



AUSABLE BAYFIELD CONSERVATION

CREATING AWARENESS | TAKING ACTION



Annual Report 2012

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Mission

Protect, improve, conserve and restore the watershed in partnership with the community

Vision

Healthy watersheds where our needs and the needs of the natural environment are in balance



FRONT COVER PHOTO: Shown in photo, ready to hammer the last nail or 'The Last Spike' to mark the completion of the Woodland Reflection Shelter pavilion along the South Huron Trail, are (left to right): Jim O'Toole, Chairman, Friends of the South Huron Trail; Lorne Rideout, volunteer; Peter Darbishire, Chairman, Woodland Reflection Shelter campaign. Many local businesses, donors, and volunteers generously donated time and materials towards the construction of this pavilion building, which is a place to find shelter from the elements, enjoy nature, reflect, and remember loved ones at that Commemorative Woods site.

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Ausable Bayfield community creates awareness, takes action

By David Frayne, Chairman, 2012 ABCA Board of Directors

I have enjoyed my year as Chairman and I want to thank the Municipality of South Huron, and Township of Perth South, for their continued support of me in this capacity.

Our Board of Directors was pleased to release the watershed's new *Conservation Strategy* in March. People from the watershed community developed this guiding document and it sets out *The Path Forward* for Ausable Bayfield Conservation Authority (ABCA) and the watershed community.

'Creating Awareness and Taking Action' are guiding messages for all of us. ABCA doesn't just talk about conservation. We inform watershed residents and we work with them to deliver projects important to the community. Examples of these healthy watershed activities include tree planting; forest management; nature trail development; controlling Phragmites (common reed); working with landowners to better manage low water levels in our streams; and increasing understanding of how to improve nearshore water quality. Staff dedication to all of our successful projects is appreciated.

As Chairman I have also had the opportunity to sit on the Joint Management Committee with the Maitland Valley Conservation Authority to guide the successful delivery of the drinking water source protection program. The larger geographic region used for delivering the source protection program has worked well. The sharing of staff expertise between



David Frayne

Chairman's Message

the partner organizations, and the diverse community knowledge base represented on the Ausable Bayfield Maitland Valley Source Protection Committee, have contributed significantly to the development of both

conservation authorities and source protection plans. These proposed plans were developed on budget, on schedule, and on time.

The work of the Ausable Bayfield Conservation Foundation continues to support and assist the ABCA in achieving its objectives. Some of the key Foundation activities in 2012 include the highest net proceeds from the Conservation Dinner; two well-attended Memorial Services – Klopp and Morrison; and the completion of the Woodland Reflection Shelter. The Shelter pavilion is an amazing addition to the South Huron Trail system and the Morrison Commemorative Woods program. My personal thanks go out to the volunteer directors of the Conservation Foundation and the community members who helped make it a successful year.

I want to thank the ABCA Board of Directors for their thoughtful discussion and deliberation on the issues through the year. Our 2013 budget process went very well and we were able to finalize the budget promptly and give our member municipalities early notification regarding levy amounts. I also appreciated the interest and patience directors demonstrated in moving towards paperless meeting agendas.

2012

Board of Directors



Bill Siemon
Huron East



Ute Stumpf
Adelaide
Metcalfe and
Middlesex
Centre



Janisse Zimmerman
Bluewater



Jim Ginn
Central Huron



Dave Frayne
South Huron
and
Perth South



Don Shipway
North
Middlesex



Mike Tam
West Perth



Paul Hodgins
Lucan Biddulph



Lorie Scott
Lambton
Shores
and Warwick

Board of Directors offers leadership for ABCA

Last year I talked about the Board of Directors as the top level of leadership at Ausable Bayfield Conservation Authority (ABCA). In addition to being held to a higher level of duty and care as a director, their overall leadership style contributes directly to the level of success achieved by Ausable Bayfield Conservation. By setting programs, policies, and budgets with agreed-upon controls and guidelines the board gives overall direction to the organization and creates

Board of Directors

the conditions that enable the organization to be efficient and successful.

On behalf of the staff I want to thank the Board of Directors for its clear direction and the ability to create networks and manage on a watershed basis.

– Tom Prout, General Manager and Secretary Treasurer

Modern leadership requires ability to adapt, listen

By Tom Prout, ABCA General Manager and Secretary Treasurer

This year some of my *Annual Report* thoughts come from two books and one magazine.

The two books are written by Margaret J. Wheatley. They are *Finding Our Way: Leadership for an Uncertain Time* and *Leadership and the New Science: Discovering Order in a Chaotic World*.

The magazine is *Fast Company* and the article is *How to Lead in A Time of Chaos – The Secrets of Generation Flux*, by Robert Safian.

Margaret Wheatley raises questions about modern leadership styles and whether Newton's theories, or Quantum Theory, can contribute more to our leadership needs of today and the future. She further suggests in her discussion about Chaos Theory that chaos can contribute to new order and new leadership styles.

Editor Robert Safian's article suggests that Generation Flux is not an age-based generation but a management-style generation. He provides examples of how well-managed chaos can lead to successful activities and organizations.

Many of us would agree that we are living in chaotic times. Whatever management style we choose, the culture of the organization and the values it upholds determine its success.

The Ausable Bayfield Conservation Authority has a *Human Resources Planning Framework* document. This document identifies the people on staff as the most important resource to the organization and provides a framework designed to help achieve excellence. The foundation of the framework, and



Tom Prout

General Manager's Report

Ausable Bayfield Conservation's expectation of excellence, is based on six values:

- Respect
- Integrity
- Accountability
- Communication
- Loyalty
- Leadership

The health of the organization is important to us and these six values help in achieving the state of excellence.

We live in an ever-changing society where individuals want and demand more:

- More say
- More information
- More about, and for, them
- More of what they want.

This creates a world with less black and white and a lot more grey. Organizational guidelines and policies fit black-and-white societies much better than the grey real world we have become. The ABCA spends more time learning what motivates the public, staff, and board members and then adapting the policies and practices to achieve success. The real challenge is knowing when and how to adapt.

The future is here and we must learn to think and work together, and to think and manage smarter. Organizational leaders are challenged with how to support staff in an ever-changing environment to achieve its goals and to achieve excellence in a society that is demanding more for less.

Building safe work environment requires respect for all

Yes, we comply with the workplace health and safety requirements, including a Health and Safety Committee. However, I believe a safe work environment also means a workplace where individuals are encouraged and respected for their input, opinions, and ideas without worry of punishment or ridicule.

A safe work environment means we encourage staff members to share in a positive workplace and make a commitment to their individual leadership roles. I want to thank all employees of Ausable Bayfield

Staff Report

Conservation Authority (ABCA) for their positive workplace outlooks, their pleasant nature, and their extra effort to help a fellow employee and serve the residents, landowners, and municipalities of this watershed. All of this contributes to the success of Ausable Bayfield Conservation.

– Tom Prout, ABCA General Manager and Secretary Treasurer



Christina Baranick



Ryan Carlow



Anne McBride



Lana Shapton



Tom Skinner



Greg Urquhart



Jeff Van Niekerk

Ausable Bayfield Conservation welcomes new personnel

Ausable Bayfield Conservation would like to welcome those who joined the organization in 2012. These new faces joining the local organization to protect, improve, conserve and restore the watershed, in partnership with the community, were:

Christina Baranick, Resource Technician

Ryan Carlow, Junior Conservationist
Anne McBride, Conservation Education Assistant
Lana Shapton, Watershed Stewardship Technician
Tom Skinner, Assistant Water Resources Technician

Greg Urquhart, Healthy Watersheds Student
Jeff Van Niekerk, Field Services – Labourer

ABCA personnel share their expertise provincially, internationally

Ausable Bayfield Conservation Authority’s *Human Resources Planning Framework* encourages staff members to share their expertise. ABCA personnel were invited to share their knowledge at the provincial and international levels in 2012.

Ross Wilson, Water and Stewardship Technologist, and Tom Prout, General Manager, were invited to speak to the Soil and Water Conservation Society annual conference, held in Fort Worth, Texas. Ross spoke on *Assessment of Polluting Potential of Major Soil Types within Lake Huron Tributaries* and Tom spoke on *Advances and Challenges in Monitoring Water at the Field Edge – Methods and Case Studies* as well as providing a poster presentation on the Rural Stormwater Management Model Project.

Staff members speaking in Ontario included Alec Scott, Water and Planning Manager (*A Strategic Team Approach to Building Resiliency and Protecting Lake Huron*); Mari Veliz, Healthy Watersheds Coordinator, and Brynn Upsdell, Healthy Watersheds Technician (*Evaluating Rural Best Management Practices at the Site and Watershed Scales in Huron County*); Davin Heinbuck, Lands and Water Technologist; Tracey McPherson, Geographic Information Systems (GIS)/CAD Specialist; and conservation education staff members Julie Stellingwerff, Denise Iszczuk, and Anne McBride. Topics included watershed resiliency and the Rural Stormwater Management Model Project, Stewardship Guide outreach to landowners, drainage, low water response, integrated watershed management, research gaps, and aquatic animals.

Main Bayfield community plan helps Clinton-area education

By Julie Stellingwerff, Conservation Education Specialist

Clinton and area schools took part in free, unique, and valuable education programs through funding from the new Main Bayfield Watershed Community Plan.

These education programs focused on healthy watersheds monitoring, links to technology, human impacts, and how to take on your own project or become locally involved.



Wood Frog

Conservation Education

Students planted trees and conducted water quality studies, determining general river health at Clinton Conservation Area.

Presentations were given at Clinton-area secondary schools, making links between water quality monitoring and Geographic Information Systems (GIS) technology in planning on-the ground best-management-practice projects, research and monitoring.



Julie Stellingwerff

2012 – Year at a Glance – Ausable Bayfield Conservation Education

Program Type	Description	Total Students	Total Adults	Total Participants	Total Program Type
School Programs	Spring	1,080	270	1,350	50 programs
	Autumn	795	111	906	35 programs
Sylvan Conservation Program at Camp Sylvan	Watershed Schools – Spring	142	14	156	Six classes
	Weston Foundation Program – Spring	26	5	31	One class
	Weston Foundation Program – Autumn	155	21	176	Seven classes
In-school Presentations	Spring Water Awareness Program (SWAP)	2,437	0	2,437	14 schools
Partnership Special Events	Family Day WinterFest South Huron – Winter Hike	9	3	12	One event
	Huron-Perth Agriculture and Water Festival	675	95	770	26 classes Two days One open house
	Huron Perth Envirothon	57	13	70	Two events
	Grand Bend Aquafest	100	60	160	One event
ABCA-led Special Events	Earth Day Tree Planting	45	27	72	Two classes
	Bannockburn Fall Hike	110	150	260	One event
	Owl Prowl	80	175	255	Two events
Other Education Programs	Nature Day Camps	36	6	42	10 days
	Non-profit programs	432	140	572	24 programs
	Guest-speaker presentations	0	172	172	Six presentations
	Private-sector programs	96	35	131	Three programs
Projects	Externally funded programs	1,414	106	1,520	29 programs
Totals:		7,689	1,403	9,092	

Weston Foundation's Family Environmental Leaders of Tomorrow Program gives urban children Camp Sylvan nature experience

By Anne McBride, Conservation Education Assistant

The Weston Family Environmental Leaders of Tomorrow Program made it possible, starting in 2012, for urban students to take part in the Camp Sylvan Conservation Program. The Weston program is in partnership with Toronto and Region Conservation Authority and is possible thanks to a grant from the W. Garfield Weston Foundation.

This three-phase program is shaping the next generation of

environmental leaders, by increasing ecological literacy, fostering environmental leadership, and encouraging community action. Phase Two of this program takes these students, from urban communities, to the great outdoors, and immerses them in nature for a two-and-a-half day excursion through the Camp Sylvan Conservation Program.



Anne McBride



Urban students enjoyed overnight camping and nature education thanks to the Weston Foundation's Family Environmental Leaders of Tomorrow Program. Here, students enter a Camp Sylvan chuckwagon.

Summer Nature Day Camps experience successful return in 2012

By Denise Iszczuk, Conservation Education Technician

Asusable Bayfield Conservation hosted two weeks of Summer Nature Day Camps in the summer of 2012.

Enthusiastic children had positive outdoor experiences, explored, discovered, and learned through active nature lessons and games in the natural environment at the Morrison Dam Conservation Area, just east of Exeter.

Special thanks are extended to supportive local families and the media, for making the Summer Nature Day Camps a success.

It was not certain that Summer Nature Day Camps would even take place in 2012 yet, because



Denise Iszczuk



Summer Nature Day Camp participants Max VanDongen-Miles and Ethan Hamilton were among the young people enjoying a first-hand nature experience.

of a public groundswell of support, a second week was added to meet the demand.



Students learn about aquatic life in their watershed, and the relationship to water quality, during a water study at Clinton Conservation Area, Main Bayfield Watershed, in Autumn 2012.



A summer library program is shown, above, in 2012. ABCA programs reach thousands of children.



Ausable River Cut Conservation Area, Autumn 2012.



Students enjoy nature walk and fossil hunting (inset photo) at Rock Glen Conservation Area in autumn of 2012.

Two groundwater monitoring wells added to network

By Davin Heinbuck, ABCA Lands and Water Technologist

An ongoing partnership, between conservation authorities and the Ontario Ministry of the Environment (MOE), maintains a network of groundwater monitoring wells across the province. The Provincial Groundwater Monitoring Network (PGMN) initiative has led to the development of more than 400 monitoring wells since 2001.



Davin Heinbuck

As part of the climate change monitoring station in Upper Parkhill Creek watershed, two wells were installed to monitor the overburden aquifer and its relationship to nearby Parkhill Creek. Consequently, Ausable Bayfield Conservation Authority (ABCA) now has 16 wells throughout the watershed, five bedrock wells, and 11 overburden wells. Hourly groundwater level data has been logged for more than ten years in most of these wells.

Where practical, telemetry has been installed at the wellheads, enabling access to current water-level information through a web-based component of the network. The groundwater-level data shows annual cycles in groundwater levels are consistent and highlight the critical annual recharge periods of autumn and spring. Based on the program's short period of record, no significant trends in water levels are apparent across the watershed but some individual wells have shown increased levels over the period of record, while others have shown a decrease.

Provincial Groundwater Monitoring Network

Water-quality sampling is another critical component of the PGMN and ABCA has groundwater quality data available for each well from 2003 to 2012. To match the core requirements province-wide, water quality is analyzed for nutrients, metals, general chemistry, and bacteria. Where groundwater quality does not meet the provincial guidelines, landowners and municipalities, on whose property the well is located, are notified of these results through Exceedence Reports. Numerous exceedence notices have been issued to date but, with a few exceptions, most were for Sodium (aesthetic drinking water objective) and Fluoride, which occurs naturally in elevated levels throughout much of Southwestern Ontario.

The Sinkhole well is located within a sinkhole catchment area. This well is one of two monitoring well locations in Ontario selected by the MOE for real-time water-quality monitoring. Further, MOE has committed to fund the analysis of two additional samples per year at the Sinkhole well.

PGMN data also supports both the Flood Forecasting and Warning and Ontario Low Water Response programs.

ABCA works with provincial, federal partners to monitor levels

Ausable Bayfield Conservation Authority, in cooperation with Ontario Ministry of Natural Resources (MNR) and Environment Canada, maintains and operates a data-collection network within its watershed area to provide watershed municipalities and residents with advance warning of life-threatening flood events in the watershed.

This monitoring network also provides information on low-water conditions, groundwater and surface water interactions, and the relationship of stream flow to aquatic health. The data collection network allows personnel to monitor watershed conditions including water levels and precipitation on major channels of the Ausable River, Bayfield River, and Parkhill Creek watersheds. Computerized monitoring systems

Water Level and Stream Flow Monitoring

in the field transmit information by telephone directly to ABCA's Administration Centre near Exeter. Staff members from Ausable Bayfield Conservation and Environment Canada jointly maintain the streamflow-monitoring stations, with funding support from MNR. A Volunteer Rain Gauge Network was established in 2005. About 30 volunteers provide valuable precipitation data to through a web-based data entry system.

ABCA, through an agreement with Ontario Ministry of the Environment, is responsible for maintenance of groundwater monitoring stations in some of the significant groundwater aquifers in the watershed. (See *Groundwater Studies*).

Level 2 low-water condition prompts discussions with industry to avoid Level 3 condition's potential call for mandatory measures

By Alec Scott, P. Eng., ABCA Water and Planning Manager

Ausable Bayfield Conservation Authority (ABCA) continued to be involved in the Ontario Low Water Response (OLWR) program, which was created after extreme dry conditions were experienced in parts of the province in 1999.

The OLWR Plan is used as a guiding document for how municipal and provincial agencies should react during periods of water shortages and defines levels of response to low water conditions.

There are three levels: Level 1, where a 10 per cent voluntary reduction in water use is requested; Level 2, where a 20 per cent voluntary reduction in water use is requested; and Level 3, where mandatory water use restrictions may be put in place.

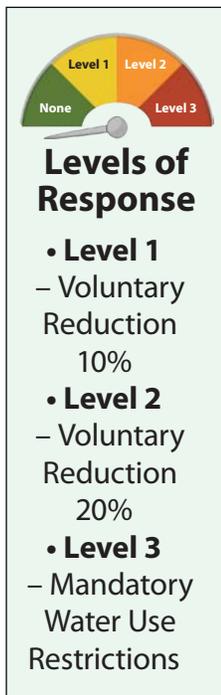
The local ABCA Low Water Response Team (WRT) is made up of municipal and provincial agency representatives as well as representatives from ABCA, Ontario Stone and Sand and Gravel Association, Golf Course Owners Association, Alliance of Ontario Food Processors, Thedford-Grand Bend Vegetable Growers, Ontario Greenhouse Vegetable Growers, Huron County Federation of Agriculture, and the Ontario Federation of Anglers and Hunters.

During the year, the WRT held one meeting and seven e-conferences. A Level 1 low water condition was declared on May 14, 2012. This was upgraded to a Level 2 low water condition in August. When water-level conditions improved in the late autumn, the watershed returned to a Level 1 low water condition and will probably remain at this level until the spring of 2013.

Following declaration of the August, 2012 Level 2



Alec Scott



Low Water Response



This photo near Bannockburn Line is an example of the low-water conditions experienced in Ausable Bayfield watersheds in 2012.

low water advisory, a letter was sent to each surface-water Permit to Take Water (PTTW) permit holders in the Hay Swamp water management area, inviting them to participate in a meeting to discuss water-use strategies in which limited water supplies could be shared. This proactive approach would hopefully find a local solution and avoid a Level 3 situation where water use restrictions could be mandated by the Province of Ontario. The meeting took place on August 14, 2012. Four of the five PTTW permit holders for the Hay Swamp area attended the meeting. While discussion took place, there was no agreement reached on pursuing cooperation for sharing the water resource during dry periods.

Approximately 20 volunteer rain gauge readers continue to provide valuable information on the extent and amount of precipitation received in the watershed. This supplements the existing automated rain gauge network operated by the ABCA to support its water quantity programs.

Flooding limited to minor events in floodplain areas

By Davin Heinbuck, ABCA Lands and Water Technologist

The year 2012 was a very quiet year for flooding.

No major events were recorded, and those events that did occur were minor in nature and limited to floodplain areas. The snowpack was gone by March and weather, for the most part, was unseasonably warm and dry. Drier-than-normal weather continued through the year and stream flows remained low (see *Ontario Low Water Response*).

One event that was monitored closely was the remnants of Hurricane Sandy which were projected

Flooding Summary

to impact southern Ontario.

Prior to ‘Sandy,’ most of the Ausable Bayfield Conservation Authority (ABCA) watershed had received 10-20 millimetres (mm) of rainfall. A forecast of another 30 mm, on already saturated ground, prompted Ausable Bayfield Conservation to issue its only Watershed Conditions Statement of 2012.

Conservation authorities, MNR introduce new flood-message terms

Conservation authorities and the Ontario Ministry of Natural Resources (MNR) approved new terminology, in 2012, for flood messages, in an effort to bring consistency to flood messages they deliver.

The words used to describe messages now align with Environment Canada’s progression of issuing weather Statements, Watches, and Warnings. Furthermore, each message carries with it a colour that has been agreed upon by the conservation authorities which use a gauge on their websites to display current conditions and applicable messages.

The dial shows Normal, or Green, when there are no flood messages. The flood messages that are issued

Flood Forecasting and Warning



have the following labels:

- Watershed Conditions Statement – Flood Outlook/Water Safety (Yellow)
- Flood Watch (Orange)
- Flood Warning (Red)

Environment Canada meteorologist Geoff Coulson speaks at annual Flood Emergency Planning meeting hosted by Ausable Bayfield Conservation

Ausable Bayfield Conservation Authority hosted the annual Flood Emergency Planning meeting at the Masonic Hall in Exeter on March 8, 2012.

ABCA member municipalities and various stakeholders were invited to attend and participate in the meeting.

There were 27 attendees, including representatives from eight municipalities as well as staff members and/or emergency management coordinators from all four counties in the watershed area. The media, and Emergency Management Ontario, were also represented at the meeting.

The 2012 meeting was highlighted by a feature presentation from Geoff Coulson, Environment Canada’s Warning Preparedness Meteorologist. He

Flood Emergency Planning

provided information on the roles and responsibilities of Environment Canada’s Ontario Storm Prediction Centre and the Warning Preparedness Program. Consistent with the new flood messaging terminology adopted by conservation authorities, he highlighted the difference between a ‘Special Weather Statement,’ ‘Watch’ and ‘Warning.’ In addition, Geoff provided an overview of severe weather and some recent severe events that have affected Southwestern Ontario.

ABCA staff also discussed roles and responsibilities in flooding emergencies, changes to the flood messaging terminology, and current watershed conditions.

ABCA personnel conduct structure inspections, maintenance

By Alec Scott, P. Eng., ABCA Water and Planning Manager

Ausable Bayfield Conservation Authority, as part of its mandate and agreements with watershed municipalities, inspected and performed maintenance on water and erosion control structures owned or constructed by the ABCA.

These structures include Parkhill Dam, Morrison Dam, a number of flood control channels, and erosion control structures in various parts of the watershed.

Conservation authority staff carry out most of the inspections and maintenance work unless it

Structures, Operations, and Maintenance

is determined that it would be more efficient to contract the work out to local companies.

As a result of the inspections, conservation authority staff completed minor repairs on a number of structures.

Work included vegetation control around structures and general minor repairs to prevent larger maintenance problems in the future.

No flood, erosion control projects funded through WECEI in 2012

Funding has been available to fund major maintenance work on conservation authority flood and erosion control projects, since 2003, from the Ontario Ministry of Natural Resources' Water and Erosion Control Infrastructure Funding (WECEI) program.

Under this program the Ausable Bayfield

Water and Erosion Control

Conservation Authority can apply for 50 per cent grant for funding major maintenance projects.

There were no WECEI projects approved, in Ausable Bayfield watersheds, in 2012.

Installation of new monitoring equipment takes place in 2012 at integrated climate change monitoring station at Parkhill Creek

By Alec Scott, P. Eng., ABCA Water and Planning Manager

In 2010, as a result of an assessment study, two subwatersheds (Parkhill Creek and Upper Ausable River) were found to have high sensitivity to climate change impacts.

Climate Change Monitoring Station for Upper Parkhill Creek

In 2011, the Parkhill Creek watershed was selected for the installation of an integrated climate change monitoring station at the present location of the Parkhill Creek, above Parkhill Reservoir flow monitoring station.

Additional monitoring equipment includes meteorological sensors, groundwater sensors, soil moisture sensors and real-time water quality monitoring sensors. The data collected will be used by a number of partners for calibration of hydrologic and climate change models. The data will also benefit the Flood Forecasting and Warning, Low Water Response, and Water Quality Monitoring programs

Other Water Management Studies



Upper Parkhill Creek climate change monitoring station.

of Ausable Bayfield Conservation Authority.

Site preparation and equipment purchase took place in 2011. Installation of the equipment took place in 2012 and collection of data from the station began in August 2012.

Partners in this project include the Ontario Ministry of the Environment, Ontario Ministry of Natural Resources, and the Ontario Regional Adaptation Collaborative partners.

Ausable Bayfield Conservation, Healthy Lake Huron partners complete first year of Rural Stormwater Management Model Project

Ausable Bayfield Conservation Authority (ABCA) is leading a project to create a Rural Stormwater Management Model (RSMM). ABCA is working together with Maitland Valley, St. Clair Region, Saugeen Valley, and Grey Sauble conservation authorities and other partners of the Healthy Lake Huron: Clean Water, Clean Beaches initiative. Project partners include provincial and federal ministries in Canada, county departments, environmental and public health agencies, landowners, and community groups.

The RSMM project is funded by a \$700,000 grant from the Ontario Ministry of the Environment’s Showcasing Water Innovation Program and in-kind contributions from other partners. Investment will total more than \$900,000.

The year 2012 was the first full year for this project to better manage the impact of runoff from storm events, along Lake Huron’s southeast shores, in a rural part of Ontario stretching from Sarnia to Tobermory. The work is already improving water and weather monitoring through installation, in 2012, of five new or upgraded water monitoring stations in five priority watersheds along Lake Huron.

The project will create a powerful new software tool to incorporate more precise and detailed data. Detailed modelling of stormwater impacts already

Other Water Management Studies



exists for urban environments. This new model, when complete in 2014, will create more understanding about how drainage works in a rural context.

To develop the model, Ausable Bayfield Conservation is working with Emmons and Olivier Resources, Inc., an engineering and environmental consulting firm specializing in water resources, watershed planning, and modeling; and Computational Hydraulics International (CHI), consultant in stormwater management, wastewater, and watershed modeling software. The increased understanding from the model will help stewardship practitioners, in partnership with landowners, to implement effective runoff and erosion control projects and other best management practices. The model will help people to know which projects work best to protect water quality, the best places to locate the projects, and the ideal size the projects should be. The project will benefit the economy, rural knowledge and capacity, and human health.

Channel improvements below Parkhill Dam part of joint-agency response to reduce mosquito breeding areas, keep numbers down

Various local agencies worked together in 2012 to undertake activities to improve local drainage and water flows in Parkhill to help reduce mosquito breeding areas.

The Municipality of North Middlesex, the Middlesex-London Health Unit, and Ausable Bayfield Conservation Authority (ABCA), each contributed to a joint response initiated to reduce the likelihood of this type of problem with mosquitoes repeating in the future.

The joint agency effort resulted from concerns, voiced by the people of Parkhill and area, about the abnormally high number of mosquitoes that appeared in the community in 2011, following a wet spring.

As one project, the Municipality of North Middlesex undertook a project to remove debris from the channel of Parkhill Creek below Parkhill Dam

Other Water Management Studies

to improve drainage and reduce the frequency and duration of flooding of the low-lying lands adjacent to the channel.

Ausable Bayfield Conservation hosted an open house of the control structure for Parkhill Dam on July 21, 2012, and developed a water-level monitoring network downstream of Parkhill Dam to determine the impact that various outflows from Parkhill Dam have in relation to the flooding of downstream areas.

The ABCA also constructed a berm along a portion of the Parkhill Creek Channel downstream of the dam to reduce the frequency of flooding in an area adjacent to residential development in Parkhill.
– Alec Scott

New, three-dimensional mapping helps ABCA to model water flow, identify areas where water quality projects needed

By Tracey McPherson, ABCA GIS/CAD Specialist

Geographic Information Systems, or GIS, has become an integral part of the day-to-day operations at Ausable Bayfield Conservation.

All personnel have access to GIS information through an internal mapping application called GeoPortal. The application was updated in 2012 to a new server and a newer, faster technology. Staff members have access to more than 140 different mapping layers, many of which link to internal databases of information to aid in operations.

Individual GIS staff members work hard to keep data layers up to date, create and link databases, create maps, and complete project specific analysis.

Shell FuellingChange provides \$25,000 grant for three-dimensional mapping project, thanks to online votes from public

Ausable Bayfield Conservation Authority (ABCA) received a \$25,000 grant, from the Shell FuellingChange Program, in 2012. The money was granted thanks to the support of the public who voted online for this water-quality project. The grant made it possible for ABCA to purchase a three-dimensional (3-D) mapping system.

The update to three-dimensional mapping technology will help conservation authority staff, working with landowners, to better understand water flowpaths, and identify areas where water quality projects are needed. It will improve the collection of features such as watercourses, wetlands, and elevation information.

Staff members are now able to update and collect features in a 3-D environment. Work began to update all watercourse and natural heritage features for the Middlesex Natural Heritage Study. Features captured in the system will assist in digital elevation model creation.

In 2012 GIS staff also worked to:

- Provide data management and mapping to the Crops and Creeks Huron/Watershed-Based Best Management Practices Evaluation (WBBE) project and the Main Bayfield Watershed Plan.
- Create maps and statistical analysis for the planned

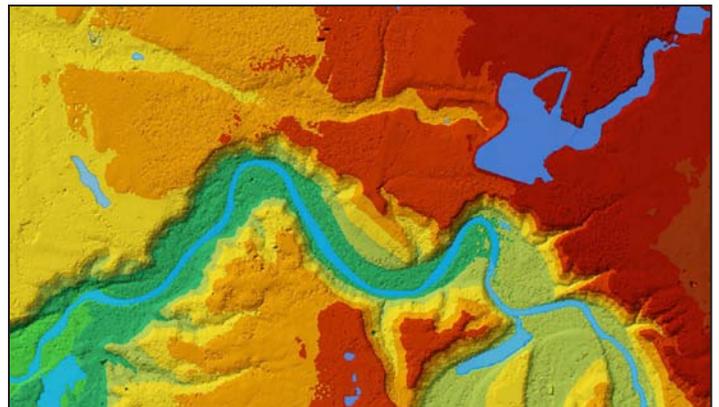


Tracey McPherson

GIS Mapping Report

Watershed Report Card.

- Develop a process, modify existing database, and start scanning of paper planning and regulation permit documents for quick retrieval through a database or GeoPortal interface.
- Geo-reference shoreline oblique photos for use in GeoPortal.
- Integrate data into our GeoPortal system for easy tracking and review.
- Organize data distribution for the Rural Stormwater Management Model (RSMM) project for the four conservation authorities that are partners in that project of the Healthy Lake Huron: Clean Water, Clean Beaches initiative.
- Update the **camaps.ca** (CA Maps) external web mapping site to display the 2010 watershed imagery.
- Continue to provide information technology (IT), data management, and mapping to all programs of the ABCA.
- Assist with the conversion to paperless agenda and reporting for Board meetings.
- Create an education booking database integrated with ABCA invoicing and e-mail system.



Advanced three-dimensional mapping, acquired thanks to a grant from the Shell FuellingChange program and public online votes of support, will assist with modeling of water flow, land use planning, and design and location of land and water stewardship projects.



People considering development should call Ausable Bayfield Conservation, and their local municipality, to discuss development and site alteration proposals before initiating work near a shoreline or in any other regulated area.

ABCA provides information about natural hazard risks

By Geoffrey Cade, ABCA Supervisor of Water and Planning

The Conservation Authority is the provincially delegated agency providing natural hazard comments to landowners and municipalities.

Ausable Bayfield Conservation Authority (ABCA) assesses how a development proposal conforms with *Provincial Policy*, with the *Conservation Authorities Act*, and with ABCA policies. As development takes place, it is important that development be located safely away from such hazardous areas as floodplains or unstable slopes. Conservation authority comments help prevent future risks to life and property, and to protect the interests and liability of our member municipalities.

The Ausable Bayfield Conservation Authority is also an agency providing Natural Heritage advice to landowners and municipalities. It is important that development take into account the need to protect natural areas and those areas which provide a source for clean groundwater and surface water.

In 2012, Ausable Bayfield Conservation Authority provided formal comment on 89 different planning applications and participated in one Ontario



Geoffrey Cade

Land Use Planning Input and Review

Municipal Board hearing. The ABCA also responded to numerous requests for information from members of the public, from lawyers, and from real estate agents. ABCA provided 108 formal written responses to inquiries in 2012. These inquiries are very important in providing prospective purchasers of property, or people wishing to do work in high-risk areas, a prior understanding of the natural hazard risks involved.

Despite low water levels in Lake Huron, and the resulting increased beach width in some locations, it should be noted that the shoreline area continues to be hazardous for development and, as a result, site alteration in this area is regulated by the Ausable Bayfield Conservation Authority. In addition this activity is often governed by local municipal by-laws.

Residents should call Ausable Bayfield Conservation Authority and their local municipality to discuss development and site alteration proposals before initiating work.

Low lake levels may increase requests for dredging permits

By Andrew Bicknell, P. Eng., Ausable Bayfield Conservation Authority Regulations Coordinator

Ausable Bayfield Conservation Authority (ABCA) is empowered, through the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (*Ontario Regulation 147/06*), to regulate specific activities.



Andrew Bicknell

Regulations Report

Areas which are regulated include river and stream valleys, the Lake Huron shoreline, watercourses, hazardous lands, and wetlands. Development affecting these areas may require the permission of the conservation authority to ensure the control of flooding, erosion, dynamic beaches, pollution, or the conservation of land, is not affected.

Ausable Bayfield Conservation participated in an initiative, in 2012, which has been undertaken province-wide for the amendment of what is referred to as the *Content* regulation under Section 28 of the Conservation Authorities Act. As a result, *Regulation 147/06*, our conservation authority's regulation, will change. The changes will result in improved consistency with the amended *Content* regulation. The amendments can perhaps best be described as process refinement, or housekeeping changes, and should serve to streamline the permitting process. Our conservation authority anticipates that the formal implementation of the amending regulation will occur early in 2013.

Often, from a regulations and permitting standpoint, the ABCA is the first agency contacted when in-water work is proposed. Ausable Bayfield Conservation Authority reviews work proposals to ensure watercourse alterations are carried out in accordance with conservation authority regulations and the provisions of the federal *Fisheries Act*. Additionally, these files must be screened to ensure there are no special concerns or considerations under the federal *Species at Risk Act* legislation (SARA) or considerations under the provincial *Endangered Species Act* (ESA) 2007. Late in 2012, conservation authority staff members partnered with other agency staff to facilitate a species-at-risk (SAR) information



This photo shows the relative low-water levels in the Ausable River Cut in 2012.

and training session in Grand Bend. The session provided an opportunity for the local community to learn more about the status of aquatic species at risk, particularly within the ABCA watershed area. Biologists and experts from various agencies were on hand to share in the state of the science focusing on species' presence and definition of critical habitat. Much discussion focused on the sensitivities associated with Old Mouth Lake and the L Lake areas, both located in Port Franks, and the Old Ausable Channel.

Traditionally, Ausable Bayfield Conservation Authority has issued permits under *Regulation 147/06* allowing dredging activities to occur within the Bayfield, Grand Bend, and Port Franks river mouths and marina areas. Due to the relative low lake levels in Lake Huron, it is anticipated that the number of dredge-related permit requests within the ABCA watershed area will rise significantly in 2013 in comparison to 2012 and recent years.

Statistics for 2012

- 50 applications for permission
- 62 minor work permits
- 16 drain reports reviewed
- 82 letters of advice (and/or drain authorizations) issued (under agreement with Department of Fisheries and Oceans)



IMAGE SOURCE: Joseph R. Tomelleri

Committee creates proposed source protection plans

By Jenna Allain, Program Supervisor, Ausable Bayfield Maitland Valley Source Protection Region

Proposed source protection plans, to protect local municipal drinking water supplies, were submitted, on August 20, 2012, to the Ontario Minister of the Environment for review and approval (pending).

The source protection committee for the Ausable Bayfield Maitland Valley Drinking Water Source Protection Region had developed the plans over the previous year and a half. Members of the committee come from different groups of stakeholders – from municipalities, agriculture, the public-at-large, environment, property owner associations, industry, and commerce.

The Ausable Bayfield and Maitland Valley source protection areas, or watersheds, make up the local source protection region. Staff members, from both the Ausable Bayfield and Maitland Valley source protection authorities, supported the work of the committee.

The proposed source protection plans set out policies which will enable our watershed communities to effectively protect their drinking water sources. These plans will limit potential threats to existing and future sources of drinking water by addressing activities and land uses around municipal wells.

Many years of work have been dedicated to collecting the necessary science and engineering data to ensure plan policies were based on the best information available. There is no question that this information will not only continue to benefit source protection efforts, but will also have broader benefits for other water quality and water quantity initiatives.

The proposed source protection plans were developed under the legislative framework set out in Ontario's *Clean Water Act, 2006*. A fundamental principle of the *Clean Water Act* is transparency and local engagement so that those who may be affected by plan policies have a say throughout the process. The source protection committee consulted through the year 2012 and relied greatly on feedback provided by the public and affected stakeholders, as the plans were developed and finalized.

Staff members, during the current period of plan review, will focus on working closely with



Jenna Allain



Ausable Bayfield
Maitland Valley
Source Protection
Region

Drinking Water Source Protection

municipalities to help them prepare for implementing the proposed policies. This preparation is vital to make a smooth transition into plan implementation. It is

anticipated the Province of Ontario could approve the plans sometime in 2013 or early 2014.

Anyone interested in these important advancements in the protection of water are invited to visit the region's drinking water website at:

sourcewaterinfo.on.ca

We are also pleased to answer your questions by phone at **519-235-2160** or **1-888-286-2610** or by e-mail at info@sourcewaterinfo.on.ca.



The Maitland Valley and Ausable Bayfield source protection authorities work in partnership with the source protection committee, municipalities, and other partners to deliver drinking water source protection in the region. There was extensive public outreach during 2012. In photo here (in the Maitland Valley Conservation Authority watershed) Mark Hackett, Manager of Environmental Services with the Municipality of North Perth, led tours of the well and treatment facilities to educate local residents about their water sources, how they work, how they are treated, and how they are protected.

ABCA partners with local organizations on water monitoring

By Brynn Upsdell, Ausable Bayfield Conservation Healthy Watersheds Technician

Water quality monitoring continued at 18 long-term stations from March to November, 2012.



Brynn Upsdell

Nine of these stations are part of the Ontario Ministry of the Environment Provincial Water Quality Monitoring Network. The other stations are funded by Ausable Bayfield Conservation Authority (ABCA) as part of the enhanced monitoring program.

Ausable Bayfield Conservation continues to partner with local organizations (Bayfield Ratepayers Association, Bluewater Shoreline Residents' Association, Municipality of Bluewater, Pinery Provincial Park, Wee Lake Residents' Association) to collect water from 64 other locations around the

Water Quality Monitoring

ABCA area (including Bayfield River, Gully Creek, Old Ausable Channel, Ridgeway Drain, Wee Lake, and outlets of several drains flowing into Lake Huron).

Benthic macroinvertebrates were collected from 30 stations in October 2012 to complement the water chemistry monitoring. Benthic macroinvertebrates are animals that live on the bottom of watercourses (e.g., aquatic insects, worms) and indicate water quality conditions.

Watch for the Ausable Bayfield Watershed Report Card in 2013.

Individual landowners may have greatest opportunity to reduce non-point source pollution; community groups also have role

By Mari Veliz, Ausable Bayfield Conservation Healthy Watersheds Coordinator

Rural non-point source water pollution comes from many seemingly insignificant sources around individual homes, farms, or construction sites.

Improvements to water quality may therefore be best identified and acted upon by individual property owners. Linking individual actions to

Communities in Watershed Action

downstream water quality conditions can be achieved through community-based watershed planning. In 2012, many communities have been involved with implementing watershed actions – let us know about your local actions.

Crops and Creeks Huron evaluates best management practices

By Mari Veliz, Ausable Bayfield Conservation Healthy Watersheds Coordinator

Agricultural best management practices have been evaluated for environmental effectiveness and economic sustainability in four lakeshore watersheds.



Mari Veliz

We have found that a grassed, shallow roadside ditch can reduce phosphorus and sediment. We have also found that peak water flow and sediment can be reduced in a Water and Sediment Control Basin, also known as a berm. Working with more than 30 local landowners, and the Huron County Federation of Agriculture, has provided good land use and economic information. Researchers from the

Crops and Creeks Huron (Watershed-Based Best Management Practices Evaluation / WBBE)

University of Guelph Watershed Evaluation Group have used the landowner data to develop a Soil and Water Assessment Tool (SWAT) for Gully Creek. The SWAT model estimates that cover crops, berms, nutrient reduction, and conservation tillage can reduce nutrients and sediment in some fields and at the outlet of the watershed. Economic results are preliminary, but suggest that berms and conservation tillage have some upfront costs but cover crops and fertilizer reduction save money.

Residents help plan, act to improve Bayfield River

By Abigail Gutteridge and Hope Brock, Ausable Bayfield Conservation Healthy Watersheds Technicians

Residents of the Main Bayfield Watershed worked to enhance the Bayfield River in 2012.

Local citizens are serving on an advisory committee of landowners and local agencies to prepare and implement a plan to protect the Main Bayfield Watershed.

The committee is contacting local organizations and landowners for input on how to make improvements. Ausable Bayfield Conservation Authority (ABCA) would like to acknowledge the local landowners who are working with Ausable Bayfield Conservation staff members to develop environmental property plans. More than 20 organizations have committed to specific actions to protect and improve water quality, such as tree planting and upgrading

Watershed Planning for Main Bayfield Watershed, near Clinton

wastewater systems. In June, the advisory committee organized a bus tour highlighting completed projects.



Abigail Gutteridge

Hope Brock

In 2011, The Fred A. and Barbara M. Erb Family Foundation provided Ausable Bayfield Conservation with \$100,000 for projects to restore wetlands and to prepare the watershed plan. A launch of the plan is scheduled for the spring of 2013.



Environmental monitoring helps Ausable Bayfield communities know the state of their watersheds. In photo above, Ausable Bayfield Conservation staff members, in canoe, record aquatic plant information in partnership with a University of Waterloo research scientist who is diving to identify aquatic plants.



Landowners are making a difference through the work they do in Main Bayfield and other local watersheds.

Port Franks residents make 2012 best year yet for turtle monitoring

By Hope Brock, Ausable Bayfield Conservation Healthy Watersheds Technician

Residents of Port Franks once again contributed to a greater understanding of the turtles that live among them through the community-based turtle monitoring program.

Almost 100 sightings were reported last year, which makes 2012 the most successful year to date.

A workshop has been held in the spring season each year since 2010 to help the community learn how to identify the seven different species that live in the area, and to introduce them to the biology and conservation of turtles.

More and more people are getting involved.

Community-Based Turtle Monitoring in Port Franks

Another subdivision association raised funds to purchase a turtle crossing sign for a busy road in Windsor Park leading to the beach. Numerous residents also reported being able to help turtles safely cross roads, which is especially important during nesting season (May-June) when the turtles are trying to reach suitable nesting habitat.

We look forward to hearing from you in 2013.

Investigation of threats to species-at-risk fishes in the Grand Bend-Port Franks area reveals degraded conditions in northern Old Ausable Channel

Ongoing monitoring to assist better management of OAC's northern portion

By Kari Jean, Aquatic Biologist

The Old Ausable Channel (OAC), L Lake, and Old Mouth Lake, are aquatic ecosystems located in the Grand Bend-Port Franks area.

These wetlands support three species-at-risk (SAR) fishes (Pugnose Shiner, Lake Chubsucker, and Grass Pickerel).

Threats to these SAR fishes include:

- Nutrient inputs
- Winter fish kills*
- Fluctuating water levels

In 2012, Fisheries and Oceans Canada (Department of Fisheries and Oceans, DFO), the Ontario Ministry of Natural Resources (MNR), and Ausable Bayfield Conservation Authority (ABCA) evaluated the relationship between water quality, aquatic vegetation, and fish in the three wetlands.



Kari Jean

Ausable River Recovery Strategy

We found that the three aquatic ecosystems have moderately good to excellent conditions. However, results did indicate that conditions are degraded in the northern OAC.

Support from the local community, and from provincial and federal departments, will help with ongoing monitoring to better manage the northern portion of the OAC.

The 2012 study provides a baseline examination of the exceptional aquatic habitat found in the OAC, L Lake, and Old Mouth Lake.

* *A fish kill (die-off, or mortality) is when fish are found dead at a specific location as a result of natural causes or environmental factors such as reduced oxygen, increases in water temperature, algal blooms, disease, or contaminants in the water.*



Healthy Watersheds Technician Hope Brock samples water at L Lake.



Healthy Watersheds Technician Brynn Upsdell, and student Lauren Aarts, are shown benthic macroinvertebrate sampling in Ausable Bayfield watersheds.



Dover Agri-Serve Inc. rolls *Phragmites australis* (common reed) on the large island in the Ausable River at Port Franks in March as part of the work to control this invasive reed.

Invasive species affect conservation-land trees, shore

By Kate Monk, ABCA Supervisor of Stewardship and Conservation Lands

Invasive species are having an impact on conservation properties.

Emerald Ash Borer is killing Ash trees in many Ausable Bayfield Conservation Authority (ABCA) forests.

In the Port Franks area, reducing the amount of *Phragmites australis* (common reed) was the focus in 2012 and will be in the years to come. Ausable River Cut shorelines and the islands in the river have the greatest populations of Phragmites and have received treatment through pesticide application and rolling. These lands are important habitat for several turtle species at risk. Ausable Bayfield Conservation, Lambton Shores Phragmites Community Group, and other agencies are collaborating to strategically to control Phragmites. The significant progress could not happen without the community volunteers.

Ausable Bayfield Conservation received a \$23,000 grant, in December, from the Government of Ontario's Great Lakes Guardian Community Fund to reduce Phragmites and restore habitat for native plants and wildlife. This will be combined with funding from ABCA, Municipality of Lambton Shores, Nature Conservancy of Canada, and other community partners.

More than 400 hunting passes were sold in 2012 with the majority used in the Hay Swamp Tracts. Local snowmobile clubs continue to use conservation

Conservation Land Management



An Ash log is shown as infected with the Emerald Ash Borer.

forests for Ontario Federation of Snowmobile trails. The Pineridge Club created a new trail in the MacGregor Tract following the tree harvest.

Emerald Ash Borer's effects prompts Ash salvage work

By Ian Jean, ABCA Forestry and Land Stewardship Specialist

Forest management activities were focused mainly in Middlesex County due to the impact of Emerald Ash Borer there. This included Ash salvage operations at Chapman Tract in Lobo Township and Parkhill Conservation Area in McGillivray Township.



Ian Jean

The Ash salvage operation started at Loomis Tract in 2011 was completed in September 2012 due to favourable (dry) ground conditions. Pine plantation thinning combined with Ash salvage was completed at Wright-Thompson Tract and MacGregor Tract in McGillivray. As part of the same operation a small section of mainly Norway spruce was thinned in Hay Swamp in Huron County.

Ninety per cent of the 630 trees at Parkhill Conservation Area marked for selective harvest were Ash. The affected section of Parkhill CA has a well-developed network of all-terrain vehicle and hiking trails. Arbor North Logging was selected for the harvest operation for their ability to minimize damage through the use of horses for skidding logs.

Work was completed in January and February to not impact the summer and autumn recreation seasons. The final tally was 123,000 fbm (foot board measure) of Ash and 12,930 fbm of other species (Maple and Cherry). Revenue for the operation was \$24,941.

A total of 465 Ash and 18 Hard Maple were marked for harvest at Chapman Tract. Ash were heavily infested with the borer and 68 were dead at the time of marking in July but deemed salvageable (and identified separately on the tender). Total estimated volume for living and dead Ash was 87,410 fbm.

Four bids were received for the timber ranging from \$14,500 to \$36,218. Edgewood Lumber was the high bid and awarded the contract. Timber harvest was completed in October. A dry autumn and careful logging practices resulted in minimal site disturbance.

Pine plantations at Wright-Thompson Tract and MacGregor Tract were mechanically thinned to remove poor quality Pine and salvage Ash. Ash that had seeded in naturally at the time of planting pines was now heavily infested by Emerald Ash Borer.

Forest Management on ABCA Lands

Many of the infested Ash were large enough to salvage for firewood or small sawlogs and these were cut as part of the pine thinning operation. Thinning at Hay Swamp was limited to a Norway spruce plantation at Part Lots 8 and 9, Concession 8 Hay. Approximately 17 acres were mechanically thinned to improve spacing.



A salvage of Ash trees at the MacGregor Tract, using mechanical harvester, limited damage to residual trees. In this photo Cottonwood, Soft Maple, White Elm, and Birch will replace Ash.



Shown in photo, on landing at the Chapman Tract, are Ash logs infested with Emerald Ash Borer. Infested ash retains its value for timber or other uses, as the Emerald Ash Borer only affects the cambium layer beneath the bark.



Field Services staffer Wayne Ford makes the first cut of a new nature trail at Crediton Conservation Area.

Nearly 100 trees were planted at the small, day-use park and a grassed walking trail was created in partnership with the Municipality of South Huron. The municipality created an off-leash dog park in 2012 as well.

Partnerships with communities improve conservation areas

By Kate Monk, ABCA Supervisor of Stewardship and Conservation Lands

The Municipality of South Huron and Ausable Bayfield Conservation Authority (ABCA) entered into a new agreement for Crediton Conservation Area to reflect a new management plan for the small, day-use park.

The municipality has maintained the area for many years but was looking to reduce the amount of grass cutting and to provide an off-leash dog park. Nearly 100 native trees and shrubs were planted with funding from the Government of Canada's Habitat Stewardship Program for Species at Risk, delivered through the Department of the Environment, and the enthusiasm of Stephen Central School students. A grassed walking path was created throughout the plantings and a fence was installed by the municipality to define the off-leash area. Ausable Bayfield Conservation hopes this will reduce the number of dogs running at large at its other properties.

The Lambton Shores Nature Trails Committee made significant improvements to the trails at Ausable River Cut Conservation Area at Northville. Volunteers, with the help of ABCA staff, refined the trail network to protect the environment. New directional blazes and maps will better help visitors navigate the trails. Illegal trails and entrances were blocked and dune grass was planted on an eroding dune.

A significant number of dead and dying ash trees affected by the Emerald Ash Borer were removed at

Conservation Areas

Rock Glen Conservation Area in the day use areas. Ash trees were the popular choice in the 1960s and 1970s as shade trees for picnic areas and playgrounds. A variety of native trees and shrubs will be planted in the park as funding allows.

The Woodland Reflection Shelter at the Morrison Dam Commemorative Woods expansion was completed thanks to community donations and an extraordinary volunteer effort by Ausable Bayfield Conservation Foundation director Peter Darbishire. The pavilion is a place to enjoy nature and remember loved ones. It links with the MacNaughton-Morrison Section of the South Huron Trail and will be used by school classes as well.

Among her many duties, summer student Lana Shapton conducted surveys of conservation areas visitors in July.

Shapton found that people were using the trails a few times a month to a few times each week or even daily to exercise and enjoy the scenery. Several people travelled to the community for the trails and also spent money at area businesses.

Conservation area usage continues to increase as more people appreciate the health benefits of spending time in nature.

We help link landowners to grant programs, project support

By Kate Monk, ABCA Supervisor of Stewardship and Conservation Lands

Stewardship staff members work with landowners to complete projects that contribute to the community's *Conservation Strategy* guidance, to Ausable Bayfield Conservation, to take action to improve the watershed.



Kate Monk

Citizens improve their own properties by taking individual actions and they are good neighbours by improving water quality, soil, and forest conditions in their community. Staff members provided technical assistance in 2012 and linked landowners with financial incentive programs for more than 100 stewardship projects. In addition, more than 160 landowners purchased native trees and shrubs from the Ausable Bayfield Conservation Authority (ABCA) to plant themselves. The number of projects in a municipality is traditionally higher where there are grant programs and focused community outreach. Of special note, some landowners in municipal wellhead protection and intake areas have been eligible for substantial grants through the Ontario Drinking Water Stewardship Program.

Ausable Bayfield Conservation's areas of expertise include reforestation, erosion control, watercourse livestock fencing, barn eavestroughs and yard runoff control, manure storage decommissioning, wetland creation, wellhead protection, well decommissioning and septic systems. ABCA stewardship staff have increased their knowledge of invasive species and are able to provide landowners with control advice and services for Phragmites and recommendations for restoring forest health in woodlots impacted by pests and diseases.

The ABCA is an important local delivery agent for ministries and agencies. We help fulfill their mandates for environmental improvement and the funding they provide for program support and grants are essential. Ausable Bayfield Conservation thanks the following funding partners:

- Huron and Perth Clean Water Projects
- Canada-Ontario Agreement (COA) Respecting the Great Lakes Basin Ecosystem – MNR Clinton District and Middlesex Stewardship Committee
- Ontario Ministry of Agriculture and Food
- Huron Stewardship Council

Private Land Stewardship Program

Stewardship Projects Receiving Funding through Programs Delivered by ABCA		
Municipality	Number of Projects	Grants
Adelaide Metcalfe	4	\$8,564.96
Bluewater	18	\$27,150.36
Central Huron	13	\$62,719.84
Huron East	12	\$24,465.09
Lambton Shores	21	\$90,648.87
Lucan Biddulph	2	\$14,856.00
Middlesex Centre	2	\$32,445.00
North Middlesex	6	\$38,423.08
South Huron	22	\$34,335.13
West Perth	6	\$3,678.10
TOTALS	106	\$337,286.53

NOTE: Totals do not include funding from programs delivered by Ontario Soil and Crop Improvement Association (OSCIA) that did not receive assistance from ABCA staff members.

- Government of Canada's Habitat Stewardship Program for Species at Risk, delivered through the Department of the Environment
- Ontario Ministry of Natural Resources (MNR) Species At Risk Fund
- Ontario Ministry of the Environment (MOE) Ontario Drinking Water Stewardship Program
- Trees Ontario Foundation
- Canada-Ontario Farm Stewardship Program



In 2012, the Huron County Clean Water Project review committee, (from left) Jack Kroes, Duncan Jewell, Ben VanDiepenbeek, and Jim Dietrich, approved 211 projects that will protect or improve water quality. The county contributed \$350,000 in 2012 which is matched by landowners and other funding agencies.

Landowners plant tens of thousands of trees in area

By Ian Jean, Ausable Bayfield Conservation Forestry and Land Stewardship Specialist

A strong interest in tree planting from watershed landowners continues to support the Ausable Bayfield Conservation forestry program.

A total of 56,500 trees were distributed this year through the spring tree program. Forty-five thousand of these were planted by conservation authority staff, mostly on private lands, with an additional 11,500 trees planted by watershed residents through the landowner pick-up program. Ausable Bayfield Conservation Authority (ABCA) staff members accomplished this by working directly with 33 landowners to plant trees at 39 separate planting sites on private land. As well, 126 watershed landowners participated in the pick-up program this year.

Ausable Bayfield Conservation stewardship staff worked with the ABCA conservation education program and watershed schools to organize tree planting events at:

- Clinton Conservation Area (Huron Centennial)
- Crediton Conservation Area (Stephen Central)
- St. Joseph's School in Clinton – with participation from all five Clinton schools (Central Huron Secondary, St. Anne's Catholic Secondary, Clinton Public, St. Joseph's, and Huron Christian School).

These school planting events are important for environmental education and an opportunity to instill a conservation ethic in the youth of the watershed.

A new partnership with South Huron Communities in Bloom saw 150 trees made available to residents of towns and villages in the municipality. Most town properties do not have sufficient space to meet the minimum of trees required by the ABCA tree program. Through this partnership we were able to reach residential landowners and hopefully increase the use of native trees in the local 'urban' forest.

Ausable Bayfield Conservation staff planted 770 balled and burlap conifers and potted hardwood trees at five project sites in autumn of 2012. This included the Zurich Scouts planting trees at the Central Huron stormwater ponds at Clinton and a community planting event at Thames Road Park, owned by the Thames Road Elimville United Church, east of Exeter. More than 100 people from the community participated in the Thames Road tree

Tree Planting Program



Ian Jean, Forestry and Land Stewardship Specialist with Ausable Bayfield Conservation, spoke to the Trees Ontario annual information tour for tree-planting practitioners.

The tour visited the Ausable Bayfield watersheds, for the first time in the tour's five-year history, on Tuesday, November 20, 2012.

planting which was funded by Huron County Clean Water Project, Tree Canada and MacLean's Home Hardware of Exeter.

In addition to the authority-planted trees, 30 landowners purchased and picked up an additional 900 trees for planting on their own properties throughout the watershed in the fall.

Once again, the Municipality of Lucan Biddulph purchased trees through the ABCA fall tree program to provide to landowners to replace roadside hazard trees. A total of 150 trees were provided to landowners through their tree replacement program.

Funding for tree planting was accessed from the Government of Canada's Habitat Stewardship Program for Species at Risk, delivered through the Department of the Environment; Huron County Clean Water Project; Ausable River COA (Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem); Bayfield River COA; Huron Stewardship Council; Canada-Ontario Farm Stewardship Program; Species at Risk Farm Incentive Program; Ontario Ministry of Transportation; and Trees Ontario. Trees Ontario is now the largest provider of funds for tree planting through their *50 Million Tree* program. Trees Ontario contributed \$47,250 to plant 35,000 trees in our watershed in 2012.

Conservationist of the Year Award goes to two deserving couples: Ann and Bill Phelan, and Joan and John Love

Ausable Bayfield Conservation presented the Conservationist of the Year Award in 2012 to two deserving watershed couples, one couple in the Bayfield North watersheds and one couple in the Parkhill Creek watershed.

The winners were:

- Joan and John Love
- Bill and Ann Phelan

The Conservationist of the Year Award includes a limited-edition conservation print of the Latornell Tree, by Bonna Rouse, one of 310 made for a special edition by Conservation Ontario.

Ausable Bayfield Conservation also made a donation towards a tree and plaque at a Commemorative Woods site maintained by the Ausable Bayfield Conservation Foundation.



Ann and Bill Phelan, of Porter's Hill Line, north of Bayfield
Bayfield River and Bayfield North Watersheds

Ann and Bill Phelan, of Porter's Hill Line, north of Bayfield, purchased land, in 1992, that had been retired from farming by planting a permanent forest cover. They have been longstanding members of the Maitland Valley Anglers, which completed a range of projects aimed at enhancing the local fisheries. Stream rehabilitation work was done on a portion of Gully Creek with the assistance of the Bayfield Anglers. A wetland has been created at the back of their property. This wetland will reduce runoff and erosion and provide habitat for wetland species. This wetland is a model of how existing natural areas can be enhanced to further protect our landscape and improve water quality. Bill and Ann actively manage their property for various habitats including, but not limited to, wood duck nesting boxes, salt licks, and food plot management for deer. A creek stream bank restoration project was completed in the last few years with assistance from local Scouts and the Bayfield Anglers. Ann has provided an invaluable service by providing near-real-time input of rainfall and streamflow data to support various projects.



Joan and John Love, of Grand Bend Line, near Grand Bend
Ausable River and Parkhill Creek Watersheds

Joan and John Love have great appreciation and respect for their land. They have completed many stewardship projects on their farm on Grand Bend Line, near Grand Bend. Their work includes: decommissioning two wells; two low-flow equipment crossings (1998 and 2011) to reduce sedimentation and bank damage; and retirement from pasture of land bordering a watercourse that runs the length of their 200-acre farm. Trees have been planted over several years to gradually naturalize the retired pasture land. The Loves have planted roadside trees along the north and east boundary of the farm and around the home and farm; built and maintained a walking trail from the farmstead through the naturalized area and the mature woodlot; installed birdhouses and bluebird boxes along the walking trail. The Loves planted many of the trees but at different times other groups were involved in the planting, such as Grand Bend Public School students, and Grand Bend Scouts. The Loves' willingness to share their property and their knowledge to educate local youth is as important as the work they have done on the property.

Municipal support combines with third-party funding to help us implement positive change in watershed

ABCA one of leading conservation authorities for non-levy funds as high percentage of budget

By Brian Horner, ABCA Financial Services Supervisor

Ausable Bayfield Conservation Authority (ABCA) continues to be one of the leading conservation authorities in Ontario when it comes to leveraging local levy dollars with third-party funding.



Brian Horner

This means that every dollar contributed by municipalities works like several dollars, when support is added from different levels of government, agencies, foundations, and other contributors.

Thanks to the approval of grant and funding applications submitted by staff members during the

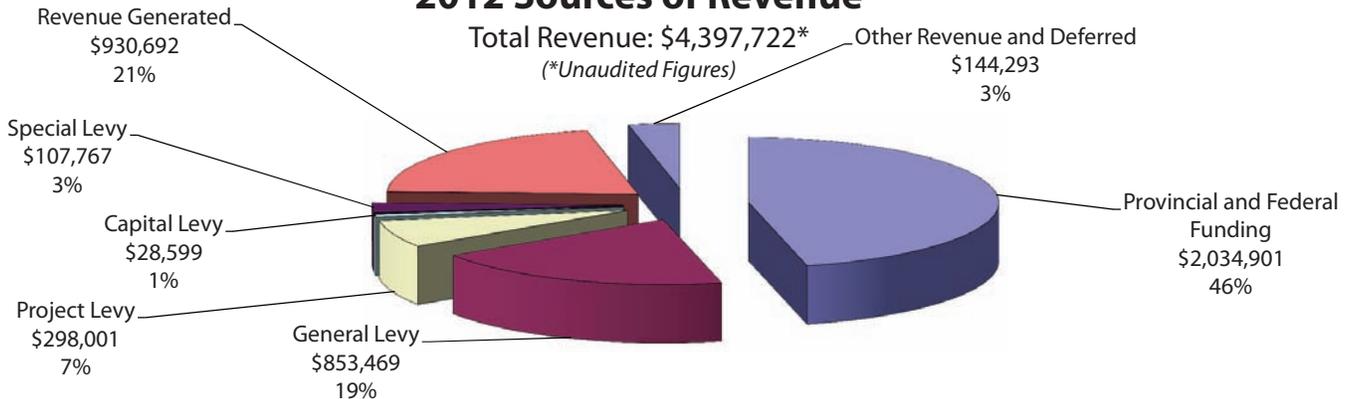
Financial Summary

2012 year, the local levy contributions represented approximately 27 per cent of total revenue compared to other conservation authorities across the province that had levies representing approximately 48 per cent of their total revenue.

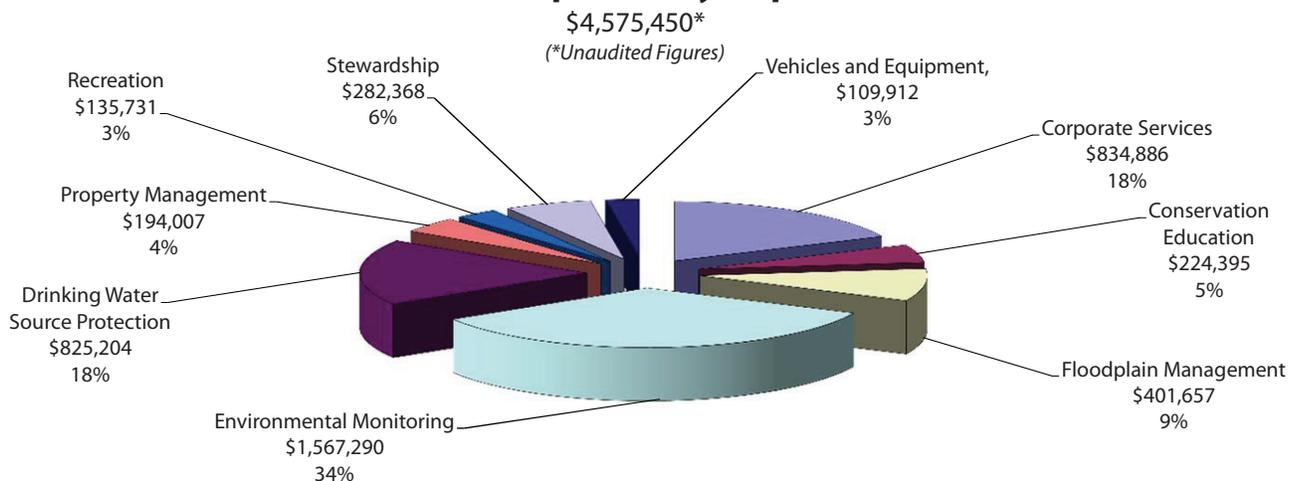
The unaudited deficit of \$177,000, which includes amortization of \$222,000, is approximately \$35,000 better than anticipated and these savings will be used towards future conservation projects.

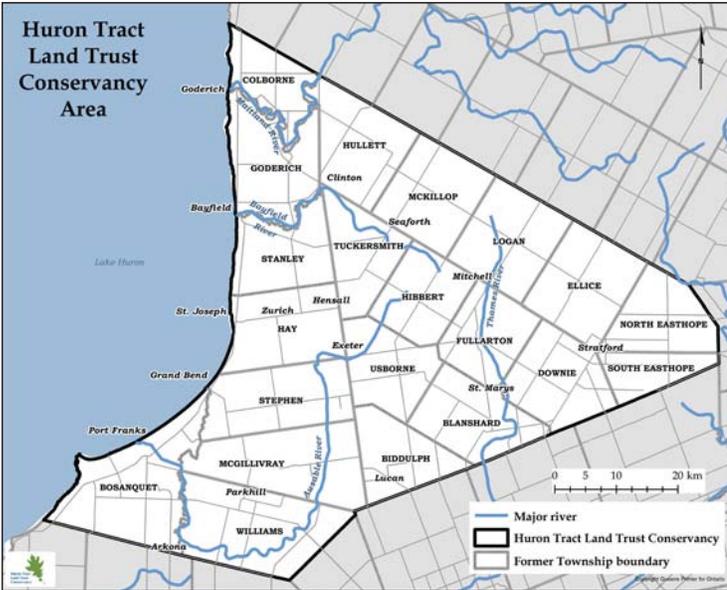
Member municipalities should be commended for their involvement and commitment to their local watersheds.

2012 Sources of Revenue



2012 Total Expenses by Department:





Historic Huron Tract area at left. Cover of new brochure above.

Huron Tract Land Trust Conservancy donors, board working to protect natural environment

By Roger Lewington, Chairman

The Huron Tract Land Trust Conservancy (HTLTC), which was formed in 2011, wants to protect the natural environment with the help of landowners, citizens of the community, municipalities, and other agencies.

The land trust's Board of Directors knew that the historic Huron Tract was significant to the development and growth of this part of Ontario. The directors agreed, therefore, that this made a perfect geographic basis on which to protect the natural environment.

The year 2012 was a year to get organized. A website was developed at htlct.ca, and the Gosling Foundation generously provided start-up funds for creating print materials, including a brochure, for distribution and banners for displaying at events.

A slide presentation was made to the Middlesex County stakeholders meeting. A bus tour led by Kate Monk, Ausable Bayfield Conservation's Stewardship and Conservation Lands Supervisor,

highlighted some potential areas where the HTLTC could focus on for protecting, through ownership, the natural environment.

We will prioritize, in 2013, these land securement sites and start working towards the protection of those properties.

The Huron Tract Land Trust Conservancy does not have significant financial assistance from governments, so it will encourage philanthropy in its own backyard.

Now that we have an organization and some tools with which to work, we need to spend time to let our communities know how they can leave a legacy through the HTLTC.

There is a nature deficit disorder that our society is facing, and there is a growing interest in protecting what remaining natural environment we have in Ontario. The Huron Tract Land Trust Conservancy provides individuals with a trusted way to achieve their legacy and make a difference. Talk to us to find out how you can help.

Huron Tract Land Trust Conservancy Board of Directors



Burkhard Metzger
Clinton



David Kemp
Staffa



Don Farwell
Stratford



Peter Twynstra
Ailsa Craig



Steve Boles
Exeter



Steve Bowers
Brussels



Philip Walden
Thedford



Tom McLaughlin
Lucan



Roger Lewington
(Chairman)
Bayfield

Foundation helps provide youth with educational, work opportunities

By Ernie Miatello, Chairman, Ausable Bayfield Conservation Foundation

The Ausable Bayfield Conservation Foundation (ABCF) Board of Directors met five times during 2012.

Long-serving board member John Walsh submitted his resignation, from the Board of Directors, in April, and it was accepted with regret. An appeal through the media was made for potential volunteer directors. The response was low so a person-to-person approach will be made to fill the vacancy. Contact us if you are interested in this personally enriching opportunity to help your local environment.

Highlights from the foundation's 2012 project areas are:

Junior Conservationist

Ryan Carlow was the 2012 Junior Conservationist. This eight-week summer position with Ausable Bayfield Conservation Authority is funded by the ABCF. A



Ryan Carlow

secondary-school student can receive mentoring, through this experience, before pursuing a possible career in the environmental field.

Student Environmental Award

The \$1,000 scholarship award is for a graduating secondary-school student residing in the watershed. Three applications were



Greg Urquhart

received and Greg Urquhart, of Township of Perth South, was chosen as the recipient.

Chairman's Report

Conservation Education

- A one dollar subsidy for each student attending an Ausable Bayfield Conservation Authority education program, up to \$5,000.
- Co-sponsorship of six buses to transport students to an aquatic species-at-risk program.
- A \$1,000 contribution to the education activities at Aquafest 2012 in Grand Bend.

Accessible Trails and Conservation Areas Projects

- A \$1,000 donation was made to the Bayfield River Valley Trail Association, towards trail-building equipment for the phased development of a trail system along the Bayfield River.
- Ausable Bayfield Conservation Foundation coordinated the Seventh Annual Friends of the Trail Gord Strang Memorial Golf Tournament, raising \$4,000 in support of the South Huron Trail.

Commemorative Woods

- The foundation co-hosted the eleventh Klopp Commemorative Woods tree dedication service, with J.M. McBeath Funeral Home, on June 3, with 125 guests attending.
- The foundation co-hosted the Morrison Dam Commemorative Woods dedication service, with Haskett Funeral Home, on September 16, with 375 guests attending.

The official opening and ribbon cutting for the new Woodland Reflection Shelter was held along with the tree dedication.

continued on next page

2012 Foundation Board of Directors



Bob Radtke
Ailsa Craig



Ernie Miatello
(Chair)
London



John Walsh
London



Roger Lewington
Bayfield



Peter Darbishire
Exeter



Ted Jones
Exeter



Bob Norris
Staffa



Teresa Ondrejicka
Exeter



Dave McClure
Grand Bend

Woodland Reflection Shelter pavilion dream comes true

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Woodland Reflection Shelter

The 20 foot by 30 foot Woodland Reflection Shelter pavilion was constructed throughout the summer months. Foundation director and community volunteer Peter Darbishire undertook the leadership of this project and volunteered many hours towards its completion. He organized assistance from volunteers and the construction trades. Donations of building materials and financial contributions gave the campaign a welcome boost. The unique donor wall, with its oak tree metal sculpture and coloured leaves, is a centrepiece for this community project.



Ribbon-cutting Ceremony

The ribbon cutting for the new Woodland Reflection Shelter, along the South Huron Trail, took place in 2012. The creation of this location for rest and nature enjoyment was a dream that became reality thanks to the work of volunteers and the generosity of local businesses and donors. Show at the ribbon-cutting ceremony are, left to right; Judith Parker, Ausable Bayfield Conservation Foundation; Jacqueline Darroch, Haskett Funeral Homes; Scott Rasenburb, representing the Rasenberg Family, who named the Reflection Tree; Peter Darbishire, project leader for ABCF; Bob Norris, representing founding grove sponsors; Raina Vingerhoeds, student creator of the metal tree sculpture; Bill Haskett; Tom Walsh, South Huron District High School teacher; and Stephen Darbishire, volunteer.



Patrons, donors, and community volunteers helped make the 2012 Conservation Dinner the most successful ever, raising \$53,900 for conservation efforts such as trails, conservation education for children, fish stocking for a family fishing derby, and Commemorative Woods. Shown in photo are (left to right) Ernie Miatello, Chair of Ausable Bayfield Conservation Foundation; Dave Frayne, Chair of Ausable Bayfield Conservation Authority; Bruce Hodge, President-Elect of Exeter Lions Club; special guest Doug Brooks, Chief Executive Officer of Certified General Accountants of Ontario; Bob Radtke, Chair of the Conservation Dinner Committee; and Martin Zimmer, Feature Artist. The dignitaries are shown behind the impressive podium of ice courtesy of Iceculture Inc. of Hensall. This was the 23rd Annual Dinner.

Conservation Dinner

The Ausable Bayfield Conservation Foundation's major fundraising event is the annual Conservation Dinner, in cooperation with the Exeter Lions Club and community volunteers, patrons, and donors. The 23rd Dinner Auction reached a pinnacle of \$53,900 in support of accessible nature trails, conservation area enhancements; fishing derby; and ongoing care of the South Huron Trail.

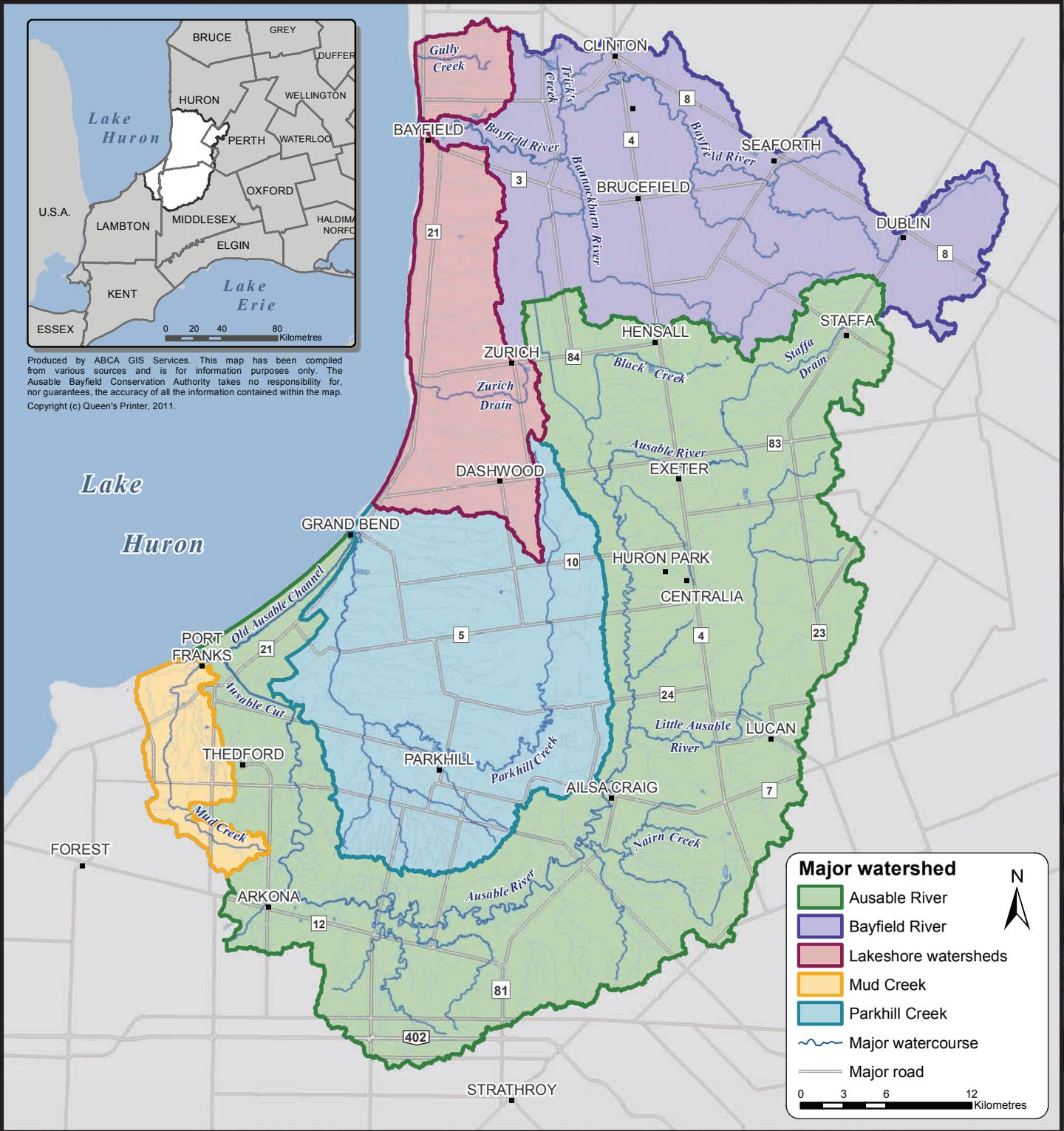
Morrison Dam Fishing Derby

The 28th Morrison Dam Fishing Derby was held the first Saturday of May in partnership with the Exeter Lions Club. More than 1,000 rainbow trout were stocked in the Morrison Dam Reservoir prior to the derby for the enjoyment of young anglers and those young at heart.





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AUSABLE BAYFIELD CONSERVATION

CREATING AWARENESS | TAKING ACTION

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