

Interjurisdictional Project: Regional Invasive Aquatic Plant Control Prioritization and Needs Assessment update

GLP Panel meeting

October 26, 2021

List parameters

- Updated list based on committee feedback:
- Impact score of 4, 5, 6 (Total impact scores can be 0-6). Also included those that score 3 and are "high" in env or soc/cult (this is purple loosestrife and *Typha angustifolia*; also include yellow floating heart as score of 3 is being re-assessed by GLANSIS and important to managers)
- All watchlist species, as these represent species that are in unique spots in the invasion timeline to potentially eradicate. All are 5s anyways, except for graceful cattail (*Typha laxmanii*), which is a 2.
- Exclude Enteromorpha (not established), Phrag (enough being done by others)
- *Conium maculatum*, *Echinochloa crus-galli*, *Persicaria maculosa*, *Solanum dulcamara* excluded due to terrestrial impacts
- Added water soldier (established in Canada)

Priority plant species

1 st Draft	Species	Common Name	Status
Done	<i>Cabomba caroliniana</i>	Carolina fanwort	NI
(low priority)	<i>Didymosphenia geminata</i>	rock snot	RE
Done	<i>Egeria densa</i>	Brazilian waterweed	WA
Done	<i>Eichhornia crassipes</i>	water hyacinth	WA
Done	<i>Hydrilla verticillata</i> (include mono/di biotypes)	Hydrilla	NI
(low priority)	<i>Hydrocharis morsus-ranae</i>	European frogbit	NI
Done	<i>Iris pseudacorus</i>	yellow iris	NI
	<i>Lythrum salicaria</i>	purple loosestrife	NI
	<i>Myriophyllum aquaticum</i>	Parrot feather	WA
Done	<i>Myriophyllum spicatum</i> (include hybrids)	Eurasian watermilfoil	NI
	<i>Najas minor</i>	brittle waternymph	NI
	<i>Nitellopsis obtusa</i>	starry stonewort	NI
	<i>Nymphoides peltata</i>	yellow floating-heart	NI
	<i>Phalaris arundinacea</i>	reed canarygrass	NI
	<i>Pistia stratiotes</i>	water lettuce	WA
	<i>Potamogeton crispus</i>	curly-leaf pondweed	NI
	<i>Stratiotes aloides</i>	water soldier	WA
	<i>Trapa natans</i>	water chestnut	NI
	<i>Typha angustifolia</i> (include hybrids)	narrow-leaved cattail	NI
	<i>Typha laxmanii</i>	Graceful cattail	WA

Literature review components

- Lead researchers/experts in GL:
- Impact score (GLANSIS):
- Jurisdictions regulated:
- Jurisdictions present: e.g., MI (**Great Lakes** basin), OH (**Great Lakes** and Ohio River basin), NY (**Great Lakes** and Mid-Atlantic basins), ONT (**Great Lakes** basin), PA (Ohio and Mid-Atlantic basins)
- General control strategies: chemical, manual/mechanical, physical, biological
- Mgmt/control case studies from the Great Lakes
- Mgmt/control case studies from outside the Great Lakes
- Novel/notable laboratory or in situ research
- Management gaps/challenges

Management Practices: Summary and Recommendations

Chemical (note: most herbicides negatively impact a subset of non-target organisms; please refer to herbicide-specific text for more details)

Treatment	Effect	Potential uses	Should not use	Efficacy	Comments
Fluridone	Slow-acting systemic herbicide				
Endothall	Fast-acting contact herbicide				
Copper	Fast-acting contact herbicide				
Diquat	Fast-acting contact herbicide				
Penoxsulam	Slow-acting systemic herbicide				
2,4-D	Slow-acting systemic herbicide				
Triclopyr	Slow-acting systemic herbicide				
Glyphosate	Fast-acting systemic herbicide				
Imazapyr	Fast-acting systemic herbicides				
Carfentrazone-ethyl	Fast-acting contact herbicide				
Imazamox	Fast-acting systemic herbicide				
Flumioxazin	Fast-acting contact herbicide				
Florpyrauxifen-benzyl	Fast-acting contact herbicide				

Management Practices: Summary and Recommendations cont.

Mechanical, physical and biocontrol

Treatment	Effect	Potential uses	Should not use	Efficacy	Comments
Cutting/harvesting	Harvesting via boat-mounted cutters				
Rotovation	Underwater rototilling				
Benthic barriers	Opaque fabric covers				
Dredging	Plant and sediment removal				
Drawdown	Lower water levels				
Hand-pulling	Includes diver-assisted suction harvesting				
Biocontrol	Biological agents				