Re:European Water Chestnut Rapid Removal Program in the Welland River

Dear Landowner,

Please review this information from the Invasive Species Centre (www.invasivespeciescentre.ca/EWCWelland) and the European Water Chestnut Rapid Removal Program.

European Water Chestnut in the Welland River

European Water Chestnut (EWC) (*Trapas natans*) is an aggressive invasive aquatic plant that was detected in the Welland River by a recreational paddler in July 2020. Four observations were submitted to <u>EDDMapS</u>, a digital invasive species reporting and tracking tool, which triggered a response by the Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF). European Water Chestnut is regulated under the Ontario Invasive Species Act (2015) because of its invasive qualities and potential to cause harm to Ontario's environment, economy, and society.



European Water Chestnut Harmful impacts

EWC is an annual plant that grows from seeds dropped the year before. The plant will grow stems from the seed to the surface of the water. Each stem may produce several branches, each terminating in a rosette that flowers and produces seed. Stems will produce linear leaves which drop early and are replaced by adventitious roots that intertwine with each other in the water column. The result, by July each year, is a dense, floating mat that shades out the water and plants below. This dense mat can become so thick it will alter the flow of water. Plant materials can get lodged in small boat motors, and paddle boats will stall on top of the mat. The seeds are jagged and can cause cuts or pain when stepped on, which makes wading or walking in the water dangerous. The dense mat will shade out native aquatic plants and alter aquatic ecosystems. The entire mat will decompose in the fall and create anoxic conditions in the river harming fish and other aquatic species.

European Water Chestnut Rapid Response Program

With support from the Ministry of Environment, Conservation, and Parks' Great Lakes Local Action Fund and the Ontario Federation of Anglers and Hunters (OFAH) Hit Squad Program (via Canada Summer Jobs), the Invasive Species Centre and the Niagara Peninsula Conservation Authority (NPCA) launched a Rapid Response Program in 2022 to contain the spread of EWC in the Welland River. The program aims to contain the population within 4 years. EWC seeds can survive and sprout for up to 10 years so the initial control efforts will be followed by a monitoring and maintenance program.

Control efforts may look different each year; EWC can be managed using manual activities, heavy equipment, and herbicides. Year one of the EWC Rapid Response Program concluded in 2022, with the ISC successfully removing the known extent of EWC in the Welland River. In 2023 the ISC continued into their second year of the Rapid Response Program where they noticed a significant decrease in EWC numbers from 7000 plants to be removed in year one to only 1000 to be removed year two, proving the Rapid Response Program to be effective.



To minimize disturbance and initiate a first attempt at controlling EWC in the river, the 2024 program will employ four OFAH Hit Squad Field Technicians and one Team Lead to manually remove the plant from the river. The team will be using a small motorboat and canoes to carefully transport the biomass (removed plants) to either E.C. Brown Conservation Area or Chippawa Creek Conservation Area. The team will be working on the river between June 27 and September 2. Other control methods will not be considered until manual activities are deemed ineffective.

Landowners with properties on the Welland River are encouraged to participate in the program. There are numerous opportunities to assist with removal of European Water Chestnut.

How to Help

- 1. **Learn to identify and report European Water Chestnut.** There will be two Bring-your-own-Boat (BYOB) Paddling Tours to provide residents with an opportunity to learn more about this invasive plant, how to identify it, how to help, and how to report any additional sightings in the Niagara Region. Both tours will be held at E.C. Brown Conservation Area. Thursday July 7, 9 a.m. noon and Saturday July 16, 10 a.m. 1 p.m.
- 2. **Support the OFAH Hit Squad Field Technicians.** Landowners can support the control program in any of the following ways:

- a. **River Access.** Do you own and maintain a private boat ramp that can launch a truck with trailer and small boat, AND/OR canoe and kayaks?
- b. **Emergency Exits.** Can you provide a place for temporary docking in case of an emergency due to inclement weather or another emergency?
- c. **Biomass Disposal.** If you have a place where biomass might be placed, EWC plants will rapidly decompose once removed from the river. If we can save time transporting plants to Chippawa Creek or E.C. Brown Conservation Areas, this could greatly increase the amount of EWC we can remove from the river this year. Do you have a location far enough away from the river that it will not wash back where the team might pile EWC to decompose? Or do you have a place where they might pile EWC for the day, before loading into the truck to save the need for trips up and down the river to empty bins?
- d. **Health Breaks.** Can you offer any place for the team to take short breaks (e.g., grassy area, dock, washrooms, drinking water, or business open during regular working hours)?
- e. **Participate in the 'Paddle with a Purpose'.** On Saturday, July 20th and Friday, July 26th from 9:00 a.m. 11:30 a.m. the ISC will be hosting an event at E.C. Brown to help local recreational paddlers learn more about how to identify and report EWC. Having extra eyes on the water can make a huge difference when it comes to invasive species.

Your participation in the program is entirely voluntary. If you want to help, have questions, or would like more information, please contact me, the program coordinator, at your convenience.

Sincerely,

Katie Church

Katie Church EWC Team Lead Invasive Species Centre

Kchurch@invasivespeciescentre.ca