

# A MESSAGE FROM THE DETROIT RIVER CANADIAN PUBLIC ADVISORY COUNCIL

*"One of the best approaches to planning for climate change is to conserve as much healthy, intact and interconnected habitat as possible." Nature Conservancy of Canada, Spring 2016*

At this writing, a deal between the City of Windsor and the Windsor Port Authority regarding the preservation of Ojibway Shores as permanent green space hangs in limbo. For over ten years PAC has lobbied all government levels. The parties are reportedly talking about a land swap. There is optimism, but nothing is certain until the sign is pounded into the ground.

Wonderful news: approximately 40 acres of industrial land connecting Black Oak Heritage Park and Ojibway Shores are now zoned parkland, upping the total area of the Ojibway Complex to 680 acres. For years PAC has urged the city to effect this zoning change. Thank you, City of Windsor.

Uncertainty still surrounds possible multi-million dollar cuts to the U.S. Environmental Protection Agency and the Great Lakes Restoration Initiative, instrumental in restoring and preserving the Great Lakes including the Detroit River. Despite protestations by the President, Congress approved \$300 million in the 2018 federal budget. We continue to support our cross river counterpart, the Friends of the Detroit River. DRCC-PAC reps regularly attend their meetings.

Thanks to the dedicated members who attend PAC meetings. Your interest in the Detroit River has been vital in any success PAC has enjoyed. Sincere appreciation is extended to outgoing Vice Chair Gord Harding and his successor Andy Paling. All the best to the dedicated DRCC staff, Claire Sanders and Gina Pannunzio.

Respectfully submitted,  
**Tom Henderson, Chair**



The Detroit River Canadian PAC is a group of citizen volunteers and representatives from non-government organizations dedicated to improving the health of the Detroit River ecosystem. If you are interested in getting involved, please contact the RAP Coordinator.



The Detroit River Canadian Cleanup (DRCC) is a community-based initiative launched in 1998 to cleanup, enhance, restore and sustain the Detroit River ecosystem.

Partnerships within the DRCC aim to promote and implement the cleanup plan, called a Remedial Action Plan (RAP), to protect, enhance and restore the Detroit River in order to remove it from the list of Great Lakes Areas of Concern. The DRCC's members provide leadership in identifying partnerships and funding opportunities to support and complete cleanup goals for the Detroit River.

For more information on any projects listed in this report, or to download the detailed 'Pathway to Delisting' work plan, please visit [detroitriver.ca](http://detroitriver.ca).

**BRIGHTON BEACH** *Power*

and many dedicated citizens like you!

- /Detroit-River-Canadian-Cleanup
- /detroitriverrap
- /DetroitRiverCC
- /detroitrivercanadiancleanup

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## Detroit River Canadian Cleanup

# Annual Report 2017 - 2018

**8 TONNES!**  
of Garbage Collected

**1,640+**  
Outstanding Volunteers :)

**2**  
Community Cleanups

**4,150**  
Trees, Shrubs & Wildflowers Planted

[www.detroitriver.ca](http://www.detroitriver.ca)



# HABITAT

## Restore the Shore!

Previous shoreline assessments indicate that 80% of the Detroit River shoreline is developed and hardened (ie sheet pile wall) as a result of urbanization and industrialization, which has resulted in unsuitable habitat for many fish species. Essex Region Conservation Authority (ERCA) evaluated and summarized the historical loss and current shoreline habitat rehabilitation efforts along the Detroit River using geographical information system (GIS) methods to compare 1931, 1988 and 2017 georeferenced aerial imagery. Additionally, any remaining opportunities for shoreline softening were identified and a list of potential short- and long-term habitat projects was developed.

## Restoring Forests and Prairies

In 2017-18, ERCA restored a total of 12 hectares (30 acres) to Carolinian upland forest or tallgrass prairie. All project decisions were guided by the priorities outlined in the Essex Region Natural Heritage System Strategy (ERNHSS) and are consistent with the habitat priorities of the Detroit River RAP. Since 2000, a total of 438 hectares (1,085 acres) of land has been restored in the Detroit River watersheds through this program. In addition, two new wetlands with native vegetation buffers were constructed in the Canard River watershed, totaling 7.5 hectares (18.5 acres).

# POLLUTION REDUCTION

The DRCC continues to implement projects in the watershed to reduce the potential for pollutants to reach the Detroit River. In 2017/18, ERCA planted 5 buffer strips (which trap sediment and filter nutrients) to help prevent surface water from carrying top soil from fields into local streams.

The City of Windsor continues to investigate methods to control combined sewer overflows (CSOs) from the areas west of Caron Avenue to the Lou Romano Water Reclamation Plant. Combined sewers carry a mixture of municipal wastewater and storm water through a single pipe. During wet weather events, there may be insufficient capacity to convey all the flow to the treatment plant or insufficient capacity at the treatment plant, resulting in excess untreated sewage being discharged into the Detroit River. In 2017, the City of Windsor undertook a study to review alternative methods for CSO and wet weather flow storage and treatment. The study is ongoing with an expected completion date of April 2019 and will result in a preferred solution for CSO control in the area.



Lou Romano Water Reclamation Plant

## MONITORING AND RESEARCH

Progress on restoring the river is measured by 14 beneficial use impairments, or BUIs. A beneficial use is the ability of all living organisms (including humans) to use the Great Lakes without adverse effects. As of 2017, the Detroit River Canadian Area of Concern (AOC) has 7 impaired beneficial uses, 6 unimpaired, and 1 requiring further assessment. The projects and research described here provide the scientific evidence to determine when a BUI is no longer impaired.



## Bird deformities or reproduction problems

Environment and Climate Change Canada have monitored Tree Swallows in nest boxes at four locations along the Detroit River since 2016. During 2016 and 2017, the sites were monitored for occupancy, hatching success and fledging. As occupancy of the nest boxes increases, eggs and plasma from the Tree Swallows will be collected for contaminant analysis. Tree swallows feed on insects that emerge from the sediment at the bottom of the river, where they may be exposed to toxic chemicals such as PCBs, mercury and PAHs. By collecting and analysing the eggs and plasma of these Tree Swallows, changes can be detected in sediment contamination at these specific sites. Tree Swallow monitoring is also being conducted at other sites around the Great Lakes, including the U.S side of the Detroit and St. Clair Rivers, and Hamilton Harbour and Thunder Bay.



## Celebrating Thirty Years of Progress with New Story Map Tool

A new interactive mapping tool that tells the cleanup story of the Detroit River is now available to explore! The ESRI Story Map highlights all the projects that have taken place over the past thirty years since the river was designated as an Area of Concern under the Great Lakes Water Quality Agreement. Check it out at: [detroitriver.ca/storymap](http://detroitriver.ca/storymap).



## SAVing our wetlands!

Researchers at GLIER at the University of Windsor studied the Detroit River wetlands in 2017 to determine whether the light availability limits the growth of submerged aquatic vegetation (or SAV for short!) Water quality and light sensors were deployed throughout the river, which allowed researchers to compare the light availability at wetlands with good water quality against those with moderate and degraded status because of suspended sediment. Results indicate that the vegetation in the wetlands at the mouth of River Canard may be impacted by low light levels but there is no evidence that River Canard water impacts wetland quality further downstream in the Detroit River.

Fisheries and Oceans Canada undertook fish community surveys at potential restoration sites in the river as well as in the Turkey Creek and River Canard wetlands in 2017. While analysis of the data is still underway, initial results revealed a unique assemblage of fish in these areas. The Canadian Wildlife Service also continues to monitor Detroit River coastal wetlands for water quality, bugs, birds, and vegetation. They also installed automatic recording units (ARUs) to record vocalizations of secretive marsh-nesting birds.

Also, a new University of Windsor project aims to quantify the environmental stresses and biological condition across the Detroit River corridor. This study will take into account all water quality data, shoreline and land use stress scores, and biological indices for plants, invertebrates, fishes, and birds. Ultimately, this project will help us to assess our approach for deriving our delisting criteria for the *Degradation of wildlife populations* and *Loss of fish and wildlife habitat* BUIs.

## CLEANUP EVENTS AND COMMUNITY TREE PLANTINGS

The DRCC supports community cleanups and tree planting activities through our member organizations. Not only do these activities improve habitat for plants and animals, they also enhance the quality of life for local residents. Two community cleanup events were held in spring 2017 with over 75 people participating. Eight tonnes of garbage were collected!

Planting native trees and wildflowers restores lost habitat and increases biodiversity, while fostering environmental stewardship in the community. Through events held in the Detroit River watershed during the fall of 2017 and spring of 2018, approximately 4,150 native trees, shrubs and wildflowers were planted with the help of 1,641 fantastic volunteers. Additionally, more than 1,000 people and 41 Green Teams attended the annual Earth Day celebrations in the Little River watershed, and planted more than 2,200 trees! Peche Island Day was held in celebration of World Rivers Day and we helped over 530 local residents and 40 volunteers get to Peche Island to explore the trails and natural heritage of this Detroit River gem.

## Family Fishing Day

In partnership with Caesars Windsor Cares, the DRCC hosted a free Family Fishing Day at Assumption Park in Windsor in July. This inaugural event took place during Ontario Family Fishing Event week when residents can fish in Ontario waters without the mandatory license. With the help of volunteers and expert anglers over 100 participants experienced fishing on the Detroit River! The DRCC provided information to participants about restoration and clean up projects, statistics on fish populations, and information on how to safely consume fish from the river.



Peche Island

## ACRONYMS

<b>AOC</b>	Area of Concern
<b>BUI</b>	Beneficial Use Impairment
<b>DRCC</b>	Detroit River Canadian Cleanup
<b>ERCA</b>	Essex Region Conservation Authority
<b>GLIER</b>	Great Lakes Institute for Environmental Research (University of Windsor)
<b>PAC</b>	Public Advisory Council
<b>PAH</b>	Polycyclic aromatic hydrocarbon
<b>PCB</b>	Polychlorinated biphenyl
<b>RAP</b>	Remedial Action Plan