



Responding to Water Soldier in Lake Simcoe

February 25, 2026

Invasive Species Centre on behalf of the Lake Simcoe
Water Soldier Working Group

Water Soldier Detection in Lake Simcoe

- Water soldier is an aquatic invasive species native to Europe and Northwest Asia
- First detected in North America in the Trent-Severn Waterway in Trent Hills (2008)
- In 2024, ~40 floating plants were detected in outside Young's Harbour
- Initial shoreline surveying in 2024 determined:
 - Large well-established infestation
 - Spatially limited to Cook's Bay between Holland River and Keswick (6 kms)



Lake Simcoe Water Soldier Working Group

Purpose: a collaborative effort to support water soldier surveillance, monitoring and response in Lake Simcoe, and explore options to reduce impacts of this new plant.

Focuses:

- Communications and outreach
- Monitoring plan development & implementation
- Control plan development & partnership identification



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Species
Centre**



**GEORGINA
ISLAND**



**Chippewas of RAMA
First Nation**



**Ducks Unlimited
Canada**



Canada



GEORGINA



**Lake Simcoe Region
conservation authority**



Innisfil



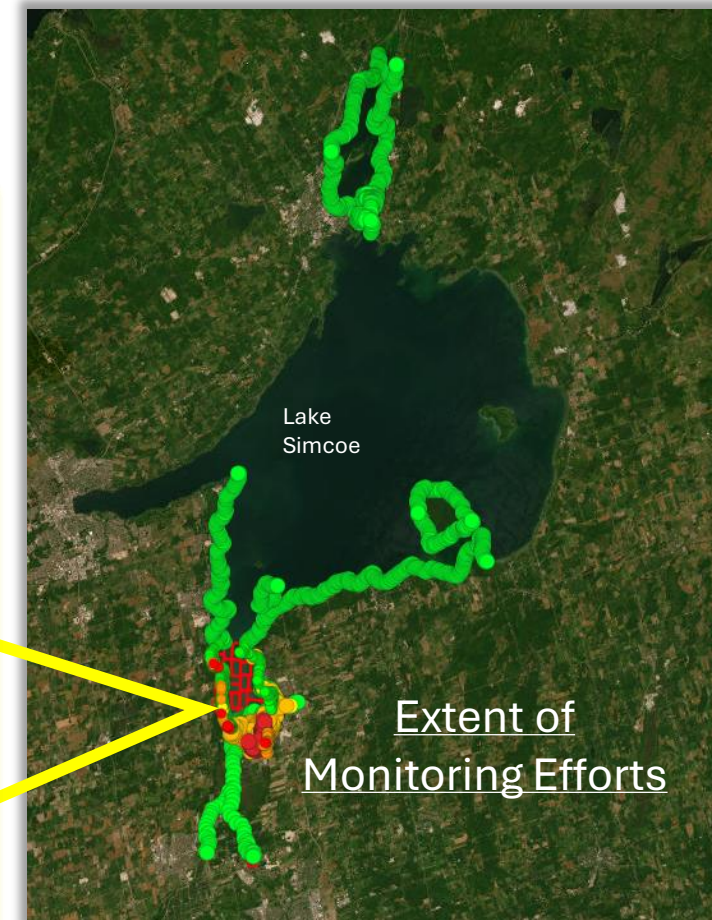
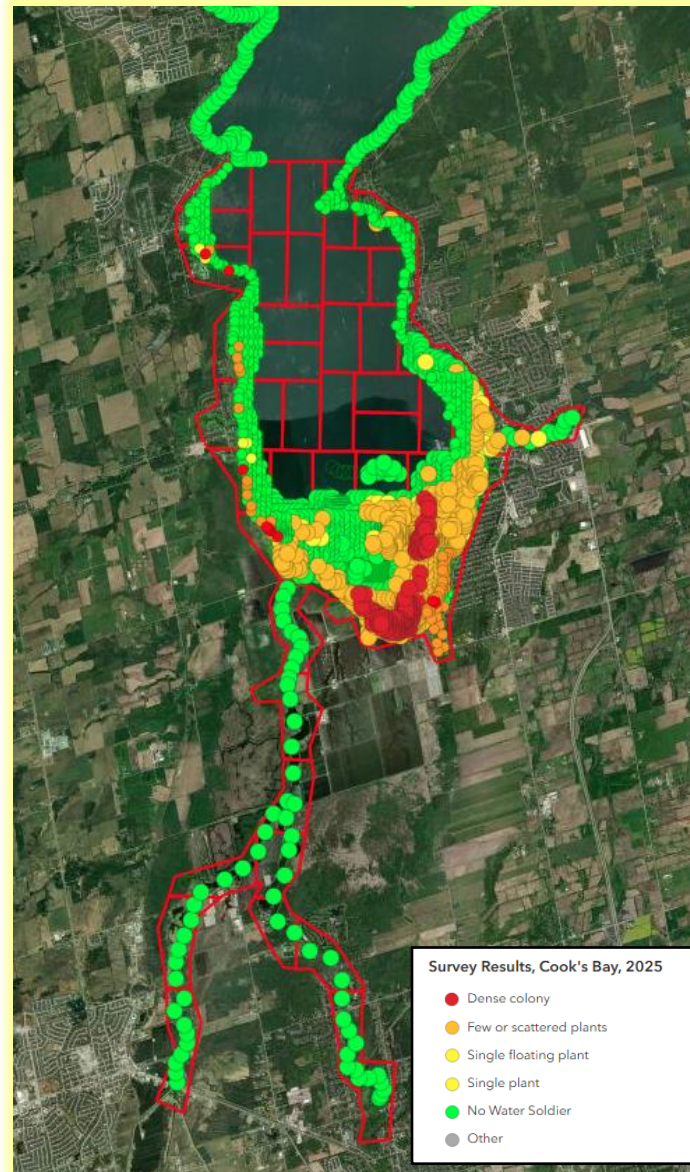
York Region

Ontario



Monitoring 2025 Findings

- Inter-agency monitoring team made up of various organizations:
 - Chippewas of Rama First Nation
 - Chippewas of Georgina Island First Nation
 - OFAH Foundation
- Monitored over 5,000 ha of Lake Simcoe
- Completed over 3,000-point intercepts
- No plants found in the Holland River
- **~450 ha** of water soldier was found in Cook's Bay



Water Soldier Lake Simcoe Photos



Dense Water soldier colony emergent and submergent form Lake Simcoe, 2025



Dense Water soldier colony emergent and submergent form drone photo Ducks Unlimited Lake Simcoe, 2025

Water Soldier Impacts to Lake Simcoe



Impacts to Lake Simcoe's Health

Disrupting progress that has been done to improve the lake health

Increase stagnant water which lead to algae blooms

Decrease native plant biodiversity



Impacts to Lake Simcoe's Recreation

Dense mats inhibits recreational activities such as

- Swimming
- Boating
- Angling
- Water skiing
- Waterfowl hunting
- Sharp serrated leaves make it hard to handle WS plants



Impacts to local landowners and users of the lake

Local farmers irrigation (Holland Marsh Famers)

Township water intakes

Waterfront properties access

Recreational access

We are at a critical juncture ...

- Plants are contained to Cook's Bay (2025) for now, but spread risk is increasing
- Action is essential to prevent further expansion
- No single agency can manage this alone – cross-agency coordination is required
- The working group's combined expertise and shared response capacity are key to success



An aerial photograph of a lake with a large, dense green algal bloom covering a significant portion of the water surface. In the foreground, a large motorboat with several people on board is visible. Further back, there are two smaller kayaks and a canoe. The background shows a shoreline with tall reeds and a clear blue sky.

Risk of Doing Nothing

- High probability of subsequent spread within and outside Lake Simcoe
- Increased pressures on shoreline residents and businesses over time
- Inhibits viability of alternative future management options

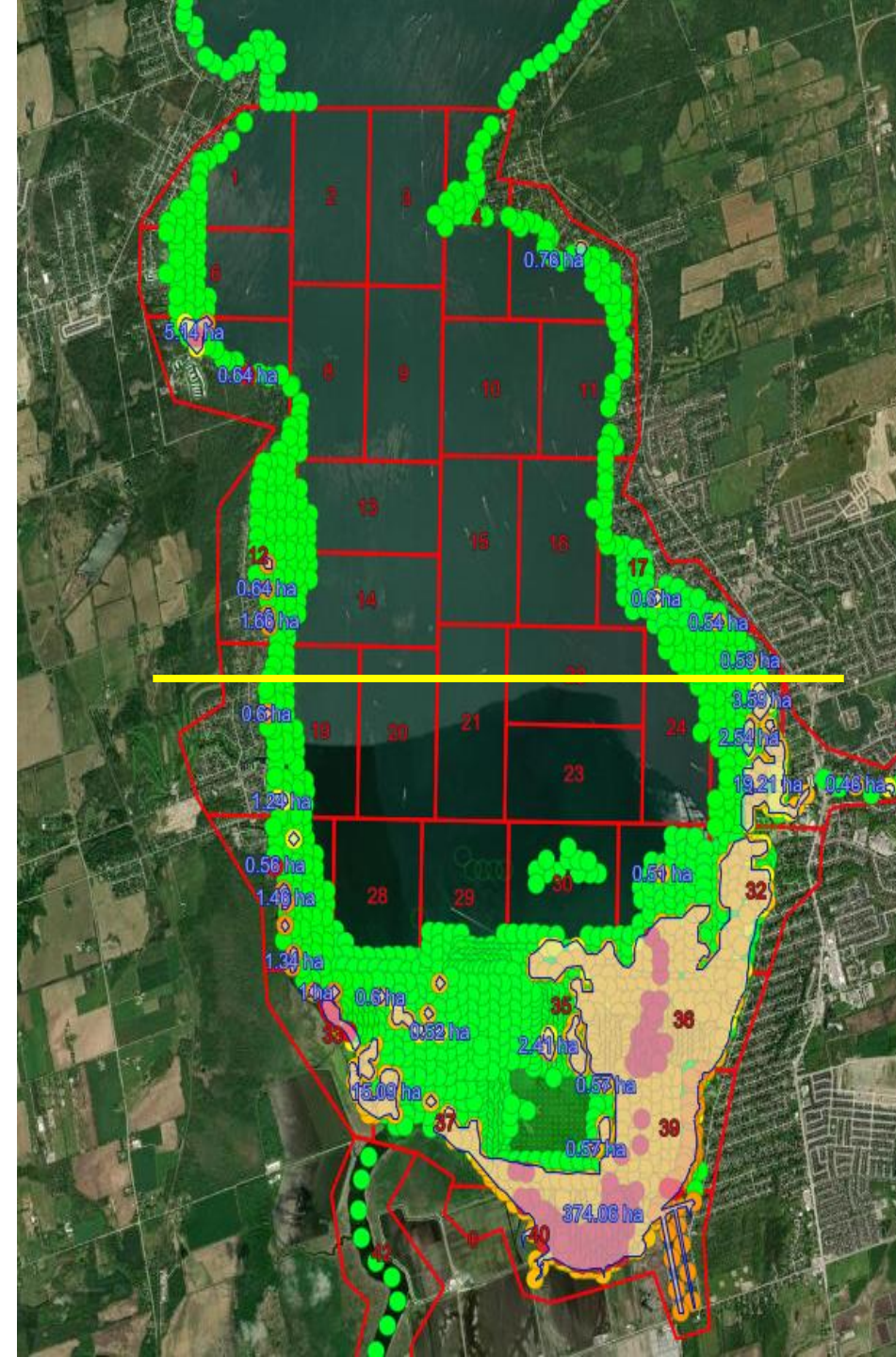
Proposed Plan Water Soldier in 2026

- **Integrated Management Plan in progress:** data gathering, knowledge review, and management options being developed (anticipated DRAFT April 2026)
- **Engage with Municipalities:** (ongoing)
- **Funding:** secure consistent funding (*estimated treatment cost ~ \$5M over 5 years*) establish clear timelines, goals and milestones (ongoing)
- **Detection and Monitoring:** increase surveillance and monitoring (summer 2026)
- **Proposed Management Implementation:** Collective agency support, phase 1 of management plan (summer 2026)
- **Monitor results of management :** Establish coordinated action for the coming years and finalize phase 2 of management plan (Fall – Winter 2026)



Working Group Integrated Management Plan Approach 2026

- Use the distribution map to “draw a line” separating priority management areas
- Address smaller, northern populations first reducing spread into lake
- Use results to inform long-term management strategies for larger southern populations
- Combine management tools to:
 - Reduce infestation size
 - Slow further spread
 - Support long-term control within Cook’s Bay
- Projected estimated range \$750k - \$1.5M per year



A Path to Success: Collaborative Action



Strong Provincial and Federal Interest: partnerships and direct support

Supporting monitoring key management activities

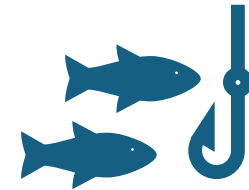


Local Municipal Involvement

Participation in Working Group

Endorse Management Plan

Communications Support



Lake Simcoe Region Conservation Authority Expertise

Data, monitoring and technical support

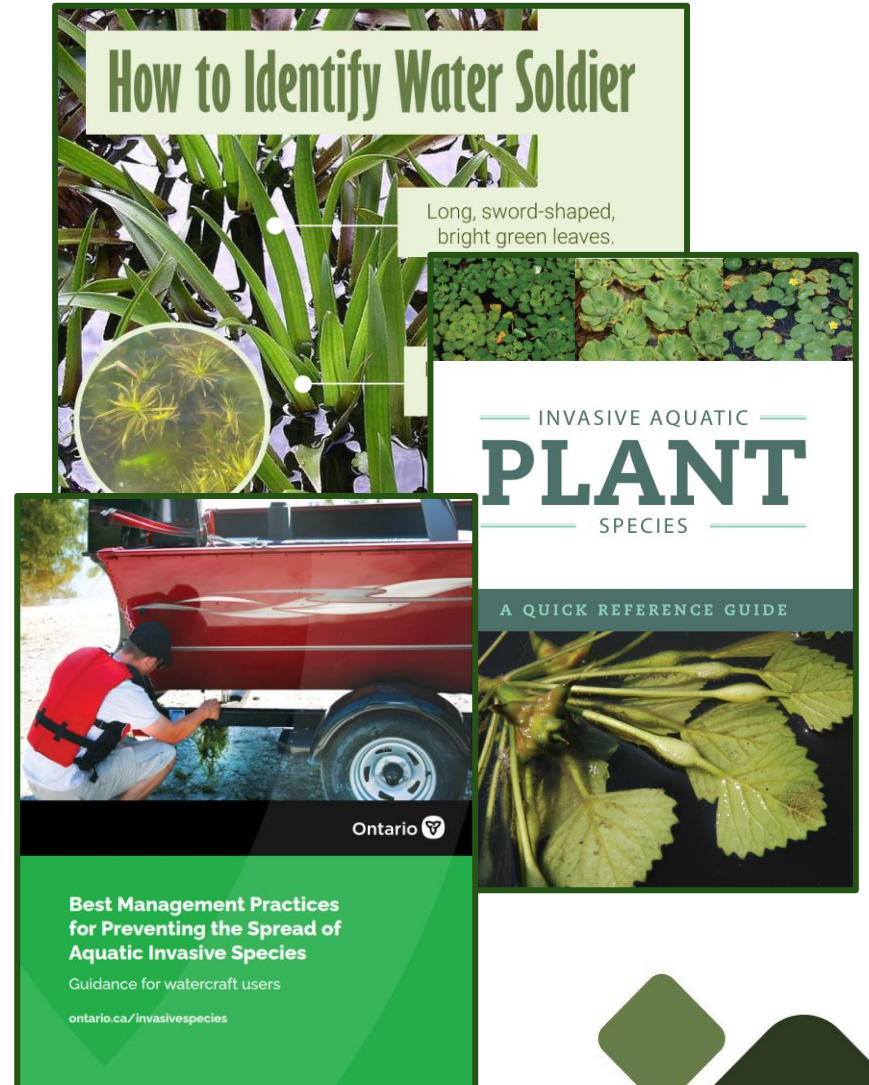
Communication and Outreach

Communications Overview - Possible Tactics

Sharing this message is a collective effort. With support from partner organizations, we can increase awareness, encourage responsible action, and prevent the further spread of water soldier on Lake Simcoe.

Opportunities for Town of Georgina support:

- Signage at marinas, boat launches, and other key watercraft spots
- Social media posts with key messages and calls to action
- Information on website with links to central water soldier page (in development!)
- Article in the quarterly newsletter
- Resources available at local events
- Connections to tourism bureaus, private marinas, boat rentals, bait and tackle shops, and other in the target audience list



Future Direction

Winter 2026

- Continue Lake Simcoe Water Soldier Working Group - recruit new members
- Continue communication and outreach with the public and key stakeholders and rightsholders

Winter/Spring 2026

- Integrated Management Plan – development continues: collecting data, reviewing current knowledge
- Evaluate risks and benefits – ecological, operational, and social considerations
- Seeking feedback – from working group members, stakeholders, rights holders and experts
- Establish coordinated action for the coming years

Summer/Fall 2026

- Increase monitoring and surveillance
- Propose Implementation of phase one management plan
- Monitor results of management and finalize phase 2 of management plan



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