



READY SCOUT, LLC

LAKE CONSULTING & SERVICES

Upper Chateaugay Lake- "Treatment Area W"

Work Plan 04/21/25



Contents

Pages 2 – 4	Introduction & Location
Pages 4 -12	Endangered, Threatened and Susceptible Species
Pages 13 -14	Eurasian Watermilfoil Abundance
Pages 15 -16	Treatment specifics



Upper Chateaugay Lake- "Treatment Area W"

Work Plan 04/21/25

Introduction

This Standard Work Plan is submitted on behalf of the Chateaugay Lake Foundation, PO Box 222 Lyon Mountain, NY 12952, info@chateaugaylakefoundation.org, www.chateaugaylakefoundation.com. The Foundation represents riparian and community property owners surrounding Upper Chateaugay Lake, the Narrows and Lower Chateaugay Lake, which span portions of Clinton and Franklin Counties in the northeastern section of the Adirondack Park.

The Work Plan is intended to meet the requirements of the Inter-Agency Guidelines for Implementing Best Management Practices to Control Invasive Species on DEC-Administered Lands of the Adirondack Park (January, 2023). Specifically, this Plan is written to describe the actions planned to control an infestation of the invasive aquatic plant Eurasian Watermilfoil (*Myriophyllum spicatum*, EWM) in the southern section of Upper Chateaugay Lake using an aquatic herbicide in 2025. This particular section of EWM infestation includes NYSDEC Underwater Forest Preserve Lands, thus triggering the required Work Plan submission. Other areas of Upper Chateaugay Lake (Treatment Areas B, D and H) are also planned for herbicide application to control EWM in 2025, however these other areas do not overlay or border DEC Underwater Forest Preserve Lands. Prior to this submission, permit applications have been submitted to NYSDEC for two Article 15 Permits and to the APA for an Aquatic Herbicide Permit and are currently under review.

Project Location

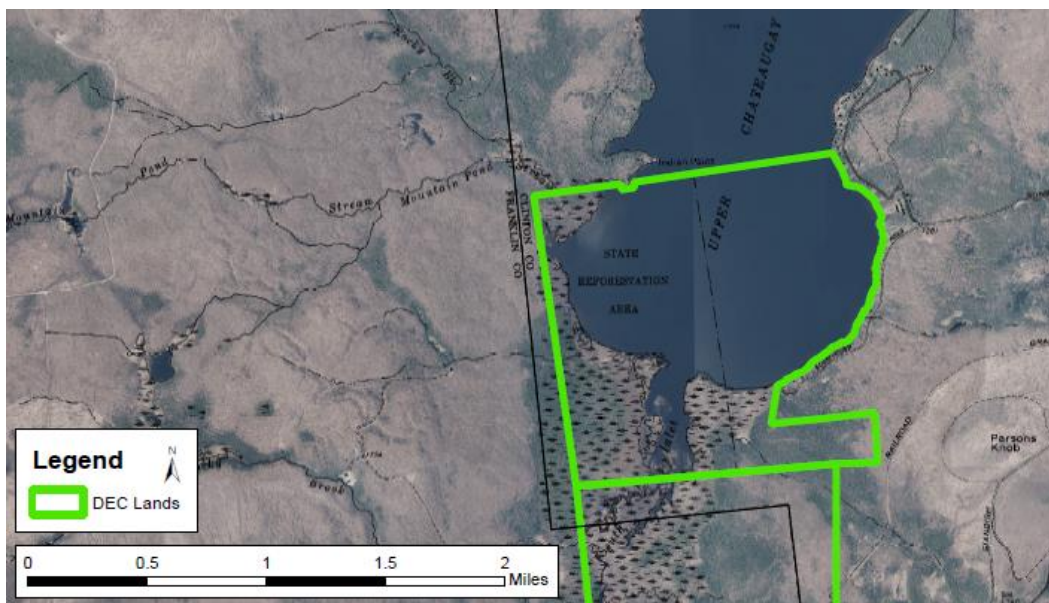
The project site associated with this Work Plan, referred to as Treatment Area W, lies in Upper Chateaugay Lake in the town of Dannemora, Clinton County, which is part of NYSDEC Region 5. The eastern shoreline of Upper Chateaugay Lake is developed with residential lakefront homes. The western shoreline of the lake is primarily forested, including Forest Preserve, although lakefront homes are present along the northern stretch of this shoreline. The southern end of the lake includes the lake inlet (South Inlet) and a large wetland complex. The northern end of the lake connects to the Chateaugay Lake Narrows, which includes a popular NYSDEC Boat Launch, and eventually to Lower Chateaugay Lake and the lake system outlet.



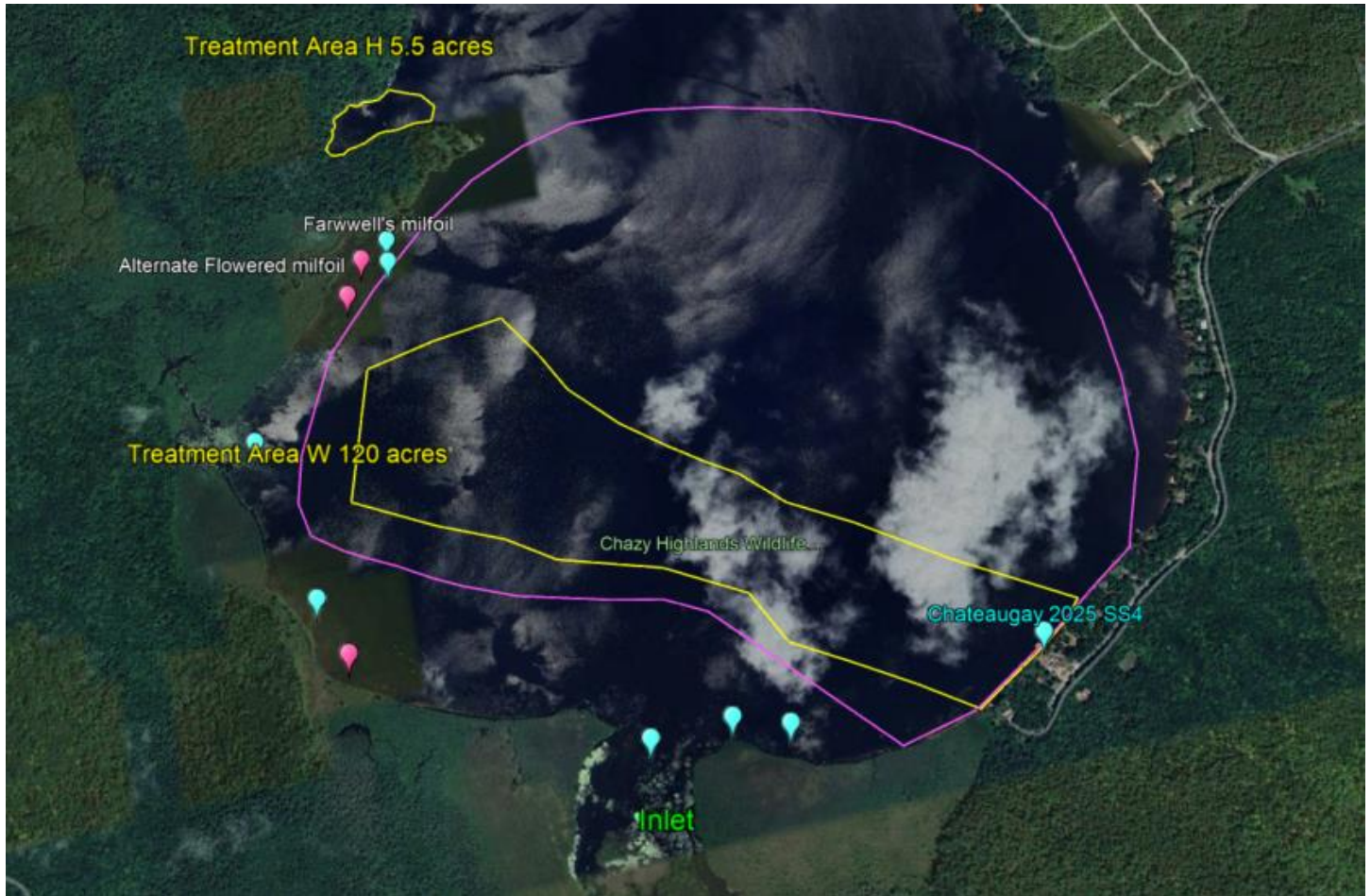
The map below shows Treatment Area W, and its size, as well as the other planned application sites for 2025. The coordinates of a point within Treatment Area W are 44°43'15.58 N, 73°58'24.24 W.



The map below shows the Forest Preserve property adjacent to Upper Chateaugay Lake.



The image below shows Treatment Area W (yellow), as well as an estimated Treatment Area W dilution area for the proposed herbicide, ProcellaCOR EC (pink). The approximate size of the dilution area is 472 acres. The dilution area is an estimate based on a planned application rate of 3.86 ppb ProcellaCOR EC, and its dilution below the Minimum Detection Limit and the product irrigation restriction limit of 1 ppb, taking into account flow from the inlet, as well as prevailing winds from the southwest.

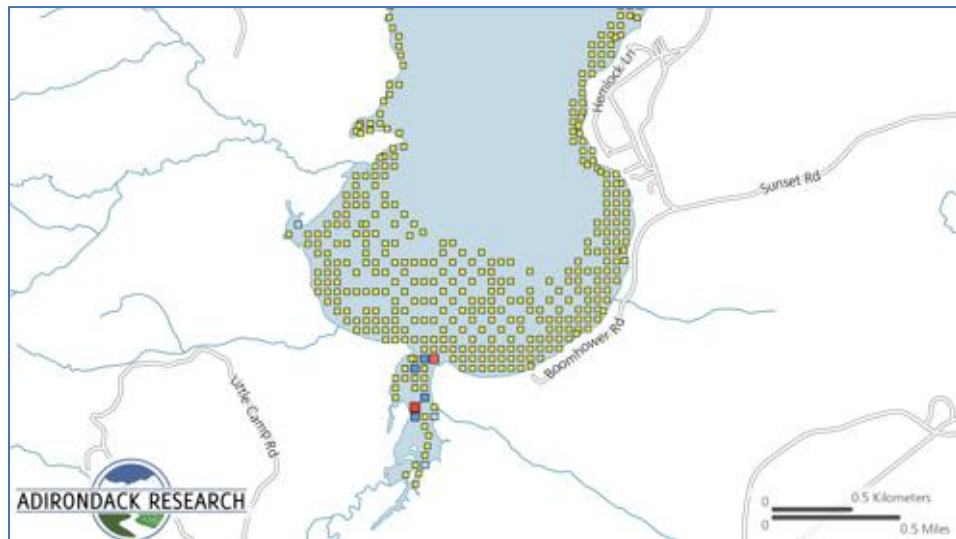


Endangered, Threatened and Susceptible Species

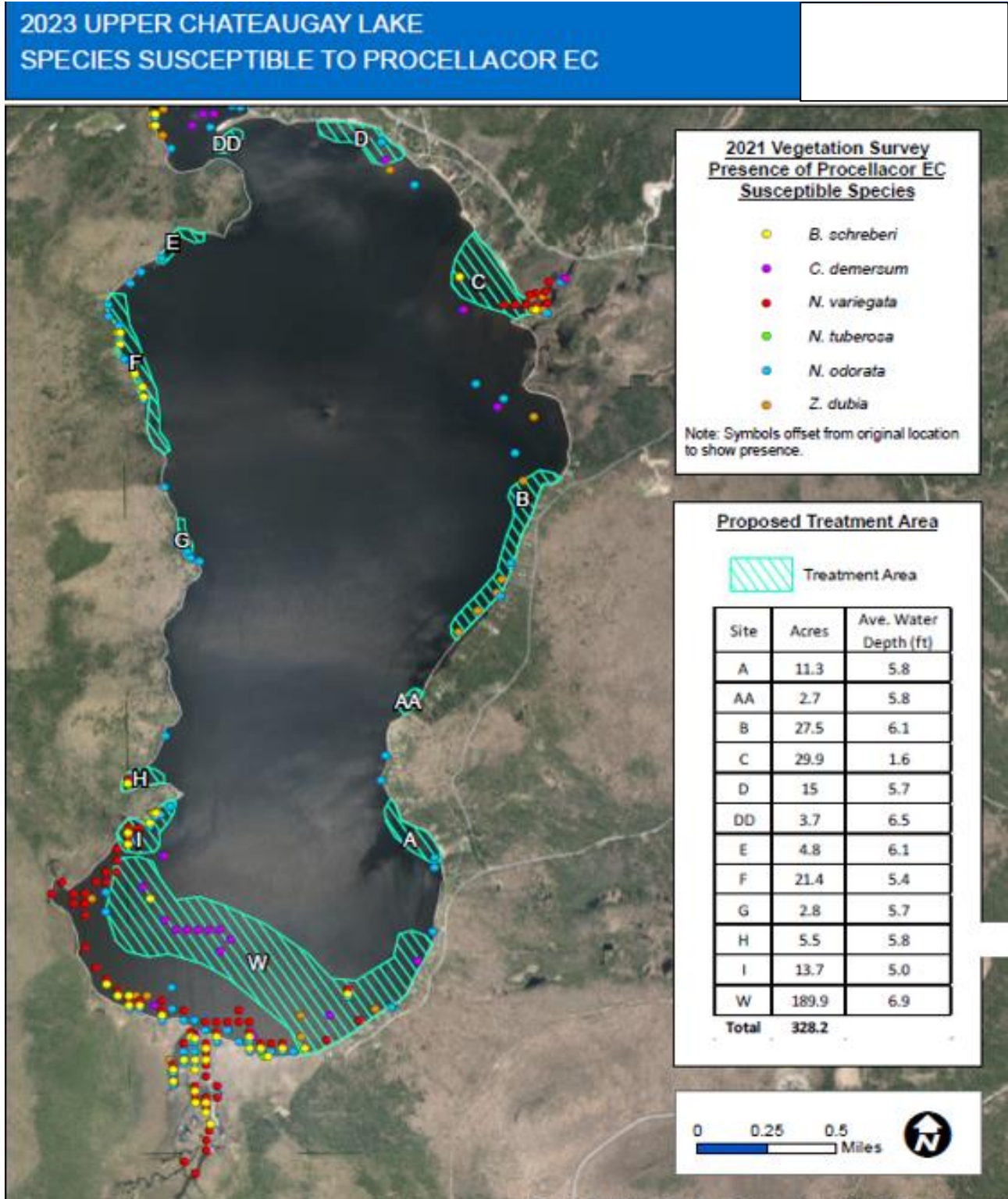
The image above also shows the mapped locations of Farwell's Watermilfoil and Alternate Flowered Watermilfoil, both species currently listed as Threatened in New York State. These sites were mapped in 2021 by the firm Northeast Aquatic Research (NEAR). The proposed herbicide to be used in 2025 is ProcellaCOR EC, a systemic herbicide selective to broadleaf plant species (dicots), and particularly effective on watermilfoils species at the lowest application rates (<10 ppb). In addition to the target species EWM, both native milfoils noted above may show some temporary or short-term control.

In addition to Farwell's and Alternate Flowered Watermilfoils, two other protected species are found in Upper Chateaugay Lake. These are Common Mare's Tail (*Hippuris vulgaris*) which is endangered, and Alpine Pondweed (*Potamogeton alpinus*) which is Threatened. Alpine Pondweed was found at only one location on the west shore of the Upper Lake in 2021 and well north of the treatment dilution area. Neither species has any known or anticipated susceptibility to ProcettaCOR EC.

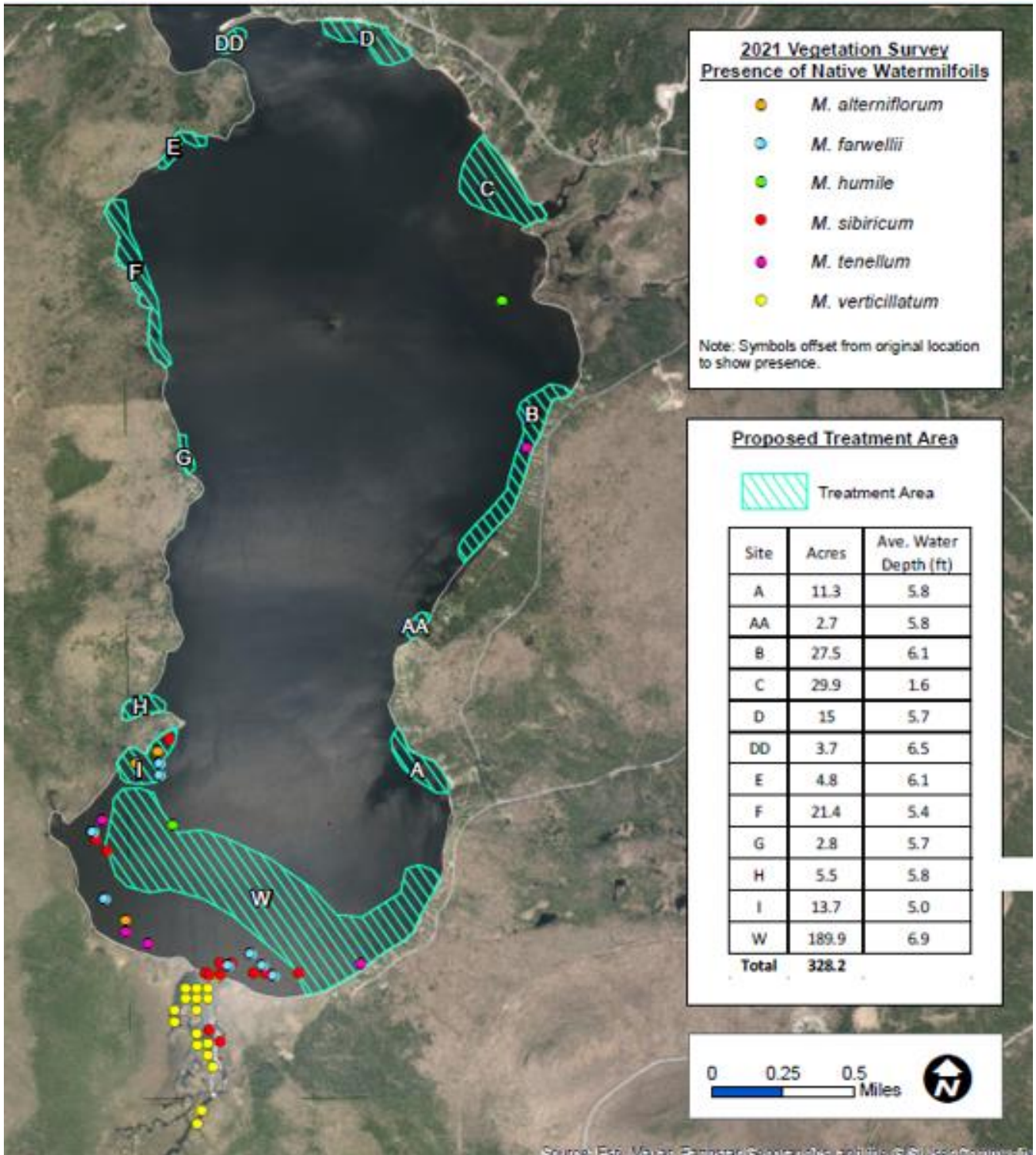
Common Mare's Tail is abundant in the southern end of the Upper Lake where the inlet comes in. The map and the image below are from the 2021 NEAR survey data and report, which documents not only the sampled locations of Mare's Tail but also states that the plant is far more abundant than sample results indicate and provides the image as further reference.



Additional maps of other susceptible species and a table of all species found in 2021 and their susceptibility to ProcellaCOR EC follow. (Note: Treatment areas shown on the maps were preliminary and may have since been modified).



2023 UPPER CHATEAUGAY LAKE NATIVE WATERMILFOILS



Susceptibility of plant species in Chateaugay Lake to ProcellaCOR EC

Scientific name	Common Name	Susceptibility
<i>Brasenia schreberi</i>	Watershield	Moderate-High
<i>Ceratophyllum demersum</i>	Coontail	Low-Moderate
<i>Chara</i> sp.	Muskgrass	Low
<i>Eleocharis acicularis</i>	Needle Spikerush	Low
<i>Eleocharis robbinsii</i>	Robbin's Spikerush	Low
<i>Elodea nuttallii</i>	Nuttall's waterweed	Low
<i>Equisetum</i> sp.	Horsetail	Unknown
<i>Fontinalis</i> sp.	Water moss	Low
<i>Glyceria borealis</i>	Manna grass	Low
<i>Hippuris vulgaris</i>	Mare's tail	Low
<i>Isoetes</i> sp.	Quillwort	Low
<i>Lemna minor</i>	Small duckweed	Low
<i>Lobelia dortmanna</i>	Water Lobelia	Low
<i>Lythrum salicaria</i>	Purple Loosestrife	Unknown
<i>Myriophyllum alterniflorum</i>	Alternate-leaf watermilfoil	Unknown/presumed High
<i>Myriophyllum farwellii</i>	Farwell's watermilfoil	Unknown/presumed High

[Continued on the following page](#)

Sources: [Selective Control of Invasive Watermilfoils with ProcellaCOR® Aquatic Herbicide and Response of Native Aquatic Plants](#), January 28, 2019 Mark Heilman, Ph.D., Jon Gosselin, SePRO Technical Specialist, [Pers. Communication](#)



<i>Myriophyllum humile</i>	Low Watermilfoil	Unknown/presumed High
<i>Myriophyllum sibiricum</i>	Northern watermilfoil	High
<i>Myriophyllum spicatum</i>	Eurasian watermilfoil	High
<i>Myriophyllum tenellum</i>	Slender Watermilfoil	Unknown/Presumed High
<i>Myriophyllum verticillatum</i>	Whorled watermilfoil	Unknown/presumed High
<i>Najas flexilis</i>	Slender Naiad	Low
<i>Najas guadalupensis</i>	Southern naiad	Low
<i>Nitella</i> sp.	Stonewort	Low
<i>Nuphar variegata</i>	Yellow Pond Lily	Low-Moderate
<i>Nymphaea odorata</i>	White Water Lily	Moderate
<i>Nymphaea tuberosa</i>	America White Water Lily	Moderate
<i>Persicaria amphibia</i>	Water smartweed	Unknown
<i>Phragmites australis</i>	Common reed	Low
<i>Polygonum</i> sp.	Smartweed	Unknown
<i>Potamogeton alpinus</i>	Alpine Pondweed	Low
<i>Potamogeton amplifolius</i>	Largeleaf Pondweed	Low
<i>Potamogeton bicupulatus</i>	Snail-seed pondweed	Low
<i>Potamogeton epihydrus</i>	Ribbon-leaf Pondweed	Low
<i>Potamogeton gramineus</i>	Grassy-Leaf pondweed	Low
<i>Potamogeton natans</i>	Floating-leaf pondweed	Low
<i>Potamogeton nodosus</i>	American Pondweed	Low
<i>Potamogeton obtusifolius</i>	Blunt-leaf pondweed	Low
<i>Potamogeton perfoliatus</i>	Clasping-leaf pondweed	Low
<i>Potamogeton pusillus</i>	Small pondweed	Low
<i>Potamogeton robbinsii</i>	Robbins Pondweed	Low
<i>Potamogeton spirillus</i>	Spiral Pondweed	Low
<i>Potamogeton zosteriformis</i>	Flat-stem pondweed	Low
<i>Ranunculus trichophyllus</i>	Thread-leaf crowfoot	Low
<i>Sagittaria graminea</i>	Grassy Arrowhead	Low

<i>Schoenoplectus</i> sp.	Bulrush	Low
<i>Schoenoplectus tabernaemontani</i>	Soft Stem bulrush	Low
<i>Sparganium angustifolium</i>	Narrowleaf bur-reed	Low
<i>Sparganium fluctuans</i>	Floating Bur-reed	Low
<i>Sparganium</i> sp.	Bur-Reed	Low
<i>Spirodela polyrhiza</i>	Great Duckweed	Low
<i>Typha</i> sp.	Cattail	Low
<i>Utricularia geminiscapa</i>	Hidden fruit bladderwort	Low
<i>Utricularia macrorhiza</i>	Common bladderwort	Low
<i>Utricularia minor</i>	Lesser bladderwort	Low
<i>Vallisneria americana</i>	Tape-grass	Low
<i>Zosterella dubia</i>	Water star-grass	Low - Moderate

Susceptible Species Notes

ProcellaCOR EC is an auxin-mimic herbicide that controls broadleaf (dicot) species, and the watermilfoils (*Myriophyllum* sp.) are considered highly susceptible at the lowest application rates. Several species of watermilfoil are found in the lake in addition to the target species EWM. These native milfoils are found almost exclusively in the Upper Lake, primarily in the vicinity of Treatment Area W. Slender and Low Watermilfoils were found within the bounds of treatment area W, and Alternate Flowered, Northern and Farwell's Watermilfoil are found right along the edge of the zone. Both Farwell's and Alternate-Flowered Watermilfoils appear on NYS's 2024 Active Rare Plant List with a rank of S2 (Imperiled) and a status of T (Threatened).

Low Watermilfoil (*M. humile*) was recorded in two locations in the Upper Lake in 2021, one north of Treatment Area B and one on the north edge of Treatment Area W. This plant may be controlled by ProcellaCOR EC if still present in 2025.

Northern Watermilfoil (*M. sibiricum*) and Farwell's Watermilfoil (*M. farwellii*) were found along the western edge and just north of the west side of Treatment Area W. These plants are found in greater abundance along the southern shoreline of the Upper Lake in the vicinity of the inlet, and are therefore likely to maintain a population in the lake even after ProcellaCOR treatment of site W.

One location of Slender Watermilfoil (*M. tenellum*) was found in Treatment Area B, two locations were found on the southwest and southeast corners of Treatment Area W, and two more locations were noted south of Treatment Area W along the southern shoreline. The impact of ProcellaCOR on Slender Watermilfoil is unclear. Since the plant occupies very shallow water, it is feasible to protect the plant during the treatment and for 1-2 days afterwards to improve its chances of undergoing any impact. This strategy was proposed for one of the treatment sites in Lake George in 2024 but it is unclear if that was conducted, and if so, what the result was.

Whorled Watermilfoil (*M. verticillatum*) was found in the inlet area of the Upper Lake and not into the open water. Given its location, no impact is expected to this species as any ProcellaCOR EC that reached the area (however unlikely as it is upstream) would be diluted by fresh water.

Alternate Flowered Watermilfoil (*M. alterniflorum*) was found in three locations in 2021, and two of these are just north of the western border of the treatment area. It's possible that these locations would be impacted by the ProcellaCOR treatment, but also possible that prevailing winds will keep these sites protected from any ProcellaCOR diffusion and prevent impact to the locations of Alternate Flowered Watermilfoil, should those species still exist in that location. It's also well established that EWM abundance has a negative effect on native milfoil abundance in general, so over the long term EWM removal should benefit the native species.

In addition to watermilfoil species, several other native plants found in Upper Chateaugay Lake can exhibit some response to ProcellaCOR EC, as noted below.

Watershield (*B. schreberi*), a small floating species, is the plant most susceptible to ProcellaCOR EC next to milfoil species. Watershield was documented in Treatment Areas H and W, as well as along the shorelines near Treatment Area W. Based on response of Watershield in other Adirondack Lakes over the past few years, Watershield in the treatment areas is expected to drop down rapidly after treatment and then reappear at the surface within 6-8 weeks. It's difficult to predict the reaction of Watershield plants along the southern shoreline of the Upper Lake, since these plants are relatively close to a large application zone but will also be influenced by freshwater from the inlet. Some reduction in overall abundance may occur in the year of treatment, but the plant is expected to return to pre-treatment range by the season after treatment.



Coontail (*C. demersum*) is moderately susceptible at the anticipated use rate for the treatment areas of Chateaugay Lake, and is also present in Treatment Areas D and W. Not surprisingly, the majority of Coontail found in the Upper Lake in 2021 is within Treatment Area W, as it often associates with EWM. Given the size of the treatment area, some reduction in Coontail will likely result from the application in that area.

White waterlily (*N. odorata/tuberosa*) and yellow waterlily (*N. variegata*) can be susceptible to ProcellaCOR EC at milfoil application rates. White Waterlily has been found in Treatment Areas B, D and W. This plant has shown variable responses to ProcellaCOR EC applications in the Adirondacks, even showing a post-treatment increase in one lake. In general, water lilies do not thrive in wave-influenced areas, so the plant's presence in 2025 may have as much to do with weather patterns as with any ProcellaCOR influence. Yellow Water Lily was previously found in Treatment Area H and the outer edges of Treatment Area W. Impact to Yellow Water Lilies will depend on their growth at the time of application. Observations of recent Adirondack ProcellaCOR EC treatments indicate that these plants will exhibit epinasty (stem twisting) and may drop flowers but will recover within weeks.

Water Stargrass (*Z. dubia*) is present within Treatment Areas B and W, and close to the border of Treatment Area D. Response to ProcellaCOR EC appears to be variable. Beets et al indicated *Heteranthera (Zosterella)* showed the most treatment related variability, with one treatment (3 ppb, 6 hr) showing a large increase in biomass and another (9 ppb, static) showing injury symptoms. In Snyders Lake, NY, water stargrass declined from 19% pre-treatment to 6% in the post-treatment survey. An opposite response occurred at Cazenovia Lake, which saw a significant increase in water stargrass lakeside following ProcellaCOR EC treatment

Eurasian Watermilfoil Abundance -Upper Lake and southern end of Upper Lake

Eurasian watermilfoil is the focus of Chateaugay Lake Foundation's long-term management plan, as it is the lake's dominant invasive aquatic plant, and negatively impacts the use of the lake, as well as inhibiting native plant communities. Various plant surveys from 2002 (Cedar Eden Environmental), 2006 and 2014 (Adirondack Watershed Institute) and 2021 (NEAR Aquatic Plant Survey) all document the presence of EWM in the lake. The NEAR survey documented EWM in 39% frequency of occurrence, the third most abundant plant found in the survey. The report included the image below of EWM densities in the Upper Lake.

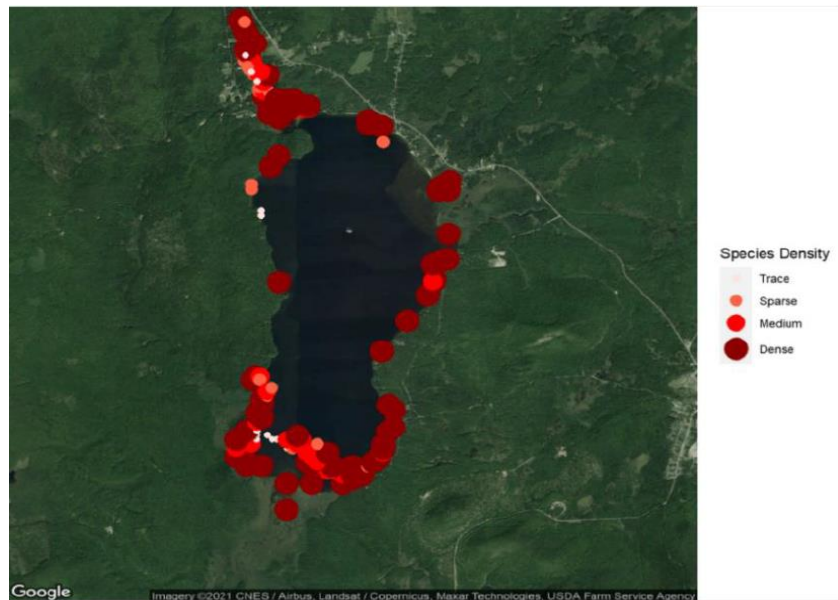
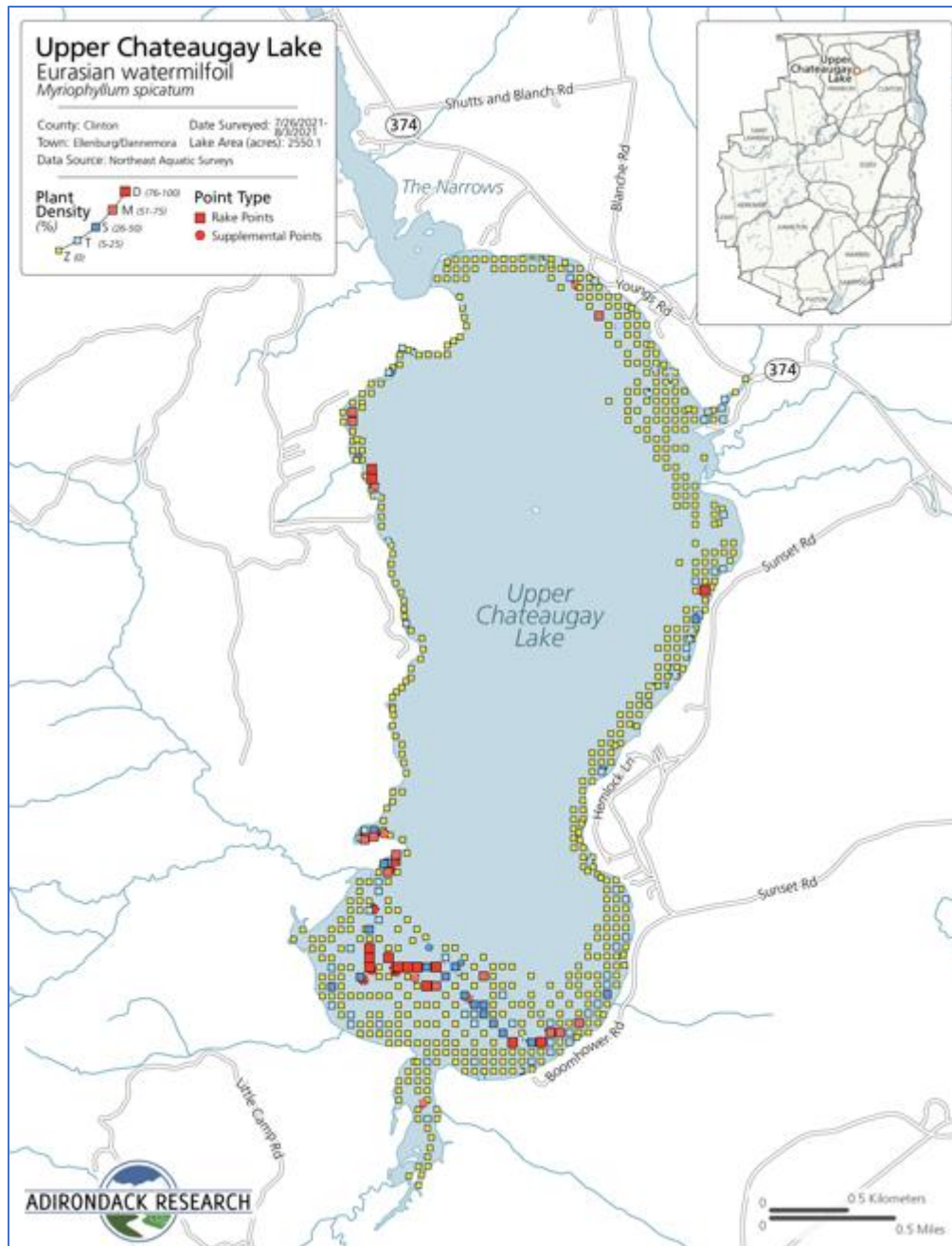
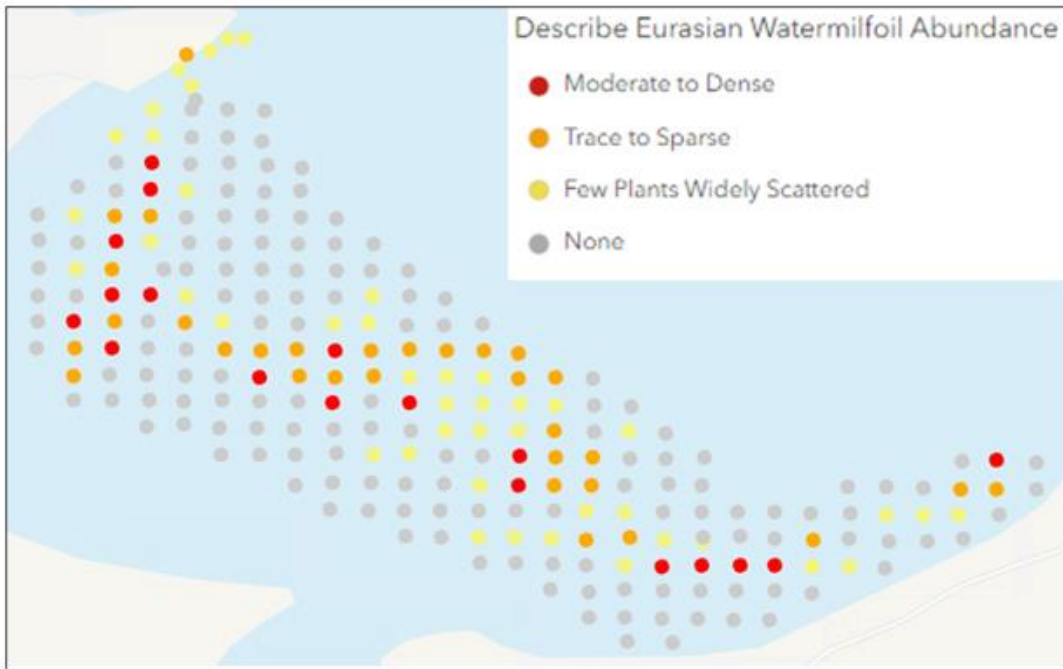


Figure 3. Eurasian watermilfoil locations and densities in Upper Chateaugay Lake.

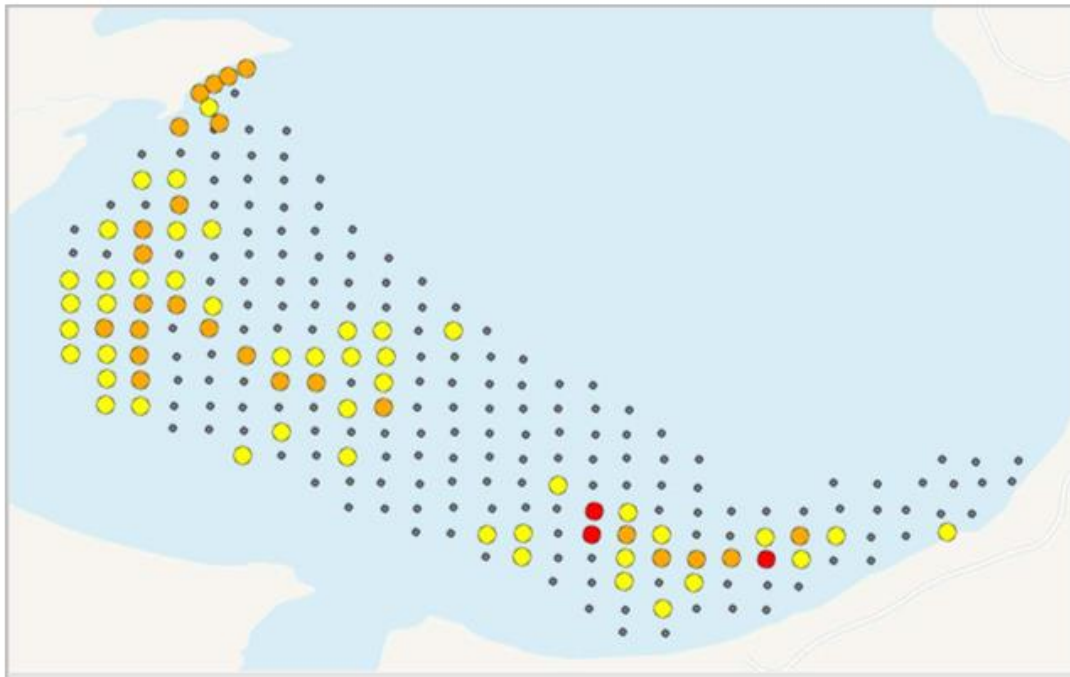
Shown below are maps of EWM presence and abundance from the 2021 NEAR survey (remapped by Adirondack Research), as well as from 2023 and 2024 AIS monitoring surveys conducted by Chateaugay Lake volunteers using the Lake Management Tracker survey protocol developed by the Adirondack Park Invasive Plant Program (APIPP) in cooperation with the Adirondack Park Agency (APA).



Eurasian Watermilfoil, South Inlet, 2023



Eurasian Watermilfoil, South Inlet 2024



Treatment Specifics

The project calls for the application of ProcellaCOR EC to Eurasian Watermilfoil in Treatment Area W and the other three Upper Chateaugay Lake treatment plots in the latter half of June 2025 pending all permit approvals. The application will be completed in one midweek workday. (A copy of the Article 25 permit applications is included for reference). In the unlikely event that Work Plan approval for Treatment Site W does not arrive prior to the June 30 APA application deadline, Sites B, D & H will still be treated. Inclusion of Treatment Area W in the 2025 application is highly desirable since that site represents a significant source of EWM distribution in the Upper Lake.

ProcellaCOR EC is the proposed herbicide for use in Chateaugay Lake, as indicated in the Foundation's multi-year Eurasian watermilfoil treatment plan. From an ecological perspective, ProcellaCOR EC provides better selectivity (protection of native plants) than other products and breaks down and disappears rapidly. From a management perspective, ProcellaCOR EC requires a shorter contact time on the plant and is more site-selective, while providing multi-season control of EWM. Finally, from a logistical perspective, ProcellaCOR EC's lack of recreational water use restrictions and its low application rate provide for less impact to the community of lake users.

ProcellaCOR EC has been used in New York since 2019, with the first in-state application taking place at Snyder's Lake in North Greenbush, NY. An outer ring of littoral zone in this lake of approximately 100 acres was treated at 3.86 ppb ProcellaCOR EC. Professional plant surveys completed post-treatment and in 2020 did not find Eurasian watermilfoil. The initial application of ProcellaCOR EC in the Adirondack Park occurred in 2020 at Minerva Lake. Annual surveys documented complete control for two seasons, with only the presence of individual plants found in subsequent seasons, indicating significant control has lasted for five growing seasons. Since that time, ProcellaCOR EC has provided successful EWM control in multiple Adirondack Park Lakes, including Chateaugay Lake Narrows, with minor negative impacts to most native plants.

ProcellaCOR EC is applied by boat. The application boat contains one 45-gallon tank, and a pump system designed to draw water from the lake to the tank and send water from the tank to rear-mounted drop hoses located at the stern. ProcellaCOR is applied through the drop hoses, which are typically 3' long. The process begins by drawing water into the tank, adding the required ProcellaCOR for a particular treatment area, and then further filling the tank to the desired level. Once ready to apply, the mixed water and herbicide from the tank are further mixed with lake water in the system and the solution is pumped out through the drop hoses in the rear. The boat travels back and forth across the treatment zone, usually in parallel lines to accurately apply the herbicide. Differences in water depth within a treatment area are addressed by either adjusting the speed of the boat or making additional passes in deeper areas. Once the mixture tank is empty, it is refilled at least 3 times and rinsed within the treatment area. In addition, empty herbicide containers are also rinsed at least three times within the treatment area. To ensure accuracy of the treatment area, each treatment site is preloaded onto a boat mounted Lowrance depthfinder/GPS using Google Earth, with treatment maps also downloaded on a cell phone with Google Earth for backup.

Following application, water samples will be collected on the day after treatment and 4-8 days after treatment and analyzed for ProcellaCOR EC concentration. This is used primarily to determine that the water use restrictions from the application can be removed. Plant surveys will also follow the application during the 2025 growing season. The applicator firm, Ready Scout, will conduct a post-treatment assessment of plant impacts in late summer, and document observations for the Chateaugay Lake Foundation and for the DEC and APA reports. In addition, the firm Adirondack



Research will conduct a detailed Aquatic Plant survey in late summer as well, including rake toss sampling from existing point-intercept locations to compare to results from previous seasons.

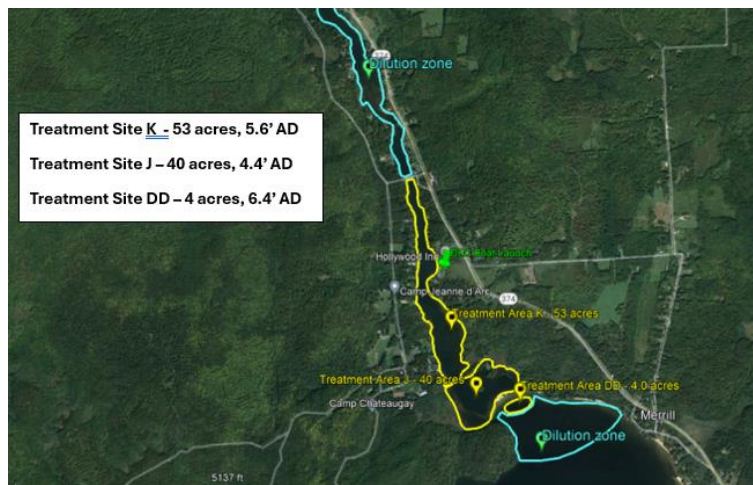
Previous EWM Management

In 2006, the Chateaugay Lakes Association engaged the Adirondack Watershed Institute to formulate a EWM management plan for Chateaugay Lake. That plan identified approximately 130 acres of EWM in the Upper Lake in 2006 and presented control options focusing on a combination of hand harvesting and benthic matting. (Biological controls and lake drawdown were analyzed but not recommended.) The plan indicated that if herbicides became approved in the Adirondack Park, then management options should be re-evaluated.

The Chateaugay Lake Foundation was formed in 2007 with a focus on tackling the EWM infestation and has an ongoing history of hand harvesting invasive Eurasian Watermilfoil in the highest priority areas of the Upper and Lower Lakes and the Narrows. This methodology provides relief in small sites but cannot feasibly control EWM lakewide. The 2021 NEAR Plant survey documented 568 sites containing EWM throughout the three sections of Chateaugay Lake. Subsequently, the plan to add recently approved herbicide ProcellaCOR EC to the lake’s integrated milfoil management was introduced. A history of EWM management by year is included with this submission.

In 2024, the first season of ProcellaCOR EC use, EWM treatment areas focused on the highest use area of the Narrows, and a small infestation just south of the sandbar in the Upper Lake. The ProcellaCOR EC application was performed in June. EWM disappeared over the following two weeks, and did not appear during the remainder of the growing season. The treatment reduced the frequency of EWM from 61.2 percent in the pre-treatment survey to 2.4 percent post-treatment.

A map of the 2024 treatment areas is below.



The proposed treatment of Bed W is integral to the Chateaugay Lake Foundation’s phased plan for achieving control of the Eurasian watermilfoil that has infested the lake system. Bed W’s large size and location at the upstream source of the lake make it a source bed for spreading EWM through the lake. The protected natural area attracts recreational boaters and anglers who unwittingly contribute to plant fragmentation and spread. Controlling this infestation is critical to bring EWM under control lakewide.

The New York State Department of Environmental Conservation
Other Information (Including additional information required by Agency or Department Permits)

Approvals:

Regional Program Manager

Date: Enter Date

Regional Director

Date: Enter Date



On behalf of Fiona Watt

Division Director

Date: 6/26/2025





Megan Phillips
Deputy Director for Planning
Adirondack Park Agency
1133 NYS Route 86
Ray Brook, NY 12977

Glenn Sullivan
Ready Scout, LLC
PO Box 262
Great Meadows, NJ 07838
gps@ready-scout.com

June 9, 2025

RE: SL2025-0015 Chateaugay Lake Foundation Invasive Species Control Standard Work Plan

Dear Glenn Sullivan,

Thank you for your April 21, 2025 submission of a species-specific standard work plan for management of Eurasian watermilfoil (*Myriophyllum spicatum*) on DEC-administered underwater lands. Agency staff have reviewed the work plan entitled "Upper Chateaugay Lake – Treatment Area W" for conformance with the Adirondack Park State Land Master Plan (APSLMP). Staff have determined that the proposed work plan for use of ProcettaCOR EC within Treatment Area W on Upper Chateaugay Lake in the Town of Dannemora is in conformance with the APSLMP.

Best,

A handwritten signature in black ink that reads "Megan Phillips".

Megan Phillips
Deputy Director for Planning
Adirondack Park Agency

cc: Elizabeth Schuyler, Resource Analysis and Scientific Services, APA
John Burth, Regulatory Programs Division, APA
Josh Clague, Division of Lands and Forests, DEC