

By Corey Hanson, Red Lake Watershed District Water Quality Coordinator. 4/2/2018.

- ✓ Thief River Watershed One Watershed One Plan
- ✓ Clearwater River Watershed Restoration and Protection Strategy Project

Thief River One Watershed One Plan (1W1P)

- District staff provided Houston Engineering staff with a GIS layer of impaired waterways in the Thief River watershed.
- Public meetings were held on January 9th and 10th, 2018.
 - Voting on priority issues
 - Meals were provided to attendees
- Photos from the meetings were shared
- A hard copy of the Thief River Watershed Source Water Assessment was found, scanned, and shared.
- Policy and Advisory Committee contact lists were added to the Thief River One Watershed One Plan website (<http://www.rlwdwatersheds.org/thiefriver1w1p>).
- Flow data files were shared with Houston Engineering
- Text about aquatic invasive species (AIS) from the Red Lake River WRAPS was provided to Houston Engineering staff so that something similar could be added to the emerging concerns section of the Thief River 1W1P.
- District staff reviewed and provided comments on the draft introduction to the Thief River 1W1P document.
- District staff reviewed and provided comments on the draft Protection and Restoration Strategy Technical Memorandum
- District staff reviewed and provided comments on the structure of the measurable goals table.
- Houston Engineering shared the results of the priority issues voting with the planning work group. Each person that attended a public meeting received 10 stickers for voting on the issues that were most important to them. A total of 431 votes were cast. Public votes outnumbered agency votes 328 to 103. The top vote-getting issue (81 public votes and 3 agency votes) was: *“Increased erosion and sedimentation resulting from bank failure and slumping, and gully formation prevents the proper function of drainage systems and increases maintenance costs.”* Forty issues received votes and will be prioritized based on the number of votes and other factors. Six issues received zero votes.



Thief River Watershed Prioritize, Target, and Measure Application (PTMApp) Development

District staff finalized a list of priority resource points for the Thief River PTMApp.

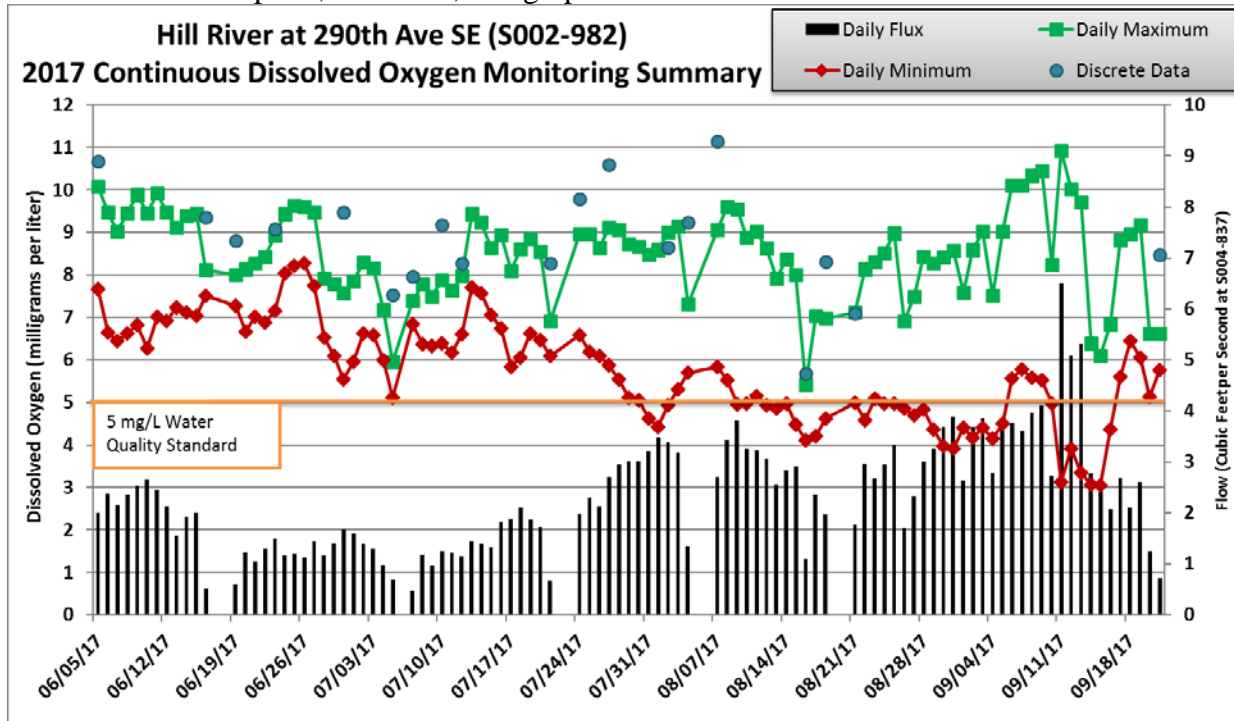
Thief River Watershed Restoration and Protection Strategy (WRAPS)

The Thief River Watershed Total Maximum Daily load report was edited to address comments from the United States Environmental Protection Agency. A semi-annual progress report was completed for the Thief River WRAPS and sent to the MPCA Project Manager.

Clearwater River Watershed Restoration and Protection Strategy (WRAPS) Project

- Objective 8 – Data Analysis
 - Longitudinal *E. coli* and dissolved oxygen sampling charts were created to communicate the results of 2017 longitudinal sampling within the Clearwater River watershed. The charts can be found in the July-August 2017 water quality report (<http://www.redlakewatershed.org/waterquality/MonthlyWQReport/2017%207%20July-Aug%20Water%20Quality%20Report.pdf>) and the September – October 2017 water quality report (<http://www.redlakewatershed.org/waterquality/MonthlyWQReport/2017%2009%2010%20Sept-Oct%20Water%20Quality%20Report.pdf>)
 - Longitudinal Poplar River dissolved oxygen assessment

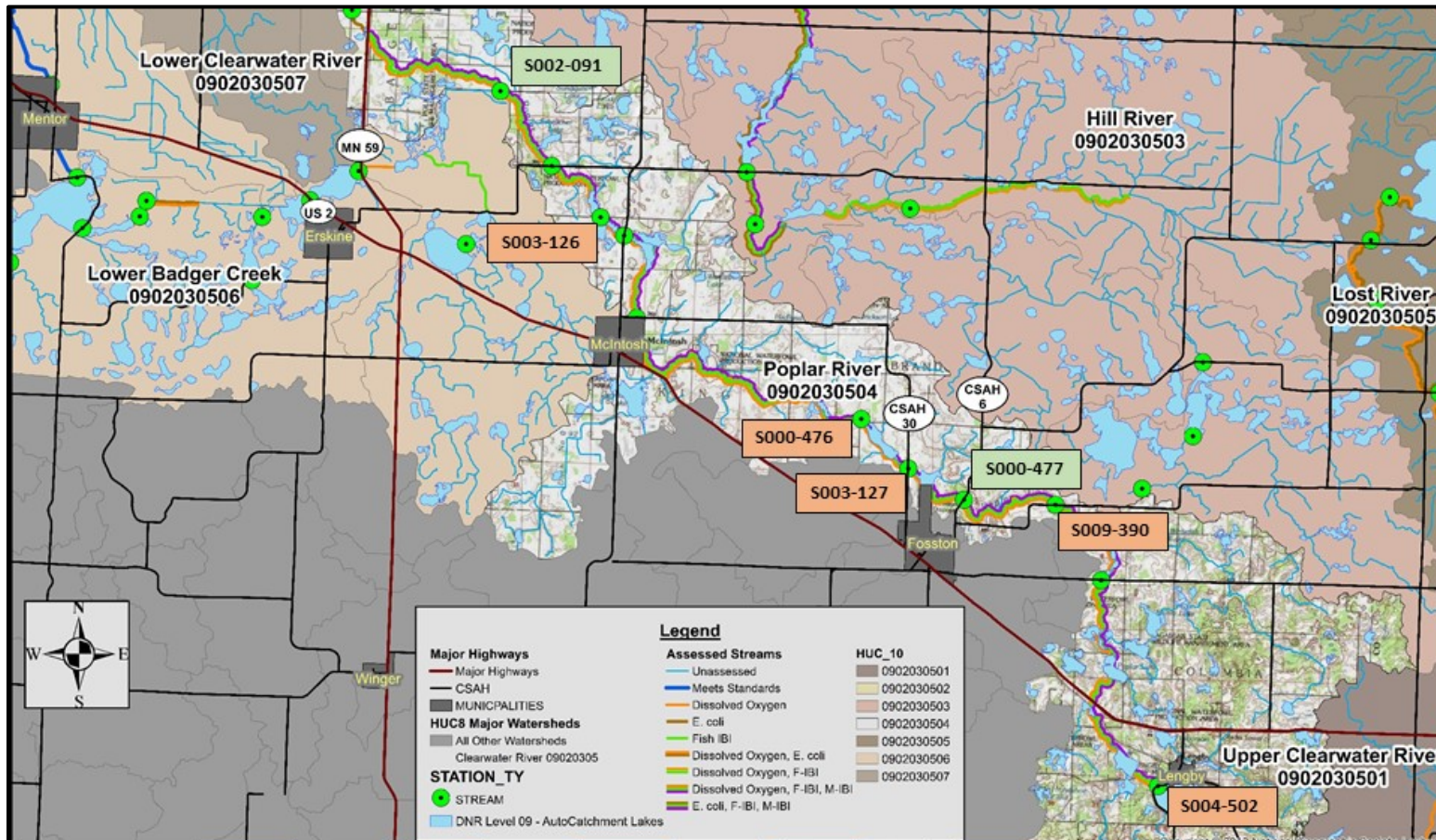
- 2017 continuous dissolved oxygen data from the Hill River at 290th Ave SE was compiled, corrected, and graphed.



- Objective 10 – Reports
 - Wrote Section 4.3.3 – Stressors of fish biological integrity in the Hill River downstream of Hill River Lake
 - Wrote Section 4.3.8 – Stressors of fish biological integrity in the Hill River upstream of Hill River Lake (09020305-656)
 - Wrote Section 4.3.9 - Stressors of fish biological integrity in Red Lake County Ditch 23 (09020305-658)
 - Wrote Section 4.4.1 - Causes of low dissolved oxygen in Walker Brook (09020305-509)
 - Wrote Section 4.4.2 - Causes of low dissolved oxygen in the headwaters of the Clearwater River (09020305-517)
 - Worked on the Poplar River sections that describe causes of low dissolved oxygen levels, stressors of fish communities, and stressors of macroinvertebrate communities
 - Wrote Section 4.4.11 - Causes of low dissolved oxygen in the Hill River upstream of Hill River Lake (09020305-656)
 - Improvements were made to index of biotic integrity maps.
 - A semi-annual progress report was completed for the Clearwater River WRAPS and sent to the MPCA Project Manager.

RED LAKE WATERSHED DISTRICT MONTHLY WATER QUALITY REPORT

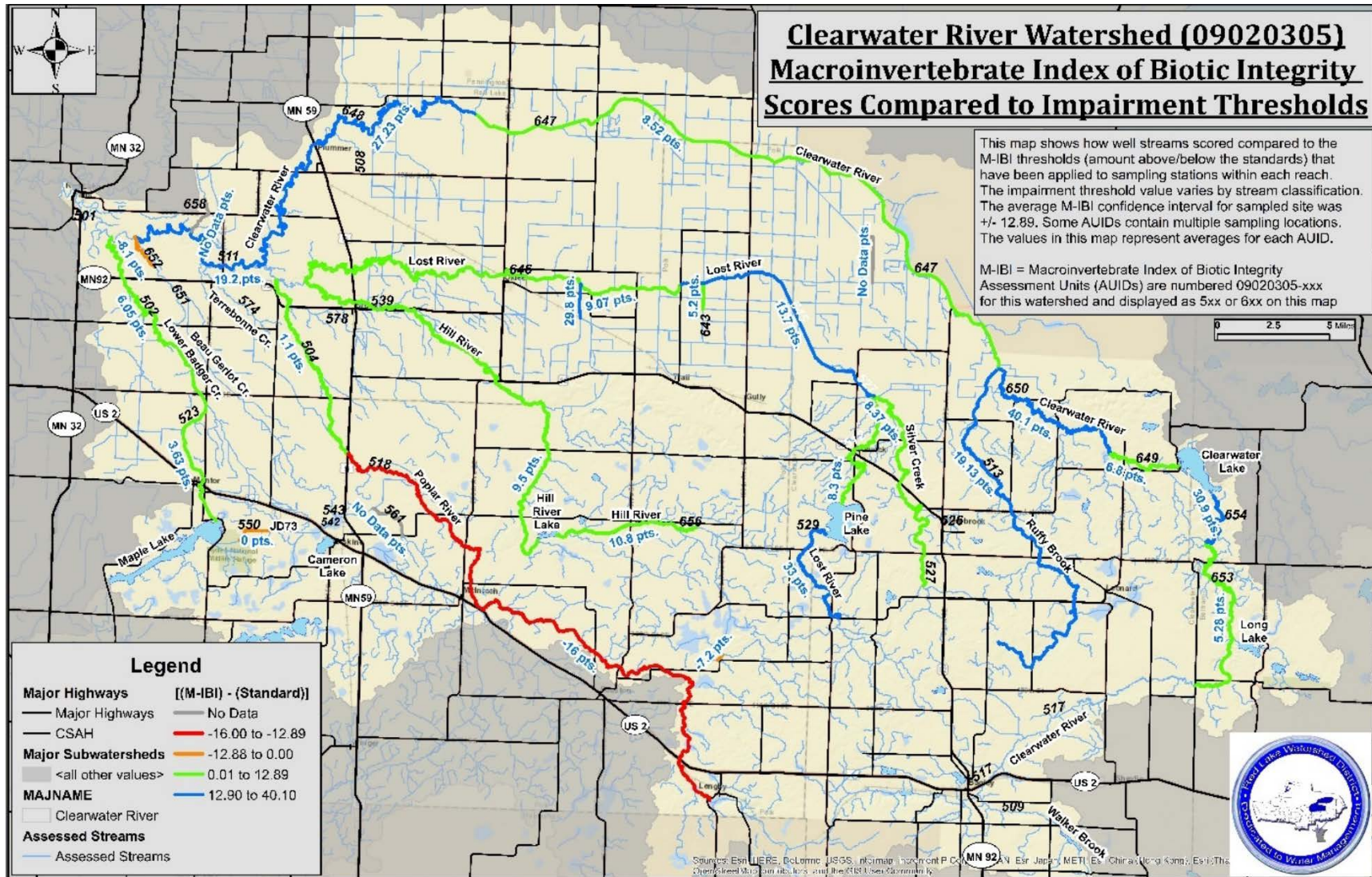
January 2018



Site ID:	S002-091	S003-126	S000-476	S003-127	S000-477	S009-390	S004-502
Street/Road:	315th St. SE	340th St. SE	380th St. SE	CSAH 30	CSAH 6	CSAH 27	390th St. SE Spring L. Outlet
Discrete and Continuous Dissolved Oxygen Measurements DO5_All (May-September Daily Minimums)							
Days with Data	26	80	36	202	45	50	70
Daily Minimums <5 mg/L	2	52	32	74	2	47	41
% of Days with Low DO	7.7%	65.0%	88.9%	36.6%	4.4%	94.0%	58.6%
Discrete Dissolved Oxygen Measurements Only DO5_All (May-September Daily Minimums)							
Days with Data	26	32	14	73	27	12	17
Daily Minimums <5 mg/L	2	7	8	4	1	8	0
% of Days with Low DO	7.7%	21.9%	57.1%	5.5%	3.7%	66.7%	Insufficient Data

RED LAKE WATERSHED DISTRICT MONTHLY WATER QUALITY REPORT

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Red Lake Watershed District Long-Term Monitoring Program

A QA/QC review of 2017 monitoring data was completed prior to finalization of 2017 water quality monitoring data in the Minnesota Pollution Control Agency's EQUIS database.

River Watch

River Watch teams were working on the preparation of projects for the 2018 River Watch Forum. Ashley Hitt visited schools within the District to provide assistance.

Red Lake River Watershed Restoration and Protection Strategy

A semi-annual progress report was completed for the Red Lake River WRAPS and sent to the MPCA Project Manager.

Red Lake River One Watershed One Plan (1W1P)

The Red Lake River 1W1P has been allocated \$677,551 from the Minnesota Board of Water and Soil Resources Clean Water Funding for implementation of the 1W1P. The Planning Work Group has been meeting periodically to develop an initial work plan that describes how that money will be spent.

Grand Marais Creek Watershed Restoration and Protection Strategy

A contract was signed on January 12, 2018 and executed on January 22nd, 2018 for the public notice process and editing of the Grand Marais Creek Total Maximum Daily Load (TMDL) and Watershed Restoration and Protection Strategy (WRAPS) documents. District staff will edit the WRAPS and TMDL documents when the MPCA has completed a review of the draft documents.

Other Notes

- A paleolimnological study has been completed for Bartlett Lake, near Northome. There is local interest in pursuing funding for a project that will improve water quality in the lake.
- A water quality report was completed for July and August of 2017.
- District staff reviewed and provided comments on the 2018 Draft List of Impaired Waters.

January 2018 Meetings and Events

- **January 4, 2018** – Red Lake River One Watershed One Plan Planning Work Group meeting at the Pennington SWCD
- **January 8, 2018** – Thief River One Watershed One Plan coordination call **8**
- **January 9, 2018** – Thief River One Watershed One Plan Public Meeting in Thief River Falls.

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

January 2018

- **January 10, 2018** – Thief River One Watershed One Plan Public Meeting, Policy Committee Meeting, and Advisory Committee meeting in Grygla
- **January 23, 2018** – RLWD and City of Thief River Falls staff met to discuss the expensive wastewater treatment facility upgrades that may be required to meet a 1 mg/L standard for discharge. City staff want to explore the possibility funding projects that more cost effectively reduce phosphorus and sediment loading as an alternative to the wastewater treatment upgrades.
- **January 24, 2018** – Conference call to plan the annual Red River Basin Water Quality Monitoring Training event

Quote of the Month:

“We must all either wear out or rust out, every one of us. My choice is to wear out

- Theodore Roosevelt

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.