

By: Corey Hanson, Water Quality Coordinator
 For: May 27th, 2010
 Red Lake Watershed District Board Meeting

Thief River Watershed Sediment Investigation

- Houston Engineering completed the process of modeling the application of best management practices in the Thief River watershed. They also completed a draft SWAT modeling report that the RLWD received on May 3rd.
- The water level logger in the Mud River at Hwy 89 (site 757) was moved from a temporary high –water location to one further out into the river, where it will be for the rest of the summer.



Stream Gauging

- Collected water level measurements in the Thief River watershed while the water was high.
- Installed a HOBO water level logger at stream gauge 40 (Agassiz Bridge – CR7).
- Measured flow at JD30 (which will be a new monitoring site for the upcoming Thief River study).
- Measured flow at stream gauge 6 on Ditch 200 downstream of Farnes Pool.
- Identified stream gauging sites on impaired reaches where we should start developing rating curves in preparation for future TMDL studies.
- Moved the Mud River (site 757) HOBO and pipe from a temporary high water site to a site that can be used for the rest of the year on April 22nd.



Fresh landslide along the Clearwater River in Red Lake Falls.

Other Notes

- Started working on a workplan and budget for the Red Lake River.
- The first round of 2010 district monitoring was completed.
- Wrote a letter of support for a grant application the Red Lake County SWCD is submitting for a culvert inventory project.
- Edited and updated the GIS shapefile of all the RLWD stream gauging sites so that it can be incorporated into the RLWD website.
- Learned that the City of Thief River Falls has plans to construct a walking/biking path along Pennington Ave (past our office) and Greenwood St. in 2014.
- High flows and ice took down the deployment pipes at the Polk CD2 continuous turbidity and stage monitoring site. I plan on re-installing them with the angled method that has been successful in the Thief River watershed. The turbidity logger is what necessitated the vertical installation. So, I'll have to construct something that will hold the middle of the deployment pipe when the pipe is in the stream at an angle.
- With the permission of the landowner, I re-installed all the tile drainage water level monitoring equipment.
- Helped with Ditch 12 right-of-way staking.

April 2010 Meetings and Events

- **April 13, 2010** – Met with Dave Friedl, Jim Courneya, and Tom Groshens to plan the early May Thief River stream channel stability reconnaissance routes.
- **April 14, 2010** – Trimble GPS surveying equipment training session.
- **April 23, 2010** - Met with a landowner to discuss sedimentation, erosion, and drainage issues. The RLWD and the Pennington SWCD could work together to install a buffer on a portion of a field that is the source of sediment and increased runoff. It could be a buffer between the field and the water, as well as a buffer between neighbors.
- **April 26, 2010** – Red River Basin Water Quality Team open house meeting in Crookston. 3pm – 6pm.
 - <http://www.bluethumb.org/> has educational materials about growing healthy lawns and gardens while protecting water quality.
 - Stormwater and Low Impact Design educational materials are available on the MPCA website: <http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/stormwater-management/low-impact-development-stormwater-management.html>.
 - Reapply for a rain garden/stormwater-related grant in the Fall.
 - Involve, educate, and connect with local planners. They are the ones who make decisions on land use within communities. You can get conservation practices installed from the beginning in developments, rather than having to retrofit.
 - Identify resources (education and construction).
 - Stress that rain gardens are amenities.
 - Target townships along the Red Lake River
 - Add East Grand Forks and Fosston

- MS4 permitting will soon be required for cities with a population greater than 5,000 that have proximity with and impaired waterbody that has an approved TMDL. This means that Crookston and Thief River Falls could have to meet these standards within the next 6 years.
 - 319 grants cannot be used to comply/satisfy MS4 permit requirements.
 - Do projects before you're regulated so you can get them done with some financial assistance.
 - Whatever you do now will count later.
 - It is possible for a city to meet their wasteload allocation before it is enforced if they are proactive.
 - Know your system
 - Inventory BMPs
 - Know areas that aren't treated.
 - Know when/where development will occur.
- **April 30, 2010** – Target date for completion of the Thief River SWAT model.

Plans for May 2010

- Adding information to the Thief River Watershed Sediment Investigation report will be a top priority.
- Revising the Draft Poplar River Dissolved Oxygen TMDL report.
- Supplemental E. coli samples at some Red Lake River monitoring sites and Ruffy Brook.
- Samples at Thief River monitoring sites.
- Work plan and budget for the Red Lake River watershed-based TMDL project.
- Begin installing continuous water quality equipment if we can get the Thief River Watershed Assessment Project contract finalized. Sampling for that project should also start as soon as possible. Ideally, we should start monitoring sometime before the end of April to achieve data goals.

Future Meetings/Events

- **May 3-5 and 10-12, 2010** – Reconnaissance of the Thief River Watershed with Dave Friedl of the DNR to prepare for the stream channel stability assessment.
- **May 24, 2010** – Red River Basin Water Quality Team meeting, 10am, RLWD office
 - “Psychology of Sustainable Behavior”
- **June 2010** – The public review and comment period for the Silver Creek and poplar River TMDLs should begin sometime this month.
- **June 9, 2010** – Marshall County water Resources Advisory Committee Meeting, Newfolden
- **June 17, 2010** - Grand Marais Creek Project Team and TMDL Stakeholders meeting, 9:30 AM, RLWD
- **June 21, 2010** – Hearing for the Clearbrook stormwater pond, Clearbrook, 9:00 am
- **June 28, 2010** - Red River Basin Water Quality Team meeting, 10 am, Detroit Lakes MPCA office - “Presenting Technical Information”

- **July 2010** – Construction on a stormwater retention pond in Clearbrook could start
- **August 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 31, 2010** – Completion of the Thief River Watershed Sediment Investigation
- **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
- **November 22, 2010** - Red River Basin Water Quality Team meeting, 10am, RLWD office - “Presenting Watershed Information”



Erosion control by the Hill River in Brooks