



## Sheep Meadow Bay

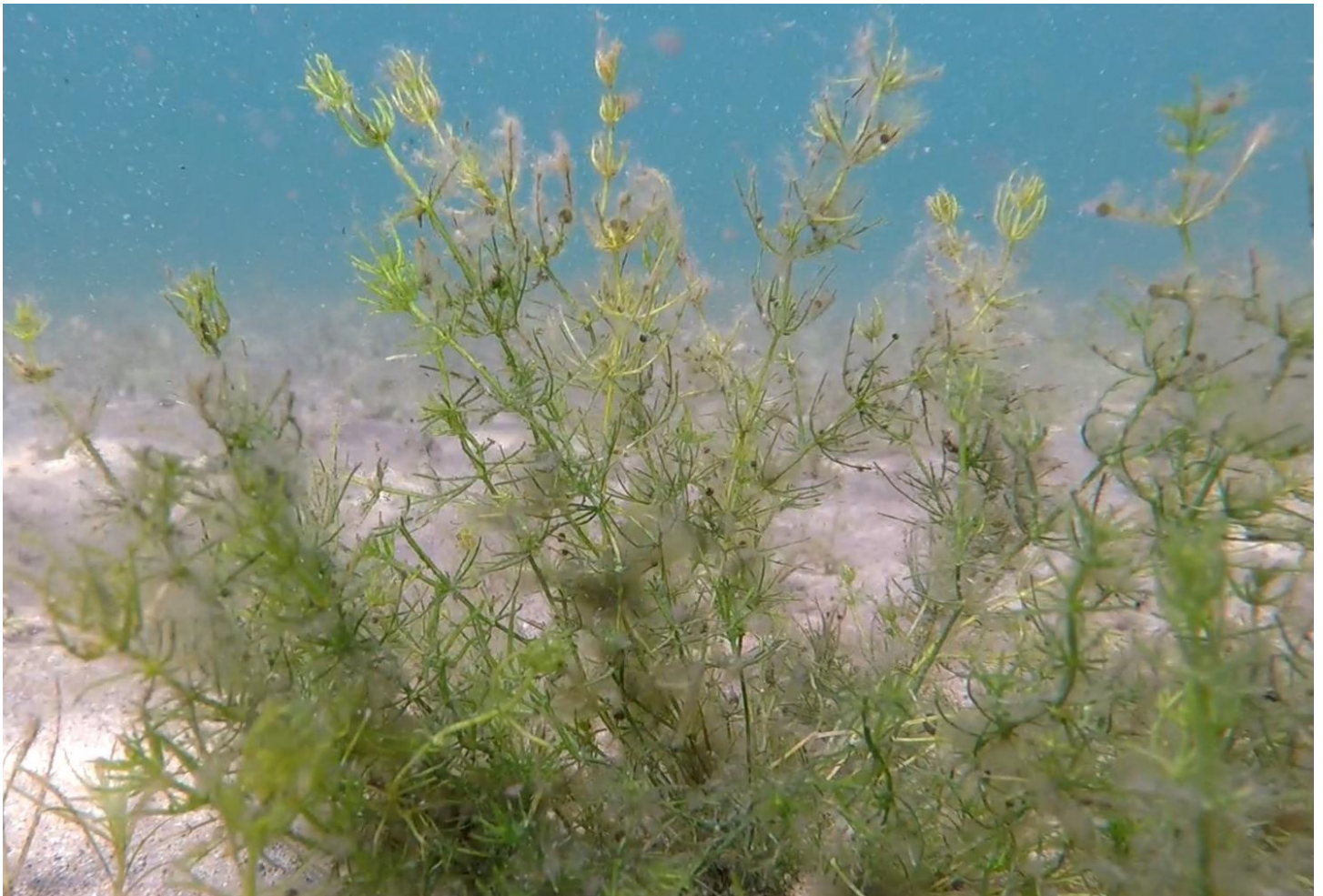
At Sheep Meadow Bay Dresden, the areas which are directly adjacent to the proposed treatment site were assessed for aquatic macrophytes from the depths of 0-30 feet. The areas of the proposed treatment site which were conducive to aquatic plant growth due to either or both bottom sediments type and depth were observed for changes to the macrophyte community since the original 2021 rake toss plant survey. The areas favorable to aquatic vegetation at this location were dominated *Myriophyllum spicatum* (EWM). Shallow areas (1'-4') which had bottom sediments consisting of mostly sand with low organic content were scrutinized for the previously observed low growing aquatic macrophytes; *Eriocaulon septangulare*, *Eleocharis acicularis*, *Elatine minima*, *Isoetes echinospora*, *Juncus pelocarpus*, *Najas flexilis*, *Sagittaria graminea*, *Utricularia resupinata* and *M. tenellum*. All shallow water species recorded during the initial survey were observed during the subsequent 2022 swimover survey; in addition to the earlier recorded species, two additional species were seen in the shallows: *Elatine minima* and *Sagittaria graminea* were found during the swimover, but were not observed during the 2021 rake-toss survey at this site. The macroalgae *Chara* was also noted at these depth locations.

In the 5 to 30 foot of depth area of the Sheep Meadow Bay littoral zone, the macrophytes: *Elodea canadensis*, *Isoetes lacustris*, *Meglodonta beckii*, *Potamogeton amplifolius*, *P. epihydrus*, *P. gramineus*, *P. perfoliatus*, *P. praelongus*, *P. robbinsii*, *P. zosteriformis*, *Ranunculus longirostris*, *Vallisneria Americana*, *Zosterella dubia* and all of the four narrow-leaf *Potamogetons* from the first 2021 rake-toss survey were observed during the 2022 swimover. The macroalgae *Nitella* was recorded at depths of 25 feet and deeper during the survey. *Isoetes lacustris* is also listed as a rare macrophyte by the State of New York, but is commonly found between 15 to 30 feet in depth in Lake George.

In total, all species identified during the initial plant survey were seen during the 2022 swimover. Three species observed during the 2022 swimover that were not collected during the initial rake-toss plant survey were : *Elatine minima*, *Sagittaria graminea* and *Potamogeton epihydrus*.

# Sheep Meadow Lake George, New York

## 2021 Submersed Aquatic Macrophyte Survey Report



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# 2021 Aquatic Macrophyte Survey Report

## Sheep Meadow Bay Lake George

### Introduction

On August 13th 2021, Warren County Soil & Water Conservation District conducted a detailed aquatic macrophyte survey for the Lake George Park Commission at Sheep Meadow Bay, Lake George in New York (Warren County). Sheep Meadow Bay, Lake George is located inside the Adirondack Park. The primary goal of the submersed aquatic vegetation (SAV) survey was to map and identify the abundance and distribution of Eurasian water milfoil to provide science-based recommendations for the continual management control strategies, as a more aggressive approach seems to be appropriate. Eurasian water milfoil at this location had previously been the target of suction harvesting, benthic barrier and hand harvesting in efforts to control its population. In addition to the target invasive plant, all submersed vegetation was mapped. The appendix of this report contains survey data tables as well as detailed distribution and abundance maps for each aquatic macrophyte species collected/observed in Sheep Meadow Bay. Also included is an aquatic macrophyte library, which provides a description of each species documented in 2021.

### Methodology

#### Point-Intercept Submersed Aquatic Plant Mapping

The Point Intercept Method (PIM) of sampling aquatic macrophytes is designed to determine the extent of aquatic plant growth within an area of concern. The total number of sample locations is typically based on the total acreage of the treatment area, where at least one sample location per acre is surveyed at a given site. For Blair's Bay, 38 GPS-referenced locations were sampled for the presence of aquatic macrophytes. During the survey, each pre-determined sampling point was accessed via a boat and the real-time GPS coordinates of the sample location were recorded using a handheld GNSS system. The same sample locations that were gathered during this survey can be utilized for future surveys for accuracy and ease of comparison purposes, if desired. This way changes in the aquatic macrophyte community can be tracked over time, especially to determine the efficacy of management program. A sample point map is included in the appendix that depicts these sampling stations. One rake toss was conducted at each sample point for detection of target species and native submersed aquatic vegetation (SAV). The Rake Toss Methodology, developed by the US Army Corps of Engineers and modified by Cornell University, was intended for use in this type of aquatic macrophyte survey (Lord and Johnson 2006). The following data was collected for each sampling station: overall abundance of aquatic macrophyte growth, relative abundance of each species, and any other pertinent field notes regarding the sample location. Based on available bathymetry information we determined that the bay had approximately 40 acres of littoral zone within 0.3 of a mile radius from the proposed treatment area. Thus, sampling stations are spread out over the entire area of 35 feet in depth or less, with a concentration on the known area of milfoil located in said grid system. Water depth was measured at each sampling station using a sonar-based depth finder and a weighted tape measure as appropriate to the SAV conditions. Water depths are depicted on a map in the appendix of this report. Based on our 40 water depth measurements, we calculated an average depth of

12.6 feet, with a maximum depth of 25 feet. The entire bay within 0.3 of a mile radius from the proposed treatment zone has an area of approximately 80 acres, of that 40 acres have a depth shallower than 35 feet. That means only 50 % of the area would be considered littoral zone by depth; bottom conditions further reduce the applicable littoral zone due to bottom substrate type. Large stretches of this sampling location have a steep bedrock substrate which does not hold sediment and are not conducive to SAV growth. For each rake toss, the weed rake, attached to a 10-meter-long piece of rope, was tossed from a random side of the boat. The weed rake used for aquatic macrophyte surveys has a specific design. It is constructed with two 13.5-inch wide metal garden rakes attached back to back. The wooden handles are removed, and a 10-meter-long nylon rope is attached to the rake heads. It is important to toss the weed rake the full 10 meters (a loop at the end of the rope is attached to the boat to prevent losing the rake). The weed rake is slowly retrieved along the bottom, and carefully hoisted into the boat. To determine the amounts of overall submersed vegetation, the weed mass is assigned one of five densities, based on the semi-quantitative metrics developed by Cornell University.

#### Aquatic Vegetation Abundance Scale

##### Field Note

Symbol	Abundance	Level Description
0	Zero	No plants on rake
T	Trace	One or two stems or fingerful on rake
S	Sparse	Three to ten stems or handful on rake
M	Moderate	More than ten stems or covering all rake tines
D	Dense	Rakeful of plants, difficult to bring into boat

As shown above, these densities are: *No Plants* (empty rake), *Trace* (one or two stems per rake, or the amount that can be held between two fingers), *Sparse* (three to 10 stems, but lightly covering the rake, or about a handful), *Medium* (more than 10 stems, and covering all the tines of the rake), or *Dense* (entire rake full of stems, and one has trouble getting the plant mass into the boat). Pictures of the corresponding densities are included in the appendix. These densities are abbreviated in the field notes as 0, T, S, M, and D. Next, the submersed weed mass is sorted by genus (or species if possible) and one of the five densities is assigned to each genus and/or species. Finally, overall floating macrophyte density within a 10-meter diameter of the survey boat is assigned a density, as well as an estimated density for each separate genus (or species) observed. This data is recorded in the field notes. This procedure is then repeated for the remaining sample points. For the purposes of this survey, the terms “density” and “abundance” refer to the same description.

Lake George New York is classified as an oligotrophic or meso/oligotrophic lake with a mean depth of approximately 70 ft deep; the lower nutrient, low production lake has a limited littoral zone by percentage of area, unlike many of the smaller Adirondack waterbodies. The Eastern shoreline and in fact a majority of the lake George shoreline is dominated by steep rocky substrates, it is not uncommon to be in 30 feet of water less than 25 feet from the mean high water mark.

Sheep Meadow Bay, conditions at this site were very similar to those found at Glenburnie. The near shore areas with both favorable bottom substrate and depths were dominated by EWM, with pockets of native macrophytes. Areas of the wave break zone with depths of 1 to 4 feet deep mostly consisted of bottom sediments of sand with little organic materials; areas within the 0.3 mile radius of the proposed treatment areas were lacking in aquatic macrophytes due to benthic bedrock or steep drop offs which are not conducive to holding soft organic sediment needed for plant growth. Areas of 20 ft in depth and greater were found to have *Isoetes lacustris* a macrophyte found on the New York State list of Rare, Threatened or Endangered plants; though it is commonly found in Lake George throughout this depth range. Areas of 25 ft in depth or more were sampled for the presence of *Nitella* which is generally found in Lake George at the 25—35 foot depth range.

In Sheep Meadow Bay the areas which are directly adjacent to the proposed treatment site were heavily sampled for aquatic macrophytes from the depths of 0-25 feet; the areas within the 0.3 miles of the proposed treatment site which were conducive to aquatic plant growth due to either or both bottom sediments type and depth were also sampled. The areas favorable to aquatic vegetation at this location were dominated by *Myriophyllum spicatum* (EWM). The reason for extended spacing between marked sample locations was as we travelled both to the north and south of the proposed treatment area, water shallow enough (< 30 ft) for aquatic plants had benthic conditions consisting of mostly bedrock or large cobble/ boulder piles, very little soft sediment. Areas consistent with aquatic plant growth by depth and sediment type visible from the surface (<15ft) were sampled. Shallow areas which had bottom sediments consisting of mostly sand with low organic content were also sampled repeatedly for low growing macrophytes such as *Eriocaulon*, *Eleocharis*, *Juncus*, *Myriophyllum alterniflorum* and *M. tenellum*. *M. tenellum* was located at three locations during the survey, but not within the immediate proposed treatment area, it was found north of the proposed treatment area within the 0.3 mile radius of the known Eurasian Watermilfoil bed.

## Summary of Aquatic Vegetation Sheep Meadow Bay—Lake George

<b>Sheep Meadow Bay</b>			
<b>Common Name</b>	<b>Scientific Name</b>	<b>Stations</b>	<b>% occurrence</b>
Slender Naiad	<i>Najas flexillis</i>	21	52.5
Robbins Pondweed	<i>Potamogeton robbinsii</i>	11	27.5
Eurasian Water milfoil	<i>Myriophyllum spicatum</i>	10	25.0
Grassy Pondweed	<i>Potamogeton gramineus</i>	10	25.0
American Eelgrass	<i>Vallisneria americana</i>	9	22.5
Stonewort	<i>Nitella</i>	8	20.0
Muskgrass	<i>Chara</i>	6	15.0
Flatstem Pondweed	<i>Potamogeton zosteriformis</i>	6	15.0
Canadian Waterweed	<i>Elodea canadensis</i>	5	12.5
Spikerush	<i>Eleocharis acicularis</i>	5	12.5
Water Marigold	<i>Megalodonta beckii</i>	5	12.5
Northeastern Bladderwort	<i>Utricularia resupinata</i>	5	12.5
Clasping leaf Pondweed	<i>Potamogeton perfoliatus</i>	5	12.5
Brown Fruit Rush	<i>Juncus pelocarpus</i>	4	10.0
Narrowleaf Pondweed	<i>Potamogeton narrow-leaf 3</i>	4	10.0
Narrowleaf Pondweed	<i>Potamogeton narrow-leaf 4</i>	4	10.0
Slender Water milfoil	<i>Myriophyllum tenellum</i>	3	7.5
Lake Quillwort	<i>Isoetes lacustris</i>	3	7.5
Longbeak Buttercup	<i>Ranunculus longirostris</i>	3	7.5
Pipewort	<i>Eriocaulon septangulare</i>	2	5.0
Spiny Quillwort	<i>Isoetes echinospora</i>	2	5.0
Water Stargrass	<i>Zosterella dubia</i>	2	5.0
Largeleaf Pondweed	<i>Potamogeton amplifolius</i>	2	5.0
Narrowleaf Pondweed	<i>Potamogeton narrow-leaf 2</i>	2	5.0
White stem Pondweed	<i>Potamogeton praelongus</i>	1	2.5
Narrowleaf Pondweed	<i>Potamogeton narrow-leaf 1</i>	1	2.5

# Discussion

## Macrophyte Abundance and Distribution

The table above is a summary of the frequency of occurrence data for the 2021 Point Intercept survey at Sheep Meadow Bay - Lake George. Entries in **red** indicate an invasive species, while entries in **green** indicate an macro-alga species. The aquatic plant community can be divided into several different categories. These include submersed aquatic plants (such as pondweeds, milfoils, and bladderworts), floating-leaf plants (such as water lilies) and free-floating aquatic plants (such as duckweeds and watermeal). The latter two groups typically comprise the floating plant community. Macroscopic algae (such as muskgrass and stonewort) are typically collected during these surveys as they impact the SAV community or serve in a similar ecological niche. Emergent growth (such as pickerelweed and cattails) commonly occur along shoreline margins, but typically are not a focal point of SAV point intercept surveys, nor were any seen or collected during this survey. At Sheep Meadow Bay, aquatic macrophytes were collected at 33 of the 40 sample points (or 83%) in the basin. Trace abundance macrophytes were collected at nine (or 23%) of the sites, Sparse abundance was found at 8 sites (20%). Moderate abundance macrophytes accounted for 28% of the sites (n=11) while only five of the sites (n=5, or 13%) were considered dense abundance. We typically consider moderate and dense Eurasian Watermilfoil (EWM) to be at nuisance abundance. Therefore, nuisance growth occurred at 13% of the sites with EWM growth at Sheep Meadow Bay.

Richness (or diversity) is the measure of different species at a specific location. At Sheep Meadow Bay, we collected/observed 26 different aquatic macrophytes. Further, we can examine the individual sample site richness to determine if there are locations in the basin that have higher (or lower) richness. The richness ranged from 0 to 11 unique aquatic macrophytes. The mean richness at all 40 stations was calculated at 3.5 macrophyte species per site. In other words, an average of three and a half different macrophytes were collected at each sample site. Sample site richness is depicted on a map in the appendix of this report.

**Eurasian water milfoil** is an aggressive invasive submersed plant and is the current target of localized control efforts in this bay. The EWM beds only cover an area of approximately an acre of the 40 acres surveyed; Eurasian water milfoil occurred at 10 (or 25%) of the sites surveyed and was one of the dominant aquatic macrophytes collected/observed in this area; exceeded only by *Najas flexilis* and *Potamogeton robbinsii*. Most abundances were dense (9- 90%) or trace (1or 10%). Therefore, 90% of the sites were dense (n=9), which we would consider a nuisance. Eurasian water milfoil is found in one larger bed area and one small bed with native macrophytes between the two beds, although EWM was found scattered in lesser amounts between the two beds. Its possible that given time, EWM will begin to dominate the area between the two beds forming one large population of Eurasian water milfoil; this has been seen at a number of locations in Lake George before.

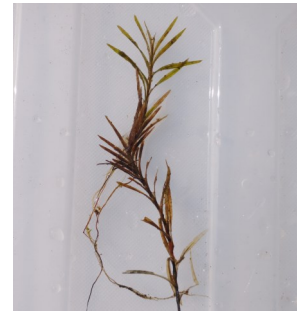




**Najas flexilis** is very common in Lake George and New York State. *N. flexilis* was collected at 21 (or 53%) of the sites in 2021. At all of these sites the small plants were found in trace abundance (n=17, or 81%) and sparse abundance at (n=4, 19%).



**Potamogeton robbinsii** is a highly desirable native pondweed. It was documented in Blair's Bay at 11 sites (28%) with a distribution found at depths of 10 feet or more, but can be found in shallower waters. At all of these sites the plants were found in trace abundance (n=6, or 55%) and sparse abundance at (n=5, 45%).



**Potamogeton gramineus** - Grassy Pondweed was one of the ten potamogetons found during this survey, *P. gramineus* is a common Lake George species which can be found throughout the littoral zone from 1 to 25 feet deep. During this survey it was recorded from 3 to 15 feet deep at 10 sites (25%) sampled; 8 samples in trace amounts (80%) and 2 samples in sparse amounts (20%).



**Vallisneria Americana** - Eel Grass have long basal ribbon like leaves with obvious lacunae bands their entire length, common in Lake George it was found at 9 sites (23%) at depths from 3 to 15 feet. 8 samples (89%) in trace amounts and 1 in sparse amounts (11%).



**Macroalga**– Chara and Nitella are visible multi-branching algal species that ecologically function as higher plants. There are two main native genera in the northeast: muskgrass (*Chara* sp.) and stonewort (*Nitella* sp.).

**Nitella** (stonewort) was found at 8 sites (20%) at an average depth of 24 feet; it tends to be lighter green, smooth more delicate branching and located among the last plants found in deepest waters at the end of the littoral zone. 5 samples were trace amounts (63%), 1 in sparse amounts (12%) and 2 in moderate amounts (25%).



**Chara** (muskgrass) tends to be darker green in color, with stiffer calcium-encrusted branches generally found in shallower waters. It was found at 6 sites (15%) in trace amounts at Sheep Meadow Bay at an average depth less than 6.5 feet.



**Potamogeton zosterformis:** Flat-stem Pondweed is another of the ten potamogetons found during this survey, P. zosterformis is a common Lake George species which was found throughout the littoral zone from 5 to 20 feet deep. During this survey it was recorded from 7 to 15 feet deep at 6 sites (15%) of the total samples, 5 in trace amounts, 1 in sparse amounts.



**Elodea Canadensis** –Canadian Waterweed has slender stems that can reach a meter in length, and a shallow root system. The stem is adorned with 3 whorled lance-like leaves that are attached directly to the stalk that tend to congregate near the stem tip. It was found in at five sample sites (13%) in Sheep Meadow Bay. The depths were from 3 to 14 feet deep, with all five densities being trace.



**Eleocharis accicularis:** Spikerush is commonly found in sandy sediments from the wave break zone to 10 feet of depth in Lake George, during this sampling in Sheep Meadow Bay it was recorded in 3 to 10 feet of water at 5 sites (13%). 4 sites (80%) was listed as trace and a single density of sparse.



**Megalodonta beckii:** Water marigold is common in Lake George, found throughout the littoral zone in waters from 5 to 25 feet in depth. In Sheep Meadow it was found at 5 sites (13%) in a trace amount at 4 of the sample sites, 1 in moderate amounts in 7 to 20 feet of water.



**Utricularia resupinata** –Northeastern Bladderwort unlike a majority of Bladderworts, resupinata is not a free floating plant, it was found in trace amounts at 5 sites (13%) in shallow sandy areas in Lake George. Thin thread like leaves with carnivorous bladders on leaf stems and roots identify this species. Found at depths of less than 6 feet it sometimes forms mats in shallow sandy areas throughout the lake.



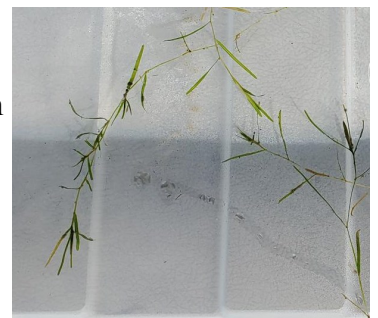
**Potamogeton perfoliatus** - Claspingleaf Pondweed is another of the ten potamogetons found during this survey, P. perfoliatus is a common Lake George species which was found throughout the littoral zone from 3 to 32 feet deep. During this survey it was recorded from 3 to 15 feet deep at 5 sites (13%) in trace amounts.



**Juncus pelocarpus** - Brownfruit Rush is commonly found in sandy sediments from the wave break zone to 12 feet of depth in Lake George, during this sampling in Sheep Meadow Bay it was recorded in 3 to 10 feet of water at 4 sites (10%). All four sites (100%) were listed as trace.



**Narrow-leaf Potamogeton 3** - there are a number of narrow-leaf potamogeton species common to Lake George that without seeds and a dissecting microscope are very difficult to identify to species. This species was found at 4 sites (10%) in Sheep Meadow Bay. It was found between 6 and 25 feet in depth, 4 samples densities were trace (100%).



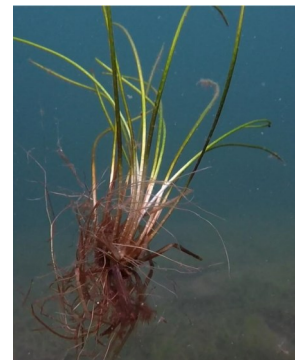
**Narrow-leaf Potamogeton 4** - there are a number of narrow-leaf potamogeton species common to Lake George that without seeds and a dissecting microscope are very difficult to identify to species. This species was found at 4 sites (10%) in Sheep Meadow Bay. It was found between 10 and 20 feet in depth, 3 samples densities were trace (75%) 1 was found in sparse amounts (25%).



**Myriophyllum tenellum** - Slender Water Milfoil is the third milfoil found during the two surveys, and is one of the two milfoils found in Sheep Meadow Bay. *M. tenellum* is found in soft or sandy areas throughout Lake George. It was listed at three sites outside of the treatment area, and found between 3 and 9 feet in depth, All 3 samples (7.5%) with densities listed as trace (100%).



**Isoetes lacustris:** - Lake Quillwort is one of two species of found in lake George and listed as a rare aquatic plant in New York State; this plant is commonly found in the deep waters of Lake George, from depths of 20 to 30 deep. It was found at three sites in Sheep Meadow Bay (7.5%), 2 samples in trace amounts and one in Moderate. All three of the sites were listed as 20 feet deep.



**Ranunculus longirostris** –Longbeaked Buttercup has leaves that are finely divided into many thread-like segments, round to fan-shaped in outline, to ¾ inch long and about 1 inch wide, alternately attached. Stems and leaves are all submersed and mostly hairless. It was found in trace (2) or sparse (1) amounts at 3 sites (7.5%) during sampling ranging from 3 to 10 feet in depth.



**Eriocaulon septangulare:** Pipewort is commonly found in sandy sediments from the wave break zone to 10 feet of depth in Lake George, during this sampling in Sheep Meadow Bay it was recorded in 4 to 10 feet of water at 2 sites (5%). Both sites (100%) were listed as trace.



**Isoetes echinospora:** - Spiny Quillwort is one of two species of found in lake George; this plant is commonly found in the shallow waters of Lake George, from depths of 2 to 10 deep. It was found at two sites in Sheep Meadow Bay (5%) in trace amounts. One of the sites was listed as 15 feet deep but was on a steep section of the bay, chances are this sample came from a shallow end of the rake toss sample area.



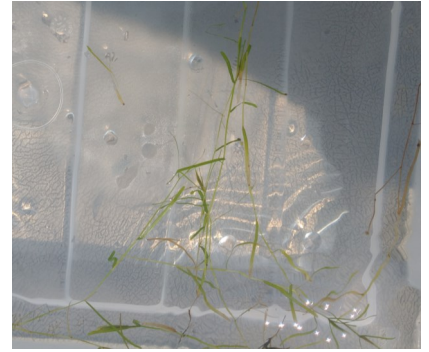
**Zosterella dubia:** Water Stargrass is often mistaken for any number of pondweeds, the lack of an obvious mid-vein on it's alternate leaves is the key identifying feature of this plant. In Sheep Meadow Bay it was found at 2 sites (5%) in 10 and 12 feet of depth in trace amounts during sampling, but is quite common in Lake George.



**Potamogeton amplifolius** - Large-leaf Pondweed was one of the ten potamogetons found during this survey, P. amplifolius is a common Lake George species which can be found throughout the littoral zone from 3 to 25 feet deep. During this survey it was recorded at 10 and 12 feet deep at 2 sites (5%) in trace amounts at both (100%).



**Narrow-leaf Potamogeton 2:** - there are a number of narrow-leaf potamogeton species common to Lake George that without seeds and a dissecting microscope are very difficult to identify to species. This species was found at 2 sites (5%) in Sheep Meadow Bay. It was found between 14 and 15 feet in depth, Both sample densities were trace (100%).



**Potamogeton praelongus**– White stem Pondweed is another of the ten potamogetons found during this survey, *P. praelongus* is a common Lake George species which was found throughout the littoral zone from 8 to 25 feet deep. During this survey it was recorded at 15 feet deep at a single site (2.5%) in trace amounts.



**Narrow-leaf Potamogeton 1:** - there are a number of narrow-leaf potamogeton species common to Lake George that without seeds and a dissecting microscope are very difficult to identify to species. This species was found at single site (2.5%) in Sheep Meadow Bay. It was found at 3 feet in depth, its sample densities was trace (100%).



# Appendix

Sheep Meadow Abundance Distribution	Total		Trace		Sparse		Moderate		Dense	
	Sites	%	Sites	%	Sites	%	Sites	%	Sites	%
Total Sites	40									
Overall Abundance	33	83	9	23	8	20	11	28	5	13
<i>Najas flexillis</i>	21	53	17	81	4	19				
<i>Potamogeton robbinsii</i>	11	28	6	55	5	45				
<i>Myriophyllum spicatum</i>	10	25	1	10					9	90
<i>Potamogeton gramineus</i>	10	25	8	80	2	20				
<i>Vallisneria americana</i>	9	23	8	89	1	11				
<i>Nitella</i>	8	20	5	63	1	12	2	25		
<i>Chara</i>	6	15	5	83	1	17				
<i>Potamongeton zosteriformis</i>	6	15	5	83	1	17				
<i>Elodea canadensis</i>	5	13	5	100						
<i>Eleocharis acicularis</i>	5	13	4	80	1	20				
<i>Megalodonta beckii</i>	5	13	4	80			1	20		
<i>Utricularia resupinata</i>	5	13	5	100						
<i>Potamogeton perfoliatus</i>	5	13	5	100						
<i>Juncus pelocarpus</i>	4	10	4	100						
<i>Potamogeton narrow-leaf 3</i>	4	10	4	100						
<i>Potamogeton narrow-leaf 4</i>	4	10	3	75	1	25				
<i>Mryiophyllum tenellum</i>	3	8	3	100						
<i>Isoetes lacustris</i>	3	8	3	100						
<i>Ranunculus longirostris</i>	3	8	2	67	1	33				
<i>Eriocaulon septangulare</i>	2	5	2	100						
<i>Isoetes echinospora</i>	2	5	2	100						
<i>Zosterella dubia</i>	2	5	2	100						
<i>Potamogeton amplifolius</i>	2	5	1	50	1	50				
<i>Potamogeton narrow-leaf 2</i>	2	5	2	100						
<i>Potamogeton praelongus</i>	1	3	1	100						
<i>Potamogeton narrow-leaf 1</i>	1	3	1	100						

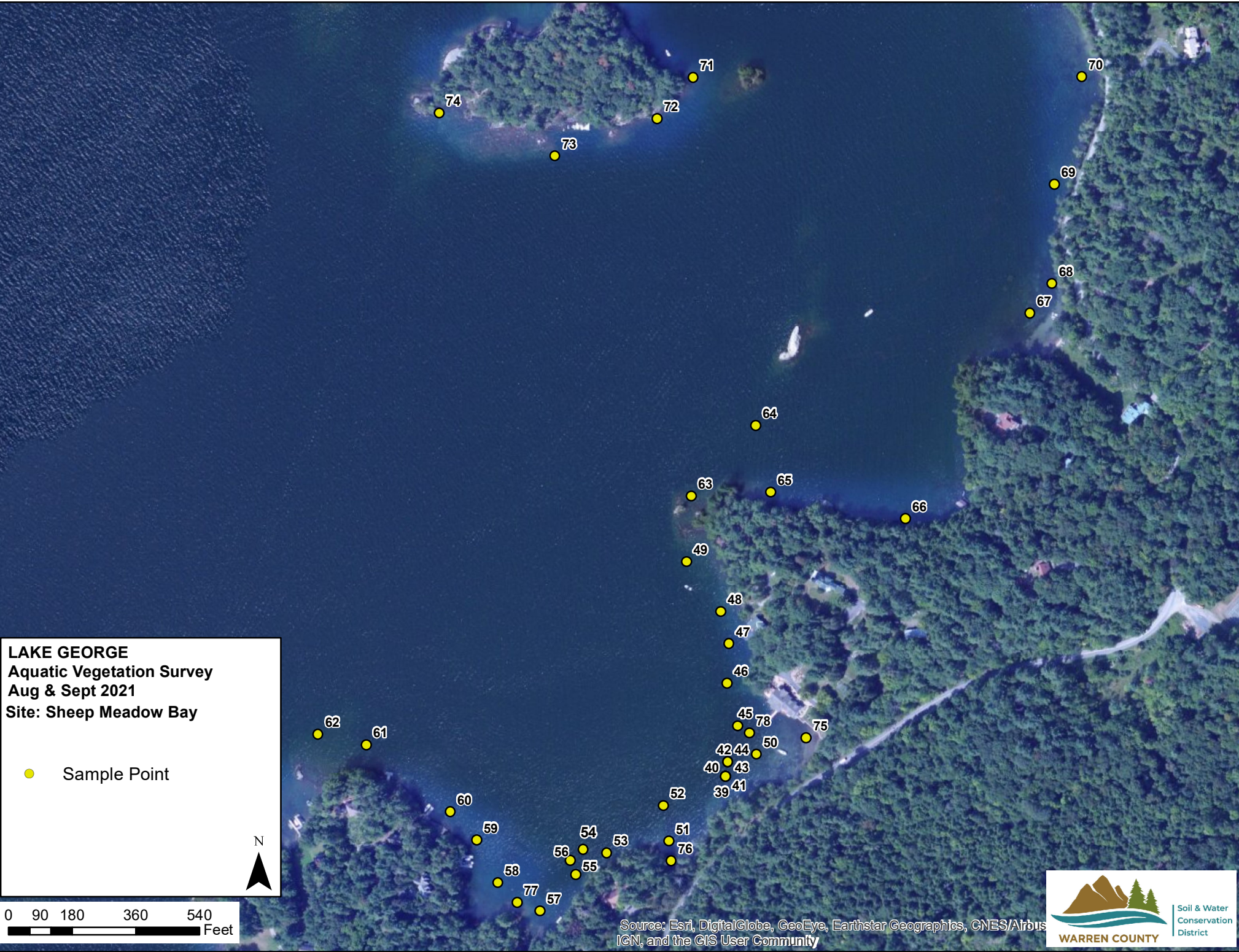
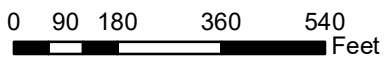




**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

● Sample Point

N



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
 IGN, and the GIS User Community

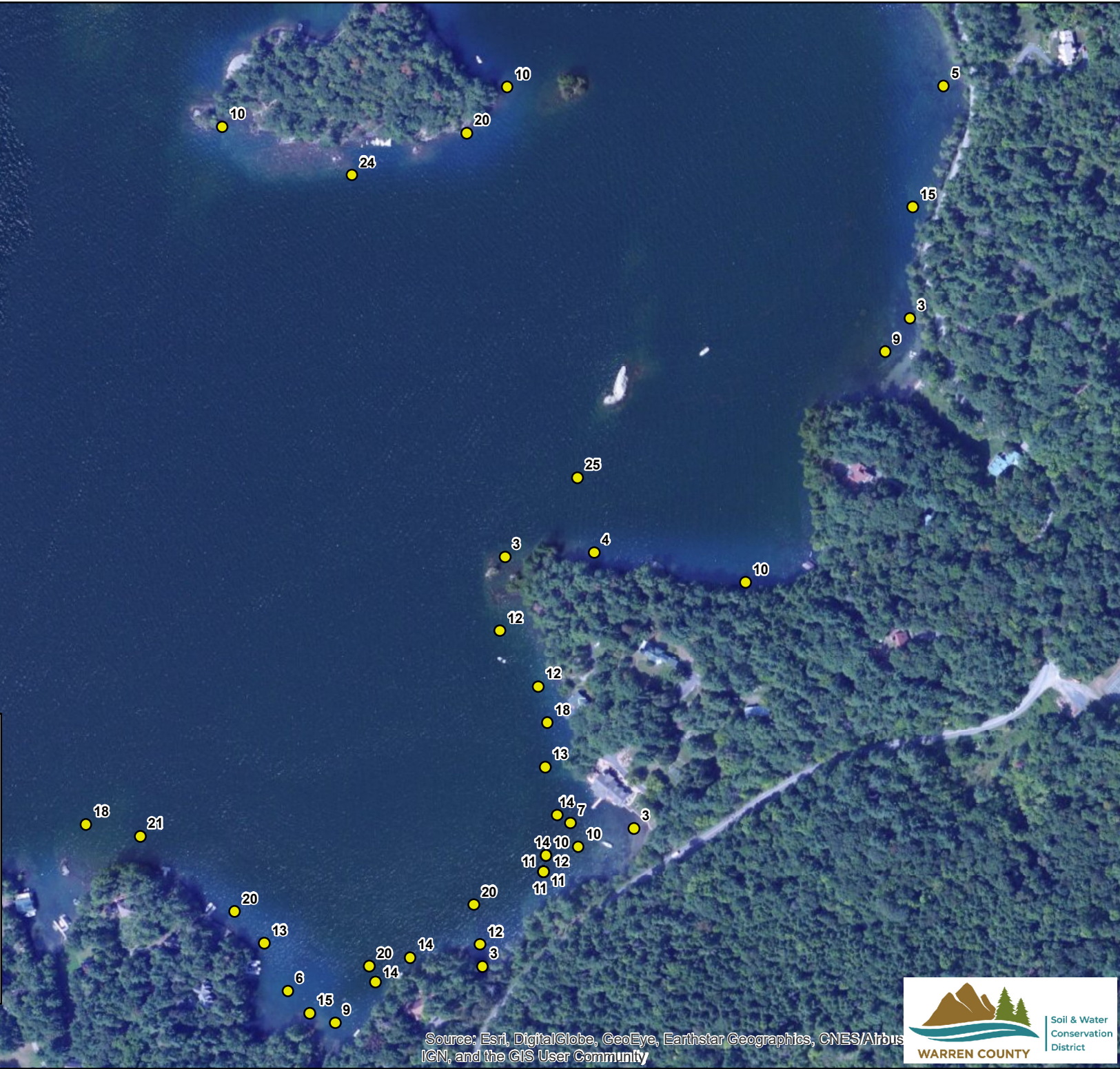


**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

● Water Depth in Feet

N

0 90 180 360 540  
 Feet



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
 IGN, and the GIS User Community



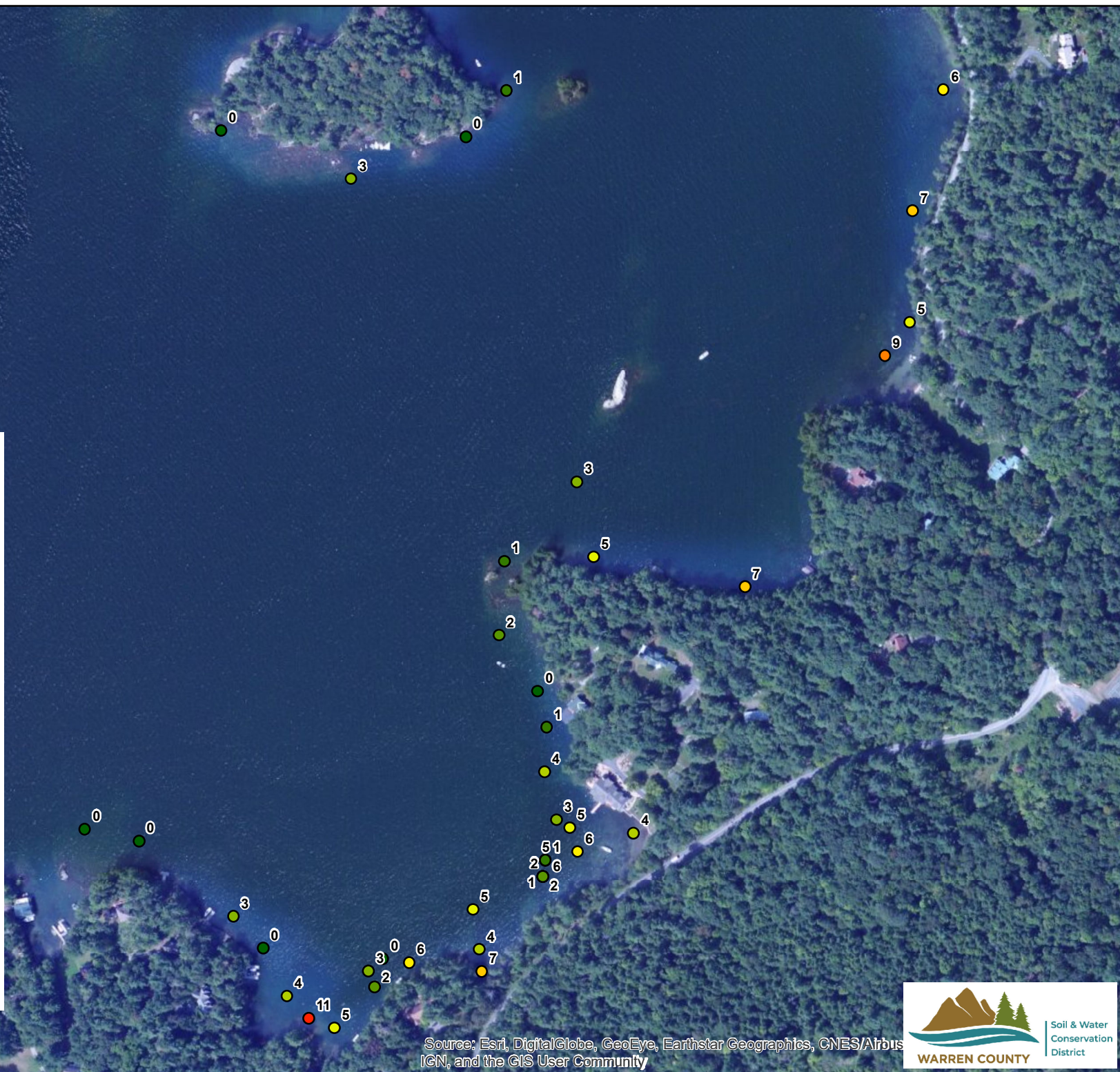
**LAKE GEORGE**  
Aquatic Vegetation Survey  
Aug & Sept 2021  
Site: Sheep Meadow Bay

**Richness-Number of  
Species per Sample Point**

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



0 90 180 360 540  
Feet



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Chara sp
- Sample Point

Plant Density  
T = Trace Plants  
S = Sparse Plants  
M = Moderate Plants  
D = Dense Plants



0 90 180 360 540  
Feet

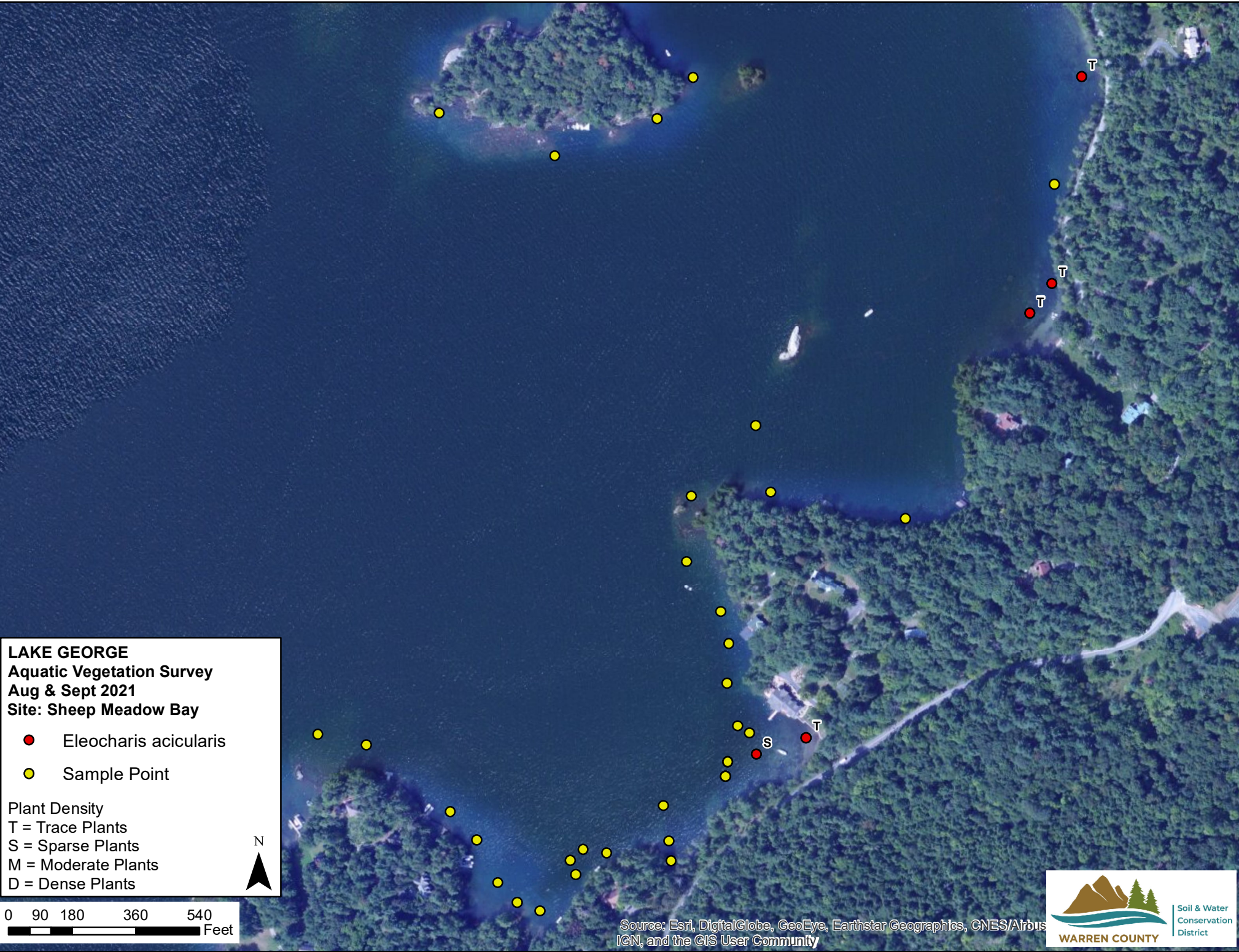
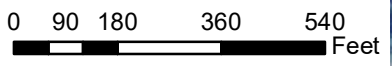
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
IGN, and the GIS User Community



**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Eleocharis acicularis
- Sample Point

Plant Density  
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
 IGN, and the GIS User Community



**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- *Elodea canadensis*
- Sample Point

Plant Density  
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0 90 180 360 540  
Feet

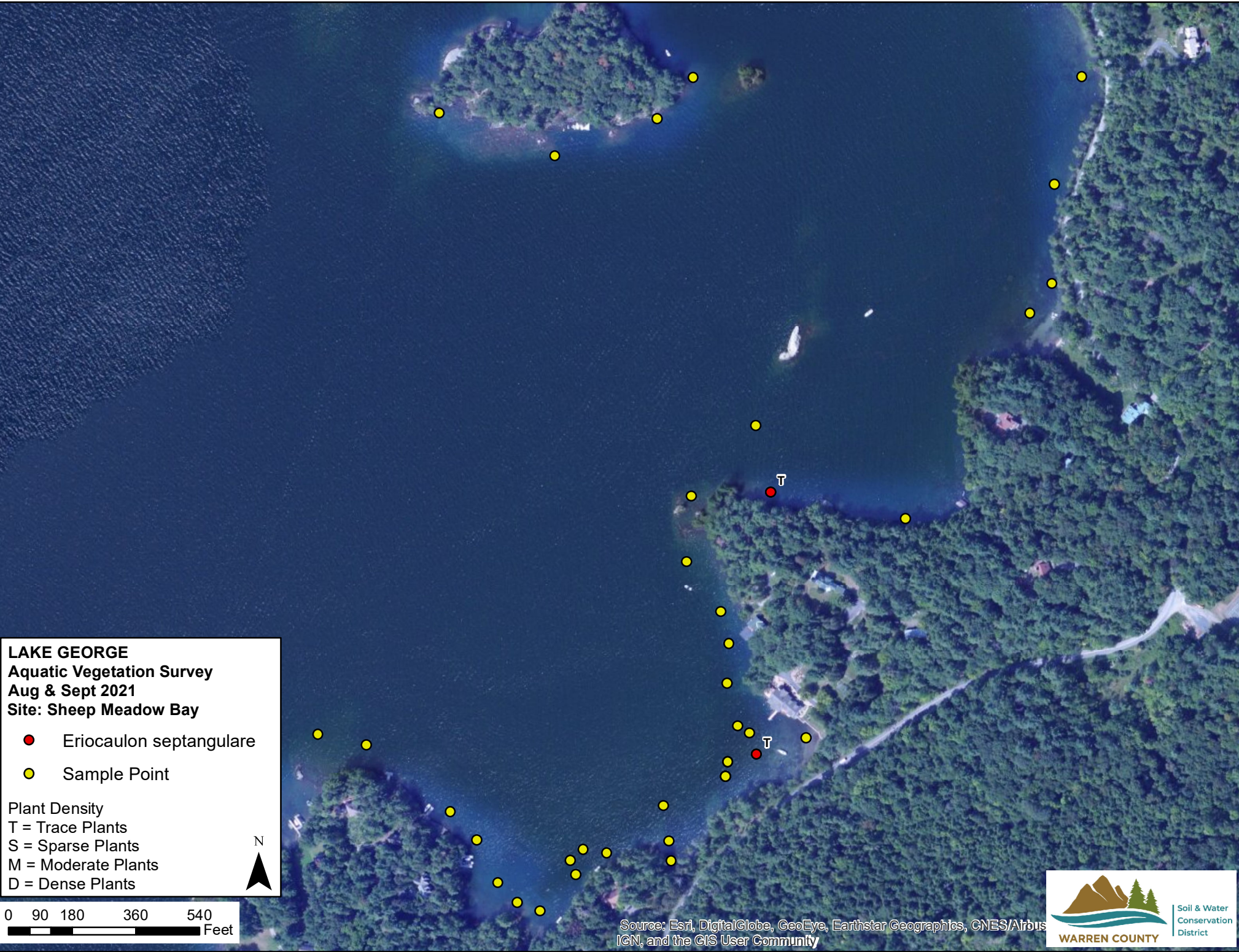
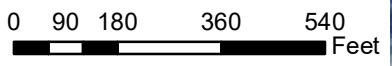
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Eriocaulon septangulare
- Sample Point

Plant Density  
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D = Dense Plants



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Isoetes echinospora
- Sample Point

Plant Density  
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D = Dense Plants



0 90 180 360 540  
Feet

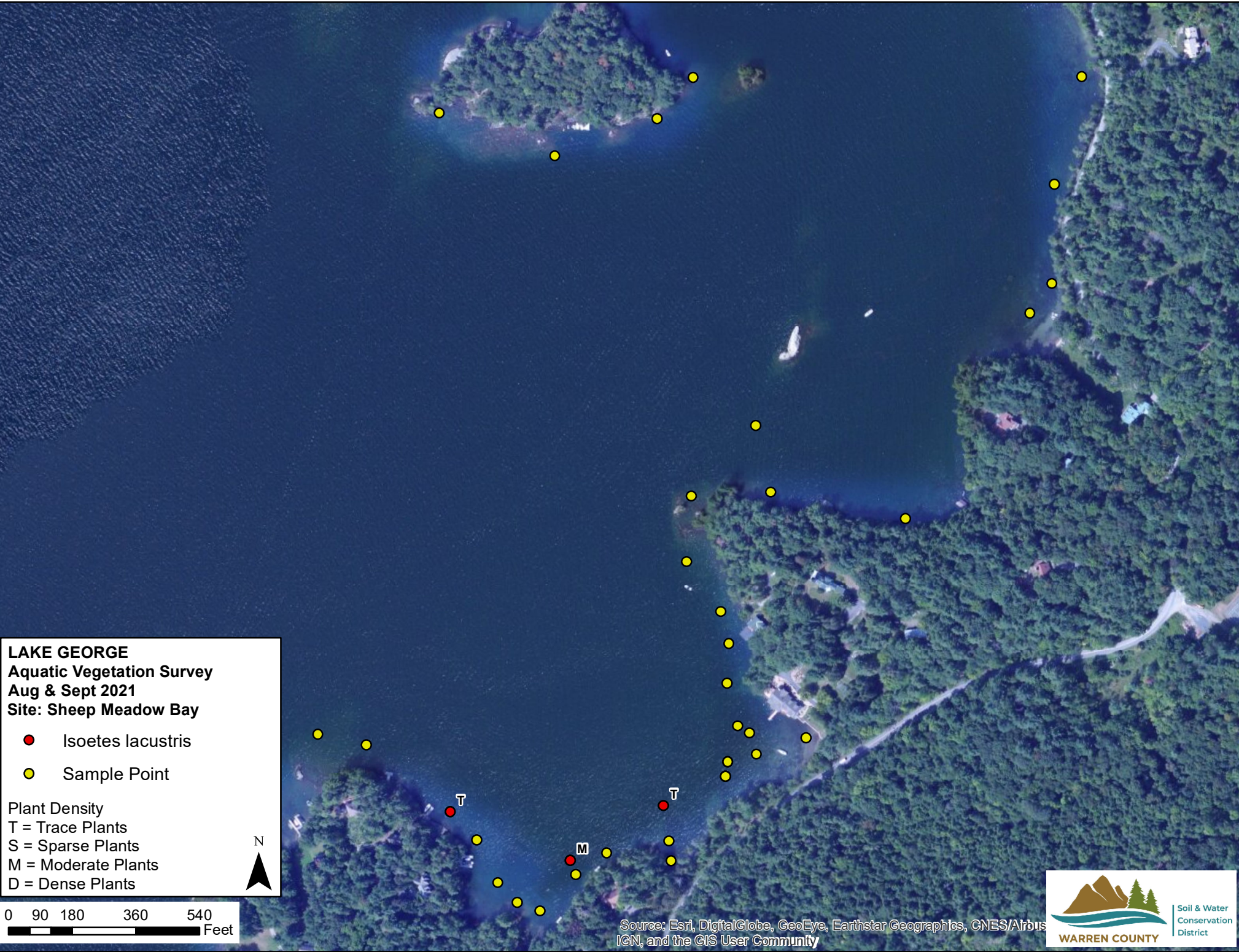
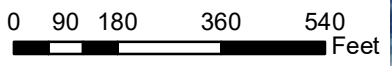
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Isoetes lacustris
- Sample Point

Plant Density  
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Juncus pelocarpus
- Sample Point

Plant Density  
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S = Sparse Plants  
M = Moderate Plants  
D = Dense Plants



0 90 180 360 540  
Feet

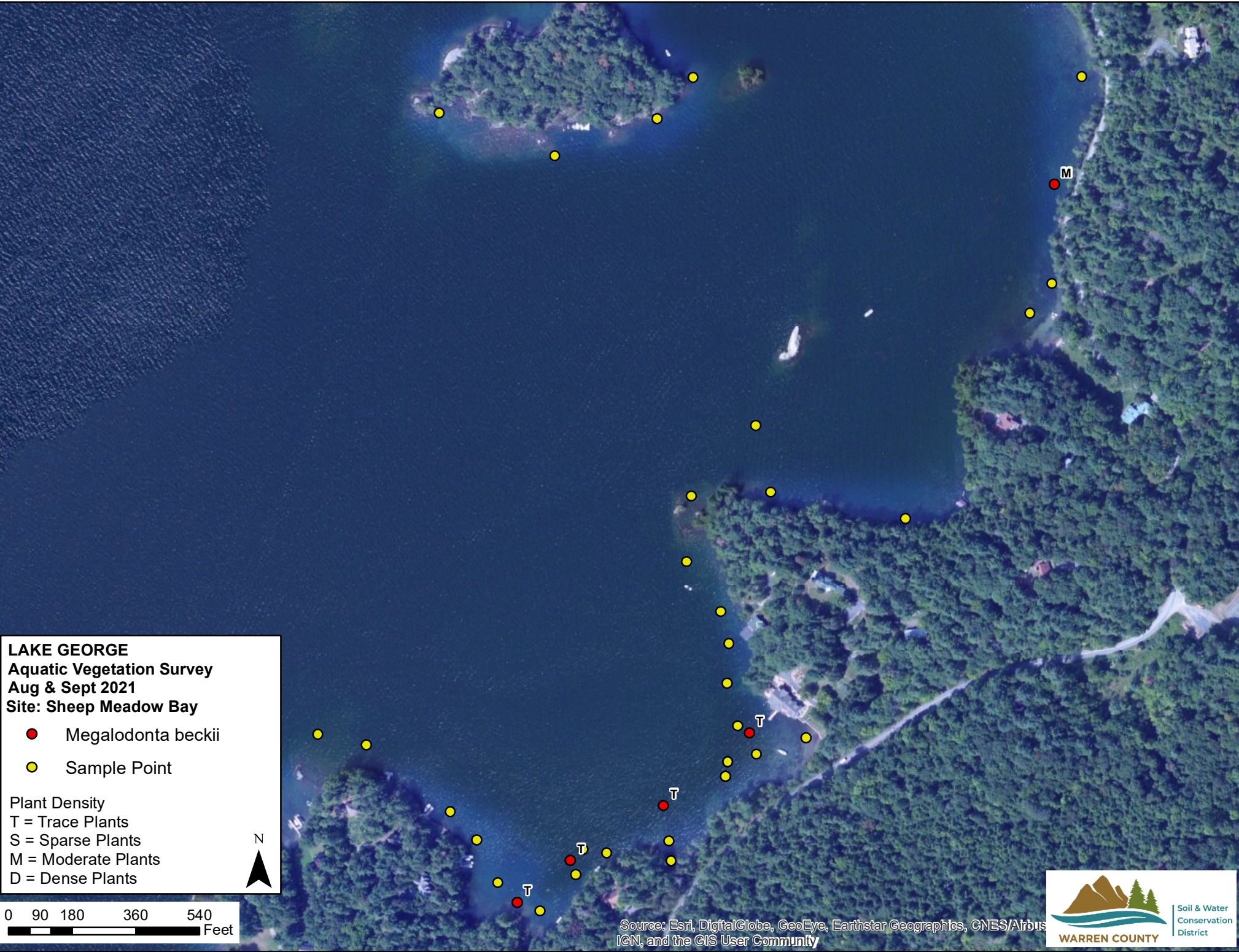
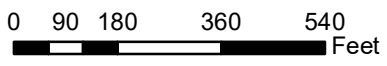
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- *Megalodonta beckii*
- Sample Point

Plant Density  
T = Trace Plants  
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M = Moderate Plants  
D = Dense Plants



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- *Myriophyllum spicatum*
- Sample Point

Plant Density  
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S = Sparse Plants  
M = Moderate Plants  
D = Dense Plants



0 90 180 360 540  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
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- Myriophyllum tenellum
- Sample Point

Plant Density  
T = Trace Plants  
S = Sparse Plants  
M = Moderate Plants  
D = Dense Plants



0 90 180 360 540  
Feet

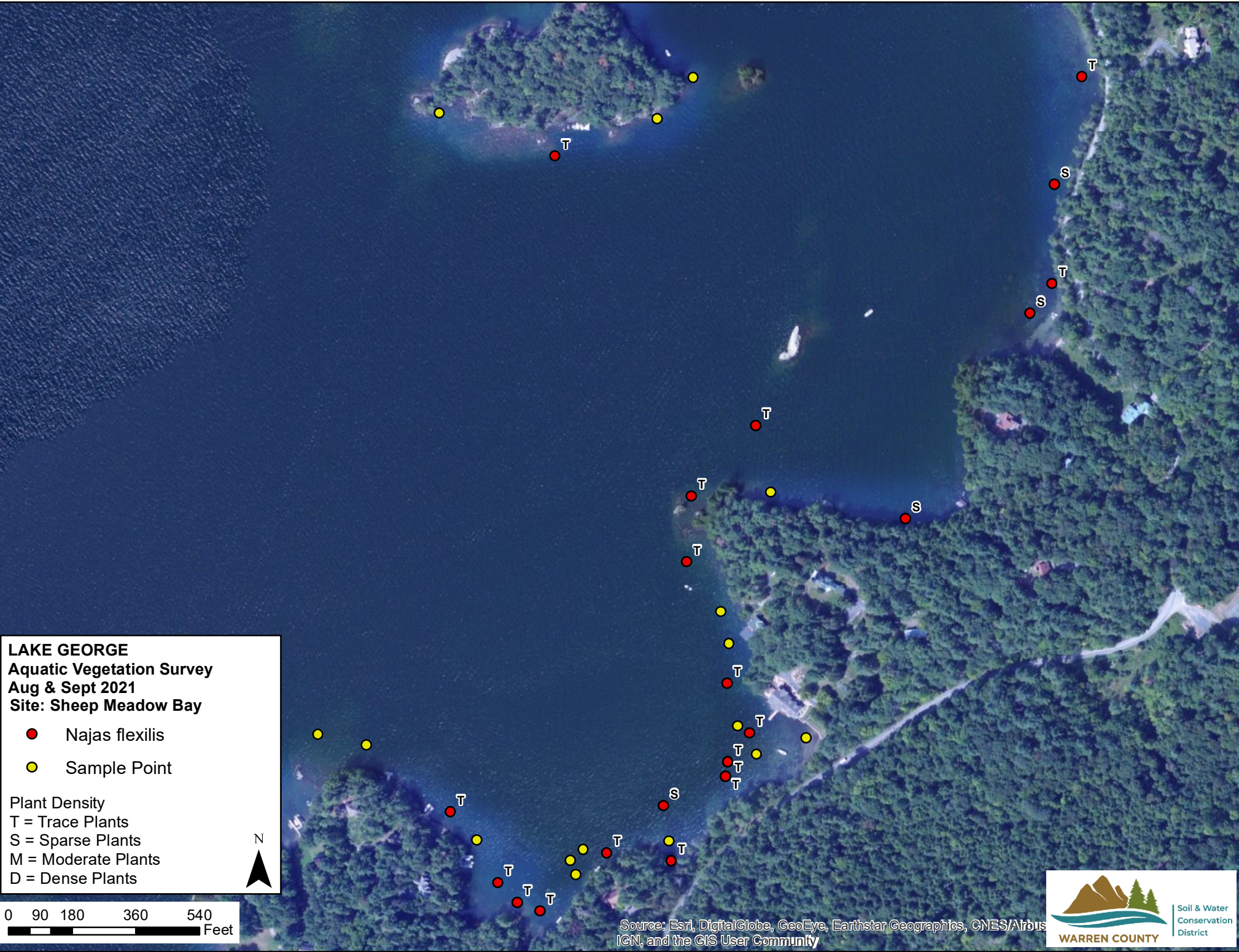
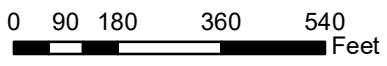
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- *Najas flexilis*
- Sample Point

Plant Density  
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 D = Dense Plants



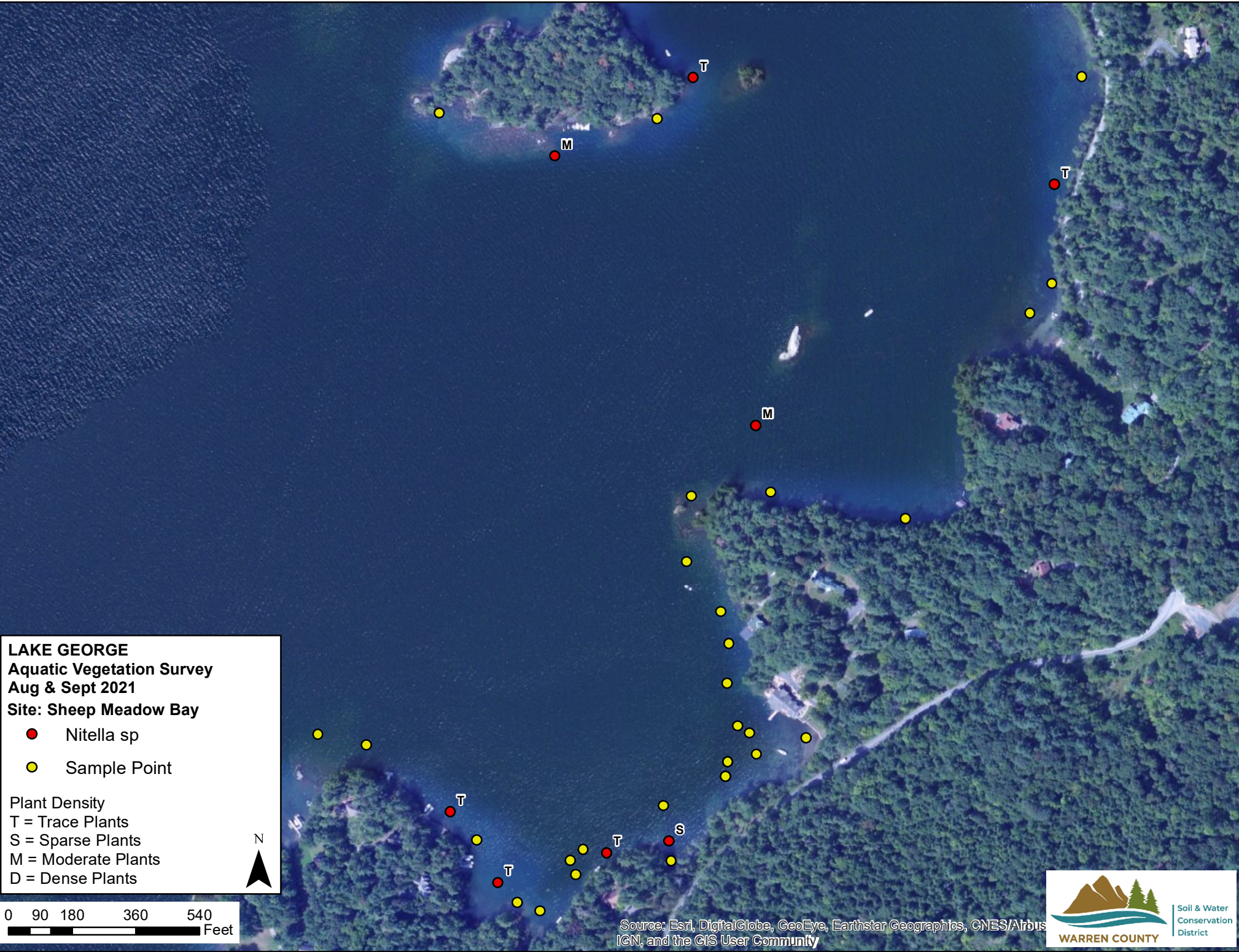
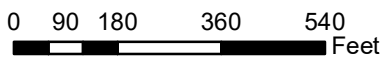
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Nitella sp
- Sample Point

Plant Density  
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**LAKE GEORGE**  
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**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton amplifolius
- Sample Point

Plant Density  
T = Trace Plants  
S = Sparse Plants  
M = Moderate Plants  
D = Dense Plants



0 90 180 360 540  
Feet

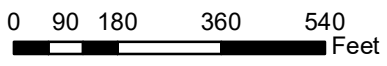
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton gramineus
- Sample Point

Plant Density  
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 D = Dense Plants



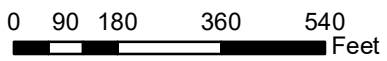
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton narrow-leaf 1 o
- Sample Point

Plant Density  
T = Trace Plants  
S = Sparse Plants  
M = Moderate Plants  
D = Dense Plants



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton narrow-leaf 2 p
- Sample Point

Plant Density  
T = Trace Plants  
S = Sparse Plants  
M = Moderate Plants  
D = Dense Plants



0 90 180 360 540  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton narrow-leaf 3 s
- Sample Point

Plant Density  
T = Trace Plants  
S = Sparse Plants  
M = Moderate Plants  
D = Dense Plants



0 90 180 360 540  
Feet

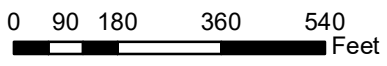
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton narrow-leaf 4 v
- Sample Point

Plant Density  
 T = Trace Plants  
 S = Sparse Plants  
 M = Moderate Plants  
 D = Dense Plants



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton perfoliatus
- Sample Point

Plant Density  
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M = Moderate Plants  
D = Dense Plants



0 90 180 360 540  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton praelongus
- Sample Point

Plant Density  
T = Trace Plants  
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M = Moderate Plants  
D = Dense Plants



0 90 180 360 540  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
IGN, and the GIS User Community

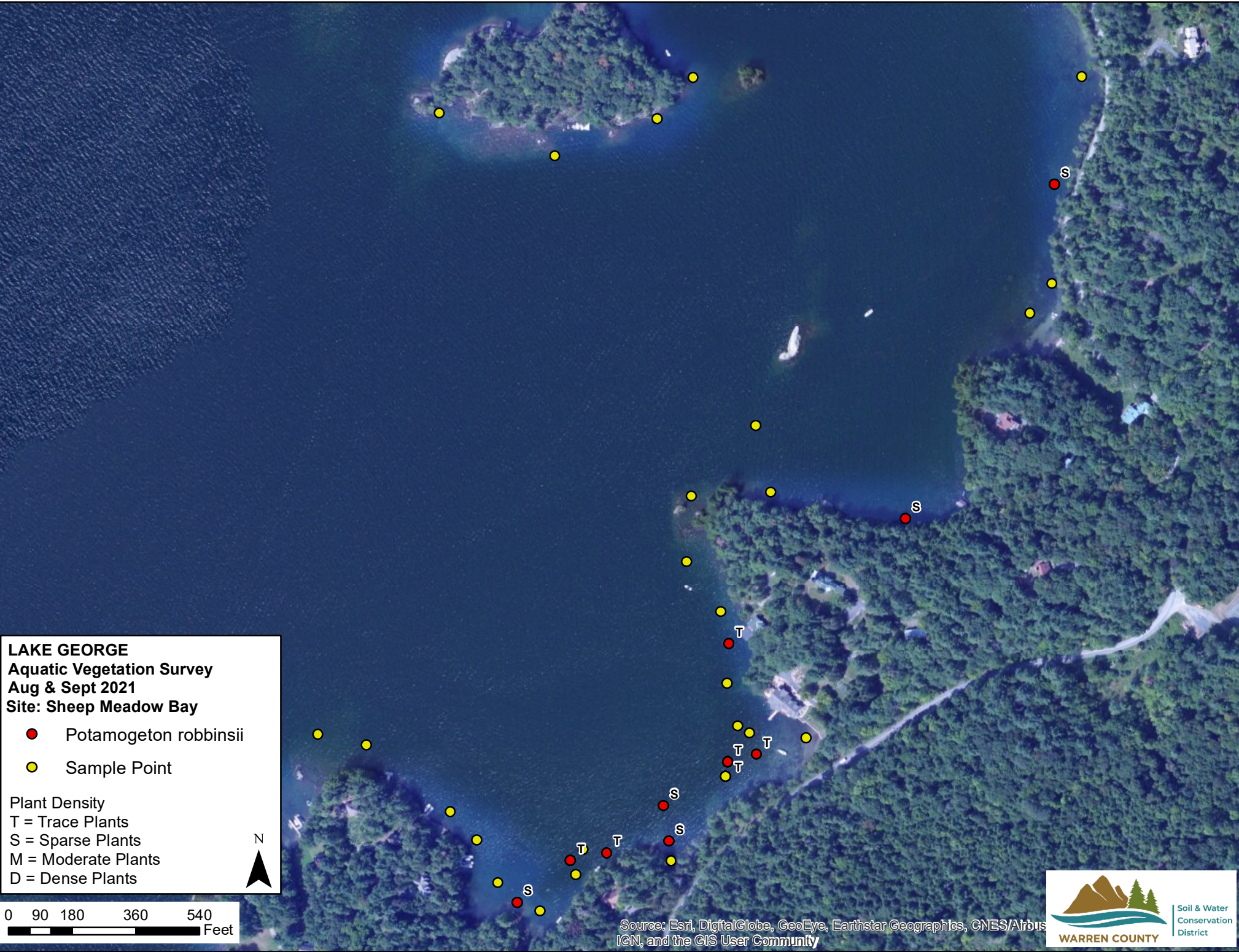
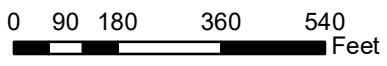




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**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton robbinsii
- Sample Point

Plant Density  
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Potamogeton zosteriformis
- Sample Point

Plant Density  
T = Trace Plants  
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D = Dense Plants



0 90 180 360 540  
Feet

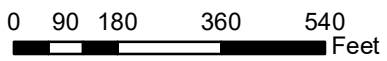
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- *Ranunculus longirostris*
- Sample Point

Plant Density  
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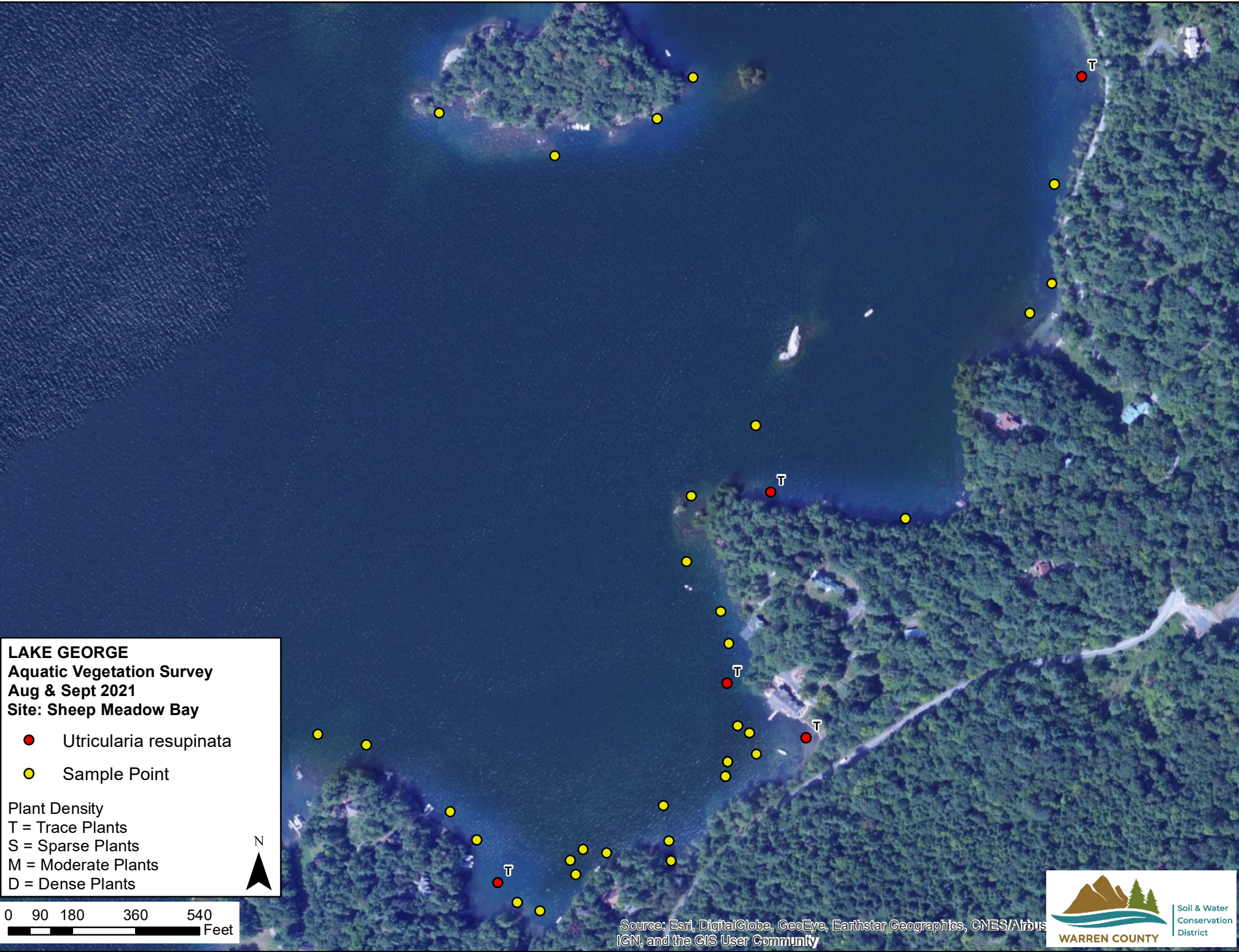
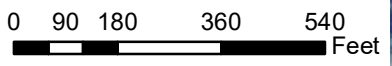
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Utricularia resupinata
- Sample Point

Plant Density  
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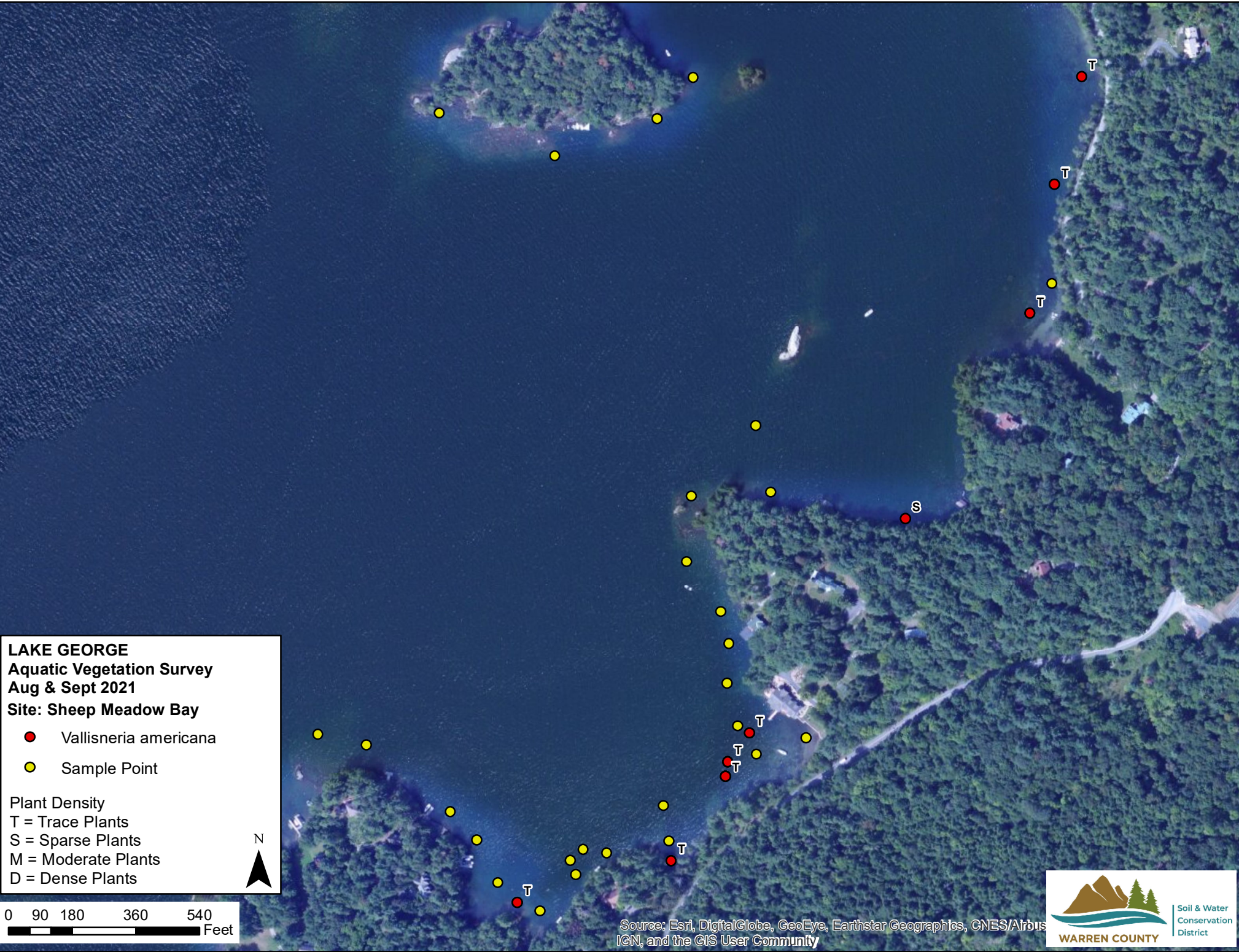
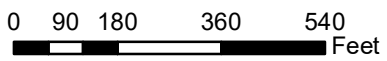
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- *Vallisneria americana*
- Sample Point

Plant Density  
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M = Moderate Plants  
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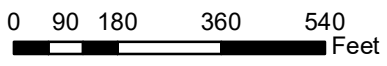
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Zosterella dubia
- Sample Point

Plant Density  
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D = Dense Plants

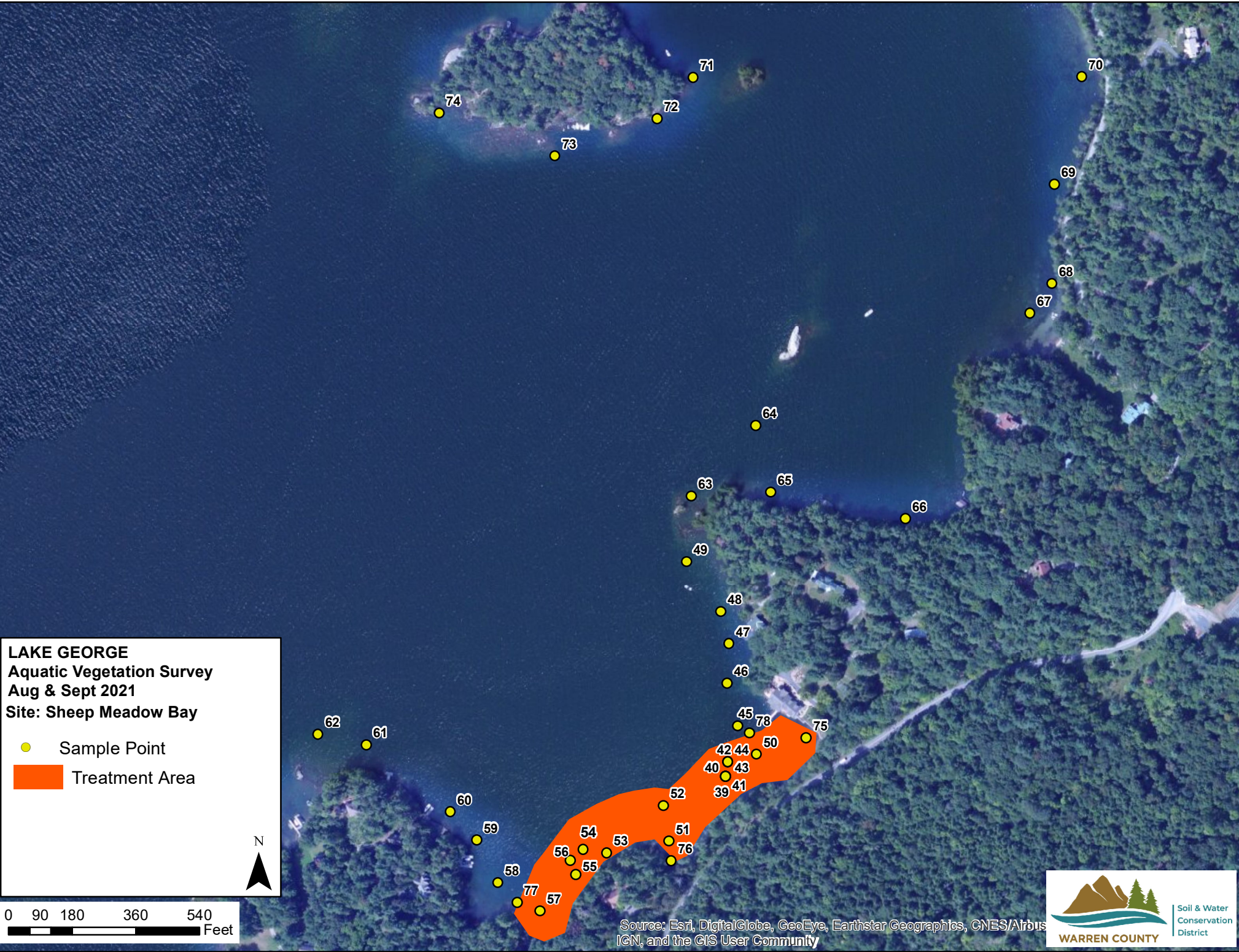
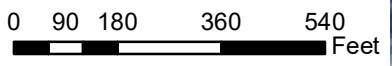


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**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Sample Point
- Treatment Area



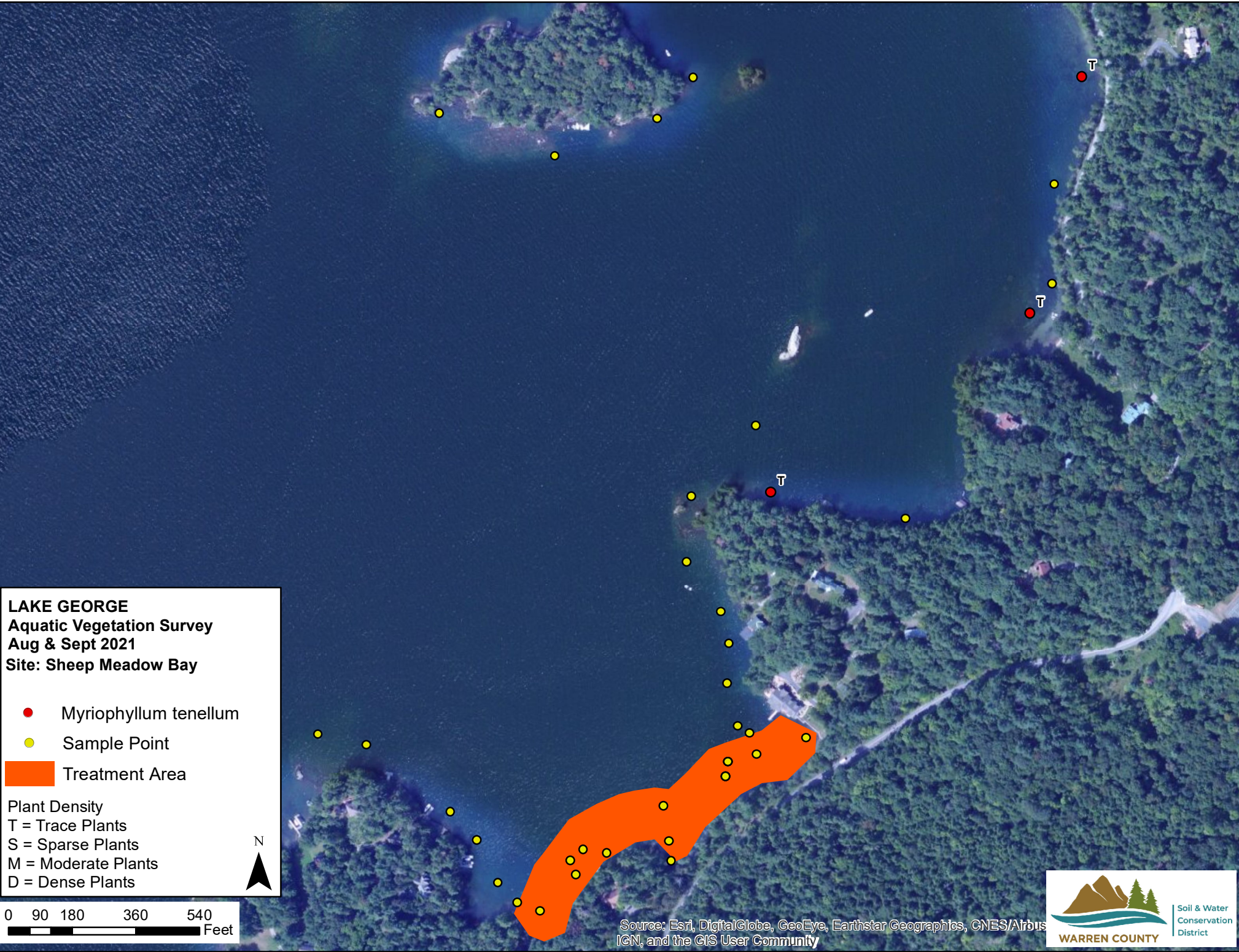
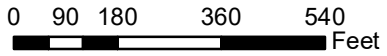
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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**LAKE GEORGE**  
**Aquatic Vegetation Survey**  
**Aug & Sept 2021**  
**Site: Sheep Meadow Bay**

- Myriophyllum tenellum
- Sample Point
- Treatment Area

Plant Density  
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
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