NEW YORK STATE OF OPPORTUNITY.

Adirondack Park Agency

P2023-0017 and P2023-0018
Lake George Park Commission (LGPC)

June 18, 2024

Overview

- Lake George Overview
- P2023-0017; LGPC, Sheep Meadow Bay (Jeliffe-Knight Bay)
- P2023-0018; LGPC, Blair's Bay
- Public Comments

Lake George

32 Miles Long, 2 miles wide

28,000 Acres

196 feet deep

AA Special Water – Suitable for Use as a Public Water Supply

9 municipalities around the lake

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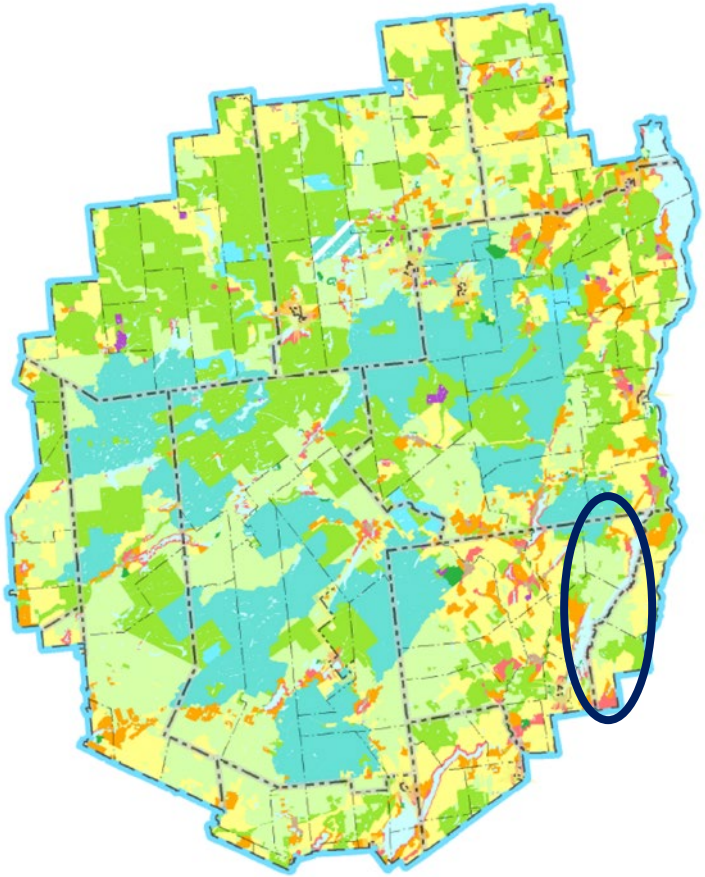
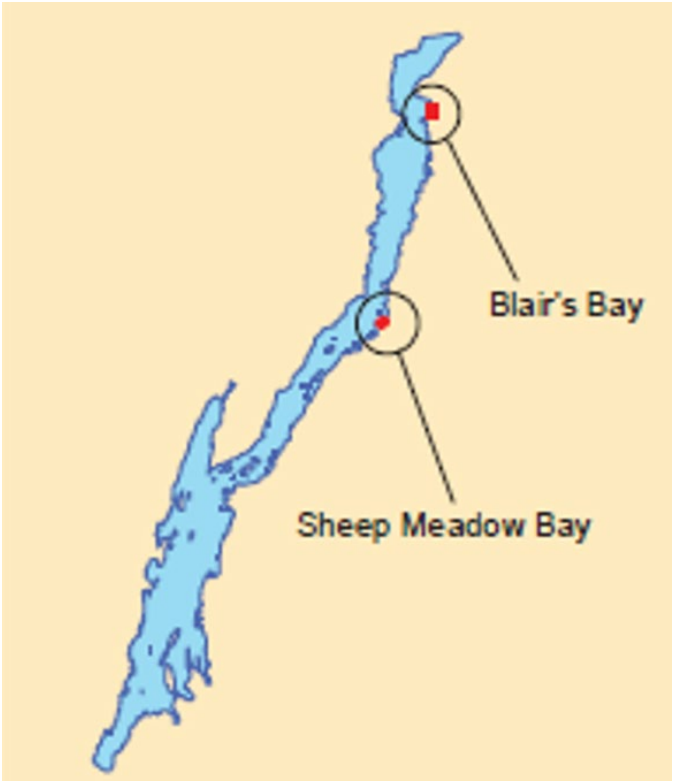
Project Locations





Town of Hague,
Warren County

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EWM Management in Lake George

Timeline

EWM identified in Lake George in 1985 (Northwest Bay);

Management began in 1986

→ Volunteer hand harvesting and Benthic Mats

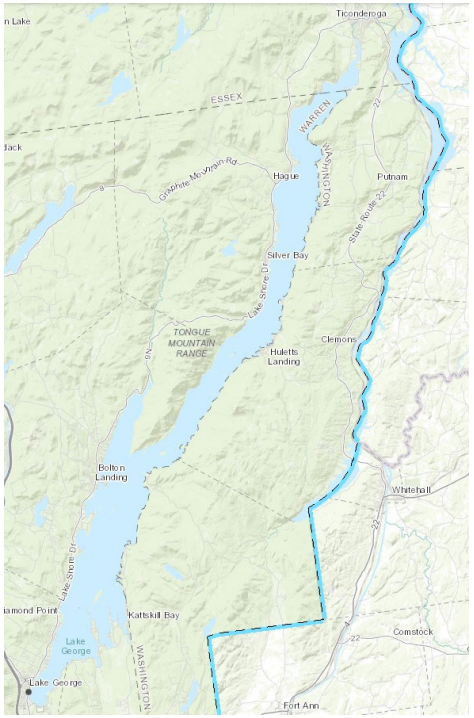
→ Managed under LGPC

Suction harvesting began in 1989

→Undertaken by Darrin Freshwater Institute from 1989-1993 (with Federal Funding)

Since 1994

→ LGPC has administered the management program, permitting requirements, and provided financial support (in cooperation with The Fund for Lake George (now the Lake George Association)



Lake George Boat Inspection Program

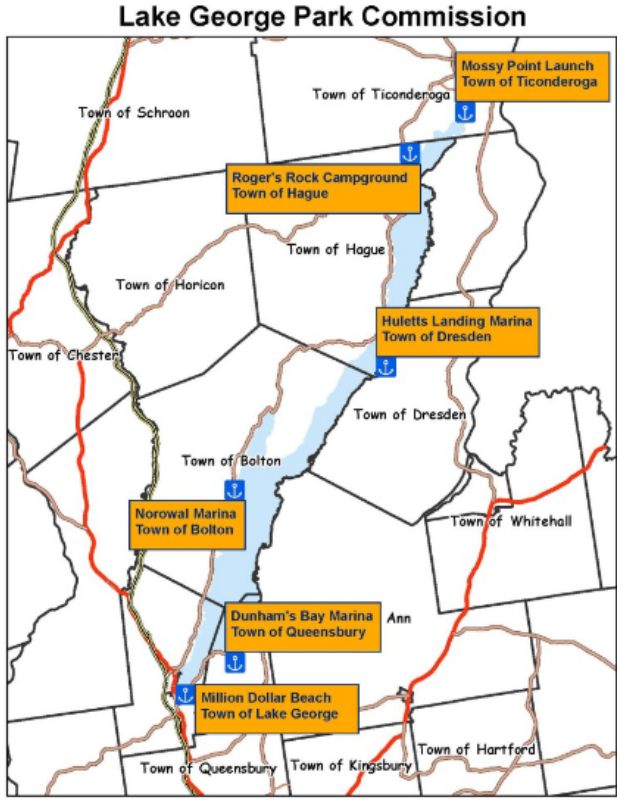
May 1 - October 31

Six regional inspection stations

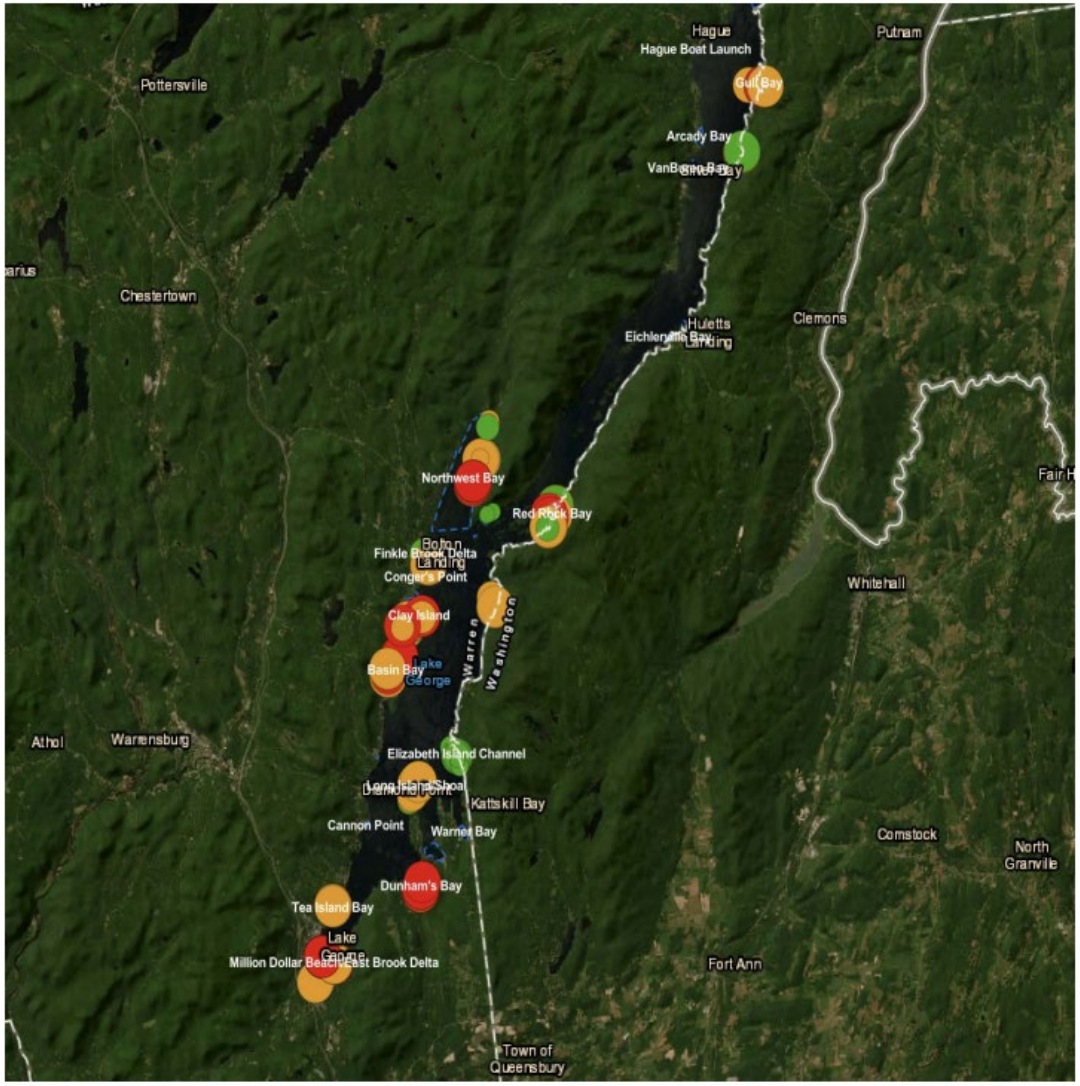
All trailered boats must get inspected and “sealed” before launching into Lake George.

- 2023
  - 35,000 Contacts
  - 800 Boats Decontaminated
  - 113 Boats with Visible AIS

- Since Inception
  - 319,000 Contacts
  - 13,653 Boats Decontaminated
  - 1,313 Boats with Visible AIS



Sites Worked Map
Red = Dense growth
Orange = Moderate growth
Green = Sparse growth



$8 Million Spent Since Program First Began

> 450 Tons Harvested

Costs are Increasing

In 2023:

- $445K Invested In EWM Management
- 50 Tons Collected
- Hand Harvest/DASH

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Management Options

- Benthic Barriers
  - Eliminates EWM beds (and everything else under the barrier – prime for regrowth)
  - Abandoned for EWM use in 2014

- Hand Harvesting
  - Effective
  - Success dependent on substrate
  - Fragmentation, sediment disturbance
  - Multiple harvests annually
  - Contractor estimates that even a successful harvest will yield regrowth of 20% - 40%

- DASH
  - Most efficient in large beds (repositioning vessel)
  - Multiple harvests annually
  - Sediment disturbance
  - Contractor estimates even a successful harvest will yield regrowth of 20% - 40%

Goals

The goal of the Commission's EWM management program is to eliminate all known dense and moderate beds and keep them from re-emerging.

This will allow for a financially manageable maintenance level of hand harvesting of sparse populations of EWM in the waterbody.

"If beds of EWM were able to be [harvested] one time and then remain clear for a period of several years, this funding would be sustainable. However, the Commission has found that at least half of the sites it manages will re-populate between 25-100% EWM within only 2-3 years' time."

It is with consideration to the above, the larger environmental and economic impacts of EWM and its management techniques, that the Commission seeks a wetlands permit from the Agency.

With ProcellaCOR, sites that have not responded well to physical techniques may finally be remediated and restored to their natural condition.

NEW YORK STATE OF OPPORTUNITY.

Adirondack Park Agency

Lake George Park Commission Sheep Meadow Bay (aka Jeliffe-Knight Bay)

Project 2023-0017

June 18, 2024

Presentation Overview

- Jurisdiction
- Conclusions of Law
- Project Location
- Proposed Project
- *Public Comment*
- Staff Recommendation

Jurisdiction

9 NYCRR Section 578.3(n)(2)(i)

- Regulated Wetland Activity
  - Application of Herbicides in Wetlands

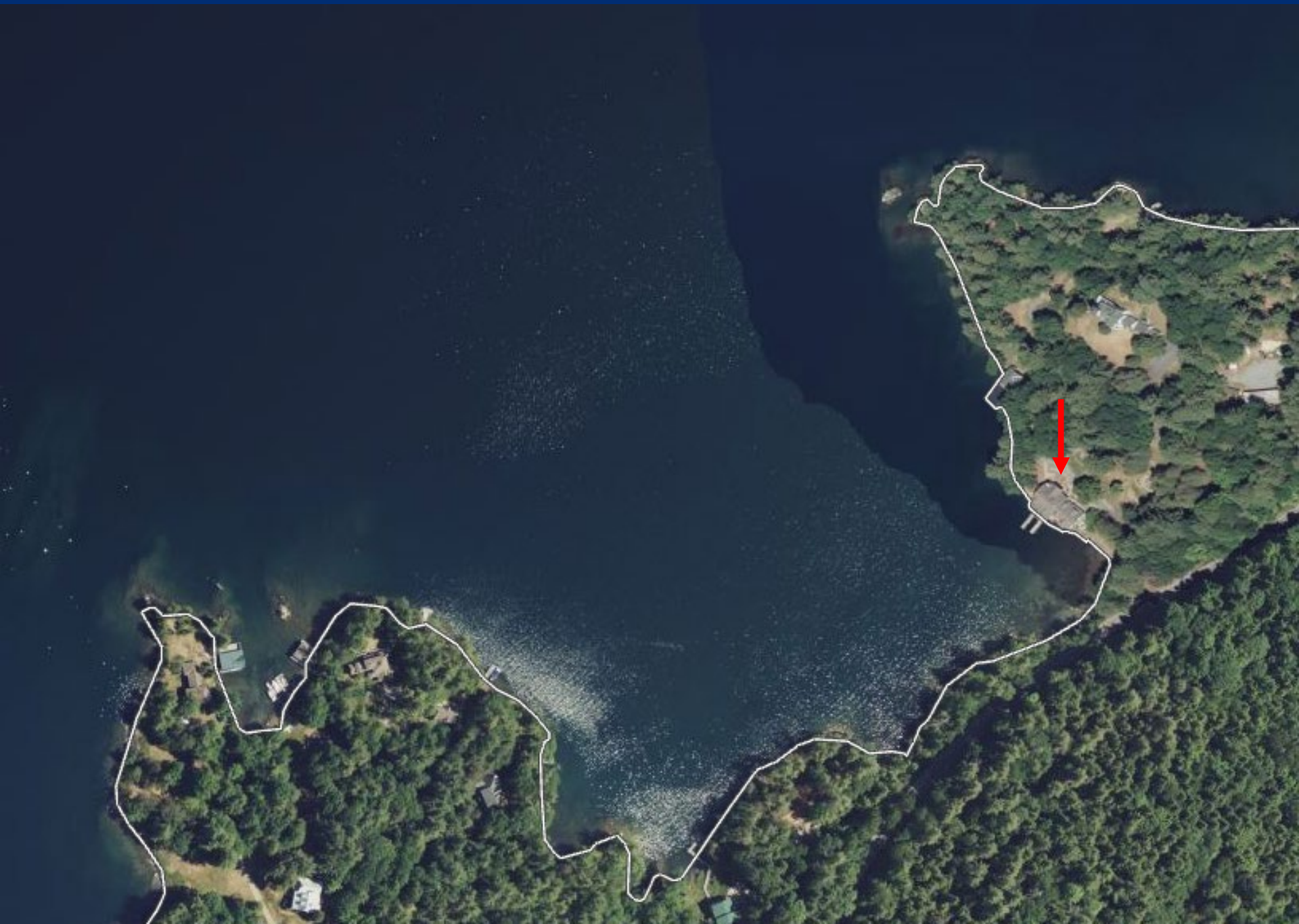
Conclusions of Law

a. will result in the minimum possible degradation or destruction of any part of the wetland or its associated values,

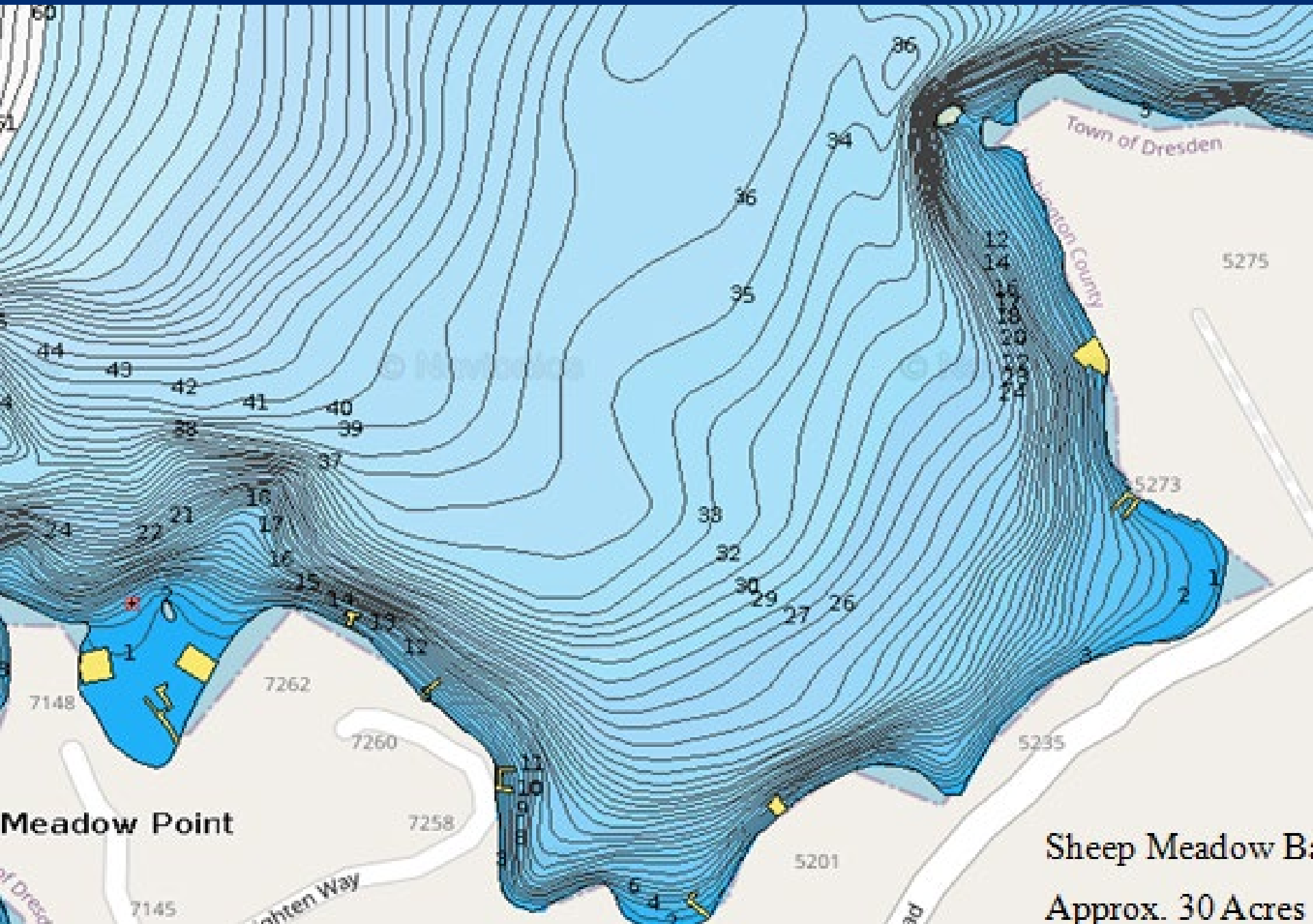
b. is the only alternative which reasonably can accomplish the applicant's objectives, and

c. will, weighing the benefits of the activity against its cost and the wetland values lost, provide a net social and/or economic gain to the community.

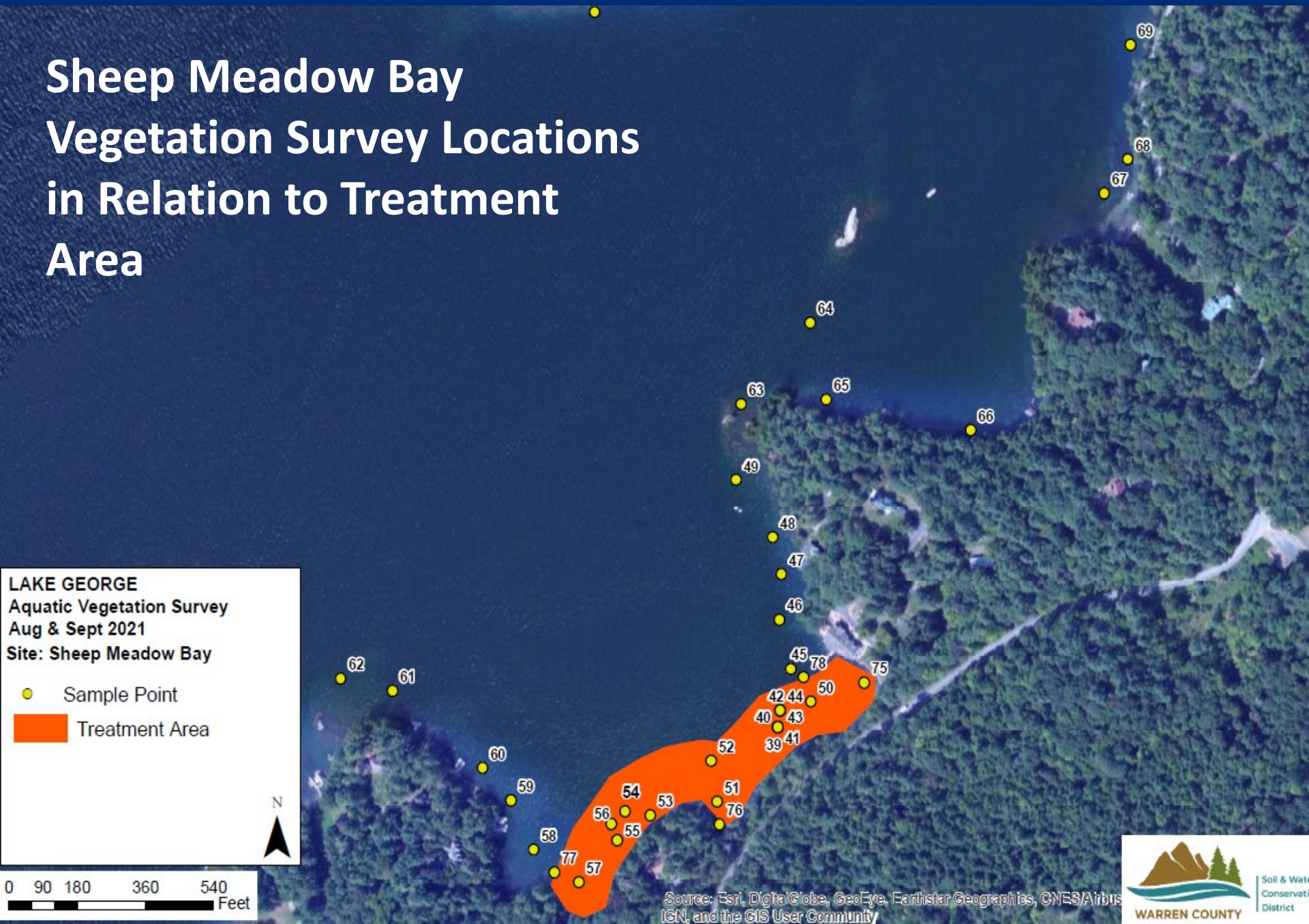
Project Location




LGPC


Town of Dresden
5275
5273
5235
5201
7262
7260
7258
7148
7145
Meadow Point
Sheep Meadow Ba
Approx. 30 Acres

Sheep Meadow Bay Vegetation Survey Locations in Relation to Treatment Area



Sheep Meadow Bay Location and Abundance of Eurasian Watermilfoil

History of Management in Sheep Meadow Bay

Year	Managed	Year	Managed
2007	Yes	2015	No
2008	Yes	2016	No
2009	Yes	2017	No
2010	Yes	2018	No
2011	Yes	2019	No
2012	Yes	2020	No
2013	Yes	2021	No
2014	Yes		

Proposed Project

Additional Applicant Goals

"The short-term goal is to eliminate the vast majority of milfoil in the two treatment areas, allowing for a much more cost-efficient and minimally impacting system to control milfoil growth and expansion."

"The longer-term goal is to show that this treatment methodology could cost-effectively be applied to other affected areas of Lake George that have shown resistance to traditional milfoil removal methods, while having no impact to public health, recreation or the environment."

Sheep Meadow Bay:

Treat 3.6-acres with ProcellaCOR EC at a concentration of 7.72 ppb.

Total volume of herbicide will be 4.78 gallons, which will be injected below the surface within the red hatched area.

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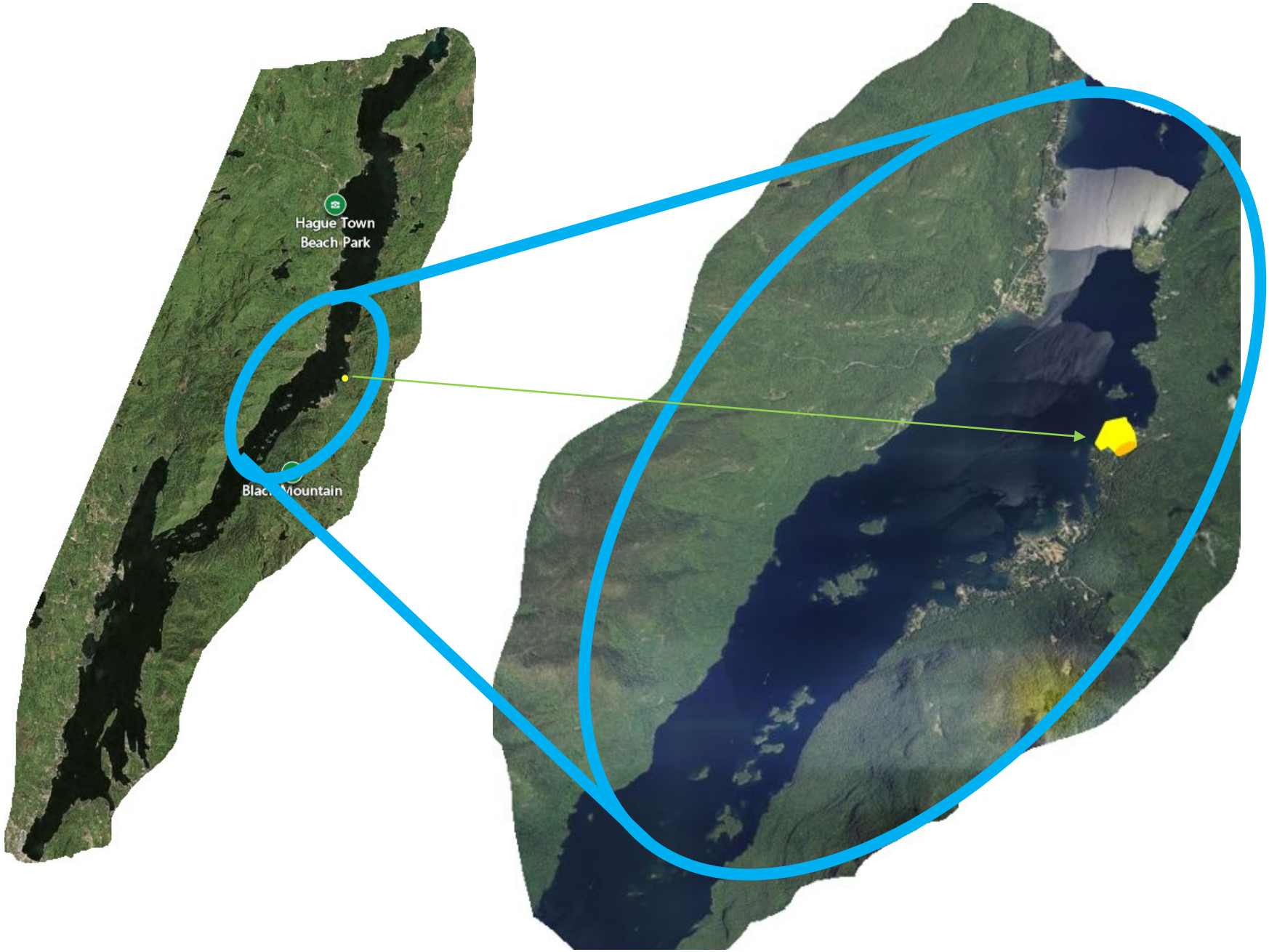
Post-treatment Concentration Monitoring

Samples collected from six locations will be analyzed until herbicide concentration is below 1 ppb in all samples.

Post Treatment Collection Schedule:
1 to 3 Hours
10 to 12 Hours
24 Hours
3 Days
7 Days
7-14 Days thereafter


Hague Town
Beach Park

Sensitive Species: Sheep Meadow Bay

Plant Species	Native	Sensitivity
Eurasian watermilfoil *M. spicatum*	No	High
Slender watermilfoil *M. tenellum*	Yes	High*
Water marigold Bidens beckii	Yes	Low*
All Other Species (N=26)	Yes	Low

Post-treatment Plant Survey

Sheep Meadow Lake George, New York

2021 Submersed Aquatic Macrophyte Survey Report

Repeat Plant Survey

Record observed impacts to all target and non-target species (plant or animal) as observed during any post-treatment qualitative assessment, or as observed during routine post-treatment herbicide concentration sampling.

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency

Public Comment and Review by Others

Staff Recommendation: Approve with Conditions

Draft Permit Conditions

- Undertake project as proposed
- Adherence to Clean Drain Dry Standards for all equipment used
- Post-treatment concentration monitoring report
- Post treatment aquatic plant survey

NEW YORK STATE OF OPPORTUNITY.

Adirondack Park Agency

Lake George Park Commission Blairs Bay

Project 2023-0018

June 18, 2024

Presentation Overview

- Jurisdiction
- Conclusions of Law
- Project Location
- Proposed Project
- Public Comment
- Staff Recommendation

Jurisdiction

9 NYCRR Section 578.3(n)(2)(i)

- Regulated Wetland Activity
  - Application of Herbicides in Wetlands

Conclusions of Law

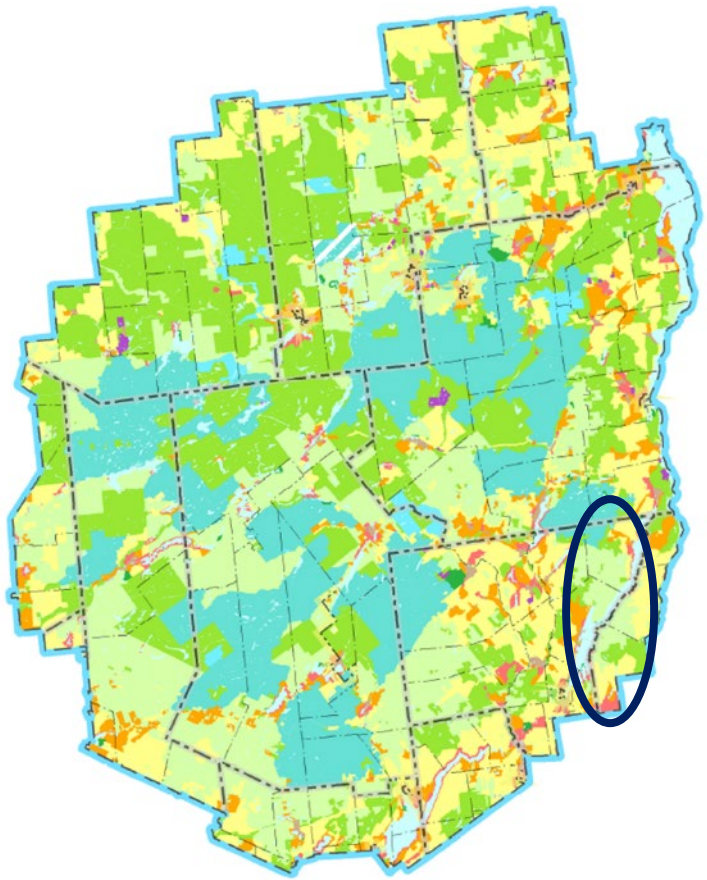
a. that the project authorized as conditioned herein will be consistent with the Adirondack Park land use and development plan; and

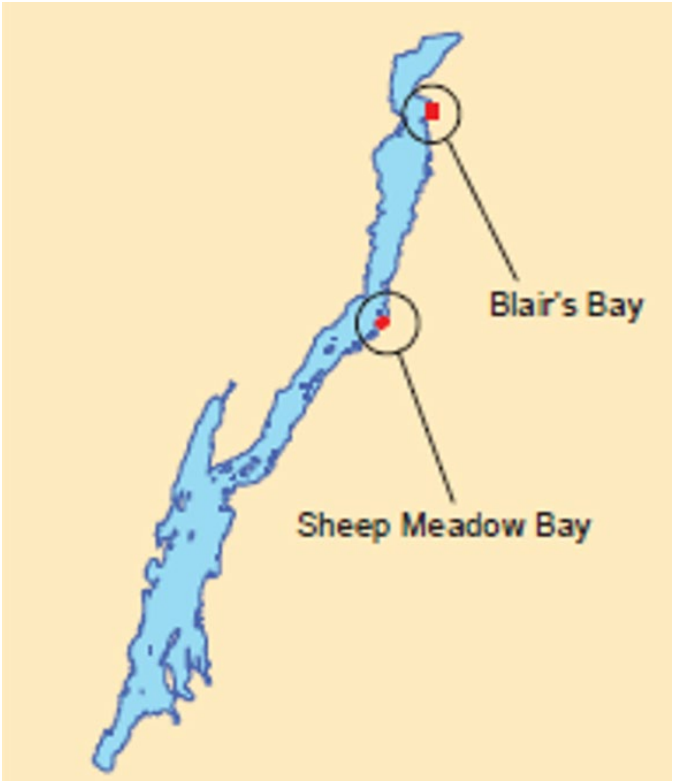
b. that the project authorized as conditioned herein will not have an undue adverse impact upon the natural, scenic, aesthetic, ecological, wildlife, historic, recreational or open space resources of the Park, taking into account the economic and social or other benefits to be derived from the activity; and

c. the economic, social and other benefits to be derived from the activity proposed and as conditioned herein compel a departure from the guidelines of 9 NYCRR Part 578.10(a)(1), in order to secure the natural benefits of wetlands associated with the project, consistent with the general welfare and beneficial economic, social, and agricultural development of the state

Project Location

Project Location

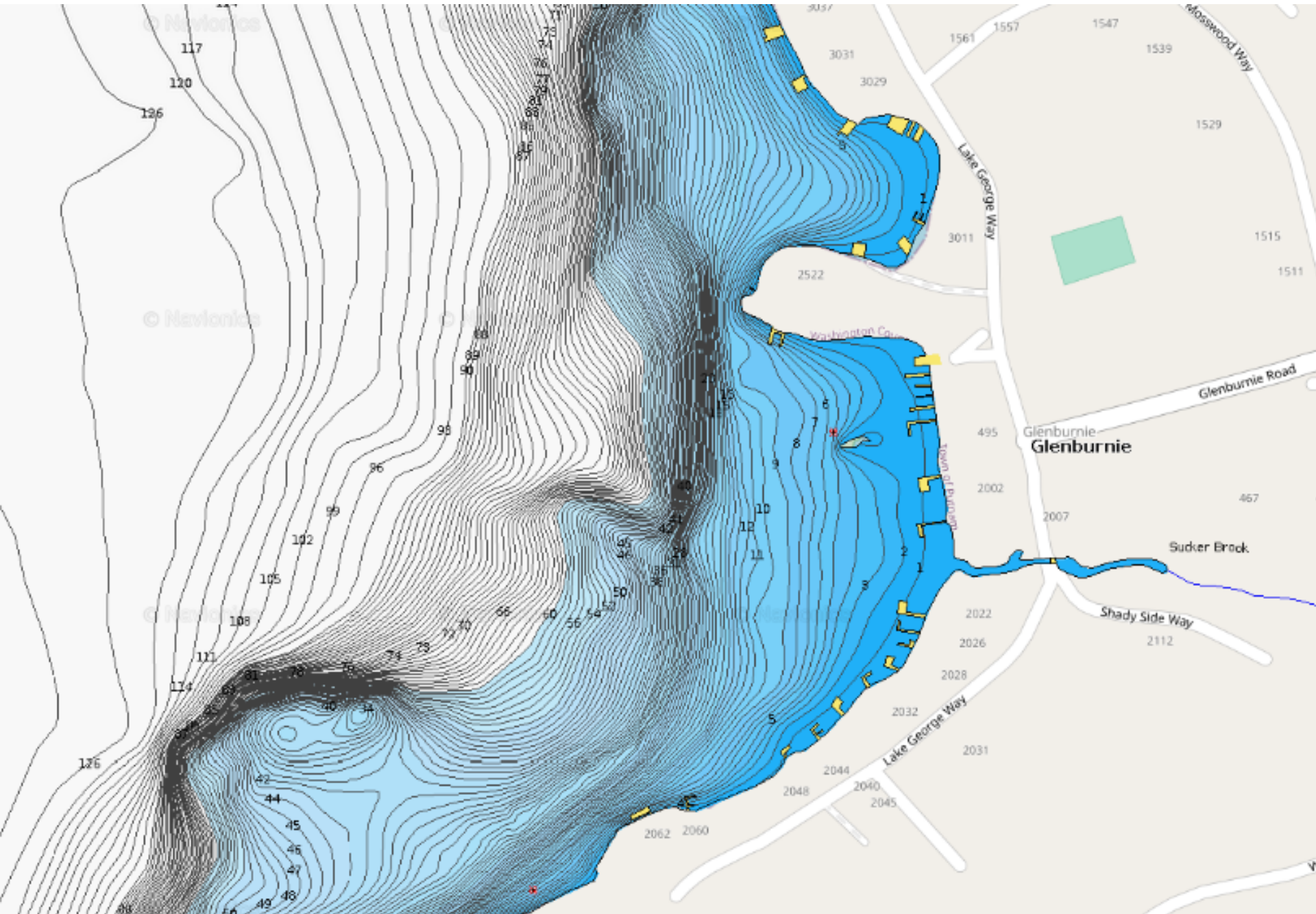




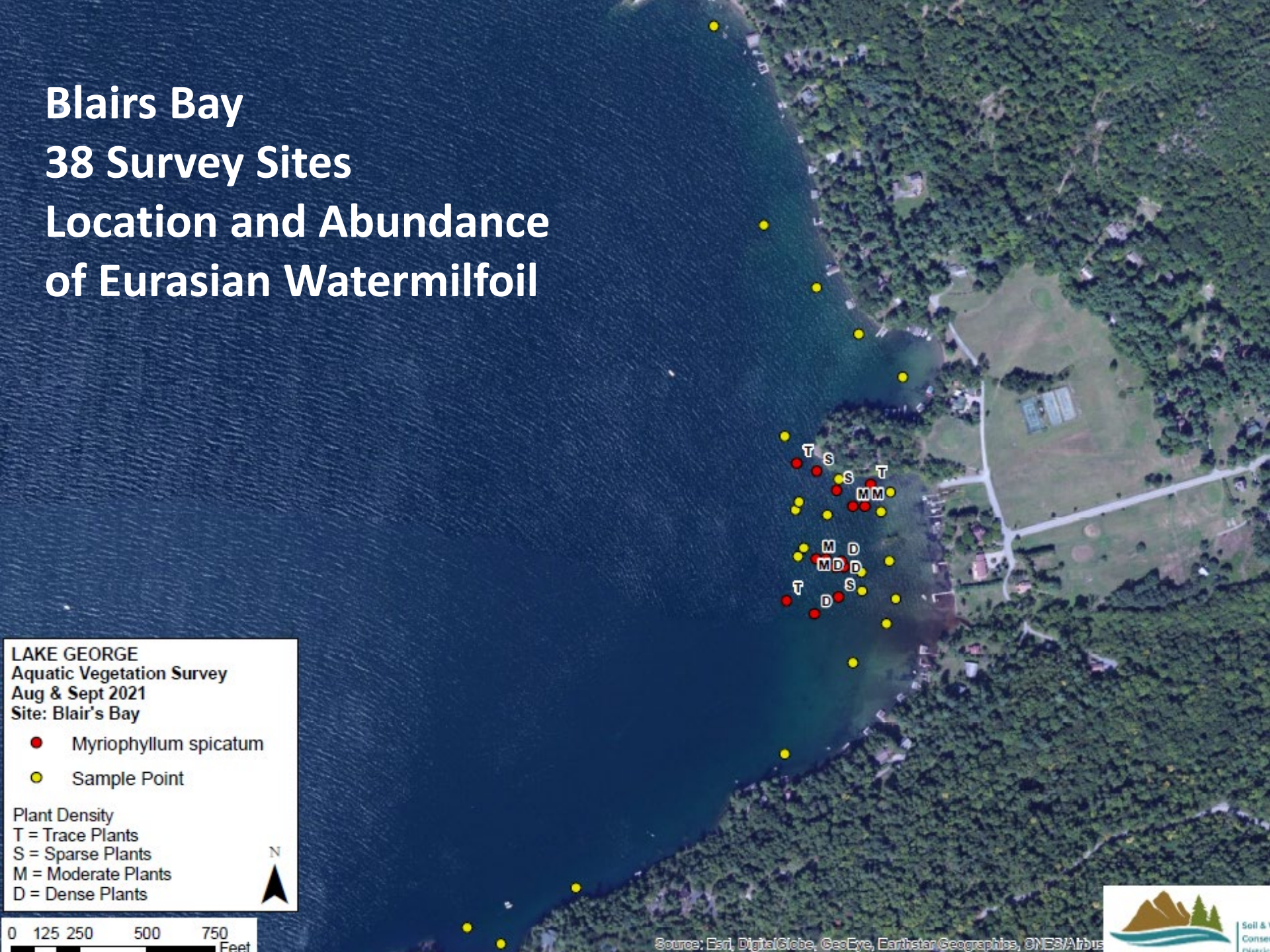
Town of Hague,
Warren County

NEW YORK STATE OF OPPORTUNITY. Adirondack Park Agency


Rte 1


Lake George Way
Glenburnie Road
Glenburnie
Sucker Brook
Shady Side Way
Lake George Way
Mosswood Way
1561
1557
1547
1539
3031
3029
1529
3011
1515
1511
2522
495
2002
2007
467
2022
2026
2028
2032
2031
2044
2048
2040
2045
2062
2060
2112

Blairs Bay
38 Survey Sites
Location and Abundance of Eurasian Watermilfoil



Close-up Blairs Bay Location and Abundance of Eurasian Watermilfoil

History of Management in Blairs Bay

Year	Managed	Year	Managed
2007	Yes	2015	Yes
2008	Yes	2016	Yes
2009	Yes	2017	Yes
2010	Yes	2018	No
2011	Yes	2019	No
2012	Yes	2020	No
2013	Yes	2021	No
2014	Yes		

2017 Management Report

Each year crews spend an increasing amount of time harvesting and consistently remove bag totals in the hundreds.

EWM here is noticeably fragile and fragments easily, exacerbating the problem.

Crews wind up chasing their tails and can easily spend enormous amounts of time here.

…recommended an all-out assault approach by keeping a crew harvesting for as much time as needed or supplementing with another technique…

Proposed Project

Additional Applicant Goals

"The short-term goal is to eliminate the vast majority of milfoil in the two treatment areas, allowing for a much more cost-efficient and minimally impacting system to control milfoil growth and expansion."

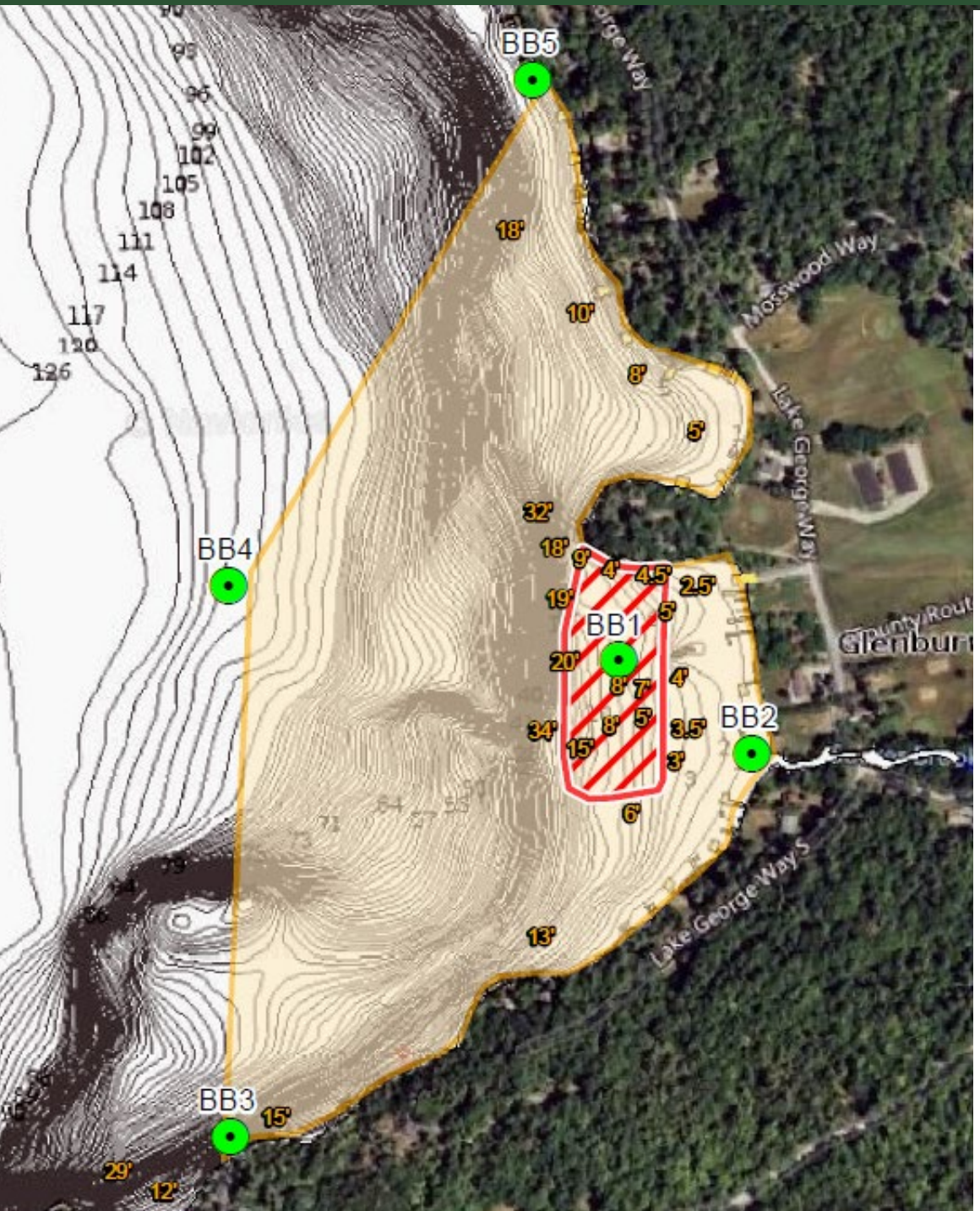
"The longer-term goal is to show that this treatment methodology could cost-effectively be applied to other affected areas of Lake George that have shown resistance to traditional milfoil removal methods, while having no impact to public health, recreation or the environment."

Blairs Bay:

Treat 4.0-acres with ProcellaCOR EC at a concentration of 7.72 ppb.

Total volume of herbicide will be 4.2 gallons, which will be injected below the surface within the red hatched area.


Blair Bay 60 acre dilution zone
Lake George
Blairs Bay
Blair Bay
Sucker Brook
Adirondack Camp
3D



Samples collected from five locations will be analyzed until herbicide concentration is below 1 ppb in all samples.

Post Treatment Collection Schedule:

1 to 3 Hours

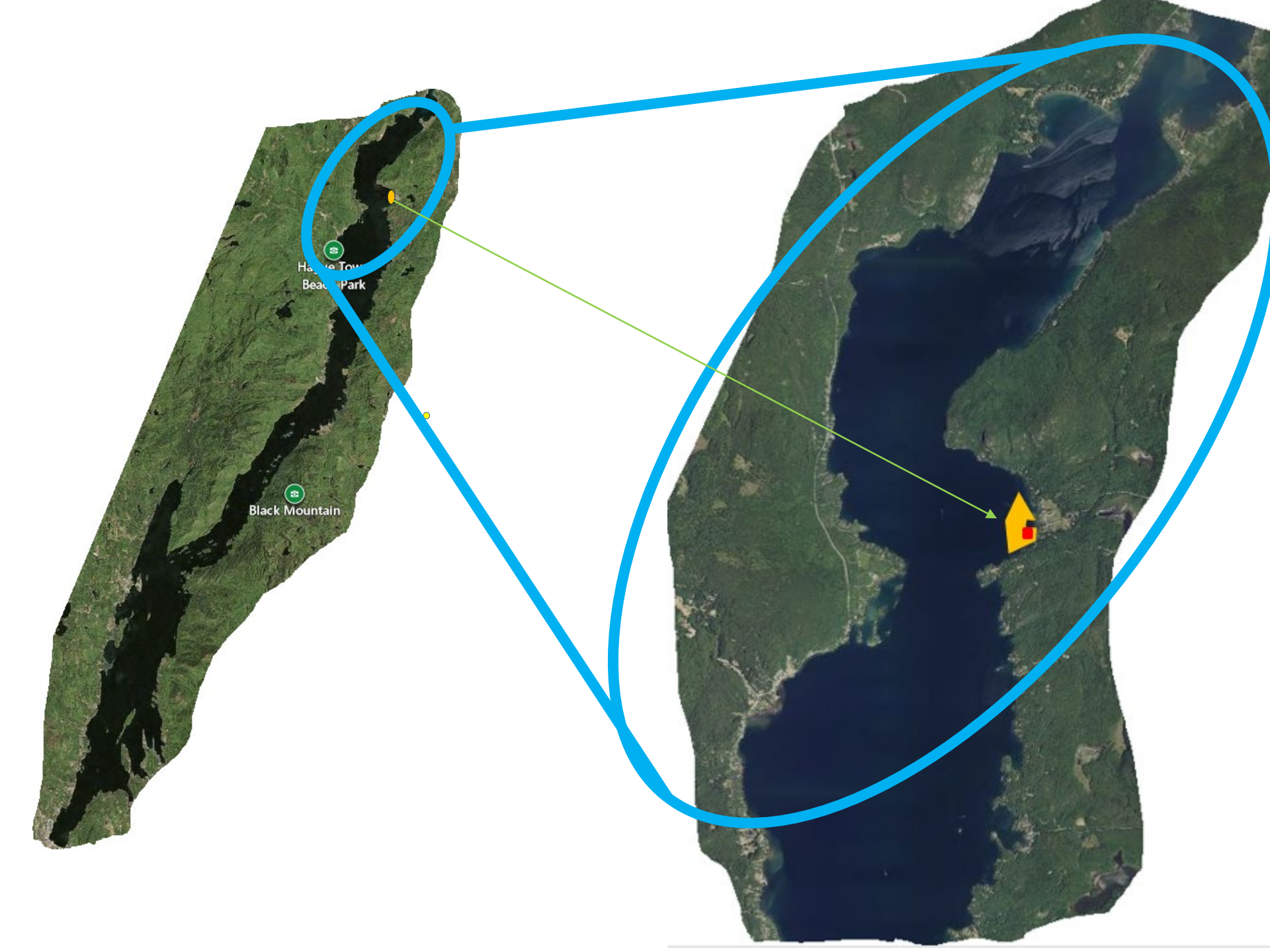
10 to 12 Hours

24 Hours

3 Days

7 Days

7-14 Days thereafter


Black Mountain

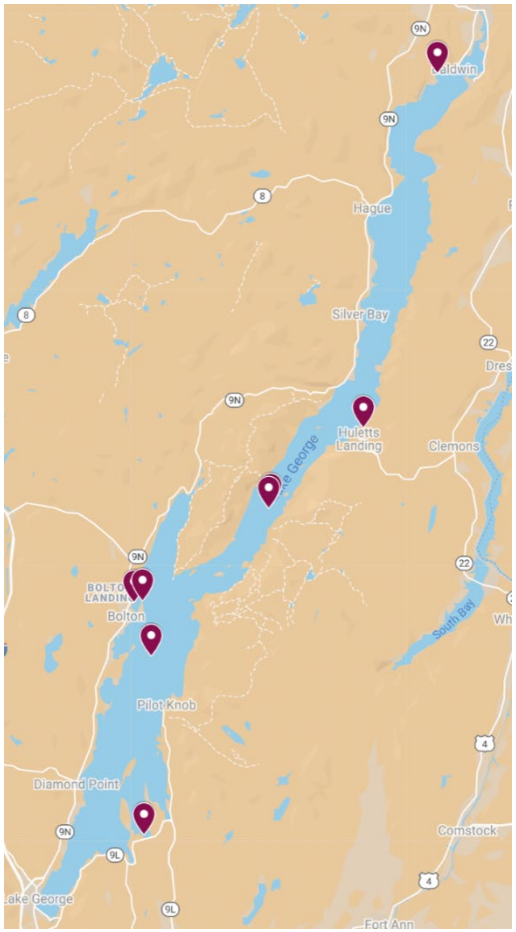
Susceptibility to ProcellaCOR EC of Plants Found Within and Surrounding Blairs Bay

Plant Species	Susceptibility
Eurasian Watermilfoil	High
Slender Watermilfoil	Medium to High
Alternate-flowered Watermilfoil	Medium to High
Coontail	Medium to High
Lake Quillwort	Low
All Other Species (N=21)	Low

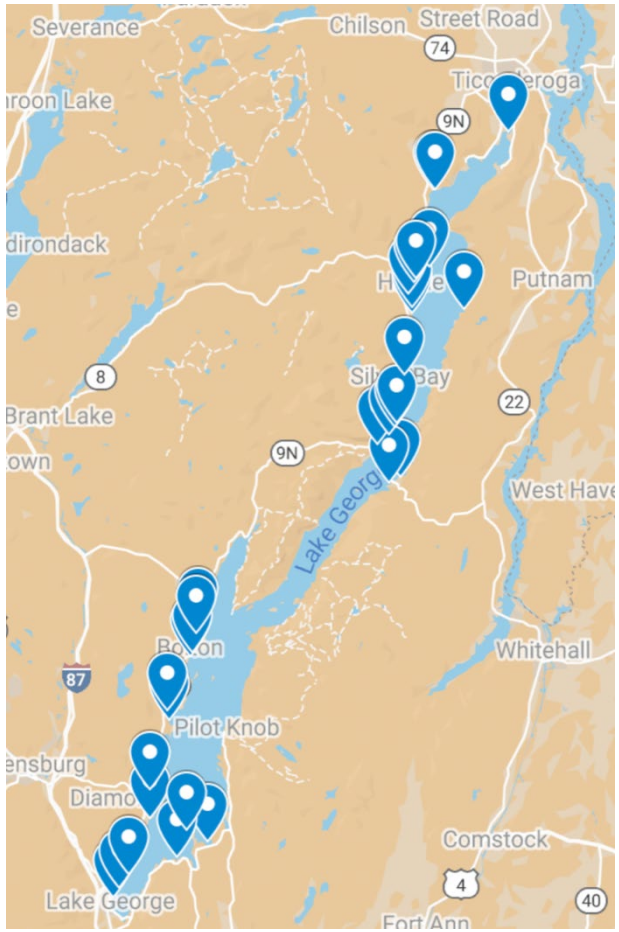
Close-up of Blairs Bay Location and Abundance of Alternate-flowered Watermilfoil

Alternate-flowered Watermilfoil in Lake George

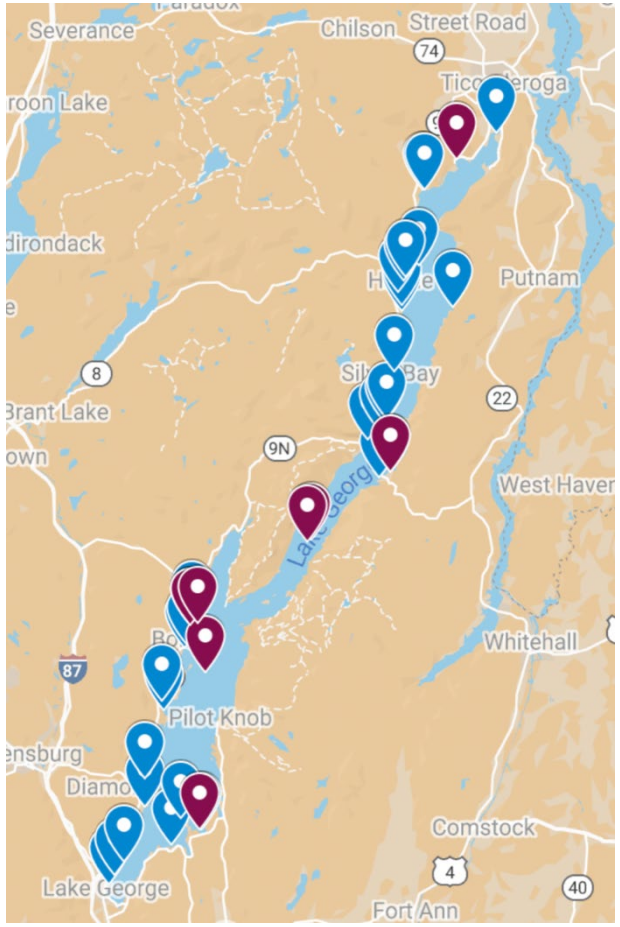
Natural Heritage Database
7 Locations



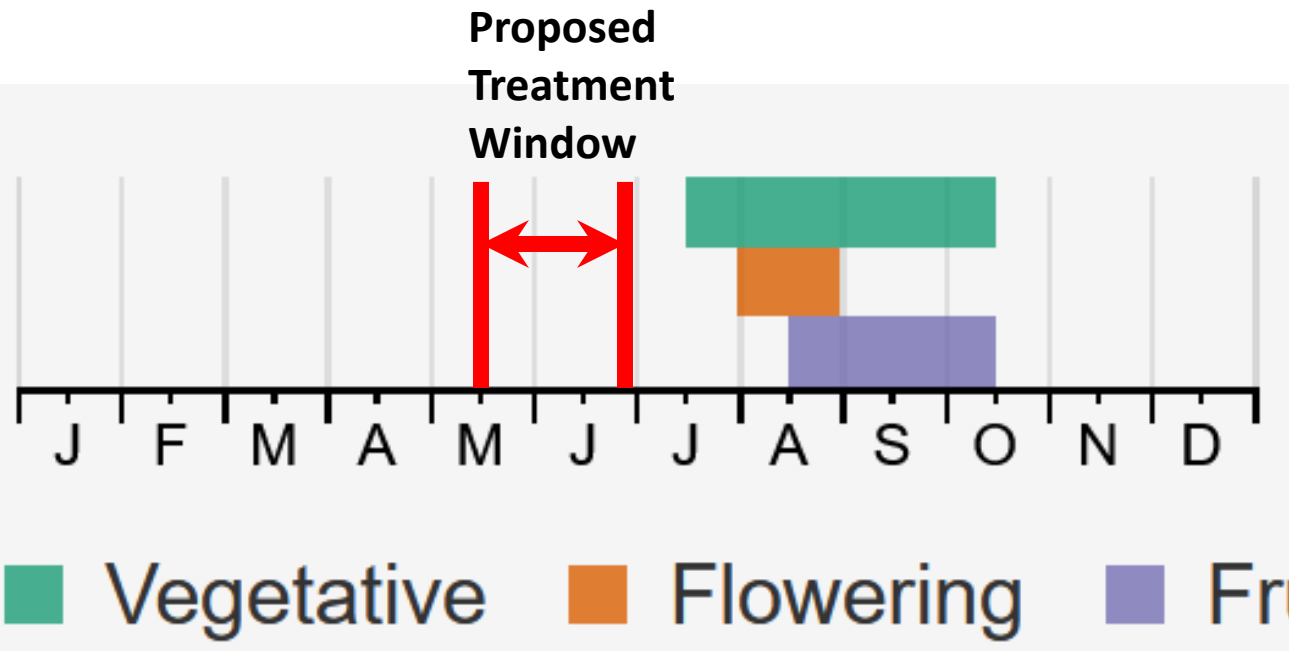
Darrin Freshwater Institute
30 Locations



Total Number of
Unique Locations = 35
(not including Blairs Bay)



Myriophyllum alterniflorum Growth in New York in Relation to Proposed Herbicide Treatment Timeframe



The time of year you would expect to find Alternate-flowered Water Milfoil vegetative, flowering, and fruiting in New York.

Post-treatment Plant Survey

Sheep Meadow Lake George, New York

2021 Submersed Aquatic Macrophyte Survey Report

Repeat Plant Survey

Record observed impacts to all target and non-target species (plant or animal) as observed during any post-treatment qualitative assessment, or as observed during routine post-treatment herbicide concentration sampling.

Public Comment and Review by Others

Public Comment

- Public Notice
  - Notice to adjoining landowners sent when application was received, also when application was completed

    2023-17 → 9 recipients; 2023-18 → 20 recipients

  - Environmental Notice Bulletin: Comment Period Ended May 30, 2024

  - 2023-17 → 258 letters received

    → 44 Supportive; 214 Not Supportive
  - 2023-18 → 186 letters received

    → 39 Supportive; 147 Not Supportive

Public Comment – Themes (Not Supportive)

- General opposition to chemical treatment
  - Applicant Response

It is natural to feel that such an action will have long-term consequences and could potentially harm the lake's ecology or even have potential impacts upon recreation, drinking water or fishing. However, none of these concerns are borne out by the considerable scientific or regulatory record regarding this particular herbicide

To date, the Commission has identified no scientific or regulatory report that identifies or validates concerns regarding the EPA registered and DEC labeled use of this product in any waterbody.

Public Comment – Themes (Not Supportive)

- Long term impacts, Need for more science
  - Applicant Response

This aquatic herbicide has been subject to dozens of peer-reviewed research studies, an Environmental Impact Statement, US Environmental Protection Agency review and registration, NYS DEC and Department of Health review and registration, review and approval by every state in the contiguous U.S. (49 out of 49) that has conducted their own independent analyses, approval by the Canadian Health Ministry, The European Union and many other countries. All of these extensive reviews document zero public health impacts from its labeled use, and exceedingly limited impacts upon native plants and organisms.

…the NYS DEC identifies that there are no 'data gaps' regarding the herbicide's potential impacts and registration in NYS. The record regarding ProcellaCOR's safe and effective use has not been contested by any regulatory entity that the Commission has identified.

Public Comment – Themes (Not Supportive)

- Drinking water and contact recreation concerns
  - Applicant Response

ProcellaCOR's EPA and DEC product registrations contain no restrictions on drinking water, contact recreation (swimming) or fishing following product application.

Public Comment – Themes (Not Supportive)

- PFAS designation from Minnesota report
  - Applicant Response

The US Environmental Protection Agency does not classify ProcellaCOR as PFAS based on its chemical structure, and the regulatory science and evaluations validates that it does not have the characteristics of long environmental persistence and toxicity risks common to long-chain PFAS.

Public Comment – Themes (Not Supportive)

- Non-Target Impacts
  - Applicant Response

In its review, the EPA found that florpyrauxifen-benzyl has no risk concerns for non-target wildlife, and does not bioaccumulate in fish or freshwater clams. This aquatic herbicide has been subject to dozens of peer-reviewed research studies, plus state and federal agency approvals, all of which document the exceptionally limited impacts upon native plants and organisms.

There are few non-target plants impacted; these include water shield and native milfoil. Water shield plants have rebound in the same growing season following treatment, and are not present in the subject treatment areas. Native milfoil is common throughout the Lake, and from a whole-lake population perspective, the population will not be significantly impacted by treatments.

Public Comment – Themes (Not Supportive)

- No crisis – hand harvesting is working
  - Applicant Response

The Commission has never called milfoil a crisis, and has managed the Eurasian watermilfoil program to the best of its ability for more than 30 years with the best available techniques and technology. It is the job of any lake management organization to understand, evaluate and apply the best management techniques possible to achieve the best and longest-term outcomes on any issue.

Public Comment – Themes (Not Supportive)

- No crisis – hand harvesting is working
  - Applicant Response

The Commission has never called milfoil a crisis, and has managed the Eurasian watermilfoil program to the best of its ability for more than 30 years with the best available techniques and technology. It is the job of any lake management organization to understand, evaluate and apply the best management techniques possible to achieve the best and longest-term outcomes on any issue.

Public Comment – Themes (Not Supportive)

- Complex circulation in Lake George; Label not followed by DEC
  - Applicant Response

An Affidavit from the NYS Department of Environmental Conservation from the DEC Regional Pesticides Program Manager notes, in part, as follows: "In my professional opinion, the use of ProcellaCOR EC as proposed in the permit application and as specified in the permits does not conflict with the registered ProcellaCOR EC labeling. The proposed treatment sites are not near the outlet of Lake George as claimed by the petitioners. In fact, the treatment area in Blairs Bay is over four miles from the outlet of Lake George, and the treatment area in Sheep Meadow Bay is over twelve miles from the outlet. The proposed use of ProcellaCOR EC as permitted by DEC would not be in conflict with the registered ProcellaCOR EC labeling."

Public Comment – Themes (Not Supportive)

- Product degradation concerns / product metabolites
  - Applicant Response

In their reviews, the EPA and NYSDEC/DOH independently review all active and inactive ingredients. It is accepted science that the active ingredient will be absorbed by target vegetation or break down in a matter of hours to days by photolysis and hydrolysis.

the science and approvals show that the inert metabolites of the product are, as would commonly be expected, less effective than the product itself … Compared to ProcellaCOR (florpyrauxifen-benzyl), EPA concluded: ...the relative toxicity of the transformation products on submerged aquatic vegetation:

- florpyrauxifen-acid was 30x less toxic
- benzyl-hydroxy was 1,700x less toxic
- hydroxy-acid was 11,400x less toxic

Staff Recommendation: Approve with Conditions

Draft Permit Conditions

- Undertake project as proposed
- Adherence to Clean Drain Dry Standards for all equipment used
- Post-treatment concentration monitoring report
- Post treatment aquatic plant survey
- Specific pre- and post-treatment assessment of Alternate Flowered Watermilfoil within and adjacent to the treatment area