

St. Clair Region
Conservation Authority

2012 Annual Report



“working together for a better environment”



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.

Conservation Authorities are the only agencies which have a jurisdiction based on the watershed. The Authority, therefore, will provide leadership by coordinating cooperative watershed planning and program implementation. The Authority will manage, where it has jurisdiction, watershed resources through conservation, preservation, restoration and enhancement to ensure these resources are maintained while meeting the needs of the public. The Authority will provide ongoing communication and education regarding watershed resources with the purpose of gaining support for our vision.

This vision cannot be achieved in isolation. In order to minimize duplication and maximize effectiveness, partnerships will be forged, cooperation with other organizations will be fostered and through this renewed sense of commitment, we will meet the challenges which face us.

"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."



2012 Board of Directors

- Betty Ann MacKinnon, Township of Adelaide-Metcalf
- Frank Nemcek, Township of Brooke-Alvinston
- Joe Faas, Municipality of Chatham-Kent
- Jeff Wesley/Tom McGregor, Municipality of Chatham-Kent
- Bill Bilton, Township of Dawn-Euphemia
- Kevin Marriott, Township of Enniskillen/Village of Oil Springs
- Elizabeth Davis-Dagg, Municipality of Lambton Shores
- Dan McMillan, Municipality of Middlesex Centre
- Helen Havlik, Town of Petrolia
- Lonny Napper/Netty McEwen, Town of Plympton-Wyoming
- Larry MacKenzie, Village of Point Edward
- Andy Bruziewicz, City of Sarnia
- Terry Burrell, City of Sarnia
- Jon McEachran, 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
- Rod Glen, 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 2012 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

- Andy Bruziewicz, Chair
- Norm Giffen, Vice Chair
- Bill Bilton
- Tony Bruinink
- Terry Burrell
- Joe Faas
- Larry MacKenzie
- Betty Ann MacKinnon
- Steve Miller





Chair's Remarks

"He who plants a tree plants a hope." This quote by the 19th century writer Lucy Larcom, symbolizes the work of the St. Clair Region Conservation Authority. We celebrated our 50th anniversary in 2011. In 2012, we launched our next 50 years of planting hope by aggressively moving forward to bring a wide array of conservation programs to our region. As you read through our annual report, I believe you will be impressed by the scope of our programs and through the many partnerships we have forged to make our watersheds safer and healthier.

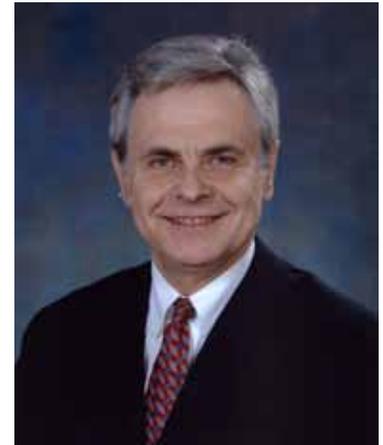
Working together in partnership with others is not just a tagline; it is the foundation of our program. It sets out the framework for how we tackle the many conservation issues facing our region. During our annual project tour last June, we celebrated the completion of a project at the Wawanosh Wetlands Conservation Area in Sarnia. The beautiful wetlands and forest, trails and facilities at Wawanosh would not have been possible without the work of many partners including government, industry, volunteer organizations and individuals. Wawanosh really is a testament to the philosophy of the Conservation Authority.

In 2012, we accomplished a great deal. We took a step closer to delisting the St. Clair River as an Area of Concern by re-designating another Beneficial Use Impairment to "Not Impaired." The Healthy Lake Huron Program began to see projects on the ground and new partners were brought on board to support conservation education, habitat creation and species research.

We were pleased to work on projects with two of our First Nation Communities. A project led by the Aamjiwnaang First Nation's Environment Committee will revitalize a portion of Talfourd Creek and provide education opportunities for their young people. A research and education project on species at risk with the Kettle and Stony Point First Nation combined the value of science and traditional knowledge for the students in the community.

As we continue to evolve our programs to meet future challenges, we do so with a strong commitment to fiscal responsibility and to the partnerships we have developed. We will continue to be innovative and focussed on the needs of our watershed and our member municipalities. I would like to thank the Board of Directors for their support and hard work over this last year. Thanks also to our dedicated staff who continue to work on our behalf to create healthy and safe watersheds.

Andy Bruziewicz
Chair





Protecting Life and Property

Goals:

- To minimize the potential for loss of life, social disruption and property damage from flooding and/or erosion.
- To minimize disruption to natural riverine and shoreline processes caused by development.
- To prevent and minimize disturbance to natural habitats from development.

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 system.

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, O.R. 171/06 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. In most cases, the Authority is able to work with the applicant to ensure that proposed developments are completed in a safe manner.

In addition, the Authority provides natural heritage and hazard comments on municipal planning matters related to development in or near areas susceptible to flooding, slopes and natural areas. While the Authority has been delegated the responsibility to represent the

provincial interest regarding natural hazards, we also provide technical advice on natural heritage and assist municipalities by reviewing environmental reports, such as coastal engineering, wetland/woodland environmental assessments, floodline, stormwater management and stable slope reports which may be required for new development. This review and input assists the municipality in meeting its 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 wishing to work in high risk areas have a prior understanding of the risks involved.



Sleigers Store Ipperwash, 1973, LFP - Purpose of CA Regulation 171/06 "Development, Interference with Wetlands & Alterations to Shorelines & Watercourses" is to prevent this from happening again.



Planning and Regulations Activity

	2011	2012
General Inquiries	34	21
Reviewing and advising on Official Plans, Official Plan Amendments, Zoning By-laws, Zoning By-law Amendments and Subdivisions	47	37
Reviewing and advising on Severances and Variances	48	47
Applications under Ontario Regulation 171/06	81	95
Inquiries under Ontario Regulation 171/06	304	238
Legal Inquiries	45	101
Review of Environmental Studies and Development Assessments	22	13
Total	581	552

GIS Mapping Put to Work to Identify Potential Stewardship Projects

Much work has been done using GIS over the past year including detailed mapping projects within the St. Clair River Area of Concern. Using the latest 2010 high resolution aerial photography, an inventory of all riparian vegetation types was digitized. The summary statistics and mapping led to further analysis using GIS to develop a strategic plan that will be used to target areas for potential stewardship projects. A master catalogue of all stewardship projects is regularly maintained using GIS which also helps target projects to ensure the most effective use of grants to landowners.

Lake Huron Shoreline Management Plan

The Authority continues to work with shoreline municipalities on incorporating technical shoreline information into development proposals along Lake Huron. The Lake Huron shoreline is a well-developed, highly desirable locale in the St. Clair Region. The Authority is seeing a significant conversion of seasonal cottage use to full-time residential use. The objective in reviewing development proposals is to place new development outside the flooding, erosion and dynamic beach hazards of Lake Huron.

The updated 2011 W.F. Baird and Associates Shoreline Management Plan identified the default dynamic beach area as outlined in the Provincial Technical guide. Two sections of dynamic beach areas in Sarnia and Lambton Shores have revealed that a site-specific analysis of coastal processes is necessary to formulate appropriate management policies for these areas where existing development and lot creation has been established. Significant background work and liaison with municipal planners and landowners, particularly in the West Upperwash beach area, led to the decision to move forward in this approach in seeking resolution to issues that have arisen. In addition to a site-specific analysis, best management beach practices will be reviewed for the defined areas. The goal is to permit beach use which will not undermine or prevent wind and wave processes that have created the beach asset in the first place. Incompatible development in sensitive beach zones can negatively impact these areas in the long term. A loss in environmental quality and property value can result with the degradation of the beach form and function.

The draft Shoreline Management Plan will incorporate the results of the beach review and be updated accordingly upon review by stakeholders.



A dynamic beach is an area in which natural erosion and accretion of the beach/dune system responds to variable lake levels. Maintaining the beach system is important to preventing flooding and erosion.



Water and Erosion Control Infrastructure (WECI) Grants

Due to budget reductions by the Ministry of Natural Resources for WECI funding, several submitted projects were not funded for 2012 - 2013. The SCRCA did receive, however, \$11,000 for ARDA Dykes Hazard Tree Removal.

The following projects, funded in previous years, were completed in 2012:

- Cathcart Park Shore Protection Phase 1
- ARDA / Running Creek Dykes Erosion Repairs and Vegetation Removal
- Sarnia Erosion Control – East of Pine Avenue

Flood, Low Water and Shoreline Warnings

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 Authority operates a flood warning program designed to warn residents in flood-prone areas. In addition, municipal representatives meet with Authority staff to review and update the 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. 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 addition to riverine flooding, the Authority issues warnings for damage which may occur from wave action along southern Lake Huron, St. Clair River and northeastern Lake St. Clair shorelines.

In 2012, only one Watershed Conditions Statement for Flood Outlook was issued. A warm winter with little snow limited the threat for flooding during the normal spring melt. Extremely low water levels in area watercourses and drought conditions on the land limited flood dangers caused by heavy rain storms.

Cathcart Park, St. Clair Township

Work continues on the shoreline protection at Cathcart Park in St. Clair Township. The work is geared to replace a failing steel sheet pile wall with a revetment comprised of stepped armour stone and sloped rip rap. The first phase of construction was completed in February 2012 and will provide protection to about 150 metres of shoreline. The Second phase of the project will begin in January 2013. This will provide protection to 70 metres of the St. Clair River shoreline. This project is being coordinated by the St. Clair Region Conservation Authority and is funded through the Ontario Ministry of Natural Resources, Great Lakes Sustainability Fund, Ontario Ministry of Environment - Canada-Ontario Agreement, and the Township of St. Clair.



The story of the year was the low water levels. The entire watershed spent much of the year under a Level 1 low water advisory while portions of the east branch watershed reached a Level 2 low water advisory. The Level 2 Low Water Condition is part of a three-tiered advisory system used in Ontario to inform the public of local low water conditions with Level 1 being the least severe and Level 3 being the most severe.



Conserving Soil and Water

Goals:

- To enhance the water resources of the region by encouraging those land uses that are compatible with the natural function and capability of the water and related watershed resources.
- To encourage the adoption of land management practices that will allow for the sustained use of water and related resources.

Tree Planting Along Highway 402

Work continues by SCRC staff to create windbreaks on Highway 402. In December 2010, a major snow storm stranded more than 300 people along the Highway. This event has helped move forward plans to create tree windbreaks along this corridor. This year, the Conservation Authority undertook maintenance on trees planted earlier including in-fill planting along Highway 402 from Strathroy to Sarnia.

In 2012, letters were sent to landowners with property bordering the north side of the highway. We received an excellent response and were able to plant large stock trees in windbreaks along 1.5 km of the highway on private lands. A list of landowners has already been started to continue plantings next year.

Private Land Tree Planting Program

This year, 73,000 trees, shrubs and poplar cuttings were planted on private and public lands. About 9,500 were planted by landowners. Authority crews planted another 63,500 trees on 17 properties. This year, we are continuing the trend toward larger projects. For example, 41,000 trees were planted on 20 hectares on Enbridge, First Solar and Lambton County properties alone. The Authority has planted more than 3.5 million trees since 1980.

Trees provide a host of benefits including protecting soil from erosion, protecting water quality, flood control, increased crop yields adjacent to windbreaks, oxygen production, and wildlife habitat as well as a more beautiful landscape.

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 2012, 150,000 trees were treated with herbicide to prevent competition from weeds.

Trees Ontario - 50 Million Tree Program

Trees Ontario has a long-term agreement to plant 50 million trees province-wide by 2025. In 2012, the SCRC received \$77,150 from Trees Ontario to help plant 57,000 trees on 29 hectares involving eight projects.

Authority Collecting Tree Seeds

Foresters understand that it is important to select the proper species for the site conditions where the tree is to be planted. Not only that, but a tree should be planted from a seed that evolved in the same geographical location.

The Conservation Authority is collecting local seeds throughout the watershed. The seeds are supplied to Somerville Nursery who will grow local tree stock for planting. Seeds collected in 2012 will be used in our tree planting program in 2014 - 2016. Seeds collected this fall include red oak, burr oak, swamp white oak, black walnut, and shagbark hickory. Seeds are also supplied to Lambton College as part of our partnership with them for use in their greenhouse.





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. In 2012:

- One timber mark was completed for harvest (10 hectares)
- Management plans were updated for Authority and Foundation properties



Damage from Emerald Ash Borer has resulted in significant issues for municipalities, homeowners and woodlot managers.

Ontario Trillium Foundation Supports Healthy Sydenham Headwaters Initiative

The SCRCA partnered with Middlesex Stewardship Council to implement a new three-year Healthy Sydenham Headwaters Initiative to improve and protect rural water quality through a community-based habitat rehabilitation approach. The Ontario Trillium Foundation has provided funding for staff implementation for the duration of the three-year program. The area of focus includes the Upper East Sydenham River Watershed and the Strathroy-Caradoc Plain. By strategically restoring wildlife and aquatic habitat in these two natural features of our watershed, we will be able to increase the potential of impacting ecosystem health and improving biodiversity. High priority recovery actions include the restoration of headwater wetlands and riparian vegetation. As of December 2012, 12.5 hectares have already undergone habitat rehabilitation in this focus area with funds from the Habitat Stewardship Program for Species at Risk.

SCRCA Provides Woodlands Conservation By-Law Services for the County of Lambton

Based on a request from the County of Lambton, SCRCA staff administers the County’s Woodlands Conservation By-Law in cooperation with the County. The County and the Authority continue to expand upon their existing relationship with the goal of conserving and improving existing forests as well as increasing forest cover in Lambton County.

Healthy Watersheds Grants Awarded to Conservation Authority Helps Landowners

Water is a precious resource. The Conservation Authority’s Healthy Watersheds Program is an initiative that provides technical and financial assistance to improve and protect rural water quality. The SCRCA actively seeks grants that will bring dollars into the region to support the conservation efforts of landowners. Grants from the federal Habitat Stewardship Program for Species at Risk, Ontario Ministry of Natural Resources Program for Species at Risk, and the Lake Huron Southeast Shore Initiative were used to support 19 projects in the region totalling \$83,000 in grants. Projects included: riparian buffers; windbreaks; wetland creation and enhancement; streambank stabilization; and manure storage.

Over the last 12 years, the Conservation Authority distributed more than \$2 million in grants to landowners which resulted in over 700 projects worth \$6.8 million.





Reptiles at Risk

Turtle Surveys

The 2012 turtle survey conducted on the Sydenham River was completed with the help of volunteers. The survey took place along a stretch of the Sydenham River from Rokeby Line in Brooke-Alvinston to Dresden Conservation Area. This area was canoed and kayaked in search of turtle sightings as many turtles are Species at Risk.

Turtle Habitat Creation

In 2012, SCRCA staff, in partnership with Friends of the St. Clair River and Lambton Wildlife, constructed artificial turtle nesting sites on private property adjacent to a tributary of the St. Clair River. Four nesting sites were constructed along the berm and were filled with a sand gravel mix suitable for turtles to dig in and lay their eggs. As well, turtle nesting enclosures will be built to protect the nests from predators. Funding for this project came from the Ministry of Natural Resources Species at Risk Fund and the Shell Fuelling Change Award to the Friends of the St. Clair River. Ducks Unlimited also helped in the construction of the nesting sites.

Snake Monitoring

Staff monitored snakes from July until early October, using coverboards and road surveys. Snakes can regulate their body temperature by warming themselves in the daytime in places like a sun-warmed coverboard, or by holding their heat at night time by sheltering under items like a coverboard. Road surveys included records of road mortalities and identification of areas where snakes were hit by vehicles. Six species were found (50 snakes in total) including eastern foxsnake, eastern garter snake, DeKay's brown snake, milk snake, northern water snake, and Butler's garter snake. Two of these species – the eastern foxsnake and the Butler's garter snake – are listed as Endangered under the Species at Risk Act.

Helping Aquatic Species at Risk

The Sydenham River continues to be a hot spot in Canada for species that use aquatic habitats and are threatened with extinction. This includes many species of freshwater mussels and fish. The Conservation Authority received federal and provincial funds to undertake research, site-specific habitat improvements, and development and distribution of an annual newsletter. An education program where students learn about the biology and ecology of species at risk was implemented.

Fish Monitoring on the St. Clair River

In 2012, staff from the SCRCA conducted fish surveys at two locations on the St. Clair River. The surveys took place at Guthrie Park and Cathcart Park to monitor the habitat enhancements made through the shoreline softening projects. Fish were collected using a seine net and then identified. The most common species observed were emerald shiner, bluntnose minnow, brook silverside, and the round goby, a non-native invasive species. All of these fish species prefer a sand and gravel substrate.



Invasive Plant Project - Introduction of Invasive Plants Through Gardens

The SCRCA worked with both gardeners and plant retailers to promote invasive plant awareness and encourage the use of native plant species in our watersheds. The outcomes of the project have initiated a major focus towards increasing education and awareness on what invasive plants are, how to identify them, the importance of native plants, and where to purchase them. With the gardening community seeking more information and plant retailers suggesting that the lack of awareness is preventing gardeners from planting more natives, SCRCA staff assembled extensive information packages. The information packages were sent out to the participating horticulture clubs and plant retailers and posted on the SCRCA website. The information package provides the tools to make well-informed decisions on garden plants. This project was supported through the Invasive Alien Species Partnership Program, Environment Canada.



Water Quality Monitoring

Surface Water

The inland surface water sampling program involved sampling monthly from April to November at 27 locations in our region. This program is part of the Provincial Water Quality Monitoring Network and the Canada-Ontario Agreement on Great Lakes Water Quality Monitoring. Analysis of the samples is financed by the Ontario Ministry of the Environment, Middlesex-London Health Unit, and the Great Lakes Sustainability Fund.

Surface water monitoring helps the Authority and the MOE track water quality issues that exist or may arise in the SCRCA watershed.

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 or benthos of the watercourse. Benthic samples were collected at a representative site in each of the 14 Watershed Report Card areas and the results will provide an indication of the water quality for the next Report Card due in 2013.

Groundwater

In an effort to better understand Ontario's groundwater resources, the Ontario Ministry of the Environment 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. Water levels are monitored at the nine groundwater wells, and the water quality of eight wells was sampled in the fall of 2012.



SCRCA Helps Municipalities With Drains

Municipalities have a legal responsibility to work in accordance with Fisheries and Oceans Canada requirements when municipal projects could impact fish habitat. Potential impacts often arise when municipal drain maintenance is proposed. A long-term agreement between Fisheries and Oceans Canada and St. Clair Region Conservation Authority allows Authority staff to directly provide fish habitat advice for municipal drainage projects. This process helps protect fish habitat while streamlining the review and approval process for municipalities.

In 2012, St. Clair Conservation staff screened over 276 proposals which could affect fish habitat in our region. Where there was potentially serious impact on fish habitat, proposals were referred to Fisheries and Oceans Canada for review. The majority of the projects required only letters of advice to the proponent, recommending measures to avoid negative impacts on fish habitat.

Rural Stormwater Management Model

The SCRCA is a part of an innovative water quality project with four other Conservation Authorities along the Lake Huron shoreline. The project will improve our knowledge of how agricultural and rural drainage function in a rural landscape. The purpose of the model is to help determine how to manage stormwater during major precipitation events. The model will aid in effectively managing runoff through strategically placed stewardship projects.

A permanent water flow station and weather station were installed in summer 2012. The sampling device can be triggered automatically to collect samples during a rain event. SCRCA staff will be able to use this information to determine the impacts of individual storm events on Shashawandah Creek and estimate how much nitrogen and phosphorus enter the system through runoff in a storm.





Health Lake Huron

Last summer, the St. Clair Region Conservation Authority completed a comprehensive *Walk the Watershed* Program along Duffus Creek. To conserve the physical and biological characteristics of this creek, staff walked from the headwaters located in agricultural land to the sandy shores of Lake Huron. It was a fascinating experience observing the transition in geography over such a short distance.

The program identified bank erosion as a problem along the whole watercourse and staff, in consultation with landowners, are discussing ways to mediate the effects of erosion. Input from landowners is crucial. SCRCA is currently moving forward with some landowners to implement projects that will retain or slow the flow of the waters upstream so that the downstream stretches of Duffus



Ipperwash Beach, 2012.

Creek receive the water at slower velocities. Project costs will be offset through the Lambton Shores Clean Water Cost-Share Program which offers grants to landowners for eligible projects to improve water quality in the Lambton Shores Watershed. Landowner participation is vital in community efforts to build a healthy watershed. Landowners have already used the grant program to offset the costs of upgrading one manure storage and several tree planting projects.

SCRCA also co-hosted a Great Canadian Shoreline Cleanup event in September with the Municipality of Lambton Shores to increase awareness of the importance of shoreline habitat and water quality at Centre Ipperwash Beach.

In November, SCRCA staff hosted a workshop with a representative from Ontario Ministry of Agriculture, Food, and Rural Affairs speaking to local farmers about the advantages of cover crops in retaining soil and nutrients on the land.

Currently, SCRCA staff are facilitating discussions on techniques to improve water quality through a landowner-directed steering committee and are raising awareness of the cost-share program and water quality concerns at a number of community events and workshops.

The Healthy Lake Huron Program is funded by Environment Canada and the Ontario Ministry of Environment.

Climate Change

Climate change is occurring in the SCRCA watershed, as it is in the rest of the world. This can be seen in several key features of climate, including warming temperatures, changes in precipitation patterns, and shifts in the growing season.

SCRCA staff put together a report that is intended to provide an initial review of the impact of climate change on the watershed. While further research needs to be undertaken, it is clear that over the last decade we have had warmer temperatures and more severe rain storms. Recent events, such as the drought in 2012, point toward the need to take action. Over the next year, the Authority will be evaluating its programs to determine which ones best increase the ability of the watershed to adapt to climate change and how these programs can be adapted to create more resilient watersheds.



Volunteers joined in the Great Canadian Shoreline Cleanup at Ipperwash Beach.



St. Clair River Area of Concern

The St. Clair River Area of Concern stretches from the Blue Water Bridge to the north shore of Mitchell's Bay on Lake St. Clair and includes the immediate drainage basin of the St. Clair River. This area is one of 43 AOCs the International Joint Commission (IJC) 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 (RAP) 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.

Contaminated Sediment Management

Contaminated sediments at three priority areas in the St. Clair River contain elevated levels of mercury and methyl mercury. Mercury was used in historical industrial processes. While these contaminated areas do not pose an immediate health risk to humans, the contaminants biomagnify in fish (such as pike) that humans eat. Biomagnification is the process through which chemicals build up in animals as predators eat smaller contaminated creatures.

The three priority areas are located along an approximately nine-kilometre stretch of the Canadian side of the St. Clair River, roughly 10 kilometres downstream from the mouth of the St. Clair River and adjacent to the Sarnia petrochemical complex and the Aamjiwnaang First Nation community.

A draft study presenting options to clean up the remaining contaminated sediments on the Canadian side of the St. Clair River was completed in 2012. The options reviewed for managing remaining contaminated sediments within the St. Clair River were:

- Monitored Natural Recovery
- Thin Area Capping
- Isolation Capping
- Sediment Removal (Dredging)

Beginning in late 2012, a consultation process was initiated that will continue into 2013. Through the consultation with the stakeholders, First Nations, and the public, we hope to receive input on the preferred options for dealing with the contaminated sediment at each priority area. Decisions on project next steps are expected in 2013.

Road to Recovery

American and Canadian representatives for the St. Clair River Area of Concern (AOC) announced at events held on both sides of the river the removal of two water-use impairments from the original list of problems. The Degradation of Aesthetics (U.S. only) and Added Costs to Agriculture or Industry (Canada and U.S.) Beneficial Use Impairments both have been reviewed and found to be "Not Impaired."

The removal of the Added Costs to Agriculture or Industry and Degradation of Aesthetics Beneficial Use Impairments represents another step closer towards delisting the St. Clair River AOC on both sides of the border.

The decision to re-designate these Beneficial Use Impairments to "Not Impaired" status was reached through consensus with the Remedial Action Plan (RAP) partners, and was endorsed by the St. Clair River Binational Public Advisory Council (BPAC), First Nations, and government agencies.



From left to right: Paulette Duhaime, US Vice Co-Chair, BPAC; Terry Burrell, Canadian Vice Co-Chair, BPAC; Patty Troy, US Co-Chair, BPAC; Kris Lee, Canadian Co-Chair, BPAC.



Drinking Water Source Protection

The purpose of the provincial Clean Water Act (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 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 have been working together, along with the Thames-Sydenham and Region Source Protection Committee, to develop a Plan to protect municipal sources of drinking water throughout the region. The Committee is a group of citizens, appointed under the Clean Water Act, 2006, representing municipal, business, general public, and interest group sectors from across the region. The Committee is responsible for guiding the development of local Source Protection Plans.

Source Protection Plan Submitted to Province

The Thames-Sydenham and Region Proposed Source Protection Plan was submitted to the province in December of 2012. The goals of the plan are:

- To protect existing and future drinking water sources in the Source Protection Area.
- To ensure that for every area identified in an Assessment Report as an area where an activity is or would be a significant drinking water threat,
 - the activity never becomes a significant drinking water threat, or
 - if the activity is occurring when the Source Protection Plan takes effect, the activity ceases to be a significant drinking water threat.

The Source Protection Plans contains local policies that address a range of drinking water threats. Landowners with significant threat activities on their property will be required to follow these policies. Examples of activities that could be a significant threat in a vulnerable area include septic systems, storing fuel, spreading manure, handling or storing road salt, and applying pesticides.

There were many tools available to accomplish the job. The Source Protection Committee chose the most appropriate tool, based on Committee knowledge and expertise, current municipal approaches and provincial guidance.

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. If additional policies were needed, these were developed to complement existing mechanisms.

The Committee also felt it was important to address moderate and low risks. This was done primarily through education and outreach.



The Source Protection Committee is a group of citizens, appointed under the Clean Water Act, 2006, representing municipal, business, general public, and interest group sectors from across the region.



Conservation Lands

Goal:

To preserve, restore, enhance and sustain natural resources on Authority land and to demonstrate proper land use, development and land management practices in balance with the need to provide recreation opportunities for the residents of the region.

Lands owned by St. Clair Conservation are an important part of the land available for recreation in this region. Fifty-five per cent of all public outdoor recreation lands in the region are owned by the Authority. The Authority and the St. Clair Region Conservation Foundation own more than 2,000 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.

Peers Wetland Acquired

Thanks to the support of many donors, the St. Clair Region Conservation Authority negotiated a combined purchase and donation of an 11-hectare wetland located east of Wallaceburg on the Kimball Sideroad. The Peers Wetland is the only sizeable wetland that remains along the lower reaches of Otter Creek. Numerous wetland areas on both the north and south side of Otter Creek were drained between the early 1970s and the 1990s for use as valuable farm land. In addition to the acquisition, funds have been obtained to undertake wetland enhancement and to plant tree buffer areas.

Donors for the Acquisition and Enhancement of Peers Wetland

Friends of the St. Clair River
Sydenham Field Naturalists
Wildlife Habitat Canada
Great Lakes Sustainability Fund
Shell Fuelling Change
Ontario Ministry of Natural Resources
Ducks Unlimited Canada
RBC Blue Water Fund
Ontario Power Generation

St. Clair Region Conservation Foundation
TD Friends of the Environment Foundation
Lambton Wildlife Inc.
Chatham-Kent Community Foundation
AECON
Nature London
Numerous Individuals and Businesses

New Crossing at A.W. Campbell

Flooding of the access road to the A.W. Campbell Conservation Area campground was an ongoing problem; getting worse with the trend toward more frequent and severe rainstorms. In the fall of 2011, the road was raised by three metres and new culverts installed. The roadway was completed in the spring of 2012 with additional grading, grass seeding and guardrails installed. At a cost of \$150,000 covered through Conservation Area reserves, the new road has greatly improved access and safety for the users of the Conservation Area.



Camping

Our three campgrounds were busy in 2012 with many successful events and activities for campers. Some of these events included Canada Day Fireworks, Elvis Day, Geocaching, Fish Fries, Pig Roasts and live entertainment. 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. Campgrounds recorded a 3% increase in gross revenues to over \$940,000. With 522 serviced campsites and 400 seasonal campers, these three campgrounds provided a significant contribution to the local economies while providing employment opportunities for over 22 contract and seasonal staff.





Management of Lambton County Forests

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 2012, work focussed on the redefinition of trails and signage at the Lambton County Heritage Forest in cooperation with the Lambton Shores Nature Trail group from the community. Tree planting, as recommended in the approved management plans, occurred at Szabo Forest, Perch Creek, and Bowen's Creek.

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 2012, a number of maintenance and repair items were completed on the Floodway:

- Continued monitoring of slump erosion on the floodway
- Continued to deal with vandalism by sand blasting spray paint from cement walls and attempting to restrict unauthorized access by ATVs
- Continued weed control in channel bottom and side slopes
- Removed debris jams
- Several catch basins and rock chutes installed/repared to reduce erosion of channel side slopes



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. All work was carried out by SCRCA staff over a period from July 5 to August 17. Approximately 15,000 catch basins were treated in Sarnia-Lambton on three separate rounds of application. 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.

Bowen's Creek Project Continues

Bowen's Creek Habitat Enhancement Project will add almost 50 hectares of wildlife habitat including about 12 hectares of wetland and 20 hectares of reforestation to the St. Clair River Area of Concern over the next three years. This property in St. Clair Township resides within the heart of Carolinian Canada and it is biologically connected to woodlands and provincially significant wetlands treasured for their unique biodiversity.

The Bowen's Creek project started in 2011 with the construction of eight hectares of wetland. Last fall, hundreds of waterfowl were using the new wetlands as a migratory stop-over.

In Phase II, trees and shrubs were planted on about 10 hectares of land around the newly constructed wetlands and another 3-4 hectare wetland was constructed on the north part of the property. From 2013 to 2015, additional trees and shrubs will be planted around the wetlands to provide more diverse habitat for wildlife.

Many partners have been involved with this project and include the federal government through the Great Lakes Sustainability Fund, Trees Ontario, Ducks Unlimited Canada, Shell Fuelling Change, Enbridge, RBC Foundation, St. Clair Region Conservation Foundation and Authority, and the Friends of the St. Clair River.





Conservation Area Development Summary

Lorne C. Henderson Conservation Area

Township of Enniskillen

145 serviced sites with 115 seasonal campers

- Hydro service upgraded to 11 existing campsites
- Concrete slab installed at visitor centre

Warwick Conservation Area

Township of Warwick

232 serviced sites with 187 seasonal campers

- Pool washroom shower areas renovated with new shower surrounds and ceramic tiles on floors and walls
- New low water toilets installed
- Campsite identification signs installed
- New bridge installed along trail system

A. W. Campbell Conservation Area

Township of Brooke-Alvinston and Municipality of Southwest Middlesex

145 serviced sites with 99 seasonal campers

- Main washroom shower areas renovated with new shower surrounds and ceramic tiles on floors and walls
- New access road crossing at Morrough Creek completed
- New paddles and life jackets purchased for canoe and kayak rentals

Wawanosh Wetlands Conservation Area

City of Sarnia

- Steel roof installed on pavilion
- Duck's Unlimited, with support from Enbridge completed extensive improvements to the water control structure - official recognition ceremony was held

Coldstream Conservation Area

Municipality of Middlesex Centre

- The Enviro-Friends of Coldstream, a volunteer organization, carries out the regular operation of the area
- Property identification signs installed
- Repairs undertaken on cedar trail boardwalks

Highland Glen Conservation Area

Town of Plympton-Wyoming

- Harbour dredged to provide safe boat access

Strathroy Conservation Area

Municipality of Strathroy-Caradoc

- Property identification signs installed
- Many improvements made to the boardwalks and trails systems

C.J. McEwen Conservation Area

Town of Plympton-Wyoming

- Renovations to washroom building

Wawanosh Wetlands Gets a Face-Lift

In 2011 - 2012, Ducks Unlimited Canada, with financial support from Enbridge Inc., undertook a project to rebuild the water control structure, improve trail access and provide for interpretive signage on the site. The project was celebrated during the annual Conservation Authority's Members Tour.

Wawanosh Lake, originally the site of a large inland marsh and lake environment, was drained in the 1800s and converted to agriculture. In 1984, a substantial wetland with surrounding upland habitat was developed through a partnership between Ducks Unlimited Canada, the St. Clair Region Conservation Authority, Lambton Wildlife Incorporated, and the City of Sarnia. The McKenzie and Blundy Funeral Home began supporting tree planting at Wawanosh in 1988.



A red-tailed hawk was released as part of the recognition ceremony for the work undertaken at the Wawanosh Wetlands Conservation Area funded by Ducks Unlimited Canada through a donation from Enbridge Inc.



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									✓	
Stirling Wetlands									✓	





Communications

The Conservation Authority is committed to engaging the community in conservation issues through a variety of means including publications, events and programs.

Conservation For Kids

The Authority provides young people with the opportunity to discover how the Conservation Authority manages the region's natural resources. The program is designed to create an enthusiasm for our natural heritage which will carry over into the child's adult life. The Authority offers outdoor and in-class programs. Many of the education programs are supported by donations from businesses and organizations. A complete list is included in the St. Clair Region Conservation Foundation's section of this report. In total, 11,267 students participated in conservation education classes in 2012.

Sarnia-Lambton Environmental Association

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. 2,796 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 taught by Authority staff in the classroom. The program introduced 843 grade 4 - 8 students to the fundamentals of groundwater hydrology and the importance of protecting our groundwater resources.



The River Rap

The Friends of the St. Clair River sponsors a program that helps teach students about the 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 YouTube by searching St. Clair Region Conservation.

Spring Water Awareness Program

A new program to warn students about the hazards of fast flowing rivers and melting ice has reached the classroom thanks to sponsorship by Union Gas. In February and March, 56 classes participated in the program bringing this safety message to over 1,400 students.

Children's Water Festival

The 6th Annual Chatham-Kent & Lambton Water Festival was a great success with 1,350 grade 4 students participating in hands-on activities. Students learned how they could make a difference in saving our precious water and natural resources while visiting the C. M. Wilson Conservation Area. Approximately 50 adults volunteered to lead Activity Centres and help with tasks during the Festival. In addition, 300 High School students provided leadership at the activity centres.

The Friends of the St. Clair River sponsored the cost of bussing for schools within the St. Clair Region watershed. As a result, three schools from our region were able to attend this worthwhile event. For more information on the Water Festival visit ckwaterfest.com.





Events - Experience our Watershed

Geocaching Adventures

Geocaching is a high-tech treasure hunt which uses a global positioning system (GPS) unit to locate a hidden cache (treasure). Two events were held where the participants explored local Conservation Areas and discovered caches.

- Lorne C. Henderson Conservation Area - beginners were welcome to learn about and to try out Geocaching. GPS units were made available and 50 people took to the woods to discover hidden caches.
- A.W. Campbell Conservation Area - Sixty Geocachers explored Campbell while seeking their caches. This is an excellent way to promote our conservation areas to a new user group.

Sarnia ArtWalk

The Conservation Authority participated in Artwalk, a weekend long festival celebrating the development of Sarnia's arts and culture district. 2012 marked Sarnia Artwalk's ten year anniversary. From its inception, Sarnia Artwalk was designed to celebrate the arts, champion ecology, and provide a free event for people of all ages to enjoy. Artwalk took place in Sarnia on June 2-3.



Strathroy Paddle Day

Paddle Day was an opportunity to introduce the Strathroy community to the new water trail established along the Sydenham River. This event was coordinated by the Conservation Authority with support from Canoe Water Adventuring. Boy Scouts assisted by supplying additional canoes and helping new paddlers. About 100 people came out to explore the water trail.

Maple Syrup Festival

Beautiful weather attracted more than 1,600 people to the A.W. Campbell Conservation Area for the 40th annual Maple Syrup Festival held March 17 - 18. While the weather was not good for the sap run, visitors enjoyed the balmy weather. Demonstrations were held on methods of making syrup from maple sap ranging from early First Nations methods to late pioneer methods to modern day syrup production. The Alvinston Firemen's Association provided the traditional pancake and sausage meals at the Alvinston Community Centre.

Sydenham River Canoe Race

Seventy-one canoes and kayaks braved the cold on April 22 to participate in the 39th Annual Sydenham River Canoe and Kayak Race. Over \$3,500 was raised for Conservation Education. The Award for the most money raised went to Steve Arnold and the fastest time for the 12-mile competitive race was won by Mark Clout and Keir Johnston at 1 hour 29 minutes and 44 seconds.



Reel Film Festival

Over 80 people attended the Reel Film Festival on March 23 hosted by the St. Clair Region Conservation Authority and Canoe Water Adventuring. Several award-winning films on canoe and kayak adventure around the world featuring wildlife encounters, personal adventure and stunning scenery were screened. Thanks to all those who attended, we were able to raise \$600 which is going toward helping Species at Risk and education in the Sydenham River Watershed.



Conservation Awards

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

Heather Wright

Heather Wright is a freelance journalist in Sarnia-Lambton who writes for *Sarnia and Lambton This Week*, the *Petrolia Topic*, and *Today's Farmer*, amongst others. She has been covering municipal politics for over two decades. In addition to her focus on municipal politics, Ms. Wright often writes about environmental issues and has reported often on projects and programs of the Conservation Authority.

McKenzie and Blundy Funeral Home

The 2012 dedication service, held on September 16, marked the 25th anniversary of planting trees in memory of loved ones through the McKenzie and Blundy Funeral Home. Over 6,000 trees have been dedicated in memory at the Wawanosh Wetlands Conservation Area and the Perch Creek Habitat Management Area since 1987. Each year, about 1,000 people attend a dedication service run by the funeral home. Their long-time support of the memorial forest program has had a major impact on the success of this program across the region.

Friends of Warwick

The Friends of Warwick is a volunteer group of campers that operates special events and raises money for improvements for the Warwick Conservation Area including additional playground equipment, furnishings for the visitor centre, and for support of their programs. The Friends of Warwick operates about 15 different activities each weekend as well as larger events such as an Antique Car Show, Live Elvis Night Show, Fishing Derby, and Halloween in the Summer. While the other two campgrounds do have volunteers, the Friends of Warwick have gone well beyond to be a vital part of the "Warwick Experience."

Sarnia Environmental Advisory Committee

Sarnia City Council appoints members to sit on the Sarnia Environmental Advisory Committee to advise and assist City Council on environmental issues, and to promote stewardship and conservation of the environment in the City. In 2012, the Committee was very active providing input on waste reduction and recycling; the Community Sustainability Plan; and the draft anti-idling by-law. In addition, the Committee has assisted with bringing guest speakers into the community to discuss environmental issues.

Visit to Hillside Elementary School, Kettle & Stony Point First Nation

SCRCA staff had the pleasure of organizing an afternoon of activities with students in grades 2-4 at Hillside Elementary School in Kettle & Stony Point First Nation. The activities revolved around the natural landscape of the area and the important Species at Risk that make their home there. Students were thrilled to share their own experiences with snakes while participating in an activity that encouraged them to act out different life stages of the at-risk eastern foxsnake and eastern ribbon snake. During the nature walk, we were amazed that the students were able to find an eastern garter snake, a wood frog, a toad and many other important species all on their own. At a small creek during the guided nature walk, students took every opportunity to explore the life in the stream; identifying crayfish, fly larvae, minnows and many other aquatic species. We thoroughly enjoyed our time with the students of Hillside Elementary School. Their enthusiasm for their natural environment was clear for all to see. This project was funded by the Aboriginal Fund for Species at Risk.



High School Students Get Hands-on Experience

St. Clair Conservation, in collaboration with St. Clair Secondary School in Sarnia, undertook a project to enhance the habitat of snake and turtle species at Perch Creek Habitat Management Area. Two field days were spent out at Perch Creek to allow the students to receive hands-on experience in habitat restoration and enhancement. The two days consisted of developing turtle habitat and teaching the students different monitoring techniques used for snakes and frogs.





Conservation Foundation

The St. Clair Region Conservation Foundation is the fundraising arm of the Conservation Authority. The Foundation supports the programs of the Authority through a number of programs and through actively seeking the donation of conservation lands.

Foundation Board of Directors

Duncan Skinner, President
 Laura Margetts, Vice President
 Norm Giffen, Treasurer
 Bill Bilton
 Ken Brooks
 Andy Bruziewicz
 Ralph Coe

Ottavio Colosimo
 Rex Crawford
 Cathy Evers
 Lyn Goddard
 John Mitchell
 John Simmons

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, \$3,250 was awarded across the St. Clair region this year.

A.W. Campbell Memorial Scholarship: two \$1,000 awards
 Erinn Lee, Wallaceburg District Secondary School
 Shelby Campbell, Strathroy District Collegiate Institute

Tony Stranak Conservation Scholarship: one \$500 award
 Lidia Ritchie, Lambton Kent Composite School

Mary Jo Arnold Conservation Scholarship: one \$500 award
 Carly Van Daele, Lambton Central Collegiate and Vocational Institute

SCRCA Conservation Scholarship: one \$250 award
 Craig Curragh, Lambton Central Collegiate and Vocational Institute

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

SLEA Presented with President's Award

The Foundation from time to time recognizes outstanding individuals and organizations that support the work of the Conservation Authority through donations to the Conservation Foundation. The Sarnia-Lambton Environmental Association (SLEA) has supported the conservation education program for 16 years. Specifically, they support two in-class programs dealing with aquatic invertebrates to measure stream health and the importance of groundwater protection. SLEA is our longest standing donor who contributes each year to support these programs and have donated \$424,000 over the last 16 years.



From left to right: Greg Findlay, President Sarnia-Lambton Environmental Association; Duncan Skinner, President St. Clair Region Conservation Foundation; Joan Green, Coordinator SLEA and CARE; Andy Bruziewicz, Chair St. Clair Region Conservation Authority; Dean Edwardson, General Manager Sarnia Lambton-Environmental Association.

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 2012. A total of \$18,500 was provided to support conservation education, trails, visitor services and tree planting throughout Lambton County.



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, 12,500 trees have been dedicated covering 40 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; Eric F. Nicholls Funeral Home, Wallaceburg; and the Denning Brothers 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 2012, 543 trees were dedicated and more than 1,000 people attended dedication ceremonies held at the various memorial forests.



While rain forced the Denning Bros. Memorial Forest Dedication inside, people participated by adding ribbons to this sugar maple which was planted later at Centennial Park in Strathroy.

Local Business Supports Conservation Education

The Foundation continued its efforts in 2012 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 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.

RBC Blue Water Project

RBC, through the Blue Water Project, donated \$5,000 to support conservation education in the St. Clair region. The funds will be used to purchase equipment and supplies to improve the students' experience while learning about conservation.

Union Gas

Union Gas continued its support of the Spring Water Awareness Program with a donation of \$5,000. This program is offered to Kindergarten - Grade 6 classes.

TD Friends of the Environment Foundation

A \$6,000 donation will help with a number of Conservation Authority projects over the next year. The funds will be used to help us communicate with watershed residents through the distribution of our Species at Risk Newsletter and the Watershed Report Card. Funds will also be used to purchase equipment needed to monitor river courses for benthic invertebrates, education programs, and water quality sampling.





Reid Conservation Area Management Plan

North South Environmental has completed the draft Management Plan for Reid Conservation Area. This 170-acre property was donated to the Foundation in 2006 and has a significant woodland, significant wetland, row-cropped farmland. It is of natural heritage significance for the province and for Lambton County. The report includes a detailed description of 16 vegetation communities, including five forest and eight wetland associations. The current boundaries of these communities and GPS locations of significant plant and animal records were mapped digitally. Three of the plant communities, including a Black maple lowland forest and Bur oak swamp, are provincially significant. 373 plant species were identified including 11 that are rare for Ontario, 10 species rare for southwestern Ontario, and 74 rare plant species for Lambton County. Provincially rare plants include Shellbark Hickory, Cuckoo flower and Rue-anemone. 84 animal species were recorded including Eastern Foxsnakes (nationally Endangered); Giant Swallowtail butterflies, and 11 regionally significant bird species. The report highlighted current uses of the property, management issues and recommendations to deal with these issues. In 2013, staff will be working to fine tune the report and to begin implementing the recommendations.

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 15 land donations totalling 325 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 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 Canada
- **Maples Woodlot**, Town of Plympton-Wyoming, 3.2 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 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

McKenzie and Blundy Memorial Forest Celebrates 25th Anniversary

This year's dedication service, held on September 16, marked the 25th anniversary of planting trees in memory of loved ones through the McKenzie and Blundy Funeral Home. Over 6,000 trees have been dedicated in memory at the Wawanosh Wetlands Conservation Area and the Perch Creek Habitat Management Area since 1987.

The Conservation Authority and Foundation wishes to thank Grant and Cheryl McKenzie and the rest of the Funeral Home staff for sharing our vision of creating forests as a place for nature and a place to remember and honour our loved ones.



Grant McKenzie addresses the audience during the McKenzie and Blundy Memorial Forest Dedication.

Ecological Gifts

Three of the properties have qualified as an Ecological Gift through Environment 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 one of the lowest municipal levy levels in the province at only \$3.06 for a home assessed at \$100,000.

Administration Notes

Bill Dakin left his position as Director of Finance after 12 years, where he worked in partnership with its 17 member municipalities and senior levels of government. Bill accepted the position of Chief Financial Officer for the Municipality of Strathroy-Caradoc.

Tracy Prince came on board as our Director of Finance. Tracy brings with her a great deal of experience in finance from a municipal and broader public sector perspective.

Administration Office

- Muriel Andreae, Senior Biologist
- Kevan Baker, Director of Lands
- Rick Battson, Director of Communications
- Diane Brodie, Payroll and Accounting Clerk
- Erin Carroll, Aquatic Biologist
- Stephen Clark, Data Technician
- Dallas Cundick, Environmental Planner/Regulations Officer
- William Dakin, Director of Financial Services (January - August)
- Marlene Dorrestyn, Administrative Assistant
- Chris Durand, IT/GIS Specialist
- Michelle Fletcher, Environmental Regulations Technician
- Patricia Hayman, Director of Planning
- Claude Lafrance, St. Clair River RAP Coordinator
- Heather Long, Receptionist/Administration Clerk
- Brian McDougall, General Manager
- Tim Payne, Forest Management Specialist
- Tracy Prince, Director of Finance (September - present)
- Girish Sankar, Water Resources Engineer
- Alison Seidler, GIS/Resources Technician
- Jeff Sharp, Conservation Services Technician
- Steve Shaw, Conservation Services Specialist
- Kelli Smith, Biological Technician
- Donna Strang, AOC Research Assistant
- Jessica Van Zwol, Healthy Watersheds Specialist

Drinking Water Source Protection

- John Campbell, Source Water Protection Database Specialist
- Ingrid Vanderschot, Source Protection Policy Advisor
- Deb Kirk, Administrative Assistant
- Derekica Snake, First Nations Liaison

Field Offices

McKeough Floodway

Shane White, Maintenance Foreman

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

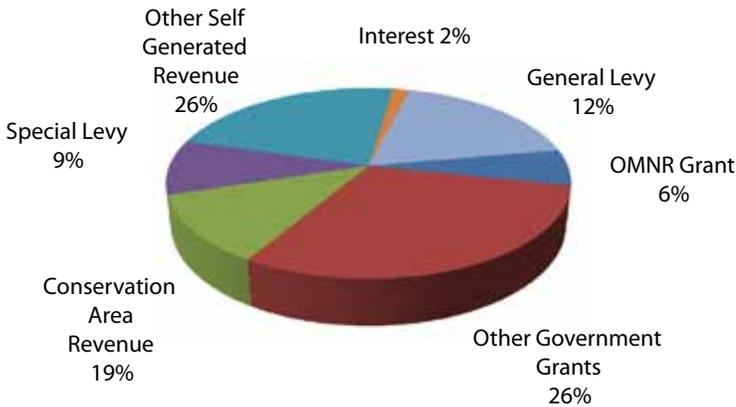
Glen Baxter, Assistant Superintendent



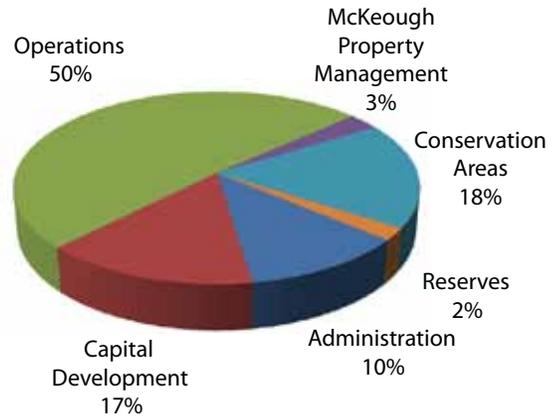


2012 Revenue and Expenditures

Revenue - \$4,998,879



Expenditures - \$4,998,879



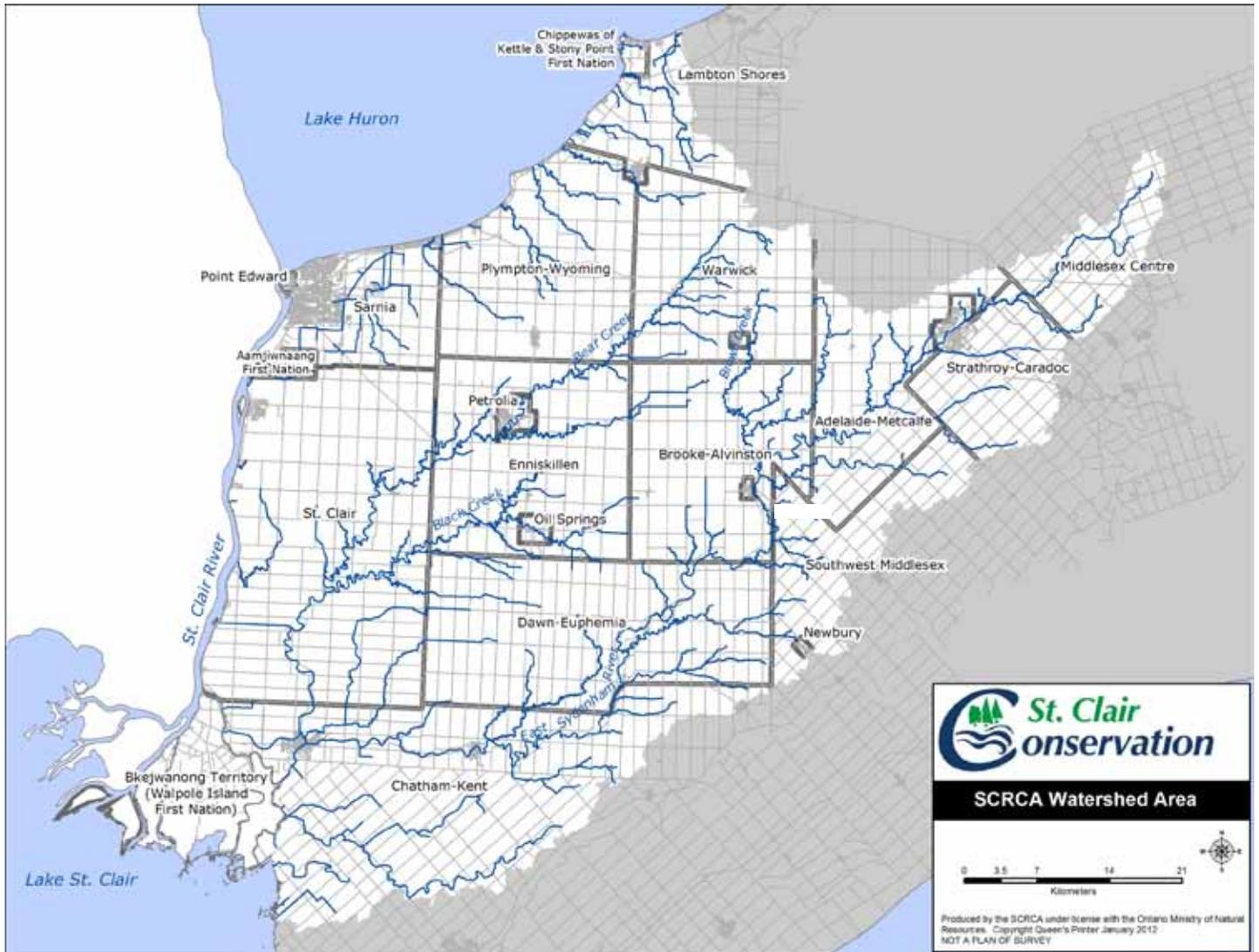
Supporting Conservation

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 grants to support conservation programs.

Species at Risk (MNR) Reptiles at Risk Habitat Stewardship Program	\$90,000
Habitat Stewardship Program for Species at Risk (EC)	\$60,000
Invasive Alien Species Partnership Program (EC)	\$29,000
Water and Erosion Control Infrastructure (MNR)	\$11,000
St. Clair River AOC (MOE/EC)	\$230,000
Drinking Water Source Protection (MOE)	\$510,000
Great Lakes Sustainability Fund (EC) Water Quality Monitoring Bowen's Creek Peers Wetland Cathcart Erosion Control GIS	\$288,000
Canada-Ontario Agreement (MOE)	\$25,000
Wildlife Habitat Canada	\$17,000
Great Lakes Guardian Fund (MOE)	\$22,000

Ontario Trillium Foundation Middlesex Stewardship Council Lambton Natural Heritage Study	\$198,000
Healthy Lake Huron (MOE/EC)	\$96,000
Trees Ontario	\$77,000
Ontario Land Trust Assistance Program Reid Conservation Area Peers Wetland	\$22,000
Employment Programs Service Canada Employment Ontario Ministry of Training Colleges and Universities MNR	\$54,000
Industry Sarnia-Lambton Environmental Association Union Gas RBC Blue Water Fund TD Friends of the Environment Foundation Shell Fuelling Change	\$61,000
Friends of the St. Clair River	\$7,000

EC - Environment Canada
MNR - Ministry of Natural Resources
MOE - Ministry of the Environment



Facts and Figures

Watershed Area - 4,100 km²
 Population - 159,666
 Drainage area of the Sydenham River - 2,724 km²

Land owned by Conservation Authority - 1,693 ha
 Land owned by Conservation Foundation - 325 ha
 Land managed by Conservation Authority (not owned) - 543 ha
 Flood Easements - 648 ha

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



**St. Clair Region
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