

At the Water Table . . .

Much is being discussed at our so called “water table” these days in the Les Cheneaux watershed. Several groups are doing their part to deal with different water quality concerns.

The Les Cheneaux Watershed Council (LCWC)

The Les Cheneaux Watershed Council is looking into several strategies to address Cedarville Bay issues, including invasive aquatic vegetation and nutrients. Contact Christine Perreault, Council President, at 906-297-2033 or cperreault@lssu.edu to get involved:

- ◆ Researching alternative wastewater management for Clark Township, especially wastewater discharge.
- ◆ Eurasian Milfoil control strategies including Eurasian Milfoil Weevils
- ◆ LCWC is developing a business plan to purchase an aquatic vegetation harvester. If you are interested in donating, please contact Bob Smith at 906-484-4081 or robsmith9@earthlink.net. The plan will need to confirm availability of funding before the end of the year.

Georgian Bay Association

The Georgian Bay Association sponsored research of the US Army Corps of Engineers’ past dredging of lower Lake Huron, which may be a cause of receding lake levels. You can contact the Georgian Bay Association at 416-968-0178 or gba@georgianbay.ca.

The Conservation District

The Conservation District’s *Les Cheneaux Watershed Project* has several irons in the fire:

- ◆ Assisting Clark Township with long term water quality protection through planning and zoning improvement.
- ◆ Critical waterfront/wetland protection easements, donations, and other strategies with the Little Traverse Conservancy and other non-profit groups.
- ◆ Implementing stream protection strategies on McKay, Flowers, and Pearson Creeks.
- ◆ Assisting landowners with septic system management.
- ◆ Increasing awareness of local water quality protection.
- ◆ Developing an interactive water quality information website www.lescheneauxwatershed.org.

Contact Pat Carr 906-484-3031 or pat.carr@macd.org

Site Plan Review Coming to Clark Township

Each year, approximately 100 building permits are issued in Clark Township. Somewhere close to you a house is going up, a cottage is getting improved, or land is being cleared for development. Even in a slow economy, our landscape is changing. The sustainability of our community, our economy and environment are all affected by each and every building permit issued. With poorly planned development, everyone suffers, including our environment. Fortunately, we have an opportunity to improve development planning to protect our area’s precious resources.

The Les Cheneaux Watershed Project is working with Clark Township to improve their Master Plan and zoning ordinances. One of the most long-awaited items is *Site Plan Review*. It’s the most powerful planning and natural resource protection tool next to placing land into various zoning districts. Easily enforced, site plan review is a way for the Les Cheneaux community to guarantee that what is approved on a site plan, is what will be built.

With new developments, especially near critical aquatic habitats such as waterfront, wetlands, and areas where groundwater may be threatened, the Les Cheneaux Community can require measures to minimize destruction to water quality. For environmental as well as aesthetic concerns in a community, site plan review is one of the best overall zoning tools that can be implemented by local government. Site plan review eliminates surprises and serves as a mechanism for working with a community’s natural features.

A site plan is a plan, drawn to scale, showing the layout of proposed uses and structures. Site plans include lot lines, streets, building sites, existing structures, reserved open space, utilities, and any other required information.



Happy Holidays!

Well, Well, Well

More about your water!

In the last issue of the *Watershed News*, we discussed the problems of excessive sulfate in your well water. This issue we'll discuss the potential problems of high nitrate levels in your well.

Nitrate (NO_3) is a form of nitrogen combined with oxygen. It can be converted in the body to nitrite (NO_2). The major adult intake of nitrate is from food rather than water, but sometimes excessive amounts of nitrate get into drinking water.

Large amounts of nitrate in drinking water can cause serious illness in infants under six months of age — a disease called methemoglobinemia. This disease reduces the ability of the red blood cells to carry oxygen. The acutely poisoned person will have a blue discoloration of the skin due to the reduction of oxygen in the blood. The condition can be fatal if not attended by a physician immediately.

Nitrate, one of the most widespread contaminants, can get into water if a well is improperly constructed or located where it is subject to contamination sources. Typical sources of nitrate include:

- ◆ Wastes from livestock operation
- ◆ Septic tank/drainfield effluent
- ◆ Crop and lawn fertilizers
- ◆ Municipal wastewater sludge application
- ◆ Natural geologic nitrogen

Shallow water wells in sandy unconfined aquifers are more vulnerable to nitrate contamination than deeper wells protected by overlying clay strata.

Because nitrate contamination can be related to human, animal, or industrial waste practices, excessive levels of nitrate in drinking water may indicate potential for the presence of other types of contaminants. Elevated nitrate can also cause health problems in livestock.

The U.S. Environmental Protection Agency has established a maximum contaminant level (MCL) for nitrate (as nitrogen) at 10 milligrams per liter (mg/L) and nitrite at 1 mg/L. Private water supply owners with excessive nitrate or nitrite should contact their local health department or family physician for assistance. Mortgage lenders may refuse to finance a mortgage if the home's water supply has nitrate above 10 mg/L.

Nitrate and nitrite levels can be obtained through an "Automated Partial Chemistry" test of your tap water. This is the same test performed by the DEQ to obtain sulfate, chloride, hardness, iron, and sodium levels. The fee is \$14. Test bottles are available at the Clark Township office of the Watershed Project office.

Hazardous Waste Collection?

It's been tough giving bad news lately when asked where to take paints, old fuel, cleaners, and other hazardous waste. As we are learning, many of our neighbors missed last summer's hazardous waste collection sponsored by the Conservation District's *Les Cheneaux Watershed Project*. Unfortunately, they may have missed it forever . . .

The Conservation District had planned to host three collections during the three-year watershed project. The project budget provided \$5,000 a year for a total grant award of \$15,000. Surprisingly, the Les Cheneaux Community had more waste in garages than expected. We spent the whole \$15,000 in one shot - plus a couple more grand!!! The good part is, we took over 8 tons of hazardous waste out of the Les Cheneaux Islands!

The Conservation District and the Les Cheneaux Watershed Council are now working to find funds to host those planned collections over the next two summers. Based on last summer's participation, we estimate that \$30,000 will do it. If you are interested in donating funds or know of a direction to turn, please contact project manager Pat Carr at 484-3031 or email pat.carr@macd.org.

Weevil Project Update

On June 21st this past summer, the Les Cheneaux Watershed Council sponsored the implanting of approximately 15,500 weevils on dense beds of Eurasian Water Milfoil at three sites in Cedarville Bay.

EnviroScience Inc. performed this initial stocking and returned six weeks later on August 7th to perform follow-up surveys of weevil success. The survey concluded that the milfoil beds were still dense, "but exhibited open pockets where milfoil had fallen out of the water column." A monitoring site which had not been stocked with bugs, "visually appeared to have had the best results." The milfoil was not topped out at the surface but rather falling over. Lab results from stem analysis revealed multiple weevil life stages as well as damage characteristic to weevils for all sites. Stay tuned to later newsletters as EnviroScience Inc. has promised a more detailed report will be generated this winter.



This Non-point Source Pollution Control project has been funded in part through the Michigan Non-point Source Program by the United States Environmental Protection Agency under assistance agreement 2006-0109 to the Chippewa/East Mackinac Conservation District for the Les Cheneaux Watershed Implementation Project. The contents of the document do not necessarily reflect the views and policies of the EPA, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.

Location, Location, Location

Familiar with this real estate term? Location, location, location. It's just common sense that the best properties are in the locations that have amenities popular to us, be it near schools, aesthetic areas, or near the water. Humans are like aquatic wildlife in that regard. We have habitat that we require to live happily. Fish and other aquatic wildlife are no different. Many species concentrate in coastal wetlands to lay eggs and hang out in the cover while young. Natural lake or stream bottoms free of unnatural dredging and sediment provide food and spawning habitat. Some need creeks that are crystal clear, free from sediment. These are the "locations" that the Les Cheneaux Watershed Project is pursuing for protection.



Do you own these properties? Are you aware of their value to aquatic wildlife? If you're interested we can help you preserve it for future generations, protect water quality, and maybe increase wildlife on your property. We can assess your property's aquatic habitat and relationship to protecting water quality. We can guide you through several protection strategies if you're interested. We can also tell you about certain tax advantages in doing so. If you have the following habitat types, we can help you protect them forever:

- ➔ Coastal wetlands are critical for fish spawning and young fish nursery. They provide food, shelter, and nesting habitat for waterfowl.
- ➔ Streamside floodplain refers to property within approximately 100' alongside our creeks, streams, and rivers. Tree shadow cools the water, roots stabilize soils. Natural vegetated floodplains keep water clean during spring floods.
- ➔ Interior wetlands constitute everything from large bogs to wooded swamps, to small depression or pockets of hydric soils—sometimes less than an acre in size. Fill them, destroy their vegetation, whatever . . . , you threaten water quality and aquatic habitat. These are forgotten habitats because they're spread throughout our watershed and we see them as useless land that is flooded in spring or full of cattails, maybe just a little soft to walk through. Fortunately, they filter runoff, stabilize runoff patterns to prevent flooding, and provide habitat for wildlife.

MEMBERSHIP

If you are interested in becoming involved or if you just want to keep informed through our newsletter, please send your membership request to our office in Cedarville. Please make checks payable to LCWC.

\$15	Basic Membership
\$25	Spring Peeper
\$50	Green Frog
\$100	Leopard Frog
\$500	Blue Heron
\$1,000	Wetland
\$_____	Water Guardian

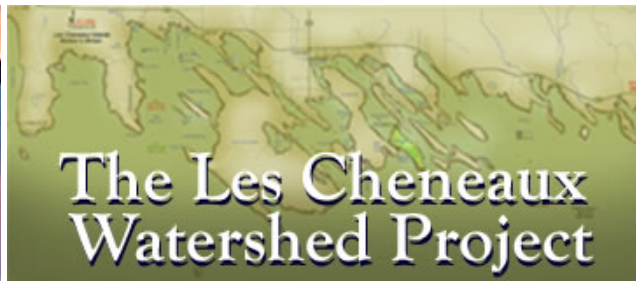
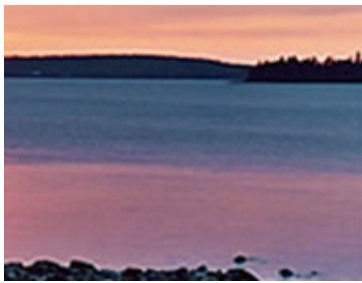
Les Cheneaux Watershed Council
P.O. Box 578
Cedarville, Michigan 49719

Pat Carr, Project Manager
Les Cheneaux Watershed Project
Phone: 906-484-3031

Check out our new website:
lescheneauxwatershed.org

Important tax information for those considering making a donation of land or conservation easement.

If your interested in conservation easements, donations, and other tax deductible strategies, time may be running out. Tax law H.R. 4 enables landowners who protect their acres using voluntary conservation easements to earn increased tax deductions and have longer time to recover the donation of their conservation easement. The law increases the tax deduction for conservation easement donations from 30% to 50% of a qualified donor's yearly income. For all landowners, the law triples the carry-forward period for deductions from five to 15 years. The enhanced tax incentive applies only to transactions made in 2006 and 2007 and completed before December 31, so time's a wastin'.



Web Site Up and Running

Many of our water quality problems can be attributed to a lack of awareness and resulting poor land use planning. Sound like a broken record?

Buy a piece of property without looking into wetlands, for example. You'll probably spend thousands on fill or need a drainfield that looks like a golf course bunker. There goes that landscape dream.

Maybe you bought that house too hastily and didn't realize that you are sitting on *karst*. Perhaps your water stinks and tastes funny. You didn't realize that your well is only 40 feet deep or that your septic tank is a 500 gallon drum that is about to collapse.

We have a place where you can go that can help prevent some of these poor choices. The Les Cheneaux Watershed Project and Watershed Council are pleased to announce that the watershed's web site is ready for your viewing. The web site address is www.lescheneauxwatershed.org.

The web site features information about our watershed such as news articles, reports, resource materials, well logs, maps, pictures, a calendar of events, and contact information. This is just the beginning of our efforts to compile and disseminate information to the full-time and seasonal residents of the Les Cheneaux watershed.

Our goal is to build a resource library that will hold all past reports, studies, pictures, and articles related to water quality in our area. We are currently working on assembling data, developing text, locating pictures, links, and graphics to make this a quality web site. If you are interested in helping organize data to go into the site, stop by the project office (Chamber of Commerce) or contact project manager, Pat Carr.

It's common sense if you are provided with information. You'll plan better and make better decisions. Take a look to find out more about your watershed. Oh yes, your comments are appreciated.

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