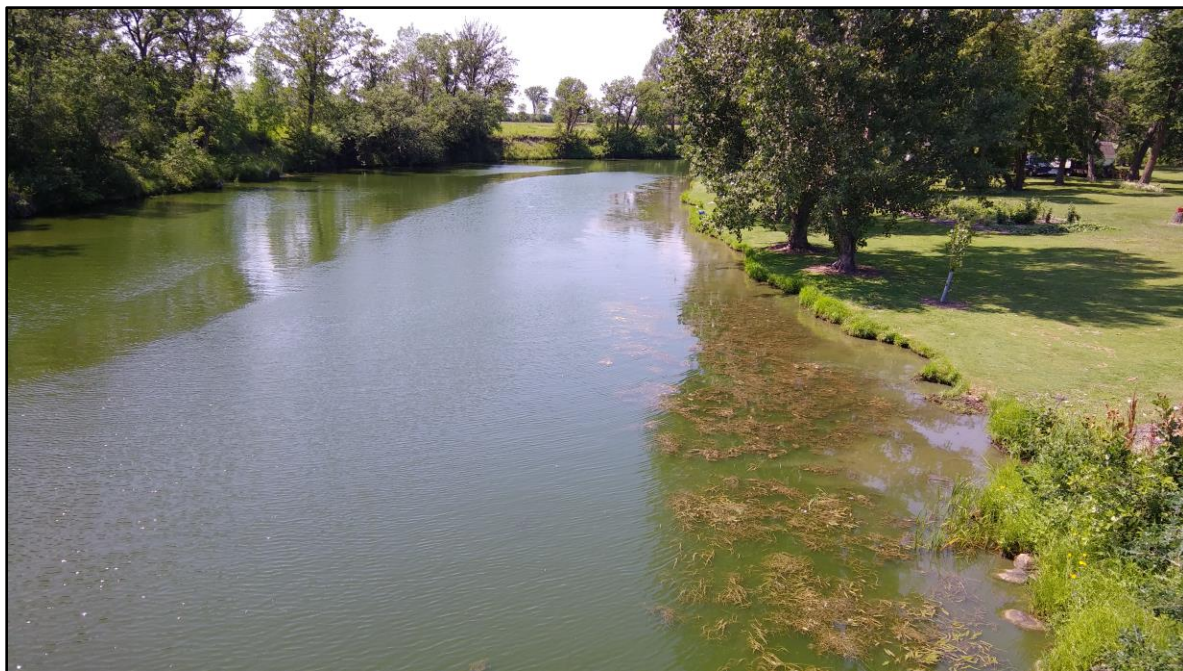


By Corey Hanson, Red Lake Watershed District Water Quality Coordinator. 12/21/2018.

- ✓ Thief River Blue-Green Algae Bloom
- ✓ Blue-Green Algae in Maple Lake
- ✓ District monitoring results
- ✓ Clearwater River Watershed Restoration and Protection Strategy Project
- ✓ Thief River Watershed Zonation Map

### **Thief River Blue-Green Algae Bloom**

On Friday, Jul 13, 2018, a significant blue-green algae bloom was found in the Thief River near the golf course. District staff were notified of the bloom by Pennington County Soil and Water Conservation District (SWCD) staff. They had been alerted to the problem by a landowner. The river looked normal at the northern 140<sup>th</sup> Ave crossing of the river (“Hillyer Bridge”). However, while traveling south and nearing the “Golf Course Bridge” crossing of the river, there was a very noticeable, strange smell in the air. The river was a very abnormal green color.



Pennington SWCD staff helped photograph and find the extent of the bloom. They found floating, slimy mats of blue-green algae along the streambank within the golf course. They reported that the bloom extended upstream past the golf course clubhouse. The bloom had not yet traveled downstream to Long’s Bridge. Samples were collected. Latex gloves were used for protection during sampling. The slime from the blue-green algae coated sampling equipment, so it had to be thoroughly washed afterward. While driving back to the office, RLWD staff spotted Mayor Brian Holmer walking from the city hall building to his business and informed him of the problem. He shut down the beach (<http://trfradio.com/2018/07/13/holmer-orders-tindolph-beach-closed-due-to-blue-green-algae/>).

Thief River Blue-Green Algae Bloom July 13, 2018 – Golf Course Bridge



Thief River Blue-Green Algae Bloom July 13, 2018



District staff printed and laminated water advisory signs. The signs were placed along the Thief River and the Red Lake River (downstream of the confluence) where people or pets might access the water. Photos and information about the bloom were shared on social media, law enforcement, the mayor, and city staff. District staff were interviewed for a Thief River Falls Times newspaper article.





## WATER ADVISORY

**This water may contain blue-green algae that can be harmful to humans and pets.**

To reduce the risk of illness:

- **DO NOT** swim, waterski, or tube if the water looks like spilled green paint or pea soup
- Avoid swallowing water and watch small children and pets who may ingest water
- Rinse off with clean water after swimming
- Stay away from areas of scum when boating



Contact your healthcare provider or veterinarian if you or your pet becomes sick after swimming.  
For more information call: 218-681-5800

Pennington SWCD and RLWD staff discussed the problem and agreed that a no-wake ordinance would help prevent future problems by minimizing the disturbance of sediment and reducing erosion along the river. Nutrient enrichment leads to algae blooms. Internal loading is the resuspension of nutrients into the water column. In shallow lakes, internal loading is caused by wave action and boat traffic. While investigating the blue-green algae bloom, several boats were observed traveling upstream and downstream. Active resuspension of sediment from the bottom of the river and erosion of river banks was observed after the fast-moving boats passed. Slower-moving watercraft had a lesser impact. Regardless of the presence of an algae bloom, it might be a good idea to have a no wake zone in the shallower and narrower parts of the Thief River to reduce erosion and damage to shoreline. A no-wake zone would also be good for the general safety for people that are using the river. Where the river is narrower, it could be dangerous for two boats to meet while rounding a corner if they are moving too fast. The no-wake idea was passed along to the mayor, along with other information about the blue-green algae bloom. The mayor, sheriff, and county attorney also thought that a no-wake ordinance was a good idea and quickly began working on a temporary no-wake ordinance. District staff provided additional information to city and county staff to help support the ordinance.

This was a problem that hasn't been documented on this river before. It was likely that a number of factors combined to cause the problem like stagnant water, heat (warm water), and nutrients. Some things, like a lack of vegetative streambank protection, have existed there for some time without causing an algae bloom. There seemed to be a significant, more noticeable, amount of boat traffic up the Thief River (to the golf course and further upstream). Slow and careful travel might be okay and might not stir up too much sediment, but one of the observed boats was a pontoon pulling a water skier. They were traveling relatively fast and left a wake of stirred-up sediment behind them. Disturbing nutrient-rich sediment from the river bottom and adding nutrients to the water column can possibly (probably) make the algae problem worse.

Thief River Blue-Green Algae Bloom July 17, 2018 – Long's Bridge



Thief River at the Golf Course Bridge on July 25, 2018 – looking like it was back to normal



When the weather cooled-off somewhat at the end of July, the blue-green algae bloom in the Thief River seemed to disappear. There no longer were visual signs of a bloom at the Golf Course Bridge or Long's Bridge. Dissolved oxygen was abnormally low at the Golf Course Bridge on July 25th, which was a sign that the bloom had died-off and was decomposing. District staff conducted several tests on the water in the Thief River at Long's Bridge during the



last week of July and all the tests indicated that blue-green algae and algal toxins are at very low, safe levels. A sample was collected (near-shore, surface water at Long's Bridge) on July 26<sup>th</sup> and sent to RMB Environmental Laboratories. That sample was analyzed for the presence of any blue-green algae (toxic or not).

In a sample collected on July 13<sup>th</sup> (the day that we discovered the bloom), the lab found that the phytoplankton population in the sample was dominated by potentially toxic species of cyanobacteria (blue-green algae) and validated the initial concern about the bloom. In a sample collected on July 26<sup>th</sup> (collected after the bloom seemed to have cleared-up), the lab found that the blue-green algae in the sample were "not at concentrations that may cause harm." The RLWD used Abraxis test strip kit to test for algal toxins on July 27<sup>th</sup> and the test did not show that a measurable amount of toxins was present (0 parts per billion). Samples were also sent to RMB Environmental Laboratories for an analysis called a "cyano scan."

The Red Lake Watershed District removed the water advisory signs that were placed along the river once there no longer were indications of a threat from blue-green algae. However, we now know that a bloom is something that can happen in our area. So, we still recommend keeping an eye-out for potential blooms, especially during hot summer days, because blue-green algae can grow quickly and become dominant if conditions are "right."

Here is a link to an interesting article about how problematic blue-green algae blooms have been spreading across the state: [https://www.wisconsin Gazette.com/news/environment/mystery-in-minnesota-dogs-dying-from-toxic-algae-blooms/article\\_9a3f4a83-0d15-5866-bcf8-071783130321.html](https://www.wisconsin Gazette.com/news/environment/mystery-in-minnesota-dogs-dying-from-toxic-algae-blooms/article_9a3f4a83-0d15-5866-bcf8-071783130321.html).

The issue caught the interest of the public in Thief River Falls. Approximately 70 people began following the RLWD Facebook page to stay updated on the issue. The RLWD's Facebook post about the problem was shared 423 times. There were some questions from residents about the safety of the Red Lake River downstream of the Thief River confluence. Flow from the Red Lake River was much greater than flow from the Thief River (the flow in the Thief River was <1 cubic foot per second at the time), so any blue-green algae coming from the Thief River would have been diluted by the relatively clean water in the Red Lake River. A sample was collected from the Red Lake River (Hartz Park, 8/9/2018) and analyzed by RMB Environmental Laboratories to see if potentially toxic blue-green algae were present at levels that would be cause for concern and hopefully confirm that the water is safe. The lab found only a few colonies of a potentially toxic species of blue-green algae (*Aphanocapsa* sp.). The lab reported that the blue-green algae was present at such a low concentration that it was not very likely to cause any harm or other concerns.

Please feel free to contact the Red Lake Watershed District, the Pennington County Soil and Water Conservation District, or city staff/leadership if you ever see anything that might be a public health threat in the river.

### **Maple Lake Area Algae Problems**



In response to complaints of nuisance algae in Maple Lake, the Red Lake Watershed District (RLWD) collected samples and utilized RMB Environmental Laboratories' (RMB Labs) new algae identification service. A sample of lake water and floating algae clumps was collected from a dock in the Maple Bay area. Analysis by RMB Labs found that the dominant forms of phytoplankton were diatoms and green algae (Spirogyra). Spirogyra is common in freshwater habitats and may develop slimy, filamentous green masses. It can be a nuisance but is not harmful. In addition to identifying the dominant form of algae, however, the lab also noted that potentially toxic species of blue-green algae were also present in the sample. In response to that information, RLWD staff collected a sample that included multiple floating clumps of algae and tested it with an algal toxin test strip on July 6, 2018. The test indicated that there were approximately 5 µg/L of



microcystin algal toxins in the sample. An algae sample was then collected for analysis by RMB Environmental Laboratories. The algal toxin test results were shared with the Maple Lake Improvement District and the Maple Lake, Mentor MN" Facebook group. The test revealed that algal toxins were present in the sample at a concentration of approximately 5 ug/L. Information on the EPA website categorizes that concentration as a "low risk." Additional research has been done in order to better define "low risk" and will continue. The concentration of 4 ug/L was noted on the NOAA website as a level that could be an irritant to people with allergies. A microcystin (algal toxin) concentration of 4 ug/L is also noted as a draft EPA advisory concentration for recreational exposures (EPA recommends a swimming advisory for concentrations higher than that level).

The RLWD collected another sample from the public swimming beach on the north end of the lake on July 9, 2018 and sent it to RMB Labs for analysis. A more thorough analysis was conducted on that sample to accurately quantify the different types of phytoplankton. Cyanobacteria (blue-green algae) comprised 7.4% of the total units (cells/colonies/filaments) per liter of phytoplankton found in the sample.

Based on the discovery of the 4 ug/L draft EPA swimming advisory recommendations, the RLWD will collect and analyze additional samples for algal toxins and share the results with Maple Lake Improvement District board members, the Maple Lake, Mentor MN Facebook group, and with any other recommended outlets/individuals.

The lake was sampled again for algal toxins on July 27, 2018. Samples were collected from the swimming beach on the north end of the lake (wading depth) and from the boat access on the southwest end of the lake. Both samples had a microcystin algal toxin concentration of approximately 5 µg/L.

Agricultural runoff is one source of sediment and nutrient runoff to the lake that can be controlled with best management practices. The East Polk Soil and Water Conservation District and the RLWD will work together to submit a Clean Water Fund grant application to fund the installation of water and sediment control basins (WASCOBs) in the Clearwater River Watershed.

Sediment deposited within a ditch near Maple Lake after a runoff event



### **City of Clearbrook Pond Excavation and Illegal Channel Excavation along Clear Brook**

While sampling, District staff learning that an excavation project was underway along Clear Brook. A contractor was working on draining water from the pond along Clear Brook, in the town Clearbrook, to facilitate additional excavation of sediment from the pond. The dark-colored, sediment-laden water was being pumped into the downstream channel. The downstream channel, between Main Street and CSAH 5, had been completely excavated. Vegetation and sediment had been scraped from the banks of the stream as if the contractor had been performing a ditch cleanout project. Clear Brook, however, is not a ditch. It is a protected public water. An



employee of the contractor (Dyrdahl Construction) said that the channel was excavated to “make it easier to mow.”

Unpermitted excavation along Clear Brook, looking upstream (east) from CSAH 5 in Clearbrook



Excavation along Clear Brook in the city park – looking upstream (east)  
The culvert on the south (right) bank in this photo is the outlet of the stormwater pond





Excavation along Clear Brook in the city park – looking downstream (west)



Slurry of muddy water being pumped from the pond in Clearbrook



District staff contacted that area's DNR hydrologist to ask about the project and let them know what was happening. The DNR staff had only permitted the excavation to deepen the pond upstream of the weir on the east (upstream) side of Main Street. The DNR had specifically instructed the city not to do any work on the channel downstream. The DNR had also not permitted the disposal of sediment in the downstream channel through the pumping of muddy water from the bottom of the pond.





Excavation within the pond along Clear Brook in the town of Clearbrook (the work that was permitted by the DNR)



Fill from the excavation, 20-25 yards north of the Clear Brook channel, along CSAH 5





**Red Lake Watershed District Long-Term Monitoring Program**

The third 2018 round of samples was collected for the District's long-term monitoring program in July.

In July 2018 samples, **high total suspended solids** concentrations were found in:

- Darrigan's Creek
- Mud River at Hwy 89 (28.8 mg/L)
- Moose River at CSAH 54 (>15 mg/L)
- Thief River at 380<sup>th</sup> St NE

**Low total suspended solids** concentrations (notably meeting total suspended solids the standard on impaired rivers) were found in:

- Red Lake River at CSAH 11 near Gently
- Red Lake River in Crookston
- Red Lake River at Fisher

In July 2018 samples, **high total phosphorus** concentrations were found in:

- Black River at CSAH 18
- Blackduck River
- Chief's Coulee at Dewey Ave in Thief River Falls
- Clearwater River at CSAH 2
- Clearwater River at CR 127
- Clearwater River north of Plummer
- Clearwater River at CSAH 12, near Terrebonne
- Coburn Creek
- Cyr Creek
- Darrigan's Creek
- Hill River at 335<sup>th</sup> Ave SE, upstream of Hill River Lake
- Hill River at CSAH 35, downstream of Hill River Lake
- Lost River upstream of Pine Lake
- Lost River at CSAH 28, north of Trail
- Lost River in Oklee
- Moose River at CSAH 54 (>0.05 mg/L)
- Mud River at Hwy 89 (0.072 mg/L)
- Nassett Creek
- North Cormorant River
- O' Briens Creek
- Pennington County Ditch 21 at 135<sup>th</sup> Ave NE
- Poplar River at CSAH 30 near Fosston
- Poplar River at 310<sup>th</sup> St SE
- Poplar River at CR 118
- Ruffy Brook at CSAH 11

## RED LAKE WATERSHED DISTRICT MONTHLY WATER QUALITY REPORT

July 2018

- Silver Creek at CR 111
- South Cormorant River
- Thief River at 380<sup>th</sup> St NE

In July 2018 samples, **high *E. coli* bacteria** concentrations were found in:

- Beau Gerlot Creek at CR 114
- Coburn Creek
- Darrigan's Creek
- Gentilly Creek at CSAH 11 in Gentilly
- Hill River at CSAH 35, downstream of Hill River Lake
- Hill River at CR 119 near Brooks (>2,419.6 MPN/100ml)
- Judicial Ditch 30, north of Thief River Falls
- Kripple Creek near Gentilly
- Lost River at CSAH 8, near Gonvick – the concentration was low at the outlet of Pine Lake, so there was a significant increase in the concentration between Pine lake and CSAH 8.
- Lost River at CSAH 28, north of Trail
- Lower Badger Creek at 150<sup>th</sup> Ave SE
- Lower Badger Creek at CR 114
- O' Briens Creek
- Poplar River at CSAH 30 near Fosston
- Poplar River at CR 118
- Ruffy Brook at CSAH 11
- Silver Creek at 159<sup>th</sup> Ave
- South Cormorant River

**Low dissolved oxygen** concentrations were found in:

- Chief's Coulee at Dewey Ave in Thief River Falls
- Coburn Creek
- Little Black River at CR 102
- Lost River upstream of Pine Lake
- Moose River at CSAH 54
- Thief River at 380<sup>th</sup> St NE
- Thief River at the "Golf Course Bridge" north of Thief River Falls during die-off of the blue-green algae bloom
- Walker Brook at CSAH 19 near Bagley

### **River Watch**

RLWD Natural Resource Specialist Ashley Hitt assisted the International Water Institute with planning and running a River Watch Summer Retreat at the University of Minnesota, Crookston. Activities during this July 17-18 event included team building, macroinvertebrate sampling, leadership development, kayaking the Clearwater River in Red Lake Falls, and more.



**Clearwater River Watershed Restoration and Protection Strategy (WRAPS) Project**

- Objective 9 – Civic Engagement
  - District staff attended a Maple Lake Improvement District (MLID) meeting on July 14, 2018 at the Mentor Community Center. Staff spoke to the standing-room-only crowd about water quality in the lake and blue-green algae issues. Notes:
    - Representatives from the East Polk SWCD, RLWD, Polk County Sherriff’s Department, Polk County Assessor, MN DNR, townships, and county government also spoke at the meeting.
    - The no-wake rule for most lakes, like Maple Lake, only applies to personal water craft.
    - There was an infestation of “stringy” weeds in Maple Lake in 2017.
    - There have been complaints about wake board boats coming too close to shore and creating wakes.
    - There was some discussion about how to warn the public if high levels are found (newspaper, signage, word of mouth, and /or radio).
    - The East Polk SWCD is working on a lakescaping project at the Lake Sarah campground.
    - A lake resident voiced concern about the amount of impervious surface around the lake and the effect that it might be having on water quality.
    - Lake residents expressed interest in educational opportunities.
    - Maple Lake opened up (ice off) early this year, in April 2018.
    - Lake Bronson has also been having blue-green algae problems.
    - There was some discussion about whether the MLID could provide some cost share for lakescaping. Copies of the annual budget were available at the meetings. Only \$2,004.90 was spent on aeration and “lake management/quality” out of the \$51,150 budget. Most of the association’s expenditures (nearly 86%) went toward administration, mosquito spraying, and street lighting. To spend more on projects that improve conditions in the lake, the group may need to make tough decisions about how to scale-back or more efficiently accomplish those big three items.
    - Dissolved oxygen levels were okay when they were tested last winter
- Objective 10 – Report Writing
  - Progress was made on writing sections of the Clearwater River Total Maximum Daily Load report
  - A semi-annual progress report was completed and sent to the MPCA

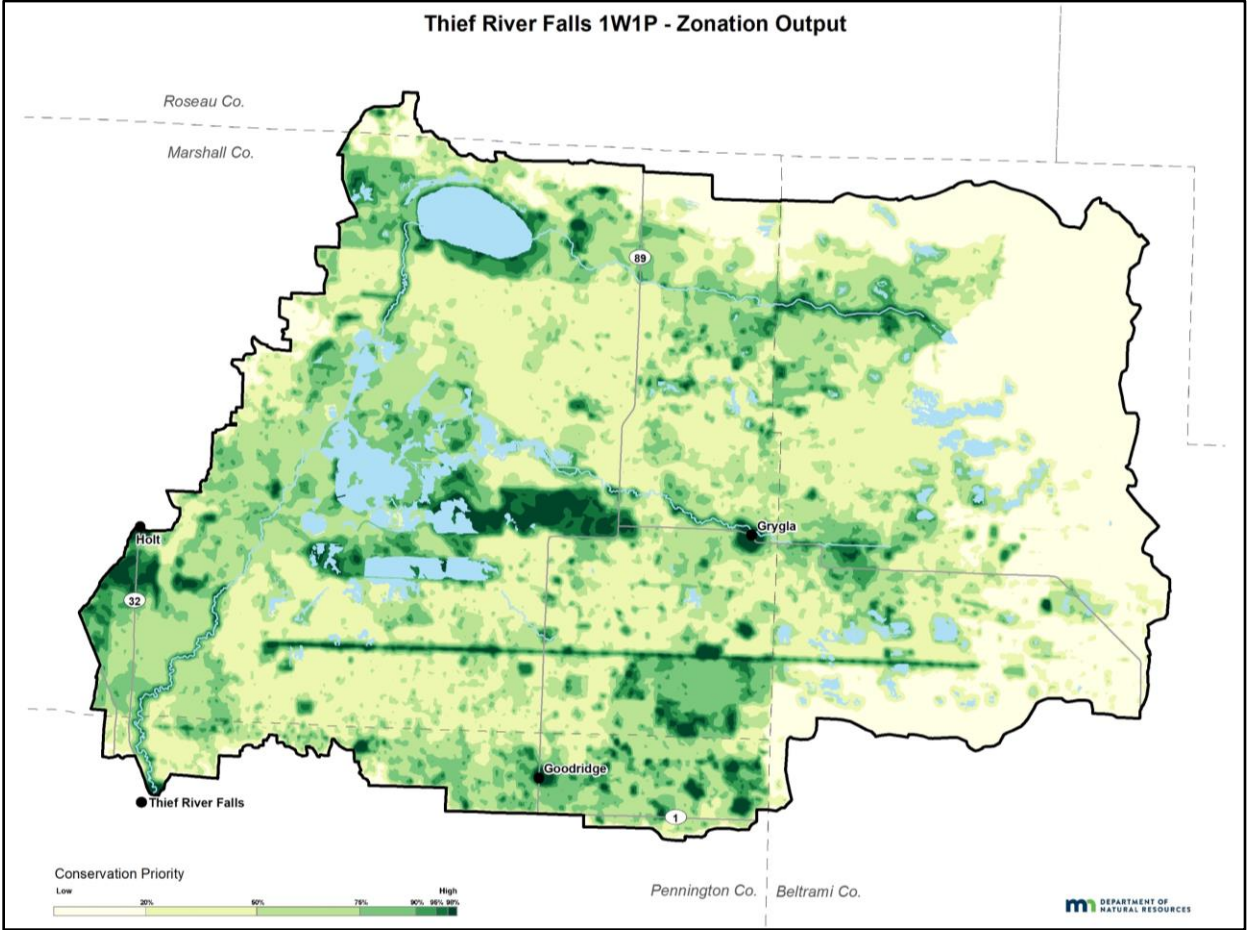
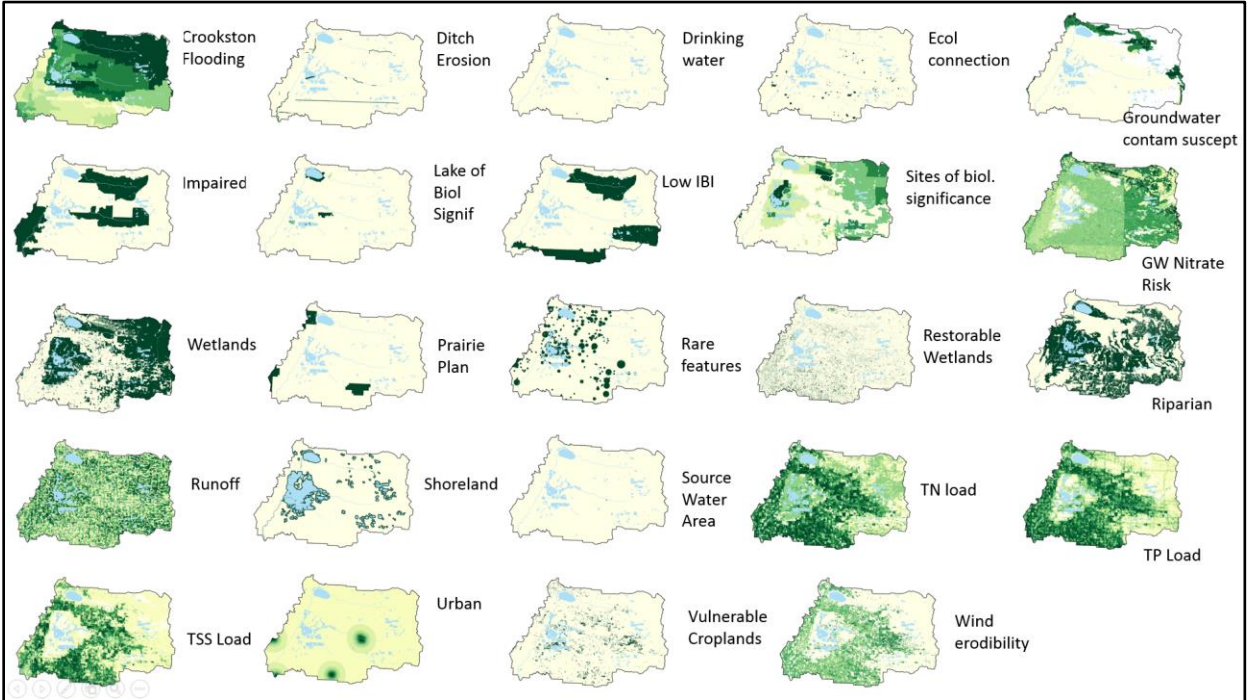
**Thief River One Watershed One Plan (1W1P)**

District staff prepared a presentation about the Thief River TMDL/WRAPS process. A Thief River 1W1P meeting (all committees) was held on July 11, 2018. District staff provided annual budget information to Houston Engineering for a section of the report.

District staff reviewed a draft version of Section 5 of the Thief River 1W1P document. MN DNR staff completed a zonation model for the Thief River watershed. The following images show the layers that influenced the model and the final zonation output map.

# RED LAKE WATERSHED DISTRICT MONTHLY WATER QUALITY REPORT

July 2018





### **Red Lake River Fish Kill**

Algae clumps were sampled near the River Valley Bridge and analyzed for the presence of algal toxins on July 6, 2018. The test indicated that there were no microcystin algal toxin present in the sample.

### **Polk County Fair**

The RLWD set up a booth at the Polk County Fair in Fertile. District staff created a display and handouts for the event. One-page handouts for the Clearwater River WRAPS, Maple Lake water quality, Cameron Lake water quality, and the Grand Marais Creek Outlet Restoration Project were printed for the booth. Staff took turns checking on the booth and restocking the handouts and free pens/candy/notepads.



### **Thief River Watershed Restoration and Protection Strategy (WRAPS)**

The Thief River Watershed Restoration and Protection Strategy and the Thief River Total Maximum Daily Load reports were officially released for public comment on June 25, 2018. A semi-annual progress report was completed and sent to the MPCA Project Manager.

### **July 2018 Meetings and Events**

- **July 11-15, 2018** - Polk County Fair
  - The RLWD set up a booth at the 2018 Polk County Fair
- **July 14, 2018** – Maple Lake Improvement District Annual Meeting

- **July 25, 2018** – 319 Small Watershed Focus Grant teleconference to discuss applying for funding to restore a portion of the Red Lake River

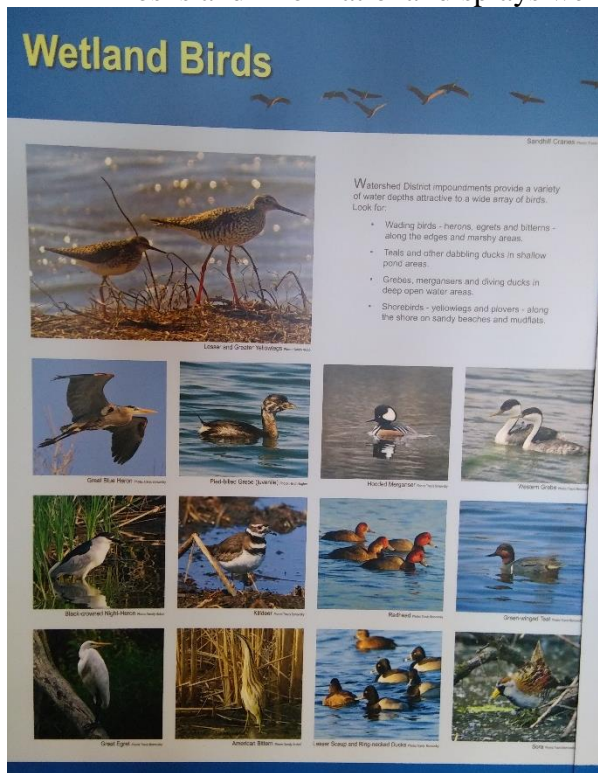
### **Other Notes**

- Water quality related notes from the July 12, 2018 Red Lake Watershed District Board of Managers meeting:
  - Clearwater SWCD staff Chester Powell and Jamin Carlson appeared before the Board to request funding from the for the installation of four side water inlet culverts/grade stabilizations along the Lost River on Branch 2 of Judicial Ditch 72 (Section 20, Winsor Township). The Board approved the Clearwater SWCD's request of a 25% cost share of the estimated cost of \$28,811.
  - Manager Dwight stated that it was determined that Bartlett Lake does not have a water quality issue, rather there are just too many good weeds. Discussion was held on weed harvesting and chemical products to create travel lanes to the lake. Staff member Corey Hanson and Denise Oakes with the MPCA will investigate the options.
- Water quality related notes from the July 26, 2018 Red Lake Watershed District Board of Managers meeting:
  - Zack Gutknecht (Beltrami SWCD) and Jamin Carlson (Clearwater SWCD) appeared before the Board to request funding from the District's Erosion Control Funds for on four shoreline restoration and protection projects located on the Clearwater Lake. Gutknecht stated that they assisted the Clearwater Lake Area Association (CLAA) with an application from Enbridge Energy Ecofootprint Grant in 2017. The CLAA is concerned about declining water quality due to the erosion on the shoreline and bluffs. The application was awarded, and the SWCD received a \$75,000 grant which requires a 2:1 match. Each landowner will be required to pay a 10% match. The Beltrami SWCD requested \$12,500 for two sites in Beltrami County and the Clearwater SWCD requested \$4,798 for two sites in Clearwater County from the District's 2018 Erosion Control Funds. The Board approved both cost share requests.
  - Manager Torgerson discussed a project located in the Clearbrook area by the local dam. Jamin Carlson, Clearwater SWCD, stated that he was unaware of any current projects located in Clearbrook.
- East Polk SWCD staff reported that they had found blue-green algae in Badger Lake, near the access.
- A semi-annual progress report for the Grand Marais Creek watershed Restoration and Protection Strategy – Public Notice project was completed and sent to the MPCA Project Manager.
- A semi-annual progress report for the Red Lake River WRAPS – Public Notice project was completed and sent to the MPCA Project Manager.
- The Pennington County SWCD received a grant from the National Association of Conservation Districts to hire a technician to design side water inlets and the associated planning for EQIP contracts in the Red Lake River 1W1P area.



- Kiosks and informational displays were constructed and installed at impoundments

### Wetland Birds



Watershed District impoundments provide a variety of water depths attractive to a wide array of birds. Look for:

- Wading birds - herons, egrets and bitterns - along the edges and marshy areas.
- Teals and other dabbling ducks in shallow pond areas.
- Grebes, mergansers and diving ducks in deep open water areas.
- Shorebirds - yellowlegs and plovers - along the shore on sandy beaches and mudflats.

**Wading Birds:** Great Blue Heron, Field Sparrow, Merganser, Mottled Noddy, Great Egret, American Egret, Lesser Scaup and Ring-necked Duck.

**Shorebirds:** Black-crowned Night Heron, Killdeer, Red-wing, Green-winged Teal.

**Diving Ducks:** Mottled Noddy, Ring-necked Duck.

### Grassland Birds

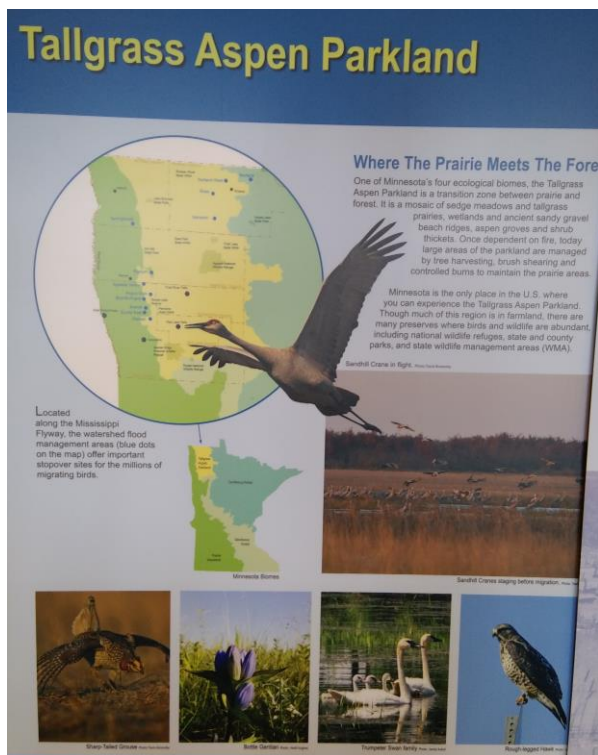


These are some of the grassland birds found in the parklands of northeastern Minnesota. The native grasses and flowers provide abundant seeds and insects for foraging and materials for nesting.

Grasslands offer nest sites for many species - waterfowl, shorebirds, waders, raptors, grouse and songbirds. They nest on the ground, in the protection of shrubs. Delayed mowing of hayfields until August or September provides that allows birds to complete a nesting cycle and time for fledging to take flight.

**Grassland Birds:** Sharp-shinned Hawk, Red-winged Blackbird, Field Sparrow, Merganser, Mottled Noddy, Great Egret, American Egret, Lesser Scaup and Ring-necked Duck.

### Tallgrass Aspen Parkland



**Where The Prairie Meets The Forest**

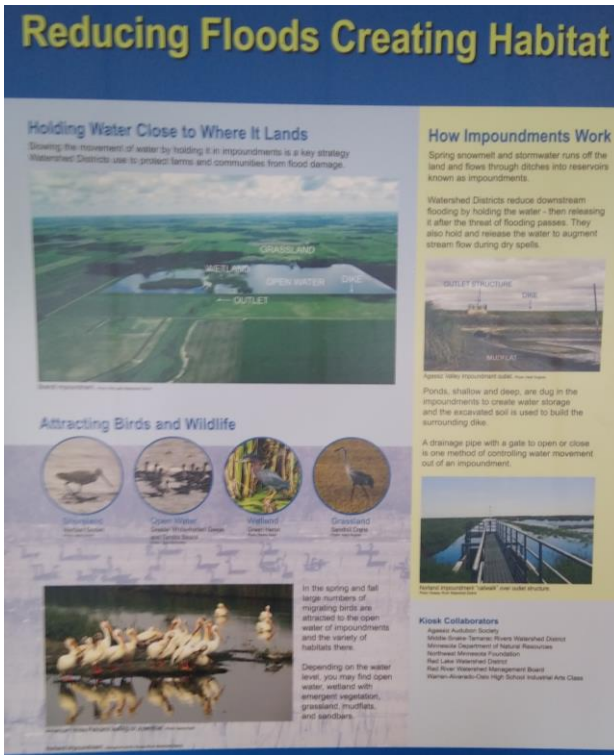
One of Minnesota's four ecological biomes, the Tallgrass Aspen Parkland is a transition zone between prairie and forest. It is a mosaic of sedge meadows and tallgrass prairies, wetlands and ancient sandy gravel beach ridges, aspen groves and shrub thickets. Once dependent on fire, today large areas of the parkland are managed by tree harvesting, brush shearing and controlled burns to maintain the prairie areas.

Minnesota is the only place in the U.S. where you can experience the Tallgrass Aspen Parkland. Though much of this region is in farmland, there are many preserves where birds and wildlife are abundant, including national wildlife refuges, state and county parks, and state wildlife management areas (WMA).

Located along the Mississippi Flyway, the watershed flood management areas (blue dots on the map) offer important stopover sites for the millions of migrating birds.

**Minnesota Biomes:** Tallgrass Aspen Parkland, Sandhill Crane, Sandhill Crane (singing before migration), Golden-crowned Kinglet, Blue Jay, Turkey Vulture, Sharp-shinned Hawk.

### Reducing Floods Creating Habitat



**Holding Water Close to Where It Lands**

Slowing the movement of water by holding it in impoundments is a key strategy Watershed Districts use to protect farms and communities from flood damage.

**How Impoundments Work**

Spring snowmelt and stormwater runs off the land and flows through ditches into reservoirs known as impoundments.

Watershed Districts reduce downstream flooding by holding the water - then releasing it after the threat of flooding passes. They also hold and release the water to augment stream flow during dry spells.

**Attracting Birds and Wildlife**

In the spring and fall large numbers of migrating birds are attracted to the open water of impoundments and the variety of habitats there.

Depending on the water level, you may find open water, wetland with emergent vegetation, grassland, mudflats, and sandbars.

**Kiosk Collaborators**

- AgriLife Extension Service
- Middle River-Terrace Rivers Watershed District
- Minnesota Department of Natural Resources
- Northwest Minnesota Foundation
- Red Lake Watershed District
- Red Lake Watershed Management Board
- Northern Minnesota Open High Districts Interlocal A16 Class

Red Lake Watershed District office rain garden



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](http://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](http://www.rlwdwatersheds.org).

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