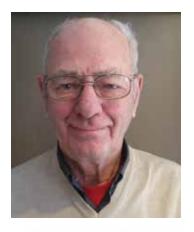
Lower Thames Valley Conservation Authority Annual Report 2015

Lower Thames Onservation

"The LTVCA...for a balanced and healthy watershed"

Message from the Chair



John Kaveloons

John Kavelaars Chair LTVCA

It has been my privilege to serve as the Chair of the Lower Thames Valley Conservation Authority for the past year, following in the large footprints of my predecessor, Mr. Brian King. I am grateful for the support of my fellow Directors and of our professional staff, who have a tremendous amount of expertise and passion for the needs of our watershed. With a lifetime spent in farming, I have first-hand knowledge of the important role of our agricultural community in protecting the productivity of the land while minimizing impacts on the environment. It is gratifying to see the increasing capacity of the Conservation Authority, supported by federal, provincial and municipal partners, to work with our agricultural stakeholders to meet the challenge of reducing the impact of soil and nutrients on our waterways and the Great Lakes.

The very visible improvements to our administrative headquarters are both timely and necessary. The building and surroundings are an important asset in our community and are worthy of being treated as such. When the project is completed by late spring of 2016, it will be a renewed source of pride for the Conservation Authority and its staff as it was when originally renovated some forty years ago. We could not have undertaken this work without the contributions of RBC, the federal government's Enabling Access fund, and of course our member municipalities. The support of the Municipality of Chatham-Kent was key in making the adjoining property available to the LTVCA for a nominal sum. The transformation from a vacant, contaminated lot to an environmentally friendly parking facility with state of the art stormwater management features was exciting to witness and will be useful as a demonstration of what can be accomplished on a challenging site.

I am grateful for the support of all of our community and government partners during the past year, and look forward to greater accomplishments in the coming months as we begin to gain momentum in our new strategic directions. Our challenges are large but our resolve is strong, and with your support, we will continue to make progress in protecting our environment for future generations while keeping our population safe from natural hazards.

General Manager's Remarks



Don Pearson General Manager LTVCA

The annual report is an important record of accomplishment, setting an annual milestone in the work of the Conservation Authority. It is a useful communications tool not only for the benefit of our members and staff but for our watershed partners - our ten municipalities and more than 100,000 residents. The report conveys the breadth of our programs and the value of the work undertaken, and provides some insight into the challenges we face. As stewards of our watersheds, including the Great Lakes, it is imperative that we focus our efforts on meeting with partners, some ambitious new goals - especially pertaining to reduction in nutrients reaching Lake Erie, and mitigating and adapting to the increasingly evident impacts of climate change.

Late in 2015, the Board adopted a new Strategic Plan, to assist the Board and Staff in meeting our challenges. Our most important objectives relate to our stakeholders – strengthening and increasing collaboration with our community; increasing awareness of the value of good watershed stewardship; and strengthening our brand – recognition of the LTVCA's role and the value it brings to our communities. To support these goals, a series of internally focused strategic objectives have been adopted, to increase financial transparency and accountability; enhance communications and processes while clarifying roles; and developing our human resources potential.

An important step in supporting our internal goals was substantially realized by yearend with the completion of a number of enhancements to our administrative infrastructure. We look forward to showcasing these improvements with an open house in the first part of 2016.

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



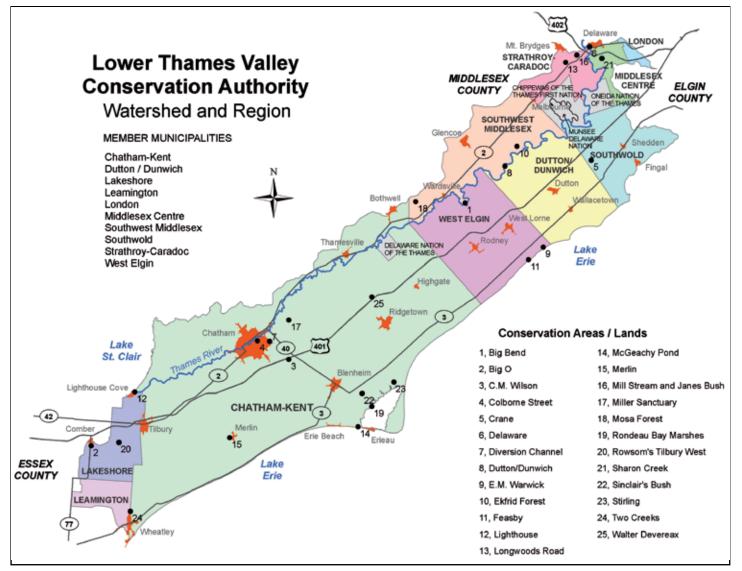
Our Mission Leading by example in environmental protection in partnership with the community.

Our Core Values

Respect, integrity, commitment, objectivity, and collaborative.



The LTVCA is one of 36 Conservation Authorities in the Province of Ontario. Member of Conservation Ontario.



Area of jurisdiction lies over the watersheds of all streams, which drain into the Thames River from the Village of Delaware, to Lake St. Clair. Southern boundary has jurisdiction over the watersheds of all streams which drain into Lake Erie, from the Talbot Creek watershed in the east, to the Two Creeks watershed in the west. Total area covers over 3,275 square kilometres (1,264 square miles) in southwestern Ontario and is home to over 120,000 people.

Board & Staff Directory

LTVCA Directors

John Kavelaars (Chair) - Municipality of Southwest Middlesex Linda McKinlay (Vice-Chair) - Town of Lakeshore

Gayle Bogart – Township of Southwold Stanley Caveney – City of London Ron Doane – Municipality of Strathroy-Caradoc Leon Leclair – Municipality of Chatham-Kent Hilda MacDonald – Municipality of Leamington Dan McKillop – Municipality of Dutton/Dunwich Steve Pinsonneault – Municipality of Chatham-Kent Michelle Smibert – Municipality of Middlesex Centre Trevor Thompson – Municipality of Chatham-Kent Jonathan Wolf – Municipality of West Elgin

Ska-Nah-Doht Village Advisory Committee

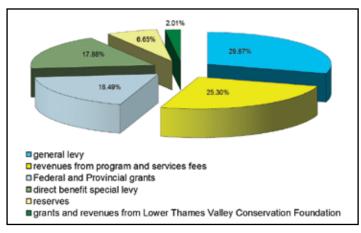
Don Fairbairn – Chair Darcy Fallon – Vice-chair Ron Watts, Ron Doane, Gayle Bogart, Dan McKillop, Don Pearson

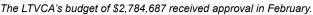
Budget

Don Pearson – General Manager / Secretary-Treasurer, directed the administration and financial aspects of the LTVCA, with support from Financial Services Specialist

- Todd Casier and Finance and Administrative Assistant

Kally Casier.







The Thames River celebrated its fifteenth year as a Canadian Heritage River. Thousands of volunteers cleaned up hundreds of kilometres along the river during the sixteenth Annual Thames River Clean-up in April.

LTVCA Full-time Staff

Don Pearson - General Manager / Secretary-Treasurer

Stephanie Allison – GIS / Communications Lindsay Bennett – Land Stewardship Technician Mike Buttenham / Colin Little – Agricultural Specialist Kally Casier – Finance and Administration Assistant Todd Casier - Financial Services Specialist Bonnie Carey - Community Relations Coordinator Bruce Clark – Construction & Maintenance Technician Jerry DeZwart – Conservation Education Technician Russ Dysarz – Western District Supervisor David Little – Eastern District Supervisor Karen Mattila - Ska-Nah-Doht Village & Museum Curator Rose Nicholas - Ska-Nah-Doht Village Education Technician Jessica Schnaithmann – Regulation & Planning Technician Valerie Towsley – Resource Technician Greg VanEvery – Environmental Technical Assistant Randall VanWagner – Environmental Project Coordinator Agnes Vriends – Clerk / Secretary Jason Wintermute - Water Management Supervisor / GIS Specialist Chris Tasker - Source Protection Manager of the Thames, Sydenham & Region Source Protection Region

LTVCA Contract Staff

Natalie Barrett – Museum Design Assistant Nicole Boere - Community Activities Coordinator Brain Boland – Security Jessalyn Chen - Assistant Water Resources Technician / **GIS** Assistant Tyler Dore – Assistant Water and Resources Technician Tylor Godin – Visitor Services Alyssa Haas – Visitor Services Stephanie Johnson – Assistant Benthic Technician Becky Johnstone - Gatehouse James Kennedy – General Labourer Paul Kominek – General Labourer Christine Langille - Visitor Services Jennifer Langille – Visitor Services Michael Latham – General Labourer Mike Lilley - General Labourer Martin McGahey - General Labourer Buddy Morrison - General Labour / Security Kirsten Neuts – Gatehouse Amanda Paulin – Tree Planter Mary Pearson – Accounting Clerk Gary Reissner- General Labourer Blake Sykes - General Labour / Security Larissa VanBommel – Gatehouse

Protecting Life & Property

Water Management

The water management and technical services program provides science-based support for land and water resources management, including natural heritage programs, as well as technical expertise to forecast, control and monitor floods and erosion to protect life and property. Jason Wintermute is the Water Management Supervisor.

Binational Phosphorus Reduction Targets for Lake Erie

The 2012 Great Lakes Water Quality Agreement, required revised binational phosphorus reduction targets for Lake Erie by February 2016. In December of 2014, the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health was signed. Since then, partner agencies have been working hard to set those targets. In 2015, it was determined that the amount of phosphorus entering the western and central basin of Lake Erie, from Canada and the United States, should be reduced by 40% by 2025. At this reduced rate of nutrient loading, it is anticipated that Lake Erie will maintain algal species consistent with healthy aquatic ecosystems. Additionally, it should minimize the extent of hypoxic zones in the waters of the Great Lakes. The Thames River has been identified as a priority watershed for the reduction of phosphorus entering the waters of the Great Lakes. Throughout 2015, the LTVCA engaged in a variety of consultation and early actions to assist in determining how those targets should be met. In 2018, a regional action plan will be released for the Thames River watershed that will detail how a 40% reduction in the spring total and soluble reactive phosphorus load will be achieved.

Great Lakes Levels

Lake St. Clair water levels began 15 cm above the longterm normal for January. An ice jam on the St. Clair River caused levels to drop rapidly to near the long-term normal in February. Water levels climbed rapidly during the spring, peaking in July around 40 cm above the long-term normal. Water levels then followed the seasonal trend dropping to 20 cm above the long term normal by the end of the year. Lake Erie water levels began the year 15 cm above the long-term normal for January. The effects of the ice jamming caused water levels to drop beneath the long term normal by March, but then rose rapidly peaking at 40 cm above the long term normal in July. Water levels then followed the seasonal trend dropping to 15 cm above the long term normal by the end of the year. The high water levels triggered four advisories to be issued this year for the Lake Erie shoreline.

Flood Control

It was another cold and snowy winter. The region saw more snow, and there was more ice on the Thames River than people have come to expect. The risk of ice jams was elevated but the LTVCA and member municipalities were well prepared. Once again, the watershed melted without any significant flooding events. A peak flow of 300 m3/s was observed on the Thames River this year which occurred during the spring melt; well below the threshold for flooding advisories.

Spring melt conditions caused local watercourses to overflow and required the operation of the Indian-McGregor Creek Diversion Channel from March 14th to 20th. The Diversion Channel was only operated on one other occasion. Heavy rainfalls produced flows that required the Diversion Channel to be operated from May 31st to July 2nd. In total, there were 11 flood advisories issued throughout the year.



The Indian/McGregor Creek Diversion Channel was active during the spring runoff on March 17th.

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.

Provincial Water Monitoring

The LTVCA partners with the Ontario Ministry of the Environment and Climate Change (MOECC) on the Provincial Groundwater and the Provincial (Stream) Water Quality Monitoring Programs. This program assists in environmental reporting, decision-making, and program implementation by the Conservation Authority, member municipalities and the province.

Groundwater monitoring is conducted at nine wells throughout the watershed with the use of water level loggers and supplemental rain and barometric pressure loggers at some locations. Seven of the wells were sampled in the fall for water quality. The LTVCA maintains the instrumentation, samples the wells, and undertakes data corrections, while the MOECC provides equipment and lab analyses.

Stream water quality sampling is conducted at 11 locations throughout the watershed. The Conservation Authority samples monthly in the spring, summer and fall for general water chemistry and the MOECC performs the lab analyses. Since biological analyses are not part of the provincial program, the LTVCA tests for e-coli at the same sites. Currently, the program is supplemented with pesticide monitoring at three sites and the LTVCA is also participating in a special study examining different lab methods of determining total phosphorus.

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. The Low Water Response Team is a group of local stakeholders who oversee local response. By October, the LTVCA had entered a Low Water Level One condition based on a short-term three month rainfall deficit.

Thames River Clearwater Revival

The Thames River Clearwater Revival is a multi-agency partnership with the objective of improving the Thames River. Partners include Environment Canada, First Nations communities, provincial ministries, the Upper Thames River and Lower Thames Valley Conservation Authorities and the City of London. In 2015, work focused on the creation of an updated Water Management Plan to be completed by December 2016. The First Nations Engagement Committee organized a Summer Youth Program to engage First Nations youth. Two program leaders and four high school aged youth participated in the program. Clear Water Revival partners and First Nations communities provided a variety of educational and training opportunities to the program participants. The program was deemed a areat success and the partners are looking to continue the program in future years. The LTVCA provides membership on the Steering and Technical Committees and the Communications Working Group, supplying data, technical advice, and peer review.

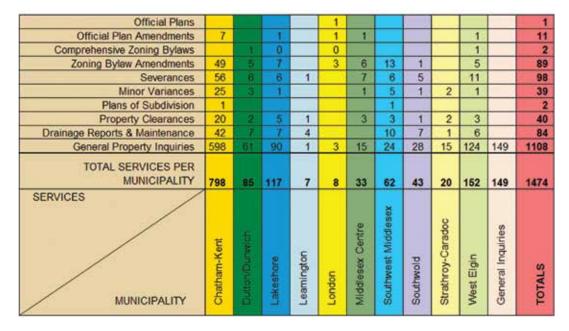
Land Use Planning & Regulations



Municipal Plan Input & Review Under the Conservation Authorities Act

The land use planning and regulations program provides environmental planning expertise to guide municipal and other land-use planning decisions on a watershed basis, consistent with current applicable Federal and Provincial legislation and policies, and Conservation Authority and municipal planning policy. Valerie Towsley, Jason Wintermute and Jessica Schnaithmann were the staff responsible for administering the land use planning and regulations program.

July visits to lake front lots along the Lake Erie shoreline were requested by landowners wanting enhanced shoreline protection. Surge storms had reached further inland from higher lake levels, breaching existing protection. At right are the municipal plan reviews summaries for the year. Plan input and review is one of the ways the Conservation Authority monitors development and achieves its objectives. The input the LTVCA has on new development near or in natural hazard areas like flood plains and steep slopes ensures identification of potential hazards before complications arise.



Development, Interference with Wetlands & Alterations to Shorelines & Watercourses Regulation

The LTVCA reviewed 196 applications under the Regulation, a decrease of 37 permits from 2014. Landowners submitted 107 applications, eight of which were for habitat projects. Five submissions were received from Union Gas for directional drills, 68 were for municipal engineers' reports and maintenance work on drains and 16 were submitted by municipal and county bodies for road culvert and bridge replacements. All applications but four were approved in 2015. Four applications from private landowners are still in the works waiting on drawings and/ or fees to be submitted. There were two applications submitted after the work had been undertaken, with rehabilitation required by the Conservation Authority as a result of the unauthorized work.

Drainage Superintendents Association

The LTVCA is a long-standing associate member of the Chatham-Kent-Essex Chapter of the Drainage Superintendents Association of Ontario. The watershed consists of highly drained agricultural lands and is managed under both the Drainage Act and the LTVCA's regulations. Cooperation and good relationships with our region's Drainage Superintendents are extremely important.

Elgin County Shoreline Study

The Elgin County Shoreline Management Plan has been completed and was adopted by the Boards of all four Conservation Authorities. This document provides a consistent approach for planning and regulatory purposes across the entire shoreline of Elgin County. It incorporates current mapping and technical standards for flooding, wave uprush, erosion and dynamic beach hazards.



The above graphic illustrates the Elgin County Shoreline and the Lower Thames Valley, Kettle Creek, Catfish Creek and the Long Point Region Conservation Authorities that fall within the boundaries of Elgin County. (graphic from Elgin County Shoreline Management Plan, October 13, 2015 - prepared by Baird - W.F. Baird and Associates Coastal Engineers Ltd.)

Protecting & Restoring Habitat

Tree Planting, Restoration, Stewardship

Chatham-Kent Greening Partnership

The Municipality of Chatham-Kent recognizes that a 'greening' effort is needed to address environmental concerns. A partnership formed with the LTVCA provides municipal funding to support four positions at LTVCA - Randall Van Wagner, Greg Van Every, Lindsay Bennett and Stephanie Allison. These employees apply for additional funds for tree planting, wetland creation and tallgrass prairie projects. The funds are then offered to landowners as incentives to restore habitat as well as educate and build awareness about the importance of a healthy environment.

The Greening Partnership has a proven track record of providing three dollars towards restoration for every dollar invested by Chatham-Kent. Nearly \$1.2 million in grants were generated for environmental restoration from various sources including: the Ontario Ministry of Agriculture and Rural Affairs, Ontario Ministry of Natural Resources and Forestry, Ducks Unlimited, Tallgrass Ontario, Forests Ontario, Enbridge, Brookfield Energy, Ontario Ministry of Transportation, Ontario Power Generation, Canada Ontario Agreement, World Wildlife Fund and Royal Bank. Over 243 acres (98 ha) were naturally restored: 92 acres (37 ha) reforested, 28 acres (11 ha) of tallgrass prairie planted and over 72 acres (29 ha) of wetlands created. Across the entire watershed, 96,816 trees were planted. Invasive species control was tackled and 52 acres (21 ha) of Phragmites Australis were eradicated.



The Greening Partnership engaged sponsors who helped plant 500 large stock trees in our neighborhood parks, cemeteries and public spaces. These sponsors include: Scribendi, Union Gas and T.D. Friends of the Environment. Along the way, 178 volunteers and students, including two First Nations groups, assisted in 37 projects.

Natural Heritage Implementation Strategy (NHIS)

The purpose of the NHIS is to identify how the Municipality of Chatham-Kent will work with all sectors of the community to maintain and enhance the natural heritage system within the municipality, and manage collectively, the greater ecological goods and services that are a benefit to all members of society. Three additional staff positions were created through grants to assist with the NHIS implementation.

In the Community

The Greening Partnership actively engages the community for the NHIS to succeed and costs just \$2.90 per household to support. In return, the community gains millions in natural restoration incentives, and hands on engagement to educate and foster cultural change toward sustainable ecological goods and services. Two well attended bus tours showcased our projects, properties, and partner involvement throughout the year.

Species at Risk (SAR)

With the assistance of Drainage Superintendents, SAR projects on priority municipal drains establish wetland and riparian vegetation to improve water quality and habitat for aquatic and terrestrial species. Projects reduce pollution and siltation of important downstream areas like the Thames and Sydenham Rivers and Rondeau Bay. They also increase and restore riparian habitat and biodiversity for SAR including Eastern Foxsnakes and Bobolinks. As well, aquatic and terrestrial corridors are improved, linking key coastal/nearshore wetlands along Lakes St. Clair and Erie.

Community outreach and education are vital. To combat invasive Phragmites, Eco Action provided four Rondeau Bay landowners with funding to restore 20 acres (8 ha) of inland riparian habitat. The Chatham-Kent Drainage Superintendent for Area 4 also secured a drain buffering project. Lindsay Bennett - SAR Biologist and Randall Van Wagner - Environmental Project Coordinator met with six Rondeau Bay farmers regarding a restoration project to retire a 50 acre (20 ha) pasture field. Another Phragmites removal project along a major tributary near Wheatley involved 20 acres (8 ha) and over 100 landowners.



Great Lakes Agricultural Stewardship Initiative

Funding for GLASI programs is provided by Agriculture and Agri-Food Canada and the Ontario Ministry of Agriculture, Food and Rural Affairs through Growing Forward 2, a federal-provincial-territorial initiative. GLASI is delivered through the Ontario Soil and Crop Improvement Association. The key components of GLASI are improving soil health, water quality and pollinator health. Mike Buttenham, later succeeded by Colin Little – LTVCA Agricultural Specialists, were instrumental in the initiation of programs designed to target areas with projects to reduce phosphorus entering the Thames River and Lake Erie. In 2015, the LTVCA received confirmation of involvement in the delivery of three programs:

The Jeannettes Creek Agricultural Phosphorus Reduction and Monitoring Program

This program will implement and monitor the effectiveness of Best Management Practices (BMPs) on reducing agriculturally sourced phosphorus within a 20km2 region located near Fletcher. The goal of the program is to verify the effectiveness of BMPs and to improve the quality of discharged water in the region.

The McGregor Creek Subwatershed Education and Outreach Program

Funding was approved in late November for this 2016 project. The goal of this program is to enhance public awareness of how BMPs can promote profitability and production for agricultural landowners while reducing the phosphorus load into McGregor Creek, the Thames River, Lake St. Clair and Lake Erie. Fact sheets and social media will be used.

Elgin County Watersheds Education and Outreach Program

This project was sourced through the Kettle Creek Conservation Authority and will undertake outreach and education efforts over the next three years to engage local producers on soil health and water quality topics and encouraging them to take action through on-the-ground projects. The project will be peer-driven through engaging local champions to provide expertise and empower producers to learn more about and implement BMPs for soil health and water quality.

Benthic Monitoring Program

The purpose of benthic sampling is to assess the water quality of watercourses using bottom-dwelling aquatic invertebrates as indicators. In May, benthic samples were collected at 12 watercourses in the LTVCA adhering to Ontario Benthos Biomonitoring Network 'kick and sweep stream protocol'. Collected samples were sorted and subsampled at the University of Windsor. The macroinvertebrates in each subsample were identified to family level to use Hilsenhoff's Family Biotic Index as an indication of water quality. A final report was produced and 58% of sites sampled concluded that substantial pollution is likely. Future benthic sampling will help to better understand the results and compare them to past years (2014). It will assist water management and stewardship staff targeting future water quality sampling and stewardship projects in areas indicating poor Family Biotic Index (FBI).

Stream Name	FBI Score	FBI Index
Fleming Creek	5.50	Fair
White Ash Creek	5.82	Fairly Poor
McGregor Creek	5.69	Fair
McCarson Drain	6.83	Poor
Waddick Drain	5.80	Fairly Poor
Natural Watercourse	6.03	Fairly Poor
Newbiggen Creek	5.63	Fair
Two Creeks	6.58	Fairly Poor
Sharon Creek	5.84	Fairly Poor
Talbot Creek Casey	4.91	Good
Big Creek	6.09	Fairly Poor
Sixteen Mile Creek	5.97	Fairly Poor

Eight out of 12 stream locations rated fairly poor or worse, with substantial pollution likely.



During benthic sampling, macroinvertebrates (insects, worms and crustaceans that live at the bottom or benthos of the stream) are sampled and act as indicators of water quality.

Conservation Scholarships and Awards

The LTVCA continued to support a variety of local scholarships and awards, including a 28 year commitment to the Ridgetown Campus of the University of Guelph's environmental program. An award of \$500 for Academic **Proficiency** in the **Environmental Management** diploma program was given to the student with the highest academic standing. Morena McDonald of Ridgetown was presented the award by LTVCA Resource Technician Valerie Towsley. **The Greening Partnership Environmental Award** applauds environmental achievements in Chatham-Kent. This year's recipients were: Union Gas (industry), Steve Myslik, Art and Sharon Alliet (landowners) and Chatham-Kent Secondary School.

Elgin Clean Water Project

The Elgin Clean Water Project (ECWP) is a cooperative program between the Catfish Creek, Kettle Creek, Long Point Region and Lower Thames Valley Conservation Authorities. ECWP assists landowners with projects, which improve and protect water quality in Elgin County. Landowners undertake stewardship practices to benefit the entire County and beyond. Three landowners from the LTVCA watershed received funding for four projects through the ECWP. Two erosion control projects were completed in West Elgin, as well as two wetland and riparian enhancement projects.



Thames, Sydenham and Region Source Protection Region

Drinking Water Source Protection

The purpose of the provincial Clean Water Act (CWA) (2006) is to protect existing and future sources of drinking water. Protecting water at the source - municipal wells and water intakes - is the first barrier in a multi-barrier approach to providing a safe, clean supply of water. The Act is part of the government's commitment to protecting and enhancing human health and the environment, while implementing the Walkerton Inquiry recommendations.

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 to protect drinking water, while taking into account the needs of our communities. The Source Protection Committee 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 development of the Source Protection Plan.



(Left) Don Pearson (GM - LTVCA), Bob Bedggood (Chair - Source Protection Committee and Brian McDougal (GM - SCRCA) celebrate the final approval of the Thames-Sydenham and Region Source Protection Plan. (Right) Chris Tasker – Project Manager steps down after 10 years of dedicated hard work!

Highlights of the Year

In November 2014, the Lower Thames Valley Source Protection Authority passed a motion directing staff to submit the Thames-Sydenham and Region Source Protection Plan to the Ministry of Environment and Climate Change (MOECC) for approval once completed. Revisions were made to the Plan based on a final round of public consultation last January and the Plan was submitted to MOECC on March 15, 2015. By September 16th, updated Assessment Reports for the Thames-Sydenham and Region Source Protection Region were approved and on September 17th, the Source Protection Plan for our region received final approval. In the future, program staff will offer workshops designed to assist municipalities in implementation of the Plan and will continue to have a role in progress reporting.

Providing Opportunities to Enjoy, Learn & Respect

Conservation Areas

The Lower Thames Valley Conservation Authority has protected environmentally sensitive lands, wetlands, culturally unique features and significant biological, ecological, and scenic qualities through its conservation areas program. Nearly 690 ha of conservation lands have been preserved at 25 locations for public use in the watershed and region. The LTVCA promotes its objectives through recreational and educational opportunities in the Conservation Areas - places to actively experience the natural world and increase environmental awareness through interpretive signage and special events.

Russ Dysarz and David Little - Western and Eastern District Supervisors respectively, Bruce Clark - Construction and Maintenance Technician and Michael Latham and Gary Reissner - General Labourers, are responsible for the maintenance of these sites. The LTVCA's Staff Safety Committee tours the conservation lands regularly to assess the properties' safety for public use. Additionally, it is the Conservation Authority's policy, to ensure conservation area facilities and programs are as accessible as possible for everyone's enjoyment.

Conservation Area development and maintenance of facilities is enhanced by annual donations of money and volunteer time from local individuals, companies, conservation clubs and organizations. The LTVCA is grateful to all donors.

This year saw many changes in our conservation areas. In the western half of the watershed, **Big "O"** was host to a spring birding event. A rehabilitated Eastern Screech Owl was released, and a hike was guided by naturalist Paul Pratt. Approximately 25 people attended, followed by lunch at the Iron Kettle Bed 'n Breakfast in Comber. **Rowsom's Tilbury West** received trail upgrades with help from the Ontario Ministry of Natural Resources and Forestry Stewardship Ranger program and **McGeachy Pond** and **Merlin** showcased our new property signs. At **C.M. Wilson**, 16,395 campers and day users enjoyed a unique escape to nature right in Chatham-Kent's back yard!

The bulk of the changes took place at our **Administration Building** in Chatham. An RBC Blue Water Fund of \$75,000 is assisting LTVCA with transforming the vacant lot and office parking lot into a green showcase of water ingenuity. The Federal Enabling Access fund has provided \$50,000 towards our newly accessible washroom and entrance. Most of the hard construction was completed just before year end, with the landscaping awaiting the spring of 2016.

In the eastern conservation areas, Longwoods Road welcomed 15,923 visitors to its beautiful, natural surroundings and Ska-Nah-Doht Village and Museum. The Carev Carolinian Arboretum and Trail was resurfaced with chip and dust for wheelchair accessibility. Sixteen public events were held throughout the year including the popular "Moonlight Winter Family Hike" and "Longwoods Heritage Weekend", along with new additions "Night Hikes and Night Legends" and "Season's Greetings at Longwoods". E.M. Warwick day use area and camp is equipped with cabins and a mess hall, and provided unique lakeside facilities for over 2,557 people. At Sharon Creek, a prescribed burn and ongoing maintenance to the 7 acre (3 ha) tallgrass prairie were undertaken in attempts to eradicate the invasive sumac. As well, the notorious "rope swing" was removed for safety reasons. Preferring the solitude of the Thames River location, 1,886 campers enjoyed Big Bend.



Major renovations took place at our Administration Building in Chatham including parking lot upgrades.



A fresh look to conservation area signage was showcased at Big O and Merlin Conservation Areas.



The Sharon Creek tallgrass prairie had a prescribed burn in the spring to encourage habitat health.



New public events were held including "Night Hikes and Night Legends" at Longwoods Road.

Conservation Education

Conservation Education programs provide elementary and secondary field trip and in-class presentations to students and the community. Staff work with stewardship partners, service clubs, schools, volunteers and the public to foster an understanding and appreciation of our renewable natural resources. Jerry DeZwart is the Conservation Education Technician.

School Programs

School field trips to conservation areas make ideal outdoor classroom experiences. Environmental studies reached 1,020 students and 208 adult supervisors at Longwoods Road this year. The public school teacher situation greatly impacted the number of class visits to Longwoods Road and C.M. Wilson Conservation Areas.

The River and Creek Safety Program is a classroom program that was delivered to 210 watershed grade 2 children and 16 educators. This valued program allows the LTVCA to contribute, along with area service clubs, to water safety education, targeting those most vulnerable to the dangers of seasonal melt waters. The Delaware Lioness Club, Royal Canadian Legion Branches 598 and 251, Glencoe District Lions Club, Rodney Lions Club, and Optimist Club of West Lorne are greatly appreciated for funding the program over 14 years.



Thames Valley Science and Engineering Fair Conservation Award recipients for 2015 were Anika Sharma and Jade Mahabir from University Heights Public School for their Going Green and Saving Trees project.

In the Community

Scout and Guide groups achieve badges while enjoying weekend camp experiences ranging from geocaching to bird watching! Workshops for Brownies, Cubs, Guides, Scouts, Pathfinders and Venturers attracted 103 youth. Summer Tuesday evenings allowed locals a chance to indulge in nature, history, and music during **Longwoods Night Hikes**.

In April, the LTVCA was present at Carolinian Canada's first Go Wild Grow Wild expo event in London. We promoted planting native species gardens to increase native pollinators, and decreasing invasive species.

At the **Thames Valley Science and Engineering Fair**, the LTVCA partnered with Upper Thames River and Kettle Creek Conservation Authorities to present a Conservation Award plaque and binoculars to junior level students whose project best addressed the themes of natural resource stewardship and conservation. Congratulations to young people doing great things!



The Carey Carolinian Arboretum and Trail provided the site for the Native Plants and Nature Photography Workshop. This woodland adventure highlighted Longwood's native plant gardens, threats posed by nonnative species and the beauty of the flowering plants of spring. Local photographer Ted Gough provided tips on how to capture the colour!

Chatham-Kent & Lambton Childrens' Water Festival

We were ready, but the public school teacher situation made this event untenable this year. Without public school participants, the expenditure of time, effort and funding were not justifiable. It is hoped the 2016 Festival will be a huge success and will once again serve to educate area children about the benefits of water stewardship.



Ska-Nah-Doht Village & Museum

OUR MISSION

Ska-Nah-Doht Village and 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.

OUR VISION

Ska-Nah-Doht Village and Museum is an interactive museum that engages the public in the preservation and presentation of the past through experiences on-site and in the community.

Village Curator - Karen Mattila managed the \$249,645 Ska-Nah-Doht Village and Museum budget. Rose Nicholas - Village Education Technician conducted programs, events and directed inventory for the Turtle Trail Gift Shop. We graciously acknowledge the \$22,992 in financial support from the Ministry of Culture through the Community Museum Operating Grant.

Summer Student Grants

Through Young Canada Works in Heritage, a Museum/ Design Assistant updated the Resource Guide to make it ready for the website. Canada Summer Jobs provided an Activities Coordinator who assisted public programing and promoted Longwoods within the community.



The Aylmer and Antler River Stewardship Rangers shared knowledge then lent a hand around Ska-Nah-Doht Village in August.

Ivey Business School

A group of HBA students from the Ivey Business School at Western University in London, drafted a Business Plan for Ska-Nah-Doht Village as their fall term project. The Ivey team has supplied us with many options that will be considered in 2016. Excerpts from their report may be integrated into the existing Strategic Plans for the Village.

Education Programs

As part of its Mission to educate about the past, Ska-Nah-Doht's education programs attracted 2,850 students and 568 adult supervisors. The attendance at these programs was seriously affected by the public school teacher situation in the fall. In addition, 92 public tour and workshop participants enjoyed the interactive museum.

Heritage Build Project Donations

Ska-Nah-Doht Village is over 40 years old and plans are underway for a well needed make-over. With a \$10,000 donation from the Ska-Nah-Doht Fund, Green Lane Community Trust Fund donating \$20,000 and the Lower Thames Valley Conservation Foundation's commitment to financial support, we are on the way for 2016-17. Thank you to all our partners.



Some serious knapping was happening at Artifact Day with the Ontario Archaeological Society and new friends in July!

Partnering with the Local Community

Community Relations

Communication efforts enhance awareness and understanding of the goals and programs of the LTVCA for our target audiences, enabling them to support and enjoy our facilities and services. Through accurate, consistent and clear messaging, staff expand the range of the target audiences whenever possible. Bonnie Carey - Community Relations Coordinator is assisted by Agnes Vriends - Clerk -Secretary on many communications projects.

Community Relations activities inform our primary audiences - LTVCA Board and Committee members, Councillors and staff from member municipalities, Government agencies, and our own staff about the Conservation Authority's programs and services. Watershed residents, media, users of LTVCA facilities and services, partners including the LTVC Foundation, and potential partners, are additional vital audiences.



A bus tour across the eastern half of the watershed was organized for the LTVCA Directors in June (left). In September, the Greening Partnership staff organized a bus tour for landowners and partners throughout the Rondeau Bay watershed (right). Staff later helped organize a bus tour as part of the Lake St. Clair Conference in Chatham during October.



Displays went to the Southwest Agricultural Conference and the Chatham-Kent Farm Show in January. The London Farm Show was attended in March, followed by an exhibit at the Go Wild Grow Wild Expo in April.

Through regular updates of social media and production of literature, our goals and objectives are broadcast across the watershed. Special events and tours are hosted across the watershed. Staff initiate and assist with local environmental projects such as children's festivals, and design, arrange and create displays for fairs and conferences.

Fostering partnerships and collaboration with organizations, volunteers and other stakeholders are priority, and help to further the conservation of our watershed resources. Meeting facilitation, fund-raising with the Lower Thames Valley Conservation Foundation, supervising employment programs, and contributing on conservation committees and working groups, help the LTVCA meet its objectives. As well, communications staff work on many projects for the Thames, Sydenham and Region Source Protection Region, including advertising, and organizing and supporting meetings as per the Clean Water Act.

Highlights of the Year

It was a busy year with lots of projects and activities, beginning with the writing of the LTVCA's annual report and creating a presentation for the Annual General Meeting. Our new logo was launched and fresh website went 'live' in the spring. Throughout the spring and fall, assistance was provided in the delivery of conservation education programs. An east end watershed bus tour for our Directors was organized in June and the annual Longwoods volunteer picnic was held in July. In the fall, time was spent preparing for the Chatham-Kent and Lambton Children's Water Festival, which unfortunately was cancelled due to public school teacher issues. Four memorial forest dedication services were planned and held across the watershed. At year-end, new conservation area advertisements for county tourist organizations were designed, as well as a funding application and brochure for the GLASI project. Throughout the year, daily updates to our website and Facebook pages were made, media releases were issued, special conservation area events were planned, reports were prepared for our Board of Directors' meetings and staff publications were reviewed. Staff participated in the Strategic Planning process during the year.





2015 saw the launch of our new LTVCA logo and website!

Lower Thames Valley Conservation Foundation

Highlights of the Year



The Lower Thames Valley Conservation Foundation works in partnership with the Lower Thames Valley Conservation Authority, to raise funds towards the wise management of our renewable natural resources. Since 1995, the Foundation has raised nearly \$700,000 for natural and cultural heritage conservation. Thousands of dollars were raised throughout the year for conservation projects.

The Lower Thames Valley Conservation Foundation assists volunteer organizations with their fund raising efforts and manages the Sharon Creek Trust Fund, initiated by the Friends of Sharon Creek. The Foundation supports special projects and events like the annual Moonlight Winter Family Hike, the Carey Carolinian Arboretum and Trail and the Lower Thames Valley Conservation Foundation Bursary. Through the Foundation's Memorial Forest Program, the Conservation Authority has planted thousands of trees across the lower Thames region. The Foundation submits

Carey Carolinian Arboretum & Trail

Facilitated through the Foundation, a \$26,000 gift in 2008 from Dr. Lewis Carey, was used the following year by the Lower Thames Valley Conservation Authority for an educational "Carey Carolinian Arboretum and Trail" project at Longwoods Road Conservation Area. Dr. Carey passed away in November of 2009. Large stock Carolinian trees were planted and interpretive signage installed. An official opening and recognition ceremony was held in 2010. The final phase of this project began in 2012, with the start of the Carolinian information kiosk construction. The kiosk nears completion with stained glass windows, exterior paneling and wheelchair ramps for accessibility and four surrounding native gardens. New Carolinian Canada information panels were designed and are exhibited in the kiosk. Some finishing touches to the kiosk and donor recognition panels will be completed in 2016.

Both the Conservation Foundation and Conservation Authority realize this project as an educational tool. Dr. Carey's wish to reflect the connection between First Nations peoples and the Carolinian forest came to fruition, as Longwoods highlights both native and natural history. funding applications to corporations, government agencies, service clubs and other philanthropic organizations to undertake projects and programs, which assist the LTVCA and watershed region.

The Conservation Foundation is a not-for-profit, federally registered charity, governed by a Board of Directors. Tax receipts are issued for all donations.

The Foundation helped fund and support several Conservation Authority and watershed initiatives:

- Lusty Family Tract Campaign Thames Talbot Land Trust
- 411 memorial trees from 2014
- Resurfacing of Carey Carolinian Arboretum and Trail
- 13 large stock trees for memorial forest dedication services Volunteers for Moonlight Winter Family Hike event and 4 memorial forest dedication services



Nearly 1,000 family and friends of loved ones attended the McKinlay Woodlands Memorial Forest Dedication Service held in September at C.M. Wilson Conservation Area - one of four annual services.









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Front Cover Photo Courtesy of Erin Carroll - SCRCA