

# **September 2005 Water Quality Program Progress Summary**

## **Stream Sites Sampled/Monitored**

- Full district monitoring run: 826, Murray Bridge, 799, 790, 86, BL18, 66, 750, 785, 780, 53-I, 53-O, 63, 59, 109, 62, PL40, PL30, 782, 797, 81, 50-I, 50-O, 52, 131, 0-6, 133, 128, 40, 98, 15, 757, 760
- Calibrated In-Situ continuous monitoring sondes at the 3 Ruffy Brook sites twice (once every two weeks)
- JD73 was sampled for the Maple Lake monitoring project (upstream of Rydell NWR).



**Figure 1. Calibrating the In-Situ Sonde at Ruffy Brook Site 797**

## **Lake Monitoring**

- Maple Lake, sites 101, 102, and 103

## **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)

## **Tile Drainage Study**

Setup of H-flume flow measurement structures at the Bachand and Yaggie monitoring sites in Red Lake County was completed. These structures will measure surface flow from the fields. A water control structure has been installed at the Bachand site to measure flow from the tile. HOBO water level recorders have been installed at each structure. Sampling was completed at the Red Lake Nation Wild Rice Paddy monitoring sites. Sampling and flow monitoring will continue at the Marshall County and Red Lake County sites until the sites begin to freeze. The Marshall-Beltrami County SWCD has continued to collect samples from the Marshall and Beltrami County monitoring sites.



**Figure 2. H-Flume Flow Measurement Structure at the Yaggie Site**



**Figure 3. Bachand Monitoring Site**





**Figure 4. Water Control Structure for measuring flow from Bachand Tile Drainage**

### **Meetings**

Red Lake River Corridor Enhancement Project (Crookston - Sept 7), RiverNight 2005 (St. Paul – Sept 22), Red River Basin Monitoring Advisory Committee (Fertile - Sept 23), Red River Basin River Watch Strategic Planning (Crookston – Sept 30)

### **River Watch**

Red Lake Falls, Grygla, Fisher (scheduled invertebrate meeting for next time), Win-E-Mac, Clearbrook (requested GIS instruction for their final report)

### **GIS**

Jim transcribed the GPS survey for Project 60 into shapefiles and did area and distance calculations. The same level of precision was used as on the engineer's specifications. Burned files to a CD for transport to HDR.

Minor subwatershed maps were updated to show the Good Lake impoundment. This will also be done for Parnell and other impoundment projects.

### **Stream Gauging**

150 (Ruffy Brook at Clearwater County Road 4), 155 (Ruffy Brook at Leon Twp. Sect. 15/16 crossing), JD73 Maple Lake Monitoring Project sampling site

### **Public Education**

Sept 14 – Pennington County Outdoor Education Day in TRF – 6<sup>th</sup> graders (Corey)  
Sept 20 – Northwest Minnesota Water Festival in Warren – 4<sup>th</sup> graders (Jim and Corey)  
Sept 21 – Northwest Minnesota Water Festival in Fertile – 4<sup>th</sup> graders (Jim and Corey)  
Sept 27 – West Polk Outdoor Education Day in Crookston – 6<sup>th</sup> graders (Corey)

### **Other Notes**

The Red River Basin River Watch Program received the Citizen Volunteer Monitoring Program of the Year Award at RiverNight 2005. The award was sponsored by HDR Engineering. Nate Dalager presented the award on the behalf of HDR and Wayne Goeken accepted it on the behalf of the River Watch program.



**Figure 5. Sheryl Corrigan, Gov. Tim Pawlenty, Wayne Goeken, and Nate Dalager at the RiverNight 2005 Awards Presentation**