

By Corey Hanson, Red Lake Watershed District Water Quality Coordinator. 6/14/2017.

- ✓ District Monitoring
- ✓ Stage/Flow Monitoring
- ✓ Clearwater River Watershed Restoration and Protection Project

Red Lake Watershed District Long-Term Monitoring Program

A 2017 sampling checklist was created, and can be found at the end of this document. The four rounds of sampling in 2017 will take place in April, June, August, and October. The Thief Lake outlet and the Badger-Mitchell Lake Channel were cut from the list. The MPCA did not assess the Badger-Mitchell Lake channel portion of the Poplar River Diversion project because the site is essentially characterizing the quality of lake water instead of stream water. The Thief River between Thief Lake and Agassiz National Wildlife Refuge will continue to be monitored at the downstream end of the reach. An assessment that emphasizes the quality of water at the downstream end of that reach will provide more protection for the Thief River and Agassiz Pool than an assessment that combines the pollutant concentrations at the upstream (where water is relatively clean) and downstream (where water can be less clean) ends of the reach.

A site was added to monitor water quality within the channelized portion of Lower Badger Creek at 150th Ave. A biological impairment and low dissolved oxygen levels have been discovered at that location. The Heartsville Coulee monitoring location was changed from the pond-like 210th St. crossing that had been monitored upstream of the diversion structure to a site closer to the Red Lake River. Some flow to the new monitoring site will be intercepted by the diversion structure, but it can be assessed as a flowing stream using the MPCA's water quality standards. The previously monitored location resembled a wetland more than it resembled a stream.



Heartsville Coulee at
13th St SE

A round of sampling for the District's long-term monitoring program was completed in April. Water quality was great throughout most of the District. Exceptions included:

- High *E. coli* concentrations were found in Chief's Coulee in northern Thief River Falls and Pennington County Ditch 21.
- High total suspended solids in the Red Lake River at Fisher and East Grand Forks.
- High total suspended solids concentrations were found in the Thief River in late March and early May by the International Water Institute.
- A high total suspended concentration (78 mg/L) was recorded at the 130th St NW (furthest downstream) crossing of Grand Marais Creek, but not at the 110th St. NW crossing (8 mg/L). Polk County Ditch 2 may be contributing significantly to this increase. Unstable ditch banks were observed along the lower reaches of that ditch, which empties into Grand Marais Creek downstream (north) of 110th St. NW.
- High total phosphorus concentrations were found in the North Cormorant River, Nasset Brook, Heartsville Coulee, Clearwater River (Clearwater Lake inlet), and Grand Marais Creek (2 sites).
- A high biochemical oxygen demand concentration was found in Heartsville Coulee.

Deer carcasses had been illegally dumped into the Lost River at the CR 119 crossing.

A large beaver dam has been built on a private crossing of Kripple Creek between CSAH 11 and 180th Ave. Additional tree/brush removal has occurred along Kripple Creek, upstream of 180th Ave.



Kripple Creek at
180th Ave

Example of Failing
Ditch Banks along
Polk County Ditch 2



Red Lake Watershed District Stream Gaging and Flow Monitoring

HOBO water level loggers were deployed at stage/flow monitoring sites in the Clearwater, Red Lake River, Thief River, and Grand Marais Creek watersheds.

1. Barometric pressure logger in Thief River Falls (Pennington County)
2. Barometric pressure logger in Crookston (Polk County)
3. Barometric pressure logger in Clearwater County at the Silver Creek stage/flow monitoring site
4. Pennington County Ditch 96 at Highway 32 (S005-683)
5. Lower Badger Creek at CR 114 (S004-837)
6. Beau Gerlot Creek at CR 114 (S008-058)
7. Terrebonne Creek at CSAH 92 (S004-819)
8. Judicial Ditch 73 near Rydell National Wildlife Refuge (S003-319)
9. Branch A of Judicial Ditch 21 (S006-540)
10. Moose River at CSAH 54 (S004-211)
11. Branch 200 of Judicial Ditch 11 (S004-493)
12. Judicial Ditch 30 at 140th Ave NE (S004-966)
13. Lost River at CSAH 28 (S007-849)
14. Silver Creek at CR 111 (S002-082)
15. Ruffy Brook at CSAH 11 (S008-057)
16. Clearwater River at CSAH 2 (S001-908)
17. Lost River at 109th Ave (S005-283)
18. Hill River at 335th Ave (S007-847)
19. Poplar River at CSAH 30 (S003-127)

20. Cyr Creek at CR 110 (S004-818)
21. Kripple Creek at 180th Ave (S004-835)
22. Gentilly River at CSAH 11 (S004-058)
23. Grand Marais Creek at 110th St. NW (S008-902). This is a new flow monitoring station.
It is the furthest downstream crossing prior to the confluence with Polk County Ditch 2.
24. Black River at CSAH 18 (S002-132)
25. Polk County Ditch 2 at CR 62 (S004-131)
26. Marshall County Ditch 20 at 180th Ave NE (S004-494)

Deployment pipes and posts were removed from the Heartsville Coulee and Polk County Ditch 1 monitoring sites.

The MPCA provided 2015-2016 flow data from sites on the Clearwater River, Hill River, Burnham Creek, Poplar River, and Polk County Ditch 2. The MPCA has recently removed their stage monitoring equipment from sites on the Hill River, Red Lake River, and Poplar River. The RLWD will install HOB0 water level loggers to continue monitoring at those stations.

Water Level Logger
in the Clearwater
River at CSAH 2



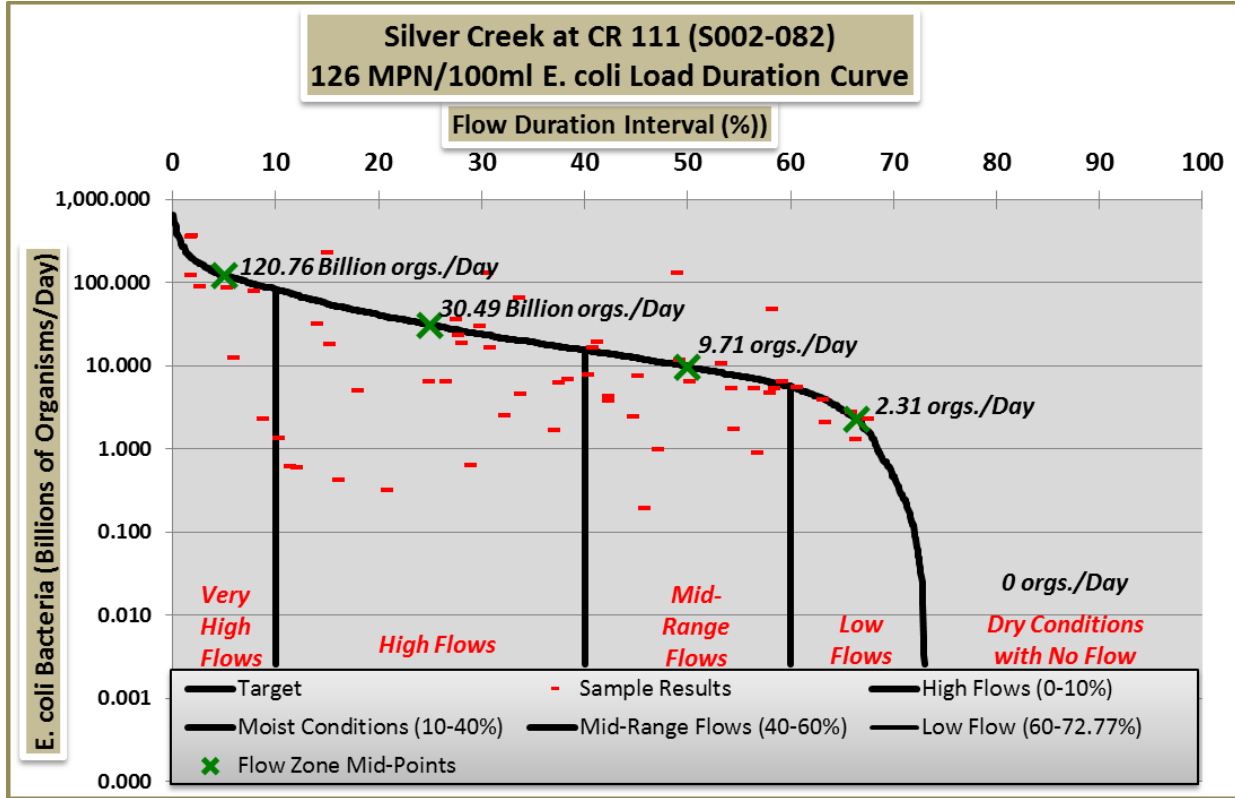


Clearwater River Watershed Restoration and Protection Strategy (WRAPS) Project

- Objective 1 – Existing Data
 - The MPCA will be removing the dissolved oxygen impairment from the Badger-Mitchell Lake channel portion of the Poplar River Diversion (AUID 09020305-542), but keeping the impairment on the reach of the Poplar River Diversion that flows between the diversion structure and Badger Lake (09020305-543). Although the MPCA has been delisting or not assessing dissolved oxygen impairments along reaches that are heavily influenced by wetlands, they kept the impairment on the reach upstream of Badger Lake due to presence of agricultural land along the upper portion of the reach. That decision was based on an incorrect assumption, however. LiDAR topographic data shows that the only farmland that is close to that portion of the Poplar River diversion channel drains north to the Poplar River and away from the Poplar River Diversion channel.
- Objective 6 – Stressor and Pollutant Source Identification
 - Discrete and continuous monitoring data was examined to find temperatures that exceeded 30 degrees Celsius. There were some days on some streams when that threshold was exceeded, but temperatures on biologically impaired reaches have all been cooler than 30 degrees Celsius.
- Objective 9 – Civic Engagement
 - RMB Environmental Laboratories worked on scripts for “Water Minutes” messages that can air on local radio stations.
- Objective 10 – Reports
 - Some time was spent on writing the Clearwater River Watershed Total Maximum

Daily Load report.

- 2016 flow data was requested from the MPCA for the sites at which they have been monitoring flow on the Lost River, Hill River, Poplar River, and Clearwater River.
- Silver Creek *E. coli* load duration curve and TMDL calculations



Silver Creek (09020305-527)	Very High Flows	High Flows	Mid-Range Flows	Low Flows	No Flow	Total
Annual E. coli Load Reductions						
Current Daily Load (10 ⁹ orgs/day)	130.55	27.27	15.39	2.78	-	--
Load Allocation (10 ⁹ orgs/day)	108.69	27.44	8.74	2.07	-	--
Load reduction (10 ⁹ orgs/day)	21.86	(0.17)	6.65	0.71	-	--
% of Flows Represented	10%	30%	20%	12.8%	27.2%	100%
# of Days Represented	36.5	109.5	73.0	46.6	99.4	365.00
Annual Load Reduction (10 ⁹ orgs/year)	797.94	-	485.55	33.10	-	1,316.59
Total Current Load	4,765.02	2,986.51	1,123.81	129.79	0	9,005.14
Percent Reduction	16.7%	0.0%	43.2%	25.5%	0.0%	14.6%

- o Some time was spent on writing the Clearwater River Watershed Restoration and Protection Strategy (WRAPS)
 - “What is a WRAPS” section of the report.
 - Identification of priority reaches for protection efforts (those reaches that are most in danger of becoming impaired).
 - Cover page

- Trend analysis for the Clearwater River at CSAH 10

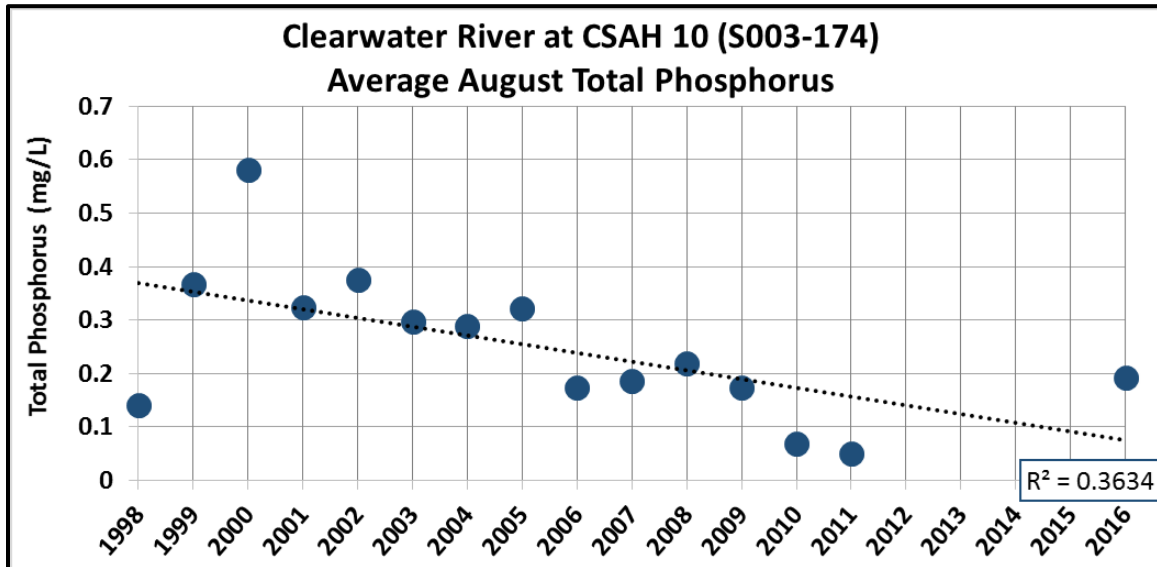
The CSAH 10 crossing of the Clearwater River is located on the channelized portion of the river, downstream of the wild rice farms that line a portion of the Clearwater River. The Clearwater River Nonpoint Study identified wild rice operations as a source of pollution in the Clearwater River during late-summer paddy drainage that occurs prior to harvest. A tile drainage study conducted by the RLWD confirmed that wild rice paddies discharge extreme concentrations of sediment and other pollutants if they are drained with surface drainage. Wild rice producers have been installing tile drainage in the paddies as a best management practice. The tile has many benefits for the farmers and helps protect water quality within the Clearwater River. Analysis of samples collected from the outlets of wild rice paddy tile drains found the low total suspended solids and phosphorus concentrations that are typical of tile drains in conventional agriculture. The tile drainage from the paddies did not exhibit the high nitrate concentrations that have been found in tile drainage systems under conventional field crops. Wild rice producers have been mindful of the importance of water quality in the Clearwater River. They have worked with local government units to keep the river buffered and to support streambank stabilization projects. Concentrations of TSS, TP, and DO have all seen improvement because of all of the efforts that have been made within that area. The improvements are especially significant during the late summer months.

Despite improving trends in water quality within the channelized reach, there is still a need for improvement. The 09020305-647 AUID of the Clearwater River (channelized portion between Ruffy Brook and JD1) is impaired by high concentrations of total suspended solids and E. coli. Low dissolved oxygen levels have been regularly recorded, particularly during wild rice paddy discharge in July and August. Despite reductions in pollutants from wild rice paddy discharge during late summer, pre-harvest drainage, the discharge continues to negatively affect water quality in the river. Landowners and users of the river have complained about water quality during the wild rice paddy discharge. The difference in water quality from upstream of the paddies to downstream is still very noticeable. People who have kayaked and swum in the river during wild rice paddy discharge have experienced swimmer's itch after coming in contact with the water.

RED LAKE WATERSHED DISTRICT
MONTHLY WATER QUALITY REPORT

April 2017

Trends of Seasonal Averages Using Seasonal Mann-Kendall Analysis				
Clearwater River at CSAH 10 (S003-174)	Total Suspended Solids	Dissolved Oxygen	Total Phosphorus	E. coli
Years	1998-2016	1998-2016	1998-2016	2005-2016
Annual Avg (All Months)	+	↑	↓	Data <10
Annual Max (All Months)	+	X	+	Data <10
Annual Min (All Months)	X	↑	X	Data <10
Summer (May - Sept.)	+	↑	↓	Data <10
April	Data <10	Data <10	Data <10	Data <10
May	X	Data <10	X	Data <10
June	↓	↑	X	Data <10
July	+	↑	X	Data <10
August	X	↑	+	Data <10
September	↓	↑	X	Data <10
October	Data <10	Data <10	Data <10	Data <10
X = No Trend				
↑ = Strong Upward Trend (Getting Significantly Better)				
↓ = Strong Downward Trend (Getting Significantly Better)				
↑ = Upward Trend (Getting Better)				
↓ = Downward Trend (Improvement)				



**RED LAKE WATERSHED DISTRICT
MONTHLY WATER QUALITY REPORT**

April 2017

- Trend analysis for the Clearwater River near the outlet of Clearwater Lake

The CSAH 14 crossing of the Clearwater River (S001-461) has been a part of the Clearbrook-Gonvick River Watch program since 1998, so there is a long record of dissolved oxygen measurements at the site. Sampling has only recently resumed at the site because the RLWD moved its long-term monitoring site for that portion of the Clearwater River from the Clearwater Lake outlet to CSAH 14. The move better represents the stream. The samples collected at the Clearwater Lake outlet were essentially samples of lake water. Water quality at CSAH 14 has been excellent in the samples that have been collected in the last two years. Water is exceptionally clear at this location. The long-term record of DO measurements shows that concentrations have been improving.

Trends of Seasonal Averages Using Seasonal Mann-Kendall Analysis				
Clearwater River at CSAH 14 (S001-461)	Total Suspended Solids	Dissolved Oxygen	Total Phosphorus	E. coli
Years:	2015-16	1998-2016	1998-02,15-16	2006, 15-16
Annual Avg (All Months)	Data <10		Data <10	Data <10
Annual Max (All Months)	Data <10	X	Data <10	Data <10
Annual Min (All Months)	Data <10		Data <10	Data <10
Summer (May - Sept.)	Data <10		Data <10	Data <10
April	Data <10	Data <10	Data <10	Data <10
May	Data <10	Data <10	Data <10	Data <10
June	Data <10	Data <10	Data <10	Data <10
July	Data <10	Data <10	Data <10	Data <10
August	Data <10	Data <10	Data <10	Data <10
September	Data <10	Data <10	Data <10	Data <10
October	Data <10	Data <10	Data <10	Data <10
X = No Trend				
= Upward Trend (Getting Better)				

**RED LAKE WATERSHED DISTRICT
MONTHLY WATER QUALITY REPORT**

April 2017

The data available from CSAH 14 indicates that water quality conditions downstream of will continue to improve as they had been at the Clearwater Lake outlet. Water leaving the lake was very clean. DO and TP concentrations have been improving. The improvements in E. coli and TSS concentrations were not as substantial because the concentrations have been minimal. The average E. coli concentration at over the history of sampling at S002-119 was 3.4 MPN/100ml. The average TSS concentration at S002-119 was just 2.4 mg/L.

Trends of Seasonal Averages Using Seasonal Mann-Kendall Analysis				
Clearwater Lake Outlet (S001-119)	Total Suspended Solids	Dissolved Oxygen	Total Phosphorus	E. coli
Years	1998-2016	1998-2016	1998-2016	1992-2016
Annual Avg (All Months)	X			X
Annual Max (All Months)	X			
Annual Min (All Months)	X			X
May - September Avg.	X			X
April	Data <10		X	Data <10
May	Data <10		X	Data <10
June		X		Data <10
July	Data <10	Data <10	X	Data <10
August	X	X		Data <10
September	Data <10	Data <10	Data <10	Data <10
October	X	X		Data <10
X = No Trend				
= Strong Upward Trend (Getting Significantly Better)				
= Strong Downward Trend (Getting Significantly Better)				
= Upward Trend (Getting Better)				
= Downward Trend (Improvement)				

- Trend analysis for the headwaters of the Clearwater River

The water in the headwaters of the Clearwater River has generally been very clean. The overall historical average TSS concentration at the Hwy 2 crossing of the Clearwater River (S001-906) is just 3.1 mg/L. There is not much room for improvement upon current TSS concentrations. Low dissolved oxygen has been more of a problem. Similar results were found in the Clearwater River at CSAH 25 (S001-458), upstream of the City of Bagley. The maximum TSS concentration at that location was just 14 mg/L. The average TSS concentration has been 2.4 mg/L. The minimum reporting limit for TSS at RMB Environmental Laboratories (where samples from this location are analyzed) is 1 mg/L. Low DO concentrations continue to occur in the warm summer months of June through September, though. The overall increasing trends that were found in DO and TP concentrations offer hope for improvement.

Trends of Seasonal Averages Using Seasonal Mann-Kendall Analysis				
Clearwater River at Highway 2 (S001-906)	Total Suspended Solids	Dissolved Oxygen	Total Phosphorus	E. coli
Years	1992-2015	1987-2015	1998-2015	1992-2015
Annual Avg (All Months)	X			X
Annual Max (All Months)	X			X
Annual Min (All Months)	X	X		
May - September Avg.	X			X
April	X		X	Data <10
May	Data <10	Data <10	Data <10	Data <10
June	X		X	Data <10
July	X	X		Data <10
August	X	X	X	Data <10
September	Data <10	Data <10	X	Data <10
October		X	X	Data <10
X = No Trend				
= Strong Upward Trend (Getting Significantly Better)				
= Strong Downward Trend (Getting Significantly Better)				
= Upward Trend (Getting Better)				
= Downward Trend (Improvement)				
= Upward Trend (Getting Worse)				
= Downward Trend (Getting Worse)				

RED LAKE WATERSHED DISTRICT
MONTHLY WATER QUALITY REPORT

April 2017

Trends of Seasonal Averages Using Seasonal Mann-Kendall Analysis				
Clearwater River at CSAH 25 (S001-458)	Total Suspended Solids	Dissolved Oxygen	Total Phosphorus	E. coli
Years	1992-2016	1992-2016	1987-2016	2005-2016
Annual Avg (All Months)	X	↑	↓+	X
Annual Max (All Months)	X	↑	↓+	X
Annual Min (All Months)	X	↑	X	↓+
May - September Avg.	X	X	↓+	X
April	X	X	X	Data <10
May	↑	↑	↓	Data <10
June	X	X	↓+	Data <10
July	X	X	X	Data <10
August	X	X	X	Data <10
September	X	X	↓	Data <10
October	↓+	↓	X	Data <10
X = No Trend				
↑+ = Strong Upward Trend (Getting Significantly Better)				
↓+ = Strong Downward Trend (Getting Significantly Better)				
↑ = Upward Trend (Getting Better)				
↓ = Downward Trend (Improvement)				
↑↓ = Upward Trend (Getting Worse)				
↓↑ = Downward Trend (Getting Worse)				

- Trend analysis for the Bee lake outlet

The outlet of Bee Lake has been listed as impaired by low DO. Although the site has not been sampled for pollutants like TP, TSS, or E. coli, field measurements have been collected by the Win-E-Mac River Watch program from 2004 through 2016. Downward trends (getting worse) in DO concentrations were identified in three seasonal categories: annual minimum, May-September average, and the month of October.

- Trend analysis for the Badger Lake outlet

The Win-E-Mac River Watch program and the RLWD long-term monitoring program have been monitoring the inlet and outlet off Badger Lake for more than 10 years. A significant portion of that data is limited to field measurements (like DO). At the inlet to Badger Lake (S002-129), dissolved oxygen concentrations have been improving. The outlet of Badger Lake is a channel that flows from Badger Lake to Mitchell Lake that was dug as part of the Poplar River Diversion Project. The Hwy 2 crossing of that channel (S002-131) has a decreasing trend in TP concentrations, but TSS concentrations have been increasing.

- Trend analysis for the outlet of Maple Lake

At the outlet of Maple Lake (S002-130), two significant trends in water quality conditions were found. There is good news that that TP concentrations have been trending downward. However, E. coli concentrations have been trending upward. Exceedances of the chronic E. coli standard have become more common in recent years. One possible explanation is that waterfowl in the pond between the lake and the sampling site are contributing to the E. coli problem. Sampling of E. coli within the lake, near the outlet, may be recommended to identify or rule-out safety concerns for aquatic recreation within the lake.

Seasonal Water Quality Trends from Seasonal Mann-Kendall Analysis				
Maple Lake Outlet (S002-130)	Total Suspended Solids	Dissolved Oxygen	Total Phosphorus	E. coli
Years	1992-2016	1992-2016	1984-2016	2004-2016
Annual Avg (All Months)	X	X		
Annual Max (All Months)	X	X	X	
Annual Min (All Months)		X	X	X
May - September Avg.	X	X		
April	Data <10	X		Data <10
May	Data <10	X	X	Data <10
June		X	X	Data <10
July	X	X		Data <10
August	X	X	X	Data <10
September	Data <10	X	X	Data <10
October	X	X		Data <10
X = No Trend				
= Downward Trend (Improvement)				
= Strong Upward Trend (Getting Significantly Worse)				
= Upward Trend (Getting Worse)				

- Trend analysis for the Maple Lake Inlet

Although TP concentrations may be improving during the late fall at the inlet to Maple Lake, the trends identified for DO, E. coli, and TSS are moving in the wrong direction.

Seasonal Water Quality Trends from Seasonal Mann-Kendall Analysis				
Maple Lake Inlet (S002-075)	Total Suspended Solids	Dissolved Oxygen	Total Phosphorus	E. coli
Years	1994-2016	1991-2016	1989-2016	2005-2016
Annual Avg (All Months)	X	X	X	↑
Annual Max (All Months)	↑	X	X	X
Annual Min (All Months)	X	X	X	X
May - September Avg.	X	X	X	↑
April	Data <10	X	X	Data <10
May	Data <10	↓	X	Data <10
June	X	X	X	Data <10
July	X	↓	X	Data <10
August	X	X	↓	Data <10
September	X	X	+	Data <10
October	X	↓	X	Data <10
X = No Trend				
↓ = Downward Trend (Improvement)				
+ = Strong Downward Trend (Getting Significantly Better)				
↑ = Strong Upward Trend (Getting Significantly Worse)				
↑ = Upward Trend (Getting Worse)				
↓ = Downward Trend (Getting Worse)				

Thief River Watershed Restoration and Protection Strategy

A contract between the RLWD and the MPCA for editing the Thief River Watershed Total Maximum Daily Load and Watershed Restoration and Protection Strategy documents throughout the public notice process was executed on April 5, 2017. The RLWD will add a TMDL for the Mud River *E. coli* impairment, applying edits based on current comments, and edit the documents based on public comments. The Mud River *E. coli* impairment was proposed for removal from the List of Impaired Waters. The river meets the standard at the long-term monitoring site at Highway 89, but a site-specific impairment was discovered during recent sampling within the town of Grygla.

Red Lake River Watershed Restoration and Protection Strategy

A contract between the RLWD and the MPCA for editing the Red River Watershed Total Maximum Daily Load and Watershed Restoration and Protection Strategy documents throughout the public notice process was executed on April 14, 2017.

Grand Marais Creek Watershed Restoration and Protection Project

Project partners participated in a phone conference on April 13, 2017 to discuss edits that were made to the Grand Marais Creek Watershed Restoration and Protection Strategy document in response to comments. Maps were added to the document and existing maps were improved. The restoration and protection strategy table was discussed. RLWD staff reviewed a draft list of restoration and protection strategies for the Grand Marais Creek WRAPS.

Other Notes

- RLWD staff met with Red Lake County Environmental Services staff to examine septic-smelling seepage at the CR 119 crossing of the Hill River near Brooks.
- RLWD staff received a complaint about fish kills and swimmer's itch in the Clearwater River during late summer drainage of wild rice paddies into the river.
- RLWD staff reviewed the Polk County Water Plan.
- RLWD staff reviewed three proposals from consultants for the Thief River Watershed One Watershed One Plan process.
- RLWD staff assisted River Watch Programs with monitoring.
 - Red Lake Falls
 - Red Lake County Central
- The Red Lake Department of Natural Resources has been working on plans for investigative *E. coli* sampling. They are planning to use microbial source tracking and longitudinal sampling to identify sources of *E. coli* bacteria pollution for the Upper and Lower Red Lakes Watershed Restoration and Protection Strategy project.

April 2017 Meetings and Events

- **April 5, 2017** – Marshall County Water Resources Advisory Committee
 - Marshall County passed a resolution stating that they were against the Buffer Bill.
 - The Thief River One Watershed One Plan process was discussed.
 - Request for proposals has been made available to potential consultants.
 - A kick-off meeting may be held in June or July of this year.
 - The RLWD is paying per diems for landowners that participate.
 - There were questions about how much the process costs counties. A county commissioner was interested in seeing numbers from other IWIP processes.
 - Marshall County has received a grant for septic system upgrades. Three septic system improvement projects are planned for this year. Many of the septic system problems that have been found in the county have surfacing effluent in yards.

- Marshall County continues to maintain the Florian Nature Area.
- Wetland banking and the Local Road Wetland Replacement Program were discussed. Wetland bank credits are being depleted. An appropriation of \$5 million for the Local Road Wetland Replacement Program (LRWRP) was approved by Gov. Dayton on March 9, 2017. There is an effort to include \$10 million in the bonding bill to create wetlands in areas that have been depleted. Marshall County has to replace wetland acres at a 2:1 ratio (at \$15K-\$20K/acre) due to >50% wetland loss within the county. There was a question about whether or not wetland bank credits can be created within impoundments and the status of the wetland banking process for wetlands within the Louisville-Parnell Impoundment.
- Agassiz National Wildlife Refuge experienced an easy spring runoff. All of their pools are full. Cattle will be brought in to graze portions the refuge. The refuge lost three employees and prohibited from hiring people to fill those positions by an executive order from President Trump. The USFWS did not use an excavator to clear sediment from the Judicial Ditch 11 within Agassiz Pool in 2016, but did use a Swamp Devil barge in September of 2016. This corresponds with higher total suspended sediment concentrations that were observed in the Thief River in late September and early October of 2016.

Example photo of a Swamp Devil Barge in action



- **April 13, 2017** – RLWD Board of Managers meeting. Water quality related items from the agenda and minutes:
 - Discussion was held on the appointment of a Citizen Advisory Committee to represent the District on the Thief River 1W1P, RLWD. The Board authorized Administrator Jesme to contact landowners and inquire of their interest in being a part of the Thief River 1W1P Citizen Advisory Committee.
 - The Red Lake River One Watershed One Plan was presented to the Northwest Regional BWSR Committee on April 12, 2017. The Northwest Regional Board recommended approval to the main BWSR Board for their approval, which will be presented at their regularly scheduled meeting April 26, 2017.

- A Step I funding submittal for the Black River Impoundment will be presented to the Red River Watershed Management Board at their April 18, 2017 meeting.
- The Red Lake River Corridor Joint Powers Board will host a bus tour of the Red Lake River on April 19, 2017. The bus tour will enable members of the Greater Minnesota Regional Parks and Trails commission and local leaders to view and visit the six member communities along the length of the river with the goal of strengthening a proposal for future funding for the Red Lake River Corridor Enhancement.
- The Pennington SWCD submitted a request for a financial donation to the Area I Envirothon. The Area I Envirothon will be held on April 26, 2017, at Lake Bronson State Park. The Board approved a donation of \$300 to the Area I Envirothon to promote education and awareness of water quality issues.
- The Board reviewed the draft 2016 Annual Report.
- **April 20, 2017** – Thief River Falls Community Expo
 - The District set-up a booth and displays at the event. The District gave away two rain gauges in a drawing.
- **April 27, 2017** – RLWD Board of Managers meeting. Water quality related items from the agenda and minutes:
 - Craig Mowry and Jordan Young (USFWS, Agassiz National Wildlife Refuge) presented information on a MNDNR Conservation Partners Legacy Grant for habitat restoration enhancement on public lands. Young stated that the Agassiz National Wildlife Refuge pool shoreline has moved in over the years due to sedimentation. Cattail invasion is now a problem due to the accumulation of sediment. The objective is to improve management abilities through the reduction of cattail density and infrastructural repairs. Project components would consist of aerial spray application and major water control structure repair work at an anticipated cost of \$239,500. Work is anticipated to be completed in 2018-2020. Mowry requested that the District partner with Agassiz National Wildlife Refuge to apply for a Minnesota DNR Conservation Partners Legacy Grant. The District would receive a 5% Administrative fee for administering the grant. The Board voted and approved the partnership with the Agassiz National Wildlife Refuge to apply for a Minnesota DNR Conservation Partners Legacy Grant for the habitat restoration at Agassiz National Wildlife Refuge.
 - Administrator Jesme reviewed a quote to repair a water quality sonde in the amount of \$1,575.81. Jesme stated that the sonde is owned by the MPCA, with the MPCA planning to dispose of the equipment. The equipment was purchased in 2014, therefore District staff recommended repairing the equipment if the MPCA is willing to dispose of the equipment and turn it over to the District. The Board voted in favor of repairing the water quality sonde at a cost of \$1,575.81, if the MPCA is willing to turn the equipment over to the District.
 - The Thief River One Watershed One Plan Policy Committee kick-off meeting was held at the District office on April 17, 2017. Consultant Request for Qualifications (RFQ) from three consultants were submitted to the 1W1P Planning Group. The Planning Group will meet to review the RFQ's and set a date and time for interviews.

- Marisa Newton will be assisting District staff this summer to help with water quality monitoring. One additional summer staff will be hired to assist with surveying.

Quote of the Month:

“Vision without action is a daydream. Action without vision is a nightmare.”
Japanese proverb

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](#) to stay up-to-date on RLWD reports and activities.

