

Chief Executive Officer



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**BY E-MAIL ONLY**  
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**Re: Renewing the Ontario Invasive Species Strategic Plan (ERO 019-7582)**

Thank you for the opportunity to provide comments on the “Renewing the Ontario Invasive Species Strategic Plan” (#019-7582) posted on the Environmental Registry of Ontario (ERO) by the Ministry of Natural Resources and Forestry (MNRF).

Toronto and Region Conservation Authority (TRCA) is actively involved in invasive species management within our jurisdiction through the [TRCA Invasive Species Management Strategy 2020-2025](#) to ensure invasive species are prevented from spreading to new areas, are monitored, controlled, and managed effectively.

**Government Proposal**

It is our understanding that MNRF is initiating the renewal of the Ontario Invasive Species Strategic Plan (2012) to build on the experiences of the previous 10 years, focusing on the future. The updated Strategic Plan proposes to include updated provincial direction and commitments to address the ongoing risk of invasive species in the province. The Strategic Plan is guided by overarching goals to prevent, detect, respond, manage, and adapt to invasive species. In 2015, the Province introduced the [Invasive Species Act](#), to regulate the prevention and management of invasive species in Ontario.

The document attached to the ERO posting, “The Ontario Invasive Species Strategic Plan: Review of Progress (2012-2022),” contains a detailed description of milestones and significant achievements both within Government and by partners that address the threat of invasive species, strong partnerships with key delivery agents, and new research and management approaches.

**General Comments**

TRCA staff have reviewed the ERO posting and the supporting document and recognize the importance of provincial action needed on the issue of invasive species. Climate change is accelerating the introduction and spread of invasive species, producing synergistic effects that are more amplified than species’ individual impacts. The prevalence of invasive plants will worsen with climate change due to longer growing seasons, increased disturbance, and increased carbon in the atmosphere. Climate change is affecting ecosystems at multiple scales, making some more vulnerable, and impacting ecological function and the provision

of ecological goods and services, including replacing native vegetation through competition for space, nutrients, and water.

### **Detailed Comments**

Please see below TRCA's responses to the questions posed in the ERO posting for your consideration.

### ***What is your vision for the future of invasive species prevention and management in the province?***

- A vision for the future of invasive species prevention and management in the province should include an implementation plan for the Ontario Invasive Species Strategic Plan. The addition into this document of a practical and effective implementation plan would result in better coordination and success in terms of achieving Strategic Plan actions and outcomes. In TRCA's experience, we feel there are significant opportunities for advancement of the 2012 Invasive Species Strategic Plan through more outcome based execution and implementation. A more targeted and focused approach on Strategy implementation could assist in countering continued degradation of the environment via invasive species infestations. Furthermore, an action oriented Plan could help mitigate or offset the continued establishment (e.g. [marbled crayfish](#)) and spread (e.g. [hemlock woolly adelgid](#)) of invasive species, which become more difficult and more costly to manage as time goes on.
- Creating a list of all known invasive species in Ontario by taxa and making it widely available will help increase public awareness and assist organizations undertaking direct public engagement and on-the-ground control to be better informed and better prepared for early detection and rapid response. We would request that the government consider creating publicly available watch lists of emerging species not yet present in Ontario and sleeper species already present or present in nearby jurisdictions that are likely to become invasive in the Ontario context with climate change.
- Accelerated timelines on risk assessment and the implementation of regulations are also needed. In TRCA's experience, following the risk assessment, it can take up to four years for species to become regulated. This delay results in increased spread, continued ecosystem degradation, and ultimately increased costs to eradicate or bring the species under control.
- Another useful measure would be updating Ministry policies (e.g. Ministry of Transportation and associated agencies) to eliminate invasive plants from existing seed mixes and focus on the inclusion of native plants (pollinator focused and not attractive to deer). TRCA and its native seed and plant vendors could assist with increasing the availability of native seed supply, but other suppliers' efforts across Ontario would be necessary to ensure this material is sufficiently available. Updated purchasing and procurement requirements related to native seed mixes would be beneficial across the Ontario Public Service.
- A well-coordinated, fully resourced collaboration of several different agencies working towards a common goal for invasive species prevention and management is another key to implementation. To empower local action, clear provincial guidance is needed as well as funding and coordination with federal, international, and local agencies, e.g., funding for education and enforcement of regulations. We

recommend that inter-agency forums (e.g., workshops or conferences) be leveraged or established with a focus on implementing the Strategy involving all relevant agencies and stakeholders. TRCA conducts such forums and workshops with MNRF and MECP related to stormwater management and flooding and would be pleased to participate or be involved in a similar conference or forum led by your Ministry.

- We note that several actions and tactics identified in the existing strategy are vague and could benefit with more detail. A number of strategies commit to *encouraging, investigating, or considering*. However, we recommend that these actions and tactics in the updated strategy be made as specific and direct as possible and have a time frame for when they will be completed.
- Based on the review of progress, it should be clear what actions were successful, not started, abandoned, etc. We recommend that The Strategic Plan include a dashboard with all past actions and include information on the status for which was achieved by 2022. The Strategic Plan should give explicit actions that will be taken based on the information gathering and partnerships established from 2012-2023.
- There is no indication of how the progress will be assessed in the existing Invasive Species Strategic Plan. The updated Plan should include a set of metrics for the key actions and/or possibly for the tactics. The metrics should be measurable and establish a timeframe for completion.
- There should also be a timeframe for when progress will be evaluated. This could be an annual report that uses metrics to evaluate progress.
- The document could also set out criteria for when the Plan should be updated (i.e., at regular, e.g., two or five year intervals) but also to respond to emerging trends or to incorporate modern management techniques.
- Prevention is another key component via a centralized early detection reporting tool that is widely discoverable and accessible and alerts multiple agencies who are best placed to mobilize a rapid response supported by contingency funding.
- Ensure provincial and partner staff including Conservation Authorities are equipped and supported to participate in surveillance surveys and rapid response. Formalize a government-led “invasive species monitoring program” that requires consultants/agencies to report to the government on surveys or collection permits to highlight if a “least wanted” species was observed.

***What opportunities are there for the future of invasive species prevention and management in Ontario?***

- Urgent action is required to regulate the horticultural industry. The Canadian Food Inspection Agency has stated that the horticultural industry is the largest pathway for the introduction of invasive plants, with at least 52% of plants arriving to Canada via ornamental gardens. A more recent American [study](#) determined that the horticultural industry is exacerbating the climate change driven spread of 80% of invasive plant species. Conservation authorities and municipalities are making significant expenditures to control invasive plants that can still be purchased at garden centres and nurseries.
- Improvements to public education through well-timed, targeted campaigns using multiple tools on multiple platforms are needed. For example, community groups on

social media platforms frequently sell or trade invasive plants (both regulated and unregulated) and the lack of awareness and understanding about invasive species most certainly contributes to their spread. Education campaigns could target the gardening community in spring and fall, and late spring and summer could target the boating and angling communities.

- Also to be considered is implementing a systemic surveillance program, including environmental DNA, for high-risk species that are not found in Ontario, or have a very limited distribution. The current provincial practice seems to have a reliance on incidental observations via Early Detection and Distribution Mapping System (EDDMapS). This does not provide adequate monitoring to protect Ontario's ecosystems. Most Ontarians do not know how or where to report invasive species. The best, and most cost-effective way to address invasive species is to prevent their establishment, therefore, monitoring and reporting are essential tools.
- Awareness opportunities exist for Ontario anglers and boaters through targeted campaigns that are tied to licence renewal (fishing or boat), as well as boat launch campaigns. There are also awareness and education opportunities with new Canadians who practice live release for ceremonial purposes.
- There are established agencies well-positioned to help achieve the provincial strategy. These include the Ontario Invasive Plant Council, conservation authorities, and municipalities, etc. These agencies should be fully recognized and leveraged through the actions and tactics identified in the updated strategy. Much of what is needed to effectively manage invasive species needs to be decentralized which requires using existing agencies to undertake many of the actions.
- The focus of Section 5—Spotlight on Phragmites is on wetlands and the control of phragmites within them. While the first sentence references growth in roadside ditches, phragmites establishment and dispersal along linear infrastructure should be identified as a focus area. Ditches and low areas along roads, highways and rail corridors possess desirable growing conditions for phragmites, and also provide links between wetland habitats for phragmites to move and become established. Specific direction on monitoring and management of phragmites outside of wetlands should be provided. Plans for provincially owned or managed linear assets, such as highways or rail should be developed and implemented by the Ministry of Transportation and its agencies.

***Do you think there are barriers related to invasive species prevention and management in Ontario? How could these barriers be addressed?***

- Lack of funding is a barrier to implementation that the province can help fill, committing to this in the Strategic Plan.
  - An increase in funding is needed to improve coordinated control efforts, research control techniques including biological controls, and surveillance and monitoring. Long-term, multi-year funding is required to undertake proper invasive species management, particularly invasive plants.
  - There is a risk of exacerbating invasive plant spread and herbicide resistance without multiple years of consistent, effective control. Land managers cannot do this without more support. Consistent multi-year funding is required to enable planning, coordination with neighbouring property owners/land

managers and on-the-ground control efforts to achieve success. For established plant species, landscape-level control is required to achieve lasting success, however, ongoing surveillance will be required given the persistence of these species on the landscape.

- Please consider restoring funding to the Ontario Invasive Plant Council (OIPC). The Province's own review of the Ontario Invasive Species Strategic Plan: Review of Progress (2012-2022) celebrates the work of OIPC, yet provincial funding was eliminated in 2019. This non-profit organization produces the highest standard of technical documents and best management practices in Canada, and perhaps North America. These free resources are an incredible value to professional land managers, including conservation authorities, as well as the public who wish to undertake management in their gardens and yards. OIPC's work is not duplicated by the Invasive Species Centre, but rather complements it.
- Ongoing efforts are needed to continue with the development and updates of technical bulletins and best management practices, especially given climate change, which is exacerbating invasive plant introduction, establishment and spread.

Overall, TRCA agrees that the Province should take further and enhanced action on invasive species through funding and increased collaboration with other agencies, including federal agencies, conservation authorities and municipalities. These actions are required to advance the provincial Invasive Species Strategic Plan, including funding needs of local agencies who can contribute to the implementation of regulations and local strategies.

TRCA is committed to working collaboratively with municipalities, provincial ministries and agencies, Indigenous communities, and stakeholders to address the impacts of invasive species in a manner that is informed by the latest watershed science to help protect our ecosystems and natural environment.

Should you have any questions, require clarification on any of the above, or wish to meet to discuss our remarks, please contact the undersigned at (416) 667-6290 or at [john.mackenzie@trca.ca](mailto:john.mackenzie@trca.ca).

Sincerely,

<Original signed by>

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Chief Executive Officer

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