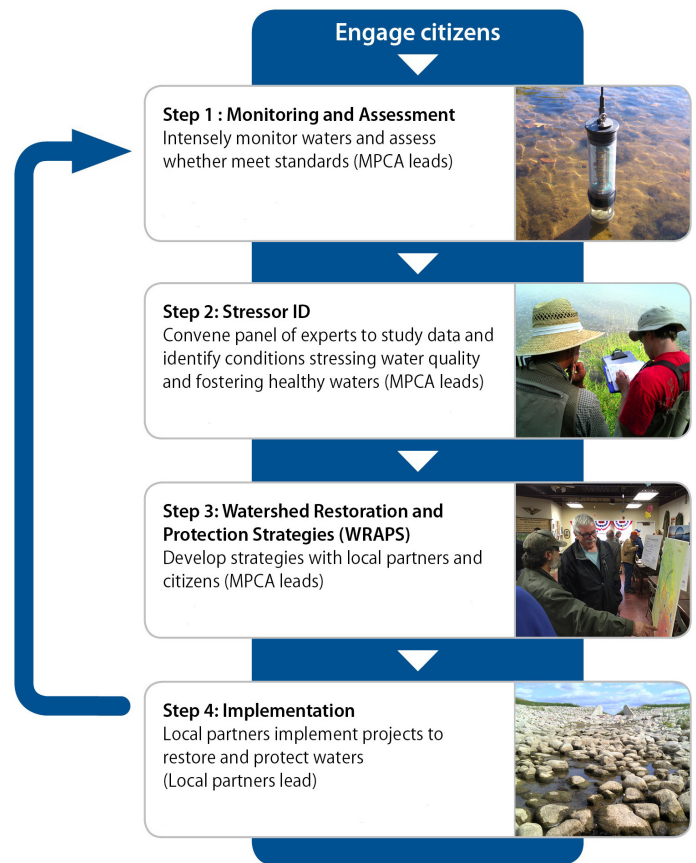
## Watershed approach

Minnesota has adopted a watershed approach to address the state's 80 major watersheds (denoted by 8-digit hydrologic unit code or HUC). This approach looks at the drainage area as a whole instead of focusing on lakes and stream sections one at a time, thus increasing effectiveness and efficiency. This watershed approach incorporates the following activities into a 10-year cycle:

- Water quality monitoring and assessment
- Watershed analysis
- Public participation
- Planning
- Implementation
- Measurement of results

The Red Lake River Watershed process began in 2012 with monitoring and an assessment that incorporated biology (fish and macroinvertebrates) along with the traditional chemistry and flow for a comprehensive watershed health assessment.

Based on the assessment and a stressor identification study, the MPCA and local partners developed a report containing strategies for restoring and protecting waters in the watershed (WRAPS Report). This is a summary of that report.

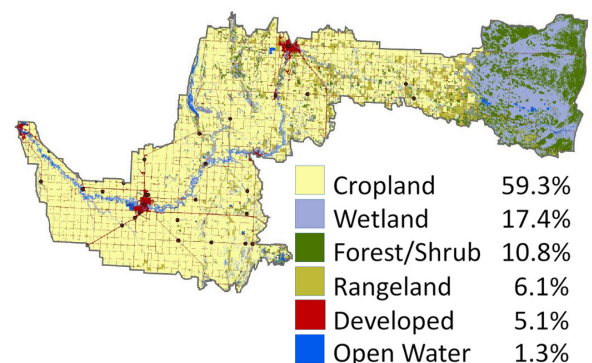


## Watershed characteristics

- Size: 1,420 square miles.
- Waters include: The Red Lake, Gentilly, Black and Little Black rivers; Burnham, Kripple and Cyr creeks; numerous ditches.
- Counties: Beltrami, Clearwater, Marshall, Pennington, Polk, and Red Lake.
- Land use: Predominantly cultivated crops including spring wheat, soybeans and sugar beets.
- The 8 digit HUC for the Red Lake River Watershed is 09020303.

Cultivated crops are the dominant land use and cover roughly 60% of the watershed. The next largest land use is wetlands with 17.4%. More than 70% of streams have been ditched to promote drainage and the region is prone to severe and frequent flooding. In more recent years, installation of agricultural drain tiles has become a common practice to even further

## Land Use - Red Lake River Watershed



increase drainage rates in the area. Although these projects accomplish their initial goal of draining water from the upstream land more quickly, many of the streams in the watershed have become more unstable and thus prone to bank failure.

The far eastern portion of the watershed, the headwaters area (the Red Lake River begins at the outlet of Lower Red Lake), is owned by the Red Lake Band of Chippewa (Red Lake Nation). The largely undeveloped land of the Red Lake Reservation is comprised of wetlands and forests and makes up approximately 18% of the watershed.

There are 12 dams in the watershed. Many are used to manage water levels to increase waterfowl habitat, and a few are used for hydroelectric power. The removal of two large dams (in 2005 and 2006) along the Red Lake River increased public safety and recreational opportunities to kayakers and anglers, and has provided fish habitat and the ability to access critical upstream spawning areas.

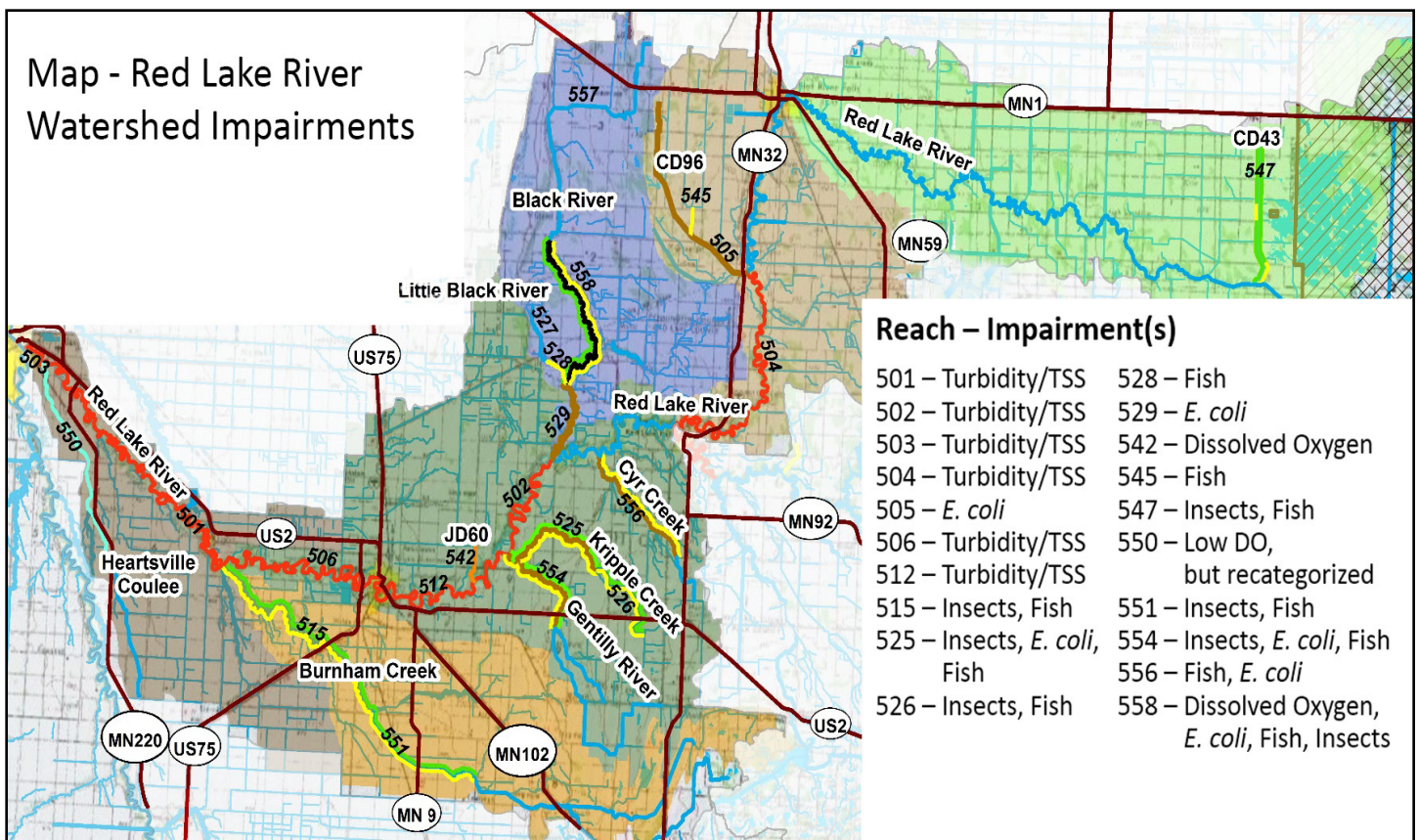
The Red Lake River is especially popular for recreation in the Red Lake Falls area. As the Red Lake River moves south and west into the Red River Valley Ecoregion, it becomes cloudier with increased turbidity.

## Assessments: Are waters meeting standards?

During the first phase of the watershed approach – intensive watershed monitoring – the MPCA and local partners collect data about biology such as fish populations, chemistry such as pollutant levels, and flow to determine if lakes and streams are meeting water quality standards.

Waters are “impaired” if they fail to meet standards. The map below shows the impairments in the watershed. The studies found 31 impairments of aquatic life (fish and aquatic insects) and recreation in 19 reaches of the Red Lake River and its tributaries. TMDL studies were done on six of reaches impaired for recreation due to excessive *E. coli* bacteria levels and six reaches impaired for aquatic life due to excessive levels of total suspended solids (TSS). TMDL studies identify sources of pollution in a watershed causing a particular impairment and then determine the reductions in those sources that are needed in order for the water body to meet state standards.

Additional analysis was done to identify likely sources of the *E. coli*. The tests showed *E. coli* contamination from livestock (likely from feedlots and cattle in streams), humans (likely from faulty septic systems), and birds (including waterfowl and swallows nesting under bridges).



## Stressors: What factors are affecting fish and bugs?

To develop strategies for restoring or protecting water bodies with biological impairments, agencies and local partners must first identify the possible causes, or stressors, of the impairments.

Lack of base flows is a stressor in all biologically impaired tributaries. Many have extended periods of intermittency, especially in late summer.

Reaches are also subject to periods of low dissolved oxygen (DO), which appear to coincide with low flow conditions.

Several reaches have a lack of instream habitat (e.g., clean, coarse substrate).

High suspended sediment is contributing to nearly all of the aquatic insect impairments.

Lastly, a loss of physical connectivity is a stressor for fish in the Little Black and Black Rivers (reaches 528 and 558).

AUID Suffix	Reach Name	Biological Impairment(s)	Stressors				
			Loss of Physical Connectivity	Lack of Base Flow	Lack of Instream Habitat	High Suspended Sediment	Low Dissolved Oxygen
515	Burnham Creek	F-IBI/M-IBI		•	•	•	•
525	Kripple Creek	F-IBI/M-IBI		•	•	•	•
526	Kripple Creek	F-IBI/M-IBI		•	•	•	•
528	Little Black River	F-IBI	•	•	•	•	•
545	County Ditch 96	F-IBI		•			•
547	County Ditch 43	F-IBI/M-IBI		•	•		•
551	Burnham Creek	F-IBI/M-IBI		•	•	•	•
554	Gentilly River	F-IBI/M-IBI		•	•	•	•
556	Cyr Creek	F-IBI		•			•
558	Black River	F-IBI/M-IBI	•	•	•	•	•

## Restoration and protection strategies

Members of the Red Lake River WRAPS Technical Advisory Committee (representing local and state agencies) have created a list of strategies to restore impaired waters and provide protection where water quality is good. An extensive list appears in section 3.3 of the Red Lake River Watershed WRAPS Report. Here are a few abbreviated examples from the list:

- Reduce overland and stream bank erosion
- Stabilize ditch outlets and improve agricultural drainage management
- Reduce pollutants in stormwater runoff within cities
- Improve in-stream habitat, base flows, and stream connectivity for fish passage
- Improve septic system compliance and grazing management, and limit cattle access to streams
- Improve the quality of vegetative buffers and protect wetlands
- Prioritize and target cost-effective projects and practices to achieve measurable improvements.

## Next steps and measuring results

Restoration and protection strategies listed in the WRAPS report were incorporated into the Red Lake River One Water One Plan. The WRAPS report lays out goals, milestones and responsible entities to address protection and restoration priorities in the watershed. Priority is given to streams closest to being restored and those closest to being impaired. Highlighted in the report are target areas most in need of projects/practices that reduce pollution and improve habitat. The report also provides guidance and “measuring sticks” to assess the watershed’s health and success of actions taken. Water quality in some areas in Minnesota has declined over many decades. Making improvements while keeping up with new problems is a perpetual challenge. Impacts from other factors such as climate change are still not completely understood. Consequently, it may take decades to fully restore impaired waters. For these reasons, it is much more cost-effective to protect clean waters while we can, such as those in the watershed that have been identified as being at risk for becoming impaired.

## Key conclusions of first cycle

- The watershed is dominated by agriculture, with nearly 60% of the land use in crop production. Approximately 70% of streams have been altered from their original course in an effort to increase drainage rates to better suit the current land use practices of the area. These alterations have resulted in heavy sedimentation and lowered levels of oxygen in many streams, reducing the abundance and diversity in both fish and aquatic insect (macroinvertebrate) communities.
- Ten streams were assessed as fully supporting aquatic recreation (swimming, etc.) while seven do not due to elevated bacteria levels. For aquatic life use (fish and aquatic insect communities) 15 streams were determined to be fully supporting and 13 stream reaches were found to be non-supporting. No lakes were assessed within the watershed.
- Studies found 31 impairments of aquatic life (fish and aquatic insects) and recreation in 19 reaches of the Red Lake River and its tributaries. TMDL studies were done for six tributary reaches impaired for recreation due to excessive *E. coli* bacteria levels and six reaches impaired for aquatic life due to excessive total suspended solids. Additional analysis done to identify sources of the *E. coli* using DNA showed contamination from livestock (likely from feedlots and cattle in streams), humans (likely from faulty septic systems), and birds (including waterfowl and swallows nesting under bridges).
- Aquatic biology is generally in good condition on the Red Lake River main-stem channel. However, both fish and macroinvertebrate (aquatic insect) communities are in poor condition on a majority of the tributaries. Insufficient base flow is the most common and impactful stressor for aquatic biology and dissolved oxygen within impaired Red Lake River tributaries. There were no pollutant-based causes of low DO or biological impairments found.
- Landowners, farmers and water managers in the watershed have implemented many projects and practices to improve water quality; however, additional widespread changes in land use practices will need to occur to bring about significant improvement in most indicators. Increased public understanding and interest in these conditions is also needed since the vast majority of land in the watershed is privately owned and improvements will require a change in agricultural practices that are largely voluntary.



In 2005, a project involving a number of state and local watershed partners removed an old dam in Crookston (left) and replaced it with a series of rapids formed from boulders (pictured from opposite side of river). This project, along with a similar project upstream of town, restored fish passage from the Red River in East Grand Forks to Thief River Falls, a distance of 125 river miles. Fish now have access to better spawning habitat.

## Full report

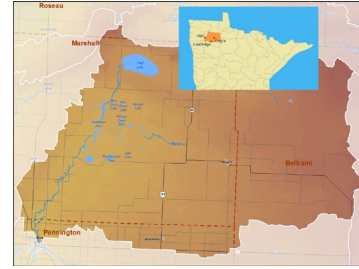
To view the full report, go online and search for “MPCA Red Lake River Watershed WRAPS report.”

## Contact person

Denise Oakes  
Minnesota Pollution Control Agency  
[denise.oakes@state.mn.us](mailto:denise.oakes@state.mn.us)  
218-846-8119



# Thief River Watershed



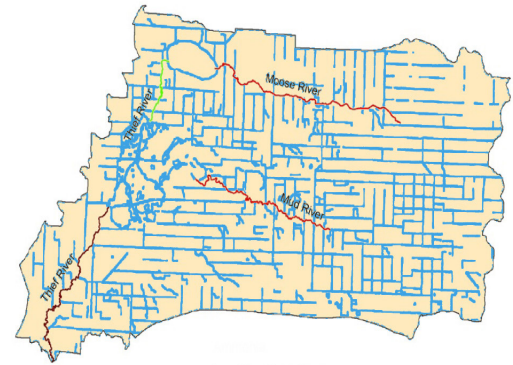
## Watershed approach

Minnesota has adopted a watershed approach to address the state's 80 major watersheds. This approach looks at the drainage area of a watershed as a whole instead of focusing on lakes and stream sections one at a time, thus increasing effectiveness and efficiency. This watershed approach incorporates the following activities into a 10-year cycle:

- Water quality monitoring and assessment
- Watershed analysis
- Civic engagement and public participation
- Planning and implementation
- Measuring results

The Minnesota Pollution Control Agency (MPCA) leads the monitoring and assessment of the waters with large contributions by local partners, and works with these local partners to develop restoration and protection strategies. Local partners lead efforts to implement the strategies to restore and protect water resources, and also engage citizens throughout the process.

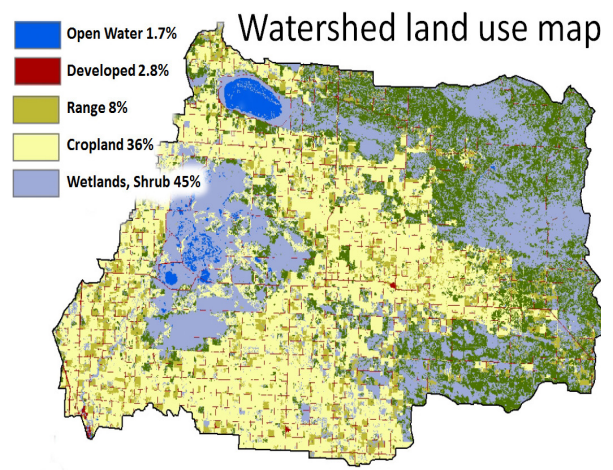
The Thief River intensive watershed monitoring cycle began in 2011 and culminated with a Watershed Restoration and Protection Strategies (WRAPS) Report published in 2018. This document summarizes key findings and recommendations contained in the full Thief River Watershed WRAPS Report. The next cycle for the watershed is scheduled to begin in 2023.



**Nearly all streams in the watershed have been straightened/channelized. This altered hydrology greatly impacts water quality in the watershed.**

## Watershed characteristics

- Size: 1090 square miles or 624,422 acres
- Counties: Marshall, Beltrami, Pennington
- Ecoregion(s): Lake Agassiz Plain, Northern MN Wetlands
- Municipalities: Thief River Falls, Holt, Goodridge, Grygla
- Land cover: Cultivated Crops (36%), Wetlands (45%), Range (8%), Developed (2.8%), Open water (1.7%), Other (6.5%)
- Tributary to: Red Lake River (confluence at Thief River Falls)
- The 8-digit hydrologic unit code or HUC for the Thief River Watershed is 09020304.



## Assessments: Are waters meeting standards and providing beneficial uses?

During the first phase of the WRAPS study – intensive watershed monitoring – the MPCA and the Red Lake Watershed District collected water chemistry data, such as pollutant concentrations, and biology (fish and aquatic insect communities) to determine if lakes and streams were meeting water quality standards designed to ensure that waters are swimmable and fishable. The map on the next page shows impairments on three reaches within the Thief River Watershed: turbidity on the Thief River, *E. coli* (bacteria) and low dissolved oxygen (DO) on the Mud River, and low DO on the Moose River.

In 2015, the state adopted Tiered Aquatic Life Use (TALU) standards to assess for biological impairments in highly channelized streams. Since the Thief River Watershed was one of the last to be assessed before the adoption of TALU, decisions regarding aquatic life impairments for fish and aquatic insects were deferred. Now that TALU has been adopted, fish and insect communities will be assessed using TALU during the winter of 2018-2019.

## Highlights of the 2013 assessment of the Thief River Watershed

Seven stream segments and one lake were assessed. Twenty stream segments were not assessed due to insufficient data, modified channel condition, or their status as limited resource waters. Also, numerous lakes were not assessed due to insufficient data. For example, most of the lakes are located within Agassiz National Wildlife Refuge and have no public access; as a result, little or no historical water quality data has been collected.

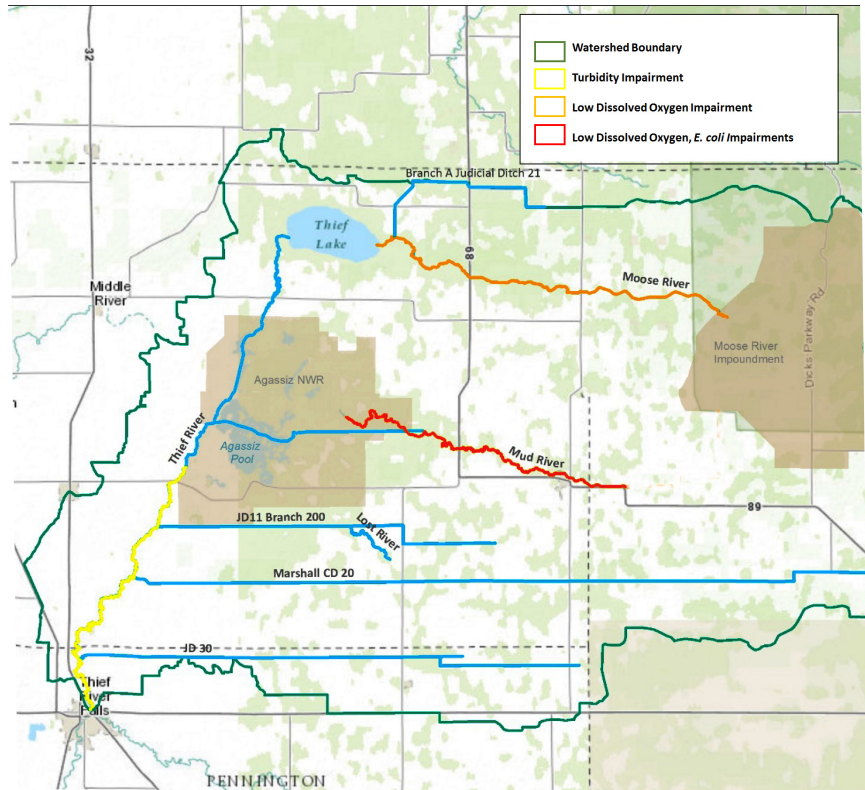
Three stream segments assessed within the watershed failed to fully support aquatic life.

Most of the aquatic life impairments were based on habitat conditions such as low DO and/or high levels of turbidity.

No aquatic life impairments were the result of poor fish and aquatic insect communities because impairment decisions on all channelized (straightened) streams (a large percentage of all streams in the watershed) were deferred pending the adoption of TALU standards.

Of the seven stream segments assessed for aquatic recreation (swimming), six showed full support. The remaining reach is impaired due to elevated levels of bacteria (*E. coli*). The only lake in the watershed with assessment level data is Thief Lake, which fully supports aquatic recreation.

The Agassiz National Wildlife Refuge which makes up much of the watershed's western boundary is managed for waterfowl production and is a popular tourist destination for recreational activities. Water releases from pools within the refuge, as well as other sources, contribute to the turbidity impairment in the Thief River.



## Stressors: What factors are affecting fish and bugs?

To develop strategies for restoring or protecting water bodies with biological impairments (those affecting fish and aquatic insect communities), agencies and local partners first identify the possible causes, or stressors, of the impairments. This is called the stressor identification process.

A stressor identification study was not completed at this time for the Thief River Watershed because assessments on all channelized streams were deferred for fish and aquatic insect data until after the adoption of TALU standards, which took place in 2015, two years after this watershed was assessed.

TALU will be used to assess the channelized reaches in the Thief River Watershed during the winter of 2018-2019.

## Total maximum daily loads

Under federal laws, impaired waters must have total maximum daily load (TMDL) studies to determine reductions of pollutants needed to meet water quality standards. During this WRAPS study, the MPCA and local partners completed two TMDLs for two impairments in two stream reaches (identified below).

- A TSS (total suspended solids) TMDL was written to address high turbidity levels in a reach of the Thief River from Agassiz pool in the Agassiz National Wildlife Refuge to the Red Lake River in Thief River Falls. Agassiz pool receives water from the Mud River, Thief River and smaller ditches. Occasional drawdowns of the pool have been required to manage water levels to meet recreational and wildlife management objectives. Strategies are being developed to reduce the high levels of turbidity/TSS in the Thief River coming from this and other sources.
- An *E. coli* TMDL was written to address excessive levels of bacteria that impair the Mud River for aquatic recreation (swimming) from its headwaters to the Agassiz pool. *E. coli* standards are applicable only during warm months (April-Oct.).
- Two additional impairments for low DO in the Moose River from its headwaters to Thief Lake, and the Mud River from its headwaters to the Agassiz pool, were also identified but data analysis determined low water flow as the cause. TMDLs cannot be calculated where low flows are the cause of the impairment; however, management strategies have been developed to augment base flow with Moose River Impoundment discharges.

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## Restoration and protection strategies

Water quality restoration and protection strategies within the Thief River Watershed were identified through collaboration with local and state partners (i.e., Soil and Water Conservation Districts, Red Lake Watershed District, MPCA, Minnesota Department of Natural Resources, and Minnesota Board of Waters and Soil Resources. Due to the homogenous nature of the watershed, most of the suggested strategies are applicable throughout the watershed.

**To protect fish/aquatic insects:** Address overland/streambank erosion, improve stream connectivity with properly sized/placed culverts, potentially modify the Agassiz pool dam and Thief River dam, reduce runoff and leaching of pesticides, reduce peak flows, increase base flows.

**To improve dissolved oxygen concentrations:** Improve nutrient and soil health management, improve base flows in Moose and Mud rivers through management of impoundment discharges, restore natural stream meanders, and increase natural vegetation along streams.

**To reduce TSS:** Improve stream buffers, restore meanders, install windbreaks to reduce erosion, increase flood plain maintenance and revegetation along ditches, stabilize streambanks, install field side-inlet controls and grade control structures, minimize effects of Agassiz pool drawdowns, and reduce sediments deposited in Agassiz pool.

**To reduce *E. coli* bacteria:** Increase conservation practices in critical areas, improve septic system compliance, and improve grazing management and feedlot compliance.

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## Next steps and measuring results

The restoration and protection strategies listed in the WRAPS report will be the basis for developing local implementation plans, such as the Thief River One Water One Plan (1W1P), to restore and protect water resources. The 1W1P process began in 2017 and should be completed by early 2019. The WRAPS Report lays out goals, milestones, and responsible entities to address protection and restoration priorities in the Thief River Watershed. The targets are intended to provide guidance and “measuring sticks” to assess the watershed’s health and success of actions taken.

Water quality in Minnesota has declined over many decades. While restoration activities continue, new problems develop, such as converting land to cultivated crops that negatively impacts water quality. The perpetual challenge is to make improvements and keep up with new problems. Impacts from other factors such as climate change are still not completely understood. Consequently, it may take decades to fully restore impaired waters.

## Key conclusions of first WRAPS cycle

- There are currently four impairments in the Thief River Watershed: Turbidity on the Thief River from Agassiz pool to the Red Lake River; *E. coli* and DO on the Mud River from the headwaters to Agassiz pool; and DO on the Moose River from the headwaters to Thief Lake. TMDLs have been written for the turbidity and *E. coli* impairments.
- TMDLs were not written for the low DO impairments because it was determined these impairments were due to low flow conditions. One of the strategies developed to address low DO conditions in the Moose and Mud rivers is to modify the discharge of the Moose River impound to maintain higher base flows throughout the season.
- Drinking water sources downstream from the turbidity impairment have been impacted by high sediment levels in the rivers downstream. This affects Thief River Falls and possibly East Grand Forks and Crookston.
- The low number of impairments isn't necessarily due to widespread good water quality throughout the watershed. Most of the streams have been modified for drainage and were not assessed for biology (fish and aquatic insects) because TALU, the special standards developed to assess highly altered streams, had not yet been adopted. These streams will be assessed for biology during the winter of 2018-2019.



Photos show the confluence of the Thief River (to the right in both images) with the Red Lake River in Thief River Falls. The Thief River's higher concentration of total suspended solids shows up gray in contrast to the cleaner water coming from the Red Lake River.

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### Full report

For the full report, go online and search for "MPCA Thief River WRAPS report."

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### Contact person

Denise Oakes, MPCA, at [denise.oakes@state.mn.us](mailto:denise.oakes@state.mn.us), or 218-846-8119.

5-9-19 BRD.



# Bndry.



# Bndry.

5-9-19 - BRD.



# Bndry.

5-947-BRD



# Red Lake Watershed District

2019 Spring runoff & Flood water storage

- Parnell Imp.
- Euclid East Imp.
- Brandt Imp.

May 9, 2019 - Board of Managers Meeting

Thief River Falls, MN

Loren Sanderson



~3000 ac/ft

4-16-2019 - Parnell Imp.  
Pool elev. 939.45  
Overtopped conc. later in the day



4-17-2019 - Parnell Imp.  
Pool elev. 940.1 record crest  
4-24-19 - still flowing over

4-22-2019

Open structure to begin  
slow releases

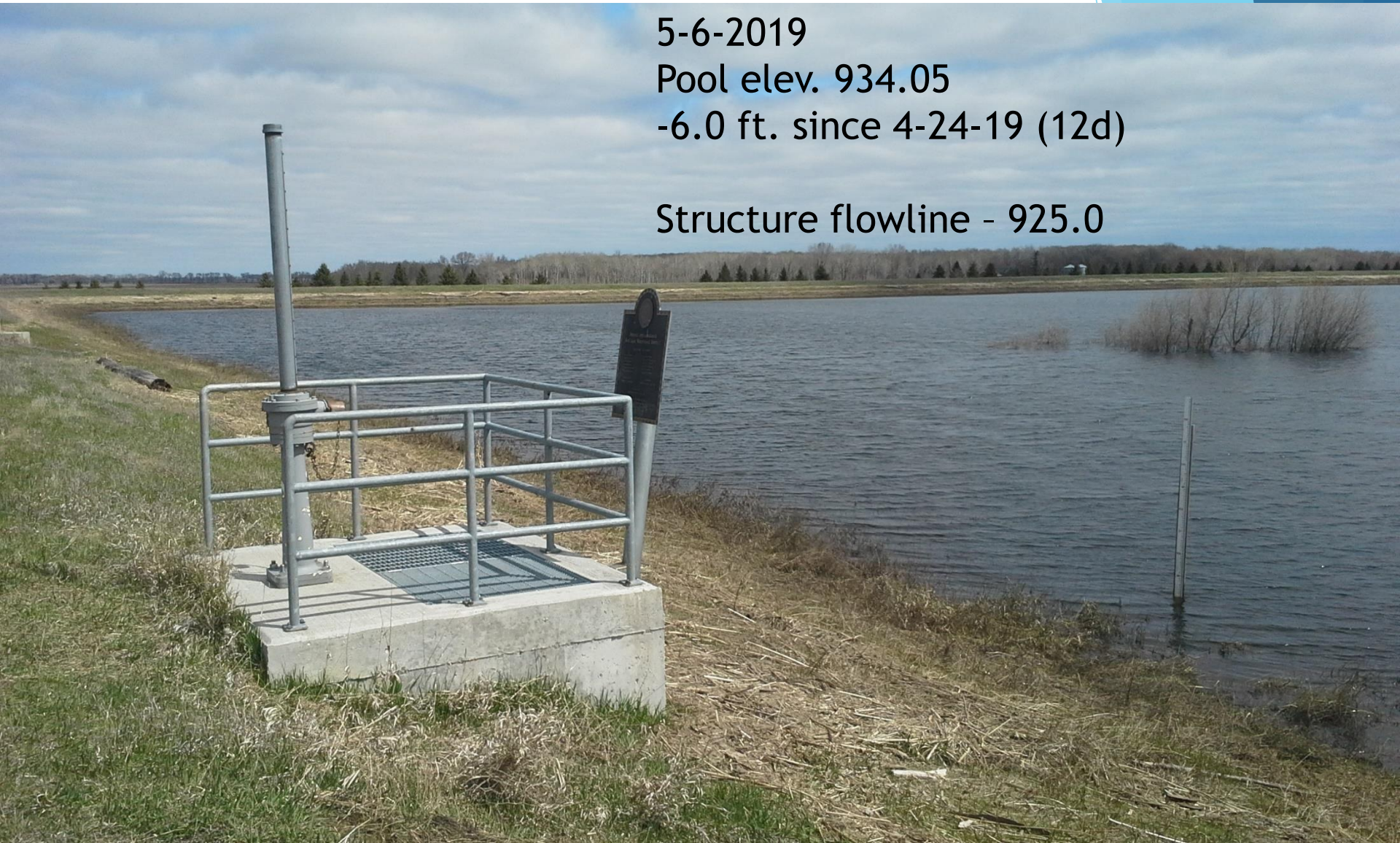


5-6-2019

Pool elev. 934.05

-6.0 ft. since 4-24-19 (12d)

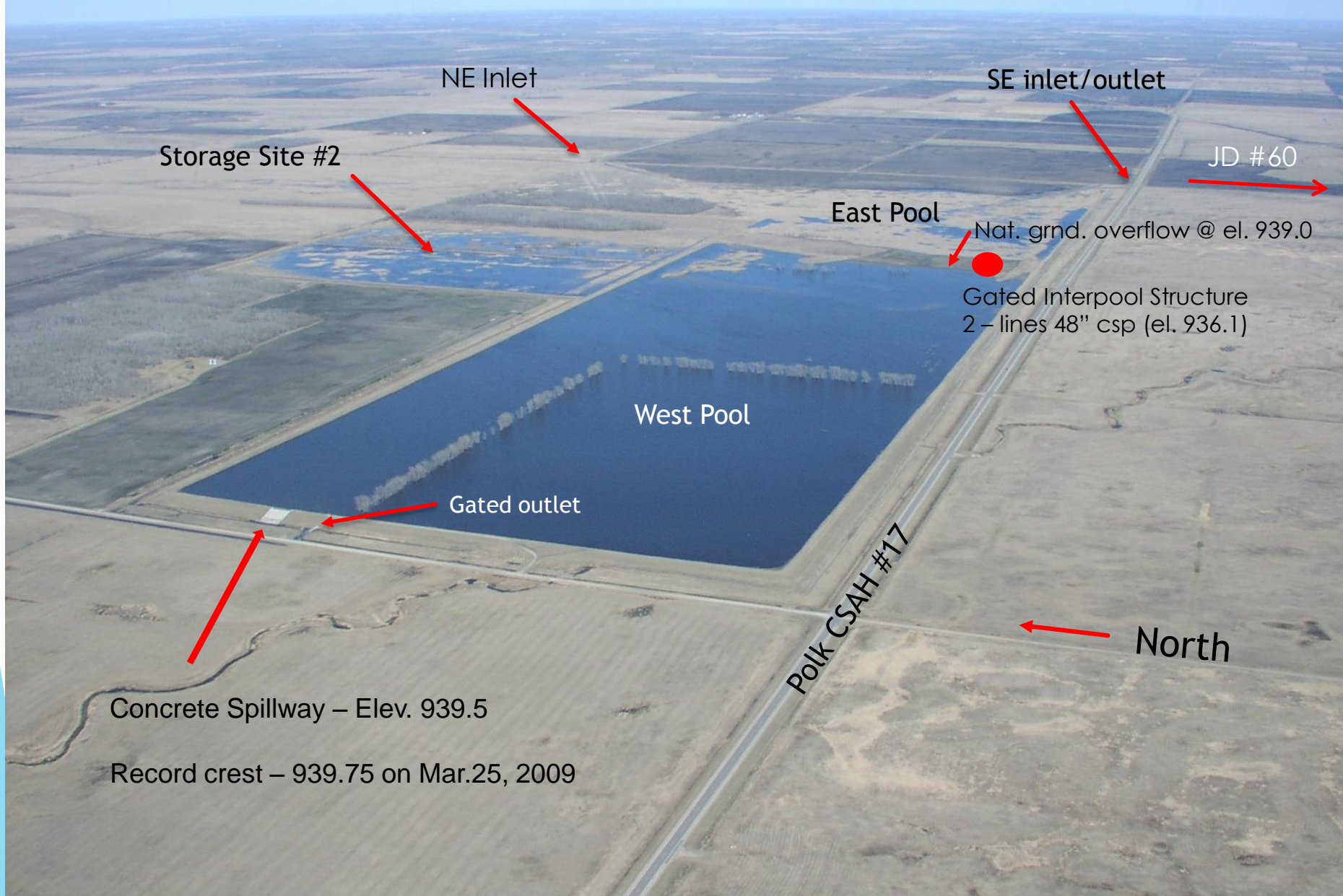
Structure flowline - 925.0



5-6-2019  
Looking West  
Parnell Struc. Outlet



# Parnell Impoundment – Looking East



4-18-2019 Euclid East Imp.  
Pool elev. - 905.4 record crest

4-22-2019  
Open structure to begin slow releases



## Euclid East Imp.

5-6-2019

Pool elev. 904.3

-1.1 ft. since 4-18-2019 (18d)

Flowline of struc. 895.3



Looking West from Outlet Struc.





Brandt Imp. (overtopped weir on eve. Of 4-20-2019)  
4-23-2019  
Elev. 914.75 record crest

3100+ ac/ft



4-22-2019

Open structure to begin slow releases

Brandt Imp.

4-23-2019

Elev. 914.75



Brandt Imp.

5-6-2019

Pool elev. 910.8

-3.95 ft. since 4-23-2019 (13d)

Struc. flowline elev. 896.6





Permit # 19-006

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Shannon Blasus		5208 Parkway Circle West Fort Collins, CO 80525		tel:970-599-5765 mobile: fax:

**General Information**

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: Polk Township: Johnson Range: 39 Section: 29 1/4: NW, SE

(4) Describe in detail the work to be performed. **Install culvert and fill material in Branch B of County Ditch 109 (Polk County) to access 40 ac.tract north side of county ditch.**

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

**Status**

Status	Notes	Date
Approved	None	May 9, 2019
Received	None	March 14, 2019

**Conditions**

**P.A. #19006 Red Lake Watershed District (RLWD) approval to install a 36 inch dia. culvert, as per approval of Polk County Drainage Authority/County Board specs/conditions; proposed work is within Branch 'B' of Polk Co. Ditch #109 Right-of Way. Contact person at Polk Co. Hwy. Dept. is Drainage Inspector Jody Beauchane at 218-281-3952 ext. 8263. For proposed work on lands not owned by applicant, he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-014

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
	Marshall County Highway Department	447 South Main Warren, MN 56762		tel:218-745-4381 mobile: fax:

**General Information**

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Marshall** Township: **Valley** Range: **39** Section: **25** 1/4: **SW1/4**

(4) Describe in detail the work to be performed. **Replace existing culverts with equivalent size pipe. There is a 48" pipe upstream and downstream from this location.**

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

**Status**

Status	Notes	Date
<b>Approved</b>	<b>None</b>	<b>May 2, 2019</b>
Received	None	April 25, 2019

**Conditions**

**Marshall County – Valley Twp.- SW¼ Section 25 - Red Lake Watershed District (RLWD) approval to replace 57" X 38" business entrance culvert with 48" diameter culvert, as per approval of MnDOT specs/conditions; proposed work is within Minnesota State Highway #89 Right-of Way. For proposed work on lands not owned by applicant, he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-015

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Rick Forsberg		33571 400th Avenue SE Gully, MN 56646		tel:218-435-6874 mobile: 218-261-3155 fax:

**General Information**

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Polk** Township: **Eden** Range: **39** Section: **34** 1/4: **SE1/4**

(4) Describe in detail the work to be performed. **Landowner would like to remove existing private culvert in a field crossing west of his residence. He like to install a larger diameter and longer pipe. Size of existing pipe unknown at this time.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Ditch flow has been overtopping his crossing. Polk County will set grade. Landowner wants permit to up size existing pipe. Culvert is in CD 81, Branch 12.**

**Status**

Status	Notes	Date
Approved	None	May 2, 2019
Received	None	April 29, 2019

**Conditions**

**Polk County- Eden Twp.- Sections 34- Red Lake Watershed District (RLWD) approval for removal of 24" diameter field crossing and replacement with 36" culvert, as per approval of Polk County Drainage Authority/County Board specs/conditions; proposed work is within Polk Co. Ditch #81 Branch 12 Right-of Way. -Approve. Contact person at Polk Co. Hwy. Dept. is Drainage Inspector Jody Beauchane at 218-281-3952 ext. 8263. For proposed work on lands not owned by applicant, he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-016

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
	Polk County Highway Department	820 Old Hwy 75 South Crookston, MN 56716		tel:218-470-8263 mobile: fax:

**General Information**

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Polk** Township: **Fanny** Range: **47** Section: **3 1/4: North 1/4 line**

(4) Describe in detail the work to be performed. **Remove farm entrance failing culvert and replace. Would like to make sure its sized correctly before purchasing.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Culvert failure, slopes washing away.**

**Status**

Status	Notes	Date
<b>Approved</b>		<b>May 6, 2019</b>
Received	None	April 29, 2019

**Conditions**

**Polk County – Fanny Twp. – Section 3 - Red Lake Watershed District (RLWD) approval to replace 72” diameter RCP with 90” diameter CMP or arch pipe equivalent. -Approve. For proposed work on lands not owned by applicant, he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-017

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Rick Forsberg		33571 400th Avenue SE Gully, MN 56646		tel:218-435-6874 mobile: 218-261-3155 fax:

**General Information**

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Polk** Township: **Eden** Range: **39** Section: **34** 1/4: **SW1/4**

(4) Describe in detail the work to be performed. **Install new crossing/culvert in CD 81, Branch 3. Need to have culvert sized for this location.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Polk County will set grade. Need crossing to get equipment across ditch. Not part of original constructin plans.**

**Status**

Status	Notes	Date
Approved	undefined	May 2, 2019
Received	None	April 29, 2019

**Conditions**

**Polk County- Eden Twp.- Sections 34- Red Lake Watershed District (RLWD) approval of 72" diameter field crossing installation within 1000' downstream of the confluence of Polk County Ditch 81 Branch 11 and Polk County Ditch 81 Branch 3, as per approval of Polk County Drainage Authority/County Board specs/conditions; proposed work is within Polk Co. Ditch #81 Branch 3 Right-of Way. -Approve. Contact person at Polk Co. Hwy. Dept. is Drainage Inspector Jody Beauchane at 218-281-3952 ext. 8263. For proposed work on lands not owned by applicant, he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-018

Status Report: **Approved**

### Applicant Information

Name	Organization	Address	Email	Phone Number(s)
Darrell Payment		21671 140th Avenue SE Red Lake Falls, MN 56750		tel: mobile: 218-277-0384 fax:

### General Information

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Red Lake** Township: **Terrebonne** Range: **43** Section: **4 1/4: NE1/4**

(4) Describe in detail the work to be performed. **Remove narrow field entrance and 15" diameter culvert. Install new entrance and 18" diameter culvert on higher ground near NE corner of Section.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Old entrance too narrow, culvert is plugged, poor location.**

### Status

Status	Notes	Date
<b>Approved</b>	<b>None</b>	<b>May 9, 2019</b>
Received	None	April 29, 2019

### Conditions

**P.A. #19018 Red Lake Watershed District (RLWD) approval to remove existing entrances and metal culverts, and install 2 new entrances with an 18 in. diameter culverts at a better location; as per approval of both Gervais and Terrebonne twp's; proposed work is in township road Right-of-Way. For proposed work on lands not owned by applicant, For he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-019

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Brett Bakken		18515 390th Avenue NE Goodridge, MN 56725		tel: mobile: 218-684-5417 fax:

**General Information**

- (1) The proposed project is a:  
**Culvert Installation / Removal / Modification**
- (2) Legal Description
- (3) County: **Red Lake** Township: **Equality** Range: **40** Section: **31 1/4: SW1/4**
- (4) Describe in detail the work to be performed. **Install entrance and 24" diameter culvert (north road ditch Red Lake County Hwy #6)**
- (5) Why is this work necessary? Explain water related issue/problem being solved. **For building site.**

**Status**

Status	Notes	Date
<b>Approved</b>	<b>None</b>	<b>May 9, 2019</b>
Received	None	April 29, 2019

**Conditions**

**P.A. #19019 Red Lake Watershed District (RLWD) approval to install an entrance with a 24 in. diameter culvert, as per approval of Red Lake County specs/conditions; proposed work is in County Hwy. #6 Right-of-Way. Contact person at Red Lake Co. Hwy. Dept. is Randy Konickson at 218-253-2697. For proposed work on lands not owned by applicant, For he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-020

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Tim Raiter		17702 Center Street East Thief River Falls, MN 56701		tel:218-681-1587 mobile: 218-686-2540 fax:

**General Information**

(1) The proposed project is a:

**Surface Drainage (New Ditch or Improvement)  
Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Pennington** Township: **Wyandotte** Range: **42** Section: **7 1/4: SE1/4**

(4) Describe in detail the work to be performed. **Clean approximately 1/4 mile in north ditch of Pennington County Road #2. Install new field entrance culvert (remove existing) plus install culvert in private ditch.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Culvert is in bad condition, ditch is silted in.**

**Status**

Status	Notes	Date
<b>Approved</b>	<b>None</b>	<b>May 9, 2019</b>
Received	None	April 29, 2019

**Conditions**

**P.A. #19020 Red Lake Watershed District (RLWD) approval to remove existing 24 in. dia. culvert and replace with the same diameter, and to clean approx. ¼ to ½ mile of the North ditch of the county road, as per approval of Pennington County specs/conditions; proposed work is in County Road #2 Right-of-Way. All excavation shall be consistent with the existing road and ditch slopes and there shall be no vertical excavation faces. Existing drainage/flow patterns shall not be changed or diverted. Contact persons at Pennington Co. Hwy. Dept. are Engineer Mike Flaagen at 218-687-7017. For proposed work on lands not owned by applicant, For he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-021

Status Report: **Approved**

### Applicant Information

Name	Organization	Address	Email	Phone Number(s)
Tim Raiter		17702 Center Street East Thief River Falls, MN 56701		tel:218-681-1587 mobile: 218-686-2540 fax:

### General Information

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Pennington** Township: **Smiley** Range: **42** Section: **31 1/4: SE1/4**

(4) Describe in detail the work to be performed. **Replace driveway culvert (north ditch Pennington County Road #3).**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Existing culvert is rusted out.**

### Status

Status	Notes	Date
Approved	None	May 9, 2019
Received	None	April 29, 2019

### Conditions

**P.A. #19021 Red Lake Watershed District (RLWD) approval to remove existing 36 in. dia. driveway culvert and replace with the same diameter, at approx. the same elevation, as per approval of Pennington County specs/conditions; proposed work is in County Hwy. #3 Right-of-Way. Contact person at Pennington Co. Hwy. Dept. are Engineer Mike Flaagen at 218-683-7017. For proposed work on lands not owned by applicant, For he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-022

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Jeffrey Olson		116 Belleville Court Thief River Falls, MN 56701		tel: mobile: 218-689-3788 fax:

**General Information**

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Pennington** Township: **Rocksbury** Range: **43** Section: **12 1/4: NE1/4**

(4) Describe in detail the work to be performed. **Install culvert and crossing**

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

**Status**

Status	Notes	Date
Approved	undefined	May 2, 2019
Received	None	April 30, 2019

**Conditions**

**Pennington County – Rocksbury Twp. – Section 12 - Red Lake Watershed District (RLWD) approval to install a field entrance and 18 in. diameter culvert as per approval of Pennington County Highway Department specs/conditions; proposed work is within Pennington County County Road #61 Right-of Way. Contact persons at Pennington Co. Hwy. Dept. are Engineer Mike Flaagen or Asst. Engineer Mike Stennes at 218-683-7017 For proposed work on lands not owned by applicant, he/she must obtain, in writing, permission from the affected landowners to perform proposed work. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-023

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Tischman Steve	Grove Park/Tilden Township	17742 US HWY. 2 SE Mentor, MN 56736		tel: mobile: 218-637-0558 fax:

**General Information**

- (1) The proposed project is a:  
**Culvert Installation / Removal / Modification**
- (2) Legal Description
- (3) County: **Polk** Township: **Grove Park** Range: **None** Section: **35 1/4: NE1/4**
- (4) Describe in detail the work to be performed. **Replace 18" diameter CMP that has rusted out/washed out with larger 24" diameter culvert.**
- (5) Why is this work necessary? Explain water related issue/problem being solved. **Pipe washout.**

**Status**

Status	Notes	Date
Approved	None	May 2, 2019
Received	None	May 1, 2019

**Conditions**

**Polk County- Grove Park Twp.- Sections 35/36- Replace failed 18" CMP centerline with 24" diameter pipe. -Approve Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166)**

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 # 19-024

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
	North Township	18121 120th Avenue NE Thief River Falls, MN 56701		tel:681-3489 mobile: fax:

**General Information**

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Pennington** Township: **North** Range: **43** Section: **20 1/4: NE1/4**

(4) Describe in detail the work to be performed. **Replace existing 15" CSP centerline culvert**

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

**Status**

Status	Notes	Date
<b>Approved</b>	<b>None</b>	<b>May 9, 2019</b>
<b>Received</b>	<b>None</b>	<b>April 30, 2019</b>

**Conditions**

**P.A. #19024 North Twp. – Penn. Co. – sec. 20,21 – remove 1 – 15" dia. centerline culvert – approve Upon field inspection by Red Lake Watershed District (RLWD) staff, it was evident that the culvert has not functioned for several years. One end was completely buried and there is drainage to the north on each side of the roadway to a county ditch. Removal of this culvert does not have adverse impacts.**

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 # 19-025

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Earl Pederson		3077 County Hwy 42 Bejou, MN 56516		tel: mobile: 218-790-4106 fax:

**General Information**

- (1) The proposed project is a:  
**Culvert Installation / Removal / Modification**
- (2) Legal Description
- (3) County: **Pennington** Township: **North** Range: **43** Section: **7 1/4: SE1/4**
- (4) Describe in detail the work to be performed. **Install culvert and field approach.**
- (5) Why is this work necessary? Explain water related issue/problem being solved. **Existing approach is too small and goes into low area of the field.**

**Status**

Status	Notes	Date
<b>Approved</b>	<b>None</b>	<b>May 2, 2019</b>
Received	None	May 1, 2019

**Conditions**

**Pennington County – North Twp. – Section 7 - - Red Lake Watershed District (RLWD) approval to install a field entrance, 18 in. diameter culvert, as per approval of Pennington County Highway Department specs/conditions; proposed work is within Pennington County County Road #65 Right-of Way. -Approve**

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 # 19-026

Status Report: **Approved**

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Bruce Jones		102 Guinan Avenue Goodridge, MN 56725		tel: mobile: 218-689-7086 fax:

**General Information**

- (1) The proposed project is a:  
**Culvert Installation / Removal / Modification**
- (2) Legal Description
- (3) County: **Pennington** Township: **None** Range: **40** Section: **21 1/4**:
- (4) Describe in detail the work to be performed. **Extend existing culvert**
- (5) Why is this work necessary? Explain water related issue/problem being solved. **Better access to property.**

**Status**

Status	Notes	Date
Approved	None	May 3, 2019
Received	None	May 2, 2019

**Conditions**

**Pennington County – Goodridge Twp. – Section 21 - Red Lake Watershed District (RLWD) approval to extend a driveway 15” diameter culvert as per approval of City of Goodridge specs/conditions; proposed work is within road Right-of Way. -Approve**

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 # 19-013

Status Report: Denied

**Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Dan Johnson		43407 190th Street SW East Grand Forks, MN 56721		tel:218-791-0520 mobile: fax:
Dan Johnson		43407 190th Street SW East Grand Forks, MN 56721		tel:218-791-0520 mobile: fax:

**General Information**

(1) The proposed project is a:

**Culvert Installation / Removal / Modification**

(2) Legal Description

(3) County: **Polk Township: Huntsville Range: 49 Section: 19 1/4: NE1/4**

(4) Describe in detail the work to be performed. **Raise culvert and fill ditch.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Water does not flow. Standing water in ditch.**

**Status**

Status	Notes	Date
Denied	<b>Polk County- Huntsville Twp.- NE1/4 Section 19- Red Lake Watershed District (RLWD) denial to fill ditch bottom to alleviate water ponding. Water ponding is a result of downstream culvert elevations being to high. To alleviate ponding water, downstream culverts would need to be lowered and the ditch re-graded accordingly. See attached ditch profile. -Deny</b>	<b>May 2, 2019</b>
Received	None	April 24, 2019

**Conditions**

**Polk County- Huntsville Twp.- NE1/4 Section 19- Red Lake Watershed District (RLWD) denial to fill ditch bottom to alleviate water ponding. Water ponding is a result of downstream culvert elevations being to high. To alleviate ponding water, downstream culverts would need to be lowered and the ditch re-graded accordingly. See attached ditch profile. -Deny**

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.

The District owns the current phone system and have the following monthly expenses:

Century Line - Line Fee	\$	272.00 (average)
MCI - long distance	\$	55.00 (average)
Garden Valley-monthly maintenance fee	\$	125.00
Total Monthly Costs	\$	<u>452.00</u>

	<b>Garden Valley Quote</b>	<b>Marco Quote</b>
Purchase 13 Phones	\$ 3,022.50	\$ 2,327.00
Purchase Conference Phone	\$ 685.00	\$ 749.00 (includes two external microphones)
Installation/training	\$ 1,500.00	\$ 835.00
Shipping	\$ 78.03	
	<b>\$ 5,285.53</b>	<b>\$ 3,911.00</b>
		\$ 3,125.00 (approx. buy out of GV Maintenance 7/13/21)
		<b>\$ 7,036.00</b>

Monthly Cost (3 year contract)		
Phones	\$ 308.00	\$ 273.00
Shared Hosted Fax	\$ 24.99	\$ 5.00
Personal Conference	\$ 14.99	\$ 7.00
Total Monthly Costs	\$ <u>347.98</u>	\$ <u>285.00</u>

**Monthly Savings**                      \$         **104.02**                      \$                      **167.00** (Monthly difference between the two quotes  
\$63 x 36 months = \$2268.00)

Total Cost for 36 months		
Current	\$	16,272.00 (\$5,424 yearly)
Garden Valley (includes purchase & monthly exp)	\$	17,812.81 (\$5,937.60 yearly)
Marco (includes purchase, buyout & monthly exp)	\$	17,296.00 (\$5,765.33 yearly)

## 2019 Chevrolet Silverado Quote

	<b>Northern Motors</b> Color: White or Silver	<b>Thibert's Chevrolet</b> Color: Cajun Red
MSRP	\$ 47,350.00	\$ 47,695.00
<b>Vehicle Quote</b>	<b>\$ 33,868.00</b>	<b>\$ 33,405.00</b>
Mud flaps and running boards	\$ 412.00	\$ 850.00
license fee	\$ 47.42	\$ 50.00
Tax	\$ 2,228.20	\$ 2,226.58
<b>Total owed</b>	<b>\$ 36,555.62</b>	<b>\$ 36,531.58</b>

## **Red Lake Watershed District - Administrators Report**

**May 9, 2019**

**Red River Watershed Management Board** – LeRoy and I will be attending the RRWMB meeting held 9:30 am on May 21, 2019 at the University of Minnesota Crookston.

**Red Lake River 1W1P Planning Work Group** – There was a RLR 1W1P Planning Workgroup telephone conference held at 1:30 pm Tuesday, April 30<sup>th</sup>. The meeting was to review the minor changes to existing Work Plan and submit to BWSR for approval. Items that were addressed was a bank stabilization project in the Burnham Creek Watershed that was initiated by West Polk SWCD. We also clarified funding for the stabilization of the outlet to Thief River Falls Westside FDR Project.

**Watershed Based Funding Joint Meeting** – I attended the second meeting of the Watershed Based Funding Local Roundtable Workgroup and BWSR Clean Water Team meeting be held from 9:30 am – 3:00 pm Friday, April 26<sup>th</sup> at the Stearns County Historical Museum, in St. Cloud. Various items were covered such as overview of Watershed-based Funding, Assurance Measures, Watershed-based Funding Policy, Desired Outcomes and various other agenda items. This meeting was rescheduled from the meeting April 12<sup>th</sup> which was canceled due to a snow storm.