

## A Message from Our Chair

I am pleased to present you with the St. Clair Region Conservation Authority's 2024 Annual Report. In my second term as Chair, I have been impressed by the continued commitment and dedication of our staff and Board in implementing services and programs that enhance the environmental health of our watershed and benefit our local communities.

Over the last year, efforts focused on completing the Conservation Lands Strategy and Watershed-Based Resource Management Strategy, both due to the provincial government by the end of 2024. I want to thank our staff for their work in drafting these documents and organizing public and Indigenous engagement. The documents provide guidance, objectives, and direction for decision making as it pertains to Authority property, services, and programs. Both strategies were approved by our Board and can be found on the SCRCA's website.

We saw the continued success of our programs in 2024 which included planting over 73,000 trees, issuing over 300 permits for development, engaging 12,000 students in conservation education, and protecting 600 metres of shoreline along Lake Huron and the St. Clair River from erosion, among many others.

The year ended with a historical investment made by the Canada Water Agency that will see \$7.85 million over four years invested into the SCRCA to help in the fight against algal blooms in Lake Erie. The funding allowed the Authority to launch the Sydenham Phosphorus Reduction Initiative (SPRI) that aims to reduce the loading of phosphorus in the Sydenham River, and ultimately, Lake Erie. While an essential nutrient to life, excess phosphorus in our waterways is the leading cause of algal blooms in our region. I look forward to seeing how this new initiative unfolds over the next four years, and the difference it will make to the health of both the St. Clair and Lake Erie watersheds.

I wish to thank our staff and board for their hard work over the past year, and our many partners, collaborators, donors, and funders whose support helps us move forward in realizing our vision of a healthy and sustainable natural environment in the St. Clair Region.

Pat Brown
Chair, Board of Directors
St. Clair Region Conservation

The SCRCA Board of Directors take a group picture in front of the St. Clair Township Municipal Building after spending the morning touring the watershed during the 2024 Bus Tour held in June.



#### **2024 Board of Directors**

**Township of Adelaide Metcalfe**Betty Ann MacKinnon

**Municipality of Brooke-Alvinston**Don McCabe

**Municipality of Chatham-Kent** Rhonda Jubenville Aaron Hall

**Township of Dawn-Euphemia** Alan Broad

Township of Enniskillen/ Village of Oil Springs Mary Lynne McCallum

**Municipality of Lambton Shores** Lorie Scott

**Municipality of Middlesex Centre** Sue Cates

**Town of Petrolia** Ross O'Hara

**Town of Plympton-Wyoming** Kristen Rodrigues

**Village of Point Edward**Greg Grimes

**City of Sarnia** Terry Burrell Anne Marie Gillis Adam Kilner

Municipality of Southwest Middlesex/ Village of Newbury

Don McCallum

**Township of St. Clair** Pat Brown Steve Miller

**Municipality of Strathroy-Caradoc**John Brennan

Frank Kennes

Township of Warwick

Jerry Westgate

**Ministry of Natural Resources and Forestry** 

Emery Huszka

#### **About Us**

The St. Clair Region Conservation Authority (SCRCA) is one of Ontario's 36 Conservation Authorities responsible for the conservation, restoration, and management of natural resources within its watershed. The St. Clair Region includes the Sydenham River watershed and smaller watersheds that drain directly into southern Lake Huron, the St. Clair River, and northeastern Lake St. Clair.

Our programs aim to 1) reduce the risk of life and property from flooding and erosion; 2) improve water quality; 3) promote habitat creation and stewardship; 4) provide outdoor recreation opportunities; 5) increase environmental awareness and literacy; and 6) monitor and protect our most vulnerable species. We achieve this in cooperation and partnership with our member municipalities, government agencies, Indigenous communities, community groups, local landowners, and businesses.



Spanning 4,130 km<sup>2</sup>, the St. Clair Region Watershed supports a population of 145,509. The primary land use is agriculture (81%) with major urban centres located in Sarnia, Strathroy, and Wallaceburg (pictured).



#### **Water Resources**

Our water resources team oversees the SCRCA flood forecasting and warning program, and the maintenance and operation of flood control structures, including the W. Darcy McKeough Floodway. We work closely with local municipalities to protect public infrastructure through shoreline protection works. Our team also administers the Drinking Water Source Protection program for the St. Clair Region which protects municipal sources of drinking water from contamination. Lastly, our water resources department monitors and reports on Great Lakes water levels and conducts groundwater sampling on behalf of the Ministry of the Environment, Conservation, and Parks.

#### **Erosion Control Projects**

Erosion control projects are organized and managed by the SCRCA in collaboration with shoreline municipalities to protect critical infrastructure from erosion caused by high water levels and extreme waves triggered by strong storm events. In 2024, approximately \$4.5 million in funding was secured through the federal Disaster Mitigation and Adaptation Fund, provincial Water & Erosion Control Infrastructure Fund, the City of Sarnia, and St. Clair Township to support shoreline protection projects along the Lake Huron (Pine Avenue to Penhuron Street) and St. Clair River (Seagar Park) shorelines.

#### **Groundwater Monitoring**

In an effort to better understand Ontario's groundwater resources, the Ministry of the Environment, Conservation, and Parks implemented the Provincial Groundwater Monitoring Network (PGMN) to monitor water quality and quantity in local wells. The Network is a cooperative effort of the Conservation Authorities in Ontario on behalf of the Ministry. The SCRCA monitors nine groundwater wells for water levels and eight groundwater wells for water quality as part of this program. The data gathered are reported in the Authority's Watershed Report Card, released every five years.

SCRCA staff spend approximately 10 days a year sampling and collecting data from groundwater wells as part of the PGMN program. Pictured is the equipment used to collect water samples and measure well water levels to determine local groundwater quantity and quality.



#### **Drinking Water Source Protection**

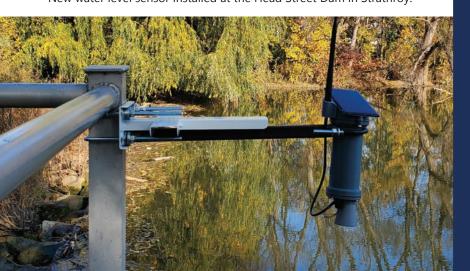
Residents living in the SCRCA watershed are protected from significant drinking water threats through the administration of the Thames-Sydenham and Region Source Water Protection Plan. The SCRCA houses a Risk Management Official/Inspector who works with local communities, industries, and municipalities to ensure risks to drinking water are identified and mitigated. The Risk Management Services office continues to provide contracted support to municipalities in the Lambton and Chatham-Kent areas, maintaining compliance with the provincial Drinking Water Source Protection Program. Annual inspections continue in the region for existing managed threats along with ongoing review and screening for any potential or new threats.

#### **Flood Operations**

Flooding is a natural process and while the Authority has done much to reduce the risk to life and property, some flooding in developed and undeveloped areas is still inevitable. As such, the SCRCA operates a flood warning program designed to warn municipalities of flood conditions. Through a network of 11 stream gauges, five snow sampling sites, ice monitoring, and meteorological data, our staff monitor ice and streamflow conditions, and issue bulletins should a flood be imminent. There were 13 events in 2024 that resulted in 27 bulletins issued for the St. Clair Region watershed.

The Authority also monitors the watershed using Low Water Indicators to determine whether drought conditions exist. In a drought situation, the Authority meets with the Low Water Response Committee to issue a Level I, II, or III Low Water Condition. No Low Water Conditions were issued in 2024.

New water level sensor installed at the Head Street Dam in Strathroy.



#### 2024 Flood Bulletins

#### **Normal Conditions**

No flood conditions exist

#### **Shoreline Conditions Statement**

#### **Water Safety**

Shoreline danger due to high water levels, wave action and erosion

#### **Flood Outlook**

Early notice of potential flooding along shorelines

0

#### **Watershed Conditions Statement**

#### **Water Safety**

River danger due to fast flows and unstable banks

#### **Flood Outlook**

Early notice of potential riverine flooding

16

#### **Flood Watch**

Potential for flooding in some municipalities

8

#### **Flood Warning**

Flooding is imminent or occurring

3

# Enhancing Monitoring Capacity throughout the St. Clair Region Watershed

The SCRCA was successful in securing \$25,000 through the provincial Community Emergency Preparedness Grant to expand the current stream gauge network throughout the watershed. The Authority was able to acquire 14 water level sensors which will be used in conjunction with current stream gauges to improve early warning communication to member municipalities during flood conditions.



## **Planning and Regulations**

As a watershed management agency acting under the *Conservation Authorities Act*, the SCRCA is responsible for ensuring that development activity is directed outside of areas prone to flooding, erosion, dynamic beaches, unstable soil, and bedrock. Under *Ontario Regulation 41/24, "Prohibited Activities, Exemptions and Permits"*, staff review applications for development activities within regulated areas,

wetlands, river, or stream valleys and areas adjacent to the shoreline of Lake Huron. A permit from the Authority may be required for development activities in or near these areas including: construction of any type of structure, site grading, placing or removing fill, wetland interference, and watercourse alterations. Landowners can access regulation mapping (pictured) on the SCRCA website to determine if their property is regulated.

to ensure that the activity is not likely to affect these hazards or create conditions which could jeopardize the health and safety of persons or result in the damage or destruction of property. In addition, the SCRCA assists our member municipalities with review of Planning applications made under the *Planning Act* to ensure that the proposals adhere to the natural hazard policies identified in the Provincial Planning Statement (2024).

#### **Planning Activity 2024**

Inquiries	97
Active Files	191
Application Types (Note: Active files may have multiple applications)	252
Minor Variances Severances Site Plan Subdivision/Condominium Zoning By-law Official Plan	41 48 27 38 71 27

Conservation Authorities have delegated responsibilities to represent provincial interests regarding Natural Hazards (Chapter 5 of the Provincial Planning Statement, 2024). The SCRCA provides expertise and comments to member municipalities on policy documents such as Official Plans and Zoning By-laws, and applications made through the *Planning Act*, as part of the Provincial One-Window Plan Review Service. The SCRCA helps the Province and municipalities reach important natural hazard objectives of the Provincial Planning Statement. Pictured are eroding bluffs along the Lake Huron shoreline.



#### **Regulations Activity 2024**

Legal Inquiries	58
Permits Issued under Ontario Regulation 41/24	305
Inquiries under Ontario Regulation 41/24	417
Compliance/Enforcement Matters under Ontario Regulation 41/24	40
Hearings	2

#### Drainage Act and Section 28 Regulations Team (DART) Protocol Activity 2024

Total Drainage Projects Reviewed	134
Standard Compliance Requirements (SCRs) Issued	56

#### **2024 Regulations Review and Timelines**

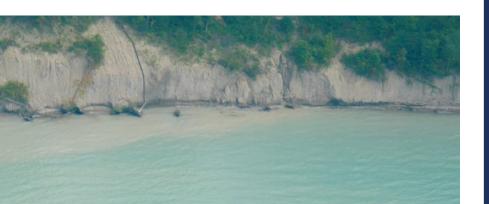
#### **Conservation Authority Mapping Review:**

SCRCA mapping is available online at www.scrca.on.ca and is reviewed on an annual basis and site-specific basis to make appropriate changes based on site-specific hazards or updated elevation information.

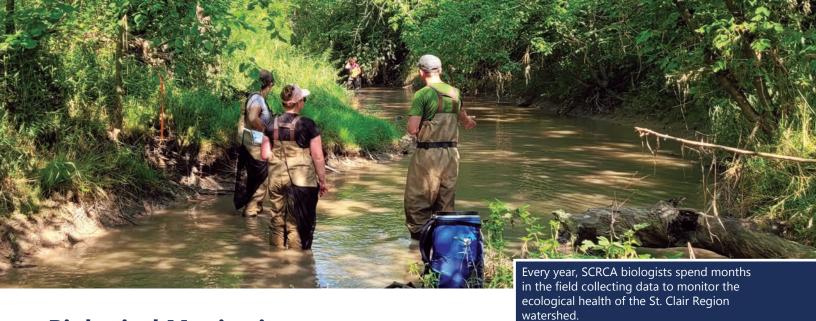
#### **Permit Review Timelines:**

- Total Permits Issued (Apr-Dec): 196
- Notification of Complete Applications\*: 135
- Total Permits Issued within 30 days of Complete Application: 148
- Average Permit Timeline for 2024: 22 days
- Administrative Reviews: 0

\*Notification of complete application within 21 days of receiving required information in Section 7(1) of O.R. 41/24. For this annual report, this is reflective of applications made to the SCRCA from April to December 2024, as this is when the regulation change came into effect.



On April 1, 2024, the provincial government enacted Ontario Regulation 41/24 – "Prohibited Activities, Exemptions and Permits" which revoked all 36 Conservation Authorities' individual regulations and consolidated them into one. While the SCRCA will continue to require permit applications for development within regulated areas, several regulatory changes were enacted. Of note were changes to the definition of a watercourse, reduction of the regulatory area surrounding Provincially Significant Wetlands, new service standard requirements for reviewing permit applications, exemptions for certain development activities, and enhanced Ministerial powers relating to Conservation Authority issued (or non-issued) permits. The SCRCA is working closely with Conservation Ontario and other Conservation Authorities to ensure policies and other guiding documents are created and updated promptly to comply with the new regulatory framework.



## **Biological Monitoring**

The Sydenham River, located within the St. Clair Region, is recognized provincially, nationally, and even internationally for its biodiversity. SCRCA biologists work with government agencies and non-profit organizations to monitor populations of local aquatic and terrestrial species (including Species at Risk) throughout the Sydenham River watershed and the smaller watersheds that make up the St. Clair Region. Staff also collect important data (e.g., water quality, benthic invertebrates) to assess the health of local habitats and overall watershed health. This data is used by both the SCRCA and our partners to help guide policy development, prioritize research efforts, and implement rehabilitation and protection measures.



Benthic invertebrates are collected by kicking sediment and sweeping a D-net along river bottoms. The animals retrieved can be used to deduce water quality based on the pollution tolerance of the organisms collected.

#### **Water Quality Monitoring**

Every year, the SCRCA monitors local water quality through the chemical analysis of surface water samples collected from 21 sites throughout the watershed and the collection and identification of bottom-dwelling biological indicators (benthic invertebrates) from 14 sites. In 2024, 171 surface water samples were collected and analyzed for nutrients, *E. coli*, and metals, in addition to 28 benthic invertebrate samples. Water quality data is shared with partner agencies and organizations and reported on in our Watershed Report Card, released every five years.

#### **Drain Classification**

The St. Clair Region watershed is home to over 3,400 kilometres of municipal drains that serve important functions for both the agricultural community and municipalities. They also serve as habitat for an array of native fish. On behalf of the Department of Fisheries and Oceans Canada (DFO), the SCRCA Biology Department samples drains throughout the watershed to support the classification of drains as part of the Fish and Fish Habitat Protection Program. The program ensures fish and fish habitat are protected by issuing permits for drain maintenance activities (e.g., cleanouts) based on the drain's sensitivity to disturbance (classification). The SCRCA collected 489 fishes, representing 16 species from 6 unclassified drains in 2024 to support the streamlining of DFOs drain maintenance review and authorization mandate.

#### **North Sydenham Mussel and Host Fishes Inventory**

The Sydenham River is one of the most biodiverse rivers in Canada. It is home to at least 82 of the 129 native freshwater fish species found in Ontario and has the greatest diversity of freshwater mussels in all of Canada. With funding provided by DFO's Habitat Stewardship Program, the SCRCA entered the second year of a new freshwater mussel and fish sampling program where fish and mussel information was collected in previously un-sampled streams to continue filling knowledge gaps related to Species at Risk (SAR) distribution and population. Building upon the sampling completed in 2023, sampling efforts in 2024 focused on the headwaters of Bear Creek (10 sites, covering a 5 km continuous stretch of the river). Six species of mussels were recorded, and 1970 fishes were collected, identified, and released, representing 17 different species. The goal of the three-year project is to aid species recovery while simultaneously implementing stewardship projects and providing education and outreach opportunities to mitigate threats and raise awareness of aquatic SAR.

#### **Captive Hatch and Release Turtle Program**

The St. Clair Region watershed is home to six of eight different species of turtle found in Ontario – all of which are considered Species at Risk. The SCRCA's Captive Hatch and Release program aims to increase turtle hatchling survivorship by eliminating threats to turtle eggs posed by nest predation, shoreline development, and human activities. Efforts focus on the collection and incubation of eggs laid by the Eastern Spiny Softshell Turtle – an endangered species at imminent risk of extinction. The 2024 program saw the collection of 1,864 eggs from at-risk nests throughout the watershed and the release of 1,460 turtle hatchlings back into the wild. However, the 2024 nesting season on the Sydenham River was heavily impacted by intense flooding. Key nesting sites along the river were submerged for weeks, resulting in limited site availability, hundreds of drowned eggs and a significant reduction in Spiny Softshell hatchlings compared to previous years.

#### **Eastern Foxsnake Nesting Network**

The Eastern Foxsnake Nesting Network established in 2013 provides nesting habitat for at-risk snakes within the watershed. The network has increased overtime and now provides habitat at 21 sites, with 6 new structures installed in 2024. SCRCA Biologists located 48 hatched Eastern Foxsnake eggs during the 2024 surveys.

Ontario is home to 41 of the 55 freshwater mussel species native to Canada. The Sydenham River supports 34 of these species, making it the most mussel diverse watershed in the country. The SCRCA identifies, measures and counts mussels found throughout the watershed before returning them back into the river they were found.

#### 2024 Highlights



#### **Fish Monitoring**

24 fish species

2 invasive species Goldfish X Carp Round Goby

**1 species at risk**Blackstripe Topminnow



#### **Mussel Monitoring**

#### 6 mussel species

Creeper
Cylindrical Papershell
Fatmucket
Giant Floater
Wabash Pigtoe
White Heelsplitter



#### **Turtle Program**

#### 1,460 turtle hatchlings

302 Eastern Spiny Softshell Turtles
258 Northern Map Turtles
848 Snapping Turtles
27 Midland Painted Turtles
25 Red-eared Slider Turtles (invasive)





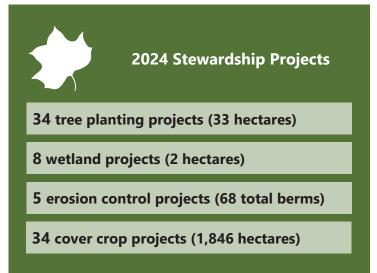
## **Stewardship and Forestry**

The SCRCA promotes and supports activities that will create healthy watersheds and improve local water quality and soil health. Conservation Authority staff achieve this by providing educational opportunities, technical advice, and financial assistance to local landowners interested in establishing Best Management Practices (BMPs) and stewardship projects on their properties, such as tree planting and wetland creation. The SCRCA also offers several forestry services to promote sustainable woodlot practices.

#### **Environmental Stewardship**

Environmental stewardship projects are completed annually throughout the St. Clair Region watershed to improve and protect rural water quality and soil health. SCRCA staff actively seek grants to provide funding to support the efforts of local landowners. In 2024, \$645,727 in grant funding was secured to support 76 projects, with participating landowners contributing an additional \$200,691. In total, over 35 hectares of agricultural land (valued at approximately \$2,281,600) were taken out of production by local landowners to allow for the implementation of stewardship projects.

In honour of the County of Lambton's 175th anniversary, the SCRCA helped plant 175 tulip trees at the Oil Museum of Canada alongside County and Enbridge staff.





#### **Tree Planting**

Tree planting completed by the SCRCA in 2024 saw 71,690 seedlings and 1,747 large-stock trees planted throughout the St. Clair Region watershed. A total of 66,300 tree seedlings were planted by SCRCA seasonal staff on 34 properties. Large-stock trees and the remaining 5,390 seedling trees were provided to local landowners and municipalities for plantations, windbreaks, and roadside plantings, among others.

#### **Tree Seed Collection**

Every fall, SCRCA staff collect seeds from native trees throughout the watershed. These seeds grow into trees that will be used in future afforestation projects in the St. Clair Region to ensure the trees produced are genetically adapted to our local growing conditions. Seed collection in 2024 saw a variety of native tree seeds collected. A total of 2,200 litres were collected from 8 different tree species throughout the watershed. The seeds collected in 2024 will contribute to afforestation projects in 2026, 2027, and 2028.

Acorns ready to be collected from a red oak tree.

## **Lambton County Woodlands Conservation By-Law**

Since 2011, the SCRCA has partnered with the County of Lambton and has provided professional forestry services in administering the County of Lambton Woodlands Conservation By-Law. The by-law aims to encourage good forestry practices among County woodland owners to ensure sustainable harvesting and maintenance. While enforcement of the by-law can occur for unauthorized woodland removals, etc., the SCRCA also implements an educational component to engage landowners on the environmental and social benefits of woodlands and best management practices to promote the preservation of tree cover within the County.



#### **Introducing SPRI - The Sydenham Phosphorus Reduction Initiative**

The Sydenham River watershed is the third largest Canadian contributor of phosphorus loads in the Lake Erie Basin, with close to 90% of total phosphorus released annually from widespread sources including agricultural and rural runoff.

Thanks to a historic investment of \$7.85 million over four years from the Canada Water Agency, the SCRCA was able to launch SPRI – the Sydenham Phosphorus Reduction Initiative, a program aimed at reducing phosphorus loading in the Sydenham River, and ultimately, Lake Erie.

SPRI was built off the Sydenham River Watershed Phosphorus Management Plan which improved the overall understanding of local sources of phosphorus, identified cost-effective solutions specific to the St. Clair Region watershed, and built awareness throughout the community. The new SPRI initiative will aim to decrease overall non-point source phosphorus loads in the Sydenham River watershed and St. Clair River tributaries by adopting and implementing agricultural and rural best management practices, strategic water quality monitoring, and outreach, engagement, and education.



- Best Management Practices (BMPs)
  Adopt a system-based approach to
  agricultureal and stewardship BMPs
- Create a sampling network to track and quantify phosphorus movement and the impact SPRI has on reducing phosphorous
- Outreach and Education
  Deliver a strong, diverse, and inclusive communication campaign to foster collaborations, partnerships, and co-benefits



#### **Conservation Areas**

The SCRCA owns and maintains 13 Conservation Areas that span a total of 605 hectares throughout the watershed. In addition, the SCRCA manages seven natural areas for Lambton County. Visitors can enjoy numerous recreational activities that include hiking along our over 40 km of trails, camping at our three regional campgrounds, fishing, and bird watching

Camping at the Authority's three campgrounds (A.W. Campbell, Lorne C. Henderson, and Warwick Conservation Areas) were a popular destination for campers near and far, bringing in over \$1.6M in gross revenue. Seasonal camping was once again fully booked for the 2024 season.

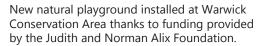
#### **SCRCA Conservation Lands Strategy**

Legislative requirements under the Conservation Authorities Act required the SCRCA to prepare a Conservation Lands Strategy prior to the end of the calendar year that would provide a clear set of objectives to inform decision-making related to land owned and managed by the SCRCA. After public and Indigenous engagement, including three open houses, and online submission of comments, the Board of Directors approved the strategy at their December meeting. The document outlines Conservation Land Management guidelines for each of the four types of conservation land classes currently owned and managed by the SCRCA (Conservation Areas Active Recreation, Conservation Areas Passive Recreation, Management Lands, and Administration Areas). The guidelines will assist staff in prioritizing future improvements and upgrades to meet the needs of the communities we serve.

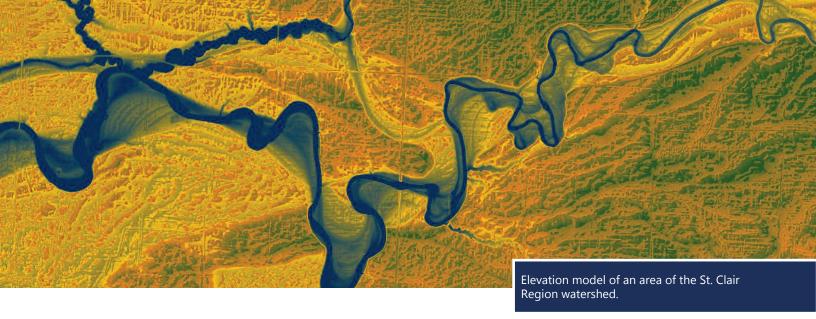
#### Judith and Norman Alix Foundation Supports Trails and Playground Enhancements at Two Conservation Areas

A donation of \$172,500 from the Judith and Norman Alix Foundation supported trail and playground improvements at the Wawanosh Wetland and Warwick Conservation Areas.

In the fall of 2024, the SCRCA was able to create a new 500-metre trail loop at Warwick Conservation Area and upgrade the 2,000-metre south trail loop at Wawanosh Wetland Conservation Area to stone dust. Additionally, a brand new, natural playground replaced a small aging playground at Warwick Conservation Area. The generous contribution of the Judith and Norman Alix Foundation has helped improve visitor experience and accessibility at both properties.

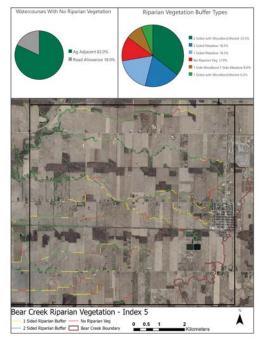






#### **GIS and IT**

Our Geographic Information System (GIS) and Information Technology (IT) experts provide essential support services to all SCRCA departments and programs. In addition to maintaining important technological infrastructure (i.e., computers, servers), our GIS and IT staff create, update, and manipulate geographic data into a form that other departments and programs can easily comprehend and utilize. Our GIS/IT staff also research and investigate new and exciting technologies to improve efficiencies within the Authority.

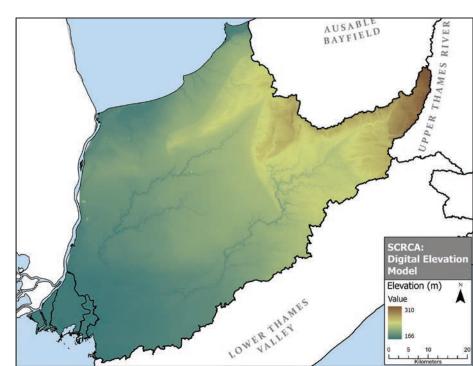


Map of riparian buffer status along watercourses in the Bear Creek subwatershed.

Digital Elevation Model (DEM) of the St. Clair Region Conservation Authority watershed with higher elevations shown in red/orange and lower elevations identified in yellow/green.

#### 2024 GIS Project Highlights

The SCRCA is leveraging GIS technology to implement Best Management Practices (BMPs) as part of the Sydenham Phosphorous Reduction Initiative (SPRI). The GIS team has embarked on a project to map and prioritize areas within the Sydenham Headwater, Bear Creek, and Brown Creek subwatersheds, aiming to identify riparian zones lacking vegetation. Additionally, other GIS models, such as the Agricultural Conservation Planning Framework (ACPF), are being utilized to pinpoint specific opportunities for conservation discussions and BMP implementation.





### **Education and Outreach**

Education is an important part of shaping tomorrow's environmental leaders and teaching communities about local conservation efforts. Our conservation education program offers a variety of hands-on, curriculum-based, indoor, and outdoor programs geared towards both elementary and secondary school students. Local media outlets and social media are utilized to enhance and expand conservation awareness throughout the St. Clair Region watershed and beyond. Additionally, staff organize and attend local events to introduce communities to the SCRCA, what we do, and how we can assist them in becoming more environmentally minded in their everyday lives.

#### **Conservation Education**

The SCRCA Conservation Education team was busy throughout 2024, engaging over 12,000 elementary and secondary students on environmental topics. The schoolyard "Nature in Your Neighbourhood" continued to be offered in addition to traditional field trips to overcome barriers associated with bussing costs and availability.

The team also expanded their connection, relationships, and collaborations with local First Nation schools. Our conservation educators continued to participate in the land-based education program at Hillside School at Kettle and Stony Point First Nation. The program provides students with hands-on, outdoor learning opportunities that contain a blend of western science, Ojibwee language, and traditional knowledge. In 2024, a similar program was initiated in partnership with the Aamjiwnaang Kinoomaage Gamig elementary school at Aamjiwnaang First Nation.



**2024 Conservation Education** by the Numbers

Field Trips to Lorne C. Henderson Conservation Area

4,080 students

Nature in Your Neighbourhood 546 students

**In School/Sponsored Programs** 4,847 students

**Specialist High Skills Major (SHSM)**451 students

**Special Interest Groups/Local Events** 2,449 students

**Teachers/School Support Staff/Chaperones** 1,813 adults

First Nation School Land-Based Ed Partnerships 1,440 students and 254 school staff

#### **Communications**

#### **Social Media**



**Facebook** 

2,802 Followers

182 Posts

241,284 Accounts Reached

16,910 Engagements



X

925 Followers

174 Posts

157 Reposts

**450 Engagements** 

40,399 Impressions



**Instagram** 

1,137 Followers

98 Posts

13,484 Accounts Reached

3,558 Engagements

46,189 Views

#### **Media Relations**

19 media releases 870 news article mentions

#### Website

158,655 website views

Despite the soggy conditions, the 2024 Sydenham River Canoe and Kayak Race attracted almost 70 paddlers and raised just over \$2,000 for Conservation Education. Pictured is 2024 SCRCA Chair Pat Brown (left) and Board Member Emery Huszka (right) as they cross the finish line.

#### **Special Events 2024**

**Green Infrastructure in Rural Drainage Demo Day**Strathroy

**AgriSuite Workshop** 

Warwick

A.W. Campbell Maple Syrup Festival

A.W. Campbell Conservation Area Alvinston

Water Quality, Erosion and Sediment Controls
Virtual

Sydenham River Canoe and Kayak Race
Dawn-Euphemia

Ipperwash Beach Cleanup Lambton Shores

A Geocaching Adventure

Lorne C. Henderson Conservation Area Petrolia

St. Clair River Evening

Four Points By Sheraton
Point Edward

**Forests Ontario Fall Tour** 

Middlesex Centre

**Greening Your Grounds Workshop**Strathroy

McKeough Demonstration Day
St. Clair Township

Wawanosh Wetland Phragmites Removal Volunteer

Day

Sarnia

Erosion Control Practices for Building Soil Resiliency
Workshop
Warwick





## **Special Projects**

#### **Healthy Lake Huron**

To improve water quality and promote clean beaches along the southeast shores of Lake Huron, the Healthy Lake Huron (HLH) program was launched in 2011. Since then, the SCRCA has partnered with all levels of government, local health units, other Conservation Authorities, and community groups to retain nutrients on land and reduce the risk of harmful algal blooms between Sarnia and Tobermory. In 2024, under the HLH program, staff spoke at the Port Franks Garden Club about Greening Your Grounds – climate adaptations individuals can implement in their own backyards. While the weather lessened participation, the Ipperwash Beach Cleanup was another successful event with four participants and 15 lbs of garbage collected. Staff enjoyed having a booth at the Forest Fall Fair where we showcased the unique species in our watershed. Finally, the Authority was asked to present at the Lake Huron Partnership Let's Talk Lake Huron webinar! Over the past year, Healthy Lake Huron funding through the Ministry of the Environment, Conservation and Parks (MECP) Canada-Ontario Agreement (COA) supported the planting of 22,655 trees and the retirement of 11.49 hectares of land in the Lambton Shores/Lake Huron region of our watershed!

#### **Sydenham River Aquatic Species at Risk Threat Inventory**

Through funding from the Habitat Stewardship Program for Aquatic Species at Risk, the SCRCA is completing a Threat Inventory for aquatic Species at Risk in the Sydenham River. The East Sydenham River supports a wide diversity of plants and animals and is designated as one of 13 freshwater Key Biodiversity Areas in Canada

by the International Union for the Conservation of Nature (IUCN). Key Biodiversity Areas are areas contributing significantly to the global persistence of biodiversity. For this project, the SCRCA is synthesizing data on local threats to the aquatic environment that can be used to direct stewardship and recovery efforts.

In addition to the Forest Fall Fair (pictured), the SCRCA participated in the Wyoming and Alvinston Fall Fairs in 2024. Information on agricultural best management practices, species at risk, stewardship options for landowner properties, and other programs and services offered by the SCRCA was on hand and provided to attendees at all three events.



#### St. Clair River Area of Concern

The St. Clair River was designated as an Area of Concern (AOC) in 1987 due to extensive urban and industrial development. For over 30 years, the local community, Indigenous Peoples, and government have collaborated to enhance water quality and aquatic habitats, aiming to remove the river from the list of Great Lakes AOCs. Significant progress has been made in addressing the remaining actions outlined in the 2022-2027 work plan, with the goal of redesignating the four remaining Beneficial Use Impairments (BUIs) to "not impaired" once all actions have been completed.

The community engagement process for redesignating BUI 3 - Degradation of Fish and Wildlife Populations to "not impaired" commenced in 2024 and remains on-going. Presentations were made to the Aamjiwnaang First Nation Environment Committee, the Walpole Island First Nation community, and the Binational Public Advisory Council in 2024. Regarding BUI 14 – Loss of Fish and Wildlife Habitat, the status assessment report was presented to the Canadian Remedial Action Plan Implementation Committee in April and June 2024. The committee endorsed the report's recommendation that BUI 14 be redesignated to "not impaired." The report findings were also presented to the Aamjiwnaang First Nation Environment Committee in December 2024. Community engagement activities on the report findings and the recommendation will continue into 2025.

The Canadian Remedial Action Plan Implementation Committee hosted the second Annual Honouring the St. Clair River event on September 26, 2024, in Sarnia, to update the community on progress in restoring the St. Clair River. The event featured presentations on microplastics in the Great Lakes by the University of Toronto, public outreach activities by the Friends of the St. Clair River, and water quality monitoring by the Bluewater Association for Safety, Environment, and Sustainability (BASES). Approximately 70 individuals attended the event.

On September 4<sup>th</sup>, Friends of the St. Clair River (FOSCR) launched their 2024 photo contest, inviting amateur digital photographers to submit photos of the St. Clair River. The theme, "Celebrating Recovery on the St. Clair," aimed to raise public awareness and appreciation for the river and encourage people to capture images showcasing ongoing improvements. By the time the contest closed on November 1<sup>st</sup>, a total of 143 photos had been submitted by 60 individuals. A panel of judges reviewed each of the entries and selected the winning photographs for each of the contest categories. Friends of St. Clair River presented each of the first-place winners with a \$500 cash prize, second-place winners with a \$200 cash prize.



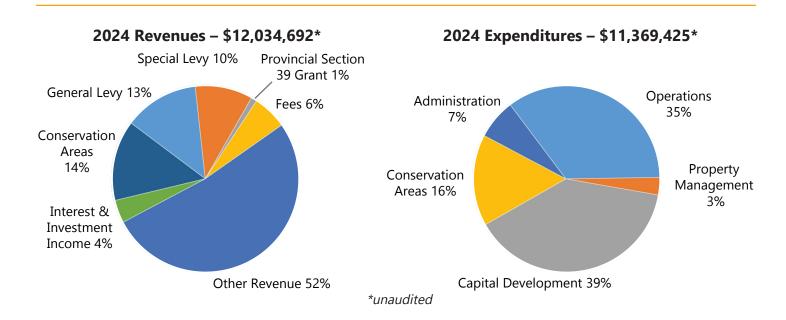
The implementation of the engineering and design plan for managing contaminated sediment in three priority areas of the St. Clair River began in November 2024. Dow Canada is leading the work which involves placing an erosion-resistant cover in targeted areas. Completing this work will help achieve the delisting criteria for two BUIs; Restrictions on Fish and Wildlife Consumption (BUI 1) and Degradation of Benthos (BUI 6).

WSP was retained to complete the sediment remediation at the three areas of contaminated sediment in the St. Clair River. Pictured is the mobilization of equipment required to complete the work.



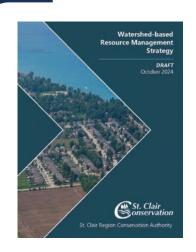
#### **Administration**

The administration and finance team at the St. Clair Region Conservation Authority plays an integral role in fostering a positive and safe workplace for all Authority employees and managing the Authority budget. Our team continuously updates and improves SCRCA policies to achieve business excellence and sustainability while maintaining a positive corporate atmosphere.



## **Watershed-Based Resource Management Strategy**

In addition to the Conservation Land Strategy, new regulations prescribed under the *Conservation Authorities Act* in early 2022 required the SCRCA to complete a draft Watershed-Based Resource Management Strategy. The strategy was approved by the Board of Directors on December 12, 2024, after the completion of both public and Indigenous engagement. The strategy (available on the SCRCA website) sets out the guiding principles, objectives, and resources of the SCRCA, it's categories of programs and services, and the knowledge base for the work the Authority conducts on a day-to-day basis.



#### **Our Staff**

#### **Administration Office**

Donna Blue, Manager of Communications Shelby Campbell, Planning Technician Stephen Clark, Risk Management Official/Inspector Emily De Cloet, Interim Coordinator, Flood Forecasting and Warning (Oct - Dec)

Melissa Deisley, Director of Planning and Regulations Nicole Drumm, Watershed Biologist Chris Durand, Manager of IT/GIS

Emily Febrey, Communication and Education Technician (Jan - Aug), Communication and Outreach Specialist (Aug - Dec)

(Aug - Dec) Ashley Fletcher, Administrative Assistant/Board Coordinator Nicholas Hagerty, Water Resources Technician (Jan - Nov) Kate Jamieson, Payroll and Accounting Clerk Chunning Li, Director of Corporate Services Brigette Matthais, Water Quality Technician (Sep - Dec) Lisa McNeill, Agricultural Stewarship Techician (Jul - Dec) Mike Moroney, St. Clair River RAP Coordinator Rashida Naznin, Environmental Engineer Kelsey Oatman, Planning and Regulations Clerk David Oczkowski, Forest Conservation Technician (Apr - Dec) Craig Paterson, Manager of Biology Tim Payne, Manager of Forestry Ken Phillips, General Manager Girish Sankar, Director of Water Resources (Jan - Oct) Alison Seidler, GIS Specialist Jeff Sharp, Conservation Services Specialist Steve Shaw, Manager of Conservation Services

Kelli Smith, Conservation Lands Specialist

Ian Van Arkel, GIS Projects Technician (Aug - Dec) Merrick Van Der Vaart, Drainage Officer (Jan - Apr),

Sarah Snetsinger, Watershed Biologist

Regulations Officer (May - Dec)

Jessica Van Zwol, Healthy Watershed Specialist (Jan - Jul), Healthy Watershed Coordinator (Jul - Dec) Jeff Vlasman, Regulations Coordinator Meagan Weber, Regulations Officer Greg Wilcox, Manager of Conservation Areas

#### **Drinking Water Source Protection**

John Campbell, Senior Information Management Analyst Deb Kirk, Administrative Assistant

#### **Field Offices**

#### **McKeough Floodway**

Shane White, Maintenance Foreman, McKeough Floodway

#### A.W. Campbell Conservation Area

Don Skinner, Superintendent Maryanne Nieuwenhuizen, Assistant Superintendent

#### **Lorne C. Henderson Conservation Area**

Terry Barrie, Superintendent Luke Derks, Assistant Superintendent Melissa Levi, Conservation Education Coordinator Mark Northcott, Education and Communication Technician (Sep - Dec)

Myra Spiller, Conservation Education/Community Partnership Technician

#### **Warwick Conservation Area**

Glenn Baxter, Superintendent Derek Thompson, Assistant Superintendent

#### **McLean Conservation Lands**

Scott O'Brien, Superintendent



#### **Staff Retirement**

Steve Shaw, Manager of Conservation Services retired in December 2024 after over 36 years of service. Throughout his tenure, Steve has been an integral part of the success of the SCRCA's tree planting program, among others. We wish Steve the very best in his next chapter.



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