

# St. Clair River Area of Concern

2017-2022 Work Plan





# Preface

In 2005, the Canadian Remedial Action Plan Implementation Committee (CRIC) was formed and given the mandate to organize the restoration of Beneficial Use Impairments (BUIs) identified in the 1991 Stage 1 Remedial Action Plan (RAP) for the St. Clair River Area of Concern (AOC). Since the CRIC's formation, a number of notable and significant activities have been completed and legislative initiatives enforced that have improved the environmental health of the St. Clair River.

The CRIC developed a work plan in 2007 that expanded on the St. Clair River Stage 2 RAP document published in 1995 and a synthesis report published in 2005 that provided an update on implementation activities conducted throughout the AOC. Both reports summarized remaining or additional actions required to restore Impaired BUIs or

assess those with inconclusive or insufficient scientific data. Each recommended activity was established to facilitate either the re-designation of an Impaired BUI to Not Impaired or the collection of additional information to assign a designation to a BUI with insufficient data. Five subcommittees were organized to develop the 2007 – 2010 work plan which documented remedial actions for the St. Clair River that related to: 1) Point Sources, 2) Sediments, 3) Habitat and Non-Point Sources, 4) Monitoring and Research, and 5) Public Outreach and Education.

An update report published in the summer of 2012 summarized the activities completed between 2007 and 2010 along with what was accomplished in 2011. The 2012 – 2017 St. Clair River AOC work plan identified the

remedial actions necessary to continue to restore BUIs, and ultimately delist the St. Clair River AOC. In 2019, the Report of Accomplishments for 2012 – 2017 was published to highlight progress made on identified actions up to March 31, 2017. The 2017 – 2022 Work Plan outlines the remaining actions required to delist the river as an AOC, and while the CRIC will endeavour to complete these actions, some may not be completed by 2022.



# Acknowledgements

The following individuals are or have been members of the St. Clair River Area of Concern Canadian Remedial Action Plan Implementation Committee and have been instrumental in the creation of this document.

**Aamjiwnaang First Nation**

Courtney Jackson, Christine James,  
Sharilyn Johnston

**Binational Public Advisory Council**

Kris Lee

**City of Sarnia**

Terry Burrell, Mike Kelch

**Environment and Climate Change  
Canada**

April White

**Lambton Public Health**

Theresa Warren

**Ontario Ministry of Agriculture, Food  
and Rural Affairs**

Trevor Robak

**Ontario Ministry of the Environment,  
Conservation and Parks**

Ted Briggs, Annette Verhagen

**Ontario Ministry of Natural Resources  
and Forestry**

Stephen Marklevitz

**Sarnia-Lambton Environmental  
Association**

Dean Edwardson, Vince Gagner

**St. Clair Region Conservation Authority**

Donna Blue, Kelly Johnson, Brian McDougall

**St. Clair Township**

Darrell Randell

**Rural Lambton Stewardship Network**

Jake Lozon

**Walpole Island First Nation**

Naomi Williams

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# Introduction

In 1985, the International Joint Commission (IJC) identified the St. Clair River as an Area of Concern in the Great Lakes Basin as it did not meet the objectives of the Great Lakes Water Quality Agreement (GLWQA), signed in 1972 by the governments of Canada and the United States. As a result of degraded chemical, physical and biological integrity, impairments to beneficial uses were identified that were attributed to elevated contaminant concentrations in the water, biota and sediments of the St. Clair River. The loss of aquatic and coastal habitat was also a concern.

The Stage 1 Remedial Action Plan (RAP) report was published in 1991. It described the environmental conditions of the St. Clair River and identified the status of Beneficial Use Impairments (BUIs) based on criteria developed by the IJC. Of the 14 possible beneficial uses, eight were Impaired, four were classified as Requires Further Assessment (RFA) and two were Not

Impaired based on surveys of water, biota, and sediment conducted between 1985 and 1986, and data up to 1990. The Impaired BUIs were attributed primarily to industrial and municipal discharges in the upper reaches of the St. Clair River.

The follow-up Stage 2 RAP report was completed in 1995 and introduced a framework for restoring the environmental integrity of the St. Clair River. The report outlined 45 different activities required to fulfill BUI delisting criteria and lead to the re-designation of all BUIs to Not Impaired.

In 2005, the St. Clair River Canadian Remedial Action Plan Implementation Committee (CRIC) was established to further advance efforts to rehabilitate the Impaired BUIs on the Canadian side of the St. Clair River. The CRIC consists of representatives from federal and provincial government agencies, municipalities, First Nations, Conservation Authorities, and non-governmental

organizations. Through the CRIC, work plans have been created to ensure restoration actions were assigned and completed by appropriate partners. The CRIC recently published the 2012 – 2017 Report of Accomplishments which summarizes the progress made on the 87 actions identified in the 2012 – 2017 Work Plan.

With some tasks remaining in order re-designate the outstanding BUIs to Not Impaired status comes the development of the 2017 – 2022 Work Plan. Once all BUIs are re-designated to a Not Impaired status, a recommendation to the IJC can be made to delist the St. Clair River as an AOC. The process of delisting an AOC is a significant milestone as it signifies that the health of the aquatic environment has been significantly improved. The BUI re-designation process that the St. Clair River adheres to can be found in Appendix A.

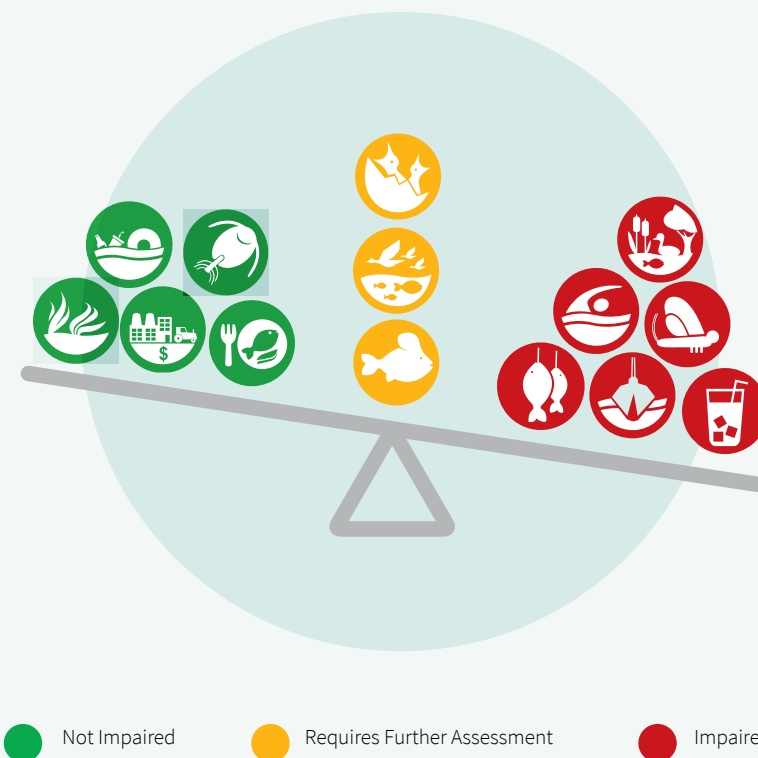
Table 1 identifies the status of the 14 Beneficial Use Impairments for the St. Clair River as of April 1, 2017.

Restoration activities are not limited to the Canadian side of the St. Clair River. In the U.S., all levels of government are working closely with the Binational Public Advisory Council (BPAC) and other partners to implement actions required to re-designate the final two BUIs remaining on the American side of the river - the Restrictions on Fish and Wildlife Consumption BUI and the Restrictions on Drinking Water Consumption or Taste and Odour BUI.

# Status of Beneficial Use Impairments in the St. Clair River Area of Concern

The status of Beneficial Use Impairments (BUIs) for the St. Clair River Canadian Area of Concern (AOC) as of April 1, 2017.

BENEFICIAL USE IMPAIRMENT	STATUS
Restrictions on Fish and Wildlife Consumption	Impaired
Tainting of Fish and Wildlife Flavour	Not Impaired
Degraded Fish and Wildlife Populations	Requires Further Assessment
Fish Tumours or Other Deformities	Requires Further Assessment
Bird or Animal Deformities or Reproductive Problems	Requires Further Assessment
Degradation of Benthos	Impaired
Restrictions on Dredging Activities	Impaired
Eutrophication or Undesirable Algae	Not Impaired
Restrictions on Drinking Water Consumption or Taste and Odour Problems	Impaired
Beach Closings	Impaired
Degradation of Aesthetics	Not Impaired
Added Costs to Agriculture or Industry	Not Impaired
Degradation of Phytoplankton and Zooplankton Populations	Not Impaired
Loss of Fish and Wildlife Habitat	Impaired





## List of Acronyms

AFN	Aamjiwnaang First Nation
AOC	Area of Concern
BPAC	Binational Public Advisory Council
BUI	Beneficial Use Impairment
CA	Conservation Authority
CRIC	Canadian Remedial Action Plan Implementation Committee
CSO	Combined Sewer Overflow
DFO	Department of Fisheries and Oceans Canada
ECCC	Environment and Climate Change Canada
FAMC	Four Agency Management Committee
FOSCR	Friends of the St. Clair River
GLWQA	Great Lakes Water Quality Agreement
IJC	International Joint Commission
MTO	Ontario Ministry of Transportation
OMAFRA	Ontario Ministry of Agriculture, Food and Rural Affairs
MECP	Ontario Ministry of Environment, Conservation and Parks
MNRF	Ontario Ministry of Natural Resources and Forestry
PWQO	Provincial Water Quality Objective
RAP	Remedial Action Plan
RLSN	Rural Lambton Stewardship Network
SCRCA	St. Clair Region Conservation Authority
SLEA	Sarnia-Lambton Environmental Association
WIFN	Walpole Island First Nation



# Beneficial Use Impairments

## Restrictions on Fish and Wildlife Consumption

### Current Status – Impaired

Delisting Criteria: This BUI will be considered restored when fish consumption advisories in indicator fishes (e.g., walleye, brown bullhead, and smallmouth bass) in the AOC are the same or less restrictive than the associated Great Lakes or appropriate reference sites and when the general guidance for the consumption of indicator wildlife (e.g., snapping turtles, geese) are no different than the non-AOC sites in the Great Lakes.

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	BEYOND	LEAD
Conduct sport fish surveys for contaminants every four years to monitor key indicator species and report on survey results until the survey is either replaced with another monitoring program or is no longer necessary for the AOC.				✓			MECP
Report on head and mouth river monitoring results for concentrations of metals and organic contaminants of concern from 2000 to 2012.			✓				ECCC
Report on sediment chemistry from 2008 to current to determine trends in contaminants for use in BUI assessment and, if required, deploy sediment traps in the St. Clair River to determine spatial and temporal trends in contaminants in the AOC.			✓				ECCC MECP
Conduct and report on survey distributed to anglers to identify the species of fish consumed from the St. Clair River.					✓		CRIC

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	BEYOND	LEAD
Management and remediation of three remaining contaminant sediment priority areas within the St. Clair River to reduce local risks to fish consumption. The following steps will be required:							
<ul style="list-style-type: none"> <li>Request funding for preferred management options, which includes detailed engineering design and environmental assessment on select preferred options.</li> </ul>		✓					ECCC MECP
<ul style="list-style-type: none"> <li>Undertake detailed engineering design and environmental assessment on selected preferred options.</li> </ul>			✓	✓			ECCC MECP SCRCA
<ul style="list-style-type: none"> <li>Review, tender, and award project and begin mobilization.</li> </ul>					✓		ECCC MECP
<ul style="list-style-type: none"> <li>Implementation of preferred sediment management options.</li> </ul>						✓	ECCC MECP
<ul style="list-style-type: none"> <li>Evaluate effectiveness of sediment remediation and implement adaptive management to improve effectiveness of remediation if necessary.</li> </ul>						✓	ECCC MECP
Review on existing consumption risk approaches and consumption guidelines that could be used to help evaluate this BUI (specifically around waterfowl, muskrat, and turtles).	✓						ECCC MECP WIFN
Review all relevant data collected, undertake an assessment.			✓	✓	✓		CRIC ECCC MECP
Prepare status report. If an impaired status results, further actions may be required.						✓	CRIC ECCC MECP
Complete BUI re-designation process.						✓	ECCC MECP CRIC

# Degraded Fish and Wildlife Populations

## Current Status – Requires Further Assessment

**IJC Delisting Guidance:** This BUI will be considered restored when environmental conditions support healthy, self-sustaining communities of desired fish and wildlife at predetermined levels of abundance that would be expected from the amount and quality of suitable physical, chemical, and biological habitat present. An effort must be made to ensure that fish and

wildlife objectives for Areas of Concern are consistent with Great Lakes ecosystem objectives and Great Lakes Fishery Commission fish community goals. Further, in the absence of community structure data, this use will be considered restored when fish and wildlife bioassays confirm no significant toxicity from water column or sediment contaminants.

The assessment approach includes the analysis of temporal data for contaminant burdens of fish and wildlife and compares the diversity and abundance of wildlife (including waterfowl, marsh birds, muskrats and frogs) inside the AOC to outside the AOC.

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
Conduct sport fish surveys to monitor key indicator species and report survey results.			✓			MNRF
Collaborate with WIFN and AFN on science results and solicit input/Aboriginal Traditional Knowledge on findings.		✓				ECCC WIFN
Review all relevant data collected, undertake an assessment and prepare status report based on delisting criteria. If an impaired status results, further actions may be required.			✓			CRIC ECCC MECP
Complete BUI re-designation process.				✓	✓	CRIC ECCC MECP

# Fish Tumours or Other Deformities

## Current Status – Requires Further Assessment

**IJC Delisting Guidance:** This BUI will be considered restored when the incidence rates of fish tumours or other deformities do not exceed rates at unimpacted control sites and when survey data confirm the absence of neoplastic or preneoplastic liver tumours in bullheads or suckers.

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
Review all relevant data collected, undertake an assessment and prepare status report based on delisting criteria. If an impaired status results, further actions may be required.	✓	✓	✓			CRIC ECCC MECP
Complete BUI re-designation process.				✓		CRIC ECCC MECP

# Bird or Animal Deformities or Reproductive Problems

## Current Status – Requires Further Assessment

**IJC Delisting Guidance:** This BUI will be considered restored when the incidence rates of deformities (e.g. cross-bill syndrome) or reproductive problems (e.g. egg-shell thinning) in sentinel wildlife species do not exceed background levels in inland control populations.

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
Complete BUI re-designation process.*		✓				CRIC ECCC MECP

\* A status assessment report recommending this BUI be re-designated to Not Impaired was completed and submitted for review. However, not all steps in the re-designation process were completed.

# Degradation of Benthos

## Current Status – Impaired

**Delisting Criteria:** This BUI will be considered restored when the benthic community structure, diversity, and abundance are not significantly different to suitable, unimpacted reference sites within the AOC of comparable physical (sediment, grain size, water velocity) and chemical characteristics; and when benthic invertebrate tissue contaminant concentrations (body burdens) are comparable to suitable, unimpacted reference sites within the AOC or when all remedial options, recommended to address the areas of interest for contaminated sediment, have been completed and follow-up monitoring confirms their effectiveness.

ACTION*	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	BEYOND	LEAD
Review all relevant data collected, undertake an assessment and prepare status report based on delisting criteria. If an impaired status results, further actions may be required.						✓	ECCC MECP CRIC
Complete BUI re-designation process.						✓	ECCC MECP CRIC

\*All remedial actions identified in the 2012 – 2017 Work Plan have been completed.

# Restrictions on Dredging Activities

## Current Status – Impaired

**Delisting Criteria:** This BUI will be considered restored when there is no limitation on the disposal of dredging spoils from routine dredging in the St. Clair River.

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
Complete BUI re-designation process.*	✓	✓				

\* A status assessment report recommending this BUI be re-designated to Not Impaired was completed and submitted for review. However, not all steps in the re-designation process were completed.





# Restrictions on Drinking Water Consumption or Taste and Odour Problems

## Current Status – Impaired

**Delisting Criteria:** This BUI will be considered restored when there are no treatment plant shutdowns due to exceedances of drinking water guidelines over a two-year period.

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
<p>Review all relevant data collected such as:</p> <ul style="list-style-type: none"> <li>the nature and frequency of spills from vessels and land-based sources;</li> <li>the nature and frequency of communal water intake closures;</li> <li>river water quality;</li> <li>action taken by industries to prevent and reduce spills;</li> <li>water treatment processes; and</li> <li>loading of industrial and municipal discharges to the St. Clair River, and undertake an assessment and prepare status report based on delisting criteria.</li> </ul> <p>If an impaired status results, further actions may be required.</p>	✓	✓	✓			CRIC MECP ECCC
Complete BUI re-designation process.				✓	✓	

# Beach Closures

## Current Status – Impaired

**Delisting Criteria:** This BUI will be considered restored when less than 20% of the geometric means of water samples collected over the swimming season, at identified beaches within the St. Clair River AOC, exceed Provincial Water Quality Objective for *E. coli* or is similar to a suitable non-AOC reference site, when assessed over a period of at least three to five years.

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
<ul style="list-style-type: none"> <li>Complete key actions identified in the City of Sarnia Master Plan for Sewer separation, Sanitary Pumping Station Replacements, sewage treatment, which includes Wastewater Treatment Plant Hydraulic Improvement, Mitigation of Plant Bypasses, and CSOs.</li> </ul>	✓					City of Sarnia
<ul style="list-style-type: none"> <li>Continue separation of combined sewers within the City of Sarnia Sanitary Drainage Area 1.</li> </ul>	✓					City of Sarnia
<ul style="list-style-type: none"> <li>Evaluate municipal infrastructure upgrades on sewage treatment plants, combined flow treatment, and combined sewer overflows and facility optimization to determine what additional steps need to be undertaken.</li> </ul>	✓					City of Sarnia, St. Clair Township, Municipality of Chatham- Kent
Review all relevant data collected, undertake an assessment and prepare status report based on delisting criteria. If an impaired status results, further actions may be required.	✓					
Complete BUI re-designation process.		✓				

# Loss of Fish and Wildlife Habitat

## Current Status – Impaired

### Delisting Criteria:

1. Administrative and legislative mechanisms are in place to protect recognized aquatic, wetland and terrestrial habitats from destruction or degradation.

2. Wetland coverage within the sub-watersheds of Area 1A is 6-10%, or is restored to the extent possible, and 155 ha of wetland habitat is rehabilitated, created, or protected within the Chenal Ecarte, Walpole Island First Nation delta, or along the eastern shore of Lake St. Clair.

3. Habitat connectivity between the St. Clair River and Sydenham River and between Walpole Island First Nation, Bickford Oak Woods, and Aamjiwnaang First Nation has been improved.

4. 50% of the major tributary lengths in Area 1A are buffered by a minimum width of 5 m of natural vegetation or buffered to the extent possible.

5. Nearshore and shoreline fish habitats have been enhanced at 6-12 priority sites along the St. Clair River to demonstrate the benefits of integrating shoreline protection with fish habitat enhancement.

6. Wetland habitat components (i.e. water quality, submerged aquatic vegetation, aquatic invertebrates, fish, and birds) achieve a quality ranking of "Good" or better based on Water Quality Index (WQI) and Indices of Biological Integrity (IBI) scores for a

3-year period, or when mean WQI/IBI scores within the AOC are shown to be statistically comparable to those outside the AOC for a 3-year period.

7. A long-term Fish and Wildlife Habitat Management Plan for Ontario is completed to facilitate habitat restoration and protection beyond AOC delisting.

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
Evaluate unevaluated wetlands for protection in municipal plans.	✓					MNRF SCRCA
Track progress on wetland goals for the AOC.			✓			ECCC SCRCA
Collaborate with MTO to access the remaining properties that will complete the Hwy 40 project, improving habitat connectivity between WIFN, the McKeough Floodway, headwaters of the St. Clair River tributaries, Bickford Oak Woods, and Aamjiwnaang First Nation forest.	✓	✓				RLSN
Track and map riparian buffer projects to assess progress.			✓			RLSN SCRCA
Acquire necessary data layers to complete and apply Fish Habitat Suitability Model.	✓	✓	✓			DFO

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
Encourage and seek out opportunities to promote the naturalization of the St. Clair River shoreline.	✓	✓	✓			SCRCA
Conduct pre- and post-project implementation fish surveys at restoration sites and report on findings.	✓	✓	✓			DFO
Track shoreline projects and assess and report on progress.	✓					SCRCA
Conduct a wetland assessment at a select wetland within Walpole Island to compare with a reference wetland outside the AOC to determine if they are comparable as per the target and share results.	✓	✓	✓	✓		WIFN
Write a Fish and Wildlife Habitat Management Plan.	✓					ECCC MNRF SCRCA
Review all relevant data collected, undertake an assessment and prepare status report based on delisting criteria. If an impaired status results, further actions may be required.		✓	✓	✓		CRIC ECCC MECP
Complete BUI re-designation process.				✓	✓	CRIC

# Public Outreach and Education

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
Raise public and youth awareness about the St. Clair River AOC progress via events, supporting programs, and media opportunities such as: <ul style="list-style-type: none"> <li>• Conservation Authority education program to school age children;</li> <li>• Children's Water Festival; and</li> <li>• Local Science Fairs.</li> </ul>	✓	✓	✓	✓	✓	<b>FOSCR</b> <b>SCRCA</b> <b>SLEA</b>
Support BPAC outreach and celebration events such as BUI re-designations, boat cruises, science symposium and distribution of outreach information and display material.	✓	✓	✓	✓	✓	<b>RAP Coordinator</b> BPAC FOSCR
Engage municipalities and First Nations by presenting biennial updates as arranged to: <ol style="list-style-type: none"> <li>1. Councils;</li> <li>2. Environment committees; and</li> <li>3. Environment department staff.</li> </ol>	✓	✓	✓	✓	✓	<b>RAP Coordinator</b> AFN WIFN
Distribute newsletters and reports to First Nation households and/or through community centres, as arranged by AFN and WIFN communications outreach.	✓	✓	✓	✓	✓	<b>RAP Coordinator</b> AFN WIFN FOSCR
Plan with WIFN and AFN attendance at special/ environmental events and meetings such as: Earth Days, Nin.Da.Waab.Jig Open House and Ecosystem Circles.	✓	✓	✓	✓	✓	<b>RAP Coordinator</b> AFN WIFN FOSCR

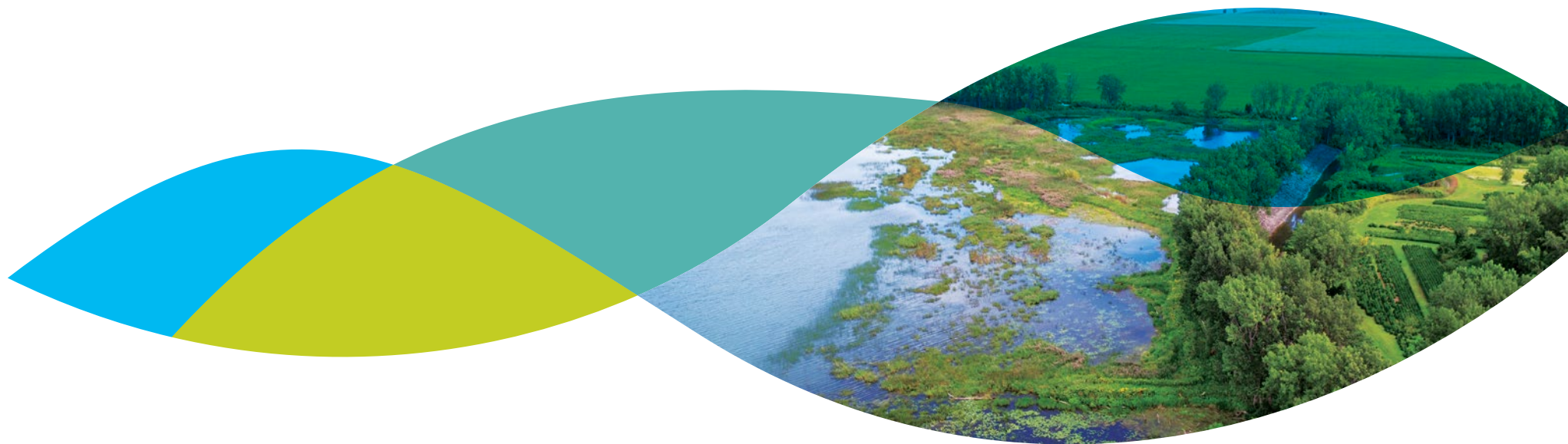
\*Bold font denotes lead agency or organization

ACTION	2017-2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022	LEAD
Promote industrial staff participation in environmental opportunities (e.g., clean-up days, tree planting, etc.)	✓	✓	✓	✓	✓	<b>RAP Coordinator</b> SLEA
Continue the production of the FOSCR E-Newsletter, enhance distribution, and survey recipients for suggestions (request permission to distribute and contribute articles to the E-Newsletter by employees of local commercial and industrial facilities).	✓	✓	✓	✓	✓	<b>RAP Coordinator</b> FOSCR
Manage and maintain the AOC Website	✓	✓	✓	✓	✓	<b>FOSCR</b> RAP Coordinator
Investigate the use of social networking tools (e.g., Facebook, Twitter).			✓			<b>FOSCR</b> RAP Coordinator
Support BUI re-designation process (e.g., drafting reports, local and First Nation engagement).	✓	✓	✓	✓	✓	RAP Coordinator

\*Bold font denotes lead agency or organization







# Conclusion

Remedial activities completed since the late 1980s have significantly improved the ecological health of the St. Clair River AOC. Within this work plan 47 priority actions have been identified, down from the 71 actions identified in the 2012-2017 work plan. Completion of these activities is expected to significantly advance the St. Clair River AOC towards “delisting.” Many of the actions listed include the review and analysis of existing data to determine the status of Beneficial Use Impairments as many remedial actions have been completed in previous years. The process by which this plan was developed highlights the cooperation between government agencies, First Nations, industry and community groups. These partnerships have contributed to the improved environmental quality of the St. Clair River and will continue to be integral in the preservation of the river beyond “delisting.”

The CRIC looks forward to the next 5 years of cooperation and progress towards delisting the St. Clair River AOC. More information on the St. Clair River AOC is available online at the Friends of the St. Clair River ([www.friendsofstclair.ca](http://www.friendsofstclair.ca)) and the St. Clair Region Conservation Authority websites ([www.scrca.on.ca](http://www.scrca.on.ca)).

# Glossary

## **Areas of Concern (AOC)**

Geographic locations recognized by the International Joint Commission (IJC) where water, sediment, and fish quality are degraded, and the objectives of the Great Lakes Water Quality Agreement (GLWQA) of local environmental standards are not being achieved.

## **Beneficial Use Impairment (BUI)**

A change in the chemical, physical, or biological integrity of a Great Lakes System sufficient to cause any of the 14 use impairments.

## **Combined Sewer Overflow (CSO)**

Combined storm and sanitary sewer systems.

## **Delist**

The removal of an Area of Concern (AOC) from the list of AOCs is achieved only when the criteria for the restoration of beneficial uses as defined by the Remedial Action Plan (RAP) are met and agreed upon by agencies and the local community.

## **Environmental Remediation**

The removal of pollution or contaminants from environmental media, such as soil,

groundwater, sediment, or surface water, for the general protection of human health and the environment.

## **Great Lakes Water Quality Agreement (GLWQA)**

A joint agreement between Canada and the United States, which commits the two countries to restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin ecosystem (from Article 2 of the 1978 GLWQA). Originally signed in 1972, the Agreement was amended in 1978, 1987, and 2012.

## **Habitat**

An ecological or environmental area that is inhabited by a particular species of animal, plant, or other type of organism.

## **International Joint Commission (IJC)**

A binational organization established in 1909 by the Boundary Waters Treaty. Through the IJC, Canada and the United States cooperatively resolve problems along their common border, including water and air pollution, lake levels, power generation, and other issues of mutual concern.

## **Non-Point Source (NPS)**

Source of pollution in which pollutants are discharged over a widespread area from a number of small inputs rather than from distinct, identifiable sources.

## **Point Source**

A source of pollution that is distinct and identifiable, such as an outfall pipe from an industrial plant.

## **Provincial Water Quality Objective (PWQO)**

Provincial Water Quality Objectives are numerical and narrative ambient surface water quality criteria. PWQOs represent a desirable level of water quality that the MECP strives to maintain in the surface waters of the Province. PWQOs are set at a level of water quality which is protective of all forms of aquatic life and all aspects of the aquatic life cycle during indefinite exposure to the water.

## **Remedial Action Plan (RAP)**

A document drafted with the purpose of restoring and protecting beneficial uses in the Areas of Concern (AOCs) within the Great Lakes Basin.

## **Sediment**

The fines or soils on the bottom of the river or lake.

# Appendix A

## Beneficial Use Impairment (BUI) Process for the St. Clair River Area of Concern (AOC)

### Beneficial Use Impairment (BUI) Re-Designation Process 2012 GLWQA and 2014 Canada-Ontario Agreement (COA) for the St. Clair River

1. AOC Remedial Action Plan Team produces a draft “Beneficial Use Impairment Status Assessment Report”.

\*First Nation community engagement to solicit comments.

2. RAP team circulates draft BUI Assessment Report for review by domestic and binational agencies (ECCC, MECP, MNRF and FAMC) and stakeholders (BPAC). Comments from agencies and First Nation communities are reviewed and considered.

3. RAP team revises the report as necessary and posts report for public review on AOC’s website.

4. RAP team considers and addresses public comments and submits report to COA AOC Annex Leads.

5. a) AOC Annex Leads may obtain additional technical review.

5. b) AOC Annex Leads consider additional technical review comments and may either specify additional work, or accept BUI assessment report.

6. COA AOC leads seek internal agency approvals. COA Executive Co-chair (on behalf of Canada) sends letter to Ontario Executive Co-chair (on behalf of Ontario) to seek Ontario’s formal concurrence on re-designation.

7. ECCC (Party) removes BUI designation as established criteria have been met (as per GLWQA).

8. ECCC with Ontario informs RAP team, the IJC and others as appropriate, of BUI re-designation.

### Process for Beneficial Uses (BU) Designated as “Requires Further Assessment”

1. AOC Remedial Action Plan Team produces “Beneficial Use Status Assessment Report”.

\*First Nation community engagement to solicit comments.

2. RAP team circulates draft BU Assessment Report for review by agencies, stakeholders, and others as required.

3. RAP team revises report as necessary and posts report for public review on AOC’s website.

4. RAP team addresses public comments and submits report to COA AOC Annex Leads.

5. a) AOC Annex Leads may obtain additional technical review.

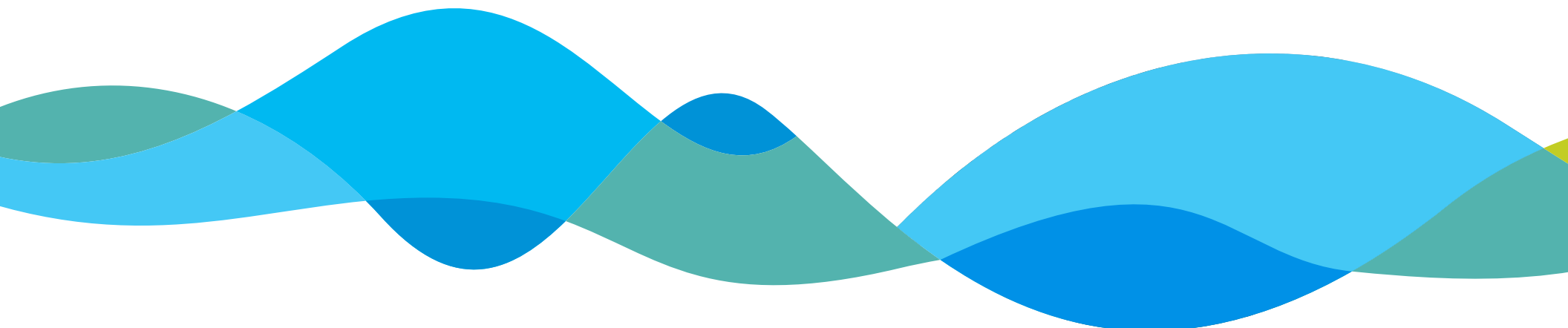
5. b) AOC Annex Leads consider additional technical review comments and may either specify additional work/outstanding issues or accept BUI assessment report.

6. COA AOC Leads inform COA Management Committee of the BU status (i.e., the required further assessment has now been completed and the conclusion is...).

7. AOC Annex Leads confirm to RAP team, IJC and other as appropriate of BUI status (Impaired or Not Impaired).



With funding support from Environment and Climate Change Canada and the Ontario Ministry of the Environment, Conservation and Parks.



Published by:

**St. Clair Region Conservation Authority**

205 Mill Pond Cr. Strathroy, ON, N7G 3P9

stclair@scrca.on.ca | **scrca.on.ca**