

November 2006 Water Quality Program Progress Summary

12/12/2007

By: Corey Hanson
For: December 14th, 2006
RLWD Board Mtg.



Lake and Stream Monitoring:

- ✓ The Ruffy Brook continuous monitoring equipment has been removed from the stream. These In-Situ TROLL 9000 multiprobes will be relocated and used for the Clearwater River Dissolved Oxygen and Fecal Coliform TMDL project.
- ✓ Our river and lake water quality data collected through 2006 was submitted to the MPCA for entry into the national STORET water quality database prior to the deadline of November 15th. The data that is available in STORET will be used for the next round of statewide water quality assessments and revision of the impaired waters list. The assessment process begins in January of 2007. I have been invited to go to the best professional judgment meeting in St. Paul to provide local input for the assessment of water bodies within the RLWD.

TMDLs

The MPCA will begin another round of water quality assessment in 2007. They will use data that is available in the STORET nationwide water quality database. Data for streams and lakes within the RLWD has mostly come from our monitoring program in previous assessments (the previous one was in 2005). This year, there will also be data available from other sources such as the Red River Basin Monitoring Network (MPCA/RRWMB), River Watch, and SWCDs. Our database, updated through the end of the 2006 monitoring season, was submitted to the MPCA for entry into STORET prior to the deadline of November 15th. Some stream reaches that have been recently added to our monitoring network will have enough data to be assessed for the first time in this round of assessments (Gentilly Creek, Black River, and more). There will be a series of data review meetings with the MPCA that will culminate with the Best Professional Judgment meeting in St. Paul where official decisions will be made on the assessment results for lakes and streams in the RLWD (and the rest of the state).

Clearwater River Dissolved Oxygen and Fecal Coliform TMDL

The first meeting for this project was held December 1st, 2006. This was a public information meeting that had a good turn out, due in part to press releases (I even ended up doing a radio interview). A summary of the workplan (budget and impaired reaches) is included in this meeting's handouts. A full version of the workplan has been distributed with earlier monthly water quality reports.

November 2006 Water Quality Program Progress Summary

12/12/2007

There will be two committees for the project:

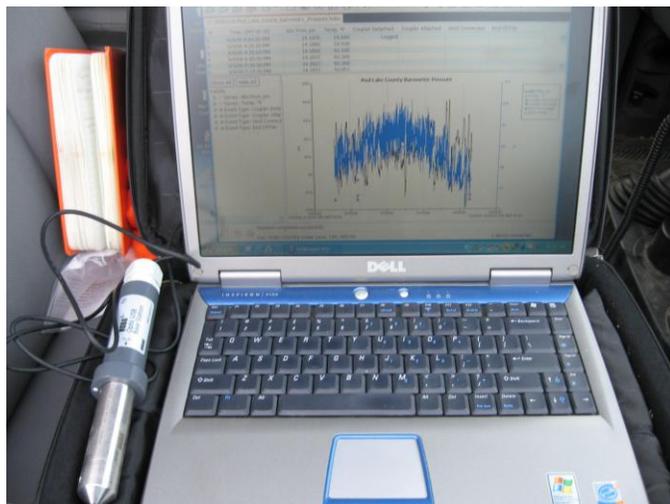
1. Stakeholder Advisory Committee – Meets approx twice a year (agencies, landowners, cities, other concerned citizens)
2. Technical Advisory Committee – Meets more often to work out the methods and other technical aspects of the project (RLWD, MPCA, DNR, etc)

Project Tasks:

1. Verify the impairments
 - a. Intensive monitoring, including continuous monitoring stations on reaches impaired by low dissolved oxygen
 - b. Data analysis for each reach
2. Assess the conditions in the watersheds
 - a. Report of water quality conditions
 - b. Land use
 - c. Sources of pollution
 - i. Ability to reduce pollution from each source
3. Define current loads (load = concentration x flow)
4. Estimate desired loads
5. Suggest strategies to achieve loads
 - a. SWAT modeling will be able to predict pollution reductions from implementation of riparian buffers and other best management practices.
 - b. Implementation plan for each of the watersheds.
 - c. Draft Total Maximum Daily Load Study for each reach that is determined to be impaired.

Tile Drainage Study:

Because of recent rain, it was possible to get some more samples from the Red Lake County monitoring sites. Rain gauges have been removed for the winter in Marshall County (early November) and Red Lake County (early December). Water Level Data from the summer has been downloaded from the HOBO water level loggers in Red Lake County. The surface drainage monitoring level loggers were removed for the winter. The Bachand Tile monitoring site was still flowing near the end of November but has stopped since then and the level logger has been removed for the winter.



November 2006 Water Quality Program Progress Summary

12/12/2007

Gary Sands of the University of Minnesota Extension Service requested that I present the findings of our project at the Minnesota-Iowa Drainage Research Conference at the Owatonna Cabela's on November 28th. Tile drainage study field data and lab results have been entered and some data analysis was done in preparation for the presentation. The presentation is available on the Projects webpage on the RLWD website (<http://www.redlakewatershed.org/projects.html>) and copies of the presentation are included with today's packets.

November (and other past) Meetings and Events

- ❖ **November 2nd** – TMDL Informational meeting at the RLWD
- ❖ **November 22nd** – Marshall County Water Resources Advisory Committee Meeting
- ❖ **November 27th** – Red River Basin Water Quality Team meeting in Moorhead.
 - Farmer's attitudes about buffers, reasons behind successes and failures of public information and implementation efforts.
 - The 24th Annual Red River Basin Land & Water International Summit Conference will be held January 23-25, 2007 at the Ramada Plaza Suites in Fargo. <http://www.redriverbasincommission.org/Conference/conference.html>
- ❖ **November 28th** - MN/IA Drainage Research Forum in Owatonna
 - Gave 30 min presentation about the RLWD Tile Drainage Study
 - Other Presentations included:
 - Two-stage ditch design concept
 - Wetland restorations for treating ag runoff (and tile water)
 - Nitrate reductions
 - Reductions in peak flows
 - 90% cost share through CRP and the McKnight Foundation
 - Drainage water management (controlled drainage)
 - Gulf of Mexico hypoxia
- ❖ **November 29th** – Marshall County Water Resources Advisory Committee
 - Agassiz NWR will be constructing a new outlet structure that will consist of a stop-log gate and a rock spillway. It will be located where the Thief River meets the Westgate Road. It will allow water to flow into the old natural channel along the west side of Madsen Pool. This structure will allow the refuge to release water through the winter without worrying about the radial gates being frozen open. The base flow and re-oxygenation from this structure should improve winter water quality conditions in the Thief River as well.
 - The Marshall and Marshall-Beltrami SWCDs are working on creating a Wetland Education Nature Area Project. The county is dealing with conflicts regarding the mining of high quality gravel resources at a potential location.
 - Marshall County has a new website: <http://www.co.marshall.mn.us/>
- ❖ **November 30th** – Clearwater County Water Plan Task Force – Bagley
 - Talked about our water quality monitoring efforts in the area.
- ❖ **November 30th** – Red Lake River Corridor Enhancement Project meeting @ the East Grand Forks Library @ 6:30 pm

November 2006 Water Quality Program Progress Summary

12/12/2007

- ❖ **December 1st** – First meeting for the Clearwater River Dissolved Oxygen and Fecal Coliform TMDL Study. Clearbrook Community Center
 - Public information – stakeholder meeting
 - Presentation by Molly MacGregor and I
 - Good “round table” discussion with lots of comments and questions
- ❖ **December 8th** – Red River Basin Monitoring Advisory Committee meeting – SHWD
 - There will be a water quality monitoring training session in the 1st or 2nd week of March. I will, at least, be talking about the importance of using good, standard methods when collecting water quality data.

Future Meetings/Events

- ❖ **December 14th** – RLWD Board Meeting
- ❖ **December 18th** – eLink training in Bemidji (BWSR Challenge Grant reporting software)
- ❖ **January 4th 2007** – Red River Basin Buffer Initiative meeting in Detroit Lakes – 10 am
- ❖ **January 22nd 2007** – Red River Basin Water Quality Team – Moorhead – Review preliminary water quality assessments
- ❖ **January 26th** - Red River Basin Monitoring Advisory Committee – Fertile
- ❖ **February 1st, 2007** – Release of preliminary assessments and data summary reports for the 2008 statewide water quality assessment cycle.
- ❖ **February 14th 2007** – Marshall County Water Resources Advisory Committee. Power Point presentation on water quality monitoring program
- ❖ **February 14th and 15th 2007** – Moorhead Ag Drainage Workshop
 - Asked by Gary Sands to present on the Tile Drainage Study. The 14th won't work due to the presentation to the Marshall WRAC. The 15th might work, though.
- ❖ **February 26th 2007** – Detroit Lakes MPCA meeting to review data and assessments prior to the BPJ meeting in St. Paul.
- ❖ **March 12th and 13th 2007** – St. Paul Best Professional Judgment meeting for Red River Basin water quality assessments.
 - I will be down there to make sure that correct water quality assessments are made for the waters within the RLWD.
- ❖ **March 13 through 15th 2007** – International Water Conference and River Watch Forum
 - Will be giving a presentation on the macroinvertebrate monitoring we did in 2003 (Talked into it by Andre Delorme of Valley City State University).
- ❖ **March 26th 2007** – Red River Basin Water Quality Team – Thief River Falls – Ethanol
- ❖ **April 11th** - Marshall County WRAC – Holt CC
- ❖ **April 15th 2007** – Challenge grant progress reports to BWSR are due
- ❖ **May 21st** – Red River Basin Water Quality Team – Moorhead
- ❖ **June 13th** - Marshall County WRAC
- ❖ **June 25th** – Red River Basin Water Quality Team – Thief River Falls
- ❖ **July 23rd** – Red River Basin Water Quality Team – Moorhead
- ❖ **August 8th** - Marshall County WRAC
- ❖ **August 27th** - Red River Basin Water Quality Team – Thief River Falls
- ❖ **September 24th** - Red River Basin Water Quality Team – Moorhead
- ❖ **October 10th** - Marshall County WRAC

November 2006 Water Quality Program Progress Summary

12/12/2007

- ❖ **October 22nd** - Red River Basin Water Quality Team – Thief River Falls
- ❖ **November 26th** - Red River Basin Water Quality Team - Moorhead

Other Notes

- ❖ Doug Thompson of the Clearwater SWCD will be retiring on December 15th.
- ❖ Clean Water Legacy Act Assessment Funding
 - Red River Basin Stream Monitoring and Assessment Proposal
 - Overall proposal compiled by Wayne Goeken of the Red River Watershed Management Board
 - I wrote a proposal for the RLWD that covered the costs necessary to collect enough data at 6 Beltrami County Sites (Coburn Creek, Blackduck River, Perry Creek, O' Brien Creek, Dorrigans Creek, South Cormorant River) along with Badger Creek, Cyr Creek, and Kripple Creek in Polk and Red Lake Counties.
 - The final value of our request came to \$30,568
 - \$23,200 for Personnel
 - \$7,368 for lab analysis
 - There is a summary of the overall proposal in today's handouts.

Thief River Watershed Sediment Investigation
Clean Water Partnership Grant Application
Was Successful!

The MPCA Has Awarded a
\$96,500 Grant

To the RLWD Water Quality Program!

Dear Corey:

I am pleased to notify you that your Clean Water Partnership (CWP) proposal submitted by the Red Lake Watershed District in September, 2006 has been approved for funding.

The Minnesota Pollution Control Agency (MPCA) received 18 CWP funding proposals for more than twice the amount of grant money available this round. The MPCA together with 8 other agencies/organizations reviewed each proposal carefully to determine the projects for funding. Your project was one of eight chosen to be funded this year.

The amount of your grant award is **\$96,500**. You will soon receive the CWP grant agreement for local processing. Project expenses cannot be charged to the project until the grant agreement has been executed by your local authorities and the MPCA. In addition, you will need to develop an extensive work plan, detailing work activities, time table and budget for your project. Enclosed is guidance to assist you with this process. A staff person from the MPCA will soon be assigned to your project and will contact you to assist you further with your project. If you have questions on this process, please contact Pete Fastner of my staff at 651-282-6245 or peter.fastner@pca.state.mn.us.

Again, congratulations and thank you for the work you do improving water quality in Minnesota!

Sincerely,

Juline A. Holleran