



Working Together For A Healthy Environment



**2015
Annual Report**

St. Clair Region
Conservation Authority

Vision, Mission, and Objectives

Vision

Vision is defined as foresight. The vision of the St. Clair Region Conservation Authority reflects the future desired state of our region.

"The St. Clair Region Conservation Authority has as its vision, watersheds where human needs are met in balance with the needs of the natural environment."

Mission

A mission reflects action. In order to achieve our vision, it is necessary to provide leadership, effective management and ongoing communication.

"The St. Clair Region Conservation Authority has as its mission, to provide leadership through coordination of watershed planning, implementation of resource management programs and promotion of conservation awareness, in cooperation with others."

Objectives

Develop and maintain programs that will protect life and property from natural hazards such as flooding and erosion – The SCRCA works in partnership with municipalities to protect life and property through the development of programs that minimize or prevent the impact of disasters such as flooding and erosion.

Protect, manage and restore our woodlands, wetlands and natural habitat – Because what we do on land is reflected in our water and ecosystems, the SCRCA develops programs that protect our land resources and promotes watershed stewardship practices that lead to healthy, sustainable communities and industries.

Ensure that our rivers, lakes and streams are properly safeguarded, managed and restored – Based on our system of watersheds, the SCRCA develops and delivers watershed-based programs that work with nature to protect, restore and effectively manage our water resources.

Provide opportunities for the public to enjoy, learn from, and respect our natural environment – Through the lands we manage and own, as well as the educational programs we deliver, the SCRCA provides opportunities for our communities to understand and appreciate the value of their natural environment as well as the social and economic benefits of protecting that environment.



2015 Board of Directors

Betty Ann MacKinnon, Township of Adelaide-Metcalf
Frank Nemcek, Municipality of Brooke-Alvinston
Joe Faas, Municipality of Chatham-Kent
Jeff Wesley, Municipality of Chatham-Kent
Alan Broad, Township of Dawn-Euphemia
Kevin Marriott, Township of Enniskillen/Village of Oil Springs
Gerry Rupke, Municipality of Lambton Shores
Dan McMillan, Municipality of Middlesex Centre
John McCharles, Town of Petrolia
Muriel Wright, Town of Plympton-Wyoming
Larry Gordon, Village of Point Edward
Andy Bruziewicz, City of Sarnia
Mike Kelch, City of Sarnia
Cindy Scholten, City of Sarnia
Diane Brewer, Municipality of Southwest Middlesex/Village of Newbury
Steve Arnold, Township of St. Clair
Steve Miller, Township of St. Clair
Tony Bruinink, Municipality of Strathroy-Caradoc
Norm Giffen, Municipality of Strathroy-Caradoc
Todd Case, Township of Warwick

The Conservation Authority is governed by a Board of Directors appointed by the member municipalities within the jurisdiction of the St. Clair Region Conservation Authority. The 20 Authority Directors vote annually to select a Chair, Vice Chair and Executive Committee.

The Board met six times in 2015 and is responsible for establishing the policy and procedures under which the Conservation Authority operates. Conservation Authority board members provide a crucial link between this organization and the municipalities we serve.

Executive Committee

Steve Arnold, Chair
Norm Giffen, Vice Chair
Tony Bruinink
Andy Bruziewicz
Joe Faas
Larry Gordon
Betty Ann MacKinnon
Steve Miller
Jeff Wesley



Chair's Remarks

I am pleased to present our Annual Report outlining our accomplishments over the last year. As an organization, we strive to effectively provide programs that further our vision of healthy and safe watersheds. We do this with an eye toward financial accountability and the needs of our member municipalities.

Helen Keller wrote "Alone we can do so little, together we can do so much." We agree. As you read this annual report, I believe you will be impressed with the wide range of partnerships that have been forged and how this has led to a comprehensive conservation program provided throughout our region.

Thank you to all those organizations and individuals who have joined with us either as funders, project participants, or volunteers. You have all been a critical part of our success.

I also thank our Board of Directors for their support and hard work over this last year and to our dedicated staff who continue to work on behalf of our communities.

*Steve Arnold
Chair*

Protecting Life and Property

Flood Operations

Flooding is a natural process. While the Conservation Authority has done much to reduce the risk to life and property, some flooding in developed areas is still inevitable. The Conservation Authority actively works to reduce the threat to life and property from the dangers of flooding. Municipal representatives meet with Authority staff to review and update a Flood Warning Plan, enabling an organized and coordinated response in the event of changing watershed conditions. Through a network of 11 stream gauges, five snow sampling stations, ice monitoring, and current meteorological data, Authority staff monitor watershed conditions by tracking and updating data on an ongoing basis to scientifically determine short- and long-term trends.

Flood Warnings: The Authority operates a flood warning program designed to warn residents in flood-prone areas. Should a flood be imminent, the Municipal Flood Coordinators and the media are advised and officials take appropriate action.

There are four types of statements issued:

- Watershed Conditions Statement for Water Safety
- Watershed Conditions Statement for Flood Outlook
- Flood Watch
- Flood Warning

In 2015, three events resulted in Watershed Condition Statements (April 10, March 15-19, and June 23-26). The colder than normal winter combined with extensive snow pack that built up from January to March created concern of significant flooding during the spring melt. A very slow but steady melt, however, resulted in only minor flooding in low lying areas.

Shoreline Erosion and Flooding: The Authority issues warnings for potential damage due to wave action along southern Lake Huron, St. Clair River, and northeastern Lake St. Clair shorelines.

W. Darcy McKeough Floodway: The W. Darcy McKeough Floodway, located 12 km north of Wallaceburg, was built to protect the community of Wallaceburg and portions of the former Townships of Chatham and Sombra from severe flooding. Since 1984, the McKeough Floodway has been operated six times. In 2015, a number of maintenance and repair items were completed on the Floodway:

- repair of twin culverts draining into floodway was completed – several other culverts are showing signs of failure
- a preferred method to repair the outlet structure has been determined
- monitoring of slump erosion on the floodway is ongoing
- slope study analysis has been completed
- continued to deal with vandalism by attempting to restrict unauthorized access by ATVs
- weed control in channel bottom and side slopes

3D Mapping Project Underway

The SCRCa is undertaking an extensive project to develop better elevation mapping. Similar projects are currently being implemented by the province, as well as many other Conservation Authorities. The focus of this project is to create a high resolution Digital Elevation Model (DEM) from digital aerial photography.

As of November of 2015 the following milestones have been accomplished:

- GIS/Photogrammetry Technician was hired and trained on workstation function and capabilities
- a methodology for digitizing hydrological features has been defined, tested and revised
- hydrologically adjusted DEMs are being produced
- manual digitizing (feature capture) of all visible hydrology has commenced – approximately one third of the SCRCa watershed has been completed

Future goals include:

- completing the process of digitizing and feature capture in 3D
- create contours and other products that display elevation information
- continue to utilize the workstation for in-depth case studies, such as shoreline slope analysis

The deliverables of this project will provide many benefits including overall improved elevation information such as the slope of the terrain, across the entire SCRCa watershed, higher quality floodplain mapping, more accurate indication of regulated areas, and mapping aids for the planning and placement of conservation projects such as the construction of wetlands and tree planting.



Shoreline Delineation Using 3D Viewing of Digital Aerial Photography

Lake Huron Shoreline Management Plan

Although work remains for two small dynamic beach areas, the Board of Directors approved the Plan as posted on the website in fall of 2015. Any further work on the dynamic beaches will be included as an addendum to the Plan.

Water and Erosion Control Infrastructure Grants

The Ministry of Natural Resources and Forestry provided \$132,000 to support a number of projects in the St. Clair region in 2015-2016. The funds were provided to the SCRC through the Water and Erosion Control Infrastructure (WECI) program.

- \$100,000 for channel repairs at the W. Darcy McKeough Floodway
- \$7,500 for McKeough Slope Stability Study
- \$12,000 for hazard tree removal from ARDA Dykes
- \$12,500 for Wallaceburg retaining wall inspection



Culverts re-installed to maintain the integrity of the berms along the diversion channel of the McKeough floodway.

New Rain Gauge Installed

A new high-tech rain gauge was installed at the Warwick Conservation Area this summer. With the increasing need for data relating to climate change, the Ministry of Natural Resources and Forestry has provided precipitation monitoring equipment to Conservation Authority partners across the province. By locating monitoring stations in strategic locations across our watershed, we are able to provide a more accurate assessment of localized rainfall events. The SCRC installed equipment including a Davis Weather Station at the Warwick site. This site will now provide comprehensive weather data in an area of the watershed that has lacked detailed environmental data in the past.



Erosion Control Projects

Cathcart Park: The fourth phase of protection at Cathcart Park was completed in February. An additional 80 metres of armour stone protection was constructed at a cost of \$290,000. Funds (\$170,000) were granted through the provincial Water and Erosion Control Infrastructure Program with matching funds from St. Clair Township. Additional funds to enhance the project by providing improved shoreline habitat were received from the Great Lakes Sustainability Fund and from the Ministry of the Environment and Climate Change through the Canada-Ontario Agreement and the Ontario Great Lakes Guardian Fund.



Lambton Area Water Supply System (LAWSS):

The construction of erosion protection at the mouth of the St. Clair River was completed in March. Approximately 280 metres of shoreline were restored with a combination of existing concrete blocks and armour stone sea wall, protecting this critical infrastructure. Funds (\$300,000) were granted through the provincial Water and Erosion Control Infrastructure Program with matching funds from LAWSS. An additional \$50,000 was secured from the Ministry of the Environment and Climate Change through the Canada-Ontario Agreement.



Promoting Safe Development and Healthy Communities

While municipalities encourage valuable development, it is important that new houses and businesses are located safely out of areas susceptible to potential natural hazards. It is also important that any development that is completed within an area of natural hazard does not endanger adjacent landowners, or other landowners within the watershed.

The St. Clair Region Conservation Authority is responsible for managing development within areas of natural hazards through Ontario Regulation 171/06 – Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. To prevent future risk and to protect the interests and liability of our member municipalities, this regulation requires landowners to obtain permission of the Authority prior to developing within natural hazard areas associated with watercourses and areas susceptible to river or lake shoreline flooding, ravine and shoreline slopes, wetlands and lands adjacent to wetlands. Through pre-consultation with proponents and member municipalities, wetland areas and hazard constraints are discussed and avoided up-front in most cases.

The Authority provides hazard and surface/groundwater comments on municipal planning matters. Natural hazard studies can include floodlines, stormwater management, stable slopes, coastal assessments and engineering. The Authority, from time to time, may obtain outside expertise to review complex technical reports. This review and input assist municipalities in meeting their obligation to adhere to related provincial policies.

The Authority also responds to requests for property information from members of the public, lawyers, and real estate agents. These inquiries are very important so that prospective buyers of property or people considering works in high risk areas have a prior understanding of the risks and requirements involved.

Great Lake Water Levels

Throughout 2015, Great Lake water levels continued to rise compared to 2014 in both Lake St. Clair and Lake Huron. Water levels have increased by 15 cm and 20 cm respectively in the last year. Lake Huron levels continued to exceed the 10 year long-term average for most of the year, however, this average continues to be based on an extended period of lower levels experienced over the past 10 years. Surface water temperatures were also colder than usual for summer 2015.

Lake levels are an important factor in managing our flood and erosion control program. In addition to the obvious impact on shoreline erosion from high lake levels, the flat terrain in the southern portions of the watershed create greater flood risks. Water levels in lower Sydenham River (Wallaceburg and Dresden), for example, are actually determined by the water level in Lake St. Clair. The higher the lake level, the less room there is in the lower reaches of the Sydenham River to accommodate increased flows from storms and spring snow melt.

Supporting Municipalities with Natural Heritage Advice

The Provincial Policy Statement assigns responsibility for Natural Heritage to municipalities. The Authority, however, has been asked to provide natural heritage comments on municipal planning matters as a service to municipalities. We provide technical advice on natural heritage and assist municipalities by reviewing natural heritage environmental reports such as wetland/woodland environmental assessments including Terms of Reference and Work Plans. This review and input assist municipalities in meeting their obligation to adhere to related provincial policies.



Planning and Regulations Activity

	2014	2015
General Inquiries	18	23
Reviewing and advising on Official Plans, Official Plan Amendments, Zoning By-laws, Zoning By-law Amendments and Subdivisions	32	65
Reviewing and advising on Severances and Variances	68	70
Applications under Ontario Regulation 171/06	169	183
Inquiries under Ontario Regulation 171/06	162	122
Legal Inquiries	57	63
Review of Environmental Studies and Development Assessment Reports including Terms of Reference	13	18
Hearings	2	0
Total	531	544

Creating Healthy Watersheds

Tree Planting Program

This year, 54,000 seedling trees and 800 large-stock trees were planted on private and public properties. During the fall, 65 large stock potted trees were planted.

Approximately \$165,000 in federal, provincial and local grants were secured through 7 separate funding programs and used to offset planting costs for most landowners taking part in the seedling program.

Tree Maintenance

For a tree planting project to be successful, maintenance of the trees is essential. The Conservation Authority offers a service to provide weed control for newly planted seedlings for three years. In 2015, 300,000 trees were treated with herbicide to prevent competition from weeds.



Forest Ontario – 50 Million Tree Program

Forest Ontario has a long-term agreement to plant 50 million trees province-wide by 2025 and plays a large role in our landowner grant program. In 2015, the SCRCA received \$54,000 from Trees Ontario to help plant 40,000 trees on private lands.

Drain Maintenance Program

Authority staff worked with municipal drainage superintendents on the maintenance of 16 km of municipal drains in 2015. The herbicide applications assist in controlling woody vegetation, decreasing the frequency of drain clean-outs, and reducing sedimentation caused by frequent clean-outs.



Woodlot Management Services

Qualified forestry staff provide woodlot management and marking services to landowners. This is an excellent option for landowners who would like independent advice or an appraisal of their woodlot. Management plans are created that meet the specific goals of the landowner. Proper silviculture techniques and “Good Forest Practices” are encouraged to ensure the long-term health of the woodlot while meeting the needs of the landowner. Staff are continuing to implement management plans for Conservation Authority, Foundation and Lambton County lands.

Woodlands Conservation By-law

The Conservation Authority continues to administer the Woodlands Conservation By-law on behalf of the County of Lambton. This partnership not only assists with the regulatory aspect of the by-law, but has expanded outreach and education related to conserving woodlands. Staff have found an increase in enquiries by landowners with regards to woodlot issues and how they relate to the by-law.

Authority Tree Seed Collection

It is important to select the correct species for the site conditions of each project where trees are to be planted. In addition, trees should be grown from tree seed that was collected in that same geographic location where planting is to take place. This ensures the best tree species genealogy for the site and results in better tree growth, survival and longevity. The Conservation Authority collects local tree seed throughout the watershed and ships the seed to the wholesale nursery stock grower. Tree seed collected in 2015 will be used in the 2017 afforestation program. Tree seed collected and shipped to the nursery this past fall included black walnut, red oak, bur oak, swamp white oak, shagbark hickory, bitternut hickory and big shellbark hickory. Approximately 3,600 liters (90 bushels) of tree seed were collected by Authority staff this year.



Red oak seeds are washed before they are shipped to a nursery to be grown into seedlings for future tree planting.

Healthy Watersheds

Grants Awarded to Conservation Authority Help Landowners

The Conservation Authority's Healthy Watersheds Program is an initiative that provides technical and financial assistance to improve and protect rural water quality. The SCRC actively seeks grants that will bring dollars into the region to support the conservation efforts of landowners. Projects include wetland creation/enhancement, sediment traps, agricultural erosion control structures, buffer strips, riparian/stream bank protection, wildlife habitat creation, windbreaks, reforestation, and native grassland habitat. In 2015, grants were obtained for landowners from Environment and Climate Change Canada, Ministry of Natural Resources and Forestry, Ministry of the Environment and Climate Change, Ministry of Agriculture and Food & Rural Affairs, and the Forest Ontario.

- Species at Risk Stewardship Fund – \$47,000 in grant are available each year until 2016. This program, funded by the Ministry of Natural Resources and Forestry, provides assistance for landowners with projects located in the east and north branches of the Sydenham River.
- 50 Million Tree Program – Up to \$1,000 per acre for reforestation projects are available from Trees Ontario for projects one hectare or larger in size. A total of \$75,000 or more is available each year for landowner tree planting projects in the SCRC watershed.
- Sydenham River Habitat Stewardship Program – \$48,650 in grant are available this year. This program is for landowners with projects located in priority area 1 for aquatic species at risk in the east branch of the Sydenham River above Dresden.
- Healthy Lake Huron – Lambton Shores Program – \$34,000 in grant are available until March 2016. This program, funded by the Ministry of the Environment and Climate Change and the Ministry of Agriculture, Food, and Rural Affairs, assists landowners with projects located in the priority area.
- Healthy Sydenham Headwaters Initiative – \$30,000 grant funded by the Middlesex Stewardship Council, will assist landowners with wetland creation and upland habitat restoration projects in the Sydenham Headwaters watershed.

In 2015-16, \$180,000 in grants were provided to landowners resulting in 31 stewardship projects. Over the last 15 years, the Conservation Authority distributed more than \$2.5 million in grants to landowners which resulted in over 810 projects.



Excavation of a future wetland will create habitat and improve water quality entering nearby watercourses.

Invasive Species – Battling Phragmites

The Conservation Authority partnered with the Lambton Shores Phragmites Community Group to help battle this invasive species in a provincially significant coastal wetland on Lake Huron. Along with the Municipality of Lambton Shores, the Conservation Authority has been seeking funds to help deal with the Phragmites which has been a long-standing issue in this coastal wetland. In 2015, funding was provided by: Ministry of Natural Resources and Forestry – \$15,000, Environment and Climate Change Canada – \$30,000, and the Great Lakes Guardian Fund – \$24,725.



Healthy Sydenham Headwaters Initiative

This initiative is wrapping up in 2016 as funding assistance from the Ontario Trillium Foundation has ended and the Middlesex Stewardship Council (MSC) has decided to disband. Nonetheless, the headwaters of the Sydenham remain an important component of our Healthy Watershed Program. The SCRC continues to encourage conservation and restoration efforts in the headwaters of the Sydenham River. In addition to monitoring water quality in the watershed, one wetland and two plots of tallgrass prairie were created in 2015. There remains \$30,000 for restoration efforts in this watershed from MSC. Staff continue to meet with landowners seeking to implement stewardship projects. Other partners providing funds for the Healthy Sydenham Headwaters Initiative include Environment and Climate Change Canada's Habitat Stewardship Program (Aquatic Species at Risk), Ministry of Natural Resources and Forestry, and Ducks Unlimited Canada.



Staff work with landowners to develop and fund projects that help improve our watersheds.

Reptile Monitoring

The Reptiles at Risk program was a great success for the 2015 field season with projects including monitoring, stewardship, habitat enhancement, and education. This work is supported by the Species at Risk Stewardship Fund through the Ministry of Natural Resources and Forestry. Reptile monitoring includes surveys for turtles, snakes, amphibians, and lizards. In addition to the field work undertaken by SCRC staff, a number of community groups and students participated in workshops highlighting the importance of reptiles in our watersheds.

Highlights

- Authority staff held a workshop at the Sombra Museum to encourage local residents in St. Clair Township to report reptile sightings. Jenny Pearce of Scienstational Ssnakes allowed participants to view and handle some of Ontario's rare reptile species including the eastern foxsnake, and eastern hog-nosed snake.
- A local high school student from Wilkesport volunteered his time to attend to two of the three artificial nesting boxes for eastern foxsnake this summer. He became a nesting box steward and checked weekly to determine if the snakes were using the boxes for nesting purposes. At the end of the nesting season all three boxes were sifted through to determine if eggs had been laid by eastern foxsnake females. In one of the artificial nesting boxes approximately 40 egg shells were found suggesting there was great success. Young hatchlings were also reported to be observed around that particular nesting box.
- Reptile monitoring was also expanded to the McLean Conservation Lands in 2015. An artificial nesting box and cover boards were placed for snakes and turtle basking logs were also installed to provide more habitat for turtles on the property. A couple eastern garter snakes and Dekay's brown snakes were observed using the cover boards and 4 snapping turtle nests were observed in early June.



Brandon Jordan, a local Wallaceburg District Secondary School student, volunteered his time this summer to be a nesting box steward and monitor the artificial nesting boxes for activity. This involved observing adult snakes hunting, looking for food around the site in early to mid-summer, finding snake skin sheds in the nesting box material, and observing young snakes around the nesting site in early to mid-fall.

Fish Monitoring

With support from programs such as the Ontario Trillium Foundation and the Fisheries and Oceans Canada, SCRC staff have been able to complete fish community surveys in a number of subwatersheds including the Plympton Shoreline Tributaries, St. Clair River Tributaries, Cow and Perch Creeks, Black Creek, Bear Creek Headwaters, Lower Bear Creek, Lower East Sydenham, Middle East Sydenham, and the Sydenham Headwaters.

Highlights from 2015 sampling:

- 15 sites were sampled in the 9 subwatersheds listed
- approximately 4,000 fish were examined
- approximately 40 fish species were identified (there are approximately 160 freshwater fish species in Ontario with the Sydenham being home to at least 82 of these species).

The purpose of fish community surveys is to gain important information on fish species distribution and watershed health which is reported every five years through our Watershed Report Cards.



Helping Aquatic Species at Risk

The Sydenham River supports an incredible variety of aquatic life, making it one of the most species-rich watersheds in all of Canada. Many of the aquatic species of the Sydenham are listed as species at risk either provincially or federally.

The Conservation Authority received federal and provincial funds to undertake research, site-specific habitat improvements, and development and distribution of an annual newsletter. Education programs where students learn about the biology and ecology of species were brought to Hillside Public School at Kettle and Stony Point First Nations and North Lambton Secondary School in Forest.



In July, SCRC staff assisted Fisheries and Oceans Canada (DFO) with mussel monitoring in the Sydenham River. Every few years DFO revisits locations along the Sydenham River to monitor for change in species population and distribution. Since the Sydenham River is the most mussel rich watershed in all of Canada, with 12 of the 34 species listed as at risk, this is a very important and worthwhile program.



This year marked the first observation of the Eastern Musk Turtle in one of our Conservation Areas. The Eastern Musk Turtle, also known as the Stinkpot, named for its strong musky odour, is a small turtle measuring anywhere between 9 and 12 centimetres along the length of the shell.

– photo courtesy of Joe Crowley

SCRCA Receives Grants to Study Wetlands

The SCRCA received \$30,000 from the Ontario Ministry of Natural Resources and Forestry as well as a \$3,000 grant from the J.P. Bickell Foundation through The Bank of Nova Scotia Trust Company to undertake evaluations of wetlands in the region. This helps the Authority better understand a number of key wetlands and to determine their provincial significance.



SCRCA Supports Municipalities – Municipal Drains

The SCRCA, acting under the Conservation Authorities Act as a watershed management agency, provides review of drainage projects for municipalities.

According to provincial direction, the SCRCA issues Standard Compliance Requirements (SCRs) under the DART (Drainage Act & Section 28 Regulations Team) protocol. The protocol was developed to streamline the approvals process and includes a set of SCRs for regular repair and maintenance activities that, if followed, would serve as the written permission to proceed with work under the Conservation Authorities Act. In 2015, 102 SCRs were issued.

At this time, the protocol only addresses the maintenance and repair of drains as required by the Drainage Act and does not address issues around new drains and improvements to existing drains. However, SCRCA has a supplementary review process for projects that fall outside the protocol and Letters of Review are issued for these projects. In 2015, a total of 40 Letters of Review were issued. Both the DART protocol and Letters of Review do not apply to permission under the federal Fisheries Act or the Ontario Endangered Species Act or any other regulatory requirements.

Water Quality Monitoring

Surface Water

Surface water samples are collected at 20 sites to provide water chemistry information for the following programs:

- Provincial Water Quality Monitoring Network
- Canada-Ontario Agreement on Great Lakes Water Quality
- Healthy Lake Huron – Lambton Shores Tributaries

Field tests are conducted on parameters such as dissolved oxygen, pH, conductivity, and temperature, while samples are bottled and shipped to MOE to be analyzed for nutrients, *E. coli*, and metals.

The health of the aquatic habitats is also assessed by sampling the invertebrate organisms such as insects, worms and crustaceans that live on the bottom of the watercourse. Benthic samples were collected at 14 sites.

Results of this sampling form the basis for the water quality grades reported in the SCRC Watershed Report Cards.



Groundwater

In an effort to better understand Ontario's groundwater resources, the Ministry of the Environment and Climate Change implemented the Provincial Groundwater Monitoring Network to monitor water quality and quantity in a number of test wells. The Network is a cooperative effort of the Conservation Authorities in Ontario, on behalf of the Ministry of the Environment and Climate Change. Water levels are monitored at the nine groundwater wells, and the water quality at eight groundwater wells.

One of the wells is outfitted with satellite telemetry and is used by the province as part of its monitoring program for low water advisories.

West Nile Virus Control

Lambton County Community Health Services contracted the Conservation Authority to undertake the Lambton County Larvicide Program as part of its overall West Nile Virus Control Program. Approximately 16,000 catch basins were treated in Sarnia-Lambton, Aamjiwnaang First Nation, and at the Dupont Plant in Corunna. Three separate rounds of application were completed over the summer. The catch basins were treated with a pelletized larvicide called methoprene. The treatment is designed to prevent mosquito larvae from becoming adult biting flies and reduce the risk of spreading West Nile Virus throughout the community.

Drinking Water Source Protection

After almost a decade of research and public consultation, the Thames-Sydenham and Region Source Protection Plan has been approved by the province and is now law.

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

The St. Clair Region, Upper Thames River, and Lower Thames Valley Conservation Authorities worked together, along with the Thames-Sydenham and Region Source Protection Committee, to develop the Plan to protect municipal sources of drinking water throughout the region. The Committee is a group of citizens, appointed under the Clean Water Act representing municipal, business, general public, First Nations and interest group sectors from across the region.

The Source Protection Plan contains local policies that address a range of drinking water threats. The Source Protection Committee worked hard to create a balance between the important goal of protecting our municipal supplies of drinking water and the burden this would create on municipalities and other implementers. In general, for existing activities that are a significant risk, the approach was to manage the risk through the use of Risk Management Plans and Prescribed Instruments. This allows the activities to continue while managing the risk such that the activity is no longer a significant threat to the drinking water source.

For future activities that would create a new significant risk, generally the approach was to prohibit this activity in those vulnerable areas where it would be a significant threat. Whenever possible, where other agencies have mechanisms in place that adequately address the significant threats, these mechanisms were used to reduce duplication. The Committee also felt it was important to address moderate and low risks. This was done primarily through education and outreach.

Great Lakes

Healthy Lake Huron

A team of dedicated environmental professionals joined together in 2011 to coordinate actions aimed at improving overall water quality along the southeast shores of Lake Huron. This group is leading the Healthy Lake Huron – Clean Water, Clean Beaches campaign, a concerted effort to address nuisance algae concerns and to promote safe and clean beaches and shorelines from Sarnia to Tobermory.

The Lambton Shores watershed was identified as one of five target watersheds. The SCRC provides grants to farmers to implement Best Management Practices (BMPs) in Lambton Shores. In 2015, three landowners participated. These projects were part of the Lambton Shores Clean Water Cost-Share Program which offers grants to landowners for eligible projects that improve water quality in the Lambton Shores Watershed.

A number of other activities were undertaken as part of the Healthy Lake Huron Initiative:

- the SCRC hosted the fourth annual Great Canadian Shoreline Cleanup event at Centre Ipperwash Beach with 14 volunteers from the community
- a walk the watershed event was held with landowners to seek out possible projects
- a bus tour on cover crops and soil health was held and speakers included a local champion landowner, OMAFRA representatives and staff from Veritas
- a display at the Forest Fall Fair provided an opportunity for staff to engage with the community and promote Healthy Lake Huron initiatives
- a postcard was distributed to shoreline and rural landowners promoting stewardship grants
- monthly and storm event water quality sampling continues to evaluate impact of runoff on nutrients entering Lake Huron
- a community steering committee continues to provide input to ensure programs are meeting the needs of the Lambton Shores watershed

The Healthy Lake Huron Program is funded by Environment and Climate Change Canada and the Province of Ontario through the Canada-Ontario Agreement.



OMAFRA staff demonstrate the value of cover crops during a bus tour organized by the Conservation Authority as part of the Healthy Lake Huron Program.

Great Lakes and St. Lawrence River Cities Initiative

The Conservation Authority had an exhibit at the Great Lakes and St. Lawrence River Cities Initiative's Annual Meeting in Sarnia. This provided an excellent opportunity to demonstrate the important role of Conservation Authorities in linking watershed management to issues relating to the Great Lakes.



Lake St. Clair Conference

The SCRC participated in the organization of the Lake St. Clair Conference in Chatham on October 21. The Lake St. Clair conference, held every two years, provides a binational forum to exchange information on Lake St. Clair's changing environment and the actions and tools needed to manage these changes. The conference offers a valuable opportunity to learn more about Lake St. Clair and helps facilitate collaborative efforts for the implementation of actions. The conference was organized through a partnership with Environment and Climate Change Canada, Ontario Ministry of the Environment and Climate Change, Michigan Department of Environmental Quality, United States Environmental Protection Agency, and the Lake St. Clair Canadian Watershed Coordination Council. Approximately 80 people attended.



Chris Korleski, U.S. EPA's Great Lakes National Program Office, addresses the Lake St. Clair Conference held in Chatham.

St. Clair River Area of Concern

The St. Clair River Area of Concern is one of 43 Areas of Concern the International Joint Commission has identified within the Great Lakes basin where there are known environmental problems. In each area, local partners are working together to implement Remedial Action Plans and take action so the area can be rehabilitated and removed from the list of Areas of Concern. The Conservation Authority is playing an important role in this plan by coordinating and managing projects. Delisting the St. Clair River as an Area of Concern under the Canada-US Great Lakes Water Quality Agreement is the ultimate goal of Ontario, Canada, and all local partners.

Road to Recovery

The Canadian RAP Implementation Committee continues to work towards the removal of water-use and ecological impairments from the original list of problems. The decision to re-designate Beneficial Use Impairments (BUIs) to “Not Impaired” status is reached through consensus with the Remedial Action Plan partners, and is endorsed by the St. Clair River Binational Public Advisory Council (BPAC), First Nations, and government agencies.

Work continued in 2015 preparing status assessments and conducting research in support of the remaining BUIs. Through many partnerships and collaborations, numerous research, habitat and monitoring projects were completed that benefit the St. Clair River Area of Concern. Some recent highlights include:

- Fish sampling in the St. Clair River in support of the “Guide to Eating Ontario Fish” published by the Ontario Ministry of the Environment and Climate Change
- Collection of Brown Bullhead (*Ameiurus nebulosus*) in the Walpole Island delta for liver tumour analysis
- Continued creation and enhancement of wetlands and installation of riparian buffers along St. Clair River Area of Concern tributaries
- Completion of Leopard Frog (*Rana pipiens*) deformity study at Walpole Island and the eastern shores of Lake St. Clair yielding positive results

Fish and Wildlife Habitat Management Plan

With funds from the Great Lakes Sustainability Fund, the SCRCA will be laying the ground work for the completion of a Fish and Wildlife Habitat Management Plan for the St. Clair River Area of Concern. This project will directly contribute to the delisting of the “Loss of Fish and Wildlife Habitat” Beneficial Use Impairment (BUI) currently identified as “Impaired” in the St. Clair River AOC. The development and organization of a management plan will require expertise in both aquatic and terrestrial ecology, rehabilitation and management.

Future Work and Upcoming BUI Assessments

Sediment Management Project: Three areas of mercury contaminated sediment remain along the shoreline of the St. Clair River and have been recommended for removal by dredging. This recommendation continues to be considered by the federal and provincial governments. Detailed engineering and environmental assessments are the next steps in the process.

BUI Status Assessments: A number of impairments have or will be assessed in the near future or are at different stages of review, bringing the St. Clair River closer to delisting. These include the “Restrictions on Dredging Activities” BUI, “Beach Closings” BUI and the “Bird and Animal Deformities or Reproductive Problems” BUI. In early 2016, a discussion paper on the “Restrictions on Drinking Water Consumption or Taste and Odour Problems” BUI will be released for public consultation. This issue was originally identified as “impaired” for the St. Clair River Area of Concern due to frequent water intake closures caused by municipal and industrial spills. The document does not provide a re-designation recommendation but rather provides relevant information to initiate a discussion on its status.



Community Conservation

High School Students Get Hands-on Experience

SCRCA staff conducted an aquatic inventory program for Grade 12 Biology students at North Lambton Secondary School. The students learned about species at risk reptiles in the area and how good water quality and ecosystem health is important to support species at risk. Using probes, students learned of the importance of conductivity, pH, temperature, and dissolved oxygen. Students assessed the stream characteristics such as siltation, erosion, barriers to fish movement, and riparian area. By collecting benthic macroinvertebrates, the students determined the health of the creek. This program is funded through the Ontario Trillium Foundation and the Reptiles at Risk program through the Ministry of Natural Resources and Forestry.



Kettle and Stony Point First Nation Students Participate in Education Program

Students from the Hillside School at Kettle and Stony Point First Nation were educated on aquatic bugs, fish, and their environmental significance. SCRCA staff delivered material on life cycles and biology of these species and why the Kettle and Stony Point area is so unique. The classes spent time at Shashawandah Creek as well where they were able to capture aquatic bugs and fish. SCRCA staff returned for a second day providing education on Species at Risk and the habitat provided within the Kettle and Stony Point area. Lessons were provided through a habitat loss game, a craft, maps, and a story. This program is funded through the Reptiles at Risk program through the Ministry of Natural Resources and Forestry, the Ontario Trillium Foundation, and the Aboriginal Funds for Species at Risk program through Environment and Climate Change Canada.



Aamjiwnaang Earth Day Celebration

SCRCA staff participated in Aamjiwnaang's Community Earth Day celebrations. Information was shared with community members on the St. Clair River Remedial Action Plan and a number of Conservation Authority programs including the unique and valuable wildlife found within our watershed, our programs to protect Species at Risk, critical habitat, and vulnerable ecosystems. Community members were encouraged to search through our benthic invertebrate sample to see what kind of life can be found in a healthy creek.



Trees, donated by the St. Clair Region Conservation Foundation, were planted at Hillside School in the Kettle and Stony Point First Nation.

Kid's Funfest

This Sarnia event focused on children and provided an opportunity for the Conservation Authority to engage youth in nature-based activities.



Agriculture in the Classroom

The Conservation Authority works with the Agriculture in the Classroom program at Brigden Fair. Our display focused on the importance of pollinators as natural predators. Students were given a chance to hold a praying mantis, one of our largest and more personable insects.

Camp Blast

Conservation Authority staff introduced kids at "Camp Blast" to aquatic species living in their own community. About 20 participants checked minnow traps, investigated rare mussel species and learned about our native reptiles.

Young Naturalist and Junior Conservationists

The Conservation Authority continues to sponsor the Lambton Wildlife Inc.'s youth programs. Both groups meet once per month with SCRCA staff at local wild spaces to learn about conservation, habitats and species at risk in the watershed. Overall, approximately 35 youth and their families benefit from these monthly meetings.



Conservation Awards

The Conservation Authority offers Conservation Awards to deserving individuals and groups who have contributed to the environmental wellbeing of our region. The 2015 recipients were:

John and Mary-Ellen King: Mary-Ellen and John King are excellent stewards of their land and have led by example completing numerous environmental best management practices. They have worked with the SCRCA, Ducks Unlimited and the Rural Lambton Stewardship Network. Since 2005, they have retired a total of 47 hectares of marginal or fragile land on their properties.

Enviro-Friends of Coldstream: The Enviro-Friends of Coldstream is a remarkable group of volunteers that have been running the Coldstream Conservation Area since 1994 in order to keep this beautiful park a part of the community. In addition to the day-to-day operation, they actively raise funds to continually improve the Conservation Area for the enjoyment of the community.

Doug Rogers: For the last 19 years, Mr. Rogers has used grassed waterways, strip tillage, and cover crops to reduce erosion and maintain soil health on his fields. Mr. Rogers has been working with SCRCA staff to promote conservation by hosting tours of his property and acting as a spokesperson for soil conservation.

Strathroy Community Christian School: The Strathroy Community Christian School has been very active in promoting conservation with its students. They fund-raised to construct a boardwalk into an adjacent wetland that allows the students to experience nature through an outdoor science room. Students actively learn about plants and community by planting garden vegetables which are harvested and donated to the Women's Rural Resource Centre.

TD Friends of the Environment Supports Community Tree Planting

TD Friends of the Environment Foundation supported tree planting efforts in Strathroy and Sarnia through TD's Green Streets Program and TD Tree Days, totalling \$16,500. Thanks to the many partners and volunteers including the Municipality of Strathroy-Caradoc, City of Sarnia, Trees Canada, and the St. Clair Region Conservation Foundation, 700 native trees were planted.



Events – Experience our Watershed

Maple Syrup Festival

About 800 people visited the A.W. Campbell Conservation Area to experience demonstrations of syrup production from times past. Tours included a story of how maple syrup was discovered by our First Nations people who later taught pioneers the wonders of this important staple. The festival was held March 21-22. The Alvinston Firemen's Association provided the traditional pancake and sausage meals at the Alvinston Community Centre.



Sydenham River Canoe Race

Sixty-six canoes and kayaks participated in the Sydenham River Canoe and Kayak Race on April 19. A bleak forecast turned into a great day. Thanks to all those who made donations, \$2,600 was raised for Conservation Education. Dick Buchanan and Jack Inch won the award for the most money raised and the fastest time for the 17 km competitive race was won by Liz Loek and Dean Brown at 1 hour 26 minutes and 10 seconds.



A Geocaching Adventure

Geocaching is a high-tech treasure hunt which uses a global positioning system (GPS) unit to locate a hidden cache (treasure). The event was held at the Lorne C. Henderson Conservation Area where 51 people from as far away as Huntsville took to the woods to discover hidden caches.

Members Bus Tour

Authority board members and municipal guests participated in a tour highlighting projects and programs of the Conservation Authority in the northwestern portion of our region. This provided an opportunity for municipal councillors to see first-hand how the Authority reaches out to the community to further healthy and safe watersheds.



Lorraine George and Pete Cloud from Kettle and Stony Point First Nation discuss the legend of the Kettle Stone as part of the members bus tour in June.

Art Walk

The Conservation Authority participated in Artwalk, a weekend-long festival celebrating the development of Sarnia's arts and culture district.



Conservation for Kids

St. Clair Conservation reaches out to students with a simple message – what can you do to protect our watersheds? Over 25 programs have been developed to introduce students to nature and to empower them to make a difference. These programs are designed to create an enthusiasm for our natural heritage which will carry over into the student's adult life. The Authority offers outdoor and in-class programs. Many of the education programs are supported by donations from businesses and organizations. In 2015, 12,700 students participated in conservation education classes.



Outdoor Programs: Outdoor Education brings classroom studies to life. 28 programs are available at one of four Conservation Areas located throughout the region. In 2015, 6,000 students participated in outdoor classes.



The River Rap: The Friends of the St. Clair River sponsor a program that helps teach students about impairments to the St. Clair River and the progress toward the goal of delisting the river as an Area of Concern. The highlight of the program is One Shot – The River RAP, a RAP video produced locally about the St. Clair River Remedial Action Plan. You can see the RAP video on You Tube by searching St. Clair Region Conservation. 250 students participated.



Species at Risk: Species at Risk is a common theme in many of the in-class and outdoor programs and is supported through the Sydenham River Habitat Stewardship Program for Species at Risk through Environment and Climate Change Canada and the Species at Risk Stewardship Fund through Ministry of Natural Resources and Forestry.



River Bottom Critters and Groundwater: River Bottom Critters is an in-class program, sponsored by the Sarnia-Lambton Environmental Association (SLEA), which gives students a first-hand opportunity to see how river bottom animals can be used to determine the quality of the aquatic health of a watercourse. 2,700 students poked and probed through the mud and discovered the wealth of life which thrives on the St. Clair River bottom. SLEA also sponsors Go With the Flow, which is a groundwater program that introduced 1,800 grades 4 – 8 students to the fundamentals of groundwater hydrology and the importance of protecting our groundwater resources.



Spring Water Awareness Program: This program was developed to warn students about the hazards of fast flowing rivers and melting ice and has reached the classroom thanks to sponsorship by Union Gas. In February and March, 1,300 students participated in the program.



Alternative Energy: This program examines the issues related to alternative energy sources. Sponsored by Enbridge, the program is taught both in the classroom and as an outdoor class. There was considerable interest in all grade levels so we have expanded the program to reach grades 2 – 12. In 2015, 1,700 students participated.

Conservation Lands

The St. Clair Region Conservation Authority and its Foundation own more than 2,100 hectares of land including beaches along Lake Huron, campgrounds, day use parks, wetlands and forests. A wide range of recreation activities are available on these lands including swimming, boating, hiking, bird watching, camping, fishing and hunting.

Camping

Our three campgrounds were busy in 2015. Campgrounds exceeded \$1 million in gross revenue. With 522 serviced campsites and 425 seasonal campers, these three campgrounds provided a significant contribution to the local economies while providing employment opportunities for over 22 contract and seasonal staff.



Take a Hike

Hiking is increasing in popularity. The Conservation Authority has been very active in making improvements to its network of over 40 km of trails throughout the region. The St. Clair Region Conservation Foundation and other donors have helped provide funds for the purchase of materials for boardwalks and bridges and for gravel to help improve accessibility to the trails. For more information on trails, visit our website at www.scrca.on.ca and select the hiking button.

Campgrounds – Always Something Happening

Our campgrounds are very fortunate to have a group of dedicated volunteers who assist staff in delivering many events and activities throughout the camping season. Some of these events included Canada Day Fireworks, Geocaching, Fish Fries, Pig Roasts, and live entertainment.



Conservation Area Development Summary

Lorne C. Henderson Conservation Area

Township of Enniskillen

145 serviced sites with 123 seasonal campers

- upgrades to WIFI system
- main pavilion roof replaced with steel
- campers installed a memorial deck
- basketball court constructed

Warwick Conservation Area

Township of Warwick

232 serviced sites with 193 seasonal campers

- new entrance road constructed
- butterfly meadow established
- security gates installed
- hydro upgraded for 11 sites
- steel siding installed on pool washroom

A. W. Campbell Conservation Area

Township of Brooke-Alvinston and Municipality of Southwest Middlesex

145 serviced sites with 109 seasonal campers

- new entrance gates installed
- upgraded hydro panel installed at pool washroom
- 2 new portable washrooms purchased
- upgrades to mini golf course

Strathroy Conservation Area

Municipality of Strathroy-Caradoc

- new entrance roadway constructed with enlarged culverts and erosion protection – funded by Strathroy-Caradoc
- new trail constructed and benches installed through a donation from Bonduelle Foods

Highland Glen/C.J. McEwen Conservation Areas

Town of Plympton-Wyoming

- indicator posts installed on boat ramp
- ash tree removal continues in areas frequented by the public

Wawanosh Wetlands Conservation Area

City of Sarnia

- security gates installed

Clark Wright Conservation Area

Municipality of Strathroy-Caradoc

- security gates installed
- boardwalks upgraded

Warwick Road Completed

With assistance from the Township of Warwick with land transfers with an adjacent landowner, the construction of a new road into the Lakeside Campground at the Warwick Conservation Area was completed. The existing road was being threatened by an eroding stream bank and had to be moved 5 metres to provide safe, long-term access.



Butterfly Meadow – Warwick Conservation Area

TD Friends of the Environment Foundation donated \$2,000 which will help enhance a Butterfly Meadow at the Warwick Conservation Area. The garden was originally created in honour of Mac and Barbara Ferguson and Ron and Mary Jane Van Horne through a private donation.





Conservation Areas	Camping			swimming pool	beach	picnic shelter	play ground	trails	natural area no facilities	phone (519)
	serviced lots	seasonal and overnight	group							
A. W. Campbell	✓	✓	✓	✓		✓	✓	✓		847-5357
Warwick	✓	✓	✓	✓		✓	✓	✓		849-6770
L. C. Henderson	✓	✓	✓	✓		✓	✓	✓		882-2280
Coldstream	✓		✓			✓	✓	✓		666-0190
Shetland	✓	✓	✓			✓	✓			692-5148
Wawanosh Wetlands						✓		✓		245-3710
Highland Glen					✓	✓				245-3710
C.J. McEwen					✓					245-3710
Clark Wright								✓		245-3710
Bridgeview						✓	✓	✓		882-2350
Strathroy								✓		245-3710
Esli G. Dodge						✓	✓	✓		786-2335
Crothers						✓	✓	✓		360-1998
Tony Stranak						✓	✓	✓		360-1998
McKeough Floodway								✓		892-3824
Management Areas										
Sinclair									✓	245-3710
Huff Woodlot									✓	245-3710
Perch Creek								✓		245-3710
Moore								✓		245-3710
Marthaville								✓		245-3710
Harrison Woodlot									✓	245-3710
Bates Lands									✓	245-3710
Gawne									✓	245-3710
Maples Woodlot									✓	245-3710
Reid Property									✓	245-3710
Cuddy Woods								✓	✓	245-3710
Stirling Wetlands									✓	245-3710
Keith McLean								✓	✓	245-3710



Management of Lambton County Lands

Based on the Conservation Authority's experience in managing natural areas, The County of Lambton has contracted out the management of a number of its properties to the Conservation Authority.

- Lambton County Heritage Forest
- Perch Creek Habitat Management Area
- Marthaville Habitat Management Area
- Bowen's Creek Habitat Management Area
- Moore Landfill Buffer Lands
- Szabo Forest
- Meadowview Villa Forest

In 2015, work focused on maintaining the trails. In addition, Phragmites control was undertaken at the Marthaville Habitat Management Area, new trees at Bowen's Creek were tended to reduce weed competition, and forestry staff marked a forestry compartment at the Lambton Heritage Forest for a selective cut.



Controlling Phragmites is an ongoing issue for the Conservation Authority. This stand at the Marthaville Habitat Management Area is being sprayed as part of an annual control program.



Wetlands created at Bowen's Creek Habitat Management Area are developing into excellent habitat and complements the tree planting and tallgrass prairie established on the site.

McKeough Upstream Lands

Property Management Plans for 14 agricultural rental parcels in the McKeough Upstream Lands have been completed with recommendations and management actions for these properties. Property Management Plans are designed to highlight the property description, historical use, farming practices, forest management, soil and water management, species at risk management, and other key features of the property while addressing environmental risks through best management practices such as riparian planting along watercourses and installing erosion control structures.

Work is continuing to enhance agricultural lands owned by the Conservation Authority. Over the last two years, 17 acres of buffers have been planted and 3 wetlands totalling 9 acres were created on marginal lands. Two erosion control projects were completed to reduce the amount of sediment entering the north branch of the Sydenham River. Two additional wetlands are planned for 2016.



A catch basin was installed to reduce erosion on one of the McKeough upstream properties as part of our program to properly manage our agricultural holdings.

New Wetland Constructed on McKeough Upstream Property

A new wetland has been constructed on an Authority property located west of Wilkesport. A large gully was forming within the agricultural field and was continuing to erode. The gully was repaired by constructing a series of wetlands. This is one of several projects undertaken in the last three years to improve the sustainability of farmland owned by the Conservation Authority.



With a little time, this newly constructed wetland will soon be supporting a wide variety of aquatic life, improving habitat and water quality entering local watercourses.

Conservation Foundation

Foundation Board of Directors

Duncan Skinner, President
Lyn Goddard, Vice President
Norm Giffen, Treasurer
Steve Arnold
Bill Bilton
Ken Brooks

Ralph Coe
Ottavio Colosimo
Rex Crawford
Caroline DeSchutter
Archie Kerr
John Simmons

Local Business Supports Conservation Education

The Foundation continued its efforts in 2015 to seek corporate support for Conservation Education. We wish to sincerely thank the following organizations for their support of conservation education this year.

Sarnia-Lambton Environmental Association

The Sarnia-Lambton Environmental Association (SLEA) donated \$30,000 to support two in-class education programs dealing with the use of benthic invertebrates to measure river quality and the importance of our groundwater resources. Over the last 19 years, SLEA has donated \$514,000 to conservation education.

Enbridge

Enbridge participated in its third and final year of a three-year commitment of \$10,000 per year to support an Alternative Energy Program. This program is taught both in the classroom and at the Lorne C. Henderson Conservation Area. The Authority is in the process of finding another sponsor to continue this very popular program.

Union Gas

Union Gas has supported the Spring Water Awareness Program for the last five years with a \$5,000 annual donation. The program is offered to Kindergarten to Grade 6.



Memorial Forests

The St. Clair Region Conservation Foundation launched the memorial forest program in 1987 with the purpose of raising funds to reforest lands within our region. To date, 13,400 trees have been dedicated covering 45 different sites. Through the program, the Foundation arranges for the dedication of trees which have been planted from donations received directly from members of the community. In addition to these trees, the Foundation receives donations from the McKenzie and Blundy Funeral Home, Sarnia; Nicholls Funeral Home, Wallaceburg; and the Denning Funeral Home, Strathroy and have established separate memorial forests to recognize this contribution to the environment.

Through the Foundation, trees can be dedicated at any of the Authority's Conservation Areas. In 2015, 561 trees were dedicated and more than 1,000 people attended dedication ceremonies held at the various memorial forests.



Steve Arnold, Chair of the SCRCA, addresses those attending the McKenzie and Blundy Memorial Forest Dedication at the Wawanosh Wetlands Conservation Area.

Conservation Scholarships Awarded

The Conservation Scholarship program rewards graduating high school students continuing their post-secondary studies in a conservation-related field based on their academic achievement and their demonstrated interest and involvement with the environment. In total, \$3,000 was awarded across the St. Clair region this year.

A.W. Campbell Memorial Scholarship: two \$1,000 awards
Dylan Henry, St. Clair Secondary School
Kyle Cornelissen, North Lambton Secondary School

Mary Jo Arnold/Tony Stranak Conservation Scholarships:
\$1,000 award – Katia Huszka, Ursuline College

The scholarships are made possible through trust funds established by the St. Clair Region Conservation Foundation and its donors.

Foundation Supports 2015 Projects

- \$10,000 – accessible picnic tables
- \$7,500 – summer conservation intern position
- \$5,000 – trails at Conservation Areas
- \$5,000 – 3D mapping project
- \$5,000 – water quality monitoring



Upgrading trails has been an ongoing project supported by the Conservation Foundation.



A summer Conservation Intern position was supported by the Conservation Foundation to provide experience to a post-secondary student.



Accessible picnic tables have been installed in several Conservation Areas thanks to support from the Conservation Foundation and other donors.

Bingo Supports Conservation

Thanks to the many Foundation volunteers who assisted with our bingo program in Sarnia, the Foundation was able to support several conservation programs in 2015. A total of \$8,500 was provided to support conservation education, trails, visitor services, a promotional video and tree planting throughout Lambton County.

Foundation Land Donations

The Foundation accepts land donations that further the objectives of the St. Clair Region Conservation Authority by preserving important natural areas. To date, the Foundation has received 16 land donations totalling 455 hectares. The Conservation Authority manages these lands on behalf of the Foundation.

- **Bates Conservation Lands**, Municipality of Chatham-Kent, 29 ha, qualified as an Ecological Gift through Environment and Climate Change Canada
- **Clark Wright Conservation Area**, Municipality of Strathroy-Caradoc, 20 ha
- **Cochrane Property**, Enniskillen Township, 1 ha
- **Cuddy Woods**, Municipality of Adelaide-Metcalf, 7 ha
- **Evoy Woodlot**, Township of Enniskillen, 36 ha (irrevocable trust agreement)
- **Fraser Property**, Municipality of Lambton Shores, 1 ha
- **Gawne Property**, Township of Dawn-Euphemia, 40 ha
- **Harrison Woodlot**, The Township of Middlesex Centre, 8 ha
- **Huff Property**, Municipality of Chatham-Kent, 12 ha qualified as an Ecological Gift through Environment and Climate Change Canada
- **Keith McLean Conservation Lands**, Municipality of Chatham-Kent, 130 ha
- **Maples Woodlot**, Town of Plympton-Wyoming, 3 ha
- **Murray Property**, Municipality of Lambton Shores, 1 ha
- **Reid Conservation Area**, Township of St. Clair, 69 ha, qualified as an Ecological Gift through Environment and Climate Change Canada
- **Sinclair Property**, Township of Dawn-Euphemia, 80 ha
- **Stirling Wetlands**, Municipality of Chatham-Kent, 12 ha
- **Western Land Company Property**, Municipality of Strathroy-Caradoc, 6 ha

Ecological Gifts

Three of the properties have qualified as an Ecological Gift through Environment and Climate Change Canada. Canada's Ecological Gifts Program provides a way for Canadians with ecologically sensitive land to protect nature and leave a legacy for future generations. Made possible by the terms of the Income Tax Act of Canada, it offers significant tax benefits to landowners who donate land or a partial interest in land to a qualified recipient. Recipients, such as the Conservation Foundation, ensure that the land's biodiversity and environmental heritage are conserved in perpetuity.

Finance and Administration

The Conservation Authority had a successful year in program development and financial management. On an ongoing basis, Authority staff work to find funds to undertake the proposed projects and to take advantage of funding opportunities that arise over the year. Efforts to find alternative sources of funds have helped the SCRCA maintain the second lowest municipal levy level amongst the 36 Conservation Authorities at only 13.5 % of total budget.

Office Renovation

The SCRCA administration office is now more accessible following a renovation to the upper floor. The renovation includes accessible parking spaces, outdoor ramps, new entrance and accessible washrooms. The renovation was supported through a \$50,000 Enabling Accessibility Fund through Employment and Social Development Canada.



Staff Retirement

Muriel Andreae, Manager of Biology, retired in April after 34 years of service. Muriel's remarkable dedication to our organization is greatly appreciated and she will be missed. We were honoured that Muriel was awarded the Latornell Leadership Award in November. The award is presented to individuals who have demonstrated life-long, outstanding contributions to the field of conservation. We wish her the very best as she embarks on a new chapter of her life.



Steve Arnold, Chair of the SCRCA congratulates Muriel on her Leadership Award presented at the Latornell Conservation Symposium.

Administration Office

Muriel Andreae, Manager of Biology (January – April)
Lisa Atkinson, GIS/Photogrammetry Technician
Kevan Baker, Director of Lands
Rick Battson, Director of Communications
Erin Carroll, Aquatic Biologist – Manager of Biology (May – December)
Stephen Clark, Water Resources Specialist
Dallas Cundick, Environmental Planner/Regulations Officer
Melissa Deisley, Regulations Officer
Marlene Dorrestyn, Administrative Assistant
Chris Durand, IT/GIS Coordinator
Patricia Hayman, Director of Planning
Sarah Hodgkiss, Planning Ecologist
Sarah Kellestine, Payroll and Accounting Clerk
Heather Long, Receptionist/Administration Clerk
Brian McDougall, General Manager
Tim Payne, Forest Management Specialist
Tracy Prince, Director of Finance
Girish Sankar, Manager of Water Resources
Alison Seidler, GIS Specialist
Jeff Sharp, Conservation Services Technician
Steve Shaw, Manager of Conservation Services
Kelli Smith, Biological Technician
Donna Strang, St. Clair River RAP Coordinator
Jessica Van Zwol, Healthy Watershed Specialist
Greg Wilcox, Biological Technical Assistant

Drinking Water Source Protection

John Campbell, Source Water Protection Database Specialist
Deb Kirk, Administrative Assistant
Linda Nicks, Hydrogeologist

Field Offices

McKeough Floodway

Shane White, Superintendent

A.W. Campbell Conservation Area

Mike Tizzard, Superintendent

Don Skinner, Assistant Superintendent

Lorne C. Henderson Conservation Area

Terry Barrie, Superintendent

Mark Bakelaar, Assistant Superintendent

Sharon Nethercott, Conservation Education Coordinator

Melissa Gill, Conservation Education/Community Partnership Technician

Warwick Conservation Area

Bill Turner, Superintendent

Glenn Baxter, Assistant Superintendent

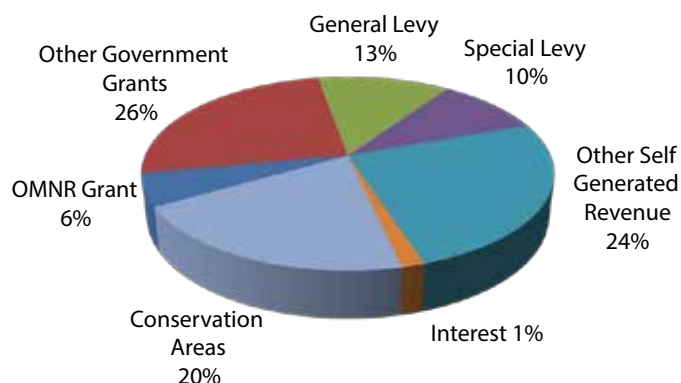
McLean Conservation Lands

Matt Carron, Superintendent

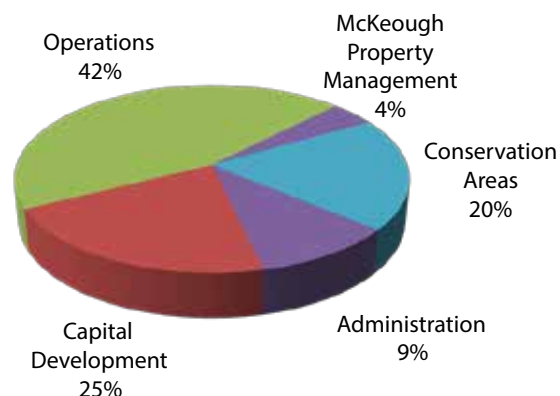
Kelly Johnson, Superintendent

2015 Revenue and Expenditures

Revenue – \$5,606,671



Expenditures – \$5,659,830



Supporting Conservation

Each year the Conservation Authority actively seeks additional grants to bring funds into the region to support conservation. We thank the many organizations that provided additional grants totalling about \$2 million to support conservation programs.

Ministry of Natural Resources and Forestry – \$472,000

Reptiles at Risk (3 years) \$76,000
 Species at Risk Stewardship Fund (3 years) – \$162,000
 Evaluation of Riparian Wetlands – \$30,000
 Fish and Wildlife BUI for St. Clair River AOC – \$30,000
 Coastal Wetland Restoration – \$20,000
 Riparian Buffer Restoration – \$7,000
 Lambton Shores Restoration – \$15,000
 Water and Erosion Control Infrastructure – \$132,000

Ministry of the Environment and Climate Change – \$395,000

Healthy Lake Huron – stewardship and monitoring – \$50,000
 St. Clair River AOC – \$60,000
 Drinking Water Source Protection – \$100,000
 Phragmites Control Great Lake Guardian Fund – \$25,000
 Shoreline Protection – \$70,000
 Aamjiwnaang First Nation Shoreline Project – \$70,000
 Ontario Community Environment Fund – \$20,000

Ministry of Agriculture, Food and Rural Affairs – \$141,000

Healthy Lake Huron – outreach and monitoring

Ontario Trillium Foundation – \$58,000

Healthy Lake Huron Aquatic Inventory and Education and Outreach Program (2 years)

Environment and Climate Change Canada – \$691,500

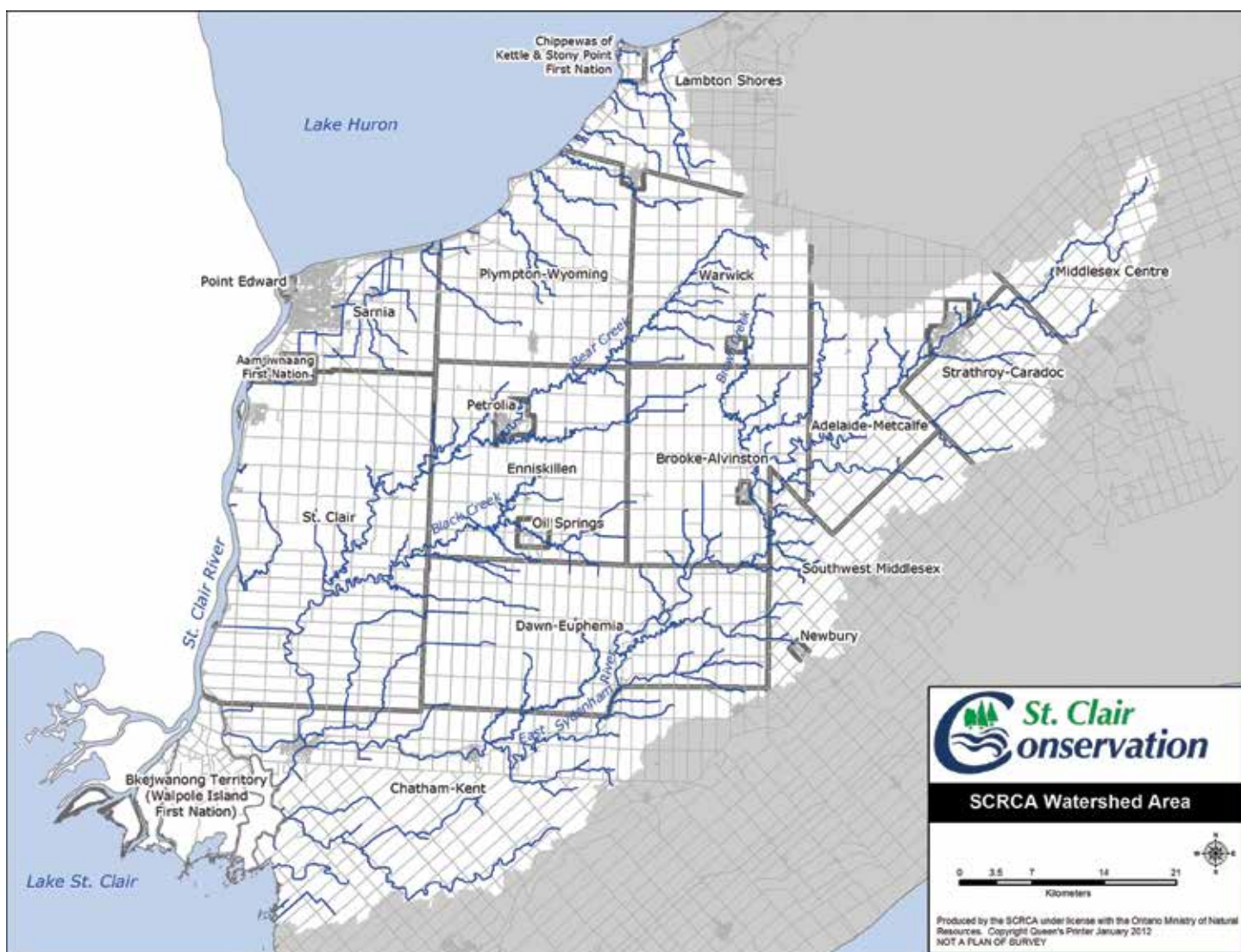
Sydenham River HSP (3 years) – \$244,000
 AOC Fish and Wildlife Plan (GLSF) – \$13,000
 Wetland Creation and Tree Planting (GLSF 3 years) – \$117,000
 Sediment and Erosion Mitigation (GLSF) – \$85,000
 Shoreline Protection (GLSF) – \$93,000
 Healthy Lake Huron – \$10,000
 Healthy Watershed Program – \$53,000
 St. Clair River AOC – \$46,000
 Phragmites Control – \$30,000
 Aboriginal Fund for Species at Risk – \$500

Other Partners – \$281,500

Friends of the St. Clair River – \$9,000
 TD Friends of the Environment Foundation – \$8,000
 J. P. Bickell Foundation – \$3,000
 Department of Fisheries and Oceans – \$10,000
 Forests Ontario – \$40,000
 SLEA – \$30,000
 Union Gas – \$5,000
 Enbridge – \$10,000
 Ontario Soil and Crop Improvement Association (3 years) – \$64,000
 Bonduelle Foods – \$1,500
 Wildlife Habitat Canada – \$22,000
 Enabling Accessibility Fund – \$50,000
 OPG – \$29,000

Employment Programs – \$11,000

Summer Job Service – \$5,000
 Summer Experience – \$6,000



Facts and Figures

Watershed Area – 4,100 km²

Population – 167,000

Drainage area of the Sydenham River – 2,724 km²

East Branch of the Sydenham River

total length – 165 kilometres

total fall – 106 metres

North Branch of the Sydenham River

total length – 137 kilometres

total fall – 77 metres

Land owned by Conservation Authority – 1,698 ha

Land owned by Conservation Foundation – 455 ha

Land managed by Conservation Authority (not owned) – 543 ha

Flood Easements – 648 ha

science

sustainability

educate

engagement

vigilance

recovery

partner

healthy

vision

explore

action

protection



**St. Clair Region
Conservation Authority**

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