

By: Corey Hanson, Water Quality Coordinator  
For: June 23rd, 2011  
Red Lake Watershed District Board Meeting

**Stream Gauging**

- Stage readings in the Thief River watershed
- Installed HOBO Water Level Loggers at:
  - Silver Creek (plus a barometric pressure logger for the Clearwater River watershed).



**Grade Stabilization for Sediment Reduction in the Thief River**

- We have nearly all the landowner access permissions that we need.
- Surveying will be done when the water levels recede Marshall County staff hope to get this completed in June.

**Thief River Watershed Assessment Project (Watershed-Based TMDL)**

- Flow measurement at the Branch A JD21 monitoring site (Stream Gauge #160).
- Flow measurement on JD30.
- Bruce Paakh (MPCA) has installed an ultrasonic stream gage at the CR7 crossing of the Thief River (RLWD stream gage number 40). In May, he replaced and reprogrammed the CR10 data logger that will be recording measurements made by the sensor. He provided the RLWD with a portable storage module so that we can download data from the gauge once every 2-3 weeks.



- Purchased 2 HOBO water level loggers.
- Installed HOBO Water Level Loggers at:
  - Thief River Barometric Pressure (RLWD Office)
  - JD30
  - CD20 at stream gauging site #41
  - Branch 200 of JD 11
  - Mud River at Hwy. 89
  - Thief River at the northern boundary of Agassiz National Wildlife Refuge
  - Branch A of JD21
  - Moose River at Hwy. 54



- Sample analysis for stressor/pollutant identification was piggy-backed onto samples collected for the Thief River SWAG monitoring.
- Jim Blix will be attending training for LIDAR Terrain Analysis (in preparation for Task 12 – Identification of Sources and Solutions in the work plan) in June.
- The Agassiz National Wildlife Refuge United States Fish and Wildlife Service office loaned 4 Eureka Mantas and 2 Eureka Manta 2 sondes to the RLWD for use in the Thief River TMDL project. Now there is enough equipment for there to be two deployable sondes for each continuous monitoring installation. Freshly cleaned and calibrated sondes can now be swapped for the dirty sondes that have been in the water for two weeks. This can be accomplished in just one trip around to all the sites.
- Purchased and prepared pipes for deploying sondes.

- Deployed Eureka Manta water quality loggers at 5 sites in the Thief River watershed.
  - Thief River at the Hillyer Bridge (Site #760).
    - New mid-level, high-water deployment pipe that will be accessible when the gage reads between 5 and 11 feet.
  - Thief River at County Road 7 (Site #40)
    - New high-water deployment pipe.
  - Thief River at the road crossing at the North boundary of Agassiz NWR (Site #140)
    - New high-water deployment pipe.
  - Branch 200 of Ditch 11 (Site #6).
  - Marshall County Ditch 20 ( Site #41)



**Thief River Watershed Assessment Monitoring Surface Water Assessment Grant**

- The Marshall (Jan Kaspari, 6 sites) and Pennington County (Wade Robinson, 3 sites) water planners each collected two rounds of samples in May.
- Provided the water planners with a data-entry template.
- Recorded GPS coordinates for new monitoring sites.
- Completed STORET/EQuIS station and project establishment forms.
- Ben Meadows shipped us expired calibration standards, so they sent replacements and I got those distributed to Jan and Wade.



**District Monitoring**

- Finished the first round of sampling for the RLWD district monitoring program in May and started the second round.
- Brought the new Pennington County water planner with during a sampling run to give her some training on sample collection.
- Started monitoring a new site on the Lost River at County Highway 8 near Gonvick.



### Crookston Stormwater

- The RLWD has provided Green Corps (University of Minnesota, Crookston) employee Michael Knudson with a HACH 2100P portable turbidimeter and a sampling device. He will be monitoring water quality at the outfalls of stormwater drainage systems in Crookston . With the data he collects, we will be able to assess the turbidity in stormwater runoff from the city relative to state water quality standards and turbidity levels in the Red Lake River.

### Other Notes

- Updated and finalized a work plan for the Red Lake River watershed-based TMDL. Local MPCA staff believe that this project could start as soon as July 1<sup>st</sup> of 2011.
- The Pennington County SWCD hired a new water planner, Cassie Jacobson, to replace Wade Robinson (who left for another job in mid-May).

### May 2011 Meetings and Events

- **May 2011** – Second round of RLWD long-term monitoring for 2011.

### Plans for June 2011

- Facilitate progress on the CD20 grade stabilization CWF project.
- Finish the second round of 2011 District Monitoring.
- Thief River Watershed Assessment Project.
  - Continuous flow and water quality monitoring
  - Civic engagement contract with RMB Environmental Laboratories.
  - Flow measurements
  - Inventory of existing water quality data
- Compile water quality data collected by Pennington and Marshall County water planners for the Thief River Surface Water Assessment Grant monitoring.
- Multiple presentations
- MAWD Summer Tour

### Future Meetings/Events

- **June, 2011** – Finish the second round of RLWD district monitoring.
- **June 8, 2011** – Marshall County Water Resources Advisory Committee
- **June 9, 2011** – NCERA 217 – Drainage Design and Management Practices to Improve Water Quality, Fargo, ND, 8:15 AM presentation.
  - I accepted an invitation from Gary Sands to give a presentation on the results of the RLWD tile drainage study.
- **June 14, 2011** – Reconnaissance of the Thief River from the Rangeline Road (CSAH 12) to the Hillyer Bridge (140<sup>th</sup> Ave NE) via kayak with Dave Friedl (DNR Clean Water

Legacy Specialist) for the Stream Channel Stability Assessment task of the Thief River Watershed Assessment Project.

- **June 16, 17, & 18, 2011** – MAWD Summer Tour, hosted by the RLWD and Middle Snake Tamarac Watershed District.
- **June 21, 2011** – Burnham Creek Reconnaissance with Dave Friedl
- **June 22, 2011** – Land Management Field School, UMC, 6:30 pm to 8:00 pm
  - I will be giving a presentation on watershed-based TMDLs.
- **June 23, 2011** – Red Lake River Corridor Enhancement meeting at the Red Lake Falls City Hall, 7 PM
- **June 24, 2011** - Meeting with RMB Labs and the MPCA to work on a Civic Engagement contract for the Thief River Watershed Assessment Project.
- **June 27, 2011** – Red River Basin Water Quality Team meeting.
- **July 2011** – Third round of RLWD long-term monitoring for 2011.
- **July 5, 2011** – Pennington County Water Resources Advisory Committee, 9 AM
- **Last 2 weeks in July** – Thief River geomorphology field work
- **August 1, 2011** – BWSR CWF Grant semi-annual progress reports are due.
- **August 1, 2011** – MPCA Thief River Watershed Assessment Project semi-annual progress report is due.
- **September 2011** – Fourth round of RLWD long-term monitoring for 2011.
- **September 14, 2011** – Pennington County Outdoor Education Day
- **September 20, 2011** – Northwest Minnesota Water Festival in Warren
- **September 21, 2011** – Northwest Minnesota Water Festival in Fertile
- **October 4, 2011** – Pennington County Water Resources Advisory Committee, 9 AM
- **November 1, 2011** – Deadline for submitting field and lab data to the MPCA for
- **November 2, 2011** - Marshall County Water Resources Advisory Committee
- **January 3, 2012** – Pennington County Water Resources Advisory Committee, 9 AM
- **January 31, 2012** – First progress report for the Thief River SWAG monitoring is due.
- **February 1, 2012** - BWSR CWF Grant semi-annual progress reports are due.
- **February 1, 2012** - MPCA Thief River Watershed Assessment Project semi-annual progress report is due.
- **August 1, 2012** – BWSR CWF Grant semi-annual progress reports are due.
- **August 1, 2012** – MPCA Thief River Watershed Assessment Project semi-annual progress report is due.
- **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** – 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.