

## **Great Lakes Plastic Cleanup – Plans for the 2022 Season Update for Town of Cobourg**

An estimated 10 million kilograms of plastic, including bottles, food packaging, pre-production plastic pellets and microplastics, flows into the Great Lakes each year and approximately 80% of all of the litter found during shoreline cleanups is plastic. Plastic waste is hazardous to fish and wildlife, it pollutes the water, and affects the millions of people who live in the region and are dependent on the largest freshwater system in the world. Yet studies on plastic pollution in the Great Lakes have been limited.

Spearheaded by Pollution Probe and the Council of the Great Lakes Region in 2020, the Great Lakes Plastic Cleanup ([www.greatlakesplasticcleanup.org](http://www.greatlakesplasticcleanup.org)) is the single-largest freshwater initiative of its kind in the world, using innovative plastic capture technologies to collect and remove plastics and other debris at marinas across the Great Lakes. The initiative was established with support from the Ontario Ministry of the Environment, Conservation and Parks, Environment and Climate Change Canada and lead corporate sponsor, NOVA Chemicals. It has since grown to include a wide range of partners and collaborative sponsors across the Great Lakes region. Through a combination of plastic capture devices deployed at 26 marinas and surrounding communities across the Great Lakes region, data collection and analysis of the amounts and kinds of plastic captured, outreach and education available online for the general public and at participating marinas, the Great Lakes Plastic Cleanup is helping communities in Ontario better understand the sources and pathways for plastic entering the Great Lakes, streams and rivers.

The Great Lakes Plastic Cleanup has shown what is possible when the full range of actors come together to find innovative solutions to a pressing environmental challenge. It provides a real-life example of how everyone can play an important role in stewardship and highlights the difference that can be made when we come together.

### **The Great Lakes Plastic Cleanup in Cobourg**

The Town of Cobourg joined the Great Lakes Plastic Cleanup in October 2020 and currently maintains one Seabin at Cobourg Marina in Cobourg Harbour, and three LittaTraps on King Street, in the Harbour Parking Lot and the Cobourg Marina Parking Lot.

On October 30th, 2020, the Honourable David Piccini, current Ontario Minister of the Environment, Conservation and Parks, and Member of Provincial Parliament for Northumberland-Peterborough South, joined Mayor John Henderson from the Town of Cobourg, to celebrate the Government of Ontario's investment in innovative litter



capture technologies at the Cobourg Marina on Lake Ontario. The launch event was captured by the media (available to view [here](#)).

*“I am so pleased to be working collaboratively with both the Great Lakes Plastic Cleanup project, Pollution Probe and its many project partners. Keeping our waterways clean has always been a priority for the town of Cobourg, and we are proud to support an initiative that will not only help protect but improve water quality for all.”*

- John Henderson, Mayor of Cobourg

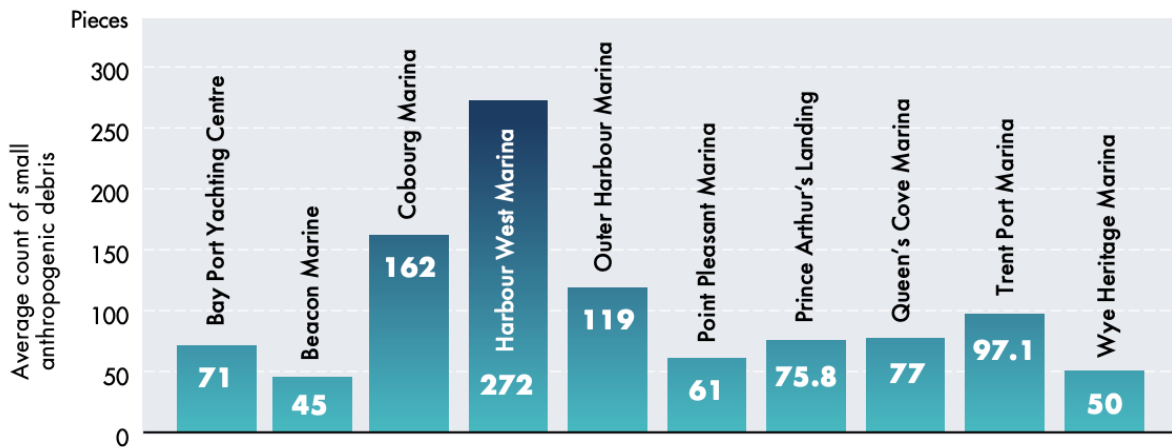
*“This will be the largest initiative of its kind in the world to tackle plastic pollution in lakes and waterways. Removing plastic from the Great Lakes and educating the public about the proper disposal of plastic waste will help ensure impacts on wildlife are reduced, biodiversity is protected, and water resources and ecosystems are safeguarded for future generations. Engaging recreational water users and local communities in solutions to plastic pollution is critical.”*

-David Piccini, Ontario Minister of the Environment, Conservation and Parks and former MPP Northumberland-Peterborough South

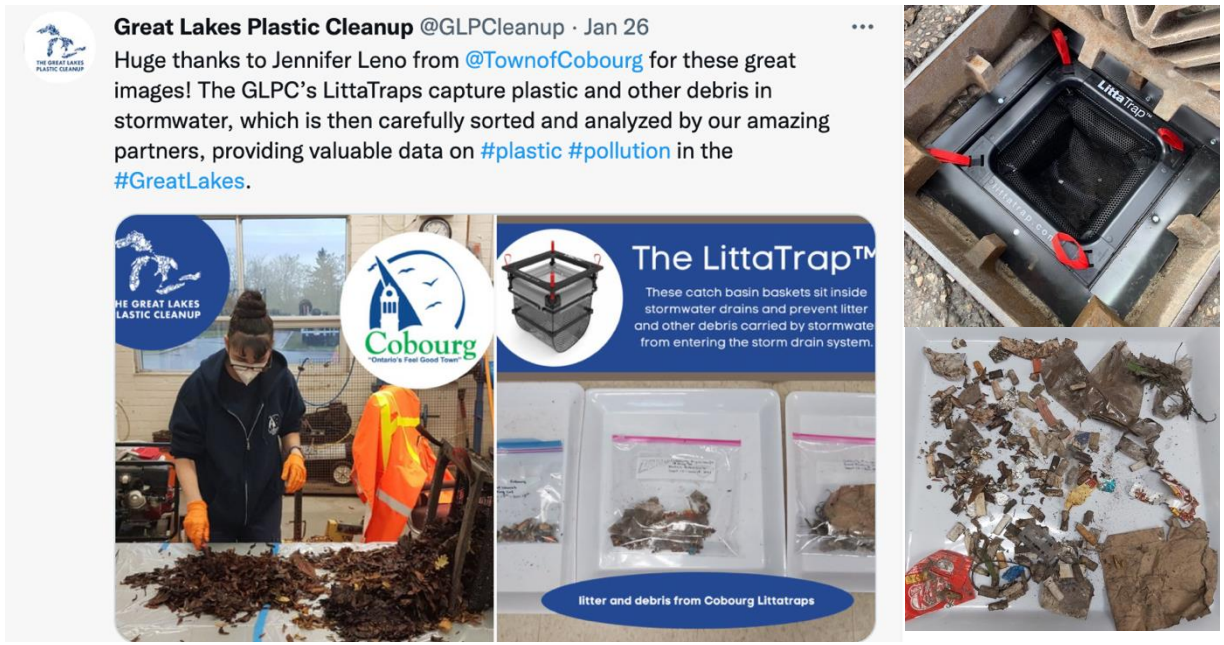
### Data Collection

Data collected from the 2020 season showed that Cobourg was among the top three marinas collecting debris, with an average 162 pieces per day.

**Figure 1: Average count of small anthropogenic debris diverted by marinas over a 24-hour period**



For the 2021 season, Cobourg continued to collect debris from each of its plastic capture devices. In particular, important efforts in undertaking waste characterizations for its three LittaTraps, including carefully sorting and analyzing what was found and submitting the information to be tracked by the Great Lakes Plastic Cleanup and its plastic cleanup network, were highlighted.



### Expanding the Great Lakes Plastic Cleanup in 2022

Lessons learned from the Great Lakes Plastic Cleanup revealed that a critical component of utilizing plastic capture technologies to remove plastics from the Great Lakes was having dedicated individuals or teams available to regularly monitor devices, and collect and analyze the debris (including the amount and kinds of plastics) captured in the device.

Data collected from plastic capture devices in previous seasons provides a solid foundation on which to support more frequent and robust data collection this year and in future. In addition, the data analysed revealed the further opportunities for public engagement to build understanding of the scale of the plastics issue in the Great Lakes. This season, Pollution Probe will explore how preventative technologies could be utilized beyond marinas to engage more communities on the issue of plastic pollution in the Great Lakes. This will include expanding the audience beyond marinas and boaters while helping to build the capacity of a broad network of organizations, communities and individuals working together to end plastic pollution in the Great Lakes.

Specific objectives for this season include:

- Improve the amount of data collected to contribute to filling data gaps and helping communities better understand plastic sources and pathways so that they can make more informed consumer choices.
- Grow the network of organizations, communities and individuals working together to help remove or prevent plastic pollution from entering the Great Lakes.
- Increase the level of shared understanding of plastic pollution in the Great Lakes, by increasing public awareness and knowledge of plastic pollution, proper disposal, and the use of technologies as a potential solution.

Activities will include comprehensive research to determine potential new participants that will help to broaden the audience for the Great Lakes Plastic Cleanup and increase the impact of its outcomes. Additional strategic locations for the installation of plastic capture devices will also be determined with a

focus on those that will increase public access and strengthen data collection. The Great Lakes Plastic Cleanup will build Waste Characterization Teams by hiring students or individuals who would be dedicated to the coordination and collection of data from plastic capture devices across the Great Lakes Plastic Cleanup network.

New educational materials, including web-content, an app and signage will be produced to support local communities interested in learning more about ending plastic pollution. There will also be a focus on increasing the number of engagement and awareness-building opportunities in local communities, including in Cobourg. We look forward to exploring how we can build on existing efforts in Cobourg using the objectives and strategies outlined herein to further contribute to ending plastic waste in our environment.

The Great Lakes Plastic Cleanup will be expanding into the U.S. this year with nine new locations along the Lake Michigan shoreline in Wisconsin, and Lake Ontario and the Niagara River in New York. Plastic capture devices will also be piloted as part of the initiative in Ohio, Michigan and Wisconsin, in collaboration with local organizations. Finally, opportunities to expand into Québec are also being pursued, and efforts are underway to grow sister initiative, the Vancouver Plastic Cleanup, in collaboration with Swim Drink Fish.