

By: Corey Hanson, Water Quality Coordinator
For: August 12th, 2010
Red Lake Watershed District Board Meeting

Thief River Watershed Sediment Investigation

- A stakeholders' meeting was held on July 9, 2010.
- Prepared and submitted all of the continuous water quality monitoring data to the MPCA for entry into the HYDSTRA State continuous monitoring database. Fifty-seven files in all (3 for each site and year) were submitted.
- Composed presentations for the stakeholders' meeting.
- Worked on the final report.

District Monitoring

- Supplemental E. coli samples were collected at a few monitoring sites. June sampling results were reviewed to see if any impairments were confirmed for that month. Fewer supplemental samples were needed this month because of the impairments that have already been confirmed by the June sampling.
- High concentrations of E. coli (>126 CFU/100 ml) were found in:
 - Silver Creek west of Clearbrook (although lower than past years)
 - Thief River between Agassiz National Wildlife Refuge and Thief River Falls.
 - Higher concentrations closer to Agassiz NWR.
 - Dilution from CD 20.
 - Concentration was the same at both the CR44 and USGS gauge sites.

Other Notes

- Conducted sampling, field measurements, and data entry for the RRWMB Surface Water Assessment Grant in Beltrami, Red Lake, and Polk Counties (100% reimbursed by the RRWMB). Sites were sampled three times each in July.
- Project 60 area monitoring.
 - Deployed a TS300 turbidity logger at the monitoring site at the Highway 75 crossing of the Brandt Channel.
 - Swapped TS300 turbidity loggers on a 2-week deployment interval.
 - The Brandt Channel was cleaned-out downstream of the Hwy 75 crossing. The beaver dam at the Hwy 75 crossing was also removed.

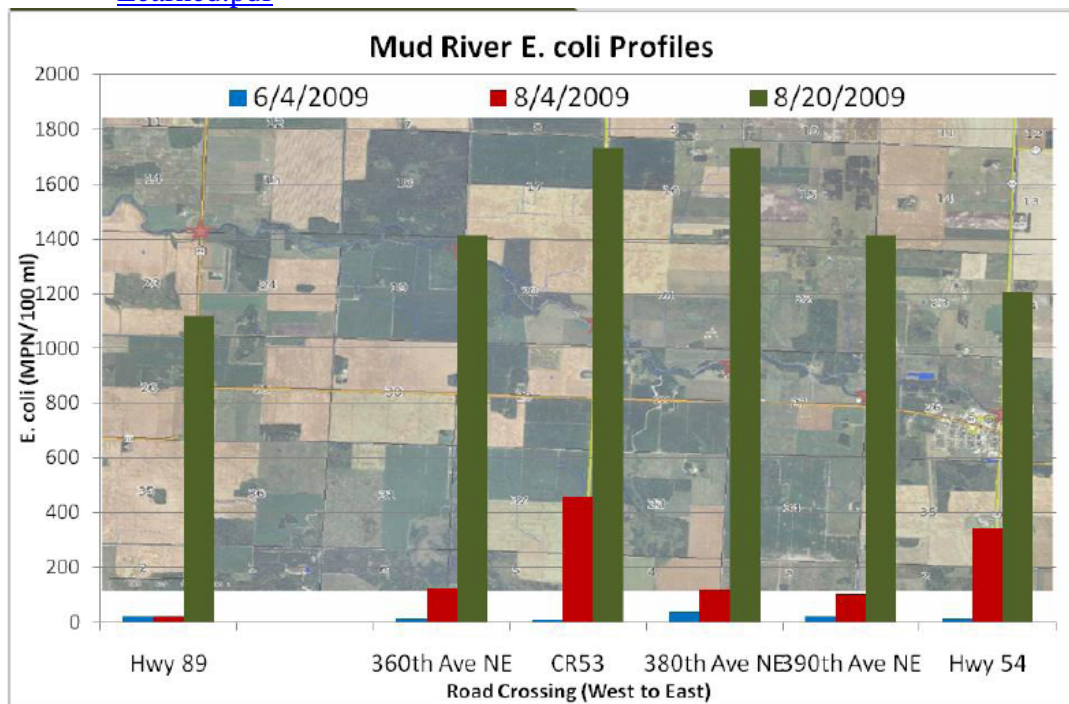


- Gary and Nick helped the Red Lake County SWCD with surveying cross sections for the Huot stream bank stabilization project.
- Worked with Dave Friedl to choose sites and plan the August stream channel stability work in the Thief River watershed.
 - 12 main stations plus 3 optional stations were identified.
 - Typically, 2 stations can be completed in a day.
 - Staff from the RLWD, DNR, RLDNR, SWCDs, and MPCA will be contributing to this effort.
 - A list of sites will be sent out to potential helpers in early August.
- Compiled, prepared, and submitted continuous dissolved oxygen and temperature data from the Clearwater River Dissolved Oxygen and Fecal Coliform TMDL to the MPCA for entry into the State's HYDSTRA database for continuous monitoring data. Twenty-even files were submitted (three for each site and year).
- Replaced tubing and seals in the Van-Dorn water sampler.
- The Silver Creek E. coli TMDL is ready for public notice
- The Poplar River Dissolved Oxygen TMDL will be reviewed internally by the MPCA.
- A wet summer has led to sustained high flows and sustained high levels of turbidity in rivers. Some are muddier than others. Below is a photo taken on July 28th by Dan Svedarsky as he was flying over the confluence of the Clearwater and Red Lake Rivers that shows the difference in water quality between the two rivers:

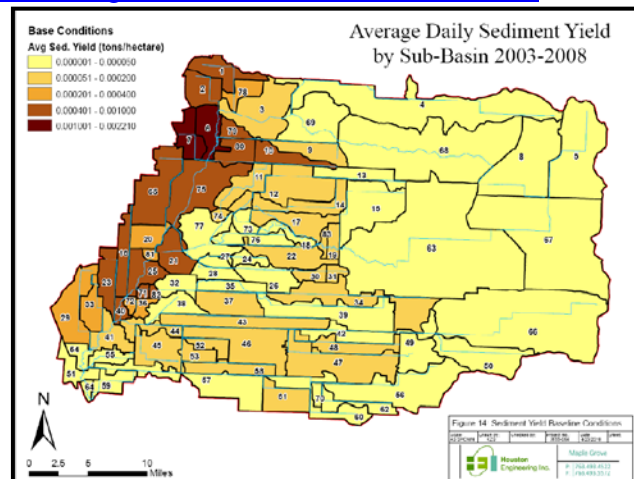


July 2010 Meetings and Events

- **July 2010** – Construction on a stormwater retention pond in Clearbrook could start
- **July 9, 2010** – Thief River Watershed Stakeholders’ meeting
 - Presentations can be directly downloaded from the RLWD website using the following URLs.
 - Meeting Agenda and minutes:
 - <http://www.redlakewatershed.org/Presentations/2010 July Informational Meeting Agenda and notes.PDF>
 - “What We’ve Learned from the Thief River Watershed Sediment Investigation “
 - <http://www.redlakewatershed.org/Presentations/What We have Learned.pdf>



- “Thief River SWAT Modeling Results”
 - <http://www.redlakewatershed.org/Presentations/20100709 SWAT Modeling Results.ppt>



- “Thief River Project Ideas”
 - <http://www.redlakewatershed.org/Presentations/Thief River Watershed Project Ideas.pdf>



- “Local Impacts and Outcomes of TMDL Studies”
 - <http://www.redlakewatershed.org/Presentations/Local Impacts and Outcomes of TMDL Studies.PDF>

The TMDL Process

Assess the state's waters



List those that do not meet standards



Identify sources and reductions needed
(TMDL Study)



Implement restoration activities
(Implementation Plan)



Evaluate water quality

- “Thief River Watershed Assessment Project Introduction”
 - [http://www.redlakewatershed.org/Presentations/20100709 Thief River Watershed Assessment Project Introduction.PDF](http://www.redlakewatershed.org/Presentations/20100709%20Thief%20River%20Watershed%20Assessment%20Project%20Introduction.PDF)
- **July 9, 2010** – CD 20 grade stabilization project planning meeting
- **July 22, 2010** – Pennington County Water Resources Advisory Committee meeting. 9am.

Plans for August 2010

- Surface Water Assessment Grant sampling (2-3 visits per site)
- Supplemental E. coli sampling at Burnham Creek, Black River, and Grand Marais Creek.
- Finishing the Thief River Watershed Sediment Investigation report.
- Start planning the Marshall CD20 grade stabilization project.
- Fluvial geomorphology study of the Thief River watershed (longitudinal surveys, cross-sections, pebble counts, etc.).
- Keep swapping TS300 turbidity loggers at the Brandt Channel monitoring site.

Future Meetings/Events

- **August 2010** – Anticipated beginning of the Thief River Watershed Assessment Project ((end of the month).
- **August 6, 2010** – Meet with MPCA and officials from the City of Crookston to discuss the upcoming Red Lake River watershed-based TMDL and how it could affect stormwater permit requirements for the city.
- **August 16th – 19th and 23rd – 26th, 2010** – Stream channel stability assessment in the Thief River watershed. Two weeks of work will be needed to accomplish this task.
- **August 23, 2010** - Red River Basin Water Quality Team meeting, 10am, RLWD office
 - “Stressor Identification for Watersheds”
- **August 30, 2010** – Completion of the Thief River Watershed Sediment Investigation
- **September 2010** – Possible beginning of work on the Red Lake River watershed Assessment Project.
- **September 15, 2010** – Pennington County Outdoor Education Day
- **September 21, 2010** – Northwest Minnesota Water Festival – Warren
- **September 22, 2010** – Northwest Minnesota Water Festival - Fertile
- **September 27, 2010** - Red River Basin Water Quality Team meeting, 10am – 2pm, Detroit Lakes MPCA, 1st floor conference room.
- **September 30, 2010** – Target approval date for Silver Creek and Poplar River TMDLs
- **October 5, 2010** – Agassiz NWR Congressional meeting, RLWD Office, 1-4 PM.
- **October 13, 2010** – Pennington County Water Resources Advisory Committee meeting.
 - Dave Friedl will be attending to talk about the results of our stream channel stability assessment work.
- **November 3, 2010** - Marshall County Water Resources Advisory Committee Meeting, Newfolds
- **November 22, 2010** - Red River Basin Water Quality Team meeting, 10am, RLWD office - “Presenting Watershed Information”