

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.

Communications products included the creation of the LTVCA's Annual Report and daily social media bulletins. Once the COVID-19 pandemic took hold, messaging reflected safety protocols regarding the use of our conservation areas and the changes to program offerings. Towards year-end, information was relayed with respect to the impact that the province's Bill 229 – Schedule 6 would have on Ontario's Conservation Authorities. Despite the effects of the pandemic on public programming, we applauded the continued support of our volunteers that enabled several initiatives to take place.

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. We graciously acknowledge the financial support from the Ministry of Culture through the Community Museum Operating Grant as well as the Pandemic Relief Fund from the Museum Assistance Program - Department of Canadian Heritage.

We hosted a four week Alternate Field Placement with an Althouse College student, researching Treaties and Wampum Belts for local First Nations in our watershed. In addition, an Ontario Job Creation Partnership (OJCP) provided an Assistant Curator to create artifact cases that will repatriate artifacts for education in 6 local schools. Two workers, also through OJCP, re-barked one of the longhouses, designed a new lookout and refurbished other structures within Ska-Nah-Doht. A partnership with Oneida Job Development placed three community members as general labourers for maintenance and help with the rebuild of a Longwoods marsh boardwalk.

Education Program

Our education programming was certainly impacted by the pandemic, and staff quickly adapted to safely deliver creative, outdoor activities. Unfortunately, the annual fall Chatham-Kent and Lambton Children's Water Festival was cancelled.

- **Ska-Nah-Doht / Longwoods Road** - Programs offer Ontario Curriculum based, field trip and in-class activities to students, community groups and at public events. With the pandemic, school field trips were cancelled, leaving only private groups participating. Despite restrictions, nearly 430 students and chaperones took part in our programs. The popular grade 2 in-class 'River and Creek Safety Program' sponsored by local service clubs, was curtailed mid-stream, however 163 children received the lesson before cancellation. New adult team building programs were developed with supplements to Indigenous training. Staff also mentored a high school co-op student.
- **Engaging Events at Longwoods** - Following a successful 'Moonlight Winter Family Hike' and 'Family Day' in February, our usual line-up of events was cancelled. Using technology at hand, we offered 'virtual Twilight Tuesdays' over the summer. Through Canada Summer Jobs, 2 students also offered a successful curbside pick-up 'Camp-in-a-Bag' for youngsters - eight weeks of conservation themes blending First Nations' approaches to the environment. By October, staff and volunteers followed all safety protocols and presented our first 'Hallowed-Scenes' drive-thru event for many happy families.

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.

In 2020, our conservation areas welcomed visitors seeking nature to recharge from COVID-19. The challenging year caused delays in spring property openings and re-working of public programming. Keeping all our properties safely open, resulted in the popularity of Longwoods Road (8,573 visitors), Sharon Creek (1,932 visitors), Big Bend (2,595 campers), C.M. Wilson (15,638 - includes 13,467 campers) and E.M. Warwick (654 campers).

The Ontario Job Creation Program was accessed watershed-wide. These extra hands and funds assisted with new steel roofs, nature trails, signage and improvements to Ska-Nah-Doht Village and public washrooms. A new conservation areas booklet was produced. Parking pass sales reached 271, with revenue to assist property upgrades. And 1.2 hectares was graciously donated beside Big O Conservation Area for future habitat restoration.



463

Hectares preserved at 18 public conservation areas

29,392

Recorded day use and camping at 5 of our 18 conservation areas

7

LTVCA-hosted events in conservation areas

1

Land donation totalling 1.2 hectares



"...for a balanced and healthy watershed"

Lower Thames Valley
Conservation Authority
100 Thames Street
Chatham, ON
N7L 2Y8

519 354-7310, 519 352-3435 FAX

E-Mail: info@ltvca.ca

www.ltvca.ca

for a detailed 2020 annual report visit our website under publications



Conservation
ONTARIO
Natural Champions



2020 Annual Report

Lower Thames Valley Conservation Authority

... continuing vital programs & services for the people of our watershed during difficult times.

Cover Picture
Sharon Creek Conservation Area in Middlesex-Centre
June 9, 2020

300⁺

Social media posts

73

Dedicated volunteers gave 672 hours

428

Students & chaperones engaged in education programs

22⁺

Media releases issued

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 snow packs; issue warnings; acquire floodplain lands and flood vulnerable structures; and operate dams, dikes, channels and erosion control structures.

Flooding & Lake Levels – Another Difficult Year

- *On the Thames* - Fourteen flood messages were issued. A winter rain event produced unusually high water levels on the Thames River in January, and the 6th Street Backwater Dam and Pumping Station was operated for a third year in a row. The dam closed on January 14th, and pumping operations continued until the dam reopened on January 17th. Flooding was limited to businesses on King St. in Chatham. High water levels on Lake St. Clair and a strong northwest wind, occurred at the same time as high flows on the Thames were passing through Lighthouse Cove, causing flooding. Throughout the year, the Indian-McGregor Creek Diversion Channel was operated three times.

- *Along the Shorelines* – Ninety-seven flood messages were issued during the year. High water levels on Lake Erie created problems for the shoreline. Damage occurred to shoreline protection works and bluff erosion increased. Flooding occurred from Wheatley to Port Glasgow. Erie Shore Drive was the hardest hit and the road was closed for repairs. Lighthouse Cove was near flooding for much of the year, also as a result of high lake levels. With high lake levels and ice free winters, damaging winds impacted the shorelines causing unprecedented erosion.

Water Quality Monitoring

A partnership continued 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 at 11 locations. Sampling for benthic macroinvertebrates continued in partnership with the Biology Department at the University of Windsor.

Thames River Blue-green Algae Bloom

For the third year out of the last four, the lower Thames River experienced an extensive blue-green algae (cyanobacteria) bloom from mid-August to September. Staff aided the province and academic researchers by monitoring the extent of the bloom and collecting samples.

LAND USE PLANNING & REGULATIONS

Municipal Plan Review & the Development, Interference with Wetlands & Alteration to Shorelines & Watercourses - 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, 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.

In 2020, staff provided 3,065 plan input and review services for our residents and member municipalities. LTVCA also reviewed 556 applications under this Regulation. For the fifth consecutive year, the volume of permit applications set a new record.



Ontario Low Water Response Program –

The LTVCA participates in a provincial program that monitors watershed conditions to determine if the area is in a low water (drought) situation and provides some means of responding. Local response is managed by local stakeholders referred to as the Low Water Response Team. There was very little activity throughout the year as there were adequate rainfalls and river flows.

Provincial Grant Funding for Capital Maintenance & Flood Forecasting

The LTVCA receives annual funding 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.

Enhancing Watershed Health

TREE PLANTING, RESTORATION, STEWARDSHIP

The care of watershed natural resources is essential to balance human and economic needs against the needs of our natural environment. Despite operational challenges of the COVID-19 pandemic, we delivered valuable services across the lower Thames valley and region. LTVCA collaborated with 26 partners, including Indigenous communities, government ministries, corporations and ENGO's. Over \$1.186 million in grants assisted landowners with tree planting and naturally restoring the landscape. The reforestation of 47.4 hectares, creation of 12.6 hectares of wetlands, seeding of 53 hectares of prairie and planting of 97,666 trees resulted from our collective efforts!

Alternate Land Use Services – ALUS

ALUS Middlesex and ALUS Chatham-Kent matched various grants for watershed restoration, working in cooperation with landowners to plant trees and prairie, and create wetlands and buffer strips. Conferences, webinars and videos were produced to reach landowners interested in restoration projects.

Species at Risk (SAR) in the LTVCA

We entered our second year of Habitat Stewardship Program and Canada Nature Fund for Aquatic Species at Risk funding through Fisheries and Oceans Canada. Work continued on the Aquatic Species at Risk Threat Assessment. Subwatersheds were prioritized for potential to maximize fish and mussel SAR recovery. A report for Southwest Middlesex identified aquatic resources and their current levels of salt (chloride) loading. Riparian areas were surveyed with a new drone, identifying locations in need of habitat restoration. Funding contributed to 27 projects including prairie and treed riparian corridors, wetland habitat and rock chutes. And sampling in seven subwatersheds for fish and mussel SAR was completed, using an eDNA sampler.



Phosphorus Reduction Initiatives

Annual total phosphorus loadings to the western and central basins of Lake Erie should be reduced by 40%. The Thames River 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. We 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 subwatershed Best Management Practice (BMP) incentive program provided \$85,172 to 40 agricultural producers for agronomic BMPs in McGregor and Jeannettes Creek. This resulted in planting of 1,265 hectares of cover crops, grid or zone soil sampling of 1,775 hectares, 1,265 hectares of alternative phosphorus application practices, and two erosion control projects. Environmental monitoring continued. The project is 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* - During 2020-2021, \$124,329 will support monitoring and agricultural research operations in the Jeannettes Creek study subwatershed. The goal is to assist the agricultural sector in strengthening environmental stewardship, enhancing water quality, and improving soil health. The project is administered by the Ontario Soil & Crop Improvement Association, and is funded by the Canadian Agricultural Partnership.

- *Lower Thames Valley Soil Health Program* - \$221,866 for a watershed-wide Soil Health Program, was funded by the Environment and Climate Change Canada Great Lakes Protection Initiative. This program will launch in 2021 and provide financial incentives to farm businesses for cover crops and grid or zone soil sampling to improve soil health and water quality. The secondary goal is to enhance agricultural education and outreach activities to increase participation in LTVCA conservation services programs.



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

- Risk Management Officials and Inspectors put a pause on all site visits for most of the spring, with outdoor only

visits resuming over the summer.

- Submitted third Annual Progress Report on the implementation progress of the Source Protection Plan.
- May marked 20 years since the water tragedy in Walkerton and to commemorate, a "Trust the Tap" campaign rolled out across Ontario to communicate how much we have learned and accomplished since then, and to emphasize the importance of source protection work.
- 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 \$3,304,046 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.

111

Flood messages issued

3,065

Regulatory and municipal plan review services provided

16

Provincial water quality monitoring sites operated

287

Landowners assisted with \$1.186M in stewardship grants

97,666

Trees planted

38

Inspired partners gave \$1.56M for conservation

113

Hectares naturally restored