# Healthy Lake Huron

Clean Water, Clean Beaches

Newsletter
Summer 2011

## **Improving Water Quality Together**



#### This Issue:

- Project Highlights for All Five Priority Subwatersheds
- Farmers Putting Environmental Farm Plans to Work
- · First Nation Protects Water
- Local Health Unit Helps Beach Users
- New Huron County Septic System Maintenance Program
- Community Resource Planning Guides Available
- Why is Too Much Phosphorus an Issue?

## Healthy Lake Huron participants and supporters

Federal Government - Environment Canada, Parks Canada, Fisheries and Ocean Canada

Ontario Provincial Government - Ministry of the Environment, Ministry of Natural Resources, Ministry of Agriculture, Food and Rural Affairs, Ministry of Municipal Affairs and Housing

Municipal/County Councils - Bruce County, Huron County, Lambton County

Health Units - Grey Bruce Health Unit, Huron County Health Unit, County of Lambton Community Health Services

Conservation Authorities - St. Clair Region, Ausable Bayfield, Maitland Valley, Saugeen Valley, Grey Sauble Local Environmental Organizations - Lake Huron Centre for Coastal Conservation

International Stakeholders - Lake Huron Binational Partnership

Aboriginal Communities Invited

First Nations: Saugeen First Nation; Chippewa of Nawash Unceded First Nation; Chippewas of Kettle and Stony Point First Nation; Aamjiwnaang First Nation; Bkejwanong Territory; Munsee-Delaware First Nation; Oneida Nation of the Thames; Chippewas of the Thames First Nation

Métis: Historic Saugeen Métis; Métis Nation of Ontario Munsee-Delaware First Nation; Oneida Nation of the Thames; Chippewas of the Thames First Nation

Métis: Historic Saugeen Métis; Métis Nation of Ontario

Munsee-Delaware First Nation; Oneida Nation of the Thames; Chippewas of the Thames First Nation

A flexible membership on an issue-by-issue basis is inclusive of other agencies and levels of government, Tribes/First Nations, non-government organizations and the public. To learn more, visit www.binational.net

A team of dedicated environmental professionals has come together to coordinate actions that will improve overall water quality along the southeast shores of Lake Huron. This group is leading the *Healthy Lake Huron – Clean Water, Clean Beaches* campaign, a concerted effort to address nuisance algae concerns and to promote safe and clean beaches and shorelines from Sarnia to Tobermory.

The past 20 years has seen an increased focus on water quality issues, including nuisance algae and beaches posted as being unsafe for swimming. This situation is caused by a combination of nutrient and bacterial pollution from private septic systems, municipal wastewater, agriculture, and natural sources. Canada and Ontario, in partnership with local municipal governments, health units, conservation authorities and local environmental organizations, are working to develop and implement recommendations for actions to deal with these concerns.

To address algae issues and beach safety concerns, all partners are focusing on and coordinating actions that are aimed at lowering the amount of phosphorus and reducing incidences of high levels of bacteria (such as *E. coli*) entering the water. Lowering phosphorus levels in the water will reduce algae growth. Preemptive actions to minimize bacteria entering the water will reduce risks to human health and minimize beach

postings. Key areas where efforts will be focused include; enhancing storm drainage in urban areas, improving septic systems, implementing best management plans on farms to reduce nutrient run off, and reducing bacteria inputs from wildlife – such as resident geese populations.

A great deal of work to address these challenges has been completed or is underway, led by this initiative's predecessor – The Lake Huron Southeast Shore Working Group – and the many partners involved. Since 2009 the participating partners have dedicated well in excess of \$500,000 towards projects aimed at improving water quality in the area.

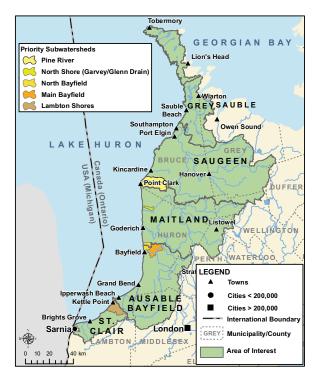
Having been named as a priority area for action under the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem, the southeast shore of Lake Huron has seen, and will continue to see, an even more robust effort

Five key watersheds have been identified as priorities for immediate action. The group is now working together with local partners to develop and support the implementation of watershed management plans, with specific targeted actions, as well as monitoring and research needs, for each priority area.

The five priority areas (also identified on the map) are:

- The Pine River sub-watershed
- The North Shore sub-watershed (Garvey Creek/ Glenn Drain)
- North Bayfield (including Gully Creek)
- · Main Bayfield watershed
- The Lambton Shores tributaries in Lambton County

Keeping up with what's happening in the southeast shore will be very easy, very soon! This is the first issue of what will become a bi-annual newsletter in the region. A website is also being developed to help inform community members, create a dialogue and form future partnerships. The website will be up and running by early fall 2011, and will be located at <a href="https://www.HealthyLakeHuron.ca">www.HealthyLakeHuron.ca</a>.



A map of the Southeast Shore Area of Interest. Credit: Ontario Ministry of the Environment.

## The Pine River Watershed Initiative Network

The Pine River covers 195 square kilometres and enters Lake Huron at Point Clark. The Pine River sub-watershed is located in Bruce County, Township of Huron-Kinloss and includes the Village of Tipley. The Pine River is under the jurisdiction of the Saugeen Valley Conservation Authority.

It has been estimated that approximately 160 years ago over 50% of the Pine River watershed was covered with wetlands. Today the Pine River has less than 1% total wetland. This means that when a drop of water hits the land in the Pine River watershed, it takes a number of hours rather than a number of weeks to find its way out to Lake Huron. The resulting impacts include increased drainage speed leading to more severe stream bank erosion as well as significant soil loss. Increased runoff of nutrients into tributaries and the Lake Huron basin leads to an increase in algae growth, an issue that is both unsightly and potentially harmful to human health.

Challenges aside, the Pine River Watershed Initiative Network (PRWIN) has had an exciting year. With the help of various partners and many volunteers, an additional 32,000 seedlings were planted in the watershed. This brings the total count of seedlings planted in the watershed since 2006 to just around 175,000!

Other work undertaken by PRWIN includes building over 5 kilometres of cattle exclusion fencing, installing 4 cattle crossings and installing 4 nitrate filters in an effort to reduce the amount of nitrate in waterways. Finally, PRWIN has worked to implement a strong education and outreach program through displays at community events, workshops and landowner appreciation days that promote the importance of land stewardship. These efforts toward restoring ecosystem health are the result of strong community support in the Pine River watershed. The value of such contributions must be recognized but that doesn't mean the work is finished!

Over the next year, an Integrated Watershed Management Plan is being developed. The plan will attempt to create solutions that consider economic, social and environmental needs within the Pine River watershed. PRWIN has also been researching potential wetland restoration projects to try to rebuild some of the wetlands that used to be a prominent part of this landscape. PRWIN and its partners continue to work together toward our goal of a cleaner river and a cleaner Lake Huron.



On the left hand side is Charles Liddle, of the Ripley Lions Club and the right is Jack Campbell, a director and past chairman of PRWIN, the kids in the background are from the Ripley Environmental 4H Club.

Credit: Pine River Watershed Initiative Network.

#### **Watershed Contacts**

| Watershed               | Contact Person  |
|-------------------------|---|
| Pine River              | Adrienne Mason, <u>pineriverwin@yahoo.ca</u> , 519-395-5538<br>Pine River Watershed Initiative Network, <u>www.pineriverwatershed.ca</u>  |
|                         | Jo-Anne Harbinson, <u>i.harbinson@svca.on.ca</u> , 519-367-3040 ext. 235 Saugeen Valley Conservation Authority, <u>www.svca.on.ca</u>   |
| Garvey/Glenn            | Richard Noble, <u>rnoble@mvca.on.ca</u> , 519-335-3557<br>Maitland Valley Conservation Authority, <u>www.mvca.on.ca</u>   |
| North and Main Bayfield | Mari Veliz, <a href="mailto:mveliz@abca.on.ca">mveliz@abca.on.ca</a> , 519-235-2610 or 1-888-286-2610 Ausable Bayfield Conservation Authority, <a href="mailto:www.abca.on.ca">www.abca.on.ca</a> |
| Lambton Shores          | Muriel Andreae, <u>mandreae@scrca.on.ca</u> , 519-245-3710<br>St. Clair Region Conservation Authority, <u>www.scrca.on.ca</u>   |

### The Garvey/ Glenn Watershed

The Garvey/Glenn drains 17.5 square kilometres of farmland and empties directly into Lake Huron, just North of Port Albert. In the upper reaches of the headwaters there is a large woodlot containing areas of wetland. Downstream of this natural area water flows both overland and through a network of open and closed drains. Through the middle of the watershed the watercourses merge and form more defined valleys which are often forested. Before entering Lake Huron, the creek flows through a deep forested gully which is actively eroding.

High concentrations of sediments and nutrients flow into Lake Huron from this watershed. Erosion issues are intensifying, the water runs cloudy more often, and there are more algae blooms. The creek also dries up more than it used to. These changes are characteristic of 'flashy' systems, meaning rainfall runs quickly off the land, often taking soil and nutrients with it.

In March, the Maitland Valley Conservation Authority had a public meeting to learn about landowners concerns. Primarily, erosion and inadequate storm water management were identified. Nutrient loading, a lack of stream buffering and several other issues were also mentioned.

Next, the Maitland Valley Conservation Authority set out to assess these issues. In April, staff walked over 50 km of natural watercourses, drains and erosion prone areas, as part of the initial watershed assessment. They mapped existing conditions and noted areas having too narrow buffer and erosion strips to adequately prevent both runoff and erosion issues.

Staff are now conducting follow-up site visits with landowners to learn about owners' short and long term goals for their properties. They are working together to connect these goals with strategic projects landowners are interested in undertaking. Thus far, staff has concentrated visits to properties within the headwaters of the Garvey/Glenn because work done in these areas will reduce the cost of addressing problems downstream. The current focus is on increasing storage within the headwaters area to allow storm water to infiltrate and be released slowly, reducing the risk of erosion in downstream areas.

A landowner committee has recently been formed. This committee is made up of landowners from throughout the watershed as well as owners with different areas of interest and expertise. This committee will provide input and direction to the future of the project.

So far landowner response has been positive and the Maitland Valley Conservation Authority hopes to build on this momentum by establishing runoff and erosion control demonstration projects in the headwaters this fall.

## The Watershed North of Bayfield

The Bayfield North Watersheds area is approximately 40 square kilometres in size and consists of 20 small streams flowing directly into Lake Huron. The watershed is located within the County of Huron.

Through the efforts of the Ausable Bayfield Conservation Authority and local partners, the Bayfield North Watershed Management Plan has been developed. The plan provides recommendations to protect the natural environment and improve water quality, but also recognizes the need to continue to provide a rural livelihood to local residents. More than 30 projects have been completed or initiated in the North Bayfield area since the planning process began in 2007. Project activities include stream bank restoration, tree planting projects and the development of best management practices (BMPs) and stewardship guides.

Watershed planning in Bayfield North has now entered a new phase of evaluation. Through funding from various agencies, the Huron County Federation of Agriculture and the Ausable Bayfield Conservation Authority are evaluating how effective some practices are at protecting soil health and water quality, and assessing their economic costs and benefits. Seventeen landowners with approximately 2,400 acres north of Bayfield have provided cropping information to help project partners at the University of Guelph's Watersheds Evaluation Group (WEG) explain to landowners what water quality might be if landowners did not undertake these practices, or what the result would be if landowners introduced plans in different parts of the landscape.

Dr. Wanhong Yang, Associate Professor of Resource Management, GIS and Spatial Analysis, and a member of WEG, has conducted advanced computer modeling to assess environmental and economic costs and benefits in other parts of the country and will be applying these techniques to this Lake Huron project.

All the farmers participating have expressed a general concern about nutrient loss and soil erosion within the watersheds, and are taking a proactive approach towards addressing these problems. The project aims to evaluate the environmental and economic costs and benefits of these approaches.

To view the Watershed Plan: (http://www.abca.on.ca/downloads/BNW\_Plan\_Version\_8\_15032010\_small.

## The Main Bayfield River Watershed

The Bayfield River drains 497 square kilometres in southwestern Ontario. The river and local beaches provide the community with great swimming, boating and fishing opportunities. A recent international article in USA Today highlighted the Bayfield Beach as one of five "Great Lake Beaches to Visit," and now even more people are likely to visit the area.

In an attempt to maintain a Blue Flag
Designation at the Bayfield Beaches, the local
community is involved in watershed monitoring
and planning. Ongoing community involvement
and individual actions are required to maintain
and enhance water quality at the Bayfield
beaches. Many partners are involved in ongoing
efforts to enhance and protect the Bayfield River
and Lake Huron.

The establishment of a water quality monitoring program in the Lower Bayfield River Watershed is underway. The objectives of this monitoring program are to determine typical concentrations of *E. coli* at various locations in the watershed and to identify actions that can be taken to reduce *E. coli* contributions from the Bayfield River to Bluewater beaches.

Enhancing stewardship in the Bayfield River Watershed has meant focusing efforts within a smaller watershed (Trick's Creek) to involve local people in ongoing resource management. The Trick's Creek tributary of the Bayfield River provides groundwater discharge that can support a cold-water fishery. Improvements to the Trick's Creek Watershed would help to enhance water quality in the Bayfield River. Promoting wetland enhancement within the broader Bayfield River Watershed is also being undertaken.

### **The Lambton Shores Watershed**

Lambton Shores Watershed is 127 square kilometres and includes provincially significant wetlands and woodlands as well as unique shoreline features such as rare kettle stones at Kettle Point. Creeks include Duffus Creek, Shashawandah Creek, James Creek and Woods Creek.

From Ipperwash around Kettle Point and down Lake Huron to Glendale Beach, the beaches of Lambton Shores and of the Chippewas of Kettle and Stony Point First Nation attract many visitors and have been a cultural focal point for many people. Like many other Lake Huron beaches, high bacteria readings, algae blooms and fish morbidity are concerns.

The St. Clair Region Conservation Authority (SCRCA) is studying the local issues, talking with

the residents and other partners, and working with the communities and agencies to develop management options.

A key part of this study will be collecting information from the community – after all, they know their watershed best. The SCRCA will be holding community meetings and undertaking surveys of beach users and landowners within the watershed. Insights from the First Nation community are key to understanding water quality and aesthetic issues on the local beaches.

In addition to the ongoing beach water quality program of the Lambton Health Unit, SCRCA staff will be monitoring several locations for *E. coli* bacteria and a number of chemical pollutants. This information will be used to help quantify the issues.

Once the information is collected, we will be developing recommendations. These will be shared with the community and will form the basis for efforts to seek funds to help address water quality and aesthetic issues along the Lambton Shores beaches.



Enjoying Ipperwash Beach.
Credit: St. Clair Region Conservation Authority.

# **Erb Foundation Boosts Bayfield**

The Fred A. and Barbara M. Erb Family Foundation is a U.S. foundation dedicated to nurturing environmentally healthy and culturally vibrant communities in metropolitan Detroit. The Foundation also supports initiatives to restore the Great Lakes Basin and is providing Ausable Bayfield Conservation Authority (ABCA) with \$100,000 for its work with landowners helping to restore wetlands, conduct planning at the local watershed scale, and other work to improve water quality between 2011 and 2013.

A local announcement of the grant took place as part of a celebration on July 21, 2011 marking 40 years since the Bayfield River watershed, and some small streams draining into Lake Huron, were added to the area of responsibility of the former Ausable River Conservation Authority.

"Protection and improvement of the Bayfield River Watershed is taking place because landowners and residents are getting involved," said Jim Ginn, Chairman of the ABCA Board of Directors. "The Erb Family Foundation grant is very positive news to protect and improve the watershed in the future."

### **Farmers Putting Environmental Farm Plans to Work**

The Canada-Ontario Environmental Farm Plan (EFP) is a program that encourages farmers to incorporate the best environmental practices on their farm. Farmers attend two-day workshops to complete a review of their farm operation using the self-assessment workbook. The materials cover 23 different areas such as water wells, soil management and manure storage. The idea for Environmental Farm Plans originated in the farm community and has been used in Ontario since 1993.

Farmers compare their own practices, management techniques and facilities against industry or sector standards. They develop an individualized action plan to address potential environmental concerns and outline timetables to improve environmental conditions on their farms. The completed action plan may then be submitted to a peer review committee. Farmers with peer reviewed action plans are eligible to apply to cost-share programs associated with the EFP to assist in implementing their environmental improvement projects.

Farmers in the counties near Lake Huron have demonstrated a strong commitment to implementing environmental improvement projects. Since 2005, farmers in these counties have been in the top 10 participating in the voluntary education program and in the top 5 counties in terms of number of projects completed. The cost-share programs have helped farmers to implement projects that contribute to improving water and air quality, soil productivity and wildlife habitat and biodiversity. Under the cost-share programs farmers receive thirty to fifty per cent of the funding, and have to assume the balance of the cost.

Common projects farmers have completed in the counties near the Lake Huron shores have a focus on reducing contamination to water sources. Examples include:

- Improved Manure Storage and Handling projects, which provide improved containment systems and increased capacity to store the manure generated on farms.
- Farmyard Runoff Control projects, which divert clean water away from existing farmyards and prevent clean water from becoming contaminated with manure, nutrients, or other potentially hazardous products
- Global Positioning Systems (GPS) and other technologies for precision
  agriculture projects help farmers make more efficient use of fertilizers, manure
  and pesticides and improve application rates and placement, reducing the
  potential for residuals in soils and contamination of surface water that may
  eventually lead to Lake Huron.

Interested farmers can get involved with the Environmental Farm Plan by attending a workshop delivered by the Ontario Soil and Crop Improvement Association. Ontario Ministry of Agriculture, Food and Rural Affairs staff provides technical expertise to assist farmers in completing their action plan. Funding for the Canada-Ontario Environmental Farm Plan Program is provided through Growing Forward. Growing Forward is a commitment by Canada's federal, provincial and territorial governments to support the development of a profitable, innovative agri-food sector that is adept at managing risk and responsive to market demands.

By participating in the Environmental Farm Plan Program, farmers see their farms in a new light. The program helps them to both identify environmental problems in their operations and develop plans for improving their farms' environmental footprint in the future. Farmers in the counties near the Lake Huron shores are strongly committed to managing their land in a healthy and sustainable way for the future.



Farmers are a significant part of the Lake Huron community, and are helping to improve water quality by implementing Environmental Farm Plans.

Credit: Shutterstock.

## Why is Too Much Phosphorus an Issue?

There are situations when there can be too much phosphorus entering our waters. Parts of the Lake Huron shoreline, nearshore areas, and embayments are experiencing the effects of such a situation. Elevated levels of phosphorus contribute to nuisance algae growths. This excessive algal growth leads to eutrophication (when the lake becomes rich in dissolved nutrients and deficient in oxygen).

There are a host of very serious concerns related to too much phosphorus in our waters;

- Risks to human safety from the threat of harmful algae blooms near drinking water intakes:
- Unstable fish communities due to harmful algae blooms and low levels of dissolved oxygen;
- Declines in property values due to loss of recreational opportunities and aesthetics;
- Disruptions in food web and energy flow that cause negative impacts on species and their habitat:
- Degraded habitats especially in nearshore, wetlands and tributaries due to increases in algae growth;
- · Beach fouling and loss of tourism revenue; and

 Added costs to municipalities, industry and the public to protect drinking water sources, and restore recreational areas.

Examples of phosphorus containing materials include; fertilizer, manure, and human waste. There are also naturally occurring sources of phosphorus in lakes, such as decaying organic matter, and eroding rocks and soils.

Dealing with the phosphorus problem means identifying its origin (or source) and then where possible, reducing the amount (or load) of phosphorus coming from those sources and entering Lake Huron. Wastewater (industrial, commercial, municipal, and individual households) and runoff (residential, agricultural, and municipal) are contributors to the phosphorous loading issue.

In terms of individual households, a lack of information appears to be the major barrier preventing residents from making necessary improvements. When people come to understand that their actions and behaviors at home contribute to our environmental issues, they are frequently willing to make the necessary changes.

Opportunities for informing the public on this issue are proactively sought out. Newsletters such as this one are great avenues for providing information needed by local residents. Contact your local conservation authority to see what you can do to combat the phosphorus issue in your home, at work and at play! We're all part of the problem, which means we can all be part of the solution too!

#### Be a Part of the Solution

Everyone can practice phosphorus reduction activities. Here are some ideas:

- Compost your food waste instead of using a kitchen food waste disposal garburator. Keeping food out of wastewater treatment plants helps to reduce nutrient loadings into the lakes.
- Use phosphorus-free and slow release organic fertilizers on your lawn and garden, and use them only when it's not raining or when rain is not being forecasted.
- Have your septic system inspected regularly and ensure it is properly used and maintained.

## **New Huron County Septic System Maintenance Program**

With their new mandatory Septic System
Maintenance Program, Huron County is going the
extra mile to protect local drinking water and
recreational water quality in Lake Huron.

Recent revisions to the Ontario Building Code require Septic System Maintenance Programs in vulnerable areas as designated in the Source Water Protection Plan. These revisions help to ensure properties that have septic systems do not contaminate drinking water sources. This also supports recreational water quality in the Great Lakes. Under the revised Code, property owners are responsible for knowing the location of their septic system, and for maintaining it.

Huron County is taking a more effective approach to protecting local water by requiring all septic system owners to participate in a mandatory inspection program. County Council has given approval in principle for the new program to be delivered by the Huron County Health Unit.

Huron County Health Unit Public Health Manager Bob Worsell says the new program will focus on inspecting high-risk properties and areas first. These include: areas along the lakeshore; properties having septic systems more than 20 years old; and properties that have no record of a septic system installation permit on file. Owners of properties that require inspection will be informed well in advance of an inspection and its expectations, so they will have an opportunity to address minor issues beforehand. In most cases, the inspection will not require any digging but a septic tank pump out will be required. When the inspection is complete, property owners will receive: a septic system inspection report, recommendations for any necessary improvements and repairs, and educational resources.

Many property owners have expressed opposition to the program because they are concerned about the expense of necessary improvements and repairs. To help property owners address these concerns, municipalities are investigating funding programs for qualified applicants, such as those offered by the Canada Mortgage and Housing Corporation.

The new Huron County Septic System Maintenance Program will help to restore and protect the quality of local water and provide benefit to Lake Huron water which is essential to both the human and economic health of the region. For more information about the program, please contact Bob Worsell, Huron County Health Unit, 519-482-3416.

## **Local Health Unit Helps Beach Users**

# Safe Swimming Checklist

#### Three Ws of Safe Beach Use

You are often the best judge of water quality for swimming or other recreational uses. By checking weather, water and websites, you can quickly and easily gauge water quality and decide if it is safe to swim.

#### 

Be aware of recent local weather conditions. Storms or heavy rains typically result in high bacterial counts and unsafe water quality for the next 24-48 hours. It is wise to wait a couple of days after a storm before visiting the beach again.

#### ☑ Water:

After arriving at the beach, a quick visual inspection of the water is one of the best ways to judge if it's safe to go in. Visual indicators of unsafe water quality include: water that is murky with suspended mud or sediment, usually caused by wavy conditions; and the presence of large numbers of birds and bird droppings. If you do venture in but can't see your feet when standing waist deep, you should get out. Rip currents, undertows and heavy wave action increase risk to swimmers.

#### **☑** Websites:

Before you go to the beach, check with the local public health unit to see if local beaches have been posted.

#### Weather and Water Information

Grey Bruce County:

- Online: <u>www.publichealthgreybruce.on.ca</u>
- By Phone: 519-376-9420 ext. 2501 or Toll Free 1-800-263-3456

#### Huron County:

- Online: www.huroncounty.ca/health
- On Twitter: <u>www.twitter.com/huronbeachinfo</u>
- By Phone: 519-482-5119 ext. 2501 or Toll Free 1-877-837-6143

#### Lambton County:

- Online: <u>www.lambtonhealth.on.ca</u>
- By Phone: 519-383-8331 or Toll Free 1-800-667-1839

Lake Huron beaches are a hub of activity every summer, enjoyed by local residents and tourists alike.

Public Health Units in Lambton, Huron and Grey Bruce counties regularly sample water from select public beaches along Lake Huron during the summer. If sample results show bacterial levels that exceed safe levels for swimming or other recreational uses, a sign may be posted at the beach warning that the water is unsafe.

However, beach postings may not accurately represent current conditions. It takes a day or two to properly assess each water sample before a decision to post can be made. During this time, it's common to have short-term weather changes that dramatically alter water quality. That's why beach users are encouraged to complete the Safe Swimming Checklist to ensure their visit is a safe and enjoyable one.

To better protect the health and safety of beach users, as of 2011, the Grey Bruce Public Health Unit will be using a variety of innovative approaches to improve their beach posting practices, rather than simply reacting to sampling results.

One of these approaches is to consider historical results in posting decisions. "A bacterial report higher than expected will not routinely cause a beach to be posted." says Andrew Barton, manager of the Safe Water Program. "However, beaches will be posted if high results were not expected or in response to incidents such as a sewage bypass or spill."

Newly designed beach signs will reflect this change in posting decisions. Every beach monitored by the Public Health Unit will have a permanent Water Quality Information Sign that identifies "Heavy rainfall and cloudy water caused by wave action increases bacterial levels in this water". If the beach is posted, an additional Water Quality Warning Sign will be added. It will state that the water is unsafe for swimming and that "High levels of bacteria in these waters may pose a risk to your health".

Changes on the website will offer a wider range of data including historic records, information on postings, relevant environmental factors and complete sampling results.

By improving their beach posting practices, the Grey Bruce Public Health Unit is putting beach users in the best position to determine the quality of the water and to make the choice themselves for safe use.

For information on beach posting practices in your area contact your local Health Unit.



This summer, signs like the one above will be permanently installed at all beaches monitored by the Grey Bruce Public Health Unit. Credit: Grey Bruce Public Health Unit.

#### **First Nation Protects Water**

The Chippewas of Kettle and Stony Point First Nation Band Council passed a resolution in 2010 to add protection to its intake in Lake Huron through the Drinking Water Source Protection Plan of the Ontario Clean Water Act, 2006.

The Ausable Bayfield Maitland Valley and the Thames-Sydenham and Region Drinking Water Source Protection Committees have worked cooperatively with



The Lake Huron shoreline near Kettle Point. Credit: St. Clair Region Conservation Authority.

the Chippewas of Kettle and Stony Point First Nation, and consultants since that time to begin intake protection zone mapping around the intake.

Staff members of the two source protection regions have also worked in partnership with the First Nation to engage the community in practical actions to protect drinking water through the Ontario Drinking Water Stewardship Program (ODSWP).

This on-the-ground stewardship effort was very successful, according to the source protection authorities. There were 33 projects approved for funding within and near the First Nation. Most of those projects were new septic systems that reduced the potential for contamination of the surface water source. The ODWSP program approved total grants there worth \$116,400.

"We are honoured to work with the Chippewas of Kettle and Stony Point First Nation, and the people who have been making stewardship improvements, to reduce the risk of contamination to the surface water source of their drinking water," said Laurence Brown, Chair of the Ausable Bayfield Maitland Valley Drinking Water Source Protection Committee.

"This is a significant step in reducing risk to the drinking water for the people of the Chippewas of Kettle and Stony Point First Nation," said Robert Bedggood, Chair of the Thames-Sydenham and Region Source Protection Committee.

## **Community Resource Planning Guides Available**

Local people are more interested than ever in protecting the health of their local environment, but also wonder, "What can I do to help?" They can have some of their questions answered in two stewardship guides that have been prepared for the area.

The first residential stewardship guide, the Stewardship Guide for the Lake Huron Coastline was designed specifically for the people living along the Lake Huron shoreline. In the past five years this homeowner manual has been revised for rural nonfarm properties and is known as the Rural Landowner Stewardship Guide for the Lake Huron watershed.

The Rural Landowner Stewardship Guide for the Lake Huron Watershed is fashioned after the successful Environmental Farm Plan (EFP) for agricultural landowners but it is aimed at engaging rural non-farm residents in the protection of their natural environment through individual actions. The Guide helps rural non-farm landowners evaluate their property and identify areas where they might positively impact the local environment.

The Guide itself is a series of worksheets that landowners work through. Worksheets cover topics ranging from wells and septic systems to managing forest, stream and wetland ecosystems. Once landowners have completed going through the Guide, they will be able to create an action plan for environmental improvements that can be undertaken

on their property. Instructions on how to create this action plan can be found in the manual or explained through local workshops. The Guide also contains valuable stewardship tips and resource information.

Since 2006, stewardship guide programs for lakeshore communities, and rural non-farm homeowners, have been implemented from Port Franks north to Sauble Beach and also in the Georgian Bay and Lake Simcoe area, by many partner organizations. The village of Auburn is taking the stewardship guide approach to engage residents in looking at septic system management, water conservation, water wells, fuel storage, and urban landscaping in 2011. The people in the community will then undertake action plans to implement the positive actions they have identified. Other communities are encouraged to take part, if they have not done so already.

Under sections of each of these guides is a discussion on private septic systems. The municipality of Huron-Kinloss, in conjunction with its partners, has developed a guide on Septic System care and maintenance for homeowners.

We are all part of the solution – homeowners, tenants, business people, producers, seasonal residents, students. Each of us can help to improve Lake Huron by using guides such as those identified above to create a healthier lake.

## Lake Huron Binational Partnership

Lakewide environmental management, restoration and protection activities in the Lake Huron basin are coordinated through the Lake Huron Binational Partnership

The United States Environmental Protection Agency, Environment Canada, Michigan Department of Environmental Quality, and Ontario's Ministries of the Environment and Natural Resources form the core of the Partnership by providing leadership and coordination.

A flexible membership on an issue-by-issue basis, is inclusive of other agencies and levels of government, Tribes/First Nations, nongovernment organizations and the public. To learn more visit ways binational net

A Canadian effort in support of the Binational Partnership to encourage and support community action to protect and restore the lake and its watershed is ongoing through the Lake Huron – Georgian Bay Framework for Community Action. Please visit <a href="https://www.lakehuroncommunityaction.ca">www.lakehuroncommunityaction.ca</a> for information, contacts and to sign the Lake Huron Charter – a commitment to work together for a healthy and sustainable Lake Huron watershed.

#### **New Website Coming in Fall 2011!**

In late fall 2011, the Southeast Shores Working Group will be launching a new website: <a href="https://www.HealthyLakeHuron.ca">www.HealthyLakeHuron.ca</a>. Be sure to check it out and add it to your bookmarks!