

Partnering With The Community

COMMUNICATIONS, OUTREACH & EDUCATION ... a part of all programs

Enhancing awareness and an understanding of Conservation Authority initiatives, enables our communities to support and enjoy our facilities and services, so vital in this changing climate. Using a broad spectrum of methods, our messages are broadcast across the watershed.

Highlights of the year included the creation of the LTVCA's Annual Report and daily social media bulletins. We attended the 'Go Wild Grow Wild Expo', organized an east watershed Directors' bus tour, and hosted events including the annual 'Longwoods Heritage Weekend' and 'Season's Greetings'. Public events expanded to other conservation areas including 'Learn to Fish' workshops.

The 'Longwoods Resource Centre Feasibility Study' was completed, with funding from the LTVCA Foundation through an Ontario Trillium grant. Our Directors supported the Foundation in moving forward, to undertake the Resource Centre redevelopment fund-raising campaign.

Outstanding volunteers were recognized at an annual award presentation. We applaud the nearly 1,300 volunteers who helped create a balanced and healthy watershed for our communities this year!



Education Program

We began a new focus, with the blending of conservation and heritage at Longwoods Road Conservation Area, emphasizing the importance of balancing the use of our natural resources with proper stewardship, as exemplified by First Nations communities.

Education at Longwoods Road Conservation Area & Ska-Nah-Doht Village - Programs offer Ontario Curriculum based, field trip and in-class activities to students, community groups and at public events. They were received by nearly 4,000 students enjoying field trips at Longwoods this year. A popular in-class program sponsored by local service clubs, was the grade 2 'River and Creek Safety Program', engaging 229 children. Along with hosting many public events, staff mentored a high school co-op student, and judged and presented a Conservation Award for local elementary students.

10th Annual Chatham-Kent & Lambton Children's Water Festival - 2,749 students, teachers, chaperones, high school and adult volunteers participated in the three-day October festival at C.M. Wilson Conservation Area.

Ska-Nah-Doht Village & Museum - continues to be a community leader, to educate about the past, collect and preserve local history, and faithfully interpret the Haudenosaunee - People of the Longhouse.

This year, two private artifact donations were added to the Education Collections. Public events like 'Twilight Tuesdays' and 'Spirit of the Harvest', engaged visitors with entertaining learning experiences. Two camps for Indigenous youth were held, and an 'Oneida Language Day' brought speakers together for a day of sharing, learning, food and fun. A Canada Summer Jobs grant funded a Community Outreach Assistant position, and staff worked with Chippewas of the Thames First Nation to welcome four more students to our summer visitor services team.

Ska-Nah-Doht Village and Museum receives guests from the community and around the world, with the Turtle Trail Gift Shop, featuring local First Nations arts and crafts, being a popular attraction! We graciously acknowledge the financial support from the Ministry of Culture through the Community Museum Operating Grant.



Stepping Into Nature

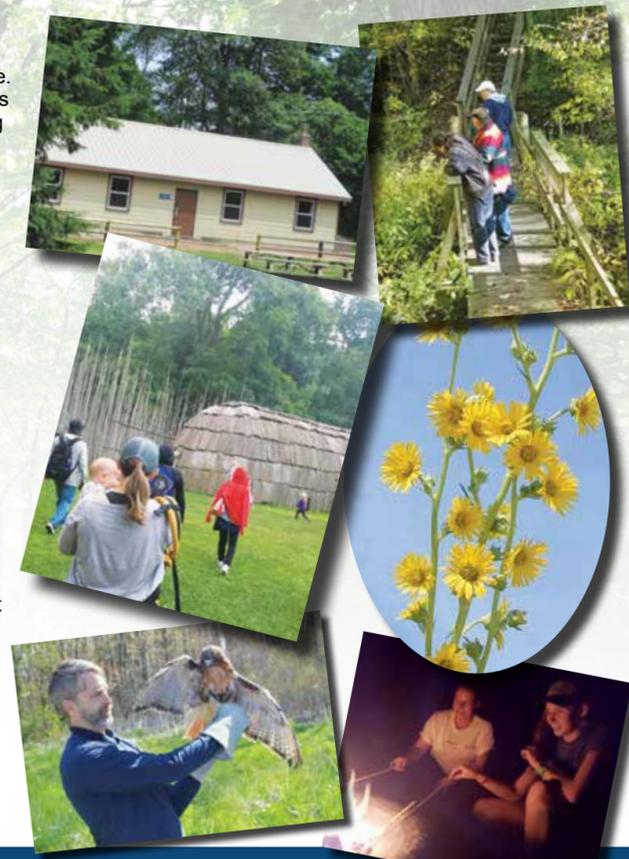
CONSERVATION AREAS

"Step into Nature" at one of Ontario's 270 conservation areas - natural lands owned and managed by Ontario's Conservation Authorities. Conservation Areas (CA's) encourage people to get outdoors and be active, as well as to enjoy and appreciate nature. They protect important natural features, in addition to ecosystems and their functions; providing recreational opportunities and living classrooms for schools, nature groups and others to explore and learn about nature. Conservation lands help mitigate the effects of climate change in our local watersheds.

The LTVCA owns over 693 hectares of protected wetlands, forests, tallgrass prairies, lakefront and habitat restoration sites. Of these properties, 18 publicly accessible CA's provide places for nature to thrive and people to discover. Many areas offer pavilions, trails and boardwalks, interpretive facilities, and venues for fishing, hiking, camping, canoeing, picnicking, cross-country skiing, snowshoeing and even outdoor weddings! CA development and maintenance are enhanced by donations of money and volunteer time from the community.

The C.M. Wilson and Longwoods Road CA's are our flagships. C.M. Wilson is a unique escape to nature in Chatham-Kent, with its campground, barn pavilion, small lake, memorial forest and Children's Safety Village. Attendance totalled 15,728 visitors. Longwoods Road, home of the Ska-Nah-Doht Village and Museum, is located in Strathroy-Caradoc. Over 17,257 visitors enjoyed events, education programs, and year round activities at the pavilion, Carolinian forest trails, group campgrounds and the Resource Centre Museum.

At Big Bend CA, staff implemented a new 'Let's Camp' online camping reservation software. E.M. Warwick CA received a facelift with new steel roofs and windows on its hall and cabins. And a 4.9 hectare land parcel 'Elva Gray Tallgrass Prairie' was graciously donated and home to ecologically significant prairie species.



463 Hectares preserved at 18 public conservation areas | **13,401** Campers experienced our four conservation area campgrounds | **27** LTVCA-hosted events in conservation areas | **1** Land donation totalling 4.9 hectares

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Conservation ONTARIO
Natural Champions

for a detailed 2019 annual report visit our website under publications



Lower Thames Valley Conservation Authority 2019 Annual Report Highlights 'Changes & Challenges'

October 27, 2019
Erie Shore Drive — Municipality of Chatham-Kent

1,282 Dedicated volunteers gave 7,853 hours of their time | **3,966** Students & chaperones engaged in field trip education programs | **38** Inspired partners gave \$1.6 M for watershed conservation

Protecting Life & Property

WATER MANAGEMENT

Conservation Authorities are on the front lines of the Provincial Flood Forecasting and Warning program, and undertake floodplain mapping; modeling; monitor streamflow, rainfall and snowpacks; issue warnings; acquire floodplain lands and flood vulnerable structures; and operate dams, dikes, channels and erosion control structures.

Flooding & Lake Levels - A Challenging Year

On the Thames - A Thames River ice jam impacted communities from Jeannettes Creek to Chatham. The 6th St. backwater dam and pumping station was operated February 6, and on February 7 an ice jam occurred at Prairie Siding. The jam moved towards Lighthouse Cove, stressing flood protection works upstream. On February 8, these dikes failed on both sides of the river, flooding 6.9 km² in Bradleyville and Jeannettes Creek. Additionally, rainfall events caused high waters on local watercourses throughout the year.

Along the Shorelines - Residents on Lake Erie and Lake St. Clair were affected by high lake levels resulting in flooding and erosion, including Lighthouse Cove on Lake St. Clair, and Rose Beach Line, Erieau, Erie Shore Drive, Wheatley, and Talbot Trail in Chatham-Kent. Flooding also occurred in Port Glasgow in West Elgin. The most significant flooding event happened August 27 on Erie Shore Drive, with 50 properties asked to evacuate, 12 homes suffering significant damaged, and a road closure.

Provincial Grant Funding for Capital Maintenance & Flood Forecasting Reduced

Annual funding is received from the Province for the operation, routine minor and preventative maintenance of flood and erosion control projects, flood forecasting and warning, chronic ice management, legal costs for ongoing joint LTVCA / Provincial capital projects, watershed management and related administration. This funding was reduced by approximately 50 percent in 2019.

Water Quality Monitoring

The LTVCA continued its partnership with the Ministry of the Environment, Conservation and Parks on the Provincial Groundwater and the Provincial (Stream) Water Quality Monitoring Programs. Groundwater monitoring is conducted at nine wells and stream sampling is conducted at 11 locations. The LTVCA received a Canada Ontario Agreement grant to expand the surface water sampling network with an additional 11 locations. Sampling for benthic macroinvertebrates carried on in partnership with the Biology Department, at the University of Windsor.

LAND USE PLANNING & REGULATIONS

Municipal Plan Review & the Development, Interference with Wetlands & Alteration to Shorelines & Water Courses - Ontario Regulation 152/06

To maintain the vitality of our watersheds and protect peoples' lives and property from flooding and erosion, Conservation Authorities administer the Conservation Authorities Act and its regulations. Under Section 28 of the Act (Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation), staff regulate development and activities in or beside river or stream valleys, Great Lake shorelines, watercourses, hazard lands and wetlands. Development on these lands may require permission from the Conservation Authority to confirm that control of flooding, erosion, dynamic beaches, pollution or land conservation are not affected. Property inquiries from the public, lawyers, and real estate agents are important so that prospective buyers or people wishing to work in high risk areas understand the hazards.

- LTVCA reviewed 494 applications under this Regulation. Staff also provided 3,121 plan input and review services for our residents and member municipalities.
- LTVCA updated policies for the Chatham - Kent Lake Erie shoreline.
- With the assistance of the LTVCA, the Town of Lakeshore received a National Disaster Mitigation Program grant to investigate how to address safe access to the community during an ice jam flood for the Lighthouse Cove Secondary Plan.

Chatham-Kent Lake Erie Shoreline Study

This study is supported by a collaboration of agencies and the public, and is produced through Canada's Climate Change Adaptation Platform, with support from Natural Resources Canada. Matching funds and in-kind support were received from: Municipality of Chatham-Kent; LTVCA; the Provincial and Federal Governments; and the International Joint Commission. The study investigates Climate Change impacts on Lake Erie. Multiple public consultation meetings were held, and the study will be completed in March 2020.



Enhancing Watershed Health

TREE PLANTING, RESTORATION, STEWARDSHIP

The responsible care of our natural resources on a watershed basis is essential to balancing human and economic needs against the needs of our natural environment, especially in this changing climate. Conservation Authorities have a long history working with landowners in the planning and delivery of watershed stewardship initiatives. We provide opportunities for local projects, which encourage a sense of ownership of environmental rehabilitation efforts. The LTVCA thanks our 10 member municipalities who recognize the need for, and contribute to land stewardship, and also acknowledges the financial support of our granting partners and dedicated volunteers.

The LTVCA collaborated with 38 partners, including First Nations communities, Federal and Provincial government ministries, corporations and ENGO's, and the outcomes were tremendous! Over \$1.3 million in stewardship grants provided assistance to landowners to plant trees and to naturally restore the landscape. Working together, and engaging the community at multiple events, we enriched habitats, protected species at risk, enhanced biodiversity, improved water quality and soil health, conducted scientific research and monitoring, and shared environmental knowledge between communities. ALUS Chatham-Kent and ALUS Middlesex were also launched in our watershed. A special thank you goes to Ridge Landfill Community Trust which provided the LTVCA with a \$1 million endowment to leverage further stewardship funding for the coming decade.

Species at Risk (SAR) in the LTVCA

Highlights of this program included the signing of a Section 11 Conservation Agreement under the Species at Risk Act (SARA) with Fisheries and Oceans Canada (DFO), to ensure a coordinated and focused approach to help aquatic species at risk. Habitat Stewardship Program and Canada Nature Fund for Aquatic SAR funding was approved by DFO for two and four years respectively, for planting of riparian corridors, and wetland restoration projects. Information flyers on aquatic SAR were distributed, and social media postings introduced readers to fish and mussel SAR in the LTVCA, their threats and how to help. As well, work continued on an aquatic SAR threat assessment, and we hosted a 'Smart About Salt' training session.

Phosphorus Reduction Initiatives

Annual total phosphorus loadings to the western and central basins of Lake Erie should be reduced by 40%. The Thames River has been identified as a priority watershed that also needs to see a 40% reduction in dissolved phosphorus and total spring loadings. At this reduced rate of nutrient loading, it is anticipated that the lake will maintain algal species consistent with healthy aquatic ecosystems, and minimize the extent of hypoxic zones in the lake. The LTVCA continued to engage watershed stakeholders through the delivery of phosphorus reduction initiatives, with the goal of reducing the Thames River's load contribution to Lake Erie.

- **McGregor & Jeannettes Creek Phosphorus Reduction Program** - The main goal of this program is to improve soil health and reduce the amount of agriculturally sourced phosphorus entering the Thames River, Lake St. Clair and ultimately the western basin of Lake Erie. This year, the LTVCA launched the subwatershed Best Management Practice (BMP) incentive program. It provided \$50,000 to agricultural producers to implement agronomic BMP's in McGregor and Jeannettes Creek for cover crops, grid or zone soil sampling to develop fertilizer prescriptions, alternative phosphorus application practices and erosion control projects. Environmental monitoring operations were also expanded. The project will continue until 2022, funded in part by the Environment and Climate Change Canada Great Lakes Protection Initiative and the Canadian Agricultural Partnership

- **On-Farm Applied Research & Monitoring (ONFARM) Program** - The LTVCA was successful in raising \$648,748 to support the regional objectives of the ONFARM Program, to be delivered 2019 - 2023. The project is administered by the Ontario Soil & Crop Improvement Association and is funded by Canadian Agricultural Partnership. The goal of the project is to support the agricultural sector to strengthen environmental stewardship, enhance water quality, and improve soil health in the Jeannettes Creek subwatershed.



209

Landowners assisted with \$1.3 M in stewardship grants

71,279

Trees planted

85

Hectares naturally restored

Protecting Drinking Water Sources

THAMES - SYDENHAM & REGION

The purpose of the provincial Clean Water Act (2006) is to protect existing and future sources of drinking water. The Upper Thames River, Lower Thames Valley and St. Clair Region Conservation Authorities partnered together to form the Thames - Sydenham and Region Source Protection Region, and worked with municipalities, stakeholders and the public to develop a Source Protection Plan (SPP) to protect drinking water. The Source Protection Committee (SPC) is appointed under the Clean Water Act, 2006, representing municipal, business, general public and interest group sectors in the region. The Committee is responsible for guiding the SPP. Jenna Allain is the Source Protection Coordinator.

Highlights of the Year

- Submission of the second Annual Progress Report on the implementation progress of Source Protection Plan

- Updates to mapping in the Source Protection Plan and Assessment Reports to reflect changes to drinking water systems; changes to certain plan policies address implementation challenges; and updates to the documents include new scientific information and technical changes.
- A refresh of the source protection committee (SPC) was required, for SPC member positions that expired in June.
- Website <https://www.sourcewaterprotection.on.ca/>



About the LTVCA

BOARD OF DIRECTORS

Linda McKinlay (Chair) – Town of Lakeshore
Trevor Thompson (Vice-Chair) – Municipality of Chatham-Kent

Kimble Ainslie – City of London
Christa Cowell – Municipality of Southwest Middlesex
Sarah Emons – Township of Southwold
Amy Finn – Municipality of Chatham-Kent
Jeannie Frawley – Municipality of Middlesex Centre
Mike Hentz – Municipality of Dutton Dunwich
Sandi Hipple – Municipality of Strathroy-Caradoc
Richard Leatham – Municipality of West Elgin
Paul Tiessen – Municipality of Leamington
John Wright – Municipality of Chatham-Kent

Ska-Nah-Doht Village Advisory Committee

Don Fairbairn – Chair
Willem Bruinink – Vice-chair
Gayle Bogart, Ron Doane, Sarah Emons, Darcy Fallon, Jeannie Frawley, Mike Hentz, Mark Peacock

CHIEF ADMINISTRATIVE OFFICER

Mark Peacock

Lower Thames Valley Conservation Authority (LTVCA) watershed means those lands draining into the Thames River from the community of Delaware to Lake St. Clair, those lands draining into Lake Erie south of the lower Thames River watershed from the Two Creeks watershed in the west to the Talbot Creek watershed in the east, and the lands draining into Lake St. Clair north of the Thames River watershed north to and including the Boyle Drain watershed. This area covers approximately 3,274 square kilometers (1,264 square miles) and is home to nearly 100,000 people.

Ten member municipalities appoint representatives to a Board of Directors.

A budget of \$3,205,524 received approval in February.

Our Vision
The LTVCA...for a balanced and healthy watershed.

Our Mission
Leading by example in environmental protection in partnership with the community.

Our Core Values
Respect, integrity, commitment, objectivity, and collaboration.

98

Flood bulletins issued

3,121

Regulatory and municipal plan review services provided

27

Media releases published

31

Provincial water quality monitoring sites operated