



# 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

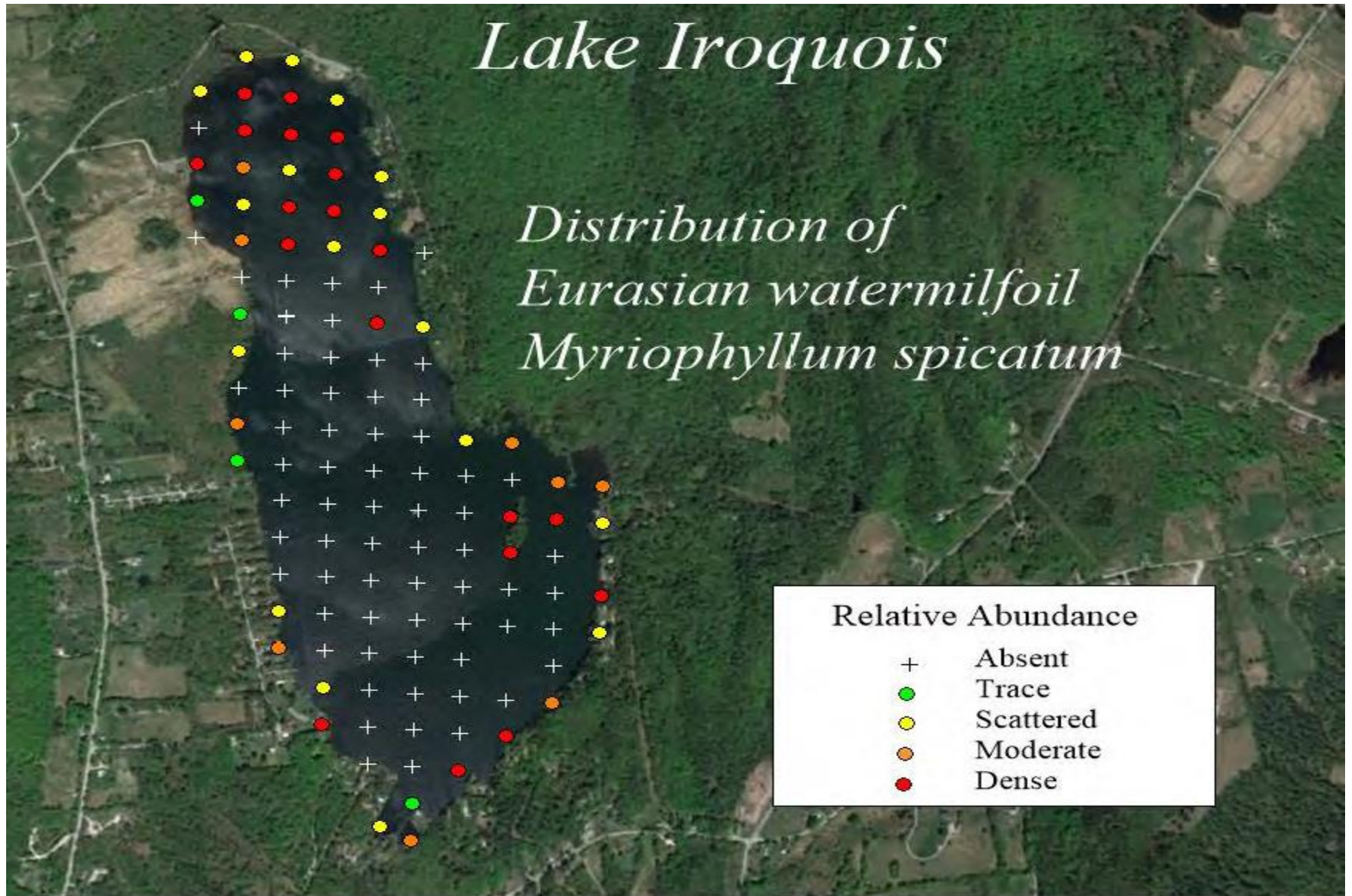


*August 2019  
Photo by Pogo Senior*

# 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 ProcettaCOR Safe?

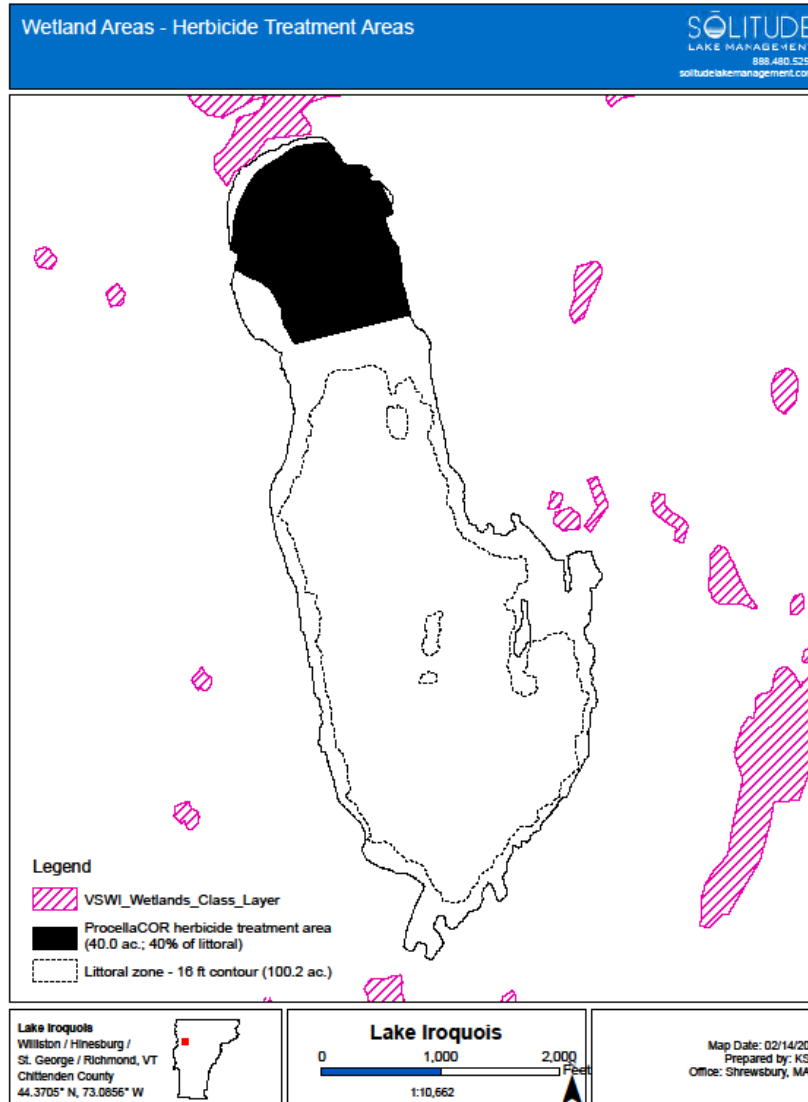
- Targeted specifically for EWM
- Used at very low concentrations: <4 ppu
- Vermont Department of Health: “poses negligible risk to public health”
- Shown to have no adverse impact on native plants or animals
- Does not cause cancer, genetic mutations, genetic damage
- It is not a neonicotinoid
- Dissipates 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 40 acres (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

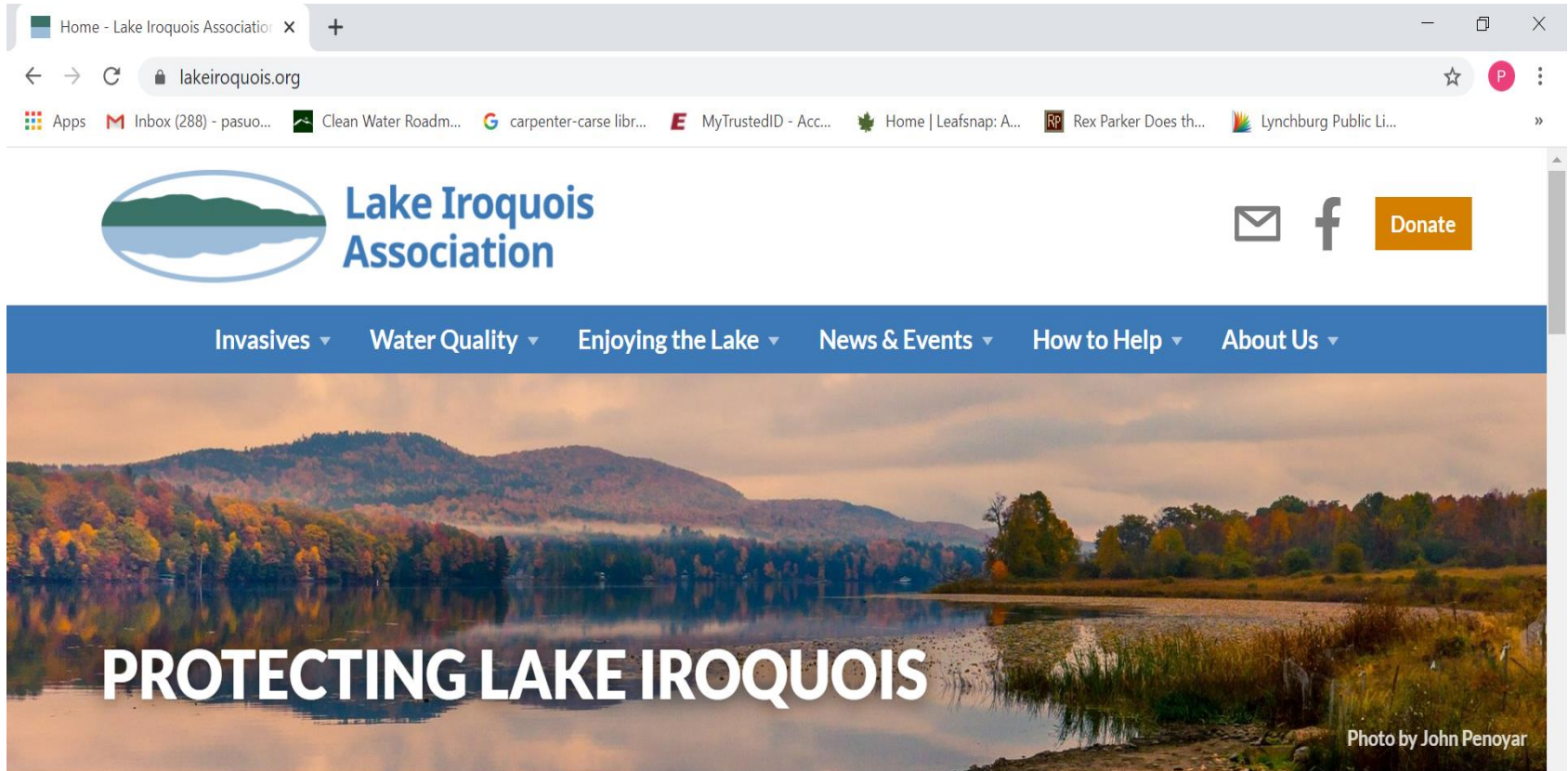


# Estimated Costs

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				
<b>Totals</b>	\$62,500	\$44,500-\$57,500\$	\$19,250	\$10,250	\$10,250

# Further Information

## [www.lakeiroquois.org](http://www.lakeiroquois.org)



The screenshot shows a web browser window displaying the homepage of the Lake Iroquois Association. The browser's address bar shows the URL [lakeiroquois.org](http://lakeiroquois.org). The website header features the Lake Iroquois Association logo on the left, which consists of a stylized lake and hills within an oval. To the right of the logo is the text "Lake Iroquois Association". Further right are icons for an email address, Facebook, and a "Donate" button. Below the header is a blue navigation bar with the following menu items: "Invasives", "Water Quality", "Enjoying the Lake", "News & Events", "How to Help", and "About Us". The main content area features a large, scenic photograph of Lake Iroquois during autumn, with colorful trees reflected in the water. Overlaid on the bottom left of the photograph is the text "PROTECTING LAKE IROQUOIS" in large, white, bold, sans-serif capital letters. In the bottom right corner of the photograph, there is a small credit line: "Photo by John Penoyar".

Nestled amid the rolling hills of mid-Chittenden County, Lake Iroquois is a 237-acre spring and tributary-fed body of water surrounded by the towns of Williston, Hinesburg, Richmond and St. George. The Lake Iroquois Association is a steward of this haven for recreation and wildlife and the surrounding ecosystem.