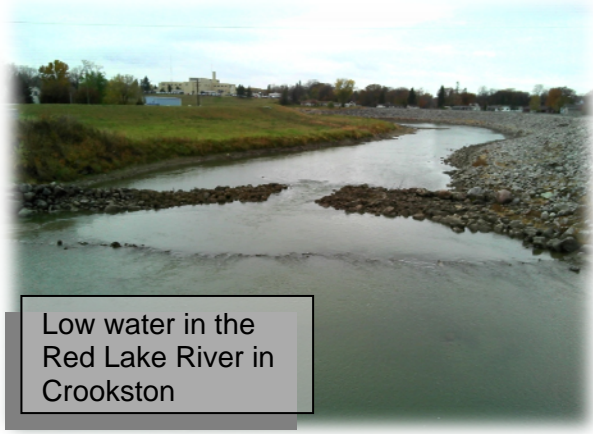


**District Monitoring**

The fourth round of sampling in 2012 for the Red Lake Watershed District's long-term water quality monitoring program was completed in October. There was no flowing water to sample in a bunch of streams and some rivers. High concentrations of E. coli bacteria were found in Gentilly Creek, Clearwater River (near Bagley), Ruffy Brook, North Cormorant River, and Darrigan's Creek (very high). HOBO water level and barometric pressure loggers were removed for the year from the Silver Creek and Ruffy Brook monitoring sites.



Low water in the Red Lake River in East Grand Forks



Low water in the Red Lake River in Crookston



Low water in the Red Lake River at Highlandina



Low water in Silver Creek



Maple Lake Scenery

**Grand Marais Creek Cut-Channel Stabilization Project**

This is a Minnesota Board of Water and Soil Resources Clean Water Fund project that will greatly reduce erosion along the Grand Marais Creek Cut-Channel. The project was funded by the Clean Water, Land, and Legacy Amendment, Red Lake Watershed District, and Polk County. The project included streambank stabilization, two grade stabilization structures, side-water inlets, and rip-rap armoring. It is part of the larger Project 60 flood damage reduction project under which impoundments have been constructed and the natural channel of Grand Marais Creek will be restored. The initial construction has been completed and there are plans to continue the streambank stabilization work west of CR64.



**Red Lake River Watershed Assessment Project**  
**(Watershed Restoration and Protection - WRAP)**

- Task 2 – Water Quality Monitoring
  - Pre-9AM field measurements were made at the Smiley Bridge (CR7) monitoring site on the Red Lake River. Pre-9am dissolved oxygen measurements are needed in order to confidently declare that a river is meeting the State’s dissolved oxygen water quality standard. The Smiley Bridge is close to the RLWD office in Thief River Falls, so it will be possible to get equipment calibrated and get to the site before 9:00am. This is being done on a semi-weekly basis, so we’ll have a decent number of pre-9:00am readings by the end of the monitoring season.
- Task 8 – Data Entry
  - 2012 monitoring data was entered and submitted to the MPCA for entry into the EQuIS database.
- Task 11 – Identification of Sources and Solutions
  - A culvert inventory for the hydro-correction of LIDAR data continued in September. Alisha Mosloff, the RLWD Water Quality Assistant is continuing to work part-time and help with this project during the school year.
  - RESPEC Consulting and Services has started developing a HSPF model for the Red Lake River watershed.
  - Gullies were identified near the Red Lake River upstream of Thief River Falls. According to local landowners, many of these gullies formed when the USCOE kept water levels in the river high for an extended period of time last year. The gullies have been identified and mapped, so they can hopefully be fixed with side water inlets.

**Thief River Watershed Assessment Project**  
**(Watershed Restoration and Protection - WRAP)**

- Task 3 – Continuous Water Quality Monitoring
  - The last Eureka Manta deployments were completed in early October.
- Task 5 – Stage and Flow Monitoring
  - The MPCA and DNR are planning to install gauges on the Mud River at Highway 89 and the Thief River at Marshall County Road 7. They will be bubbler systems and the new gauge on the Thief River will provide real time data that will be accessible via the internet.
- Task 6 – Channel Stability Assessment
  - Follow-up geomorphology surveying, measurements, BEHI ratings, and Pfankuch ratings were conducted at most of the Thief River geomorphology sites by Jason Vinje (DNR), Stephanie Klamm (DNR), Dave Friedl (DNR), Jim Blix (RLWD), and Corey Hanson (RLWD).
  - Phone calls were made to obtain access permission where needed.



2012 Thief River Follow-Up  
Geomorphology Measurements



- Task 9 – Data Entry
  - 2012 monitoring data was entered and submitted to the MPCA for entry into the EQuIS database.
- Task 11 – Civic Engagement
  - Posted a summary of the Agassiz National Wildlife Refuge Water Quality Study to the Thief River blog on posterous.com.
- Task 12 – Identification of Sources and Solutions
  - Jim Blix has been working on a Stream Power Index for the Marshall County Ditch 20 watershed.

### **River Watch and Public Education**

Several schools conducted a round of River Watch monitoring in October with the assistance of Jim Blix and Alisha Mosloff:

- Win-E-Mac (twice)
- Grygla
- Thief River Falls
- Bagley
- East Grand Forks (new program)
- Red Lake Falls

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

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

The 2012 River Watch Kick-Off meeting was held at the Best Western in Thief River Falls on October 9, 2012. Staff member Jim Blix attended and Myron Jesme gave a presentation showing FDR and NRE projects throughout the valley which gave the students a better understanding of what their research leads to. There was approximately representation from 8 schools and upwards of 60 participants.

### **Other Notes**

- There is an opportunity for the development for improved canoe routes on the Clearwater River upstream and downstream of Clearwater Lake. Grants are available to counties (not watershed districts, unfortunately) to create/improve trails and recreational opportunities. Along the Clearwater River, improved accesses, clearing/snagging, and an improved road would result in a couple of great reaches for canoeing and kayaking.

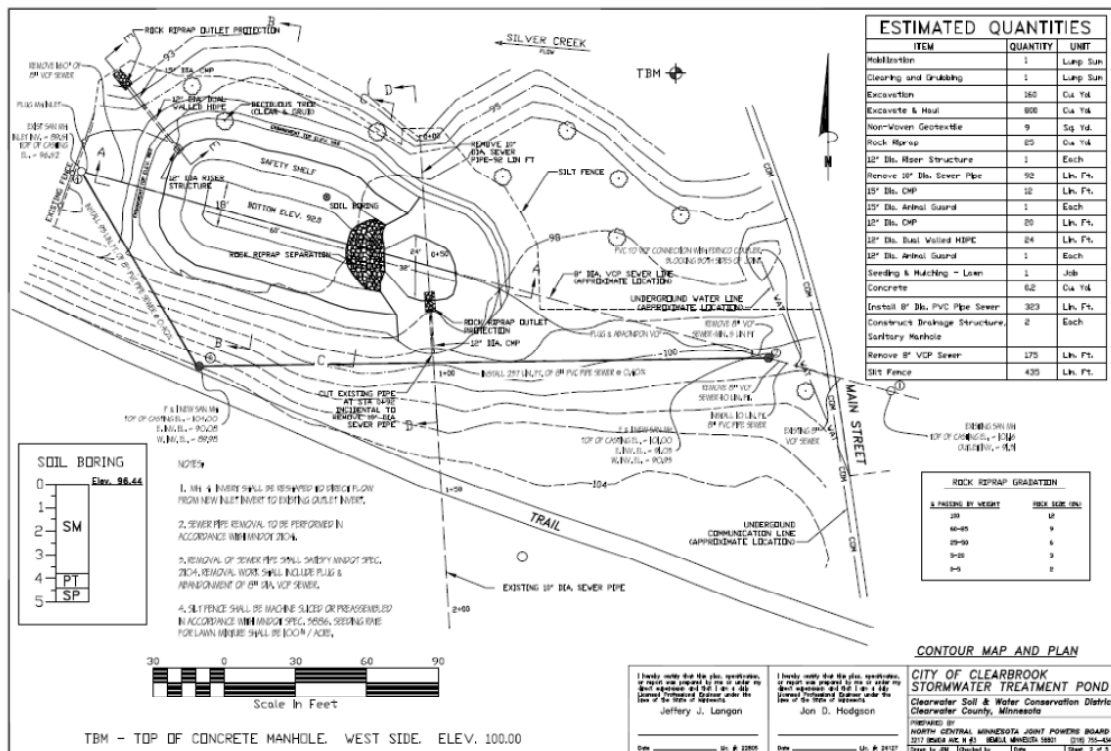
“If the going is real easy, beware, you may be headed downhill.”  
- Anonymous



# RED LAKE WATERSHED DISTRICT MONTHLY WATER QUALITY REPORT

# OCTOBER 2012

- Entered Thief River Surface Water Assessment Grant data from 2012.
- Entered Red Lake River and Grand Marais Creek Surface Water Assessment Grant data from 2012.
- The funding for the Grand Marais Creek Watershed Restoration and Protection project will pass through the Red Lake Watershed District. Most of the work will be done by EOR Engineering. The District will participate in minor administrative, civic engagement, and data collection roles.
- A preconstruction meeting with Taggard Excavating was held on October 2, 2012 for the Clearbrook Stormwater Project. There was some delay in construction due to the fires in northwestern Minnesota as Taggard has a contract with the State for emergency fire calls. Later in October, the RLWD received preconstruction documents from Taggard Excavating for this project.



- The RLWD Board of Managers reviewed correspondence from the MN Board of Water and Soil Resources extending the expiration date for the Red Lake Watershed District 10 Year Overall Plan to October 2018. Administrator Jesme stated that the extension allows for the synchronization of the watershed district update schedule and process with the MPCA Watershed Restoration and Protection Strategies (WRAPS) schedule, which will allow the watershed district the ability to utilize the WRAPS detailed water quality assessments to develop their implementation plans.

“The daily grind of hard work gets a person polished.”  
- Anonymous

### Plans for November and December 2012

- Thief River Watershed Restoration and Protection Project.
  - Complete a report on the existing data that is available for the watershed.
  - Stream power index analysis of sub-basins in the Thief River watershed.
  - Create a web page dedicated to the Thief River Watershed
  - Retrieve deployed monitoring equipment. Remove sonde deployment pipes.
  - Enter data.
  - Finish cleaning and calibrating continuous water quality monitoring equipment.
  - Compile and apply corrections to continuous water quality data.
  - Compile flow monitoring data.
- Red Lake River Watershed Assessment Project
  - Complete a report on the existing data that is available for the watershed.
  - Create a webpage dedicated to the Red Lake River
  - Finish cleaning and calibrating dissolved oxygen loggers.
  - Compile and apply corrections to continuous dissolved oxygen data.
  - Compile flow monitoring data.
- Data reviews for EQuIS submittals.
- MAWD Convention

“Things turn out best for people who make  
the best of the way things turn out.”  
– John Wooden

### Future Meetings/Events

- **November 1, 2012** – EQuIS data submittal deadline.
- **November 20, 2012** – Civic Engagement planning meeting with the MPCA and RMB Environmental Laboratories.
- **November 21, 2012** – Marshall County Water Resources Advisory Committee meeting
- **November 29 through December 1, 2012** – MAWD 2012 Annual Meeting and Trade Show
- **December 7, 2012** – Red River Basin Monitoring Advisory Committee, Sand Hill Watershed District, 9:30 am.
- **December 10, 2012** – Pennington County Water Resources Advisory Committee meeting.
- **January 31, 2013** – The second progress report or final report for the Thief River SWAG monitoring is due.
- **February 1, 2013** - BWSR CWF Grant semi-annual progress reports are due.
- **February 1, 2013** - MPCA Thief River Watershed Assessment Project semi-annual progress report is due.
- **June 30, 2013** – Expiration of the Thief River Watershed Assessment Project Contract.
- **June 30, 2013** – Expiration of the Red Lake River Watershed Assessment Project – Phase I Contract.
- **June 30, 2013** – Final report for the Thief River SWAG grant is due
- **July 30, 2013** – Due date for the final progress report and final invoice for the Thief River Watershed Assessment Project
- **July 31, 2013** – Final payment request for the Thief River SWAG is due.