

Peter and Esther Warner win Conservationist Award

eter Warner, and his late wife Esther, won the Conservationist of the Year Award in 2023 for years of stewarding their beautiful 60-acre property, Merrywood Farms, in the heart of Grand Bend.

Over a 25-year period, they planted tree buffers, created a Managed Forest Plan, and hosted local students for conservation education and tree planting.

In 2022, with help from Ausable Bayfield Conservation Authority (ABCA), Peter restored the remaining 15 acres of land by planting more than 7,000 native-species trees.



ABCA Chair Marissa Vaughan and Stewardship Manager Nathan Schoelier present Conservationist award to Peter Warner.

The year 2023 was a very important one for ABCA

By Marissa Vaughan, Chair, Ausable Bayfield Conservation Authority

t has been my honour and privilege to serve as Chair of the Ausable Bayfield Conservation Authority Board of Directors during 2023. I would like to thank Past Chair Dave Jewitt for his dedicated service and express my gratitude for the support provided by our current Vice Chair, Ray Chartrand.

ABCA has been protecting life, property and watershed resources, in partnership with local municipalities and the citizens of our community, since 1946. That's more than three quarters of a century! We are proud of this legacy. Our staff and board members are committed to serving our community through our stewardship role, so that future generations will continue to thrive for years to come.

The year 2023 was busy as we met new requirements of the *Conservation Authorities Act*. It was a period of renewal and we looked to the future by drafting a new *Conservation Lands Strategy* and a new *Watershed-Based Resource Management Strategy*.



Marissa Vaughan

I would like to thank the hundreds of people who have provided input into these plans and I encourage you to continue providing your feedback in the consultations scheduled for 2024.

In partnership with local municipalities, we will continue to build upon a foundation of 77 years of watershed enhancements and map out a path for a healthy watershed future.

Watershed management successes have been possible thanks to our landowners, residents and community groups. Working together we are building awareness and sustainability in our environment.

We have an excellent, hard-working Board of Directors and a talented, dedicated staff. When we combine that with a generous community of watershed stewards, and the support of our valued funding partners, great things are possible ... and are happening.

On behalf of the entire Board of Directors, I would like to thank you for your stewardship of our water, soil and habitat. We look forward to working with you in the year and years ahead to enhance this watershed we call home.

Ausable Bayfield Conservation Authority acknowledges the original stewards of this land, the Haudenosaunee and Anishinaabe. We recognize the Huron Tract Treaty signed in 1827. We recognize that this territory was subject to the Dish with One Spoon wampum, under which multiple nations agreed to care for the land and resources including plants and animals, in peace. As shared stewards of this land and water, ABCA is grateful to have the opportunity to work in this territory.

Ability to adapt helps create healthier watersheds

By Brian Horner, General Manager and Secretary-Treasurer

n important concept in our work is adaptive management. It's a constant cycle of learning and evaluation and incorporation of new data into decision-making.



Brian Horner

When managing watershed resources, we need knowledge and data as we develop policies. We need monitoring and research in order to assess whether our management actions are as effective as they can be. That assessment can help us to determine where our approaches are working well and which actions we need to change.

Adaptive management helps us to understand complex, dynamic ecosystems and to create productive, forward-thinking conservation strategies.

In 2023, we had to adapt as *Conservation*Authorities Act changes required us to

update some of our documents. Ausable Bayfield Conservation Authority has successfully met the challenges of moving forward on these required documents.

We worked closely with our member municipalities on programs identified in the Inventory of ABCA Programs and Services. We thank these municipalities for their vision and their support.

In 2023, we thanked some retiring board members and welcomed several new board members. The new members showed their ability to adapt as they capably took on their new roles.

There is a saying that 'the only constant in life is change' and I would like to thank all of our Board of Directors and all of our staff for being able to adapt to change so well over the course of the year. This ability to adapt helps us as we work together to construct a healthy watershed future.

ABCA works to complete Conservation Authorities Act requirements

e have completed several projects to meet the requirements of the Conservation Authorities

Act update and associated regulations:

- Fee Policy.
- Land Acquisition Policy and Plan.
- Land Disposition Policy and Plan.
- Inventory of ABCA Programs and Services.
- Cost Apportioning Agreements with participating municipalities for Category 3 programs and services.

- Governance section and web pages on the Ausable Bayfield Conservation Authority (ABCA) website, and;
- The Watershed-Based Resource Management Strategy; Conservation Lands Strategy; Conservation Lands Inventory; and Capital Asset Management Plan were started in 2023 and are to be completed in 2024.

The documents provide a guide for the long-term management of the watersheds in cooperation with the community and municipalities.

Planning and Regulations

By the numbers - 2023

| Files initiated | 1,100+ |
|---------------------------------|--------|
| Planning Act Comments/Inquiries | 102 |
| Major Permits Issued | 97 |
| Minor Permits Issued | 8 |
| Drain Reports Reviewed | 6 |
| Drain Maintenance Reviewed | 42 |

Drinking Water Source Protection









Four new videos in 12-part series on protecting drinking water sources

All current source protection committee (SPC) members have appeared in videos promoting source water protection. Our 12-video series has received 35,000+ views. In 2023, we released four new videos with SPC members (from left to right): Be Part of the Water Team, with Paul Heffer; Water Wise well water testing with John Thompson (and his wife Beth Ross); Your Well, Your Responsibility well water protection tips with Doug Hocking; and The Worth of Water video, with source protection tips for business, with Philip Keightley. To watch the videos, visit sourcewaterinfo.on.ca/news/videos

Public consultation held on updates to source protection plans

ublic consultation, on proposed Section 36 updates to source protection plans, started in 2022 and continued until February 10, 2023.

- We completed a Section 51 amendment, under Ontario Clean Water Act, 2006, to reflect decommissioning of the Zurich wells in the Municipality of Bluewater.
- The Ausable Bayfield Maitland Valley Drinking Water Source Protection Committee welcomed two new members in 2023: Doug Hocking, of Exeter, and John Thompson, of Goderich.
- In 2023 as part of the new Best Practices initiative in Ontario we partnered with the community and local public health to provide Water Wise Events for well water sampling in several local communities.



The community groups (including service clubs and resident associations) helped with water sample bottle distribution, signs, promotion, event space and help at events.

- As part of the best practices well water testing events we worked with four community partners to host four events.
- There were 168 people who attended these events.
- Working with four community partners, volunteers and staff distributed 337 water sampling bottles.
- There were 131 water sampling bottles returned to local public health for testing.

Water Level and Streamflow Monitoring

Data network helps provide warning of flood events

n partnership with Ontario Ministry of Natural Resources and Forestry, and Environment and Climate Change Canada, Ausable Bayfield Conservation Authority (ABCA) maintains and operates a data collection network to provide watershed municipalities and residents with advance warning of flood events.

The network includes:

- 14 automated stations that allow staff to monitor water level, precipitation and temperature.
- 20 volunteer rain gauge participants, and
- A communications process so Flood Messages and Low Water Advisories are provided to our watershed municipalities and the public in a timely manner.

Flood Emergency Planning



Ross Wilson, ABCA Water and Soils Resource
Coordinator; Keynote Presenter Mark Robinson,
meteorologist with the Weather Network and
co-host of two television series, *StormHunters*and *Unearthed*; Davin Heinbuck, ABCA Water
Resources Coordinator; and Marissa Vaughan,
Chair, ABCA Board of Directors, at Flood
Emergency Planning Meeting.

Forty-seven attend Flood Emergency Planning Meeting

usable Bayfield Conservation Authority hosted the annual Flood Emergency Planning Meeting on March 28, 2023.

- Forty-seven attendees reviewed the Roles and Responsibilities in Flood Emergencies and heard about the Flood Forecasting and Warning Network.
- Representatives from eight municipalities, community emergency staff from three counties, Emergency Management Ontario, Lambton OPP and three conservation authorities attended.

Flooding and Low Water

ABCA issues ten flood messages during 2023

here were no major flooding events in 2023. The largest winter melt occurred in February and, compared to most winter melts, was relatively minor. Snow water equivalent of 40-70 mm, with 20 mm of rain, was not enough to melt all the snow, but did produce some runoff.

- Ice thickness on rivers was less than normal with only a slight risk of ice jams.
- A dry spring resulted in a Level 1 Low Water Advisory in early July but July was very wet.
- ABCA issued seven Flood Outlook/Water Safety messages and three Flood Watches.



In this photo, from April 2, 2023, flooding is evident in the Parkhill Creek watershed, between Grand Bend and Parkhill.



Kari Jean, Aquatic Biologist, returns a Northern Pike back into a local municipal drain.

- 30 municipal drains assessed.
- More than 4,500 fish surveyed.
- 33 sites sampled for fish.
- **300** plots sampled for freshwater mussels.
- 31 sites sampled for beach water quality.

Thank you to our partners

ommunity members have told us they want biologically diverse waterways where they can swim and fish. Our partners make monitoring (and management) possible:

- Fisheries and Oceans Canada Canada Nature
 Fund and Environment and Climate Change
 Canada Habitat Stewardship Program support
 monitoring and management for aquatic species,
 including rare fish and mussels.
- Ontario Ministry of the Environment, Conservation and Parks supports more than 20 years of monitoring.
- Fred A. and Barbara M. Erb Family Foundation and the Ontario Ministries of Agriculture, Food and Rural Affairs and Environment, Conservation and Parks support Healthy Lake Huron – Municipal Drain; Cover Crop; and Wetland Enhancement programs.
- Huron County and Ontario Soil and Crop Improvement Associations – ONFARM – support efforts to understand agricultural best practices.
- Long-term support from the **Bluewater Shoreline Residents' Association** meant that a summary document about shoreline *E. coli* concentrations encouraged more Lake Huron stewardship.

Groundwater Monitoring

ABCA collects groundwater data at 16 monitoring wells

ith provincial support, Ausable Bayfield Conservation Authority (ABCA) maintains and collects hourly groundwater levels and annual water quality samples at 16 wells.

Over time:

- Groundwater level data show annual recharge periods in autumn and spring.
- Drought or above-normal precipitation drive short-term changes.
- When water quality indicators exceed a provincial guideline, notices are issued to the landowner, respective municipality and local public health.
- Some locations are more susceptible to naturally occurring elements or surface water influences.



Assistant Water Resources Technician Christie Brown measures groundwater levels at one of the monitoring wells in the watershed.

Visit https://data.ontario.ca/dataset/ provincial-groundwater-monitoringnetwork or the Ausable Bayfield Watershed Report Card to learn more.



Canada Nature Fund supports monitoring of freshwater mussels in Bayfield River

reshwater mussels are nature's water filters. These animals are indicators of the health of local rivers.

Canada Nature Fund made it possible to study Bayfield River mussels for the first time since 2007. Most of the sixteen different species of mussels that live in the Bayfield River, including one of the two species at risk, were found in 2023.



Gwen Taylor, Junior Conservationist, holds a mussel found during monitoring. This was part of her summer job experience, funded by Ausable Bayfield Conservation Foundation.

New Watershed Report Card released in 2023

e have completed watershed report cards for **16** local areas. These reports summarize data from:

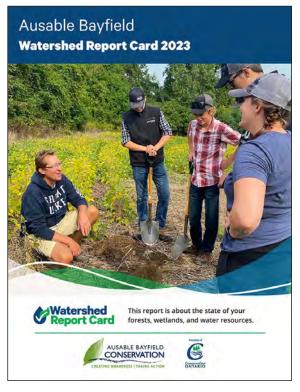
- 19 surface water stations.
- 14 groundwater stations.
- 15 sites sampled for invertebrates.
- Forest, wetland and over-winter vegetation cover measured with Geographic Information Systems.

Watershed grades suggest there is room for improvement. These reports offer suggested actions for all of us.



Use your smart phone camera to use this quick response QR code to visit the link and check on your backyard creek.

www.abca.ca/watersheds/reportcard



Watershed Report Cards are prepared every five years, most recently in 2023.

Protecting life and property ...

Ausable Bayfield Conservation
Authority (ABCA) works to
protect, improve, conserve,
and restore the watershed in
partnership with the community.







At fishing demonstration, day-campers learn

Bluewater Shoreline Residents' Association supports beach water sampling program.



public health, and source water protection

were partners in well water testing events.

Page 8

... through community partnerships





500 Butternut trees to be planted

at new Butternut Seed Orchard

Conservation Lands partnerships support stewardship

e established the Southwest Ontario Butternut Archive Orchard, at Triebner Tract, in partnership with the Forest Gene Conservation Association (FGCA) and funding partners.

Butternut (Juglans cinerea) is a native tree. It is an Endangered Species and it is in severe decline due to the Butternut Canker Fungus (Ophiognomonia clavigignenti-juglandacearum).

The goal of the Butternut archive orchard partnership is to use Ausable Bayfield Conservation Authority conservation lands to grow canker-resistant Butternut trees, which may be later introduced into stewardship programs for species recovery.

The five-acre site will be used to grow up to **500** Butternut trees for the purpose of seed production for species recovery. The archive orchard trees are grown from remnant Butternut trees that are showing a resistance to the canker, which has been present in Ontario since the 1960s. Due to scarcity of healthy, resistant Butternut trees, it will take several years to complete the orchard. There were 67 trees planted in the orchard in May 2023. It is estimated the seedlings will take five to 10 years to produce seed.

The Southwest Ontario Butternut Archive Orchard is an example of how ABCA works in partnership to support watershed conservation.

On-the-ground watershed action – by the numbers

- **6,204,731** trees planted since 1946.
- 42,770 trees planted by 246 landowners.
- 7,873 native plants planted.
- 13 wetlands restored by 10 landowners.
- 17 management plans to promote healthy forests.
- 22 invasive species management projects.
- 131 wetlands restored since 2008.
- ~5,000 acres of over-wintered cover crops.
- 11 Water and Sediment Control Basins.



"More of us sharing our experience (with cover crops) will mean that more better practices will happen."



Citizen Science

- 53 sites sampled for urban and agricultural best practices – more engaged people support more landscape water retention.
- 683 turtles protected more informed public understands more about habitat needs for rare animals.



Monitoring, Stewardship and Outreach – Working Together to Protect Life and Property



Monitoring leads to action

ata and information help to leverage financial incentives for landowner stewardship.

Every local dollar for stewardship, from the municipal levy, turns into four dollars invested locally and results in local improvements to watershed resources.

Stewardship Projects and Grants by Municipality

| Municipality | Projects | Grants |
|-------------------|----------|-----------|
| Adelaide Metcalfe | 3 | \$41,946 |
| Bluewater | 33 | \$114,197 |
| Central Huron | 9 | \$10,007 |
| Huron East | 26 | \$77,765 |
| Lambton Shores | 4 | \$34,936 |
| Lucan Biddulph | 3 | \$3,950 |
| Middlesex Centre | 6 | \$17,495 |
| North Middlesex | 23 | \$47,645 |
| South Huron | 18 | \$36,800 |
| West Perth | 4 | \$12,715 |
| TOTALS | 129 | \$397,481 |

Total Reported Value of Projects: \$727,704

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.





Triebner Tract Restoration

- **2,500** trees planted.
- 2.5 acres of wetlands restored.
- One acre of wildflower meadow planted.
- 100 American Chestnut seedlings planted in partnership with the Canadian Chestnut Council.

Monitoring, Outreach and Management

- Three forest health monitoring plots created at Parkhill Conservation Area.
- Forest Health Research
 Program, of Ministry of Natural
 Resources and Forestry (MNRF),
 completed assessments at plots
 at Chapman Tract and Mystery
 Falls Management Area. Beech
 Leaf Disease was detected there
 in all trees. Beech Bark Disease
 was not detected.



 Completed 30 acres of forest management, including 10 acres of Beech Bark Disease management at Linfield Wildlife Area.



- 3,642 hectares of conservation lands.
- 26+ kilometres of trails managed.
- 200+ responses to the Conservation Lands Strategy consultation.
- 2,590 people took part in conservation education at ABCA conservation areas.
- 36,000 people visited Rock Glen Conservation Area (RGCA).
- 2,093 entries to the Arkona Lions Museum at RGCA from 46 countries.



"The conservation educators were absolutely fabulous! They captured the students' attention and kept them busy and learning all day long."

"Students loved the experiential learning."

onservation education staff worked with local schools, non-profits, libraries, and community groups:

- Adventurous play-based learning; inquiry; mental health and mindfulness; Indigenous knowledge; and technology.
- Five weeks of nature day camp with more than 60 campers.
- More than 1,000 students reached in Make Peace With Winter special event.
- Most attended program topics: Species at Risk; Fossils; Water Quality; Watershed Management; Climate Change; and more.

These educational experiences foster the next generation of watershed stewards. This would not be possible without our generous community partners including: NextEra Energy Canada, LP; Cordelio Power; and Ausable Bayfield Conservation Foundation.

Outreach – By the Numbers





- 6,143 students and teachers reached at 195 school programs.
- 8,640 students and community members reached at 257 education events.
- 3,631 people reached during Ausable Bayfield Conservation outreach events.
- 577 people attended Turtle Release, saw turtle hatchlings released back into the wild, learned about species at risk.
- ~300 watershed residents participated in public tree plantings.

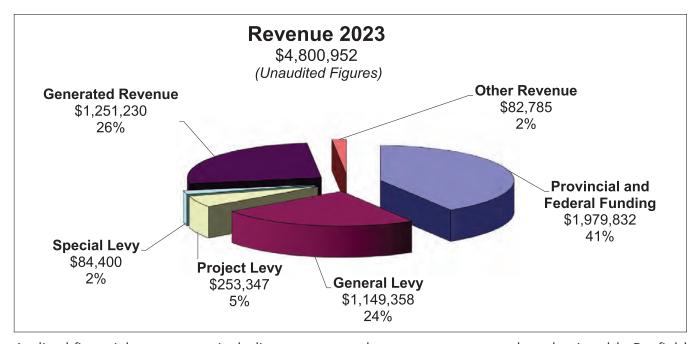
ABCA Board of Directors

The Ausable Bayfield Conservation
Authority (ABCA) Board of Directors,
in 2023, was (front row, l. to r.)
Dave Jewitt, Central Huron; Marissa
Vaughan, Chair, South Huron and
Perth South; Ray Chartrand, Vice
Chair, Huron East; Greg Lamport,
Bluewater; (back row); Steve Herold,

West Perth; Dave Marsh, Lambton



Shores and Warwick; Wayne Shipley, Adelaide Metcalfe and Middlesex Centre; Adrian Cornelissen, North Middlesex; and (not in photo) Jaden Hodgins, Lucan Biddulph.



Audited financial statements, including revenue and expenses, are posted on the Ausable Bayfield Conservation website on the Financial web page (**www.abca.ca/governance/financial**).

Each local dollar works like three

usable Bayfield Conservation Authority continues to be one of Ontario's leading conservation authorities in leveraging local levy dollars with third-party funding to maximize benefit to watershed resources and watershed ratepayers.

Approval of grant applications submitted by staff meant local levy dollars were about 30 per cent of total revenue. Levies at other conservation authorities were about 50 per cent of their total revenue.

ABCA continues to leverage each local dollar generated with about \$2 more in funding, compared to the provincial average that is dollar for dollar for other conservation authorities.

Staff have continued to do a terrific job of bringing projects in at, or better than, budgeted.

Ausable Bayfield Conservation Foundation (ABCF)

he Ausable Bayfield Conservation Foundation is honoured to be in its 50th year of supporting needed conservation projects and partnerships to sustain healthy watersheds.

The Conservation Foundation continues to support environmental monitoring and conservation education. Other 2023 highlights include:

- Supporting local student, Gwen Taylor of Perth South, in a summer learning experience as Junior Conservationist. Gwen was also the recipient of the \$1,000 Student Environmental Grant in 2023.
- Partnering with Exeter Lions Club for the 37th Annual Trout Fishing Derby at Morrison Dam Conservation Area on Saturday, May 6, 2023.
- The Commemorative Woods Tree Dedication Service, on September 17, 2023, held in partnership with Haskett Funeral Homes Ltd.





In-person Dinner returns:

After one missed year and two years holding the auction online, the Conservation Dinner returned to an in-person event in 2023. Shown on April 20, 2023 are Brian Horner, ABCA General Manager; Lee Finkbeiner, Exeter Lions President; Dave Frayne, Dinner Chair; and Marissa Vaughan, Chair of ABCA Board.

Huron Tract Land Trust Conservancy (HTLTC)

he year 2023 was an exciting one for Huron Tract Land Trust Conservancy.

- We thanked former board members
 Peter Twynstra and Kim McCabe for
 their years of dedicated service upon
 their retirement from the board.
- We welcomed Jessica Smeekens and Kerry Teskey to the Land Trust Board.

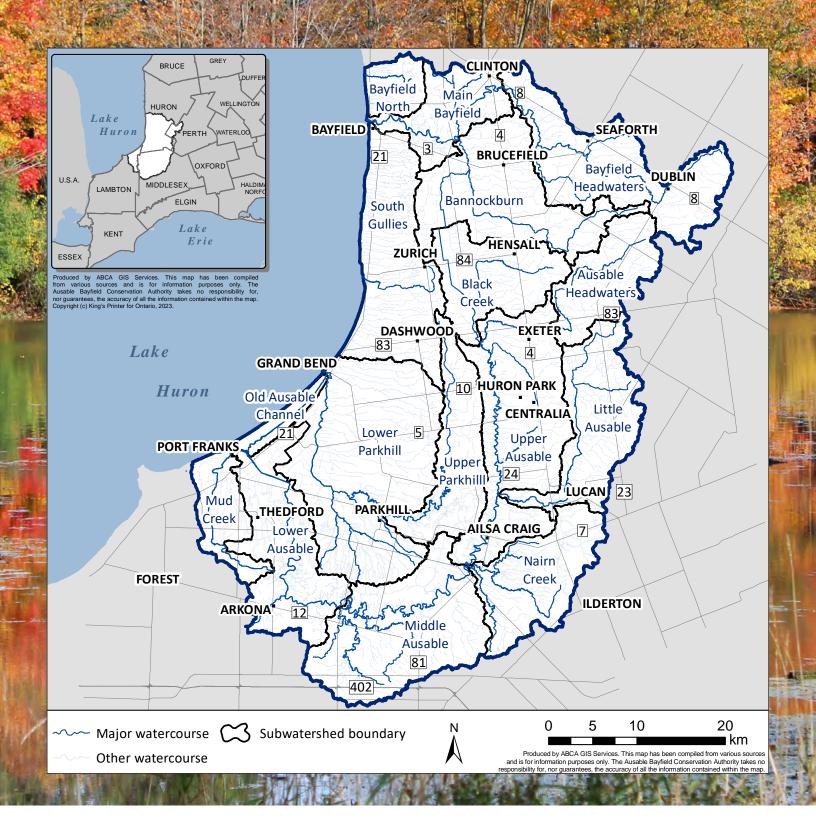


Tour of Warner Preserve

Warner Preserve in Grand Bend (2023), donated by Peter Warner and his late wife Esther, is the fifth property permanently preserved by the Land Trust. In this photo, Land Trust and Conservation Foundation directors tour this important nature area.



- In June, nine community members, led by Peter Jeffers and the Bayfield River Valley Trail Association's Trail Blazers works crew, planted hundreds of pollinator plants at Bayfield River Flats Natural Area, which will add habitat for species, help to filter water during flooding, and hold soils in place.
- Dedicated volunteers of Bayfield River Valley
 Trail Association led a fundraising campaign
 to raise \$52,000 for a new pedestrian
 walkway at Bayfield River Flats Natural
 Area. This will allow the Bayfield and area
 community to walk to the nature area without
 having to drive or cross the highway.





Ausable Bayfield Conservation Authority (ABCA) 71108 Morrison Line • RR 3 Exeter, Ontario • N0M 1S5

Phone: 519-235-2610 • Toll-free: 1-888-286-2610 • Website: abca.ca • E-mail: info@abca.ca