October 2005 Water Quality Program Progress Summary

Stream Sites Sampled/Monitored

- Ruffy Brook Monitoring
 - Calibrated In-Situ continuous monitoring sondes at the 3 Ruffy Brook sites twice (once every two weeks)
 - Reconnaissance along the former trout stream reach of Ruffy Brook in search of potential stream classification survey (geomorphology) sites. Bill Evarts of the DNR notified us that he would be able to do some stream classification work on Ruffy Brook in early November. He stated that he would like to include a disturbed site, and undisturbed (reference) site, and a site that is being placed into CRP (before and after) in the survey.
 - Landowners were contacted about allowing access to their land for stream classification surveys.
- Lake Monitoring
 - o Maple Lake, sites 101, 102, and 103
 - JD73, Maple Lake inlet, and Maple Lake outlet were sampled for the Maple Lake monitoring project (upstream of Rydell NWR).
- Red River Basin Buffer Initiative Monitoring
 - Clear Brook (CB#3) upstream of Clearbrook, Silver Creek 2 (SW of Clearbrook), and 81 (lower end of Silver Creek watershed – sampled as part of district monitoring run) – October 11th

Tile Drainage Study

Sampling for the year is ending. Some samples were collected early in the month. The Yaggie flow measurement structure was leveled and stabilized. Some additional samples may be collected from the Bachand site, however, before winter if the tile continues to flow. The Quality Assurance Project Plan (QAPP) for this project was completed (although it will remain a living document) and distributed. A QAPP is a document that includes all the goals, methods, etc. that are behind a monitoring program. Fifty-five copies of the QAPP were printed and bound for distribution.

Meetings

- October 5th Marshall County Water Resources Advisory Meeting
- October 17th Red River Basin River Watch Strategic Planning Session at UMC
- October 20th Red Lake River Corridor Enhancement Project meeting in Red Lake Falls.
 - Need to look up how much the RLWD has spent on erosion control projects along the Red Lake River (include erosion control on the Ditch 10 project, for example) to show "matching funds" for the Red Lake River Corridor Enhancement Project Bonding Bill Application.

- o \$683,000 total budget for this bonding request
 - \$383,000 for park and access improvements
 - \$240,000 for erosion control and shoreline management
 - \$30,000 for an erosion assessment along the Red Lake River
 - \$30,000 to SWCDs to place riparian buffer strips into CRP
- October 24th Red River Basin Water Quality Team Meeting (at RLWD)
- October 28th Red River Basin Monitoring Advisory Committee in Fertile

River Watch

- Red Lake Falls, Grygla, Fisher, Win-E-Mac, Clearbrook, Fosston, Bagley, Red lake County Central
- Writing descriptions of parameters monitored for the benefit of River Watch students.

Stream Gauging

Goose Lake Outlet, JD73 Maple Lake Monitoring Project sampling site, 81 (Silver Creek), PL30 (Lost River), PL40 (Hill River), BL18 (Black River water quality monitoring site), 86 (Gentilly Creek – high conductivity water shorted out the wading rod – need to purchase an electrically isolated "Aquarod" for high conductivity streams like this one),

Other Notes

- Researched and acquired quotes for turbidity monitoring equipment and put together a continuous turbidity monitoring plan for Project 60 to utilize the water quality monitoring funds that were received in the Challenge Grant.
- A computer was purchased for storing a central GIS database, running the HEC HMS model developed as part of the 10-year plan, and for Jim's everyday use.
- Data entry, improvements to water quality database.

 Noticed septic effluent entering the Hill River, notified the Red Lake County SWCD.



Figure 1. Septic Seepage into the Hill River