

Annual Report 2017



AUSABLE BAYFIELD
CONSERVATION

CREATING AWARENESS | TAKING ACTION

Table of Contents



FRONT COVER PHOTO: Canada celebrated, in 2017, the anniversary of 150 years since Confederation. Ausable Bayfield Conservation held a *#Maple150* photo contest to celebrate Canada 150 and more than 20 people entered. The Board of Directors of Ausable Bayfield Conservation Authority reviewed short-listed photos and chose a photo by Bonnie Sitter, of Exeter, as the winner. This autumn scene shows the bright red Sugar Maples along Bannockburn Line, north of Mill Road near Varna. The visually stunning photo is featured on the front cover of the *2017 Annual Report*. The winning photographer received a free Autumn Blaze Maple tree for winning the contest and she donated the prize for planting at Jessica's House hospice.



Pages 2 - 3	Corporate Services
Page 2	Chairman's Message; Board of Directors
Page 3	General Manager's Report; Staff Report
Pages 4 - 10	Water Management
Page 4	Groundwater Resources and the Provincial Groundwater Monitoring Network (PGMN)
Page 5	Water Level and Streamflow Monitoring
Page 5	Flood Forecasting and Warning
Page 6	Flood Emergency Planning
Page 6	Ontario Low Water Response (OLWR)
Page 7	Structures, Operations, and Maintenance
Page 7	Water and Erosion Control Infrastructure (WECl)
Page 8	Municipal Plan Input/Planning Report and Shoreline Management Plan (SMP) Update
Page 9	Geographic Information Systems (GIS) and Information Technology (IT)
Page 10	<i>Ontario Regulation 147/06</i> – Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses
Page 11	Drinking Water Source Protection
Pages 12 - 15	Healthy Watersheds
Page 12	Watershed Communities Taking Action
Page 13	Measuring Rural Best Management Practice Effectiveness in Huron County
Page 13	Soil Health
Page 14	Port Franks and Bayfield; Community-Based Turtle Monitoring
Page 14	Ausable River Recovery – Fisheries Monitoring, Outreach
Page 15	Fish Living in Municipal Drains
Page 15	Wetlands
Pages 16 - 17	Conservation Land Management
Page 16	Conservation Land Management
Page 17	Forest Management on ABCA Lands; Community Outreach
Pages 18 - 19	Watershed Stewardship
Page 18	Tree Planting Program; Conservationist of the Year Award
Page 19	Private Land Stewardship Program
Page 20	Conservation Education
Page 21	Financial Summary
Pages 22 - 23	Ausable Bayfield Conservation Foundation
Page 24	Huron Tract Land Trust Conservancy

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

We create awareness, take positive action by working together

By Burkhard Metzger, Chairman, Ausable Bayfield Conservation Authority (ABCA) Board of Directors

I am honoured, on behalf of the Board of Directors, to thank our watershed landowners, community groups, municipalities, and other partners for their positive actions to protect water, soil, and living things.



Burkhard Metzger

Our staff members are dedicated. They work hard for the community. They help to create habitat, protect life and property, preserve valuable topsoil, improve water quality, and implement projects that better manage water running off of land during storms. They help to build more resilient watersheds to the benefit of all. Staff don't accomplish this on their own, however. Successes such as water quality projects, cover crops, nature area preservation, or tree planting are possible thanks to landowners, residents, volunteers, partners,

Chair's Message

and communities of this watershed. I applaud these watershed partners for their vision, commitment, generosity and hard work.

We look forward to releasing the updated *Watershed Report Card* in 2018. We complete the report cards every five years for 16 local subwatersheds of the Ausable Bayfield area. The reports share current science and provide valuable information about your watershed. They offer strategies to make local improvements over the next five years. I encourage you to read these documents and find out about your local watersheds and to consider positive actions you can take.

Thanks once again to all of you for your work to protect and improve your watershed home. Together we are 'Creating Awareness, Taking Action.'

Ausable Bayfield Conservation Authority (ABCA) Board of Directors – 2017



Burkhard Metzger
(Chair)
Central Huron



George Irvin
(Vice Chair)
Bluewater



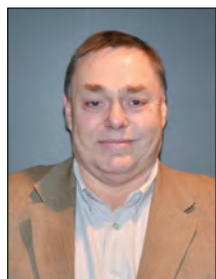
Mike Tam
West Perth



Dave Frayne
South Huron
Perth South



Bob Harvey
Adelaide-Metcalf,
Middlesex
Centre



Wayne Hall
Lucan Biddulph



Doug Cook
Lambton Shores,
Warwick



Ray Chartrand
Huron East



Brian Ropp
North Middlesex
*Joined the Board
on March 17, 2017*



Don Shipway
North Middlesex
*Retired from the Board
on March 17, 2017*

Many individuals, groups in watershed going above and beyond

By Brian Horner, General Manager and Secretary-Treasurer

I would like to thank all the people who go above and beyond the call of duty in this watershed community. From staff members donating to charities and doing more than what's required; to agricultural producers adding cover crops and sharing their experiences with their peers; to communities adding rain gardens; to donors and volunteers raising tens of thousands of dollars for conservation projects in the community – I am inspired by your generosity.



Brian Horner

We were pleased to work in partnership with neighbouring Maitland Conservation in 2017 in the conservation authority tent at the International Plowing Match (IPM) and Rural Expo held in Walton in Huron County from September 19-23, 2017. I thank Maitland Valley and Ausable Bayfield staff and

General Manager's Report

volunteers, who worked diligently together to create a dynamic interactive experience at the tent. Thousands of people visited stations in the tent. We enjoyed the chance to talk to guests about trees, stewardship, flora and fauna, water quality, and to answer their questions.

In 2018, I look forward to building upon our important community partnerships so we can continue to move closer to the healthy watersheds envisioned by the community in the *Conservation Strategy*.

The challenges are real. The soon-to-be-released *Watershed Report Cards* share some of those challenges as well as some of the successes. The report cards share ideas, watershed by watershed, about how we can continue to build momentum to create the resilient watersheds we need for the health of plants, animals, and people.

Ausable Bayfield Conservation Authority (ABCA) – New Staff Members – 2017



Daniel King

Regulations
Coordinator



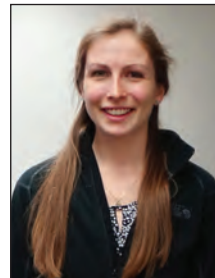
Tommy Kokas

Water
Resources
E.I.T.



Deb Brown

Conservation
Educator



Marlee Sauder

Assistant Water
Resources
Technician
(Summer position)



Sean Willis

Conservation
Lands
Assistant
(Summer position)



Alexis Wilbee

Junior
Conservationist
(Summer experience
position)

Best wishes to retiring staff, and former staff making changes

Ausable Bayfield Conservation Authority (ABCA) wishes all the best to staff who have retired in 2017 or who have left the organization to pursue new jobs or to achieve other life goals.

ABCA gave well wishes and a *bon voyage* to Alec Scott, ABCA's Water and Planning Manager, and Sandra Funk, Corporate Services Assistant, who retired, in 2017, after decades of dedicated service.

Also leaving Ausable Bayfield Conservation for other career and life opportunities were:

Brock Spencer – Water Resources Engineer

Staff Report

Andrew Bicknell – Regulations Coordinator
Cameron Irvin – Water Quality Technician
Rachael Scholten – Stewardship Technician
Rob Carnegie – GIS Technician
Brynn Upsdell-Wright – Water Quality Specialist

We wish all the best to Alec, Sandra, Brock, Andrew, Cameron, Rachael, Rob, and Brynn and congratulate them on entering new chapters in their lives. You will be missed!

Retiring Water and Planning Manager Alec Scott gave 35 years of dedicated service to Ausable Bayfield Conservation Authority

Alec Scott was the first Professional Engineer hired at Ausable Bayfield Conservation Authority (ABCA). Alec served with distinction at ABCA for 35 years before his well-earned retirement in 2017.

"It is not possible to fully replace someone like Alec, who has served this watershed community well for more than three and a half decades," said ABCA General Manager and Secretary-Treasurer Brian Horner. "We appreciate Alec's leadership role over the past 35 years and his current leadership role in training and knowledge transfer as Ausable Bayfield Conservation enters a new era and Alec begins his well-deserved retirement."

Geoffrey Cade, former Water and Planning Supervisor, assumed the managerial position to replace Alec as of December 18, 2017. "I have



Alec Scott (second from left), shown with wife Valeri and ABCA Past Chair Mike Tam and GM Brian Horner at open house to honour Alec's 35 years of service.

learned a great deal from Alec and I am honoured to follow him in this position," Geoff said. "I also appreciate the time he is taking to share his extensive knowledge and insights going forward into 2018 ... which makes the transition as seamless as possible."

Sixteen groundwater monitoring wells in watershed

By Davin Heinbuck, Lands and Water Technologist

The 2001 Provincial Groundwater Monitoring Network (PGMN) initiative is a continued partnership between conservation authorities and the Ontario Ministry of the Environment and Climate Change (MOECC) that maintains a network of more than 400 groundwater monitoring wells across the Province of Ontario.



Davin Heinbuck

Ausable Bayfield Conservation Authority (ABCA) has 16 wells throughout the watershed: five bedrock wells and 11 overburden wells. Hourly groundwater level data has been logged for nearly 16 years at most well sites. Groundwater data is downloaded on-site by staff, or GOES (Geostationary Operational Environmental Satellite) satellite at selected sites where real-time data such as rainfall is required.

Groundwater level data shows annual cycles are consistent and highlights the critical annual recharge periods of autumn and spring. Long-term groundwater levels have remained relatively stable over the monitoring period, but the degree of groundwater level changes in a single year has shown more variability. These changes are driven by weather patterns such as periods of drought or higher-than-normal precipitation. Based on the program's relatively short period of record it is challenging to determine long-term trends.

Groundwater Resources and the Provincial Groundwater Monitoring Network (PGMN)

Water quality sampling is another critical component of the PGMN and the ABCA has groundwater quality data available for each well from 2003 to 2017. To match the core requirements province-wide, water quality is analyzed for nutrients, metals, and general chemistry. Exceedence notices are issued to the landowner and the respective municipality and local health unit when water quality parameter exceeds the Provincial guidelines. To date, numerous exceedence notices have been issued; but the majority have been for Sodium and Fluoride, which occur naturally in elevated levels throughout much of Southwestern Ontario.

All of the PGMN data collected into 2017 has been reviewed by ABCA staff and corrected as necessary. Water quality and quantity data has been uploaded to the MOECC's public website. Through an interactive map, water level and quality information is available free to the public at this link:

<https://www.ontario.ca/environment-and-energy/map-provincial-groundwater-monitoring-network>

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

Data collection, monitoring supports flooding, drought programs

By Davin Heinbuck, Lands and Water Technologist

Ausable Bayfield Conservation Authority (ABCA), in cooperation with the Ontario Ministry of Natural Resources and Forestry (MNRF), and Environment and Climate Change 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.

The data collection network allows staff to monitor conditions, including water levels and precipitation, throughout the watershed. Computerized monitoring systems, in the field, transmit information by telephone or satellite directly to the office east of Exeter. The ABCA network consists of the following:

- Fourteen automated monitoring stations, 12 of which are for water level.
- Most stations monitor a combination of precipitation, temperatures, and other meteorological sensors.

Water Level and Streamflow Monitoring

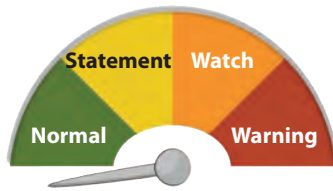
- One dedicated climate monitoring station (in cooperation with MOECC).
- Approximately 20 volunteer rain gauge readers provide information through a web-based data entry system.

Data is archived in a system called Watershed Information System Kisters (WISKI). The ongoing monitoring programs continue to provide information for the Ontario Low Water Response (OLWR), Flood Forecasting and Warning, and other conservation authority programs. Monitoring of precipitation and water quantity within the watershed ensures we have early indications of any potential flooding (or low water conditions) so that Flood Messages or Low Water Advisories can be provided to our watershed municipalities in a timely manner.

Ice jam near Port Franks backed up water onto local properties

By Davin Heinbuck, Lands and Water Technologist

The winter of 2016-2017 was milder than usual and characterized by periods of snow, followed by warmer weather. This resulted in several minor snow melts over the course of the winter.



The most substantial snowpack of the winter was in early January. However, a brief warm-up on January 12 and 13, 2017, combined with nearly 30 millimetres (mm) of rain, saw the snowpack disappear and contribute to high runoff and stream flows. These flows, while not unusual, were enough to break-up and move the thin river ice. An ice jam formed on the Ausable River at Highway 21, just upstream of Port Franks, backing water up onto numerous properties to the east of the bridge. The jam eventually broke through and water levels receded without causing further problems downstream. Ausable Bayfield Conservation Authority issued a Flood Warning on January 13 with respect to the ice jam.

The other notable flood event of 2017 occurred in early May. Stream flows were slightly below those seen in January, but the flooding could have been much

Flood Forecasting and Warning



Broken-up ice is shown on the Ausable River (at left) and Bayfield River (at right) on January 13, 2017.

worse. The watershed received 25-45 mm of rain on May 1, and stream flows were high. A second related weather system came through on May 4, with forecasts of 50-75 mm of rain. A Flood Watch was issued. Fortunately, observed rainfall was close to 30 mm, and no major flooding was experienced.

While both events resulted in high flows, only a few road closures were reported, with most flooding limited to traditional low-lying flood plain areas.

In total, ABCA issued nine *Watershed Conditions Statement – Flood Outlook/Water Safety* messages; one *Flood Watch*; and one *Flood Warning*.

Flood emergency planning meeting helps partners to prepare

By Davin Heinbuck, Lands and Water Technologist

Ausable Bayfield Conservation Authority (ABCA) hosted the annual Flood Emergency Planning meeting at the Masonic Hall in Exeter on February 23, 2017.

The conservation authority invited ABCA member municipalities and other stakeholders to attend and take part in the meeting. More than 20 attendees included representatives from seven watershed municipalities as well as staff and/or Community Emergency Management Coordinators (CEMCs) from three counties. Local media also attended.

Gus Rungis, Senior Water Resources Engineer with the Grand River Conservation Authority (GRCA), was keynote speaker. He described how GRCA developed Flood Warning Zone maps for areas prone to flood problems, most notably along the Nith River in the towns of Ayr and New Hamburg. The GRCA has worked with municipalities to educate residents and provide better forecasts for the flood-prone areas. The new mapping contains better ground elevation information, allowing GRCA to produce maps showing the areas or zones that would be flooded during different flow events. These zones can be identified in flood messages

Flood Emergency Planning



More than 20 municipal officials, emergency coordinators, and reporters attended the Annual Flood Emergency Planning meeting. Gus Rungis, of Grand River Conservation Authority (GRCA), spoke on the development of flood warning zone maps at GRCA. GRCA sends out. By working with the municipalities, they were able to create lists identifying properties, owners, and contact information.

ABCA staff reported on the conservation authority's roles and responsibilities in flood emergencies, defining flood messages, ABCA flood communication testing, and current watershed conditions.

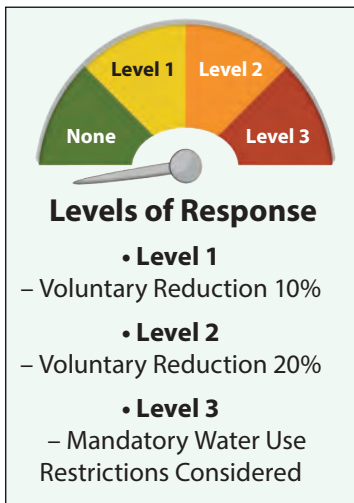
The annual Flood Emergency Planning Meeting continues to provide a forum for discussion and planning to make all agencies better prepared to deal with flooding emergencies.

Water Response Team issues no Low Water Advisories in 2017

By Davin Heinbuck, Lands and Water Technologist

Ausable Bayfield Conservation Authority, in 2017, continued to be involved in the Ontario Low Water Response program. The OLWR program was created after extreme dry conditions hit parts of Ontario in 1999.

The Low Water Response Team (WRT), for the ABCA area, is made up of representatives of provincial agencies, municipalities; 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.



Ontario Low Water Response (OLWR)

During the year, the WRT held one meeting and was provided monthly watershed condition reports.

The Level 1 Low Water Advisory, remaining in effect since the autumn of 2016, was ended by the WRT in May of 2017. With the exception of late summer, weather was generally wetter than normal, and no Low Water Advisories were issued.

About 20 volunteer rain gauge readers provide valuable information on the extent and amount of precipitation received in the watershed.

The OLWR program continues to provide the public and member municipalities with information on the condition of our watersheds in relation to possible drought problems. When there are higher stresses on water resources – including surface water such as creeks, rivers, and Lake Huron and groundwater in aquifers (below our feet), the Water Response Team issues low water advisories of level 1, 2, or 3.

For practical water conservation tips, visit the water quantity page at abca.ca.

Inspection, maintenance of structures helps flooding protection

By Ross Wilson, MSc, PAg, CCA-ON, Water and Stewardship Technologist

Ausable Bayfield Conservation Authority (ABCA) inspected and performed maintenance on water and erosion control structures owned or constructed by the ABCA. This work is part of the ABCA mandate and agreements with watershed municipalities. This work included Parkhill Dam, Morrison Dam, a number of flood control channels, and erosion control structures in various parts of the watershed.

Most of the inspections and actual maintenance

Structures, Operations, and Maintenance

work are carried out by conservation authority staff unless it is determined that it would be more efficient to contract out the work to local companies. As a result of the inspections, minor repairs were completed on a number of structures by conservation authority staff. Work included vegetation control around structures and general minor repairs to prevent larger maintenance problems in the future.



The photo at left shows a project, at Stewart Gully, to stop gully erosion that might otherwise impact a municipal road. Above, the photo shows Morrison Dam after flooding moved some protective riprap that was out of place.

Geotechnical Stability Assessment study is completed in 2017

By Ross Wilson, MSc, PAg, CCA-ON, Water and Stewardship Technologist

Since 2003, the Ontario Ministry of Natural Resources and Forestry's Water and Erosion Control Infrastructure (WECI) funding program has been available to fund major maintenance work on conservation authority flood and erosion control projects. Under this program the Ausable Bayfield Conservation Authority can apply for 50 per cent grant funding for major maintenance projects.

In 2017, one WECI study and one repair were undertaken.

- A Geotechnical Stability Assessment study for Morrison Dam was needed to comply with current Canadian Dam Safety Guidelines and Ministry of Natural Resources and Forestry Guidelines. The minimum stability Factors of Safety were met in all cases, so no remedial action was required.

Water and Erosion Control

The consultant recommended continued monitoring of the dam be completed on an annual basis to ensure that the embankments remain stable.

- Repairs to the Parkhill Dam were required in two locations: on the concrete walkway to the control tower and on the downstream stilling basin. Repairs were completed by a local contractor in November, prior to freeze-up.
- The ongoing inspection and maintenance work on Flood and Erosion Control projects ensures that the structures will continue to protect watershed residents from flooding and erosion hazards into the future.



ABCA Planning and Regulations Officer Meghan Tydd-Hrynyk talks to interested people at the shoreline management open house in Zurich on June 3, 2017. Staff answered questions on topics such as water quality issues and community actions to improve water quality; Lake Huron water levels; effects of a changing lake for cohesive bluffs and dynamic beach systems; how average annual recession rates are measured and mapped along the shoreline; current local and provincial policies; and how lakeshore hazards such as flooding and erosion are determined in the current *Shoreline Management Plan* (2000).



About 220 people attended two shoreline management public open houses in June 2017, in Zurich and Thedford. Presenting at the open house on June 17, 2017, in Thedford, were, left to right, Dr. Robin Davidson-Arnott, Professor Emeritus, University of Guelph, and coastal engineer Fiona Duckett, M.Sc., P. Eng., of W. F. Baird and Associates Coastal Engineers Ltd. They are shown with Deputy Mayor Doug Cook, of the Municipality of Lambton Shores, and Geoffrey Cade, then Supervisor of Water and Planning with Ausable Bayfield Conservation Authority. Staff answered questions at mapping stations and displays.

ABCA continues work to update Shoreline Management Plan

By Geoffrey Cade, Manager of Water and Planning

Ausable Bayfield Conservation Authority (ABCA) continued work to update the existing *Shoreline Management Plan* (SMP) which has been in place since 2000.

As part of the work plan for moving forward, as approved by the Board of Directors, we held two public open houses in June. Both meetings, one in Zurich and one in Thedford, generated significant interest and were very well attended.

At the meetings, residents heard presentations regarding shoreline processes and shoreline protection structures. Computer stations, showing updated (draft) mapping, were also available and this allowed residents to view their own properties. Following presentations, attendees were able to ask questions of ABCA staff and of its consultants.

Moving forward, it is expected that draft development guidelines will be prepared for review by the ABCA Board of Directors and for public comment. Work is also expected to start on consolidating the information compiled to date and start preparation of the formal SMP Update Report.



Geoffrey
Cade

Municipal Plan Input/Planning Report and Shoreline Management Plan (SMP) Update

By the numbers – Planning 2017

Minor Variances	29
Severances	31
Official Plan/Zoning Bylaw Amendments; Stormwater Management	20
Formal Inquiries	90

When complete and approved, the SMP will represent the most recent and accurate shoreline data, help staff implement ABCA regulations, inform public and ultimately identify means to safely develop or redevelop the Lake Huron shoreline.

In general, Municipal Plan Input program (planning application) activities continued at a level consistent with previous years. Much of the development does continue to take place along the Lake Huron shoreline.



Aerial photography provides valuable information on changes over the years – including shoreline erosion (recession) and changes in land uses. Mapping can also inform stewardship efforts.



Young people at the International Plowing Match and Rural Expo in Walton in 2017 learned about watersheds and topography in the conservation authority tent with the interactive augmented reality digital sandbox.

Mapping, GIS analysis completed for 2018 Watershed Report Card

By Tracey McPherson, GISP, GIS/IT Coordinator

“Maps are like campfires – everyone gathers around them, because they allow people to understand complex issues at a glance, and find agreement about how to help the land.”

– Sonoma Ecology Center

Geographic Information Systems (GIS) and information technology (IT) services at Ausable Bayfield Conservation Authority ensure information, and access to information, are available now and in the future.

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

All staff members have access to GIS information through an internal mapping application called GeoPortal. Individual GIS staff members work hard to keep data layers up to date, create and link databases, create maps, and complete project-specific analysis.

Information Technology, or IT, provides all computer networking and hardware and software support to staff. IT is responsible for:

- Purchasing of all hardware and software.
- Maintenance of all hardware and software.
- Troubleshooting issues.

Geographic Information Systems (GIS) and Information Technology (IT)



Tracey
McPherson

GIS actions taken in 2017:

- Completed mapping and data requests for staff, consultants, and partners.
- Updated wetland features.
- Presented mapping, answered questions at Shoreline Management Plan open houses.
- Completed GIS analysis and mapping for updated Watershed Report Cards.
- Transferred knowledge to other Lake Huron CAs on ABCA GIS analysis and mapping for creek walks used to direct stewardship efforts.
- Provided mobile data collection solutions to Ausable Bayfield Conservation Authority staff.
- Programmed scripts to automate tasks, analyze data.
- Purchased a large format scanner and plotter.

GIS Results:

- Created quality data, supporting decisions.
- Ensured a robust, secure, ongoing network support system.
- Collaborated with partners to complete projects.
- Supported internal projects, data collection.

Higher water levels, erosion continued in 2017

By Daniel King, Regulations Coordinator

High water levels and erosion on the Lake Huron shoreline, that we saw in 2016, continued through 2017.

Water levels greater than the long-term mean continued in 2017, but Lake Huron did not experience the record-setting water levels seen in other lakes of the Great Lakes-St. Lawrence Basin. After about 15 years of relatively low lake levels, above-average lake levels were seen starting in 2016 and they have continued. While higher than what many residents of the shoreline have seen in recent years, these levels remain within the expected range of variation for the Michigan-Huron system.

The combination of higher lake levels and natural erosion process has reduced the width of a number of beach areas within the shoreline regulated by the Ausable Bayfield Conservation Authority (ABCA). In the few locations where the bluff has been exposed and weathered the resulting slope failures are salient reminders of the importance of directing development away from hazardous zones on the shoreline as well as inland. This is the intention of the Ausable Bayfield Conservation Authority's *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation* (Ontario Regulation 147/06). It ensures that new development within areas – such



Daniel King

Ontario Regulation 147/06 – Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses

2017:

- 111 applications for permission
- 86 minor work permits
- 13 drain reports reviewed
- 24 drain maintenance reviews
(Standard compliance requirements)

as wetlands, flood-prone areas, and river and stream valleys – affected by natural hazards, as well as the Lake Huron shoreline, is designed and implemented using best practices and appropriate technical expertise; minimizing risk to people and property.

We continue to encourage developers, contractors and landowners to contact the ABCA early in the process of development to consult with staff on any proposed works in regulated areas. Often, potential conflicts with the regulation can be addressed by changes which, if made early, are smaller and less costly than reviews after more expensive drafting and planning has been done. The ABCA also continues to offer a service to prospective property purchasers and real estate agents to explain the relevant regulation and how that may apply to future plans a buyer has for a property they are considering.



Lake levels continued to be relatively high in 2017. Erosion was also present along much of the shoreline.

Changes to municipal water systems lead to need for updates to Ausable Bayfield, Maitland Valley Source Protection Plans

By Geoffrey Cade, Program Supervisor, Ausable Bayfield Maitland Valley Source Protection Region

Drinking water source protection in this region requires us to update current technical and mapping information and to implement policies developed by the Ausable Bayfield Maitland Valley Source Protection Committee.



Geoff Cade

Since provincial approval of Ausable Bayfield and Maitland Valley Source Protection Plans, on January 19, 2015, there have been changes to six well systems in the Ausable Bayfield Maitland Valley Source Protection Region. Some wells have been decommissioned and others have switched from production to back-up wells. A new production well has been drilled in Blyth and, in Varna, the Municipality of Bluewater has assumed a former community well.

These changes have meant that an update was needed to the source protection plans and mapping, through an amendment process. We notified property owners, in these wellhead protection areas, by mail. Public open houses were scheduled to take place in Blyth and Varna in January 2018.

After the 35-day-comment period, which was scheduled to end on February 8, 2018, the amended source protection plans are to be sent to the Ontario Minister of the Environment and Climate Change for approval to include these new and revised wellhead protection areas (WHPAs) in the locally-developed, provincially-approved plans.

The Source Protection Committee is welcoming three new members with a wealth of experience and community involvement. Bert Dykstra and Mary Ellen Foran are new representatives from the agriculture sector and Jennette Walker joins the committee as an environment representative. We welcome the depth of expertise these people bring to the committee.

The drinking water source protection (DWSP) staff has an excellent working relationship with all levels of municipal and county staff in the counties and municipalities with whom we work. Regular communication allows for transmitting of information and the answering of questions in a timely manner.

Risk Management Officials (RMOs) Donna Clarkson and Mary Lynn MacDonald continue to work with municipalities, landowners, business people, industry and others to provide education and outreach

Drinking Water Source Protection



Ausable Bayfield
Maitland Valley
Source Protection Region

and to develop risk management plans (RMPs) and prohibition agreements. Restricted Land Use Notices required by properties in wellhead protection areas, for zoning changes or building permits, are completed as quickly as possible, by the RMOs, for county planning staff and municipal building officials to proceed with paperwork for landowners and persons engaged in activities. This also affords an opportunity to educate about drinking water source protection and reach out to owners, contractors, and consultants as well.

With Alec Scott's well-deserved retirement, there has been some reorganization of roles in various departments at Ausable Bayfield Conservation Authority and I have taken over as Water and Planning Manager. In January of 2018, Donna Clarkson and Mary Lynn MacDonald will assume the positions of Co-Supervisors of the DWSP program in this region.

Results:

- We have reduced risk from a number of activities that could contaminate local municipal drinking water sources if not properly managed. A risk management plan is one of the tools we have used to reduce risk to our local drinking water sources in the most vulnerable areas around municipal wells. We have worked cooperatively with landowners to develop and implement effective, practical, realistic risk management measures.

Find out more:

- If you are located close to a municipal well and would like to learn if plan policies apply to you, or how to protect water sources, visit sourcewaterinfo.on.ca or email info@sourcewaterinfo.on.ca or phone 1-888-286-2610 to speak to Donna or Mary Lynn.



Water quality monitoring by staff, made possible with community support, helps to provide data on trends. This helps us to evaluate success and focus our efforts.

Phosphorus loadings in Gully Creek reduced by 25 per cent

By Mari Veliz, Healthy Watersheds Supervisor

Our local communities continue to support activities that enhance, and help us to learn about, the health of water, soil, and living things in our watershed. In some cases, federal, provincial and municipal agencies support environmental monitoring activities. In other instances, local community members want to collect the information themselves. The Healthy Watersheds Team facilitates both types of data collection (Table 1). Some community groups consider the monitoring results and take the next step of supporting individual and community actions that are known to improve water quality and freshwater habitat (Table 2).



Mari Veliz

Some of the aquatic monitoring data is summarized every five years for the *Ausable Bayfield Watershed Report Card*. (Watch for updated new Report Cards in 2018!) This coarse level of evaluation helps us to understand if there are broad ecosystem changes. In 2017, the Healthy Watersheds Team worked with researchers from the University of Guelph to develop an ecosystem model. Preliminary findings from the study showed that the installation of 44 (!) water and sediment control basins (or berms) in Gully Creek since 2010 have reduced phosphorus loadings by 25 per cent. Ongoing field-scale research helps to verify the effectiveness of agricultural best management practices, such as reduced tillage and improve the ecosystem models. Improved models are important because it is difficult and expensive to monitor everywhere. Ecosystem models can help to explain environmental conditions in broader areas over longer time-frames. Watch for recent water quality and biological results at abca.ca.

Watershed Communities Taking Action

Table 1: 2017 ABCA Water Quality and Bio-monitoring Stations

Type of station	Number
Dry Weather – water quality	33
Wet Weather – water quality	14
Best Management Practices Verification	8
Citizen Science	9
Fish	55
Reptiles (turtles)	4
Benthic macroinvertebrates	30

The number of stations reflects the funding commitments from year to year and there may be overlap between types.

Table 2: 2017 Community Outreach by ABCA Healthy Watersheds Team

Community Outreach	Number
Community Groups	8
Community Events	19
Watershed Communities in Action*	5

* Bayfield, North of Bayfield, Ailsa Craig, Grand Bend, Port Franks

Community outreach is also critical to improving our local environment, as we typically see more conservation actions taken when there is financial and technical support for individuals. Healthy Watersheds staff members continue to help communities with their activities (e.g., events and monitoring) (Table 2).

Agricultural BMPs have reduced phosphorus, nitrogen, sediment

By Daniel Bittman, Water Quality Technician

In 2017, the Ausable Bayfield Conservation Authority (ABCA) continued to demonstrate the effectiveness of vegetative cover and Water and Sediment Control Basins (WASCoBs) in reducing sediment and nutrient concentrations in temporary channels and watercourses in Huron County.



Daniel Bittman

A Great Lakes Agricultural Stewardship Initiative (GLASI) project, funded by the Ontario Soil and Crop Improvement Association (OSCIA), reported reductions in the peak flow rate into and out of a WASCoB of up to 97 per cent. Past research had suggested that a WASCoB may reduce phosphorus

Measuring Rural Best Management Practice Effectiveness in Huron County

and sediment in surface runoff before it leaves the field through a tile inlet (e.g., Hickenbottom®) in the basin. These results were substantiated by researchers from the University of Guelph, who developed a computer model that showed significant reductions in phosphorus, nitrogen, and sediment due to implementation of agricultural BMPs in Gully Creek over the last 15 years. The GLASI study also found that there may be reduced runoff opportunities when fields are covered with vegetation compared to when they are not covered.



The Huron County Demonstration Farm near Clinton, Ontario – thanks to partners such as the County of Huron and the Huron Soil and Crop Improvement Association – is a place to study cover crops and soil health.

Projects in priority subwatersheds highlight importance of soil health

By Abigail Gutteridge, Healthy Watersheds Technician and Ross Wilson, MSc, PAg, CCA-ON, Water & Stewardship Technologist

The importance of healthy soils has continued to be at the forefront of the agricultural sector in 2017. The Great Lakes Agricultural Stewardship Initiative Priority Subwatershed Project (GLASI PSP), implemented by the Ontario Soil and Crop Improvement Association (OSCIA), wrapped up its third and final year in 2017. This project saw the implementation of 20 best management practices (BMPs) in the Gully Creek. All BMPs (e.g. reducing tillage, applying organic amendments to the land, and phosphorus management) were aimed at improving soil health and, ultimately, surface water quality.

Ausable Bayfield Conservation Authority has continued to study soil health in our watershed area. In 2017, efforts were focused on the Huronview



Abigail Gutteridge



Ross Wilson

Soil Health

demonstration site in the Main Bayfield watershed. The ABCA has been working with the Huron Soil and Crop Improvement Association (HSCIA) to improve soil health at this site. Yield mapping from 2016 was used to establish two soil sampling transects. Five sample sites in each transect were chosen along a yield gradient. Two additional control sites were sampled in the nearby cemetery. The soil health metrics included: percentage soil organic matter, wet aggregate stability, infiltration, bulk density, porosity, and resistance to penetration. A respiration test was also completed at these sites. Results showed that the benchmark sites had overall better organic matter and infiltration rates, with little discrepancy in these metrics in cropped field conditions based on yield. With a broad range of values, infiltration rates seem to provide a good indication of soil health. Ausable Bayfield staff look forward to continuing to work with HSCIA to measure soil health conditions as BMPs are implemented at this demonstration farm.

Bayfield takes action to slow stormwater in rural and urban areas

By Hope Brock, Healthy Watersheds Technician

Residents of Bayfield and area were able to implement recommendations from the *Main Bayfield Watershed Plan* in 2017 thanks to funds from the Fred A. and Barbara M. Erb Family Foundation, Environment and Climate Change Canada, and the Ontario Ministry of the Environment and Climate Change. To help slow down and filter urban stormwater, 35 student and adult volunteers planted 500 plants into a rain garden at Sloman Park in Clinton.



Hope Brock

A watershed walk took place in the rural Steenstra

Port Franks and Bayfield

Drain subwatershed where 16 best management practices were identified to help manage stormwater. Throughout the larger Main Bayfield watershed, landowners installed eight berms, planted 1,440 trees and shrubs, and 473 acres of cover crops. Citizen scientists collected water samples at three stormwater outfalls along the Bayfield beach 13 times from June through August. The Blue Bayfield community group successfully hosted a Bayfield Sustainability Summit, for 100 attendees, which included keynote speaker Maude Barlow.

Port Franks and the Municipality of Lambton Shores protect turtles

By Kari Jean, Aquatic Biologist and Hope Brock, Healthy Watersheds Technician

The turtle monitoring program, and the great work of all the volunteers, helps Ausable Bayfield Conservation Authority (ABCA) biologists to better understand the turtles, and the habitats they use.

In 2017, there were 143 reptile sightings in the Grand Bend-Port Franks area. Funding is gratefully acknowledged from the Ausable Bayfield Conservation Foundation. The ABCA provided nest protection cages to five homeowners who observed turtles laying eggs on their property, and at least 15 hatchlings were safely returned to the nearest watercourse after emerging.

Community-Based Turtle Monitoring

Six volunteers invested more than 400 hours of monitoring the turtle exclusion fencing along Outer Drive. More than 100 turtle sightings were documented with seven turtle species observed. Only five turtles (one dead; four alive) were found on the road, and in all cases these turtles were found where the fencing is only on one side of the road (due to laneways and guiderail). These results are encouraging given that in previous years reported incidental sightings have been as high as 20 turtles on the road (six dead; 14 alive).

Three fish species at risk in OAC – Monitoring, education take place

By Kari Jean, Aquatic Biologist and Leslie Coleman, Water Resources Technician

The Old Ausable Channel (OAC) is one of the few remaining locations in Ontario where Pugnose Shiner, Lake Chubsucker, and Grass Pickerel – three fish species at risk (SAR) – can be found. Monitoring the habitat conditions and status of these SAR fishes is necessary to make informed management decisions involving the OAC.

We conducted intensive habitat monitoring at 72 locations with use of data loggers and hand-held equipment to better understand dissolved oxygen concentrations and water quality in the OAC in different seasons.



Kari Jean



Leslie Coleman

Ausable River Recovery – Fisheries Monitoring and Community Outreach

In partnership with Fisheries and Oceans Canada, fish surveys were conducted at 36 locations in the Ausable River watershed to investigate the presence of SAR fishes. Although no SAR fish were found, this monitoring provided important fish community data in areas where very little sampling has previously been done.

Education and outreach events were hosted in Grand Bend, Ailsa Craig and Port Franks to provide information to community members about Ausable fish and reptile species, some of their habitat threats and ways to protect aquatic species at risk.



Above is a Bayfield-area municipal drain – one of the 15 drain classification study sites that were assessed by Ausable Bayfield Conservation staff in 2017.



This juvenile Northern Pike was found in a local drain during the 2017 drain classification study. Fish are identified, measured and returned to the watercourses.

Perches, Sunfish, Northern Pike among fish species in drains

By Kari Jean, Aquatic Biologist

Many rural watercourses in Ontario have been designated as municipal drains. Drains are classified into categories developed by Fisheries and Oceans Canada (DFO). Classification is based on a drain's flow characteristics and types of fish living within it and helps to determine the best time of year for drain maintenance activities.

Fish Living in Municipal Drains

Fisheries and Oceans Canada provided funding in 2017 that allowed Ausable Bayfield Conservation Authority (ABCA) to complete fisheries assessments in 15 drains. Types of fish found in the drains included different species of minnows, Perches, Sunfish, and – in one case – Northern Pike.

Wetlands initiative completes tenth year; six acres restored in 2017

By Angela Van Niekerk, Wetlands Specialist

The Healthy Headwaters Wetlands Initiative provides technical and financial assistance to landowners to enhance wetlands. Since 2008, staff – working with landowners – have completed 65 wetland projects in the Ausable Bayfield area. We have worked with landowners and funding partners to restore more than 240 acres of wetlands and, together, we have planted native plants on another 485 acres of riparian and fragile lands.



Angela
Van Niekerk

Less than two per cent of wetlands in Southwestern Ontario remain from pre-settlement times. Development and rural land use pressures have resulted in the loss of wetlands across our watershed. In 2017, we restored three wetlands (1.5 acres), created a rain garden in Clinton, and planted five acres of Tallgrass Prairie next to a 2016 restored wetland. We planted native plants on another 27.5 acres of fragile wetland edge and riparian habitat. More than 100 students and volunteers planted in three riparian wetland areas.

Efforts by local landowners, to enhance small natural areas, help to reduce downstream flooding and erosion and recharge groundwater.

Wetlands

The 2017 restorations were funded through Great Lakes Guardian Community Fund, Habitat Stewardship Program for Species at Risk, Lake Huron Georgian Bay Framework for Community Action, and Ducks Unlimited Canada.

The Huron County Coastal Wetland Assessment project, funded through the Ontario Ministry of Natural Resources and Forestry (MNRF; Guelph District Office), helps to improve wetland mapping in Huron County. The Huron coastal wetlands have been mapped by air photo interpretation but had not been verified previous to 2015. We are verifying the mapped wetlands through site visits to landowners' properties to collect vegetation data.

In 2017, 68 site visits were completed to enhance aerial photography assessment. Forty-six wetland areas were more accurately mapped across the Ausable Bayfield and Maitland Valley watersheds.

Thanks to local property owners for protecting and enhancing their wetlands and providing us with the opportunity to more accurately represent these important natural areas.

I would also like to express my personal appreciation to Rachael Scholten, former Stewardship Technician, for all her help with the wetlands program in 2017.

First-ever cover crop on ABCA farmland

By Kate Monk, Stewardship, Land and Education Manager

The Ausable Bayfield Conservation Authority (ABCA), Huron County Clean Water Project, and tenant farmer Jason Regier shared the costs of a multi-species cover crop at Linfield Wildlife Area in 2016-2017. With rolling terrain, the roots and biomass protect the soil during the off-season from wind and water erosion while improving soil health. The Huron County Water Protection Steering Committee visited the property on June 16, 2017 as part of their annual tour. The farm demonstrates how natural heritage and agriculture can co-exist to protect the environment and grow crops.



Kate Monk

Conservation Land Management



Crimson clover in the multi-species cover crop caught the eyes of hikers and passersby at the Linfield Wildlife Area.

Community groups support recreation areas in local watershed

By Kate Monk, Stewardship, Land and Education Manager

Ausable Bayfield Conservation Authority has significant partnerships with Lions Clubs throughout the watershed that improve the conservation areas and allow the properties to stay open for public recreation and education, such as:

- Clinton Lions Club at Clinton Conservation Area.
- Parkhill Lions Club at the Parkhill Reservoir Scenic Lookout.
- Arkona Lions Club at Rock Glen Conservation Area.
- Exeter Lions Club at South Huron Trail.

The Lambton Shores Nature Trails group continued to care for nature trails on ABCA property in the Port Franks and Ausable Gorge areas.

Two sections of stairs were replaced at Rock Glen Conservation Area (RGCA) with funding from the ABCA and Ausable Bayfield Conservation Foundation. Attendance at RGCA continues to increase with tourists and students. New displays at the Arkona Lions Museum and Information Centre at RGCA bring new people to the park.

Caring for the land and people

Control of invasive *Phragmites australis* was completed on ABCA properties in Port Franks and North Middlesex. Hazard trees (mostly Ash) were removed along nature trails at several conservation areas.



In photo above left, Ausable Bayfield Conservation Field Services staffer Tony Drinkwater installs a no-motorized-vehicle sign at Ausable River Cut Conservation Area. The vehicle ban protects the sensitive dune habitat. In photo above right: Ausable Bayfield Conservation Foundation, and ABCA, funded the replacement of two sections of stairs at Rock Glen Conservation Area.

The Board of Directors approved a new risk management policy for ABCA properties. The document will formalize best practices for ensuring the properties are safe for public use.

Schools, municipalities, staff work together to add forest cover

By Ian Jean, Forestry and Land Stewardship Specialist

Ausable Bayfield Conservation Authority (ABCA) staff work in partnership with schools, community groups, and municipalities to facilitate tree planting projects and events throughout the watershed. Several are highlighted below:



Ian Jean

Tree Planting and Outreach with Schools, Community Groups, and Municipalities

- **Bluewater:** Ausable Bayfield Conservation planted 120 trees along roadsides targeted mainly to Lake Huron access roads with no trees.
- **South Huron:** To diversify the conifer plantation adjacent to the South Huron Landfill, Ausable Bayfield Conservation planted 250 hardwood trees. South Huron Communities in Bloom purchased 310 trees through the ABCA Tree Program for their spring-season sale.
- **Central Huron:** 120 trees were ordered for planting in a naturalized area.
- **Lucan Biddulph:** 1,500 trees planted by ABCA on a 2.5-acre retired hay field owned by the municipality. Eighty-seven trees were purchased in the autumn for the Parks and Roadsides tree replacement initiative.
- **Lambton Shores:** Provided 33 trees, 20 shrubs, and 108 native wildflowers for establishing windbreak and pollinator planting at Klondyke Sportsfield (coordinated by Lakeshore Eco Network).
- **Grand Bend Public School:** Students received outdoor education from Ausable Bayfield Conservation staff and participated in the planting of 100 trees to enhance a wildlife corridor at Merrywood Farms near Grand Bend.

Ausable Bayfield Forest Management Plan updated in 2017

By Ian Jean, Forestry and Land Stewardship Specialist

Ausable Bayfield Conservation Authority is the largest owner of forested land in the watershed with more than 8,000 acres of forest. This represents about 10 per cent of the forested area in the watershed. Approximately 5,000 acres are enrolled in the provincial Managed Forest Tax Incentive Program.

The *Ausable Bayfield Forest Management Plan* is the guiding document for management of authority-owned forests. The plan is updated at 10-year intervals and this was completed in 2017. The main changes were to update mapping for several properties and to prepare an updated 10-year operations schedule. Active management, including selective thinning timber harvest, is pursued on between 100 and 200 acres annually. Revenue from timber sales helps offset costs of land ownership.

The main management objective continues to be to salvage timber from dead Ash trees killed by the Emerald Ash Borer. In August and September, Miller Wood Products of Exeter conducted an Ash salvage/improvement cut at Willert-Ross Tract in Hay Swamp. A total of 459 trees was cut, including 309 Ash trees.

At Ratz Tract, Miller Wood Products cut 248 trees (80 Ash) from the southern portion along Kirkton

Forest Management on ABCA Lands

Road. Revenue from the operations was \$16,525 and \$15,000 respectively.

The retention of trees to provide habitat, food sources, or other significant characteristics is important when marking trees for harvest. At Ratz Tract, a handful of Ash trees with live crowns were left to grow in case the trees may be showing a measure of resistance or tolerance to the Borer. ABCA does not permit timber harvest between April 1 and July 1 due to it being the primary breeding season for birds, amphibians, and other wildlife.

Most of the remaining authority-owned forest is enrolled in the provincial Conservation Land Tax Incentive Program. Management is hands-off in order to protect the significant features for which they are designated. Efforts are ongoing to locate and monitor species at risk. In 2017 conservation authority staff members were successful in obtaining funding from the Species at Risk Stewardship Fund. The funding supported field work to locate and map two rare forest plants, False Rue-anemone and Heart-leaved Plantain on ABCA properties.

Landowners plant tens of thousands of trees, providing benefits

By Ian Jean, Forestry and Land Stewardship Specialist

Many watershed residents continue to improve and restore the watershed by planting trees. Conservation authority staff planted almost 24,000 trees at 50 project sites throughout the Ausable Bayfield watershed area. In addition, landowners purchased and planted more than 16,000 trees through the spring and fall tree programs. There were 225 individuals or businesses who ordered trees.

During this past year, Ausable Bayfield Conservation Authority (ABCA) staff planted 18 farm windbreaks which will reduce wind and water erosion and benefit water quality. Treed buffers were installed along 16 stream reaches or wetlands. Treed buffers benefit water quality by acting as a physical barrier by slowing and filtering runoff before it enters the watercourse.

Tree Planting Program

Staff planted 16 projects to create, connect or enlarge forests that will contribute to improving forest cover, biodiversity, and forest health. The trees planted by watershed residents, who purchase trees through the conservation authority tree program, are used for many more stewardship projects not counted above.

One of the important roles of conservation authority stewardship staff is to pursue cost-share funding to support these projects. Funding for tree planting was secured from Huron County Clean Water Project, Forests Ontario, Habitat Stewardship Program for Species at Risk, Great Lakes Guardian Community Fund, and the Species at Risk Stewardship Fund.



Geographer and filmmaker Jennifer Pate, BA, MSc, was keynote speaker at the annual early-evening awards event, hosted by Ausable Bayfield Conservation, and held March 16, 2017. She brought a message, about loving and protecting the Great Lakes, called *'Love Your Greats.'* The Bayfield woman has co-led eXXpedition Caribbean, conducting the first-ever sampling for microplastics in the Caribbean Sea, and has also co-led eXXpedition Great Lakes, the world's largest simultaneous sampling for microplastics in history. She spoke about how harmful microplastics and microfibres from plastic products are heavily concentrated in the Great Lakes. She also provided a message of hope and said solutions are coming from individual citizens who are motivated to join together and develop initiatives such as shoreline cleanups, water sampling, and making positive changes in their personal purchasing decisions.



Conservationist of the Year Award winners Mels and Ruthanne van der Laan have their Cold Stream Ranch farm on McEwen Drive, RR 3 Denfield, Ontario, in the Municipality of Middlesex Centre, Middlesex County.

Shown at the Conservation Awards evening, at Ironwood Golf Club near Exeter on March 16, 2017 are, from left to right; George Irvin, Vice Chair, Ausable Bayfield Conservation Authority (ABCA) Board of Directors; Rachael Scholten, ABCA Stewardship Technician; award winners Mels and Ruthanne van der Laan; and Ian Jean, ABCA Forestry and Land Stewardship Specialist. More than 60 people attended the evening. Wetlands and stewardship staff have worked with the van der Laans for a number of years on ongoing restoration and stewardship projects at their property. The couple's restoration work has been appreciated by neighbours and has inspired at least two other wetland restoration projects.

More than 120 projects completed with help of \$300,000 in grants

By Kate Monk, Stewardship, Land and Education Manager

All staff, of Ausable Bayfield Conservation, play a role in helping landowners and organizations complete projects to improve and protect soil and water quality. They do this by teaching youth, communicating to the general public, monitoring water quality, applying for grants, providing technical advice or planting trees.



Kate Monk

More than \$300,000 in grants supported the completion of 124 conservation projects in 2017. Funding was provided by municipal, federal, and provincial funding programs and foundations.

The International Plowing Match (IPM) and Rural Expo at Walton, in Huron County, from September 19-23, 2017 was the largest public outreach event of the year for stewardship staff. Thousands of people learned about watershed health and actions such as windbreaks, stream buffers, cover crops, and many other positive practices. The Huron County Clean Water Project, and the importance of cover crops, received a boost during a CTV *Fields to Forks* feature in August.

On June 16, 2017 a bus tour by the Huron County Water Protection Steering Committee learned about several stewardship projects in the Municipality of Bluewater including rain gardens, cover crops, windbreaks, ravine reforestation, erosion control, shoreline management and forest management.

Staff controlled invasive *Phragmites australis* for private landowners and the County of Huron.

Private Land Stewardship Program



CTV/Bell Media broadcast journalist Scott Miller interviewed agricultural producers Geoff Strang and Mike Strang for a segment of the *Fields to Forks* television program. They spoke about cover crops and soil health and a project they completed with support of the County of Huron's Clean Water Project.



Huron County Water Protection Steering Committee toured a number of Bluewater projects in 2017.

Stewardship Projects and Grants by Municipality

Municipality	Number of Projects	Grants
Adelaide Metcalfe	1	\$4,570
Bluewater	18	\$20,010
Central Huron	22	\$137,861
Huron East	18	\$12,844
Lambton Shores	7	\$6,532
Lucan Biddulph	3	\$4,348
Middlesex Centre	2	\$3,440
North Middlesex	21	\$78,391
South Huron	30	\$34,200
TOTALS	124	\$302,196

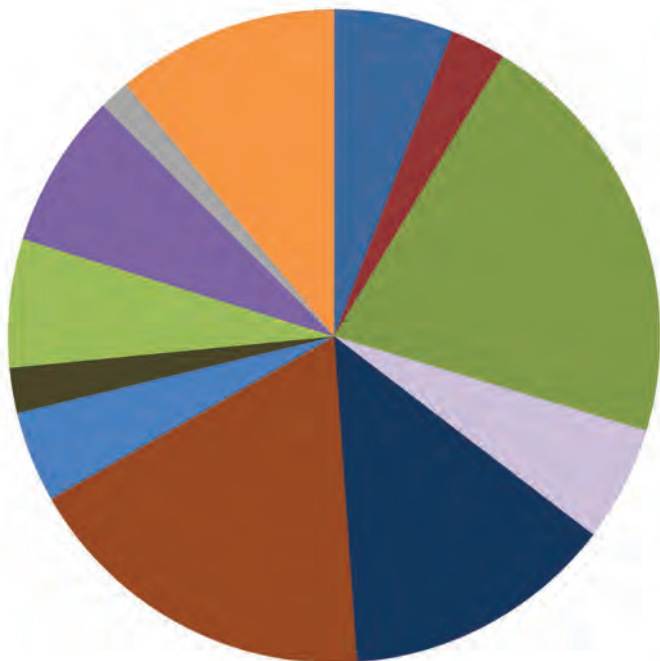
NOTES: Totals do not include funding from programs delivered by Ontario Soil and Crop Improvement Association (OSCIA) that did not receive assistance from Ausable Bayfield Conservation staff members.



Cover crops and windbreaks were just some of the projects shared in the conservation authority tent at the 2017 IPM and Rural Expo, held in the Maitland Conservation watershed in Walton.

Conservation Education

Special Events – Conservation Education – 2017



- Open House – Grand Bend Area Wastewater Treatment Facility
- Envirothon
- Turtle Release
- Owl Prowl
- Agriculture Safety Day
- Huron-Perth Agriculture and Water Festival
- Science Fair
- Day Camp
- Turtle Scavenger Hunt
- Forest Festival
- Innovation Creativity Entrepreneurship (ICE) Training
- BEAN Day – Biodiversity Education and Awareness Network

Education doesn't just take place in schools – Conservation educators provide programs outdoors, in libraries, community

By Denise Iszczuk, Conservation Educator

Ausable Bayfield Conservation Authority (ABCA) staff provide active learning programs, events and experiences for schools, community groups, and the public. Conservation educators focus on delivering memorable experiences while building connections between youth and their natural environment.

Within the watersheds of Ausable Bayfield Conservation there are community groups such as Girl Guides, Scouts, 4-H, and YMCA groups, and Big Brothers and Sisters which book educational programs to either help with their badge work or to get outdoors and active. In 2017, Ausable Bayfield Conservation delivered 41 programs to more than 1,300 young people and adults at locations throughout the watershed area including Rock Glen Conservation Area, libraries, and churches. Most programs took place at Morrison Dam Conservation Area (MDCA) east of Exeter.

It is often the case that community groups do not have funding for conservation education programs which focus on soil, water and living things. Special funding from Ausable Bayfield Conservation Foundation enabled staff to deliver 20 free programs for watershed community groups.



Denise Iszczuk

Conservation Education

Libraries in Huron County took advantage of Ausable Bayfield Conservation's one-hour summer reading themed program called *Our Nature, Our Canada*. At Clinton, Bayfield, Hensall, Seaforth, and Zurich libraries education staff shared the importance of Canada's water, plants, and animals and participants made a window decal, shaped like a Maple Leaf, to take home and help stop birds from striking windows.

Ausable Bayfield Conservation continues to engage community groups and help them improve watersheds for healthier communities and healthier people.



4,000 youths learned at the 2017 IPM education tent. Conservation Educator Deb Brown teaches above.



Conservation Educator Denise Iszczuk at *Our Nature, Our Canada* library program.

For each dollar in levy, about \$2.25 is raised in outside funds

By Brian Horner, CPA, General Manager and Secretary-Treasurer

Ausable Bayfield Conservation Authority (ABCA) continues to be one of the leading conservation authorities in Ontario in leveraging local levy dollars to bring in third-party funding. Thanks to the approval of grant and funding applications, submitted by staff during the year, the local levy dollars represented approximately 32 per cent of total revenue. This compares to other conservation authorities, across the Province of Ontario, that had levies representing approximately 50 per cent of their total revenue.

By making every levy dollar work like several, this reduces upward pressure on the levy and makes it possible to accomplish more for each levy dollar.

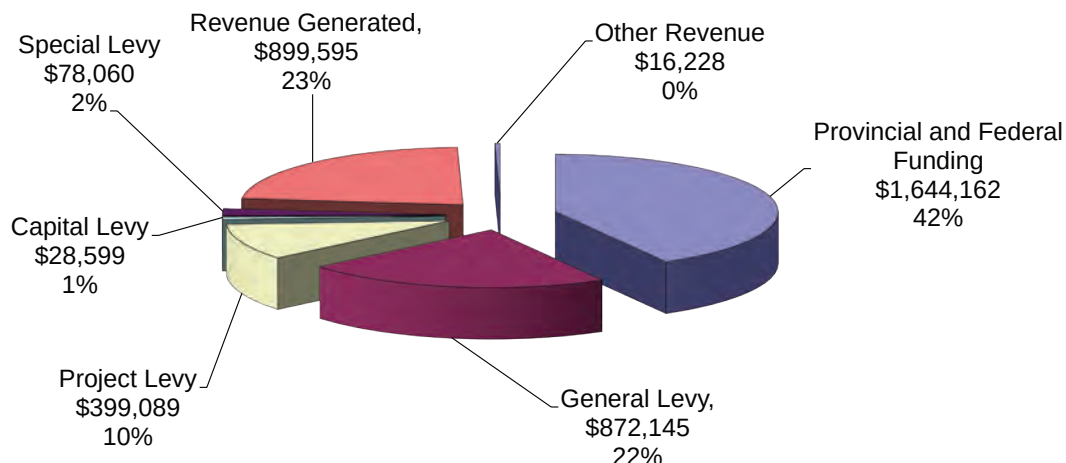
Financial Summary

Similar to the past few years this conservation authority has continued to leverage every local dollar generated with approximately \$2.25 in additional funding, compared to the provincial average that is dollar for dollar among other conservation authorities.

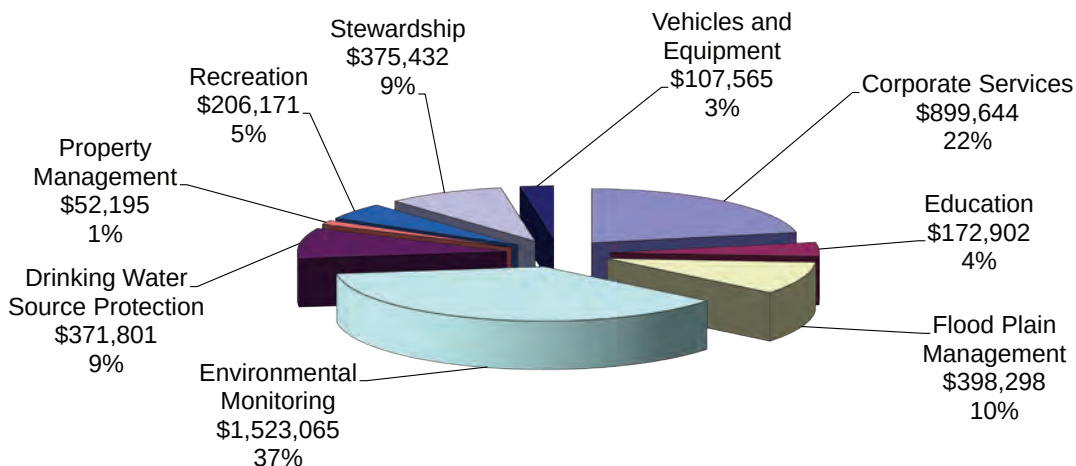
The unaudited financial results show the conservation authority again coming in as budgeted, as the \$169,000 loss includes \$213,000 of amortization. Staff have continued to do a terrific job in bringing projects in at, or lower than, budgeted costs.

We, again, would like to thank our member municipalities for their continued involvement and commitment to their local watershed.

2017 Sources of Revenue – Total Revenue – \$3,937,879 (Unaudited Figures)



2017 Department Expenses – Total Expenses – \$4,107,072 (Unaudited Figures)



Fostering partnerships, supporting action for community benefit

By Bob Radtke, Chairman, Ausable Bayfield Conservation Foundation (ABCF)

It is an honour to serve as Chair of Ausable Bayfield Conservation Foundation (ABCF). Thanks to the Board, donors, volunteers, and other community partners who help to foster partnerships and support action in local watershed communities.



Bob Radtke

Student Environmental Award

Marina Lather, of Centralia, is the 2017 Student Environmental Award winner. She is enrolled in the General Arts and Science – Environmental Studies program, Algonquin College, Ottawa and plans to acquire prerequisites for the Forestry Tech Program.



ABCF Chairman Bob Radtke presents the \$1,000 student bursary to Marina Lather.



Alexis Wilbee

Junior Conservationist

Alexis Wilbee, of the Clinton area, was chosen as Junior Conservationist for a two-month summer position funded by Ausable Bayfield Conservation Foundation.

Supporting Conservation Education

- The Conservation Foundation provided \$2,400 in subsidy for students participating in an outdoor education program and \$2,000 for youth organizations to book a nature program.
- \$400 towards a live owl presentation at the annual Owl Prowl.
- A grant of \$500 to cover busing students to a nature program on species at risk at Morrison Dam or Rock Glen Conservation Areas.

Conservation Foundation



Commemorative Woods

The Commemorative Woods program was created in 1988 and has sites in conservation areas at Clinton, Klopp, Morrison Dam, Rock Glen, and Parkhill Scenic Lookout. The ABCF Board is currently considering expansion of the Parkhill Commemorative Woods as the Scenic Lookout location and M. Box & Son Memorial Woods have reached capacity for planting trees. Two sites in the Parkhill area, owned by Ausable Bayfield Conservation Authority, were discussed. A next step is to approach a local service club to seek a possible partnership that would engage the community.

Morrison Dam Tree Dedication Service

Close to 400 family and friends attended the memorial tree dedication service hosted with Haskett Funeral Homes at Morrison Dam Commemorative Woods on September 17, 2017.

Policy on Interring Cremated Ashes

After receiving a request to inter cremated ashes at a commemorative woods, the ABCF developed a policy stating that the ABCF will not permit interring cremated ashes of pet, animal, or human remains, and no physical memorabilia or markers are to be left as a memorial or tribute on ABCF properties. Planting trees as a living legacy in the five commemorative woods sites will continue to be promoted.

Continued on next page

Ausable Bayfield Conservation Foundation Board of Directors

Bob Radtke
(Chairman)
Ailsa Craig



Anne Melady
(Vice Chair)
Dublin



Robert Norris
Staffa



David McClure
Grand Bend



Gerry Cook
Exeter



Peter Darbshire
Exeter



Roger Lewington
Bayfield



Dave Crockett
St. Joseph



Tom Prout
Exeter



Conservation Dinner surpasses \$1.1 million raised for community

Continued from previous page

The community Conservation Dinner gala dinner and auction has now surpassed \$1.1 million in net proceeds, in 28 years, for conservation projects in watershed communities. The 2017 event was held on April 6 and raised \$60,000. Proceeds are split between community conservation projects of the Ausable Bayfield Conservation Foundation (ABCF) and Exeter Lions Club.



Julian Bayley, founder, Iceculture Inc.; Bob Radtke, Chairman, ABCF; Craig Hebert, President, Exeter Lions Club; Dinner Committee Co-Chairs Janet Clarke and Mary Ryan-Allen; Burkhard Metzger, ABCA Chairman; and Brian Horner, ABCA General Manager.

Morrison Dam Fishing Derby

Volunteers helped to stock 750 rainbow trout in the Morrison Dam Reservoir for the 200 anglers who attended the 33rd annual Fishing Derby. It was held a week later, on May 13, due to swollen rivers on May 6. This event is possible because of a \$1,300 donation from the ABCF and Exeter Lions Club.



Exeter Lions Club volunteers Paul Scott and Tom Hartai help to stock Morrison Reservoir for the family fishing derby.

Protection of Wetland Habitat and Natural Areas

- Partnered with the Bayfield River Valley Trail Association to receive donations for the trail and towards the Bayfield tree project.
- \$3,000 towards Port Franks species-at-risk turtle monitoring.
- \$500 for Ausable River Outreach events in Ailsa Craig – Ontario Fishing Weekend and Gala Days.
- Partnered with Lakeshore Eco Network to seek donations for the 5000 Trees Project and Ausable Heritage Tree Festival in Grand Bend and the Earth Rises II Forum in Thedford.

- \$1,500 towards Old Ausable Channel habitat monitoring.
- Received \$25,000 grant from Great Lakes Guardian Community Fund for seven wetland and native planting projects Ausable Bayfield Conservation staff have undertaken with landowners. In the past, 62 wetlands have been developed and 267,500 trees planted through GLGCF grants.

Accessible Trails and Facilities

- The 12th annual South Huron Trail Golf Tournament was held August 28, 2017 at Ironwood Golf Course and raised \$5,000 towards the Jones Bridge pedestrian bridge project on the South Huron Trail.
- \$5,000 towards replacement of a section of stairs at Rock Glen Conservation Area.
- The South Huron Trail Mobile, donated by the family of Gord Strang in 2005, was retired in 2017. A new six-passenger electric cart will cost \$13,500. ABCF provided \$2,500 and a South Huron Community Grant of \$6,000 has been raised to date.



Winning golfers (l. to r.) Steve Thomas; Jim DeBlock; Craig Hebert; and Bob Illman, accept butterfly box prizes from Dave Crockett, Vice Chair, ABCF.

Pedestrian Bridge

Ausable Bayfield Conservation Foundation committed up to \$25,000 to the new Jones Bridge pedestrian bridge on the South Huron Trail.

Tom Prout and Peter Darbishire were named to the Pedestrian Bridge Community Working Group.



Donna Jones, Exeter, donated \$50,000 towards the pedestrian bridge for the South Huron Trail. To be called Jones Bridge, it is dedicated by Donna, in loving memory of Ted Jones. Left to right in photo are, Brian Horner, ABCA GM; Tom Prout, Past GM (Retired) and ABCF Director; Bob Radtke, Foundation Chair; the donor, Donna, presenting cheque; Donna's son, Randy Jones; and Donna's daughter-in-law, Susann Jones.

Huron Tract Land Trust Conservancy is helping to leave land legacy

By Roger Lewington, Chairman, Huron Tract Land Trust Conservancy (HTLTC)

The Huron Tract Land Trust Conservancy (HTLTC) continues to inspire communities to ensure a land legacy by protecting natural lands and habitat. These are exciting times as we continue to talk to landowners about how we can help them to leave a land legacy. Many people are passionate about their land and what it means to them. We understand that and are both humbled and honoured that they would consider the Huron Tract Land Trust Conservancy as an organization in which to entrust their lands for generations to come.



Roger
Lewington

Building on the donation of a 10-acre forest from the Mayhew family in 2015, the Bayfield River Valley Trail Association (BRVTA) led a successful fundraising campaign to purchase the Bayfield River Flats Natural Area in 2016. The property will benefit the community of Bayfield and area and is permanently protected through ownership by the HTLTC. Bayfield River Flats Natural Area is 4.75 acres of riverbank property beside the Highway 21 Bridge at Bayfield. Community volunteers, led by the BRVTA and a joint BRVTA/HTLTC management committee, undertook a massive cleanup of the property and establishment

Huron Tract Land Trust Conservancy

of trails and passive-use river access. We were thrilled this past summer to be entertained by a family of 10 beavers

on the property as well as rich flora and fauna.

We continue to talk to interested landowners, about lands they are considering for preservation, and how we can help make their legacy a reality.

Our volunteer board members are the backbone of the HTLTC and I would like to thank them for their valuable input and work. This year (2017), two founding board members – David Kemp and Tom McLaughlin – stepped down after eight years of dedicated service. On behalf of the board, I would like to thank them for their contributions. I am also pleased to welcome two new board members, Paul Spittal and Max Morden, both of whom bring a wealth of community experience and environmental knowledge to the board.

We look forward to the coming year and would like to reach out to landowners who have special lands and who want to leave a lasting legacy.



Board of Directors – Huron Tract Land Trust Conservancy (HTLTC)

Mission:

Ensuring a land legacy.

Vision:

An inspired community that values and protects natural lands and habitat.



Steve
Bowers
Brussels



Burkhard
Metzger
Clinton



Don
Farwell
Stratford



Roger
Lewington
(Chair)
Bayfield



Philip
Walden
Thedford



Peter
Twynstra
Ailsa Craig



Steve
Boles
Exeter



Max
Morden
Grand Bend
*Joined the Board
as of Dec. 14, 2017*



Paul
Spittal
Bayfield
*Joined the Board
as of Dec. 14, 2017*



David
Kemp
Staffa
*Retired from Board
as of May 17, 2017*



Tom
McLaughlin
Lucan
*Retired from Board
as of Aug. 30, 2017*



Produced by ABCA GIS Services. This map has been compiled from various sources and is for information purposes only. The Ausable Bayfield Conservation Authority takes no responsibility for, nor guarantees, the accuracy of all the information contained within the map. Copyright (c) Queen's Printer, 2017.



Ausable Bayfield Conservation Authority (ABCA)
 71108 Morrison Line • RR 3 Exeter, ON • N0M 1S5
 Phone: 519-235-2610 • Toll-free: 1-888-286-2610 • Website: abca.ca • E-mail: info@abca.ca