

January 2006 Water Quality Program Progress Summary

By: Corey Hanson

Stream Sites Sampled/Monitored

- ❖ Jim and I sampled at sites PL40 (Hill River near Brooks), 81 (Silver Creek), and Silver Creek 2 (crossing by Vernon's land). RMB Environmental Labs is conducting the analysis at no charge and paid for the shipping costs because they are doing a study to find out what is causing total phosphorus results to be lower than orthophosphorus results at some sites.

- ❖ Collected field measurements at the three Ruffy Brook monitoring sites

Tile Drainage Study:

- ❖ Checked over data, conducted some interpretation of data and data analysis, and wrote a draft report of progress and observations made in the 2005 monitoring season.

- ❖ Ice has built up on one of the h-flumes in Red Lake County (Yaggie 2 site) that were installed as part of the Red River Watershed Management Board. We will likely need to use a steamer or large torch to melt the ice in the structure and make sure the end of the culvert is clear prior to spring runoff. According to locals, this site has a history of water being backed up on the upstream side of the road. When the culvert finally thaws, the pressure of the ponded water forces water out of the culvert at a high velocity. Nate and I plan to do what we can to make sure this culvert is open for spring runoff to avoid damage to the h-flume.

Past Meetings

- **January 5th** – Red Lake River Corridor Enhancement Project – East Grand Forks
 - River Watch will try partner with the Red Lake River Corridor Enhancement Project – Northwest Minnesota Foundation Grant App.
 - Budget for accesses was increased by about \$300K, new budget total is \$910,000. \$300,000 of this would go to the RLWD and SWCDs for erosion control projects.
 - Printed some plan books for the meeting
- **January 6th** – Met with Doug Thompson on regarding the Clearbrook Stormwater Study
- **January 12th** – Project 60 monitoring plan committee meeting
- **January 19th** – Project 60 overall group meeting – discussed mon. plan
- **January 23rd** – Red River Basin Water Quality Team Meeting – Detroit Lakes

Future Meetings/Events

- ❖ **February 15th** – Red Lake River Corridor Enhancement Project meeting in Fisher at 7pm
- ❖ **February 21st** – Drainage workshop at the Moorhead Area Conference Center (Courtyard by Marriott).
- ❖ **February 22nd** – Envirothon planning meeting at the Penn. SWCD @ 10 am to review draft questions
- ❖ **February 24th** – Red River Basin Monitoring Advisory Committee meeting – Sand Hill Watershed District in Fertile @ 9:30 am
- ❖ **February 27th** – Red River Basin Water Quality Team Meeting at the RLWD – Subject will be calculating sediment loads from ag fields.
- ❖ **March 13th** – River Watch Forum at UMC
- ❖ **March 16th** – Water Quality Training Session, 9-4 @ UMC – I will be presenting on standard operating procedures and standard forms for field records and data entry.
- ❖ **April 24th** – Red River Basin Water Quality Team Meeting at the RLWD – Red River Basin Water Quality Monitoring Network report, streambank erosion
- ❖ **April 26th** – Envirothon at Agassiz NWR. Jim will be presenting at the Aquatics station and I will be at the Current Events station this year. The theme for this year's Envirothon is "Water Stewardship in a Changing Climate."
- ❖ **June 26th** - Red River Basin Water Quality Team Meeting at the RLWD
- ❖ **July 24th** - Red River Basin Water Quality Team Meeting in Moorhead

River Watch

- ❖ Crookston High School will have an opportunity to participate in the International Water Institute's National Science Foundation Grant funded "Understanding the Science Connected to Technology" project. This project provides funding for stipend money for teachers and students, day camps, travel support, materials, and supplies. The schools learn how to use GIS software, create video documentaries that are aired on PBS, receive a college level River Watch credit, conduct video conferencing for training purposes, partake in online training courses, and attend day camps. Crookston already has much of the technology required for the project and there is a possibility of having a class dedicated to the project.
- ❖ Wayne Goeken, Monitoring Coordinator – Red River Watershed Management Board, has put together a Northwest Minnesota Foundation grant application that will enhance River Watch programs at schools along the Red Lake River Corridor. Through this project, River Watch will partner with the activities of the Red Lake River Corridor Enhancement Project and other existing projects. It will also increase the involvement of River Watch programs in the assessment of waters for impairment, community education and watershed awareness, and the Adopt-A-River Program.

Other Notes

- ❖ Have begun process of data verification for all of our projects in preparation for analysis for reporting purposes

- ❖ Project 60
 - Began reporting to eLink, and found out that...
 - Semi-annual reports were due at the end of November (for both the Project 60 – related Challenge Grant project and the Ditch Inventory Challenge Grant project).
 - Reporting was not yet possible, however, because some grant recipients hadn't completed their work plans. No BWSR grant funds are made available for spending until all recipients have submitted work plans.
 - There was a plan to use the same RLWD expenditures as matching funds for both state grants. You can't use one state grant (the BWSR Challenge Grant we received) to help pay for your required matching contribution to another state grant (the DNR Grant we received) project. Each grant requires a separate set of matching funds. After discussion regarding this issue and calls placed to BWSR, the focus of the challenge-grant-funded portion of the project had to be altered so that it will still relate to the construction of the impoundments, yet won't be used for the exact same purpose as the DNR Grant that was received for the impoundment construction.
 - The water quality monitoring portion of this grant was changed so that it would not only pay for the turbidity monitoring equipment, but would also cover water level monitoring equipment and staff time.
 - Compiled a monitoring plan for Project 60 using contributions from Dave Friedl (DNR), Penny Doty (West Polk SWCD), Nate Dalager, Danni Halvorson (RRWMB Water Quality Monitoring), and myself.



Figure 1. Turbidity - logging probe (L) and HOBO water level logging probe (R) that will be used for Project 60 water quality monitoring

- ❖ Received and reviewed the *Red River Basin Stream Survey Report – Red Lake River Watershed 2004*, by Tom Groshens of the MN DNR. The fish sampling data we collected for sites along the Clearwater River as part of the Clearwater River Habitat/Bioassessment Project was used in this report.
- ❖ Began working on a report for the Clearwater River Habitat/Bioassessment Project
 - Sampling occurred during the summer of 2003. Reporting for this project has been delayed due to priority given to the reporting for grant funded projects.
 - Fish were sampled at 15 sites along the Clearwater River. Fish data analysis was completed for us by the DNR (in the aforementioned report)
 - Macroinvertebrate, habitat, and physical condition data were also collected at stream sites along the Clearwater River, and also on all the major tributaries to the Clearwater River.
 - Within Clearwater Lake, vegetation was sampled and mapped. Also, water quality samples, zooplankton samples, benthic macroinvertebrate samples, and littoral invertebrate samples were collected at the lake.
- ❖ Wrote a report on the 2005 Maple Lake Monitoring for the Maple Lake District and our annual report.