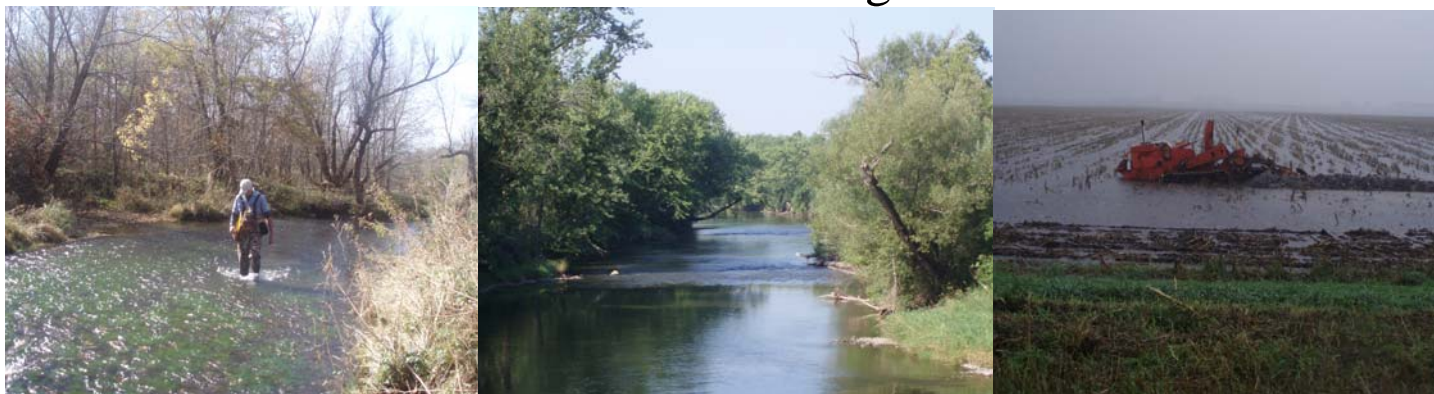


2010 Cedar River Monitoring Observations



Tillage Survey

A Tillage transect survey was completed throughout the watershed with an intense focus on Dobbins Creek and Little Cedar. This survey was completed with the help of the MN Dept of Ag. They provided the equipment, software, and training for the survey.

Water Quality Data

Seventeen sites were sampled during the 2010 monitoring season (11 CWL and 6 TMDL). We took about 12 samples for each site.

Chloride was sampled at the CWL sites 6 times last year. All sites were below the MPCA standard of 100 mg/L. Blooming Prairie Tributary had the highest average (30.6 mg/L). The overall average (22.5mg/L) split the data from 20.3mg/L in 2008 to 23.3 mg/L in 2009.

Conductivity was sampled at all sites. Samples showed a slight decrease from the 2009 data.

Dissolved Oxygen was sampled at all sites. The average 9.02 mg/L was similar to the 2008 and 2009 averages. Sites on the Wolf and Dobbins Creek at Mower County 19 did have samples below 5mg/L, which is the level at which dissolved oxygen begins to effect aquatic life.

E. Coli was sampled at the CWL sites and the Nature Center staff sampled 3 sites in the Nature Center. The average has increased from the 2009 data and has shown a steady increase over the past 20 years except for last year. All sites had an average that exceeded the estimated MPCA standard of 126 mg/L.

Nitrate-Nitrite was sampled at the CWL and TMDL sites. Almost 25 percent of the sites exceeded the 10 mg/L MPCA drinking water standard. Up from 17 percent in 2009.

pH was sampled at all sites. The average declined slightly from the 2008 and 2009 data. The total average was within the eco-region normal range (8-8.2). All sites averages were within .1 of the eco-region norm.

Phosphorous levels were highest below the wastewater treatment plants on Blooming Prairie Tributary and on the Cedar River South of Austin at Mower Co. 28. Over 25 percent of the samples exceeded state standards.

Sulfate was sampled at the CWL sites. Extreme levels can potentially be harmful to humans and animals. The total sample average (22.8 mg/L) is lower than the 2008 and 2009 data. Blooming Prairie had the highest average (42.6 mg/L).

Turbidity/TSS/T-tube in general the watershed showed more normal results than the low of 2009. Sites exceeded the estimated standard in 22% of turbidity samples (up from 10% in 2009) and 18% of TSS samples (up from 5% in 2009).

Stream Geomorphology

Geomorphology - is the scientific study of landforms and the processes that shape them. The MN DNR, MPCA and CRWD took physical surveys of stream sections as well as took sediment and bank survey data. Preliminary results show that most of the streams are type F, which means that they are deeply entrenched and detached from the flood plain.