

Kettle Moraine Land Trust is helping to improve water quality locally and all the way to the Gulf of Mexico

The Kettle Moraine Land Trust has a strong track record of forming valuable partnerships to protect and conserve natural resources in Walworth County. In the past KMLT has worked with conservation organizations like the Wisconsin Department of Natural Resources (WDNR) to protect threatened oak woodlands and rare bog habitats. Important wetlands, fish spawning areas and wildlife habitat have also been conserved through KMLT partnerships with lake improvement associations and other non-profit conservation organizations. The latest in this long line of KMLT partnerships is the newly formed Delavan Lake WIN (Watershed Improvement Network).



Delavan Lake WIN's purpose is to tackle an increasingly ominous and difficult challenge - protecting and ensuring clean water. Water all across the country is threatened by polluted runoff from urban areas,

development and agriculture. By forming a network of local governments, citizen groups and conservation organizations, a unified vision is developed to work in a cooperative way. The Kettle Moraine Land Trust has brought together stakeholder groups and is facilitating the creation of a multi-year work plan that will guide Delavan Lake WIN organizations and municipalities to work together to protect the water quality of Delavan Lake.

Delavan Lake WIN is a collaboration of experts, resources and community groups with mutual goals.

This time however, KMLT's collaboration involves a new kind of partnership; one between the Kettle Moraine Land Trust and farmers. Kettle Moraine Land Trust recognized the importance of working with both the urban and farming community to tackle water quality challenges affecting Delavan Lake.

"Agriculture is an important economic resource to our region and local farmers are an excellent source of knowledge about land use challenges and solutions." said Jerry Petersen, KMLT president. To improve water quality leaving agricultural lands in the Delavan Lake watershed, KMLT asked the USDA -Natural Resources Conservation Service (NRCS) to become one of the first Delavan Lake WIN partners. NRCS works with farmers and landowners to protect and maintain healthy ecosystems while ensuring productive farm lands. NRCS agreed to partner and through their Mississippi River Healthy

Basins Initiative, KMLT was able to request and receive funds to help local farmers implement conservation practices that improve the quality of water draining to the Mississippi River and the Gulf of Mexico.

Why would KMLT be interested in the Gulf of Mexico?

According to Maggie Zoellner, program manager for KMLT and facilitator of Delavan Lake WIN, "The Mississippi River has one of the largest drainage basins in the world. Only the Congo and Amazon rivers have larger basins. Water from Delavan Lake and all of Walworth County contribute nutrients to the Mississippi River. Poor water quality is bad for our local economy and the nation."

Because the Kettle Moraine Land Trust is an official partner of NRCS, additional funding is available to farmers in the Delavan Lake watershed to partially cover the cost of installing conservation practices such as grass waterways and cover crops. Funds are also available to qualified farmers to plant areas to permanent vegetation along streams and to convert to no-till plantings. These practices help improve water quality by decreasing nutrient loss from fields. Wildlife and aquatic habitat is also enhanced when streams are protected by permanent vegetation.

Many farmers realize the advantage of protecting water quality and Charles Pearce of C & C Farms is one of them. Charles celebrated his first birthday on his family farm south of Delavan Lake and has lived and worked there ever since. He and his son Charlie now farm together and look for ways to improve the health of the lands they own. The Pearces routinely place fields that are prone to erosion in hay to keep soils from washing down hill. Because of additional funding available in the Delavan Lake watershed, Pearce planted a cover crop on several of his fields to help reduce soil erosion. "If we get a hard rain in the spring the soil stays where it is."

MISSISSIPPI RIVER HEALTHY BASINS

NRCS has identified the Mississippi River Basin as a priority area because of the affect of nutrient loading on the health of local water bodies and in the Gulf of Mexico. Nutrient loads come from runoff including wastewater, fertilizers, animal waste and soil erosion. Excess nutrients become concentrated where the Mississippi River discharges into the Gulf of Mexico. These over abundant nutrients - primarily nitrogen and phosphorus increase algae growth. This eventually depletes the oxygen in the water to the point where other aquatic organisms including fish cannot survive. Because of high nutrient loads a dead zone is created every year where the Mississippi River flows into the Gulf. The dead zone is totally devoid of life and is increasing in size nearly every year.

says Pearce. After the cover crop is removed Pearce plants corn or soybeans directly into the ground without tilling the soil. The roots of the cover crop continue to hold on to the soil and residue left behind from harvesting helps hold soil in place as well. When soil loss is reduced, water quality is improved.



Charles Pearce inspects a no-till corn field with Kettle Moraine Land Trust program manager Maggie Zoellner.

Pearce has seen many changes in the way farmers tend their lands in his lifetime. "I remember when everyone used to plow everything. Now you don't have dirty water like you used to, you don't have all the dust in the air."

The Kettle Moraine Land Trust is thrilled that the Delavan Lake WIN organizations have come together quickly and that improvement projects have already begun. Future plans also include studying the plant communities along area streams, inventorying fish and other aquatic wildlife; and educating community residents about how to improve the quality of water leaving urban areas. According to Zoellner, "Delavan Lake WIN is all about taking action to protect important natural resources. Air, water, land and people are all connected. We can't have clean water and beautiful scenery if we don't actively work together to make wise decisions."

Learn what you can do to protect water quality by visiting <http://clean-water.uwex.edu/pubs/>