

June 2006 Water Quality Program Progress Summary

By: Corey Hanson

For: July 8, 2006 RLWD Board Meeting

Lake and Stream Monitoring:

The second round of sampling at our regular district monitoring sites for 2006 was completed in June. The other rounds of sampling will be in August, and October. Maple Lake inlet, outlet, and JD73 samples were collected in early June and will be collected monthly again this summer – with analysis being paid for directly by the Maple Lake District.

I learned during the 2005 assessment process that we need to collect more fecal coliform data for the months of June through August in order for the MPCA to assess our monitoring sites. Therefore, we are collecting some “supplemental” fecal coliform samples during the summer months (starting last year) so that we will have a minimum of 5 samples per calendar month over the last 10 years of sampling at each site. Before the new alternating schedule, samples were collected in the same 4 months every year so all summer samples were collected in July. So, most sites have plenty of fecal coliform samples for the month of July, but have very few for the months of June and August. June, July, and August are the most crucial months for fecal coliform monitoring because these are the months in which they grow the most and can reach problem levels. They are also the months in which people may be engaging in activities that bring them in contact with the water, so these are the months in which the health risk indicated by high fecal coliform is relevant.

Clearwater, Maple, and Cameron Lakes were also sampled. Samples were also collected at Buzzle Lake and Blackduck Lake (Beltrami County lake sites – as requested by the Board).

Tile Drainage Study:

Flow at the sites has subsided. There hasn't been much rain lately, so we didn't collect a lot of samples in June. I submitted an interim progress report to the Northwest Minnesota Foundation. I have been downloading data from the Marshall County rain gauge monthly and submitting it to the Marshall-Beltrami SWCD.

Project 60 Monitoring

The Stevens TS300 turbidity probes and HOBO Level Loggers have been working well. They will be checked every two weeks. The probes will be cleaned and data will be downloaded during these bi-weekly site visits. I will try to get enough flow measurements to create a rating curve at each of these sites (and any other sites needed for the project – downstream of the Euclid impoundment?). Flow had stopped completely at both monitoring sites by the end of June.

June Meetings

- ❖ **June 12th** – Red River Basin Buffer Initiative Meeting @ Detroit Lakes MPCA office
 - Reported on RLWD expenditures to date for the project

- ❖ **June 15th** – Red Lake River Corridor Enhancement Project meeting – in Thief River Falls.
 - Chuck Fritz and Wayne Goeken attended to discuss the River Watch Watershed Watch project, which will work with the Red Lake River Corridor joint Powers Board to implement some of the aspects of the Corridor Enhancement project. They will not only use River Watch students to help accomplish some of the tasks in the RLRCE plans, but may also use International Water Institute resources to find funding for some of the corridor enhancement projects.
 - Promotional Video about the Red Lake River (by Crookston River Watch through the Understanding the Science Connected to Technology grant)
 - List of festivals and events that involve the river
 - Small projects such as hand-planting (Red Lake Falls Park, 75 Bypass near Crookston, other new accesses or park features)
 - Look for financial resources
 - 50/50 cost share grants from DNR, LCMR, etc
 - Federal appropriation grant
 - Keep trying to get bonding bill funding
 - Focus on awareness (Adopt-a-River, 40th Anniversary of the Red Lake River Canoe and Boating Trail designation)
 - Find out what resources are available from all partners
 - Red Lake Falls Summerfest is July 26th through July 30th
 - Otter Tail Power has plans to remove the remainder of its dam on the Red Lake River upstream of Crookston.

- ❖ **June 23rd** – Red River Basin Monitoring Advisory Committee meeting in Fertile
 - Discussion to identify official goals of the group
 - River Watch update
 - Some suggested changes to the SOP

- ❖ **June 26th** - Red River Basin Water Quality Team Meeting at the RLWD
- ❖ **July 8th** – Maple Lake District Annual Meeting
 - Spoke about our Maple Lake area monitoring program and results

Future Meetings/Events

- ❖ **July 19th** – Marshall County Water Resources Advisory Committee meeting in Newfolden
- ❖ **July 24th** - Red River Basin Water Quality Team Meeting in Moorhead
- ❖ **July 25th** – Sediment Summit @ the Detroit Lakes MPCA office
- ❖ **July 28th** – Red River Basin Monitoring Advisory Committee Meeting at the Sand Hill WD
- ❖ **August 10th** – Next Red Lake River Corridor Enhancement Project Meeting – in Fisher

River Watch

- ❖ Jim is continuing to assist area River Watch schools with their monitoring.
- ❖ Crookston High School River Watch will be participating in the International Water Institute's Understanding the Science Connected to Technology Grant.
- ❖ The International Water Institute was successful in receiving a grant from the Northwest Minnesota Foundation for a Watershed Watch project. This project will link River Watch activities with community activities, especially those that are a part of the Red Lake River Corridor Enhancement Project. See the notes on the June 15th RLRCE Project meeting above for more details.

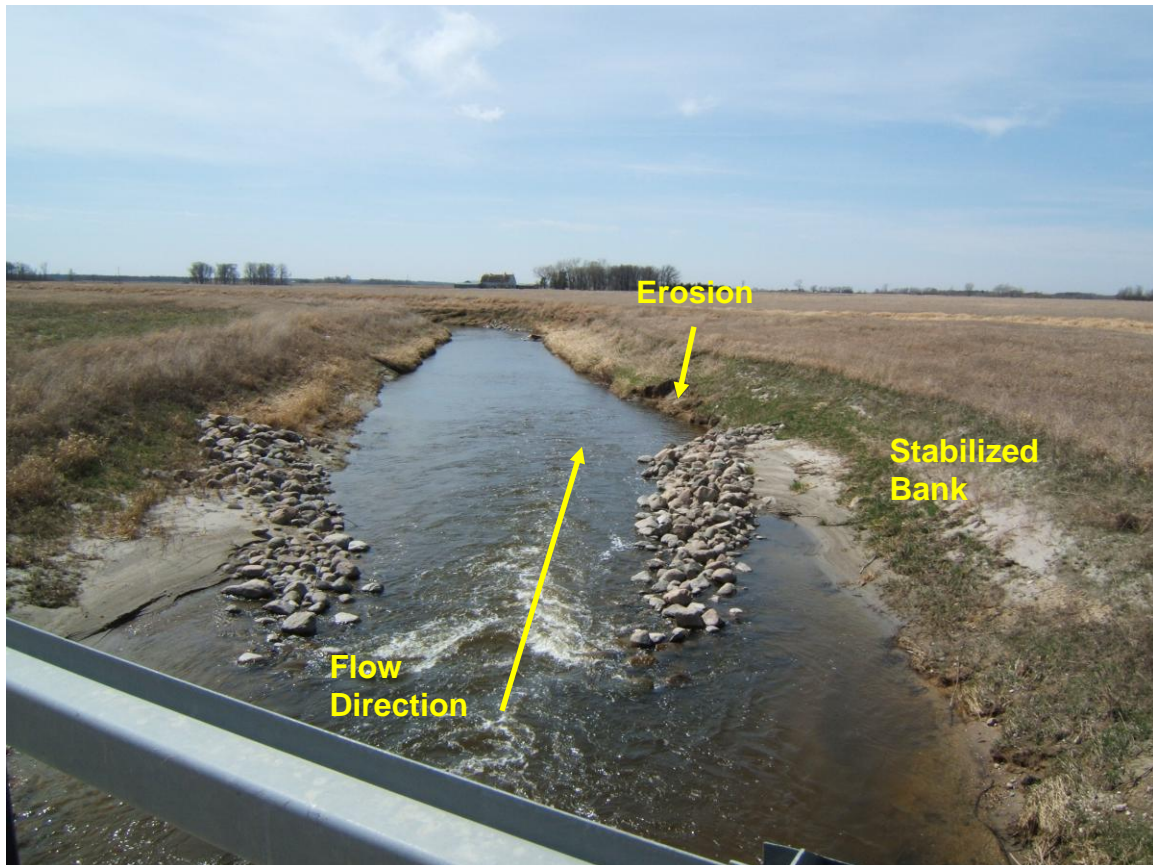
Other Notes

- ❖ The MPCA has decided to give \$100,000 to the RLWD to conduct a TMDL study on some impaired reaches within the Clearwater River Watershed. Mike Vavricka from the MPCA will be coming to the Board to officially propose this project. The reaches that will be studied include:
 - Clearwater River; Ruffy Bk to Lost R 09020305-510 Fecal coliform
 - CD #57; Unnamed Ditch to Clearwater R 09020305-508 Low Oxygen
 - Clearwater River; Ruffy Bk to Lost R 09020305-510 Low Oxygen
 - Poplar River; Spring Lk to Hwy 59 09020305-518 Low Oxygen
 - Lost River; Silver Cr to Hill R 09020305-507 Fecal
 - Possibly Silver Creek as well (fecal coliform impairment)
- ❖ Reviewed Marshall Co Water Plan

- ❖ Completed this year's photo monitoring of the Greenwood 27 and Gully 6 streambank stabilization projects (The pictures of Gully 6 were earlier - this the Spring by Gary)
 - Greenwood 27 (by Clearwater Rice) structures are doing well, willows are starting to get some size to them so they don't seem as insignificant as they had in the past.



- At the Gully 6 (Lost River Erosion Control Project) site, the erosion is less severe than it originally was but there are still a couple of problem areas.
 - The water is still coming from under the bridge at such an angle that the cross-vein weir cannot fully correct the direction of flow and there is some erosion on the downstream side of the cross vein weir on one of the banks. The area that was actively eroding prior to the project seems to have stabilized and is re-vegetating.



- Due to the design changes that changed the project's bendway weirs into stream barbs and changed their angles, the final stream barb is actually directing flow directly into the opposite bank instead of down the middle of the channel and is creating a new erosion problem.

