BCA Meeting
July 30, 2016

Invasive Water Plant Species: A Proactive Approach

WELCOME

THANK YOU
FOR YOUR MEMBERSHIP!!

Brantingham Community Association

PAST and PRESENT

Thank you to our area directors!

Thank you to our officers!

Invasive Species 101

An Update

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has.”

- Margaret Mead

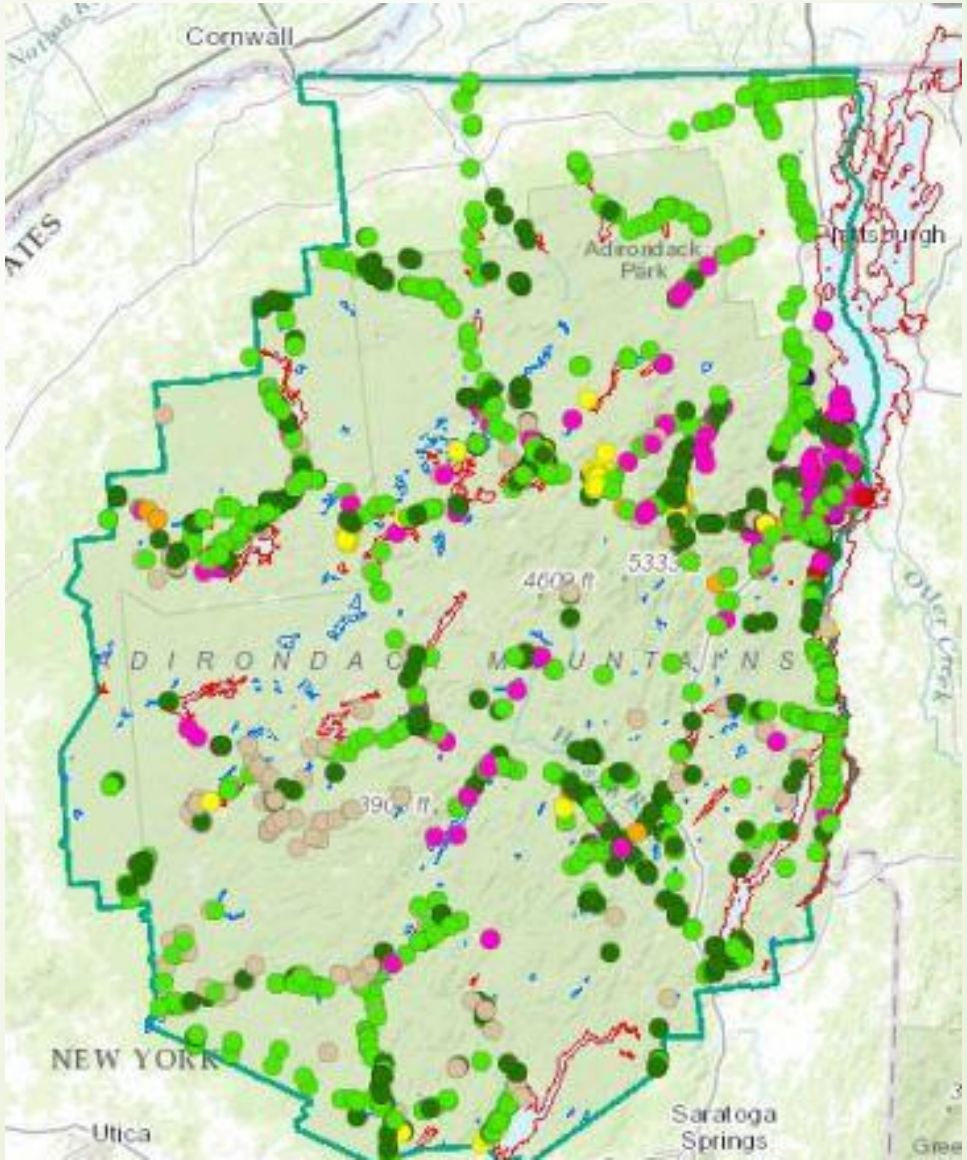
BCA BY-LAWS Article 3, Section 3:

C. To protect and improve the nature and physical environment in and about the lands and waters of the Brantingham area Community, for purposes of social, leisure, and physical activities for its members

- **"Invasive species are plants, animals, and other organisms either accidentally or intentionally introduced from other places that cause harm to the environment, economy, or human health**. In recent years, the rate and risk of invasive species introductions has been exacerbated due to increased movement of people and materials and increased environmental alteration and degradation."

- "The Adirondacks is one of the few places in the Northeast with more free-flowing than dammed rivers and streams; more intact than fragmented forests. It is a crossroads where ecosystems more common to the north (boreal bogs) meet others more common to the south (oak-hickory forests). It boasts more than 3,000 lakes and ponds and nearly 600,000 acres of wetlands." (apipp,2016)

WHAT IS ALREADY HERE……



- **"Japanese knotweed, spiny water flea and Eurasian water milfoil are among the most threatening in the Adirondacks of upstate New York**. Emerald ash borer, Asian longhorn beetle and hydrilla are nearby. Researchers estimate invasive species cause environmental losses and damages of nearly **$120 billion a year nationwide."**

Aquatic Invasie Plants are easily transported

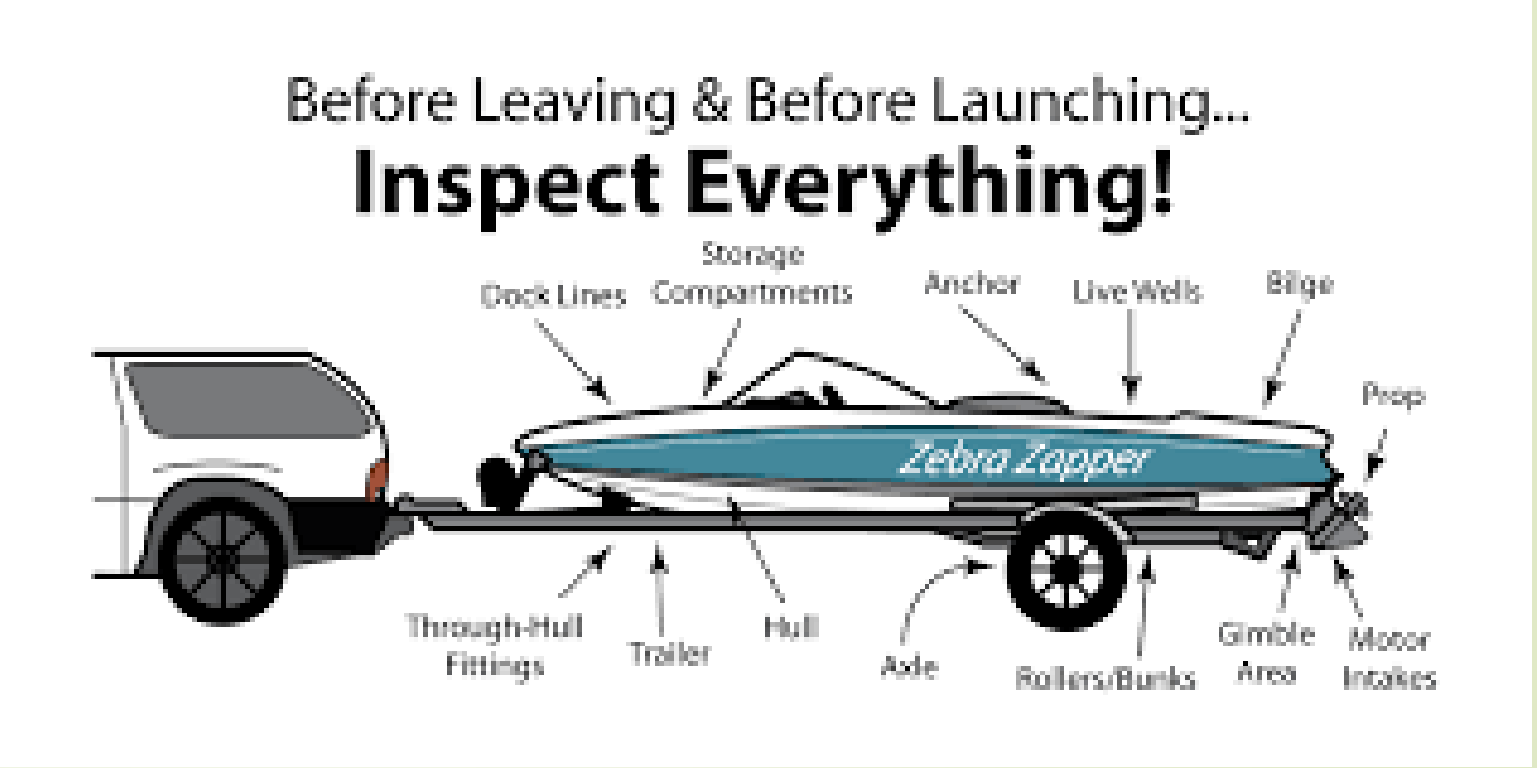
- **Plants can be transported by:**
- anchor
- Fishing line
- Live well
- Prop
- Trailer
- Even on the fish

It only takes one small piece of plant to infect a body of water

So 1 plant can become…….

“Prevention is the most effective strategy in addressing invasive species”

- Inspect, clean, drain and dry



What you can do to help?

Inspect, Clean, Drain and Dry

After you remove your boat from a body of water…..

Drying the boat

- Most effective method to ensure that any aquatic species die before the boat is put into another body of water
- 5 – 7 days
- Open all compartments
- May take longer to dry in cooler temperatures
- May disinfect instead

HOT Water or Steam

- Water must exceed 140°
- Spray hot water for at least 10 seconds on each area of the boat/equipment
- Can use to clean boat and equipment
- Car washes do NOT have water hot enough to be effective
- Household steam cleaners can be used to clean live wells, bilge, small compartments
- Do not steam stickers or they may come off.

Disinfectants that **MAY** work….

- 2% bleach solution – soak or spray equipment for at least 2 minutes
- Zebra mussels can close themselves for protection, but may respond to a higher percentage of bleach
- Potassium Chloride
- Parvasol
- Kennelsol

Personal Watercraft

Personal Watercraft

- "Ballast tanks in waterski boats provide one of the greatest risks for transporting AIS from water to water."
- After removing PWC from body of water, start and run the motor for 5 – 10 seconds to blow out water and contaminants
- Stop the engine and remove plants, water and mud
- Look under the craft and remove contaminants
- Check the trailer
- These tanks must be disinfected
- 2 gallons of Potassium Chloride for 12 hours

Not just for motorboats!!!!

- Paddlers

Canoes, Kayaks, etc

- Same procedure
- Empty the boats by turning them over and draining the water
- Inspect, clean, dry and disinfect

www.adkinvasives.com

APIPP Website

APIPP – High Priority Invasive Species

- APIPP has identified 8 species that are considered to be high concern for the Adirondack Park

- 2 of the species are aquatic plants
- 1 is a terrestrial invasive plant
- 2 of the species are aquatic animals
- 3 are terrestrial invasive insects

Eurasian Watermilfoil

Eurasian Watermilfoil

- "Spread to more than 55 waterbodies in the Adirondacks"
- In all 12 Adirondack Counties
- "The most widespread of the priority aquatic invasive species."
- Even a stem fragment can reproduce

Hydrilla

HYDRILLA

- According to the 2014 APIPP report, Hydrilla has **NOT** been identified within the boundaries of the Adirondack Park.
- However, it is close

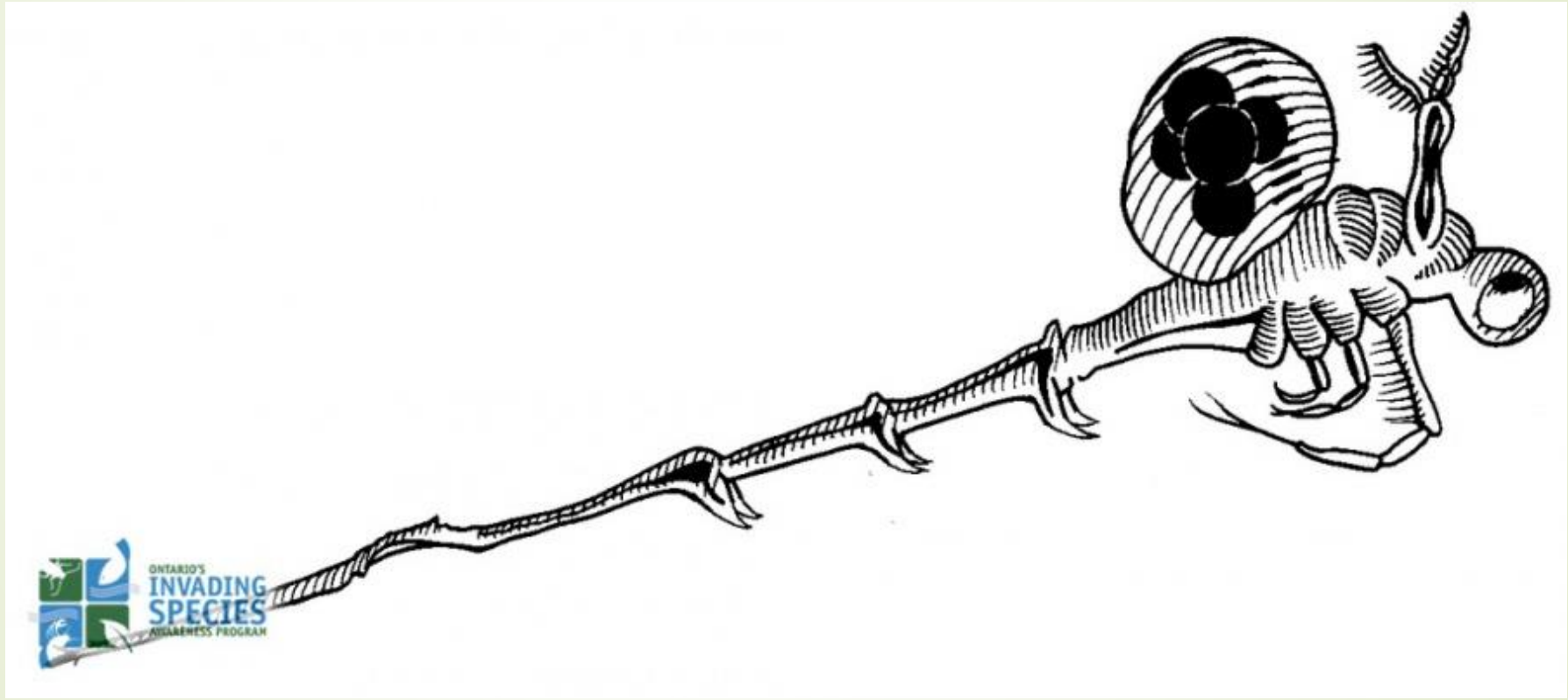
HYDRILLA

- Only requires 1 whorl of leaves needed to start a new infection
- Moved by boats and fisherman
- 15 waterbodies infected in New York state
- Currently not in the Adirondack Park

SPOTTED WING DROSOPHILA

- Fruit Fly
- Attacks fruit by laying eggs on fruit and making it unusable
- Only live 2-9 weeks
- Produce at least 300 eggs in their lifespan

Spiny Waterflea – In the ADK's



SPINY WATER FLEA – INVASIVE ANIMAL

- Has been identified in 5 counties; Fulton, Hamilton, Saratoga, Warren and Washington:
- Interrupts the food chain by overconsuming the native zooplankton
- Moved by fisherman (lines, lures) and boats

ASIAN WATER CLAM

Present in only two counties:
Warren and Washington County

WATER BODY: Lake George

Highly prolific and impact swimming quality and may clog pipes, may affect drinking water.

Each adult produces 2000 – 4000 offspring

JAPANESE KNOTWEED - Terrestrial

Can be 14 feet in height

Spreads Rapidly

2 OTHERS – PRIORITY CONCERN (ANIMALS and NOT in ADK's)

Identified in 21 New York Counties
Attacks ASH trees

Attacks Maple, Horse-chestnut, Birch, Sycamore, Poplar, Willow, Mountain Ash and Elm trees

Aquatic Invasive Species (AIS)

- "The current focus of spending in the ADK Park is primarily on AIs
- **"The most cost effective approach is prevention"**
- "prevention must include addressing the pathways that transport invasive species from one location to another"

Aquatic Invasive Species

- "Invasive species cannot be effectively addressed by one-time activities"
- "A long-term approach to prevention and targeted control that include monitoring is essential to success."
- Lake associations are being heavily burdened financially
- However, prevention is far cheaper than response to infection
- "**We have been fighting milfoil for 20 – 25 years and we are spending hundreds of thousands to manage it." – Town of Chester Supervisor**

STATE BOAT INSPECTION SITES OPEN IN ADIRONDACKS

- In 2014, during the first ever Invasive Species Week, Governor Cuomo signed a new law to help stop the spread of these harmful species. Under the law and subsequent regulations, the Department of Environmental Conservation and the Department of Agriculture and Markets created lists of prohibited and regulated species and established measures to prevent their release in the state. **The regulations make it unlawful to knowingly possess a prohibited species with the intent to sell, import, purchase, transport or introduce.** (Nearing, 2014)

STATE BOAT INSPECTION SITES OPEN IN ADIRONDACKS

- "A recent study by the Adirondack Park Invasive Plant Program found that if invasive species are allowed to spread, **they could cost the Adirondack economy up to $900 million**. This includes annual losses in visitor spending, and agriculture and primary forest production value as well as losses in property value that will affect the tax base and borrowing ability for property owners on an ongoing basis." (Neary, 2015)

BOAT DECONTAMINATION STATIONS

- Decontamination stations are being installed to **help identify and remove invasive species from boats** before they are launched into a new body of water. (Morrissey, 2015)

"The Actual and Potential Impact of Invasive Species on the Adirondack Park"

- **" The most cost effective approach to prevention is to focus on the pathways that transport invasive species from one location to another"**
- "Very few invasive species are eradicated….often involves actions are implemented in perpetuity including continued monitoring."
- "Prevention is less costly than control"
- (yellow wood, 2014)

The Actual and Potential Economic Impact of Invasive Species on the Adirondack Park

- "Eurasion Watermilfoil first discovered in 1979… and has spread to more than 55 waterbodies in the Adirondacks."
- "…most widespread of the priority aquatic invasive species…"
- Can spread through stem fragmentation which makes it easy to spread from one body of water to another
- Dense pockets of Eurasion Watermilfoil can affect fish and native plants and interferes with water activities such as boating, fishing and swimming.

The Actual and Potential Economic Impact of Invasive Species on the Adirondack Park

- Response to infestation includes mechanical removal , chemical herbicides, use of carp and other biological controls
- Costly
- Requires a APA permit, which can be time consuming (300 pages, can take 6 months)
- Ongoing – there is not cure only continuous treatment

The Actual and Potential Economic Impact of Invasive Species on the Adirondack Park

- Studies on the effect of prope
- 2009 study in Wisconsin, dropp by **8%**
- 2010 study in Vermont found ir **16%** on property value
- Adirondack study suggested t Eurasion Watermilfoil would de value by approximately **$10,0**

NYSFOLA Conference

- Conference directed toward lake association interested in starting a boat launch stewardship program.
- Cost is challenging
- Many program started small with a few volunteers and continued to develop the program
- Some were able to obtain funding from their town(s)
- As the speaker stated, “It is important for the towns to understand that the protection of the waterways is the protection of the economy”
- Grant monies are available, but only to lake associations that have established a program

NYSFOLA CONFERENCE

- I attended a conference designed to educate lake associations on how to develop a boat launch steward program
- The associations I spoke to stated they started small with volunteers and developed each year
- Helps to align and learn from other lake associations
- Grant monies are becoming more available for prevention programs
- Education is key

Adirondack Watershed Institute Stewardship Program

- Currently over 70 inspection sites in the Adirondack Park
- Stewards are trained through the program at Paul Smith's College
- Stewards are typically college students who are paid through the program and NYS grant monies
- Established sites are monitored from Memorial Day to Labor Day
- Stewards are paid $13.50/hour
- The goal of the program is data collection and education

Boat Launch Steward

- Paul Smith's College Adirondack Watershed Institute provides annual training for Boat Launch Stewards

Paul Smith's College
THE COLLEGE OF THE ADIRONDACKS
PROTECT THE ADIRONDACKS!

Boat Washing Stations

- Many stations being placed throughout the Adirondack Park

BOAT DECONTAMINATION

- The procedure requires inspecting the boat and spraying the exterior and all interior compartments with hot water at least 140 degrees
- High water temperature kills any remaining plant fragments.
- Boats with an I/O must be flushed internally
- PWC must be flushed internally

LANDA ECOS - $24,000

LANDA MHC – Approximately $6300

HOT WATER Pressure Sprayer Including accessories

electric, gas, propane and diesel versions

LANDA MHC

- Purchase price includes delivery, setup and training.
- Includes a flusher adapter for PWC and I/O engines
- Electric version would require a 230 volt single phase wiring
- **Would require a stone containment area**
- **As Professor Holmlund stated; The site would require approval from the NYS Department of Environmental Conservation, Adirondack Park Agency, and possible the NYS Department of Transportation**

LANDA Power Washer MHC

Cost of creating this station would also include:

- Creation of a stone containment area
- Signage
- Cost of fuel or electricity

History of involvement AIS Survey

- The BCA became involved with APIPP (Adirondack Park Invasive Plant Program)

2002

Jim Murphy, then President of the BCA, and Ed Cousins attended APIPP volunteer training in the identification of invasive plant species.

ANNUAL SURVEY:In August, volunteers can be seen on the lake, "throwing the rake"

This procedure pulls plants from the bottom and allows volunteers to look for any evidence of Aquatic Invasive Plant Species

Judy Wilson spend years as a volunteer.

Currently, Polly Peterson is the committee chairperson for invasive plant monitoring

Developing a new watercraft inspection steward program (APIPP)

- Requires a program coordinator
- Decide on program structure: Volunteer or Paid staff?
- Budget: Workman's Compensation, supplies, training costs, shirts, signage, chair, table, date entry forms, phone
- Declare scope of practice for stewards
- Uniforms
- Town permission
- Best schedule to use volunteers and/or paid staff
- Determine how to collect data
- Develop education material

APPLICATIONS FOR BRANTINGHAM

- The question that needs to be addressed is whether these ideas can be applied to the Brantingham Community?

APPLICATIONS FOR BRANTINGHAM

- **Do any of the programs being utilized at other Adirondack lakes feasible or even necessary for a 327 acre lake?**
- Is it cost effective?
- Do we have the volunteer manpower?
- It is even necessary with the limited boat traffic on Brantingham?
- Can we afford being reactive to an infestation rather than acting proactively
- Are surveying and education enough?

How to determine boat traffic on Brantingham Lake?

- **Volunteers to perform a manual census vs. Game Camera**
- Must determine:
- What other bodies of water they launch their watercraft?
- AIS awareness
- Are they using methods to check, drain and dry their boats after removal?
- How many are renters who have no investment of water quality?

EMAIL from ERIC HOLMLUND, PHD

Karen,

Great questions about alternatives for Brantingham Lake (which is in the Adirondack Park). As you know, we have 15 voluntary decontamination stations active across the park this summer (www.adkcleanboats.com). The one closest to you is in Thendara- likely 30-40 minutes away. Obviously, this isn't optimal for protecting your lake.

You raise good questions about what actually is needed for your particular waterway. Since your lake appears to be in private ownership, it would probably be lower on the park-wide list of priorities compared with other waterways with designated NYS boat launches. Is your boat launch open to the public, and is it owned by the town?

If your snowmobile association is allowing use of their barn, I would guess that this is on private property. If your association wishes to provide a voluntary high pressure (possibly hot water) wash station, Jeff Sann (PSCAWI) and Brendan Quirion (APIPP) can provide advice about equipment and logistics. If you wish this private site to be part of our network, that could raise traffic to your lake, which might not be your intent.

I think it is wonderful that your association is seeking to provide a decontamination option for your lake. It is likely that you will need to have a consultation with the NYSDEC region 6, NYSDOT, and possibly APA to ensure that wash water is not a contamination threat to your nearby wetlands and streams.

Best,
Eric

Eric Holmlund, PhD
Director, Adirondack Watershed Institute Stewardship Program
Coordinator, Recreation and Environmental Studies

ADIRONDACK PARK INVASIVE PLANT PROGRAM
SINCE 1998
APIPP

Brendan Quiron, APIPP PROGRAM COORDINATOIR

Hello Karen,

Thank you for reaching out. Under a voluntary status, boat wash station locations are most effective when surrounded by lakes manned by boat launch stewards. These stewards are very effective in referring boaters to the wash station, who usually drive right by the stations on their way to the water. **Without having stewards to provide these referrals, we have found that very few boaters can be compelled to stop at stations; even with good station visibility and appropriate signage. That being said, positioning the station as close to the launch as possible can increase use and improve the effectiveness of a station that does not have stewards to provide referrals**. Please take the time to watch a presentation that I gave on last year's program at the following link

https://vod.video.cornell.edu/media/The+Adirondack+aquatic+invasive+species+%28AIS%29+spread+prevention+pilot+program+by+Brendan+Quirion/1_9qnzllki

This presentation will provide one stop shopping for information on boat wash stations and the regional aquatic invasive species program and should answer many of your questions. Jeff, Eric and I would be happy to discuss logistics with you in more detail when the time comes.

Sincerely,

Brendan Quirion

Mike Siless, President of Snomads

- **"…it's safe to say at your meeting that we've begun corresponding on the possibility"**
- Awaiting any details
- The board will consider and make a decision

LAKE BONAPARTE

- 1286 acres
- Boat Launch with parking area
- Eurasian Watermilfoil identified in 2001
- Using a biological control program – EnviroScience Incorporated (MILFOIL WEEVILS)
- Newsletter: "**We attempted to secure a NYS grant for Lake Stewards to be positioned at Sand Bay and the marina. During research…..we concluded that the program, only partially funded…would NOT be effective from a cost or results standpoint.**"
- **MANAGEMENT PLAN: Included a "staffed power-wash station at the boat launch to control invasive species"**

Drop off site

Cost $35.00
You may pick up supply kits at
Lewis County Soil and Water
5274 Outer Stowe Street
Suite #1
Lowville, NY

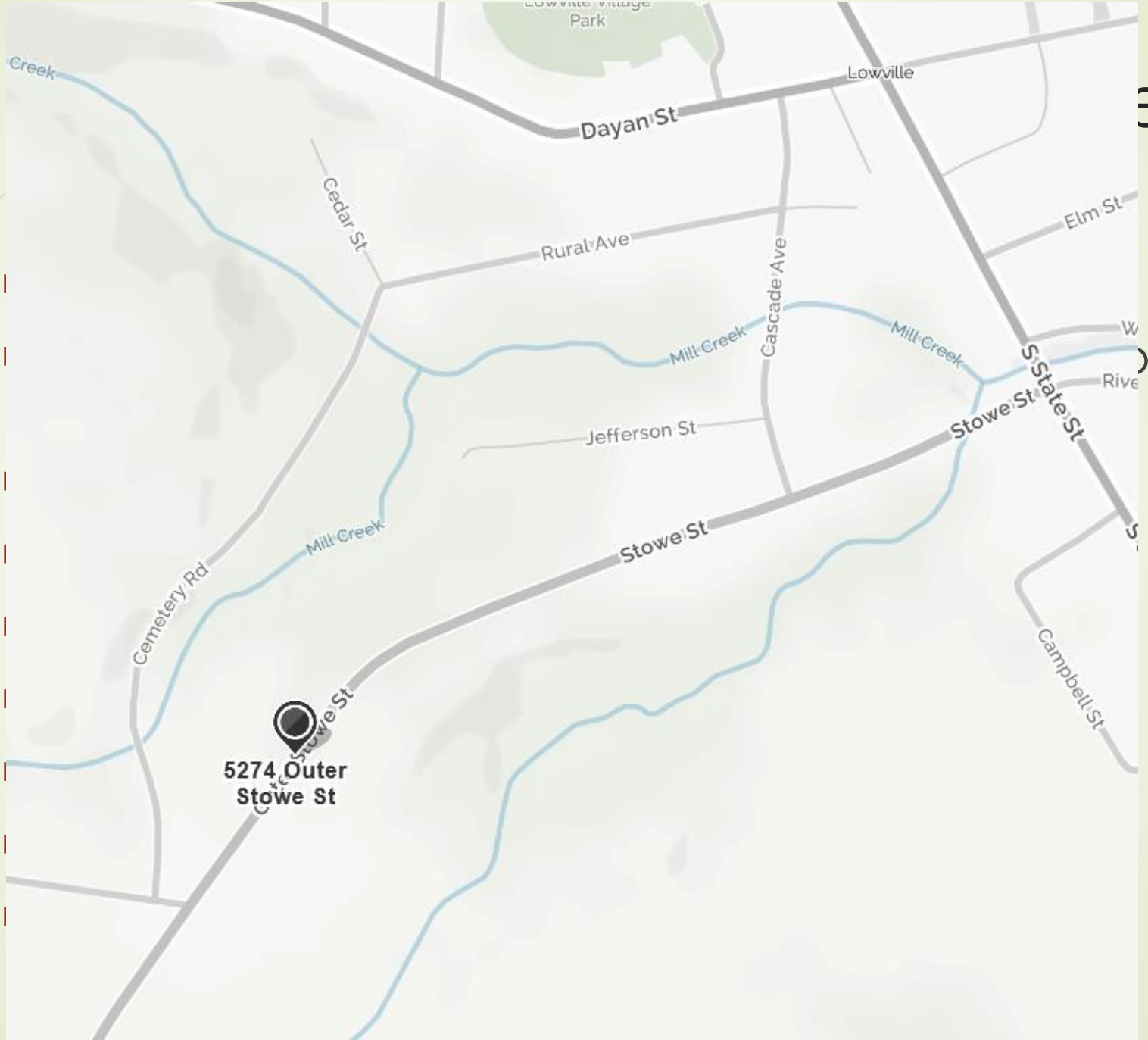
Drop off samples:

- **Converse Laboratories Inc.**
  800 Starbuck Avenue, Suite B101
  Watertown, NY 13601

CLI Converse Laboratories Inc.

er

oil and


Park
Creek
Lowville
Dayan St
Cedar St
Rural Ave
Elm St
Cascade Ave
Mill Creek
Mill Creek
Rive
State St
Stowe St
Jefferson St
Mill Creek
Cemetery Rd
Stowe St
Campbell St
5274 Outer
Stowe St

PLEASE PUMP AND CHECK
YOU SEPTIC TANK
EVERY 3 – 5 YEARS

PROTECT
THE LAKE!!!!!