Lake Iroquois Association

Spring 2020

The Problem:
Invasive Eurasian Watermilfoil

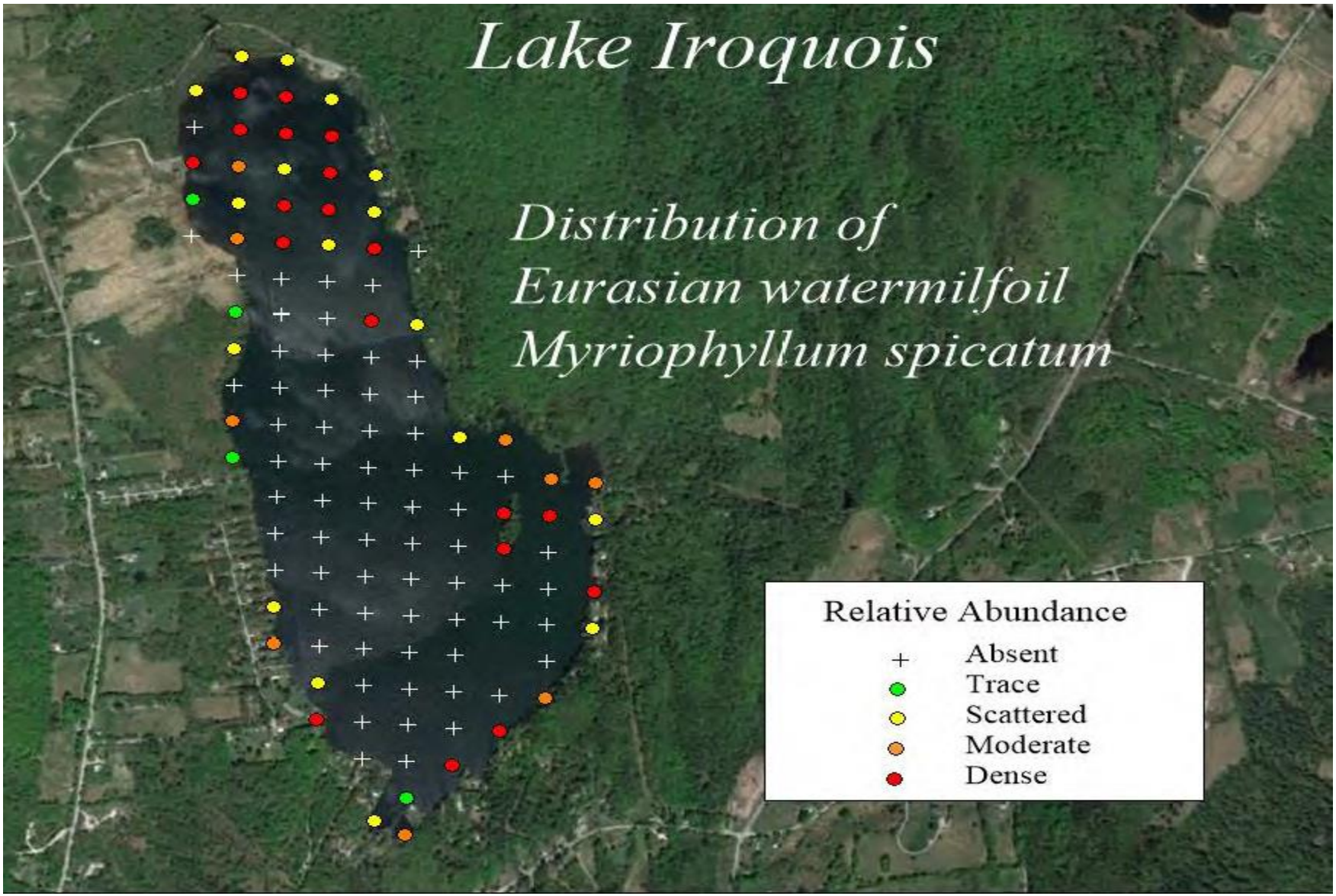
- First detected in Lake Iroquois in 1990
- Aquatic plant survey of 2014 – 70 acres of 244 acre lake infested
- Aquatic plant survey of 2019 – 86 acres infested
- In 1984: 45 native aquatic species found
- In 2019: 32 native aquatic species found – 28% decline

August 2019
Photo by Pogo Senior

Why is Invasive EWM a Problem?

- Difficult to eradicate because has no natural predators
- Damages and disrupts natural ecosystems by squeezing out native plants
- Native aquatic plants are crucial to provide food and habitat for native animals and insects
- Profoundly impacts ecosystem food web, affecting not only fish, but birds, amphibians, and mammals
- Forms dense mats severely limiting recreational uses of a lake
- Can also contribute to algal growth
- Can cause decline in property values

2019 Aquatic Plant Survey



What is LIA Doing About EWM?

Creation of a multi-faceted long range management plan which includes:

- Benthic mats (bottom barriers)
- Diver-Assisted Suction Harvesting (DASH)
- Herbicide – ProcellaCOR
- Greeter program and pressurized hot-water boat wash station
- Continued work on reduction of nutrient and sediment runoff
- Continued education of lakefront property owners about lake friendly landscaping and creation of riparian buffers
- Continued education and outreach to all lake users on best practices
- Continued in-lake and tributary monitoring

Why Use the Herbicide ProcellaCOR?

- Bottom barriers can only be used in very limited areas, as they kill everything under them
- DASH is very slow and very expensive: approximately $6000/acre
- Reduction of nutrient levels helpful but extremely slow and there will always be nutrients in the lake
- Herbicide provides ability to reduce enough EWM to gain control over the infestation

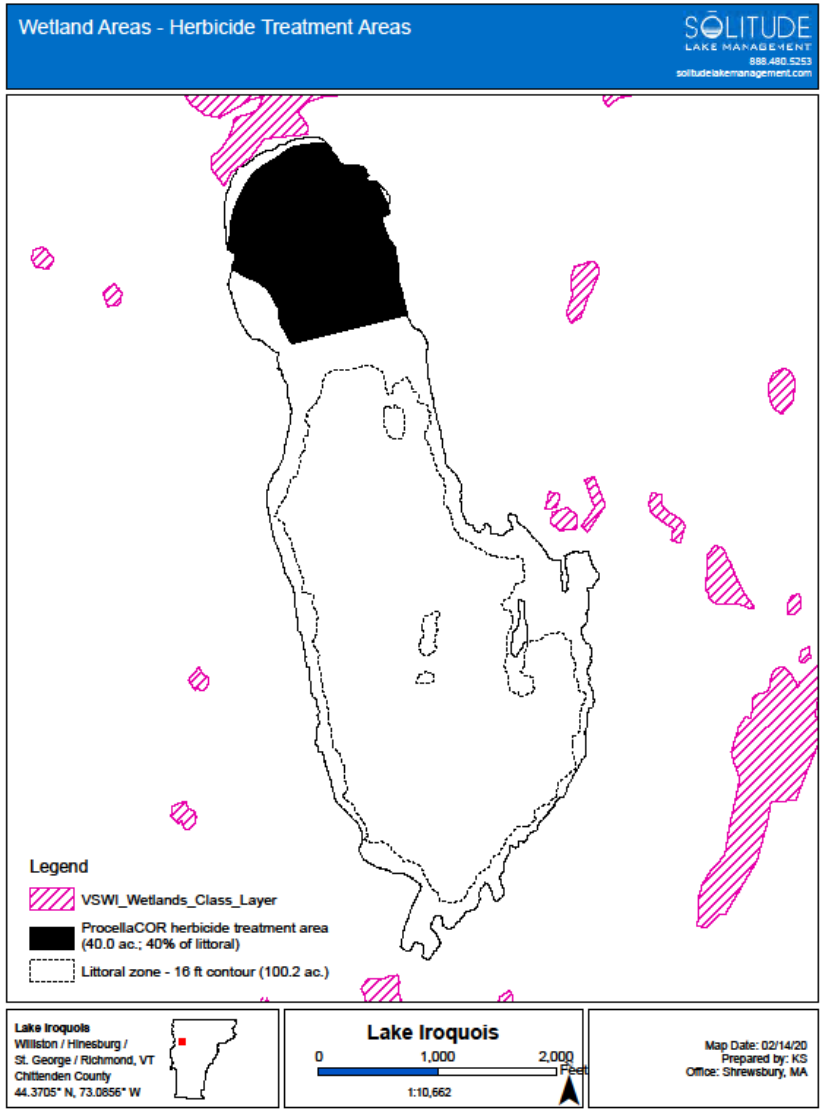
Is ProcellaCOR Safe?

- Targeted specifically for EWM
- Used at very low concentrations: <4 ppu
- Vermont Department of Health: “poses negligible risk to public health”
- Shown to have no adverse impact on native plants or animals
- Does not cause cancer, genetic mutations, genetic damage
- It is not a neonicotonoid
- Dissipates quickly – often in less than 24 hours
- Used successfully in 4 Vermont lakes in 2019

The Permit Process

- LIA-LIRD jointly submitted an Aquatic Nuisance Control Permit Application to Vermont Department of Environmental Conservation (DEC)
- Treatment to be limited to 40acres (40% of littoral zone) at north end of lake
- All property owners abutting the lake and abutting the waterbodies for one mile downstream notified of application submission
- DEC reviews application, then posts online for public comments
- LIA-LIRD has sent out press releases, posted all information including complete permit application with long-range management plan on website, is scheduling public meetings, and presentations to Selectboards
- If granted, LIA-LIRD will notify all property owners, recreation departments, camp sponsors and participants of expected date of treatment
- Drinking water will be supplied on day of treatment to those households who draw their drinking water from the lake
- Post-treatment aquatic plant survey to be done in September

Planned Treatment Area: Approximately 40% of Littoral Zone



Estimated Costs

Estimated Program Costs – 2020 dollars	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Description	2020	2021	2022	2023	2024
Herbicide treatment	$ 52,000	$39,000 – 52,000-	$-		$ -
Suction harvesting	$ -	$	$ 15,000	$6,000	$6,000
Benthic Barriers		$500	$500	$500	$500
Monitoring/annual aquatic plant surveys	$ 5,000	$ 3,500	$ 3,750	$ 3,750	$ 3,750
Notification (mailings, signs, etc.)	$1,500	$1,500-	$ -		$ -
LIA Expenses (consultant for permit prep, meetings, miscellaneous)	$4,000				
Totals	$62,500	$44,500-$57,500$	$19,250	$10,250	$10,250

Further Information

www.lakeiroquois.org