



Agenda	Minutes	Newsletter
Evolution of the Partnership		Organization Structure
Goals		Past Projects
Importance of Ulao Creek		Partners
Planning & Resource Management		Stormwater Management Plan
Membership		What's New

Our Mission
 To form an alliance of concerned citizens, landowners, and public and private organizations to protect and improve the water quality and natural habitats in the Ulao Creek Watershed.



ULAO CREEK WATER QUALITY MONITORING

By Tom Dueppen - Ozaukee County LWCD

The 8,212-acre (12.8-square-mile) Ulao Creek Watershed drains north to south and spans three municipal boundaries (the Village of Grafton, Town of Grafton, and City of Mequon) before discharging into the Milwaukee River. Increasing development within these communities has altered many aspects of the natural environment, including the natural hydrology, or flow of surface water into streams and rivers. Agricultural and urbanization activities generate pollutants at numerous runoff points that eventually drain into surface water systems, especially after rain events. The “diffuse nature” of these contaminants, known as nonpoint source pollution, compounds the difficulties in not only controlling stormwater runoff, but also in assessing its impact on the environment. The contaminated, untreated water accumulates in drainage ways and is usually channeled directly into streams, rivers, and lakes. Ultimately, these contaminants filter into natural wildlife habitats and groundwater (drinking water) sources. The quality of area streams, especially during heavy rains, directly impacts both animals and people.

To assess the water quality of Ulao Creek, the Ozaukee County Land & Water Conservation Department has teamed up with UCP volunteers to monitor five sites along the Creek for turbidity, temperature, dissolved oxygen, water velocity, and biotic index. Studying these water quality parameters should indicate how effectively the Creek can support life and also determine how adjacent land uses may be impacting stream water quality. Each site has been monitored once a month (May – Sept) for the last 3 years. No definitive conclusions have been reached, but the current results indicate the following:

- Average Temperature ~ 64°F => too warm for large game fish
- Average Turbidity ~ 10-20 NTUs => not a concern, YET
- Average O² Concentration ~ 7.0 mg/L and 76% saturation => reduced biodiversity
- Average Habitat Score ~ 37 => slightly above average
- Average Biotic Index ~ 1.75-2.0 => poor stream health

These monitoring results not only help us define and understand the impact of nonpoint source pollution on stream quality, but also provide

baseline stream data necessary to assess how effective our current development practices are in reducing flood risks/erosion/pollutant loading and in protecting / promoting wildlife habitats and overall water quality. The activities conducted by the UCP are a model for any developing community concerned with land and water conservation. Continued monitoring also will become increasingly important as all three Communities and the County, proceed through the NR 216 Municipal Stormwater Discharge Permit Program.

[Back to Newsletter Index](#)

[Back to UCP Home Page](#)