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Amos Lake Aquatic Plant Survey Report 2025

GREGORY BUGBEE, RILEY DOHERTY, MADISON MANKE, and SUMMER WEIDMAN

Office of Aquatic Invasive Species
Department of Environmental Science and Forestry

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INTRODUCTION

Since 2004, the Connecticut Agricultural Experiment Station Office of Aquatic Invasive Species (CAES OAIS) conducted over 400 surveys of aquatic vegetation and water chemistry in Connecticut's lakes, ponds, and rivers. To date, 264 waterbodies have been mapped, with many, such as Amos Lake, undergoing multiple surveys to monitor changes (CAES OAIS, 2025). Among these lakes and ponds, nearly 60% contain invasive, non-native plant species (Figure 1). These plants can rapidly degrade aquatic ecosystems, real estate values, and recreational opportunities. The presence of invasive species is influenced by factors such as water chemistry, public boat launches, random events, and climate change (Rahel and Olden, 2008). CAES OAIS offers an online database (*portal.ct.gov/caes-oais*) where users can access digitized vegetation maps, detailed transect data, temperature and dissolved oxygen profiles, and clarity. Also included are water chemistry data such as pH, alkalinity, conductivity, total phosphorus, and total nitrogen. The database also houses a digitized herbarium with mounts of plant species from each waterbody. This resource enables citizens, government officials, and scientists to review historical data, compare it with current conditions, and make informed management decisions.

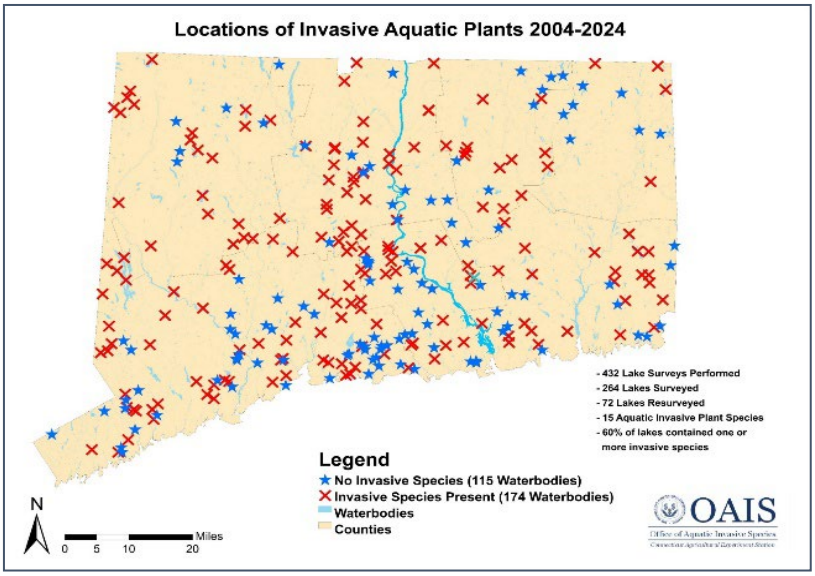

Figure 1. Connecticut lakes with (red X) and without (blue X) invasive species.

Amos Lake is a 112-acre waterbody in Preston, CT, with a state-managed public boat ramp situated along the middle of its western shoreline. During the off-season (the Sunday after Labor Day to June 15), an 8 MPH speed limit is enforced, and water skiing is prohibited between 11 a.m. and 6 p.m. A campground with lake access is located at the southern end, while homes are scattered along much of the remaining shoreline. The lake has a maximum depth of approximately 45 feet and an average depth of about 20 feet.

CAES has surveyed Amos Lake in 2006, 2013, 2018, 2022, 2023, 2024, and 2025.

Results have shown changes in the plant community largely due to plant management efforts. Early surveys identified variable watermilfoil as the primary invasive species. By 2018, the plant had expanded, prompting targeted herbicide treatments with ProcellaCOR® in 2021 and 2022. Results were impressive as the plant has been reduced to negligible levels since. Elsewhere in the lake, a small population of Eurasian watermilfoil was observed and hand pulled. The 2023 survey found northern hydrilla, a very aggressive, invasive plant that was likely transported via watercraft from the Connecticut River.

Native plant populations in Amos Lake have remained relatively stable over the course of the surveys with species like Robbins' pondweed very abundant. Small declines in a few species, such as bladderworts, may be related to herbicide sensitivity. Blooms of mat forming algae have periodically impacted recreational use. Water quality parameters such as phosphorus and clarity have fluctuated but generally reflect a balanced ecosystem. These findings underscore the importance of ongoing monitoring and adaptive management strategies to preserve the lake's ecological health.

OBJECTIVES

1. Perform a seventh aquatic vegetation survey of Amos Lake and test water to quantify water chemistry.

2. Compare 2025 with previous surveys and add vegetation maps and water chemistry information to the OAIS website.

3. Update aquatic plant management options.

METHODS

Aquatic Plant Surveys and Mapping

CAES OAIS conducted an aquatic vegetation survey of Amos Lake on August 18 and 19, 2025, using established methods consistent with previous surveys. The work was carried out from 16 and 18- foot motorized Jon boats navigating areas capable of supporting aquatic plants. Plant species were identified through visual observation or collection using a long-handled rake or grapple. Vegetated areas in deeper water were documented with Lowrance® Hook 5 and HDS 5 sonar systems, supplemented by occasional grapple tosses for ground-truthing. Quantitative plant abundance data were collected by resurveying 12 transects, established in 2006, that represent the diverse habitat of the lake. Each transect included 10 sampling points located at 0, 5, 10, 20, 30, 40, 50, 60, 70, and 80 meters from shore. Locations were determined using Trimble® R1 GNSS global positioning systems with sub-meter accuracy.

Depth was measured with a rake handle, drop line, or digital depth finder, while sediment type was visually estimated. Plant abundances at each point were ranked on a scale of 1 to 5 (1 = very sparse, 5 = very abundant). When field identifications were uncertain, samples were taken to the lab for verification using Crow and Hellquist's taxonomy (2023). One specimen of each species was collected and added to the CAES OAIS aquatic plant herbarium. Digitized mounts are available online (*portal.ct.gov/caes-oais*). Common names of plants are used in this report, with scientific names provided in Table 2. GPS data were post-processed in Pathfinder® 5.85 (Trimble Navigation Limited, Sunnyvale, CA) and imported into ArcGIS® Pro 3.6.2 (ESRI Inc., Redlands, CA). These data were overlaid onto high-resolution aerial imagery of the continental United States provided by the USDA Farm Services Agency.

Table 1. Species richness in Amos Lake during surveys years.

	2006	2013	2018	2022	2023	2024	2025
Number of Total Species	21	26	21	21	29	29	26
Number of Native Species	19	24	19	19	27	25	23
Number of Invasive/Non-Native Species	2	2	2	2	2	4	3

Table 2. Frequency of occurrence (FOQ) of aquatic plants on transects in Amos Lake during CAES OAIS vegetation surveys.

Native Species	2006	2013	2018	2022	2023	2024	2025
Arrowhead (*Sagittaria* species)	4%	1%	8%	3%	7%	2%	2%
Berchtold's pondweed (*Potamogeton berchtoldii*)	—[a]	—	—	3%	3%	5%	10%
Bur-reed (*Sparganium* species)	—	—	—	1%	0%	3%	3%
Common bladderwort (*Utricularia vulgaris*)	3%	3%	8%	—	1%	0%	1%
Common duckweed (*Lemna minor*)	—	—	—	—	0%	0%	3%
Coontail (*Ceratophyllum demersum*)	1%	—	—	1%	1%	1%	3%
Eelgrass (*Vallisneria americana*)	5%	4%	9%	10%	4%	5%	7%
Floating bladderwort (*Utricularia radiata*)	—	—	—	—	—	—	1%
Floating-leaf pondweed (*Potamogeton natans*)	—	—	—	—	5%	—	3%
Golden hedge-hyssop (*Gratiola aurea*)	—	0%	0%	—	0%	0%	—
Great duckweed (*Spirodela polyrhiza*)	—	—	—	2%	—	—	—
Humped bladderwort (*Utricularia gibba*)	1%	3%	13%	—	0%	0%	1%
Large-leaf pondweed (*Potamogeton amplifolius*)	—	—	20%	9%	0%	—	—
Leafy pondweed (*Potamogeton foliosus*)	0%	0%	—	—	—	—	—
Little floating heart (*Nymphoides cordata*)	—	1%	—	0%	—	—	—
Pickerelweed (*Pontederia cordata*)	—	0%	3%	1%	1%	1%	1%
Primrose-willow (*Ludwigia* species)	—	1%	—	—	—	0%	—
Purple bladderwort (*Utricularia purpurea*)	3%	2%	8%	—	0%	0%	5%
Quillwort (*Isoetes* species)	1%	0%	—	—	—	—	—
Ribbon-leaf pondweed (*Potamogeton epihydrus*)	0%	—	—	—	0%	0%	—
Robbins' pondweed (*Potamogeton robbinsii*)	37%	47%	53%	49%	47%	50%	45%
Slender naiad (*Najas flexilis*)	1%	0%	—	2%	0%	1%	—
Slender watermilfoil (*Myriophyllum tenellum*)	3%	1%	0%	2%	0%	0%	0%
Small pondweed (*Potamogeton pusillus*)	—	—	0%	—	0%	—	—
Snailseed pondweed (*Potamogeton bicupulatus*)	1%	0%	3%	—	—	0%	1%
Spikerush (*Eleocharis* species)	—	3%	0%	0%	0%	2%	2%
Spotted pondweed (*Potamogeton pulcher*)	4%	7%	2%	8%	6%	7%	13%
Swamp loosestrife (*Decodon verticillatus*)	2%	0%	1%	3%	2%	0%	4%
Variable pondweed (*Potamogeton gramineus*)	2%	1%	2%	3%	2%	2%	3%
Watershield (*Brasenia schreberi*)	2%	5%	5%	0%	0%	0%	0%
Water smartweed (*Polygonum amphibium*)	—	—	—	—	1%	—	—
Water starwort (*Callitriche* species)	—	0%	—	—	—	—	—
Waterwort (*Elatine* species)	—	0%	—	—	—	—	—
Western waterweed (*Elodea nuttallii*)	—	—	—	—	0%	0%	0%
White water lily (*Nymphaea odorata*)	12%	18%	33%	31%	26%	27%	23%
Yellow water lily (*Nuphar variegata*)	0%	4%	9%	10%	8%	10%	9%

Non-Native Species	2006	2013	2018	2022	2023	2024	2025
Mudmat (*Glossostigma cleistanthum*)	4%	2%	3%	3%	2%	3%	2%

Invasive Species	2006	2013	2018	2022	2023	2024	2025
Eurasian watermilfoil (*Myriophyllum spicatum*)	—	—	—	0%	—	0%	2%
Northern hydrilla (*Hydrilla verticillata* ssp. *lithuanica*)	—	—	—	—	0%	0%	1%
Variable-leaf watermilfoil (*Myriophyllum heterophyllum*)	1%	1%	21%	—	—	0%	—

[a] "—" = Species not found in Amos Lake; 0% indicates found in the waterbody but not on any transect points

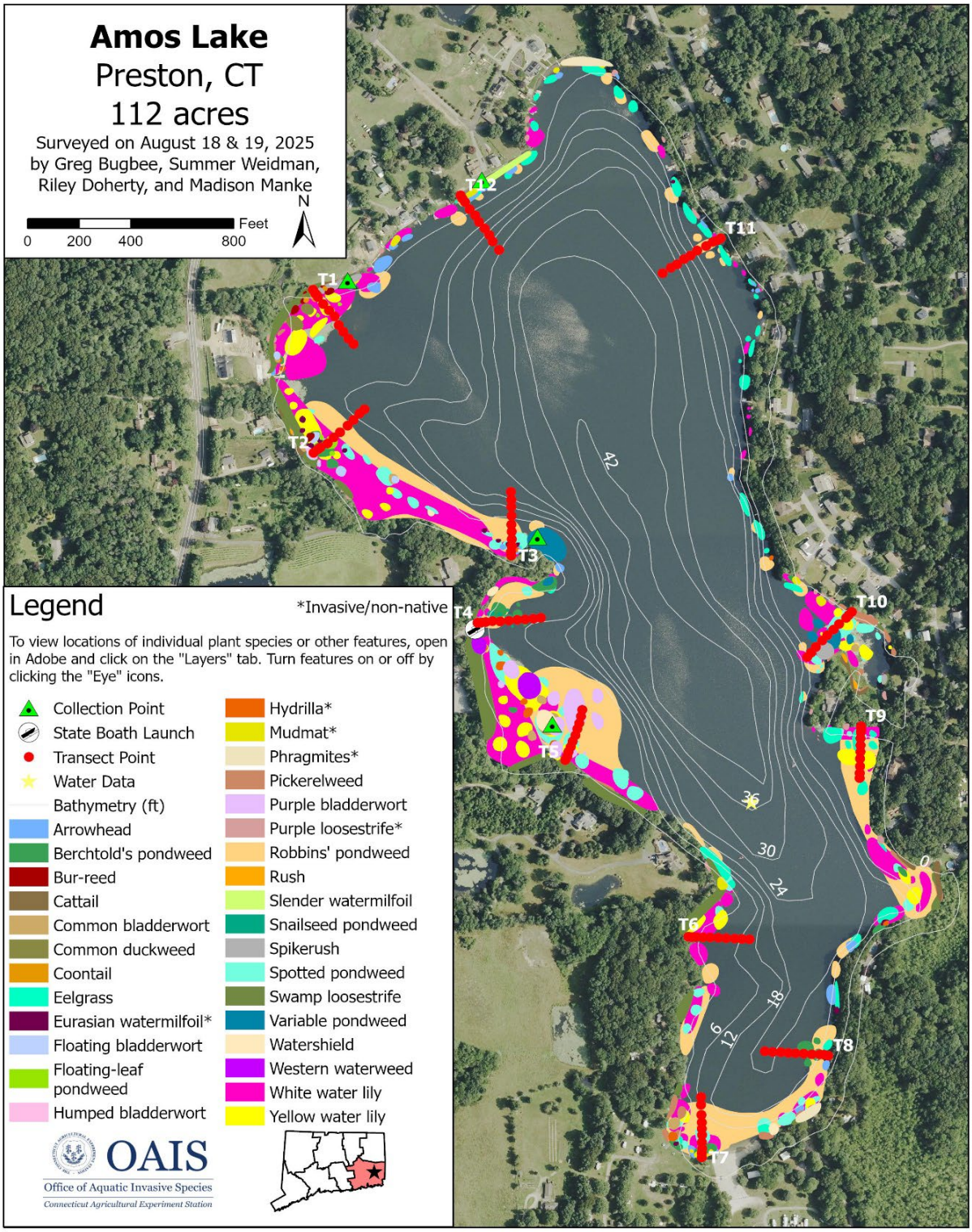

Figure 2. Map of aquatic vegetation documented in Amos Lake in 2024.

Figure 3*. Herbarium mount of northern hydrilla from Amos Lake.*

Water Analysis

Water samples were collected from a deep section of the lake (approximately 33 feet), consistent with the previous survey location. Water temperature and dissolved oxygen were measured 1.5 feet below the surface and at 3-foot intervals down to the bottom using a YSI 58® meter. Water clarity was assessed by lowering a six-inch black-and-white Secchi disk into the water and recording the depth at which it was no longer visible. Samples for pH, alkalinity, conductivity, total phosphorus, and total nitrogen were taken from 1.5 feet below the surface and 1.5 feet above the bottom. These samples were stored at 38°F until analyzed.

A Fisher AR20® meter was used to measure pH and conductivity. Alkalinity (expressed as mg/L $CaCO_3$) was determined by titrating with 0.016 N H_2SO_4 to a pH endpoint of 4.5. Total phosphorus was measured using the ascorbic acid method, following digestion with potassium persulfate (APHA, 1995). The phosphorus concentration was measured with a Milton Roy Spectronic 20D® spectrometer at a wavelength of 880 nm and a light path of 2 cm.

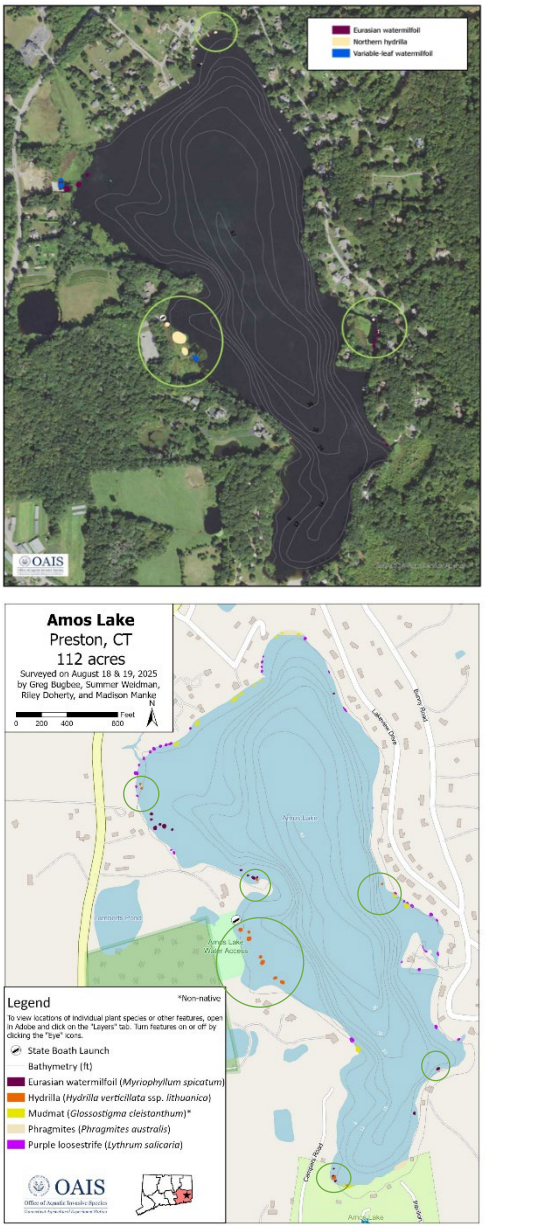

Figure 4. *Northern hydrilla has spread since initial discovery in 2023. The maps show 2024 hydrilla locations (top) compared to 2025 (bottom). Northern hydrilla locations are the yellow (2024) and orange (2025) dots within the green circles.*

RESULTS

Aquatic Plant Surveys and Transects

In 2025, CAES OAIS documented a diverse aquatic plant community in Amos Lake. A total of 23 native and 3 invasive and non-native species were identified (Table 1). Variable watermilfoil was a fourth invasive species found in 2024; however, it was absent in 2025, likely due to its sensitivity to recent herbicide

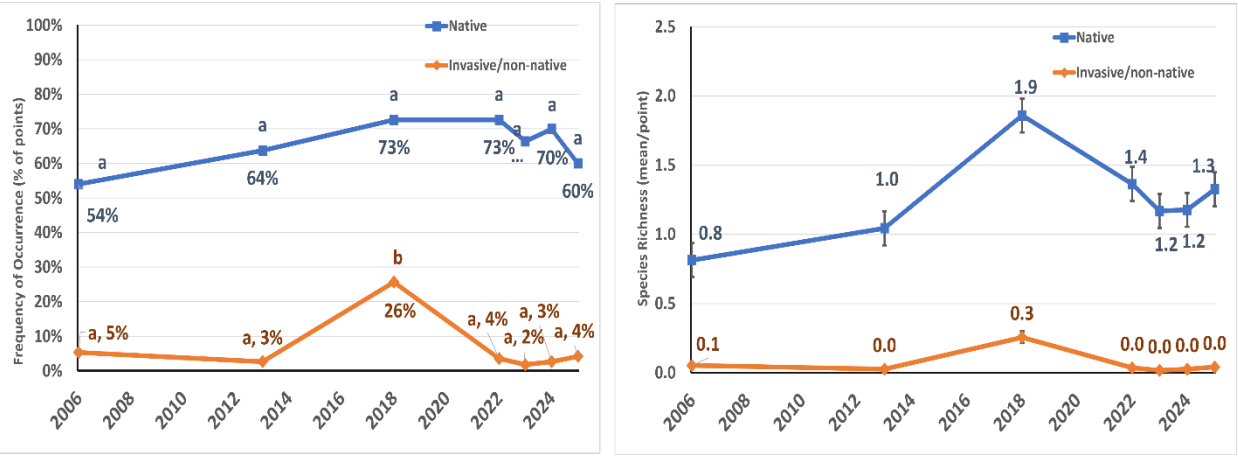

Figure 5. Frequency of occurrence (left) and species richness (right) of native and invasive aquatic plants on transects in Amos Lake from in 2006 to 2025.

treatments. Although much of the lake is too deep for plant growth, most areas at depths less than 10 feet were densely vegetated (Figure 2). Mudmat, a non-native species from New Zealand and Australia (Crow and Hellquist, 2023), has been present in Amos Lake since at least 2006. It is not considered invasive, as it has not exhibited harmful traits in Connecticut and is too small to be a nuisance. Northern hydrilla was found near the State boat launch in 2023 (Figure 3 & Figure 4, top). Although surveyors manually removed the visible hydrilla, our 2025 survey found it had spread to several new locations (Figure 4, bottom). The hydrilla likely originated from the Connecticut River, where it was first reported in 2016. Its introduction to Amos Lake was likely due to boat launch activity.

In 2022, surveyors manually removed Eurasian watermilfoil, from a single location. The plant was absent in 2023 but appeared in small shoreline patches in 2024 and 2025. Phragmites and purple loosestrife were noted but, because they are not true aquatic plants, they were excluded from our analysis. Shoreline areas were dominated by waterlilies. Detailed information on native plants is beyond the scope of this report but is available on the USDA PLANTS Database website (*https://plants.usda.gov/*).

Native species found in all surveys from 2006 – 2025 include arrowhead, eelgrass, Robbins' pondweed, slender watermilfoil, spotted pondweed, swamp loosestrife, variable pondweed, watershield, white water lily, and yellow water lily (Table 2). No new native species were recorded in 2025. Robbins' pondweed remained the most frequently found native species in 2025 (45%). Other frequently observed plants included white water lily (27%), yellow waterlily (10%), and spotted pondweed (7%). No notable changes in the frequency of native species occurred from 2024 to 2025. Western waterweed, observed in 2025, is visually similar to northern hydrilla but can be distinguished by its three leaves per whorl, compared to hydrilla's five or more. Many coves contained dense stands of emergent vegetation, particularly white and yellow waterlilies. Digitized survey maps showing individual plant layers are available on the CAES OAIS website (*portal.ct.gov/caes-oais*).

Frequency of occurrence on transect points from 2006 to 2025 showed little change indicating little or no effect from the herbicide treatments (Figure 5, left). These treatments likely resulted in the reduction in frequency of occurrence of invasive species from 26% in 2018 to 4% in 2025. This was due to the elimination of variable watermilfoil. Species richness (number of species per point) peaked in 2018 at 1.9 and declined to between 1.2 and 1.4 from 2022 to 2025. There was little change in species richness from 2024 to 2025 for both native and non-native species (Figure 5, right).

Lyngbya, a mat forming filamentous alga, covered many vegetated areas in 2022, but although still present, was less abundant in 2023, 2024 and 2025.

Water Chemistry

The occurrence of invasive plants in freshwater systems is often closely linked to water chemistry (June-Wells et al., 2013). For example, lakes with higher alkalinity and conductivity tend to support species such as Eurasian watermilfoil, minor naiad, and curlyleaf pondweed, while those with lower values favor fanwort and variable-leaf watermilfoil. Water clarity in Connecticut lakes varies between 1 and 33 feet, with an average of 7 feet (CAES OAIS, 2025). In Amos Lake, water clarity measured 8.2 feet in 2025, up from 5.9 feet in 2024, 6.6 feet in 2023, and 7.2 feet in 2022 (Figure 6). 2018 featured the highest transparency of 13.1 feet and 2013 had the lowest of 3.3 feet. These fluctuations are likely due to natural variation and decaying vegetation from the 2021–2022 herbicide treatments, which can release tannins and encourage algal growth. In all survey years, the summer thermocline in Amos Lake formed at a depth of approximately 12 feet. Dissolved oxygen levels mirrored this pattern, with well-oxygenated water above the thermocline and a sharp drop to nearly 0 mg/L below it (Figure 7). Following an unusually high pH reading of 9.0 in 2022, surface pH's returned to near-neutral values from 2023 to 2025. The elevated 2022 pH was possibly caused by photosynthesizing algae and cyanobacteria associated with decaying plants from the herbicide treatment. Bottom water pH remained stable across the years, ranging from 6.2 to 6.7, with a 2025 value of 6.4.

Surface alkalinity, which had been stable between 14 and 20 mg/L $CaCO_3$ from 2006 to 2023, increased to 51 mg/L $CaCO_3$ in 2024. This value is still low compared to the Connecticut lake range (>170 mg/L $CaCO_3$) and could be related to the very dry summer. Low alkalinity lakes are generally more

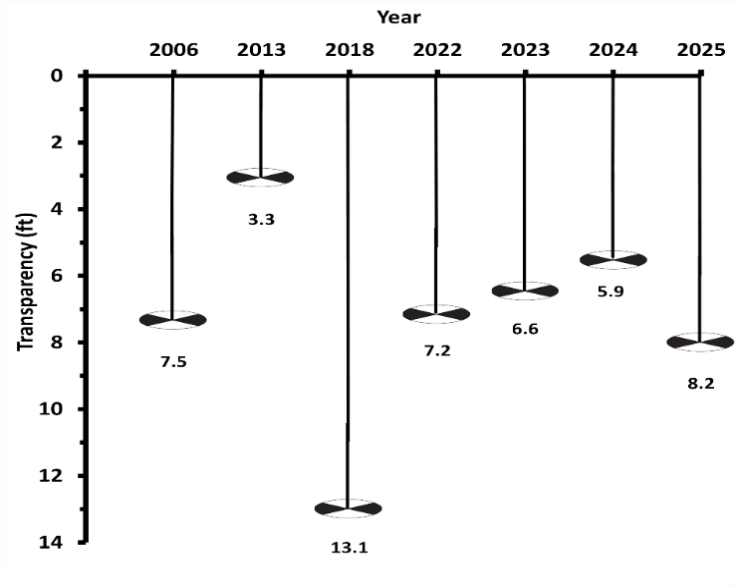

Figure 6. Transparency in Amos Lake during CAES OAIS surveys.

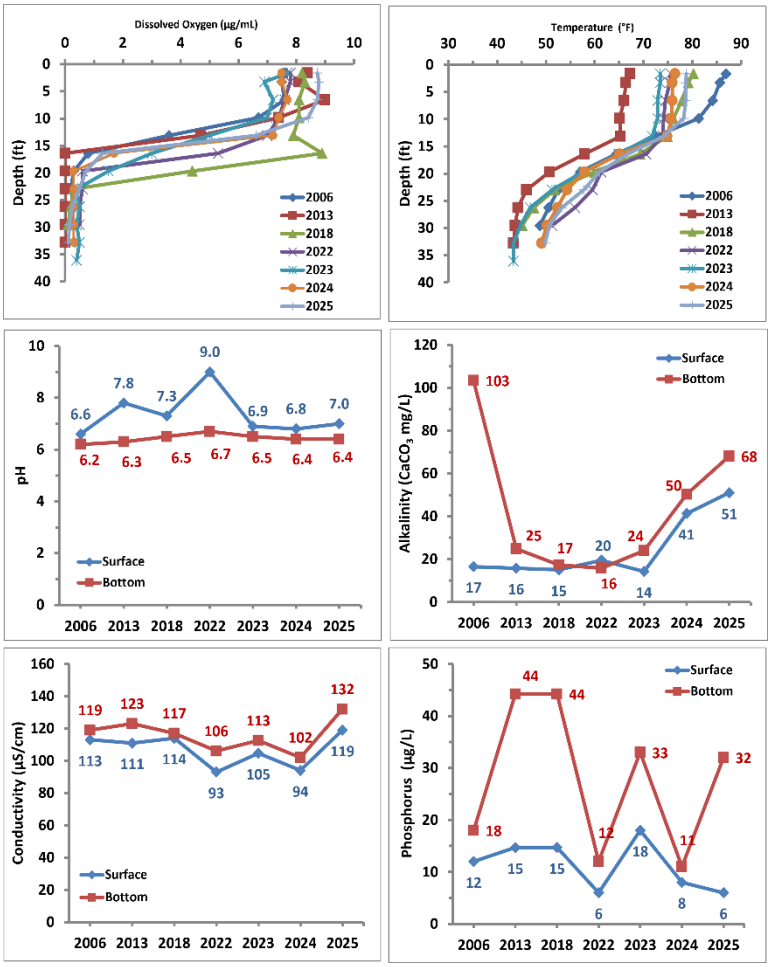

Figure 7. Water chemistry data for Amos Lake from 2006 - 2025.

Figure 8. Hydrilla treatment sites in 2025

susceptible to pH fluctuations caused by external factors, such as watershed activities or acid rain. Conductivity is an indicator of dissolved ions from both natural and human-made sources. In 2025 both surface and bottom water alkalinities reached their highest level to date with readings of 132 µS/cm and 119 µS/cm, respectively. These values fall within the typical range of 50–250 µS/cm for Connecticut waterbodies. Amos Lake's low alkalinity and conductivity make it more suitable for variable-leaf watermilfoil than Eurasian watermilfoil.

Phosphorus (P) levels in the water column are key measures of a lake's trophic state. High P levels promote harmful algal/cyanobacteria blooms (Frink and Norvell, 1984; Wetzel, 2001). Rooted macrophytes, however, rely on nutrients primarily from the hydrosoil (Bristow and Whitcombe, 1971). Lakes with P levels between 0 and 10 µg/L are classified as nutrient-poor (oligotrophic), while those with 15–25 µg/L are moderately fertile (mesotrophic), and those with 30–50 µg/L are fertile (eutrophic). Lakes with P concentrations exceeding 50 µg/L are considered extremely fertile (hypereutrophic). In Amos Lake, P concentrations in 2025 were 6 µg/L at the surface and 32 µg/L at the bottom (Figure 6). Compared to 2024, the higher concentrations near the bottom in 2025 may indicate less mixing due to weather events.

Aquatic Vegetation Management

Nuisance aquatic vegetation in Amos Lake has been actively managed since 2021. On August 31, 2021, four acres were treated with ProcellaCOR® EC at a rate of 3–4 PDU/acre-ft to control variable-leaf watermilfoil. A follow-up treatment to 9.5 acres was applied on June 27, 2022, at the same rate. These treatments effectively suppressed variable-leaf watermilfoil until 2024 when it reappeared in very small patches. No treatment was performed in 2024.

In 2025, 8.1 acres of hydrilla (Figure 8) were treated with granular Sonar® H4C to obtain a 20-25 ppb. Follow-up applications at the same rate June 26, and July 17. A final application of 8ppb of Sonar H4C was applied on August 14. The active ingredient in Sonar® H4C is fluridone which is slow acting. Our finding of hydrilla during our mid-August survey may indicate additional time was needed for control. Therefore, the efficacy of the treatment can best be made

Figure 9. Eurasian watermilfoil treatment sites in 2025.

by a survey in 2026. The U.S. Army Corps of Engineers (USACE) is conducting research to identify the best herbicides for managing northern hydrilla and refinements to treatments can be expected. CAES OAIS trained Amos Lake Association members in hydrilla identification and hand-pulling techniques in August 2024.

On June 26, 2025, ProcellaCOR® was applied to the variable-leaf and Eurasian watermilfoil (Figure 9) with subsurface hoses at a rate of 3.5 PDU/acre foot. Our 2025 survey found no variable watermilfoil and sporadic sparse patches of Eurasian watermilfoil in untreated areas (see map in appendix).

Benthic barriers, or "bottom blankets," are another effective method for eliminating nuisance vegetation in small areas such as swim zones, dock surroundings, and pioneer infestations. CAES OAIS tested short-term barrier placements (<30 days) in Lake Quonnipaug and Lake Beseck achieving season-long control of Eurasian watermilfoil and fanwort. While labor-intensive, benthic barriers can be relocated during the season for broader control and reused over multiple years. Mechanical harvesting usually offers immediate but short-term control as regrowth from the remaining roots and basal plant parts is common. Spread by fragmentation is a concern and disposal areas are needed.

CONCLUSIONS

In 2025, 23 native and 3 invasive and non-native aquatic plant species were documented in Amos Lake. The invasive species observed included northern hydrilla and sparse Eurasian watermilfoil. Noticeably absent in 2025 was variable watermilfoil which was likely due to herbicide treatments. Northern hydrilla continued to spread but the 2025 herbicide treatments may not have had sufficient time to take effect. Eurasian watermilfoil was present in several areas that did not receive herbicide treatment. Amos Lake's water chemistry indicates a low to moderate fertility condition with little change from 2006 to 2025.

Continued aquatic plant monitoring is recommended to monitor the effectiveness of weed management and the spread of northern hydrilla. Refinements to hydrilla management options are being pursued by the USACE and their findings should be monitored. Continuation of annual plant surveys will provide information to optimize future management decisions.

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APPENDIX

Invasive Plant Descriptions

Hydrilla verticillata

Common name:
Hydrilla

Origin:
Asia

Key features:
Plants are submersed

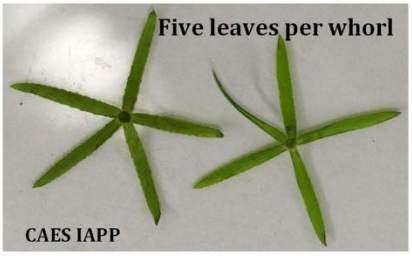
Stems: Slender, branched and up to 25 feet (7.5 m) long

Leaves: Whorled leaves approx. 0.7 inches (1.5 cm) long, whorls often have 5 leaves (range 4-8); leaf margins are visibly toothed

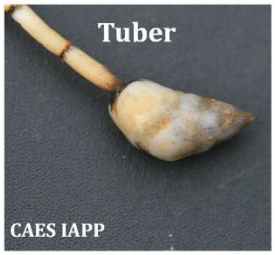
Flowers: Female flowers have three translucent petals that have reddish streaks; male flowers have three petals and can be white to red in color

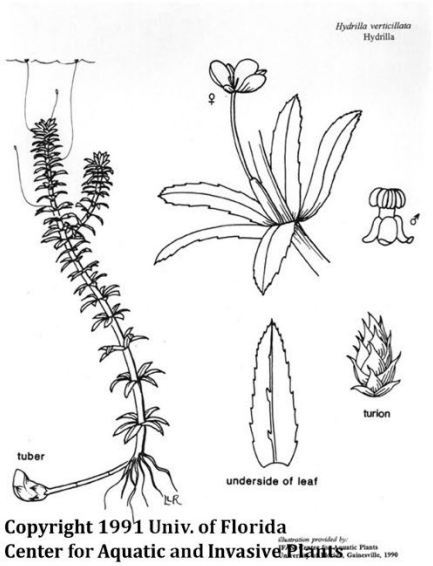
Fruits/Seeds: Small tubers (key feature) can be found in the sediment, turions form along the stem

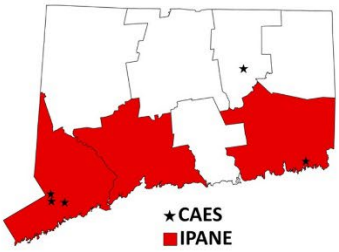
Reproduction: Fragmentation, turions, tubers and seeds



Easily confused species:
Waterweeds (Native): *Elodea nuttallii* and *Elodea canadensis*
Brazilian waterweed: *Egeria densa*







Myriophyllum heterophyllum

Common names:
Variable-leaf watermilfoil
Variable watermilfoil
Two-leaf watermilfoil

Origin:
Southern United States

Key features:
Plants are submersed

Stems: Dark brown stems extend to the water's surface and spread to form large mats

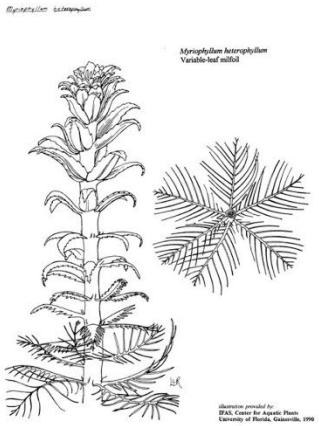
Leaves: Triangular with ≤ 11 pairs of leaflets. Leaves are dissected and whorled (4-6 leaves/whorl) resulting in a feathery appearance with leaf whorls < 1 inch apart giving it a ropy appearance

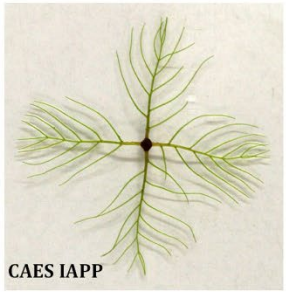
Flowers: Inflorescence spike 2-14 inches (5-35 cm) long extend beyond the water's surface with flowers in whorls of four with reddish petals

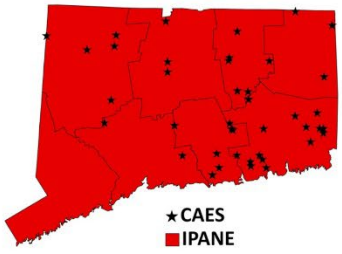
Fruits/Seeds: Fruits are almost round, with a rough surface

Reproduction: Fragmentation and seeds

Easily confused species:
Eurasian watermilfoil: *Myriophyllum spicatum*
Low watermilfoil: *Myriophyllum humile*







Myriophyllum spicatum

Common name:
Eurasian watermilfoil

Origin:
Europe and Asia

Key features:
Plants are submersed

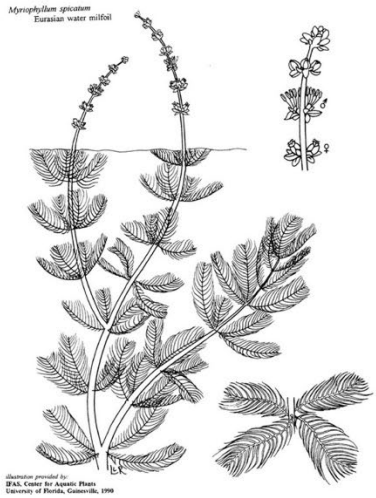
Stems: Stem diameter below the inflorescence is greater with reddish stem tips

Leaves: Leaves are rectangular with ≥ 12 pairs of leaflets per leaf and are dissected giving a feathery appearance, arranged in a whorl, whorls are 1 inch (2.5 cm) apart

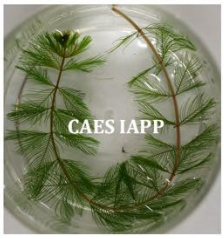
Flowers: Small pinkish male flowers that occur on reddish spikes, female flowers lack petals and sepals and have 4 lobed pistil

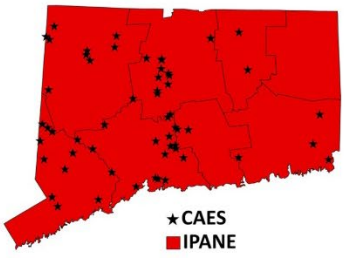
Fruits/Seeds: Fruit are round 0.08-0.12 inches (2-3 mm) and contain 4 seeds

Reproduction: Fragmentation and seeds

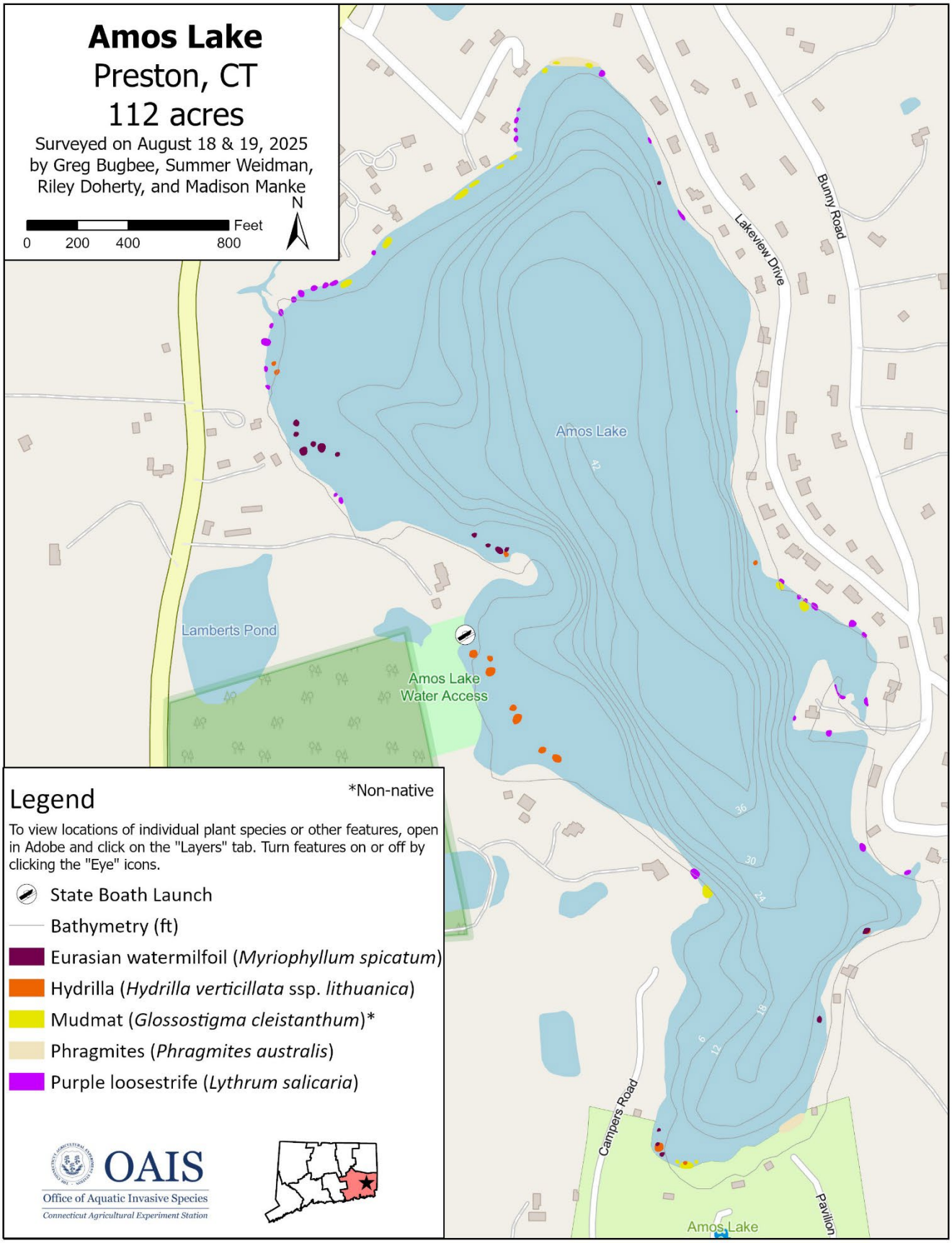


Easily confused species:
Variable-leaf watermilfoil: *Myriophyllum heterophyllum*
Low watermilfoil: *Myriophyllum humile*
Northern watermilfoil: *Myriophyllum sibiricum*
Whorled watermilfoil: *Myriophyllum verticillatum*

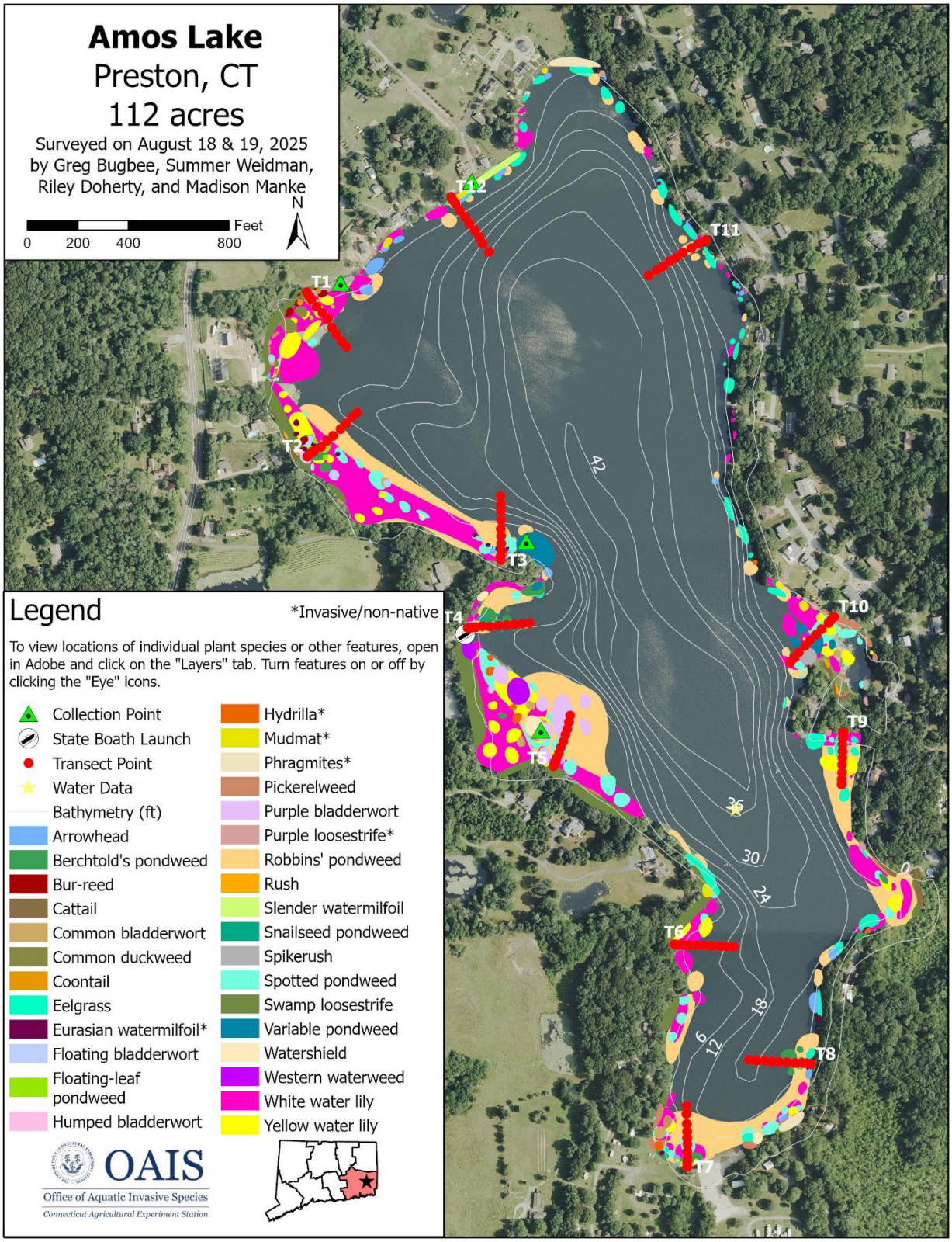


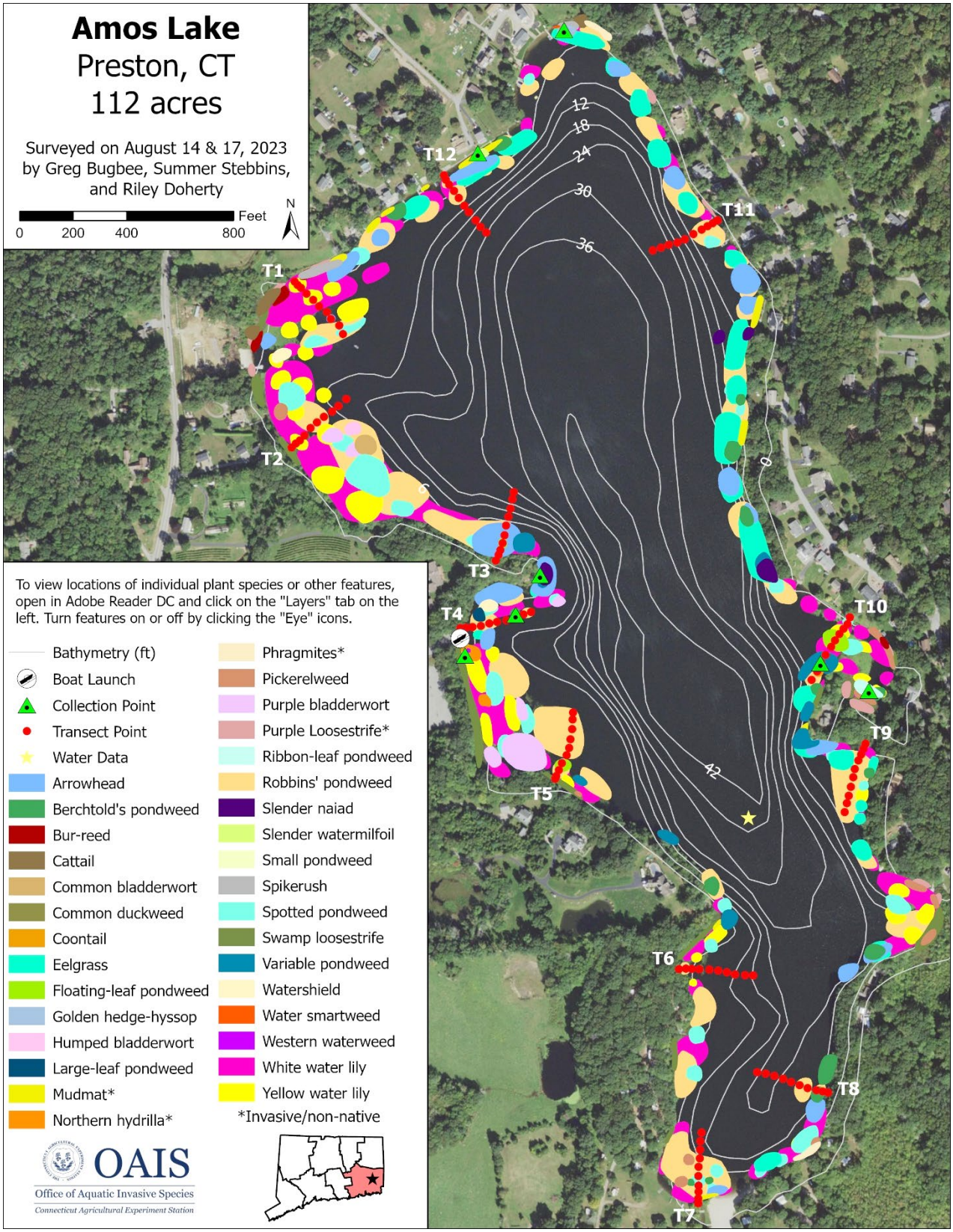


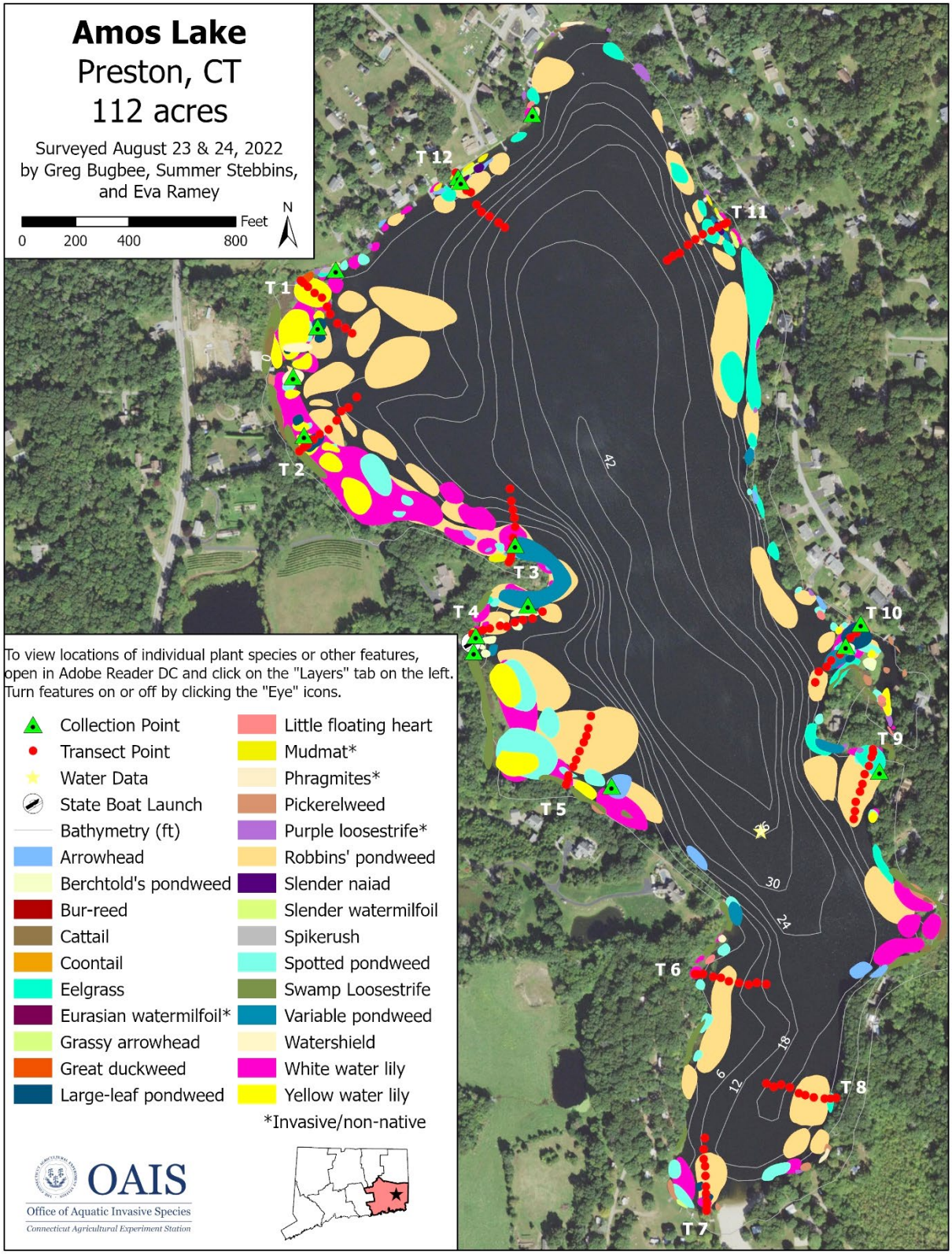
Locations of Invasive/Non-Native Plants in 2025

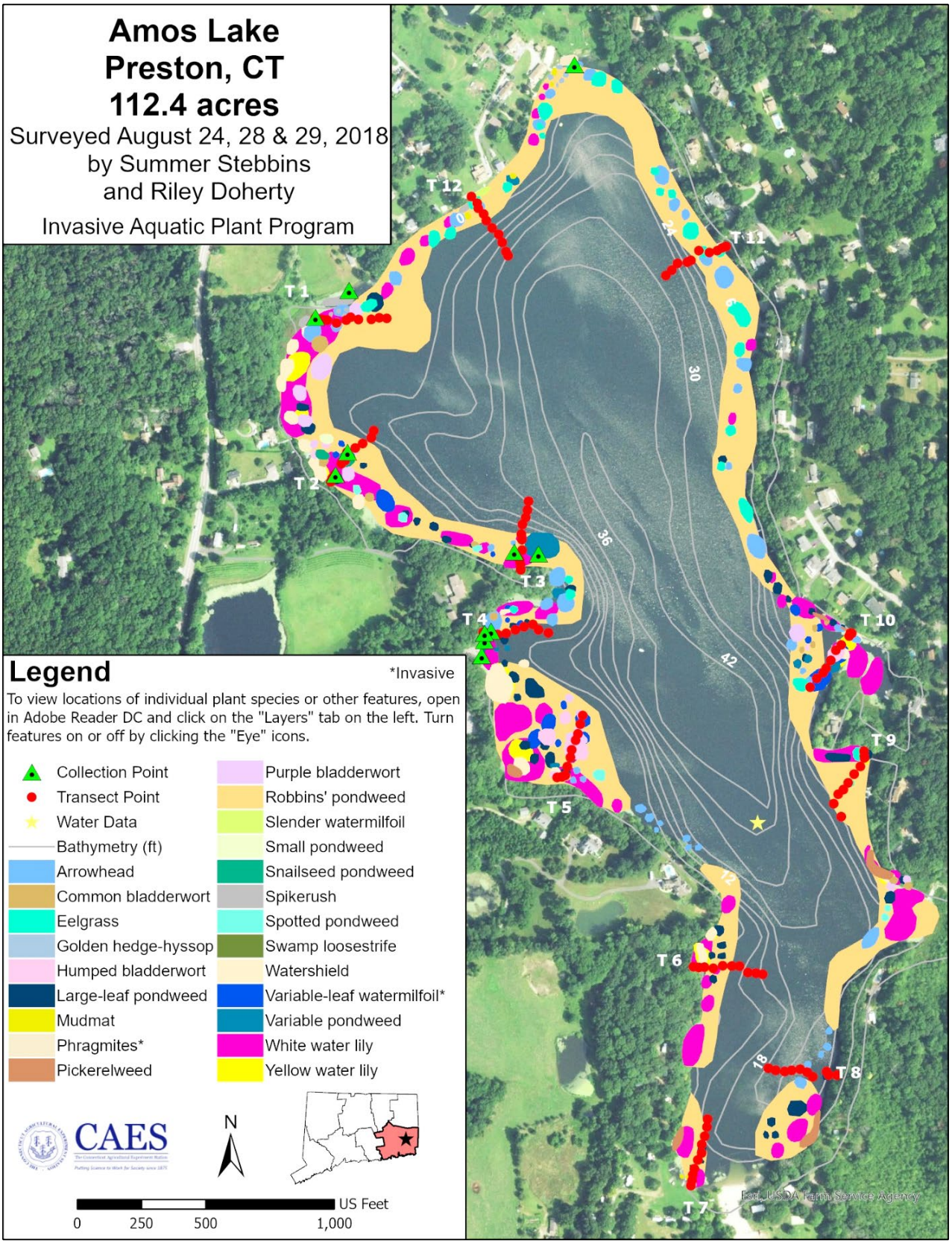

Amos Lake
Preston, CT
112 acres
Surveyed on August 18 & 19, 2025
by Greg Bugbee, Summer Weidman,
Riley Doherty, and Madison Manke
N
Feet
0 200 400 800
Bunny Road
Lakeview Drive
Amos Lake
Lamberts Pond
Amos Lake
Water Access
Campers Road
Pavilion
Amos Lake
Legend
*Non-native
To view locations of individual plant species or other features, open in Adobe and click on the "Layers" tab. Turn features on or off by clicking the "Eye" icons.
State Boath Launch
Bathymetry (ft)
Eurasian watermilfoil (Myriophyllum spicatum)
Hydrilla (Hydrilla verticillata ssp. lithuanica)
Mudmat (Glossostigma cleistanthum)*
Phragmites (Phragmites australis)
Purple loosestrife (Lythrum salicaria)
OAIS
Office of Aquatic Invasive Species
Connecticut Agricultural Experiment Station

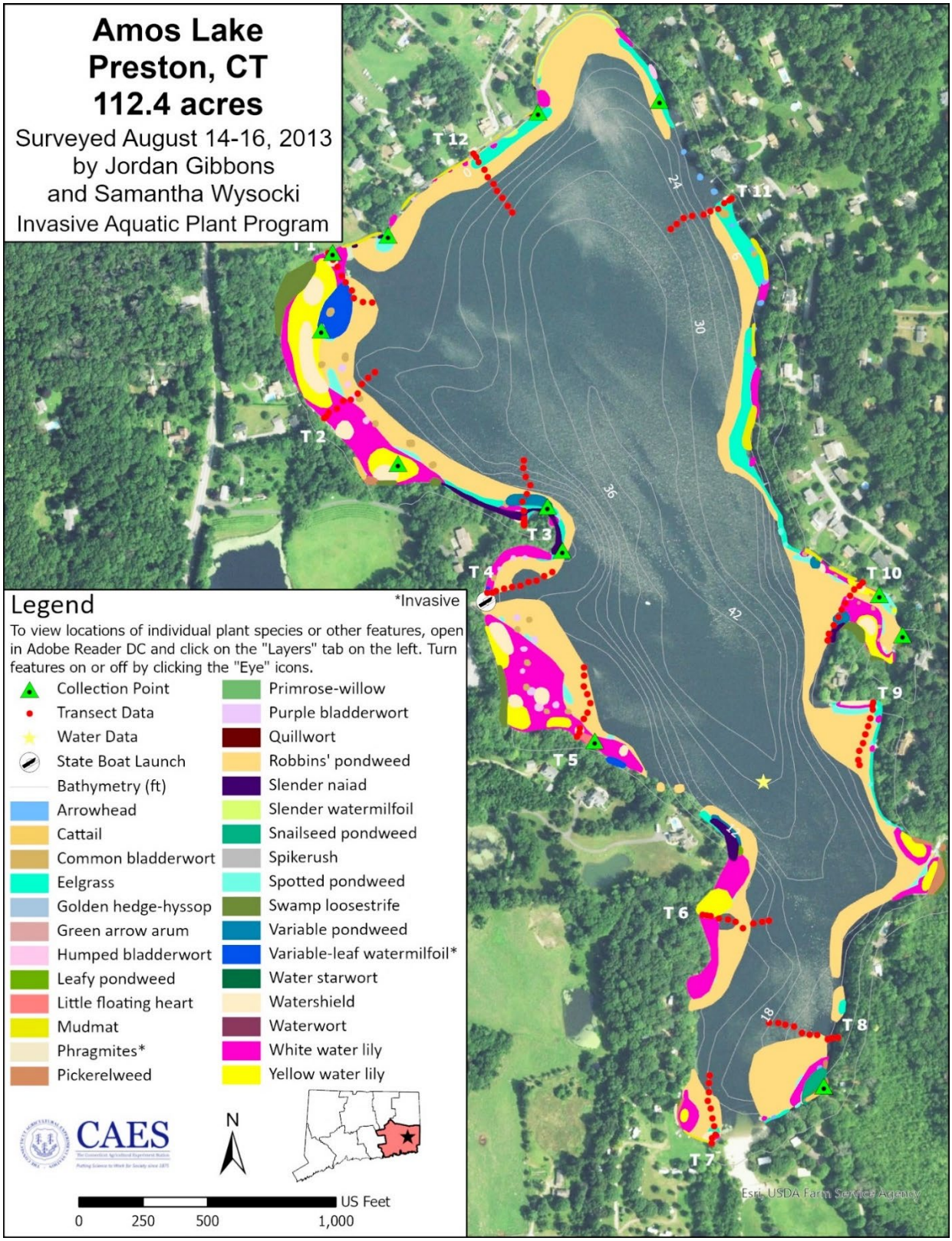
Previous Years Aquatic Plant Survey Maps

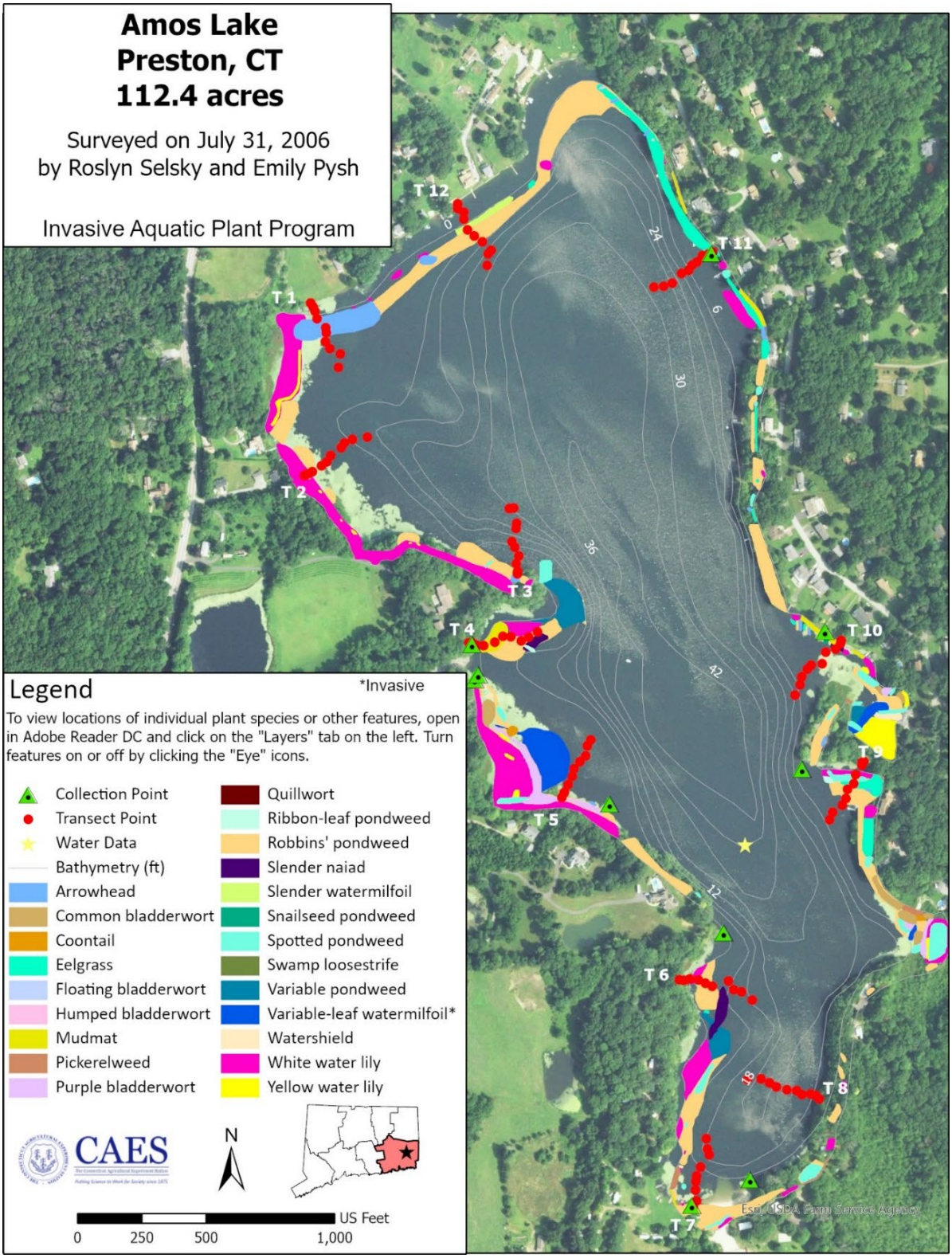



Amos Lake
Preston, CT
112 acres
Surveyed on August 14 & 17, 2023
by Greg Bugbee, Summer Stebbins,
and Riley Doherty
0 200 400 800 Feet
N
T1
T2
T3
T4
T5
T6
T7
T8
T9
T10
T11
T12
12
18
24
30
36
42
To view locations of individual plant species or other features, open in Adobe Reader DC and click on the "Layers" tab on the left. Turn features on or off by clicking the "Eye" icons.
Bathymetry (ft)
Boat Launch
Collection Point
Transect Point
Water Data
Arrowhead
Berchtold's pondweed
Bur-reed
Cattail
Common bladderwort
Common duckweed
Coontail
Eelgrass
Floating-leaf pondweed
Golden hedge-hyssop
Humped bladderwort
Large-leaf pondweed
Mudmat*
Northern hydrilla*
Phragmites*
Pickerelweed
Purple bladderwort
Purple Loosestrife*
Ribbon-leaf pondweed
Robbins' pondweed
Slender naiad
Slender watermilfoil
Small pondweed
Spikerush
Spotted pondweed
Swamp loosestrife
Variable pondweed
Watershield
Water smartweed
Western waterweed
White water lily
Yellow water lily
*Invasive/non-native
OAIS
Office of Aquatic Invasive Species
Connecticut Agricultural Experiment Station


Amos Lake
Preston, CT
112 acres
Surveyed August 23 & 24, 2022
by Greg Bugbee, Summer Stebbins,
and Eva Ramey
Feet
0 200 400 800
N
T 1
T 2
T 3
T 4
T 5
T 6
T 7
T 8
T 9
T 10
T 11
T 12
42
30
24
18
12
6
To view locations of individual plant species or other features, open in Adobe Reader DC and click on the "Layers" tab on the left. Turn features on or off by clicking the "Eye" icons.
Collection Point
Transect Point
Water Data
State Boat Launch
Bathymetry (ft)
Arrowhead
Berchtold's pondweed
Bur-reed
Cattail
Coontail
Eelgrass
Eurasian watermilfoil*
Grassy arrowhead
Great duckweed
Large-leaf pondweed
Little floating heart
Mudmat*
Phragmites*
Pickerelweed
Purple loosestrife*
Robbins' pondweed
Slender naiad
Slender watermilfoil
Spikerush
Spotted pondweed
Swamp Loosestrife
Variable pondweed
Watershield
White water lily
Yellow water lily
*Invasive/non-native
OAIS
Office of Aquatic Invasive Species
Connecticut Agricultural Experiment Station


Amos Lake
Preston, CT
112.4 acres
Surveyed August 24, 28 & 29, 2018
by Summer Stebbins
and Riley Doherty
Invasive Aquatic Plant Program
T 1
T 2
T 3
T 4
T 5
T 6
T 7
T 8
T 9
T 10
T 11
T 12
0
6
12
18
24
30
36
42
Legend
*Invasive
To view locations of individual plant species or other features, open in Adobe Reader DC and click on the "Layers" tab on the left. Turn features on or off by clicking the "Eye" icons.
Collection Point
Transect Point
Water Data
Bathymetry (ft)
Arrowhead
Common bladderwort
Eelgrass
Golden hedge-hyssop
Humped bladderwort
Large-leaf pondweed
Mudmat
Phragmites*
Pickerelweed
Purple bladderwort
Robbins' pondweed
Slender watermilfoil
Small pondweed
Snailseed pondweed
Spikerush
Spotted pondweed
Swamp loosestrife
Watershield
Variable-leaf watermilfoil*
Variable pondweed
White water lily
Yellow water lily
CAES
N
US Feet
0
250
500
1,000
Esri, USDA Farm Service Agency


Amos Lake
Preston, CT
112.4 acres
Surveyed August 14-16, 2013
by Jordan Gibbons
and Samantha Wysocki
Invasive Aquatic Plant Program
T 1
T 2
T 3
T 4
T 5
T 6
T 7
T 8
T 9
T 10
T 11
T 12
24
30
36
42
18
Legend
*Invasive
To view locations of individual plant species or other features, open in Adobe Reader DC and click on the "Layers" tab on the left. Turn features on or off by clicking the "Eye" icons.
Collection Point
Transect Data
Water Data
State Boat Launch
Bathymetry (ft)
Arrowhead
Cattail
Common bladderwort
Eelgrass
Golden hedge-hyssop
Green arrow arum
Humped bladderwort
Leafy pondweed
Little floating heart
Mudmat
Phragmites*
Pickerelweed
Primrose-willow
Purple bladderwort
Quillwort
Robbins' pondweed
Slender naiad
Slender watermilfoil
Snailseed pondweed
Spikerush
Spotted pondweed
Swamp loosestrife
Variable pondweed
Variable-leaf watermilfoil*
Water starwort
Watershield
Waterwort
White water lily
Yellow water lily
CAES
N
US Feet
0
250
500
1,000
Esri, USDA Farm Service Agency


Amos Lake
Preston, CT
112.4 acres
Surveyed on July 31, 2006
by Roslyn Selsky and Emily Pysh
Invasive Aquatic Plant Program
T 1
T 2
T 3
T 4
T 5
T 6
T 7
T 8
T 9
T 10
T 11
T 12
0
6
12
18
24
30
36
42
Legend
*Invasive
To view locations of individual plant species or other features, open in Adobe Reader DC and click on the "Layers" tab on the left. Turn features on or off by clicking the "Eye" icons.
Collection Point
Transect Point
Water Data
Bathymetry (ft)
Arrowhead
Common bladderwort
Coontail
Eelgrass
Floating bladderwort
Humped bladderwort
Mudmat
Pickerelweed
Purple bladderwort
Quillwort
Ribbon-leaf pondweed
Robbins' pondweed
Slender naiad
Slender watermilfoil
Snailseed pondweed
Spotted pondweed
Swamp loosestrife
Variable pondweed
Variable-leaf watermilfoil*
Watershield
White water lily
Yellow water lily
CAES
N
US Feet
0
250
500
1,000
Esri, USDA Farm Service Agency

Transect Data

Appendix Amos Lake Transect Data (1 of 3)

Transect	Point	Distance from Shore (m)	Surveyor	Latitude	Longitude	Date	Depth (m)	Substrate	CerDem	DecVer	EleSpp	LemMin	NupVar	NymOdo	PonCor	PotBer	PotBic	PotFol	PotGra	PotNat	PotPul	PotRob	SagSpp	SpaSpp	UtrGib	UtrVUl	UtrPur	UtrRad	ValAme	GloCle	HydVer	MyrSpi
1	1	0.5	Riley Doherty	41.52041	-71.98042	8/18/2025	0.1	Muck	2	2	0	2	2	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
1	2	5	Riley Doherty	41.52037	-71.98038	8/18/2025	0.1	Muck	2	2	0	2	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
1	3	10	Riley Doherty	41.52033	-71.98035	8/18/2025	0.2	Muck	2	0	0	2	2	4	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
1	4	20	Riley Doherty	41.52025	-71.98028	8/18/2025	0.6	Muck	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	5	30	Riley Doherty	41.52018	-71.98019	8/18/2025	1.2	Muck	0	0	0	0	4	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1	6	40	Riley Doherty	41.52011	-71.98012	8/18/2025	1.3	Muck	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	7	50	Greg Bugbee	41.52002	-71.98006	8/18/2025	1.2	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	8	60	Greg Bugbee	41.51995	-71.97999	8/18/2025	1.3	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	9	70	Greg Bugbee	41.51987	-71.97989	8/18/2025	1.5	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	10	80	Greg Bugbee	41.51984	-71.97977	8/18/2025	2.0	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	0.5	Riley Doherty	41.51862	-71.98043	8/18/2025	0.3	Muck	0	3	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0
2	2	5	Riley Doherty	41.51866	-71.98037	8/18/2025	0.5	Muck	0	0	0	0	2	3	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2	3	10	Riley Doherty	41.51867	-71.98032	8/18/2025	0.6	Muck	0	0	0	0	3	3	0	0	0	2	0	2	2	2	0	0	0	0	0	0	0	0	0	0
2	4	20	Riley Doherty	41.51872	-71.98023	8/18/2025	1.2	Muck	0	0	0	0	0	3	0	0	0	2	0	2	2	4	0	0	0	0	0	0	0	0	0	2
2	5	30	Riley Doherty	41.51879	-71.98015	8/18/2025	1.8	Organic	0	0	0	0	0	2	0	0	0	0	0	2	0	3	0	0	0	0	0	0	0	0	0	0
2	6	40	Riley Doherty	41.51884	-71.98005	8/18/2025	1.8	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2	7	50	Greg Bugbee	41.51892	-71.97994	8/18/2025	2.0	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
2	8	60	Greg Bugbee	41.51900	-71.97987	8/18/2025	4.0	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	9	70	Greg Bugbee	41.51907	-71.97979	8/18/2025	4.8	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	10	80	Greg Bugbee	41.51909	-71.97969	8/18/2025	5.2	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	0.5	Greg Bugbee	41.51748	-71.97767	8/18/2025	0.2	Organic	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	2	5	Greg Bugbee	41.51752	-71.97767	8/18/2025	0.3	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
3	3	10	Greg Bugbee	41.51758	-71.97763	8/18/2025	0.6	Muck	0	0	0	0	0	2	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	2
3	4	20	Greg Bugbee	41.51765	-71.97763	8/18/2025	1.3	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
3	5	30	Greg Bugbee	41.51774	-71.97763	8/18/2025	1.5	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
3	6	40	Greg Bugbee	41.51781	-71.97760	8/18/2025	1.8	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
3	7	50	Greg Bugbee	41.51791	-71.97759	8/18/2025	3.0	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	8	60	Greg Bugbee	41.51801	-71.97759	8/18/2025	5.1	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	9	70	Riley Doherty	41.51809	-71.97760	8/18/2025	7.1	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	10	80	Greg Bugbee	41.51819	-71.97761	8/18/2025	7.7	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	1	0.5	Greg Bugbee	41.51674	-71.97813	8/18/2025	0.1	Gravel	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	2	5	Greg Bugbee	41.51674	-71.97808	8/18/2025	1.0	Gravel	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0
4	3	10	Greg Bugbee	41.51675	-71.97801	8/18/2025	2.0	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
4	4	20	Greg Bugbee	41.51676	-71.97792	8/18/2025	2.3	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
4	5	30	Greg Bugbee	41.51677	-71.97780	8/18/2025	2.8	Silt	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
4	6	40	Greg Bugbee	41.51679	-71.97768	8/18/2025	3.6	Silt	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	7	50	Greg Bugbee	41.51682	-71.97756	8/18/2025	3.8	Silt	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	8	60	Greg Bugbee	41.51686	-71.97744	8/18/2025	3.5	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	9	70	Greg Bugbee	41.51689	-71.97732	8/18/2025	4.5	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	10	80	Greg Bugbee	41.51692	-71.97723	8/18/2025	4.5	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	1	0.5	Greg Bugbee	41.51523	-71.97691	8/18/2025	0.1	Gravel	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	2	5	Greg Bugbee	41.51527	-71.97689	8/18/2025	0.4	Organic	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	3	10	Greg Bugbee	41.51531	-71.97686	8/18/2025	1.2	Organic	0	0	0	0	3	3	0	0	0	0	0	0	3	4	0	0	0	0	2	0	0	0	2	0
5	4	20	Greg Bugbee	41.51539	-71.97683	8/18/2025	1.5	Organic	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0	0	0	0
5	5	30	Greg Bugbee	41.51547	-71.97683	8/18/2025	1.7	Organic	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0
5	6	40	Greg Bugbee	41.51556	-71.97679	8/18/2025	1.7	Gravel	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0
5	7	50	Greg Bugbee	41.51566	-71.97679	8/18/2025	2.0	Gravel	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	3	0	0	0	0	0
5	8	60	Greg Bugbee	41.51576	-71.97678	8/18/2025	2.2	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	0
5	9	70	Greg Bugbee	41.51586	-71.97679	8/18/2025	2.0	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	0
5	10	80	Greg Bugbee	41.51594	-71.97678	8/18/2025	1.8	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	0

Appendix Amos Lake Transect Data (2 of 3)

Transect	Point	Distance from Shore (m)	Surveyor	Latitude	Longitude	Date	Depth (m)	Substrate	CerDem	DecVer	EleSpp	LemMin	NupVar	NymOdo	PonCor	PotBer	PotBic	PotFol	PotGra	PotNat	PotPul	PotRob	SagSpp	SpaSpp	UtrGib	UtrVul	UtrPur	UtrRad	ValAme	GloCle	HydVer	MyrSpi
6	1	0.5	Summer Weidman	41.51328	-71.97518	8/19/2025	0.2	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	2	5	Summer Weidman	41.51326	-71.97513	8/19/2025	0.3	Organic	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	3	10	Summer Weidman	41.51325	-71.97507	8/19/2025	0.5	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	4	20	Summer Weidman	41.51324	-71.97494	8/19/2025	1.0	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	5	30	Summer Weidman	41.51324	-71.97484	8/19/2025	1.0	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	6	40	Summer Weidman	41.51323	-71.97471	8/19/2025	1.5	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	7	50	Summer Weidman	41.51320	-71.97458	8/19/2025	3.6	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	8	60	Summer Weidman	41.51320	-71.97446	8/19/2025	5.7	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	9	70	Summer Weidman	41.51319	-71.97435	8/19/2025	5.9	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	10	80	Summer Weidman	41.51321	-71.97422	8/19/2025	6.6	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	1	0.5	Summer Weidman	41.51085	-71.97502	8/19/2025	0.1	Gravel	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
7	2	5	Summer Weidman	41.51090	-71.97503	8/19/2025	0.3	Gravel	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	4	0	0
7	3	10	Summer Weidman	41.51095	-71.97502	8/19/2025	0.5	Organic	0	0	0	0	0	4	0	0	0	0	0	0	0	5	3	0	0	0	0	0	0	0	0	0
7	4	20	Summer Weidman	41.51104	-71.97505	8/19/2025	0.5	Muck	0	0	0	0	0	3	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0	0
7	5	30	Summer Weidman	41.51113	-71.97504	8/19/2025	0.5	Organic	0	0	0	0	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0
7	6	40	Summer Weidman	41.51122	-71.97508	8/19/2025	0.7	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
7	7	50	Summer Weidman	41.51131	-71.97510	8/19/2025	1.0	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
7	8	60	Summer Weidman	41.51140	-71.97508	8/19/2025	1.2	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
7	9	70	Summer Weidman	41.51151	-71.97509	8/19/2025	4.0	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	10	80	Summer Weidman	41.51159	-71.97508	8/19/2025	4.8	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	1	0.5	Summer Weidman	41.51196	-71.97322	8/19/2025	0.2	Gravel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	2	5	Summer Weidman	41.51196	-71.97329	8/19/2025	0.6	Gravel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	3	10	Summer Weidman	41.51197	-71.97333	8/19/2025	0.6	Gravel	0	0	0	0	0	0	0	3	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0
8	4	20	Summer Weidman	41.51202	-71.97347	8/19/2025	2.6	Muck	0	0	0	0	0	0	0	5	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
8	5	30	Summer Weidman	41.51203	-71.97359	8/19/2025	2.9	Muck	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	6	40	Summer Weidman	41.51205	-71.97370	8/19/2025	3.2	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	7	50	Summer Weidman	41.51206	-71.97381	8/19/2025	5.6	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	8	60	Summer Weidman	41.51207	-71.97391	8/19/2025	6.0	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	9	70	Summer Weidman	41.51208	-71.97406	8/19/2025	6.4	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	10	80	Summer Weidman	41.51209	-71.97417	8/19/2025	6.7	Muck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	1	0.5	Summer Weidman	41.51557	-71.97271	8/19/2025	0.1	Gravel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	2	5	Summer Weidman	41.51551	-71.97269	8/19/2025	0.3	Organic	0	0	0	0	0	5	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0
9	3	10	Summer Weidman	41.51548	-71.97270	8/19/2025	0.5	Organic	0	0	0	0	0	5	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	1	0	0
9	4	20	Summer Weidman	41.51539	-71.97272	8/19/2025	0.8	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	3	0	0
9	5	30	Summer Weidman	41.51529	-71.97274	8/19/2025	0.8	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	3	0	0
9	6	40	Summer Weidman	41.51521	-71.97278	8/19/2025	1.0	Organic	0	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
9	7	50	Summer Weidman	41.51512	-71.97282	8/19/2025	1.0	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
9	8	60	Summer Weidman	41.51504	-71.97282	8/19/2025	1.0	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
9	9	70	Summer Weidman	41.51496	-71.97286	8/19/2025	1.0	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
9	10	80	Summer Weidman	41.51488	-71.97288	8/19/2025	1.0	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
10	1	0.5	Summer Weidman	41.51682	-71.97282	8/19/2025	0.1	Gravel	0	2	0	0	0	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
10	2	5	Summer Weidman	41.51679	-71.97287	8/19/2025	0.3	Organic	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	1	0	0	0	0	0	0
10	3	10	Summer Weidman	41.51676	-71.97291	8/19/2025	0.8	Organic	0	0	0	0	3	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
10	4	20	Summer Weidman	41.51669	-71.97301	8/19/2025	0.5	Organic	0	0	0	0	3	3	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
10	5	30	Summer Weidman	41.51663	-71.97308	8/19/2025	0.5	Organic	0	0	0	0	0	5	0	0	0	0	2	0	3	5	0	0	0	0	0	0	0	0	0	0
10	6	40	Summer Weidman	41.51654	-71.97314	8/19/2025	0.5	Organic	0	0	0	0	2	5	0	0	0	0	4	0	3	2	0	0	0	0	0	0	0	0	0	0
10	7	50	Summer Weidman	41.51645	-71.97317	8/19/2025	0.5	Gravel	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
10	8	60	Summer Weidman	41.51635	-71.97325	8/19/2025	0.5	Gravel	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	9	70	Summer Weidman	41.51629	-71.97332	8/19/2025	0.8	Organic	0	0	0	0	0	4	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0
10	10	80	Summer Weidman	41.51622	-71.97336	8/19/2025	1.0	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0

Appendix Amos Lake Transect Data (3 of 3)

Transect	Point	Distance from Shore (m)	Surveyor	Latitude	Longitude	Date	Depth (m)	Substrate	CerDem	DecVer	EleSpp	LemMin	NupVar	NymOdo	PonCor	PotBer	PotBic	PotFol	PotGra	PotNat	PotPul	PotRob	SagSpp	SpaSpp	UtrGib	UtrVul	UtrPur	UtrRad	ValAme	GloCle	HydVer	MyrSpi
11	1	0.5	Greg Bugbee	41.52093	-71.97463	8/18/2025	0.1	Sand	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	2	5	Greg Bugbee	41.52093	-71.97469	8/18/2025	1	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	2	0	0	0
11	3	10	Greg Bugbee	41.52091	-71.97475	8/18/2025	1.2	Sand	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	2	0	0	0
11	4	20	Greg Bugbee	41.52086	-71.97485	8/18/2025	1.5	Organic	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
11	5	30	Greg Bugbee	41.52082	-71.97498	8/18/2025	2.3	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11	6	40	Greg Bugbee	41.52076	-71.97507	8/18/2025	2.8	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	7	50	Greg Bugbee	41.52074	-71.97518	8/18/2025	5.0	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	8	60	Greg Bugbee	41.52066	-71.97529	8/18/2025	5.8	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	9	70	Greg Bugbee	41.52064	-71.97539	8/18/2025	6.1	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	10	80	Greg Bugbee	41.52058	-71.97550	8/18/2025	7.1	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	1	0.5	Greg Bugbee	41.52143	-71.97831	8/18/2025	0.1	Gravel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	2	5	Riley Doherty	41.52141	-71.97828	8/18/2025	1.3	Organic	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	0	0	2	0	0	0
12	3	10	Greg Bugbee	41.52136	-71.97825	8/18/2025	1.3	Sand	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
12	4	20	Greg Bugbee	41.52128	-71.97819	8/18/2025	1.8	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	5	30	Greg Bugbee	41.52121	-71.97811	8/18/2025	2.5	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	6	40	Greg Bugbee	41.52114	-71.97806	8/18/2025	4.2	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	7	50	Greg Bugbee	41.52106	-71.97798	8/18/2025	8.0	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	8	60	Greg Bugbee	41.52099	-71.97791	8/18/2025	8.2	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	9	70	Greg Bugbee	41.52092	-71.97787	8/18/2025	9.4	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	10	80	Greg Bugbee	41.52083	-71.97777	8/18/2025	9.4	Silt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0