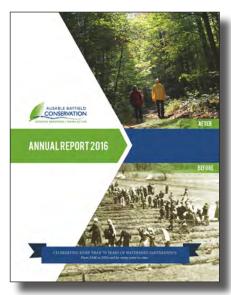


### **Table of Contents**



FRONT COVER PHOTOS: Ausable Bayfield Conservation Authority is Ontario's first conservation authority. The former Ausable River Conservation Authority was created in 1946. The Bayfield River watershed was added in 1972. As we celebrate more than 70 years of partnerships in our watersheds - from 1946 to 2016 and beyond – it is exciting to think of what has been accomplished. The two photos on the front cover - the 'before' photo of school children and the community planting trees and the 'after' photo of towering Pines in the Hay Swamp area illustrate how much we improve the landscape when we work together to protect water, soil, and living things.



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### Mission

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**Financial Summary** 

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

### Vision

**Ausable Bayfield Conservation Foundation** 

**Huron Tract Land Trust Conservancy** 

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

# Thanks to watershed community for 70 years of partnerships

By Mike Tam, Chairman, 2016 Board of Directors, Ausable Bayfield Conservation Authority (ABCA)

andowners and community groups have been helping to protect water, soil, and living things in this watershed for more than seventy years.

The former Ausable River Conservation Authority, Ontario's first conservation authority, was



Mike Tam

formed on July 30, 1946 and was renamed Ausable Bayfield Conservation Authority (ABCA) in 1972.

In our 70th anniversary year in 2016, Ausable Bayfield Conservation was pleased to honour all our partners – including landowners and residents; municipalities; community groups and organizations; Ministries and Departments; and generous funding partners who have shown vision for a healthier watershed. Without you, the many watershed improvements would not have been possible.

### Chair's Message

Your thousands of projects have helped to keep topsoil on the land and keep sediment out of creeks, rivers, Lake Huron, and groundwater.

The Directors serve with great pride on the Board to help improve forest conditions; enhance wetlands; protect water quality and quantity; protect life and property; and support community efforts that benefit people and the natural ecosystem. I would like to make special thanks to our municipal partners who had the vision for this organization 70 years ago and continue to make success possible. I would also like to thank the staff of Ausable Bayfield Conservation for their positive work in the community.

I wish you all the best in 2017 and look forward to working with you to continue to improve our watershed home that we cherish so much.

# Congratulations on your successes over past seven decades

By Brian Horner, General Manager and Secretary-Treasurer

he cover of this year's Annual Report shows two photos – one from our watershed history and one from the present day. The 'before' photo shows young people and community members planting Pine trees many decades ago near Hay Swamp. The 'after' photo shows the



**Brian Horner** 

towering Pines today in that Provincially Significant Wetland. These photos depict community planting and the fruits of their labours for our benefit today.

During ABCA's 70th anniversary year in 2016, Kate Monk, Supervisor of Stewardship, Land and Education, presented to the Board of Directors about seven decades of watershed milestones.

### **General Manager's Report**

Kate quoted Margaret Mead that we should "never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." I thank Kate for this reminder of what can be accomplished, and what has been accomplished, when we work together.

Whether it is planting hundreds of thousands of trees; creating hundreds of acres of wetlands; completing thousands of water quality projects; improving management of stormwater runoff; adding rain gardens and rain barrels; or improving best management practices at home and work; I would like to congratulate you, as a valued partner, for your part in achieving watershed successes.

### Ausable Bayfield Conservation Authority (ABCA) Board of Directors – 2016



Mike Tam (Chair) West Perth



Burkhard Metzger (Vice Chair) Central Huron



George Irvin Bluewater



Ray Chartrand Huron East



Cook
Lambton
Shores,
Warwick



**Dave Frayne**South Huron
Perth South



Wayne Hall Lucan Biddulph



**Don Shipway**North
Middlesex



Adelaide-Metcalfe, Middlesex

### **Corporate Services**

### Ausable Bayfield Conservation Authority (ABCA) - New Staff Members - 2016



Cameron Irvine Water Resources Technician



Leslie Coleman Water Quality Technician



Colin McBride Assistant Water Resources Technician (Summer position)



Michelle Polley Conservation Educator (Summer position)



Megan Loucks Conservation Educator (Summer position)



Curtis McEachen Conservation Lands Assistant (Summer position)



Hannah Krebs Junior Conservationist (Summer experience position)



Jonathan Miller Secondary School Co-op Student

### **Water Management**

# Groundwater monitoring in 16 local wells, water quality sampling support programs including flood forecasting, low water response

By Davin Heinbuck, Lands and Water Technologist

he 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). This initiative maintains a network of more than 400 groundwater



Davin Heinbuck

Ausable Bayfield Conservation Authority (ABCA) currently has 16 wells throughout the watershed: five bedrock wells and 11 overburden wells. Hourly groundwater level data has been logged for nearly 15 years at most well sites. Groundwater data is downloaded on-site by staff, or GOES (Geostationary Operational Environmental Satellite) at selected sites where real-time data such as rainfall is required.

monitoring wells across the Province of Ontario.

Groundwater level data show that annual cycles are consistent and highlight the critical annual recharge periods of autumn and spring. Longterm groundwater levels have remained relatively stable over the monitoring period but the degree of groundwater level changes within a single year has shown more variability. These changes are driven by weather patterns such as drought periods or periods of higher than normal precipitation. Based on the program's relatively short period of record it is challenging to get an accurate handle on 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 2016. 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 2016 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:

### www.ontario.ca/environment-and-energy /map-provincial-groundwater-monitoring-network

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

# Data from monitoring of water level, temperature, precipitation, weather and climate inform flood messages, low water advisories

usable 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 throughout the watershed, including water levels and precipitation. Computerized monitoring systems in the field transmit information by telephone or satellite directly to the office near 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 activity.

### **Water Level and Streamflow Monitoring**

- One dedicated climate monitoring station, in cooperation with Ontario Ministry of the Environment and Climate Change (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, 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.

## Flood Watch on Easter weekend was most significant flood event

By Davin Heinbuck, Lands and Water Technologist

ith the influence of an El Niño event, the winter of 2015-2016 was considerably milder than usual. Snowfall events were followed by warmer weather, and melted away. However, in mid-February, there was approximately 50-100 millimetres (mm) of water equivalent in the snowpack, close to normal for that time of year. Fortunately, warm and dry weather followed, allowing much of the snow to disappear without incident by February 20, 2016.

Flows were above seasonal for almost two weeks, but no problems were reported. Additionally, there were no problems related to ice jams.

The most significant flood event of 2016 occurred during the Easter long weekend. A Flood Watch, the only one of 2016, was issued on Easter Sunday (March 27, 2016) in anticipation of a forecast for 30-50 mm of rainfall. At the time, flows were still high from a significant rain and freezing rain event of 50-75 mm a few days earlier.

Rainfall on March 27-28, 2016 was on the low end of the forecast range, and generally between 30 and 40 mm.

### **Flood Forecasting and Warning**



A Flood Watch was issued in late March, 2016.

We were fortunate with this event that the heavy rainfalls were spaced out by several days with below-freezing temperatures. Both events resulted in high flows but only one road closure was reported. Flooding was limited to traditional low-lying flood plain areas.

With the exception of some heavy rains in August, the remainder of the year was drier than normal.

Bayfield

In total, Ausable Authority issued six flood messages: five Watershed Conditions Statements (Flood Outlook and Water Safety); one Flood Watch; and no Flood Warnings.



Conservation

### **Water Management**



Intense rainfall over a small area can lead to flash floods. Land use, topography, and ground wetness can influence if flash flooding occurs. Floodwaters can rise and fall rapidly with little or no warning. The Flood Emergency Planning Meeting heard that by the time a weather pattern has formed, rain may be occurring already. Canada does not have a bulletin specifically called a flash flood warning. In this nation, severe thunderstorm warnings may mention flash flooding as a concern. Watches and warnings are when weather events are close to occurring but municipal staff and emergency coordinators were encouraged to be mindful of all statements and bulletins issued by Environment and Climate Change Canada. Each message issued starts to paint a picture of the event.

# Emergency coordinators, municipal staff, local media learn about tools to be better prepared for flood, weather events

he 2016 annual Flood Emergency Planning meeting was held at the Masonic Hall in Exeter on March 10, 2016. Ausable Bayfield Conservation Authority (ABCA) member municipalities and various stakeholders were invited to attend and participate in the meeting. The more than 20 attendees included representatives from five watershed municipalities; staff and/or emergency coordinators from three counties; and local media. The meeting continues to provide a forum for discussion and planning to make all agencies better prepared to deal with flooding emergencies.

ABCA staff reported on the Conservation Authority's roles and responsibilities in flood emergencies; flood communication testing in the watershed; and current watershed conditions.

Attendees recognized that ABCA's flood messaging is consistent with the nationally accepted standard of weather messaging. This was reinforced in the feature presentation by Geoff Coulson, a Warning Preparedness Meteorologist at Environment and Climate Change Canada. Geoff's presentation covered a number of weather-related topics such as the science of flash floods; their forecasting challenges; and the factors that can increase the severity of resulting damage.

Steve Jackson, Flood and Erosion Safety Services Coordinator at Maitland Valley Conservation Authority (MVCA), highlighted the Lakeshore Emergency Planning Exercise they conducted with the Township of Ashfield-Colborne-Wawanosh.

### **Flood Emergency Planning**



Geoff Coulson (in photo above), a Warning Preparedness Meteorologist at Environment and Climate Change Canada, presented at the annual flood emergency planning meeting. As one of four presenters, he spoke about flash floods, tools to find out about weather events, changes in our climate, and projected impacts of that climate change. Also presenting were Stephen Jackson, Flood and Erosion Safety Services Coordinator with Maitland Conservation; Davin Heinbuck, Ausable Bayfield Conservation Authority Land and Water Technologist; and ABCA Water and Planning Manager Alec Scott.

Since 2015, Lake Huron water levels have surpassed the long-term average and, with higher lake levels, there is an increase in wave action that is eroding beaches, threatening bank stability, and in some cases already causing bank failures.

The exercise looked at dealing with emergencies for buildings along the bluff and the challenges that exist. These include unstable slopes and structures, limited access, and a need for rescue training and equipment when dealing with slope failures.

### Water Management



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) – such as there was in 2016, the Water Response Team issues low water advisories of level 1, 2, or 3. In 2016, a Level 2 Low Water Advisory was issued, calling for a 20 per cent reduction in water use. For practical water conservation tips, visit the water quantity page at abca.on.ca.

# **Level 2 Low Water Advisory issued in October of 2016**

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

uring 2016, 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 of Ontario in 1999.



Alec Scott

The local ABCA Low Water Response Team (WRT) is made up of municipal and provincial agency representatives as well as representatives from the 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 was provided monthly watershed condition reports. The Level 1 Low Water Advisory from the autumn of 2015 was ended in April of 2016. However, due to dry conditions, a new Level 1 Low Water Advisory was issued in July.

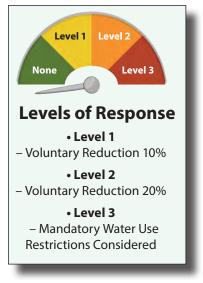
### **Low Water Response**

In October a Level 2 Advisory was issued but this was lowered to a Level 1 Advisory in December based on slightly improved conditions. The Level 1 Advisory was left in place over the winter and was to be reviewed in spring 2017.

Approximately 20 volunteer rain gauge readers continue to provide valuable information on the extent and amount of

precipitation received in the watershed.

This program continues to provide the public and member municipalities with information on the condition of our watersheds in relation to possible drought problems.



### **Water Management**

## Conservation authority staff complete minor repairs on structures

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

s part of the Ausable Bayfield Conservation Authority (ABCA) mandate, and agreements with watershed municipalities, the conservation authority 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.



A safety review for Parkhill Dam (above), was started in 2015 and finished in 2016. A safety review was also completed for Morrison Dam.

### Structures, Operations, and Maintenance

Most of the inspections and actual maintenance work are carried out by conservation authority staff unless it is determined that it would be more efficient to contract the work out 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.



Replacement of hub rails at Morrison Dam, with a beam guiderail system, was one of the dam projects completed in 2016.

## Dam safety reviews, repair project completed with WECI support

ince 2003, the Ontario Ministry of Natural Resources and Forestry (MNRF) 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 WECI program the ABCA can apply for 50 per cent grant funding for major maintenance projects. In 2016, two WECI studies and one repair were undertaken.

Dam Safety Reviews for Morrison Dam and Parkhill Dam, started in 2015, were completed by March 2016.

A repair project involving the replacement of the hub rails at Morrison Dam, with a beam guiderail system, was completed.

**Water and Erosion Control** 

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.

### Watershed hydrology update, phase one of watershed natural heritage study are completed

The following studies were undertaken in 2016:

• Based on a report outlining a method for Rating Significance of Terrestrial and Aquatic Natural Areas, for watershed natural heritage, Phase One of a project to test the rating system in the ABCA watersheds was completed. Phase two of the test should be completed in 2017.

### **Other Water Management Studies**

 Phase two (final phase) of an update to the ABCA Watershed Hydrology project (originally completed in 1992), was completed.

# **Shoreline Management Plan Update continues in 2017**

By Geoffrey Cade, Supervisor of Water and Planning

n 2016, Ausable Bayfield Conservation Authority (ABCA) continued technical work to support updates to the existing ABCA Shoreline Management Plan (SMP).

As part of Phase II of the SMP



Geoffrey Cade

Update, a consulting team completed supporting documents including a Shoreline Slope Stability Risks and Hazards Fact Sheet for Property Owners; a draft report on Erosion of Cohesive Bluff Shorelines; a draft discussion paper on Climate Change Impacts on the Great Lakes; and a Draft Consultant Recommendation Report. The Draft Consultant Recommendation Report and draft mapping were released for public comment between September 1 and December 1, 2016.

Due to concerns which were raised by the public and by the Board of Directors, with some aspects of the draft Recommendation Report (including proposed development guidelines), portions of the consultant's report were rejected.

### **Shoreline Management Plan (SMP) Update**

ABCA staff are to provide the Board of Directors with proposed options to re-engage the public as local policies and other updates to the 2000 document are developed. It is expected that public open houses will take place in 2017 and that the update project will not be completed until sometime in 2018.

### By the numbers – Planning 2016

Minor Variances	20	
Severances	31	
Official Plan/Zoning Bylaw Amendments;	29	
Stormwater Management		
Formal Inquiries	91	

# Mapping of natural heritage features was updated in 2016

By Tracey McPherson, GISP, GIS/IT Coordinator

"In vain have you acquired knowledge if you have not imparted it to others."

### - Deuteronomy Rabbah

eographic Information Systems (GIS) and information technology (IT) services at Ausable Bayfield



Tracey McPherson

Conservation Authority ensure that information, and access to information, is available now and in the future.

### **GIS Results:**

- Created quality information to support decisions.
- Ensured a robust, secure and ongoing network support system.
- Collaborated with partners to complete projects.
- Increased awareness of the ABCA and its projects.

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

### GIS actions in 2016:

- Completed mapping and data requests for staff, consultants, and partners.
- Updated natural heritage features using 2015 air photos.
- Upgraded eligible computers to latest Windows 10 operating system.
- Helped in setting up the new security system.
- Provided mapping for Shoreline Management Plan Update Draft Consultant Recommendation Report.
- Participated in an Ontario Ministry of Natural Resources and Forestry (MNRF) pilot project to assess the use of historic air photos for erosion studies.
- Presented at Latornell Conservation Symposium on using digital elevation models.

# Past year reminds us shoreline change is ongoing process

By Andrew Bicknell, P. Eng., Regulations Coordinator

he year 2016 reminded us just how dynamic the Lake Huron shoreline is.

In 2016, we witnessed

In 2016, we witnessed significant changes along many areas of the shoreline, from the dune systems in the south to the bluff areas in the north. Where decades of lower lake



Andrew Bicknell

levels had deposited sands, forming wide beaches and dune systems, seemingly protecting the bluff and shoreline from erosion, in 2016 we witnessed significant natural erosion of these beach and dune systems.

We saw areas of the bluff which, under lower lake levels, had been seemingly protected behind sand beach and dunes, experience significant erosion with the loss of the underlying cohesive bank and in some cases the loss of stairs, landings, and small structures at the toe of the slope. Over the course of days we witnessed the erosion of the shoreline, exposing shoreline structures such as crib walls and gabions which likely hadn't been visible for years or decades.

We were reminded why structures such as gazebos and decks are not permitted at the bottom of the lake bank in the flood hazard and wave uprush zones. We were reminded that while the sandy beach and dune systems do offer some degree of protection against lake effects and erosion, the underlying principle of prevention through thoughtful planning and policy, serving to direct new construction and development outside of the shoreline hazard zones, is still the best guardian against the forces of the Lake.

Ausable Bayfield Conservation Authority's Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 147/06) regulates new

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



development within hazardous lands not only along the Lake Huron shoreline but also areas inland in vicinity of other naturally occurring hazards such as river and stream valleys, flood-susceptible locations, and wetlands. Alterations along the shoreline and installation of shore protection structures are activities which are subject to conservation authority regulations and the permitting process.

In 2016, staff responded to an unprecedented number of applications to allow repair or replacement of shoreline protection structures at the toe of the lake bank. Utilizing a risk management type framework, and process for screening such applications, staff were able to approve and permit many of the proposed projects as designed. In some instances a more detailed technical review and assessment was needed in a field referred to as coastal engineering considering shoreline science and the knowledge of expert consultants.

# Flood plain management programs protect life, property

usable Bayfield Conservation Authority directs new development away from hazardous areas through flood plain management programs.

- Ongoing maintenance of existing flood and erosion control structures ensures continued protection of existing development in hazard areas.
- Continued monitoring of precipitation and water quantity in the watershed ensures we have early

### **Water Management Outcomes**

- indications of potential flooding or low water conditions.
- Regular review and updating of watershed studies helps to ensure that decisions relating to ABCA watershed issues are being made with the best information available.

### **Drinking Water Source Protection**

# Partnership with municipalities, landowners, Province of Ontario resulting in reduced risk to municipal drinking water sources

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

n April 2016, the Ausable Bayfield Maitland Valley Source Protection Region completed year one of source protection plan implementation for the benefit of public health and safety.

Municipal risk management officials continue to work with municipalities, landowners, business people, and others to provide education, and develop risk management plans (RMPs). This tool reduces risk to our local drinking water sources by managing land use activities in the most vulnerable areas around municipal wells.

The past chairman of the Ausable Bayfield Maitland Valley Source Protection Committee (SPC), Larry Brown, retired from his position in 2016. We were honoured to have the chance to thank him for his dedicated service since 2007. We congratulate Larry on his leadership of the committee as it worked with the public to develop terms of reference, assessment reports, and approved source protection plans. Matt Pearson, an original SPC member, was officially appointed as the new Chairman of the Source Protection Committee, and has capably carried on the chairman's duties.

Our entire region was saddened by the loss of John Vander Burgt, SPC member.

## **Actions**

- The Municipality of North Perth was the region's first municipality to install drinking water protection zone signs. The signs educate people that they are in a vulnerable area near a municipal well and to keep contaminants off the ground and out of water sources.
- We were pleased to complete upgrades to the local sourcewaterinfo.on.ca website. We added an interactive map and fact sheets for each of the 25 local municipal well systems, to help people find out more about their local municipal wells.
- Work in 2016 included updating mapping and assisting municipalities which were delineating new wellheads (such as Varna); and working with municipalities to review development applications in vulnerable areas to determine whether source protection plan policies may apply.

### **Drinking Water Source Protection**



Ausable Bayfield Maitland Valley Source Protection Region



Jenna Allair

As John's obituary said, "His friends and family will remember him as a strong-willed, honest, generous and, above all, selfless man. His hard work and kindness will be missed."

I was privileged to know John and to work with him. His contributions helped to leave a legacy of a practical and workable approach to protection of local drinking water sources in this region. We will miss his intellect, practical approach, tough questions, insights, sense of humour, knowledge, and strength of character. Thank you, John.

On a personal note, I have accepted the Source Protection Coordinator position with the Thames-Sydenham and Region Drinking Water Source Protection Region. I would like to thank everyone with whom I have worked at Ausable Bayfield and Maitland Valley conservation authorities over the past eight years. It has been an honour to do so.

### Results

- Risk management officials work with local partners to develop practical and effective risk management plans. This reduces risk from activities in the most vulnerable areas near municipal wells.
- In the Risk Management Office at Ausable Bayfield Conservation Authority, risk management officials Mary Lynn MacDonald and Donna Clarkson have worked diligently with landowners and municipalities in eight municipalities.
- Local drinking water sources have also been protected by keeping certain new activities out of the most vulnerable areas.
- Some people have reduced risk to drinking water by making changes at their home or work based on education and outreach efforts and their own commitment to keeping water clean.

# Monitoring results are followed by community action

By Mari Veliz, Healthy Watersheds Supervisor

n the past five to 10 years, there has been considerable interest in evaluating our environmental performance. The Healthy Watersheds Team works with other agencies and the community to evaluate environmental conditions. In some cases, federal, provincial and



Mari Veliz

municipal agencies support 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).

Some of the aquatic monitoring data is summarized every five years for the *Watershed Report Card*. (Watch for Report Cards in 2018!) This coarse level of evaluation helps us to understand if there are large ecosystem changes.

In 2016, the Healthy Watersheds Team completed a three-year monitoring program and found there are potentially more subtle environmental measures such as field flow presence or absence related to the effectiveness of rural best management practices (BMPs) implementation. The research conducted by Ausable Bayfield Conservation Authority (ABCA) has also highlighted the importance of soil health on agricultural lands for improved water quality. This is one reason why ABCA staff initiated an agricultural soil health monitoring program in 2016.

Table 1: 2016 ABCA Water Quality and Biomonitoring Stations

Type of station	Number
Dry weather water quality	32
Wet weather water quality	16
Best Management Practices verification	10
Citizen Science	9
Fish	19
Reptiles (turtles)	4
Benthic macroinvertebrates	25

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

### **Watershed Communities Taking Action**



A new turtle sign at Ailsa Craig Community Park is thanks to Ailsa Craig residents; Municipality of North Middlesex; Ausable Bayfield Conservation Foundation; and Ausable Bayfield Conservation Authority. In photo are: John Jimmo, Aquatic Biologist, ABCA; Charlene

McNair-Kestle, Co-Chair of Ailsa Craig Park Project Committee; Richard Dennett, of Ailsa Craig and District Lions Club; and Scott Nickles, Recreation and Facilities Manager, Municipality of North Middlesex.

Another important consideration for ecosystem change is to watch for change in aquatic conditions that may be vulnerable to ongoing land use intensification (both agricultural and from an urban development perspective). When we monitor these more vulnerable areas we can recommend approaches to safeguard these areas in the future. Watch for water quality and biological results at abca.on.ca.

Community outreach is also critical to reaching our goals, as we typically see more conservation actions taken when there is financial and technical support for individuals. Healthy Watershed staff continue to help community groups and stakeholders with their activities (e.g., events and monitoring) (Table 2).

Table 2: 2016 Community Outreach by ABCA Healthy Watersheds Team

Community Outreach	Number
Community groups	5
Community events	10
Watershed Communities in Action*	5

<sup>\*</sup> Bayfield, North of Bayfield, Ailsa Craig, Grand Bend, Port Franks

## New approaches help to better measure BMP effectiveness

By Daniel Bittman, Water Quality Technician and Brynn Upsdell Wright, Water Quality Specialist

on-point source pollution is influenced by rainfall or snowmelt moving through the landscape. Studies have shown the water quality and quantity benefits of agricultural best management practices (BMPs), but field-scale investigation of BMPs is not well-characterized for Huron County. Agricultural BMPs include erosion and sediment control structures, conservation tillage, and vegetative buffers and plant cover.

In 2016, Ausable Bayfield Conservation Authority (ABCA) developed new approaches to measuring the effectiveness of vegetative cover and Water and Sediment Control Basins (WASCoBs) in Huron County. These new approaches to measuring effectiveness have improved the conservation authority's ability to evaluate field-scale water quality and quantity.

### **Best Management Practices in Huron County**

A New Directions Research Program study, funded by the Ontario Ministry of Agriculture, Food and Rural Affairs, reported reductions in the peak flow rate into and out of a WASCoB of up to 97 per cent. As a result, the research suggested that





Daniel Bittman

Brynn Upsdell Wright

a WASCOB may reduce phosphorus and suspended solid loads in surface runoff before it leaves the field through a tile inlet (e.g., Hickenbottom\*) in the basin. The study also found different crop types (e.g., corn, soybeans, winter wheat, oats, and crop residue) may have significant influence on occurrence of runoff during a rainfall event.

# Soil health efforts continue in priority watersheds and beyond

By Abigail Gutteridge, Healthy Watersheds Technician

Building on the successes of the International Year of Soils (United Nations designation), soil health improvement efforts continued into 2016.

Funding programs, such as the Great Lakes Agricultural Stewardship Initiative (GLASI), implemented by the Ontario

Ahimil

Abigail Gutteridge

Soil and Crop Improvement Association (OSCIA), have included funding for projects that help Ausable Bayfield Conservation to improve soil conditions and measure watershed health improvements.

Some of the best management practices (BMPs) that are being implemented and monitored in Gully Creek include water and sediment control basins, reduced tillage, nutrient or organic amendment applications, or cover crops.

Ausable Bayfield Conservation has also continued studying the health of soils in our watershed by sampling and analyzing soils from four broad categories – clays; clay loam; silt loam; and sand.

Nineteen samples from a range of these four categories were collected, and we made efforts to sample in locations that had also been sampled in the 1950s to allow for some comparison. Reference sites that had never been cultivated were also sampled to provide benchmarks.



Soil health, and its relationship with sustainable food production and water quality protection, is an increasing focus for Ausable Bayfield Conservation. Ross Wilson, Water and Stewardship Technologist with Ausable Bayfield Conservation, is shown above at 2016 soil health demonstration at a Mitchell and District Agricultural Society event. He collects soil health information from local fields with the support of participating agricultural producers as ABCA studies soil health and works to protect and improve it.

The soil health metrics included: percentage soil organic matter, wet aggregate stability, infiltration, bulk density, and porosity. In general, there were differences between the cultivated soil sites and their reference sites. The differences in the various metrics will help farmers better manage specific soil conditions on their properties. Further analysis and reporting for this project will continue into 2017.

### **Healthy Watersheds**







About 15 community volunteers, along with dozens of students from Huron Centennial School, helped to plant two new rain gardens in Bayfield on June 21, 2016.

## Bayfield takes action to slow stormwater in rural, urban areas

By Hope Brock, Healthy Watersheds Technician

ayfield-area residents were able to implement recommendations from the Main Bayfield Watershed Plan in 2016 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.



Hope Brock

To help slow down and filter urban stormwater, 41 local students and 15 community volunteers planted 300 plants into two rain gardens at Pioneer Park in Bayfield.

### **Main Bayfield Watershed Plan**

A watershed walk took place within the rural Johnston-Dowson sub-watershed where 26 best management practices (BMPs) were identified to help manage agricultural stormwater.

Throughout the watershed landowners installed eight berms, planted 600 trees, and restored a wetland.

Citizen scientists collected water samples at three stormwater outfalls along the Bayfield beach 13 times from June through August.

## Port Franks, Municipality of Lambton Shores help to protect turtles

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

he turtle monitoring program, and the great work of all the volunteers, helps Ausable Bayfield Conservation Authority (ABCA) biologists to better understand turtles in this watershed and the habitats those turtles use.

In 2016, there were 110 reptile sightings in the Grand Bend - Port Franks area.

Funding is gratefully acknowledged from the Ausable Bayfield Conservation Foundation.

Ausable Bayfield Conservation Authority provided nest protection cages to four property owners who observed turtles laying eggs on their property, and 11 hatchlings were safely returned to the nearest watercourse after emerging.

### **Community-Based Turtle Monitoring**

The Municipality Lambton Shores, help from the ABCA, Eco-Kare International, and Animex Fencing installed metres of turtle 280 exclusion fencing along Outer Drive in Port Franks. The new fencing will help keep turtles off the road by redirecting them through an existing culvert or back into the wetland (L Lake).



Exclusion fencing along
Outer Drive in Port
Franks directs turtles
through the culvert,
which connects to L
Lake, or into wetland.

### **Healthy Watersheds**







Port Franks community members gathered to take part in the release of 60 Snapping Turtle hatchlings in early August of 2016. The eggs were removed from their original location at a local golf course and incubated as the nest was at risk of being destroyed.

# **Communities support Ausable River Recovery**

By Kari Jean, Aquatic Biologist

he Old Ausable Channel (OAC) is one of the few remaining locations in Ontario where three fish species at risk (SAR) including Pugnose Shiner, Lake Chubsucker, and Grass Pickerel can be found.



Kari Jean

Monitoring the habitat conditions and status of these SAR fishes is essential to making informed management decisions involving the Old Ausable Channel.

Habitat monitoring was conducted at several locations to better understand dissolved oxygen concentrations and water quality throughout the Old Ausable Channel.

### **Ausable River Recovery Strategy**

Education and outreach events were hosted in Grand Bend and Port Franks to provide information to community members about ways to protect aquatic species at risk. Ailsa Craig also hosted Ausable Bayfield Conservation Authority (ABCA) staff to highlight Ausable River fish and reptile species and some of their habitat threats.

These projects were completed with support from the Ausable Bayfield Conservation Foundation, the Ontario Ministry of Natural Resources and Forestry, Fisheries and Oceans Canada, Environment and Climate Change Canada, Pinery Provincial Park, and community members.

# Diverse fish found in municipal drains in ABCA watershed

By Kari Jean, Aquatic Biologist

any 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 appropriate drain maintenance activities and timing windows.

### **Fisheries and Municipal Drains**

Fisheries and Oceans Canada provided funding in 2016 that allowed ABCA to complete fisheries assessments in 19 drains. Types of fish found in the drains included different species of minnows, perches, sunfish and, in one case, young Coho Salmon.

### **Healthy Watersheds**



An Ausable Bayfield Conservation and Healthy Headwaters Wetlands Initiative social media campaign in 2016 helped promote wetland enhancement, restoration, and creation in Ausable Bayfield watersheds.

Staff created eight wetlands info-graphics and they reached thousands of people, and received hundreds of 'likes,' through social media channels such as Facebook and Twitter.

# Healthy Headwaters Wetlands Initiative enters tenth year Local wetlands program restores, enhances 7.8 acres in 2016

By Angela Van Niekerk, Wetlands Specialist; Rachael Scholten, Stewardship Technician; and Hannah LaCroix, Huron Coastal Wetland Study

ince 2008, a total of 62 wetland projects have been completed in the Ausable Bayfield area. More than 293 acres (97 hectares) of wetlands have been restored and another 480 acres of riparian and fragile lands have been planted with native trees, shrubs, and wetland plants.

Less than 2 per cent of wetlands in Southwestern Ontario remains from pre-settlement times. Development and rural land use pressures have resulted in the historic loss of wetlands across our watershed. In 2016, five wetlands were restored totalling 7.8 acres. Another 53 acres of fragile, wetland edge and riparian habitat were planted with native trees, wetland plants, and shrubs. Five planting events were held, involving 170 students and volunteers in enhancement of riparian wetland areas.

These efforts by local landowners have been important to maintain moisture supply during droughts, reduce downstream erosion and flooding and provide important habitat for some common and rarer species.

The wetlands initiative provides technical advice and financial assistance to complete wetland projects. We thank all of the landowners who have protected or enhanced wetlands on their own properties.

### Wetlands







Rachael Scholten



Hannah LaCroix

### **Huron Coastal Wetland Study**

The Huron coastal wetlands have been mapped by air photo interpretation but had not been previously verified.

The Ontario Ministry of Natural Resources and Forestry funds the Huron Coastal Wetlands Evaluation project to verify these wetlands on the ground. In 2016, through site visits and enhanced aerial photography assessment, 310 wetland areas were more accurately mapped across the Ausable Bayfield and Maitland Valley watersheds. Thanks go to local property owners for providing us with the opportunity to more accurately represent important natural areas.

### **Conservation Land Management**

# Storytime Trail launched along South Huron Trail

By Kate Monk, Stewardship, Land and Education Manager

t's rewarding to see the towering trees and clean, meandering streams and rivers on land Ausable Bayfield Conservation Authority (ABCA) has acquired and restored over the past 70 years. People benefit as they spend time at conservation lands for recreation and nature appreciation.



Kate Monk

### Increased attendance at Rock Glen

Across Southern Ontario, more people are visiting conservation areas. Rock Glen Conservation Area received a significant increase in attendance with more than 21,000 visits plus 21 family passes.

### Low-flow culvert replaced

Public use also requires infrastructure and several projects were completed to keep these areas safe for visitors and protect the ecosystem. The complete replacement of the low-flow culvert on the internal roadway at Rock Glen Conservation Area near Arkona, at a cost of more than \$75,000, was the most significant project. Funding for this project came from property reserves and conservation area revenue. The lower section of the stairway to the waterfalls was also replaced.

# Boardwalk section replaced at Bannockburn Conservation Area

The northern boardwalk section at Bannockburn Conservation Area was replaced with funding from the ABCA and Ausable Bayfield Conservation Foundation.

### Storytime Trail launched

The Storytime Trail promotes activity, literacy and family togetherness in an outdoor setting.



### **Conservation Land Management**



Volunteer Sharon O'Toole reads the story at one of the new Storytime Trail reading stations.

The Storytime Trail initiative on the MacNaughton - Morrison Section of the South Huron Trail officially opened on June 21, 2016 with about 200 students and adults at a special program.

While walking the two-kilometre section of trail, people can read eight pages of a story on eight different sign posts. The rest of the story is available online via the Huron County library website and a copy of the featured storybook is on display at the Exeter Library Branch. The posted story changes monthly to encourage people to regularly hike to be active and healthy.

The project wouldn't have happened without funding from the Health Kids Community Challenge – Huron County Initiative and collaboration of the Huron County Library, Friends of the South Huron Trail, and Ausable Bayfield Conservation.

Ausable Bayfield Conservation Authority formed a new partnership with the Parkhill Lions Club in 2016 at the Parkhill Dam Scenic Lookout. The club maintained the gardens and installed two benches where people can enjoy the beauty of the Parkhill Reservoir. The Lions Friendship Arch has a home at the entrance to the property. The ABCA also appreciates the donation of portable toilet facilities by Johnson's Sanitation Service Ltd. of Parkhill.

### **Conservation Land Management**

## Students, community volunteers plant to improve forest cover

By Ian Jean, Forestry and Land Stewardship Specialist

usable Bayfield Conservation Authority (ABCA) staff work in partnership with schools and community groups to facilitate tree planting and habitat restoration projects and events throughout the watershed.



an Jean

Ausable Bayfield Conservation forestry and stewardship staff were involved in these 2016 initiatives:

- Plant native wetland grasses and wildflowers at the Grand Bend Wastewater Treatment Facility demonstration wetlands in partnership with Grand Bend Public School; Municipality of Lambton Shores; Municipality of South Huron; Communities in Bloom; and CH2M Hill.
- Supply trees and technical advice to 5000 Trees Project Spring and Fall Tree Sales in the Grand Bend area.

# Tree Planting and Outreach with Schools and Community Groups

- Led a tour of local farm windbreaks in partnership with Huron-Perth Woodlot Owners Association.
- Plant trees with St. Joseph's and St. Anne's students in ongoing schoolyard naturalization.
- Riparian Rangers program to plant trees and shrubs along Ausable River in Exeter with participation from Exeter Public School; Precious Blood Catholic School; Exeter Scouts; Communities in Bloom; and Municipality of South Huron.
- Supply trees to South Huron Communities in Bloom Spring Tree Sale.
- Supply trees, technical advice to Bayfield River Trails Association Sawmill Trail tree planting.
- Supply trees to Bluewater Communities in Bloom Fall Tree Order.

## Good forestry practices maintain forest cover, provide revenue

By Ian Jean, Forestry and Land Stewardship Specialist

usable Bayfield Conservation Authority plays an important role in demonstrating good forestry practices that enable economic returns while at the same time protecting and conserving natural heritage values. This is especially important due to the relatively low amount of forest cover (14 per cent, Ausable Bayfield Watershed Report Card 2013), in the watershed, that is mainly privately owned and managed.

Emerald Ash Borer continues to be the primary factor influencing forest management in the watershed. The Borer is now present throughout the watershed causing widespread mortality in all native Ash trees. Staff assessed a number of sites within the ABCA's Hay Swamp properties. Based on the forest inventory work, Willert-Ross Tract and Coleman Tract Two were selected for an Ash salvage operation.

Staff completed tree marking, volume estimates and tendered the marked timber for sale to selected timber buyers. At Coleman Tract a total of 335 trees (233 Ash) were marked and at Willert-Ross Tract a total of 459 trees (309 Ash) were marked.

Miller Wood Products, of Exeter, was the successful bid with a combined sum of \$31,365 offered for both properties. Timber harvest was completed at Coleman Tract in December of 2016 with Willert-Ross Tract delayed until summer of 2017.

### **Forest Management on ABCA Lands**

The retention of trees to provide habitat and food sources (nut trees such as Oak and Beech) for wildlife, as well as identification and protection of significant natural heritage features (stick nests, rare species), are important considerations when harvesting trees on conservation authority property. Several large Ash and Soft Maple were retained during the marking and harvest operations to provide wildlife habitat.

ABCA does not permit timber harvest between April 1 and July 1 due to it being breeding season for birds, amphibians, and other wildlife.

### **Tree Planting on ABCA Lands**

With support from Ausable Bayfield Conservation Foundation, ABCA staff planted native deciduous trees in selected conifer plantations in the autumn of 2016. Red Oak, Bur Oak, White Oak, and Tulip Tree were selected for planting in order to enhance species diversity and accelerate progression to natural forest. This initiative to assist migration and introduce these trees to suitable sites is beneficial as our fragmented landscape inhibits natural seed dispersal. Each tree was protected with a tree guard or tree tube and stake to protect them from wildlife damage and also identify them for future monitoring.

### **Watershed Stewardship**

# Landowners in watershed plant more than 50,000 trees

By Ian Jean, Forestry and Land Stewardship Specialist

any watershed residents continue to improve and restore the watershed by planting trees. More than 200 landowners participated in the spring and fall planting programs. More than 51,000 trees were distributed through the Spring Tree Program and more than 2,000 trees through the fall program. The high level of participation in tree planting demonstrates that a large portion of the community is engaged directly in activities to improve the watershed.

Ausable Bayfield Conservation Authority (ABCA) facilitates tree planting in collaboration with the watershed community to implement projects that protect, conserve, and restore the watershed. Trees are planted to establish windbreaks, watercourse buffers, reduce erosion on steep slopes and banks, and to create or enlarge forests.

During the past year of 2016, Ausable Bayfield Conservation staff planted 15 farm windbreaks which will reduce wind erosion and water erosion of the soil which can have a negative effect on water quality. Treed buffers were installed along 13 stream reaches or wetlands that will filter runoff and provide a physical barrier protecting surface water.

Staff planted nine projects to create or enlarge forests that will contribute to improving forest cover, biodiversity, and forest health.



The Conservationist of the Year award in 2016 went to Lambton Shores Phragmites Community Group. This "enthusiastic, dedicated group of citizens in the Port Franks area" was formed in 2011 to address invasion and spread of *Phragmites australis* (European Common

Reed) in Lambton Shores. Phragmites impacts shorelines, coastal wetlands, and rivers. It affects water quality, wildlife habitat, recreation, and public safety.

### **Tree Planting Program**



Forestry and Land Stewardship Specialist Ian Jean spoke about a recent South Huron windbreak project during the Huron-Perth Chapter of the Ontario Woodlot Association tour on June 9, 2016. Participants learned of best practices for planting and maintaining windbreaks to prevent wind erosion on farm fields.

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 staff is to pursue cost-share funding in order to support projects that benefit watershed health. Funding for tree planting was obtained from a variety of federal, provincial, and municipal programs including Habitat Stewardship Program, Huron County Clean Water Project, Forests Ontario, and National Wetland Conservation Fund.



Janette Anderson, Great Lakes Program Coordinator, Environment and Climate Change Canada, spoke at the Ausable Bayfield Conservation partner appreciation evening on March 17, 2016. Her topic was Collaboration Works: Lessons Learned from Global Review of Coastal Management. She shared national and international examples of partners working together to reduce impacts to land, water, and habitat. She cited action plans reducing nitrogen and phosphorus discharges and leading to recovery of some wildlife populations.

### **Watershed Stewardship**



A flowering cover crop photo contest was held by Ausable Bayfield Conservation in 2016. Cover crops have been grown for centuries but have recently experienced resurgence in popularity. In Huron County, a new cover crop incentive category resulted in a number of cover crop planting projects. Farmers growing cover crops find benefits such as improved nutrient cycling; improved water management; erosion protection; weed control; reduced compaction; better physical condition; and carbon sequestration.

# Landowners complete more than 100 stewardship projects with help of more than \$400,000 in grants

By Kate Monk, Stewardship, Land and Education Manager

onservation projects continue to evolve in our watershed to protect soil and water quality. Farmers are adapting innovative technologies to conserve soil and improve soil health while producing high-quality food for Canadian and international markets. They are learning as they grow cover



Kate Monk

crops during the time of year when commercial crops aren't being grown. This reduces erosion, especially during winter rainfall events.

Stewardship staff at Ausable Bayfield Conservation worked with farm and non-farm rural landowners and community groups to voluntarily complete 110 stewardship projects in 2016: fragile land retirement, cover crops, erosion control, wetland creation, well decommissioning, wellhead protection, manure storage decommissioning, forest management plans, and *Phragmites australis* control.

Funding to support his work was provided from a variety of sources for a total of \$415,470 in grants. Landowners also contributed funding and the land for the projects.

Conservation authority staff provide on-site environmental and technical advice, working with landowners to develop the best possible project.

### **Private Land Stewardship Program**

Stewardship Projects and Grants by Municipality			
Municipality	Number of Projects	Grants	
Adelaide Metcalfe	1	\$9,450.00	
Ashfield-Colborne- Wawanosh	1	\$3,290.00	
Bluewater	22	\$44,981.58	
Central Huron	26	\$164,003.52	
Huron East	21	\$20,824.77	
Lambton Shores	2	\$4,608.24	
Lucan Biddulph	4	\$28,042.00	
Middlesex Centre	1	\$3,994.55	
North Middlesex	13	\$104,071.25	
South Huron	20	\$24,163.25	
TOTALS	111	\$407,429.16	

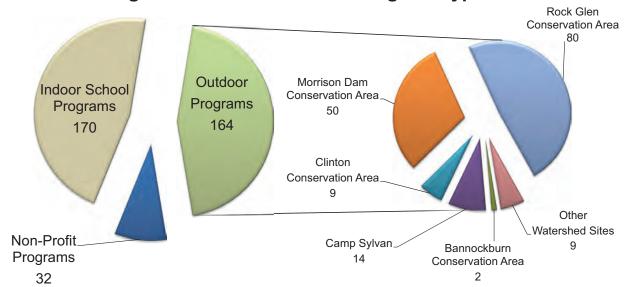
**NOTES:** Totals do not include funding from programs delivered by Ontario Soil and Crop Improvement Association (OSCIA) that did not receive assistance from Ausable Bayfield Conservation staff members.

Township of Ashfield-Colborne-Wawanosh is in Maitland Valley watershed.

Staff also play an important role in completing paperwork and sourcing funding.

### **Conservation Education**

### **Education Programs in 2016 Based on Program Type and Location**



## We tip our hats to our generous partners helping to educate youth

By Denise Iszczuk and Melissa Prout, Conservation Educators

n 2016, the Ausable Bayfield Conservation Authority (ABCA) Education Department partnered with 37 organizations to develop diverse learning opportunities for youth. There are very many great organizations to mention and we highlight the following programs that would not have happened without additional support.





Denise Iszczuk

Melissa Prout

# **Conservation Education**

In spring, with \$3,000 in funds from Healthy Kids Community Challenge – County of Huron, we completed a pilot project called *Using the Outdoors to Run, Jump, Play Every Day at School*, which combined physical and environmental literacy while using little to no equipment. More than 800 Huron County students from four watershed schools took part in the pilot project. Teachers and students learned the benefits of outdoor play and ideas for improving the outdoor play experience. Youths used pedometers to measure activity levels during the facilitated activities. Many classes recorded 1,000 steps during the one-hour outdoor experience. This helped students to make connections between outdoor play and healthy living.

In autumn, we hosted a two-day Innovation, Creativity and Entrepreneurship Workshop for 46 secondary school students.



Students did citizen science on The Great Manure Tour by developing nutrient management approaches. Students then presented their ideas to policy makers.

The event was called *The Great Manure Tour*. It took students to four farms and a municipal wellhead in order to better understand manure management practices. Students answered the challenge to come up with alternative solutions to current systems and received mentorship from six partnering organizations. NextEra Energy Resources supported this workshop. After the workshop, four students travelled to the Great Lakes Public Forum in Toronto to present their ideas to policy makers.

With cooperation from three municipalities and two non-profits, and with support from two additional funding partners, we combined the *Get to Know Your H20* Grades 7 and 8 in-school program with three complementary experiences: a stream study; a tour of the local drinking water and wastewater facilities; and a tree planting exercise. This new multi-phased program delivered to five schools highlighted each student's connection with local water resources and empowered them to take action in their community.

# **Ausable Bayfield Conservation leverages local levy** funding to generate revenue from other sources

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

usable Bayfield Conservation Authority (ABCA) continues to be one of the leading conservation authorities in when it comes to leveraging local levy dollars to generate revenue from additional thirdparty funding. Thanks to the approval of grant and funding applications submitted by staff during the year, the local municipal levy dollars represented approximately 30 per cent of total revenue. This compares to other conservation authorities across the Province of Ontario with approximately 50 per cent of their total revenue relying upon municipal

Similar to the past few years, Ausable Bayfield Conservation Authority has continued to leverage every local dollar with approximately \$2.50 in commitment to their local watershed.

Revenue Generated

### **Financial Summary**

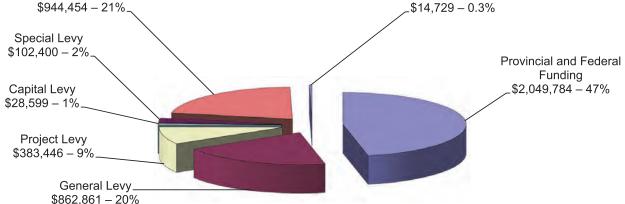
additional generated funding, compared to the provincial average that is roughly dollar for dollar among other conservation authorities. This makes a single local dollar work like several for the benefit of services and programs for watershed residents.

The financial results (unaudited at the time of publication) show this conservation authority again coming in as budgeted as the \$210,000 loss includes \$212,000 of amortization. Staff have continued to do a terrific job in bringing projects in at, or better than, budgeted costs.

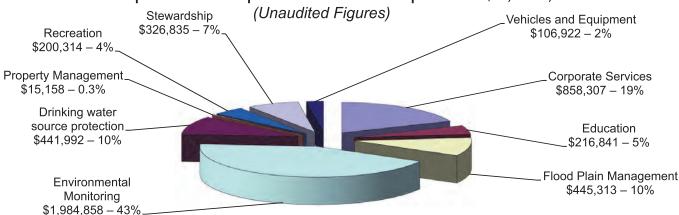
We again would like to thank our member municipalities for their continued involvement and

### 2016 Sources of Revenue – Total Revenue \$4,386,273

(Unaudited Figures) Other Revenue \$14,729 - 0.3%



### 2016 Department Expenses – Total Expenses \$4,596,540



### **Ausable Bayfield Conservation Foundation**

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 Darbishire Exeter



Roger Lewington Bayfield



**Dave Crockett** St. Joseph



**Tom Prout**Exeter

# Foundation fosters partnerships, supports action

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

would like to thank all the volunteers, donors, Directors, and other supporters of the work of the Ausable Bayfield Conservation Foundation (ABCF).

This generous watershed community has made a local difference. Here are some 2016 highlights:

### **Junior Conservationist**

Hannah Krebs, of Hensall, was chosen as Junior Conservationist.

This is a two-month summer position funded by the Ausable Bayfield Conservation Foundation.



Hannah Krebs

### **Commemorative Woods**

J. M. McBeath Funeral Home was sold to Haskett Funeral Homes so the final tree dedication service was held at Klopp Commemorative Woods on June 12, 2016 with 100 people attending.

More than 450 family and friends attended the annual tree dedication service with Haskett Funeral Homes at Morrison Dam Commemorative Woods on September 18, 2016.

#### **Conservation Education**

- \$3,000 subsidy for students participating in an outdoor education program and \$1,500 for youth organizations to book a nature program.
- \$300 towards a live owl presentation at the annual Owl Prowl.
- A grant of \$1,000 to cover busing of students to a nature program, on species at risk, at Morrison Dam or Rock Glen conservation areas.

#### Student Environmental Award

Samantha Bycraft of Lucan received the Student Environmental Award. She is attending University of Waterloo in the Honours Geography and Environmental Management program.

#### **Conservation Foundation**





Ausable Bayfield Conservation Foundation Chairman Bob Radtke presents Student Environmental Award \$1,000 student bursary to Samantha Bycraft, of Lucan.

# Protecting Wetland Habitat and Natural Areas

- Partnered with the Bayfield River Valley Trail Association to receive donations towards the Bayfield Tree Project and Bayfield River Flats Acquisition.
- \$5,500 towards planting trees, nuts and seeds to enhance diversity and habitat in Ausable Bayfield Conservation plantations transition to hardwood forests.
- \$4,000 towards turtle monitoring, exclusion fencing in Port Franks and event in Ailsa Craig.

Continued on next page

### **Ausable Bayfield Conservation Foundation**

## **Conservation Dinner surpasses \$1 million raised for community**

Continued from previous page

### **Conservation Dinner**

he Conservation Dinner raised \$63,000 in net proceeds on Thursday, April 14, 2016 to support conservation projects, such as parks and nature education and recreation, in the watershed community.

This fundraiser has surpassed \$1 million in net proceeds raised in 27 years. This charity auction is a partnership of Exeter Lions Club, Ausable Bayfield Conservation Foundation (ABCF), and community donors, guests, volunteers, and artists.

The gala charitable auction raised a record amount in 2016. The organizing committee was hard at work preparing for the 28th dinner in 2017.



The 27th Conservation Dinner, on April 14, 2016, raised a new record of \$63,000. This auction surpassed the \$1 million mark in net proceeds raised over its history for local nature education and recreation; parks, accessible trails, and conservation areas; student award and youth job experience; and more. In above photo, left to right, in front of Flying Geese sculpture by Jim Dawe of Murals in Metal, are: Brian Horner, General Manager and Secretary-Treasurer, Ausable Bayfield Conservation; Mike Tam, Chairman of Ausable Bayfield Conservation Authority Board of Directors; Jim Dawe, Feature Artist 2016; Bob Radtke, Chairman, Ausable Bayfield Conservation Foundation; Paul Anstett, Chairman of the Conservation Dinner Committee; and Craig Hebert, First Vice President, Exeter Lions Club.

### **Accessible Trails and Facilities**

- 11th annual South Huron Trail Golf Tournament raised \$4,400 in support of the proposed Pedestrian Bridge on the South Huron Trail.
- \$5,000 towards replacement of a boardwalk at Bannockburn Conservation Area.

### **Conservation Foundation**



Winning team at the 11th South Huron Trail Fundraiser Golf Tournament was Al Beattie; Heather Beattie; Karstin Stuckless; and Gladys Rock.



Larry Wein and Dennis Rau, of the Exeter Lions Club, help to stock Morrison Reservoir for fishing derby.

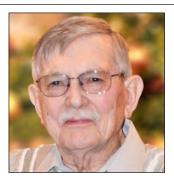
# Morrison Dam Fishing Derby

There were 750 rainbow trout stocked in the Morrison Dam reservoir for the 32th Fishing Derby on April 30, 2016.

This family-friendly event is made possible by donations of \$1,300 each from Ausable Bayfield Conservation Foundation and the Exeter Lions Club.



Bob Norris



Ted Jones

### Remembering their Legacy of Service

Ausable Bayfield Conservation Foundation lost two giants of conservation in 2016 with the passing of former directors Bob Norris and Ted Jones. This loss leaves us with heavy hearts. We will remember their legacy of community service.

### **Huron Tract Land Trust Conservancy**



Photo by Jack Pal

The generosity of the Bayfield and area community led to a successful fundraising campaign, by the Bayfield River Valley Trails Association, that made it possible for HTLTC to preserve and protect the Bayfield River Flats.

# Generosity of Bayfield-area community, Bayfield River Valley Trails leads to permanent protection of Bayfield River Flats nature area

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

#### Mission:

Ensuring a land legacy.

#### Vision:

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

he Huron Tract Land Trust Conservancy continues to inspire communities to ensure a land legacy by protecting natural lands and habitat.

Building on the donation of a 10-acre forest from the Mayhew family in 2015, the Bayfield River Valley Trails Association led a successful fundraising campaign in 2016 to purchase the Bayfield River Flats Natural Area. The property will benefit the community of Bayfield and area and is permanently protected through ownership by the Huron Tract Land Trust Conservancy.

### **Huron Tract Land Trust Conservancy**

Bayfield River Flats Natural Area is 4.75 of riverbank property beside the Highway 21 bridge at Bayfield.



The land may contain several species at risk, and is a mixture of flood plain land and upland forested

The community has embraced the idea of preserving the property as a natural area with 1,200 feet of river access for passive recreation, such as fishing, kayaking, walking, birding, etc.

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



Roger Lewington (Chair) **Bayfield** 



Tom McLaughlin (Vice Chair) Lucan



**David** Kemp Staffa

areas.



Don **Farwell** Stratford



Peter Twynstra Ailsa Craig





Steve **Bowers** Brussels



Philip Walden Thedford



Burkhard Metzger Clinton





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