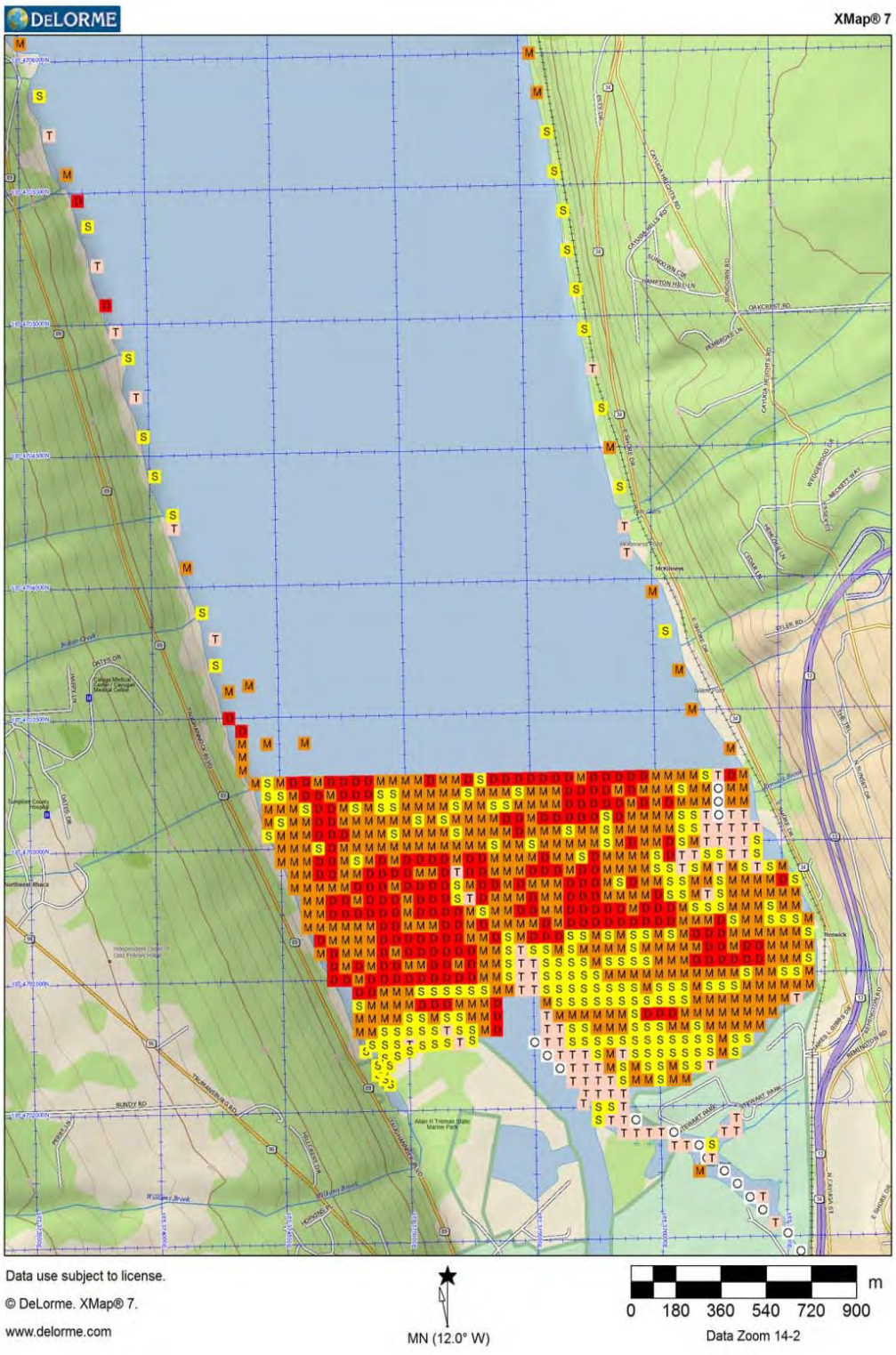
2013 Monitoring Report of the Cayuga Inlet and Southern Cayuga Lake Monoecious Hydrilla Eradication Project



Abundance - All Species Combined (Native + Non-native)

Cover Map

The map on the cover shows the All Plant Species Combined (Native + Non-native) abundance at the southern end of Cayuga Lake during late summer 2013. Each individual colored square represents an evaluation of the total plant species abundance at a predetermined location identified by the interception of the X and Y lines of the Universal Transverse Mercator (UTM) coordinate system at North American Datum 1983 (NAD 83), true north. This method assumes that the data values recorded from the collections of the two thrown rake tosses at the point of the line intercepts is representative of the aquatic plant species present and the abundance (an estimate of mass) of individual species within a 50m X 50m area. The total number of rake tosses evaluated in the non-herbicide treated areas of Cayuga Lake and Fall Creek (pre-herbicide treatment evaluations) in 2013 were 1942. The total number of rake tosses made to evaluate the ongoing Cayuga Inlet herbicide treatments and the post-herbicide treatment evaluation of Fall Creek were 1128 additional rake tosses.

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Report to the

Cayuga Inlet and Southern Cayuga Lake Hydrilla Task Force, New York State Department of Environmental Conservation, New York State Office of Parks, Recreation & Historic Preservation, United States Fish and Wildlife Service, The Nature Conservancy, Tompkins County Soil and Water Conservation District, Oswego County Soil and Water Conservation District, City of Ithaca, Tompkins County Health Department, Finger Lakes-Lake Ontario Watershed Protection Alliance, Tompkins County Water Resource Council and Tompkins County Environmental Management Council.

Prepared by

Racine-Johnson Aquatic Ecologists
1185 Ellis Hollow Road
Ithaca, NY 14850

Robert L. Johnson
rlj5@cornell.edu
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Tables

Figures

Introduction

This 2013 annual report is to: Cayuga Inlet and Southern Cayuga Lake Hydrilla Task Force, New York State Department of Environmental Conservation, New York State Office of Parks, Recreation & Historic Preservation, United States Fish and Wildlife Service, The Nature Conservancy, Tompkins County Soil and Water Conservation District, Oswego County Soil and Water Conservation District, City of Ithaca, Tompkins County Health Department, Finger Lakes-Lake Ontario Watershed Protection Alliance, Tompkins County Water Resource Council, Tompkins County Environmental Management Council and all other interested parties.

This document summarizes the 2013 aquatic plant results from the monitoring surveys in the Cayuga Inlet and the south end of Cayuga Lake as an evaluation of progress to eradicate *Hydrilla verticillata* from the Cayuga Inlet, Fall Creek and the southern end of Cayuga Lake. We include in this report the important evaluation of the densities of subterranean hydrilla turions (tubers) in the sediments of the infested areas.

The identification on August 5, 2011 and expert verification of monoecious *Hydrilla verticillata* in the Cayuga Inlet at Ithaca, NY prompted a rapid response to stop the spread from the Cayuga Inlet of this non-native invasive to neighboring waterways. A local effort began immediately to identify the location and extent of the hydrilla growth. Several volunteers sampled the Inlet and tributary waterways recording the GPS (global positioning system) locations of hydrilla found by tethered double headed garden rakes. We depict the initial 2011 – 2012 findings in Figure 1 (this figure is from the 2012 final project report and refer you to that report for details). Locations with hydrilla identified by this project from 2011 through 2013 is available on the website iMapInvasives owned by The Nature Conservancy. http://imapinvasives.org/nyimi/map/

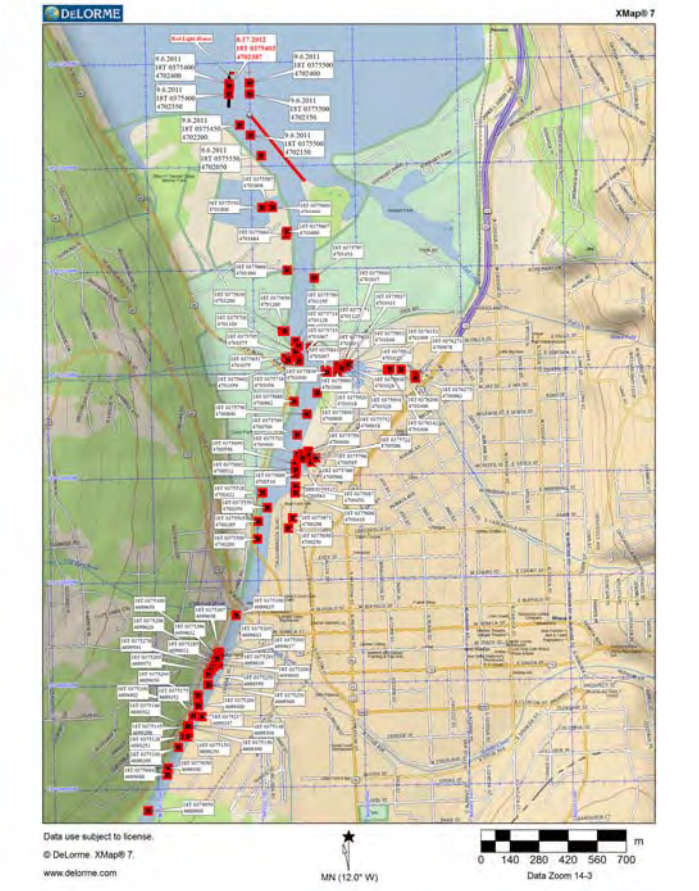


Figure 1. Locations in the Cayuga Inlet where rake-toss surveys identified *Hydrilla verticillata* in 2011 and 2012, first shown in 2012 final report (Johnson 2013).

This report lists aquatic plant data collected by surveys in 2013 using the line intercept method (Madsen 1999) in Cayuga Inlet, Fall Creek and Cayuga Lake by Racine-Johnson Aquatic Ecologists of Ithaca, NY. We adapted the line intercept method of survey using the rake toss procedure of collection to determine plant species presence and an estimate of the species abundance (mass) at a given location and time. We depict this information in tables, graphs, abundance maps and pie charts to provide a baseline of the current aquatic plant community condition in 2013. As part of the management plan in place to eradicate hydrilla from known locations by the application of herbicides, hand removal and benthic barriers we are required to monitor the success of those efforts. An equally important monitoring effort continues to document depletion of the non-germinated hydrilla tubers still viable in the sediments where hydrilla has grown.

The New York State and Local Hydrilla Task Force's plan of eradication requires depletion of the subterranean hydrilla turions (tubers) populations over time and prevent initiation of new turions by controlling new vegetative growth. Our aquatic plant community monitoring and assessment of hydrilla tuber densities in the sediment establish a baseline of plant community data. This information will help assess the effectiveness of the various treatment methods and aid in the evaluation of any non-target plant effects. We illustrate in graphs the documentation of the depletion of tubers in this report

Aquatic plant monitoring in 2013 in the Cayuga Inlet and Lighthouse area to evaluate the plant community before herbicide applications could cause changes in 2013 plant growth, started on July 9th and finished on July 18th, later than the June 22 to July 3, 2012 evaluations a year earlier.

Plant monitoring, on the water in 2013, to evaluate the aquatic plant community and identify any new hydrilla locations in Southern Cayuga Lake and the Fall Creek Tributary began on August 8 and continued through November 23, 2013. This monitoring period was also later than lake monitoring in 2012 to allow the greater probability that monitoring teams are able to discover locations growing hydrilla. The Cayuga Inlet biotype of hydrilla appears to emerge in late spring and often delays elongation toward the surface until late July/early August and continues to elongate into late fall.

Herbicide treatments began in 2013 with the application of Aquathol K (endothall) on July 16, 2013 to the Cayuga Inlet later than the June 26, 2012 application. This was followed on August 14, 2013 with Sonar One (fluridone pellets) at the same selected locations treated with pellets in 2012 and Sonar Genesis (fluridone liquid) application began at the three input stream distribution locations and continued until October 15, 2013. The duration of fluridone applications applied in 2013 decreased by 1.5 months from the 3.5 months of treatment from July 12 – October 31, 2012.

All 2013 herbicide treatments ended on October 15 after which we conducted the post-herbicide rake-toss evaluation of plant growth starting on October 21 and ending on November 21 for the Inlet and Lighthouse areas. Additionally with the herbicide treatment of Aquathol K (endothall) to 22 acres in Fall Creek on September 26, 2013 prompted by the discovery of hydrilla in this tributary on August 8, 2013, we conducted a post herbicide evaluation of plant growth using the rake-toss collection method from October 22 through November 21, 2013.

The discovery of hydrilla growing in the southeast corner of Cayuga Lake on August 21, 2013 prompted the decision to hand remove that growth and place a benthic barrier over the growth area. Completion of the removal took place the last week in August before the Labor Day holiday activities on the lake.

The following website contains detailed information about the 2011 – 2013 Cayuga Inlet hydrilla eradication project. http://ccetompkins.org/environment/invasive-species/hydrilla

Methods

The survey team applied a systematic search grid using the line intercept method (Madsen 1999) to hunt for the presence of monoecious *Hydrilla verticillata*, document community structure and estimate relative abundance of species. We sampled and recorded aquatic plant species presence and abundance at pre-selected locations determined by overlaying a UTM grid in the Cayuga Inlet, Fall Creek Inlet and southern Cayuga Lake at Ithaca, NY in 2013 (Figure 2). Racine-Johnson Aquatic Ecologists from Ithaca NY collected the 2013 rake-toss data presented in this report.

We used a basic line intercept sampling method to preselect locations to sample by using a global positioning system (GPS) to guide us to sampling points defined by a geographic information system (GIS). Monitoring crews in boats tossed a tethered dual-headed rake to collect data from two rake tosses at each sample point of a 50m X 50m UTM (NAD83 datum and true north) transect grid. Hand-held and boat mounted GPS equipment guided our movement to these locations. Members of the sampling crew toss the double-headed rake at each selected location and then pull the rake along the bottom about 10 meters. The individual throwing the rake lifts any plant mass into the boat or to shore. An estimate of overall plant abundance and individual species percentages of the total plant mass from each randomly tossed rake enhances the basic line intercept method described by Madsen 1999.

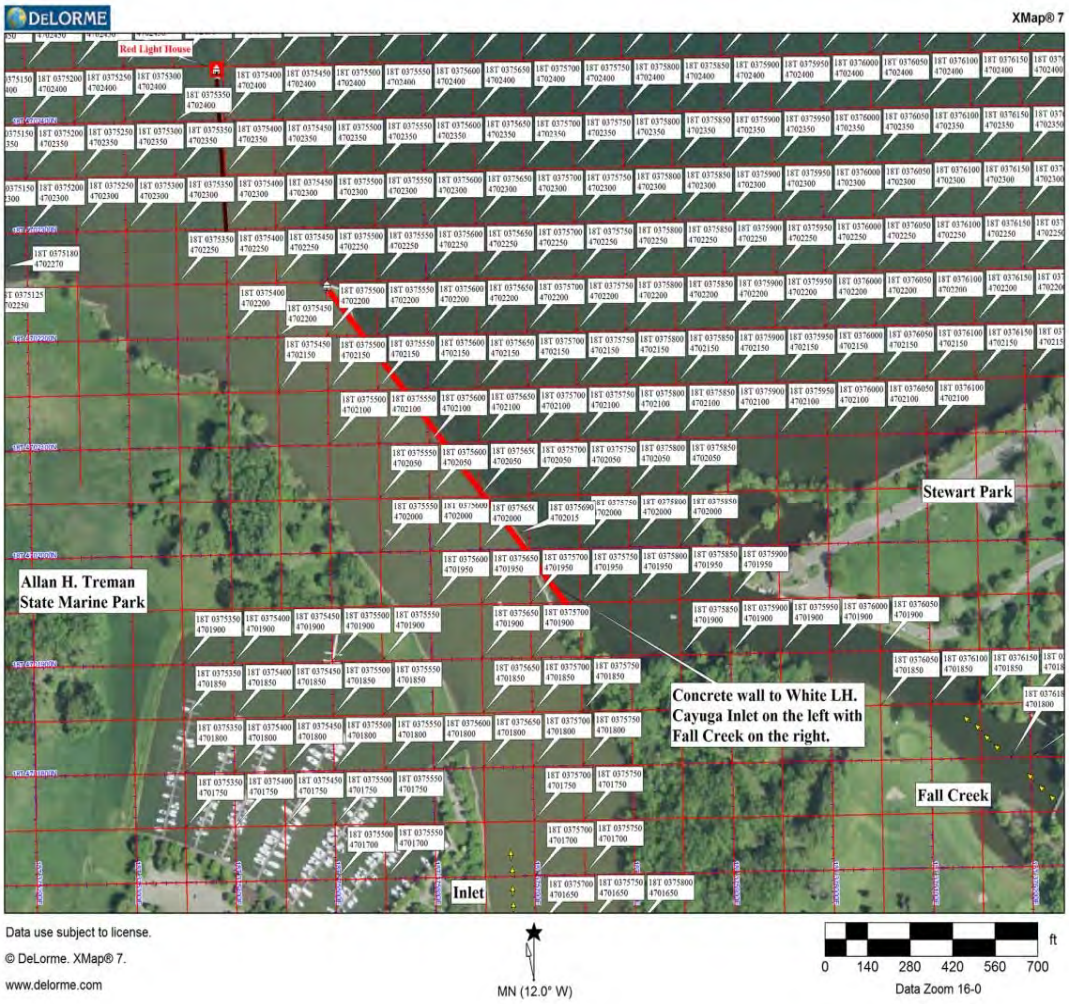


Figure 2. Example of a small section of our UTM grid used to predetermine locations to sample aquatic plant presence and abundance. Locations sampled are at points defined by the line intercepts of the NAD 1983 X coordinate East and NAD 1983 Y coordinate north.

The monitoring team then separated each plant mass collected by rake into individual species, analyzed the separations by recording the species identification (Borman *et al*. 1999, Crow and Hellquist 1999) and assigned a percentage estimate of mass to each species (Figure 3). We use a classification of dense, medium, sparse, trace or zero to classify the overall plant biomass of each individual rake toss. A rating of "dense" is more than an armful and difficult to get into the boat while an arm-full or when all rake tines are full receives a "medium" rating. Continuing, a "sparse" is when two hands are full or about 50% of the tines on the rake are full, a "trace" is less than a small handful or when plants are on a couple of rake tines, and a "zero" is a bare rake.

Figure 3. Sampling team processing a dense macrophyte sample from dual-headed rakes by separating to individual species for an estimate of each species' percentage of the whole mass.

To obtain an all-species combined (native and non-native) abundance value at a specific location for the pictorial abundance maps in Cayuga Lake, Lighthouse Area and the Inlet proper we simply average the two on-water estimated rake abundance categories for the two rake tosses at each location to produce a mean value. For example, at the sample location if rake-toss one is an armful or all the rake tines very full, that plant mass is recorded as a medium or abundance rating of 3 (Table 1). If the second rake-toss at that location amounts to a small handful or less and about two tines full on a rake that results as a trace or abundance rating of 1 (Table 1). We calculate the mean of 3 (medium) and 1 (trace) as 2 or sparse for that location. If we recorded one rake-toss as a medium and the second as a bare rake or O, the mean would be 1.5, also a sparse (Table 1).

Table 1. Abundance categories or rake-toss ratings used to describe a collected sample assumes mean dry weight ranges for spreadsheet processing of field data. Our estimate of abundance allows the use of a visual depiction of the mass of all individual species combined as well as the mass of individual species.

Abundance Categories	Rake-toss Abundance Rating	Dry Weight (g/m^2) Ranges associated with Total Plants Abundance	~ Range Midpoint (g/m2) for calculation	Dry Weight (g/m^2) Ranges associated with Single Species Abundance
"O" = no plant(s)	0	0	0	same
"T" = trace plant(s)	1	~ 0.0001 – 0.999	0.5	same
"S" = sparse plant(s)	2	~ 1 – 24.999	13	same
"M" = medium plant(s)	3	~ 25 – 99.99	62.5	same
"D" = dense plant(s)	4	~ 100 – 400+	250	same

We base our abundance analysis for each rake toss on our broad rake-toss abundance categories reported in the field. Our abundance ratings originate from assumptions based on the biomass relationship to rake toss shown in Figure 4 and determined by field experiments.

After observational data collected from pre-determined locations in Cayuga Lake, Cayuga Inlet and Fall Creek arrives at our office members of our team enter the information into MS Excel spreadsheets, check the spreadsheet for data entry errors, preform analysis and list in a report. We specifically summarize the individual rake-toss results from the data tables and show in Table 2 of this report. Data tables 1- 6 are the actual field collected observations that are transformed into pictorial depictions that appear as abundance values on lake maps in Map Lake-1 through Map Lake-23, inlet pre-herbicide maps in Map Inlet-1 through Inlet-12 and inlet post-herbicide maps in Map Inlet-13 through Inlet-24.

While the 2013 pre-herbicide evaluation of Fall Creek is part of the Cayuga Lake Survey listed in Data table 1 and shown as part of the Cayuga Lake maps, labeled Map Lake-1 through Map Lake-23 the finding of hydrilla on August 8, 2013 in Fall Creek required a post-herbicide evaluation of plant growth shown as Map Fall Creek-1 through Map Fall Creek-9. We show a specific depiction of hydrilla locations found in 2013 on Map Hydrilla-1 pre-herbicide application and Hydrilla-2 post-herbicide application. Specific coordinate locations of new hydrilla finds in 2013 is in this report as table Coordinates 1 and entered on the iMapInvasives website owned by The Nature Conservancy. http://imapinvasives.org/nyimi/map/

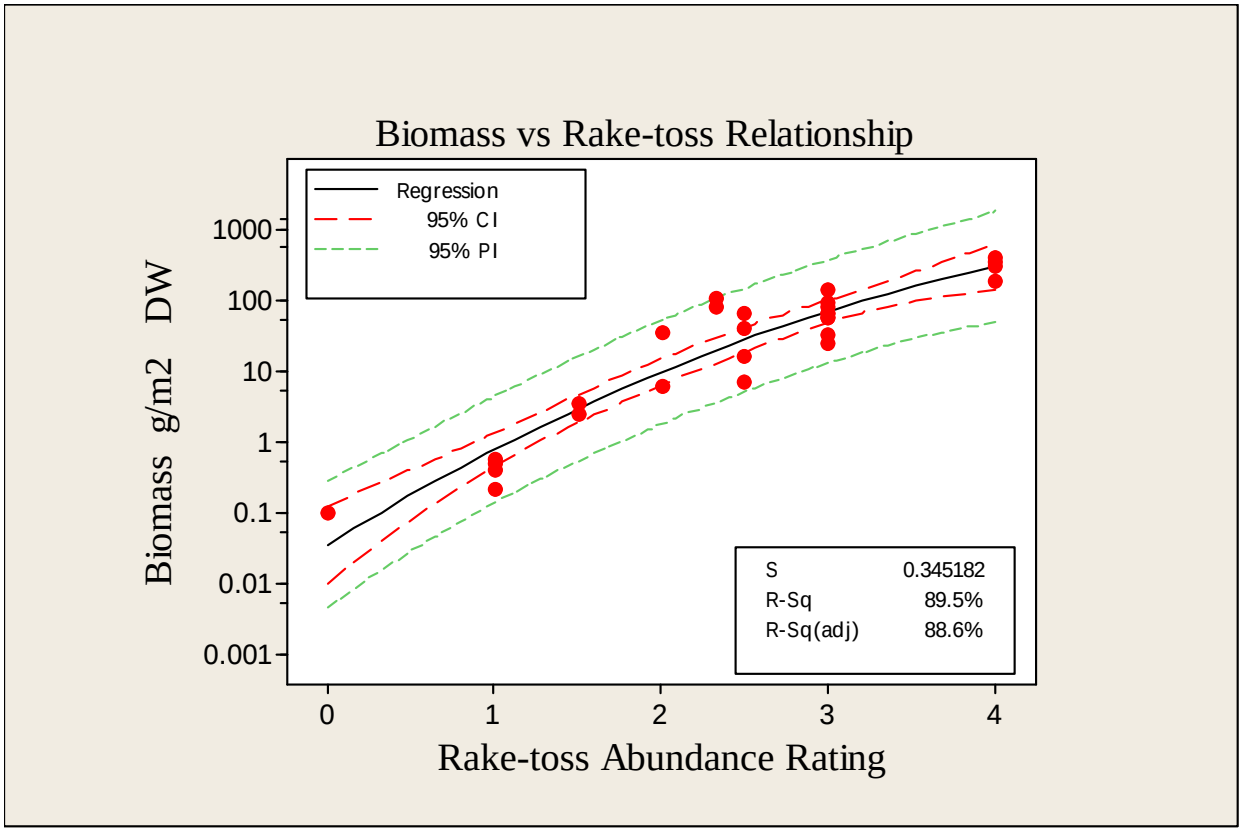


Figure 4. Best-fit line to describe the relationship between onsite estimates of abundance made with the rake-toss method of collection contrasted with an estimate of biomass (Three individual in-lake biomass quadrat experiments with a description following determine the regression equation).

To analyze the abundance data of individual species we used the values in Table 1. Specifically the standard assumed abundance rating or category as it relates to dry biomass (g/m^2). Figure 4 describes the basis for Table 1 concluded from experiments conducted in Chautauqua Lake, NY during 2006 and 2007 (Johnson 2008). Along with additional data collected in 2011 we contrasted the "rake-toss" estimates at specific locations to the absolute dry biomass data collected from the same locations at the same time. We used 28 lake locations, collected five $0.25m^2$ quadrat samples from each location for a total of 140 biomass samples and determined dry mass by drying the quadrat samples to 105°C. We calculated a mean biomass dry weight (g/m^2) for each of the 28 locations. From this quadrat biomass sampling and the accompanying rake-toss estimate of abundance, we determined the best-fit regression line shown in Figure 4.

In practice using the relationships in Table 1 and the 2013 rake-toss data sets we calculated mean species abundances for each location sampled by using the field percent estimate of each biologist's rake toss. With the use of GIS, we placed the resulting abundance values on individual species maps for each sampled location to create a visual record of the relative species abundance for Cayuga Lake, the relative species abundance for the pre and post-herbicide Lighthouse area and the relative species abundance for the pre and post-herbicide Inlet proper.

In the Results section following, the Cayuga Lake abundance maps show the rake-toss results for only the southern end of Cayuga. The survey included the narrow East and West littoral zone north to Portland Point on the east and Crowbar Point on the west (Figure 5 left). Those additional results are included in Table 2 and Data 1 but not depicted on the Cayuga Lake Maps. The Results section also refers to the Lighthouse area (LH) in Table 2, Figures 10 & 11, Pie charts and listed rake toss Data 2. Figure 5 on the right below shows the 29 (50m X 50m) locations of the Cayuga Inlet at the entrance to Cayuga Lake, described as the Lighthouse area (LH). We feel this area (LH) needs to be a separate grouping from the Inlet proper because of location as the intersection zone of the Inlet and Cayuga Lake and we treat the area separately in this report.

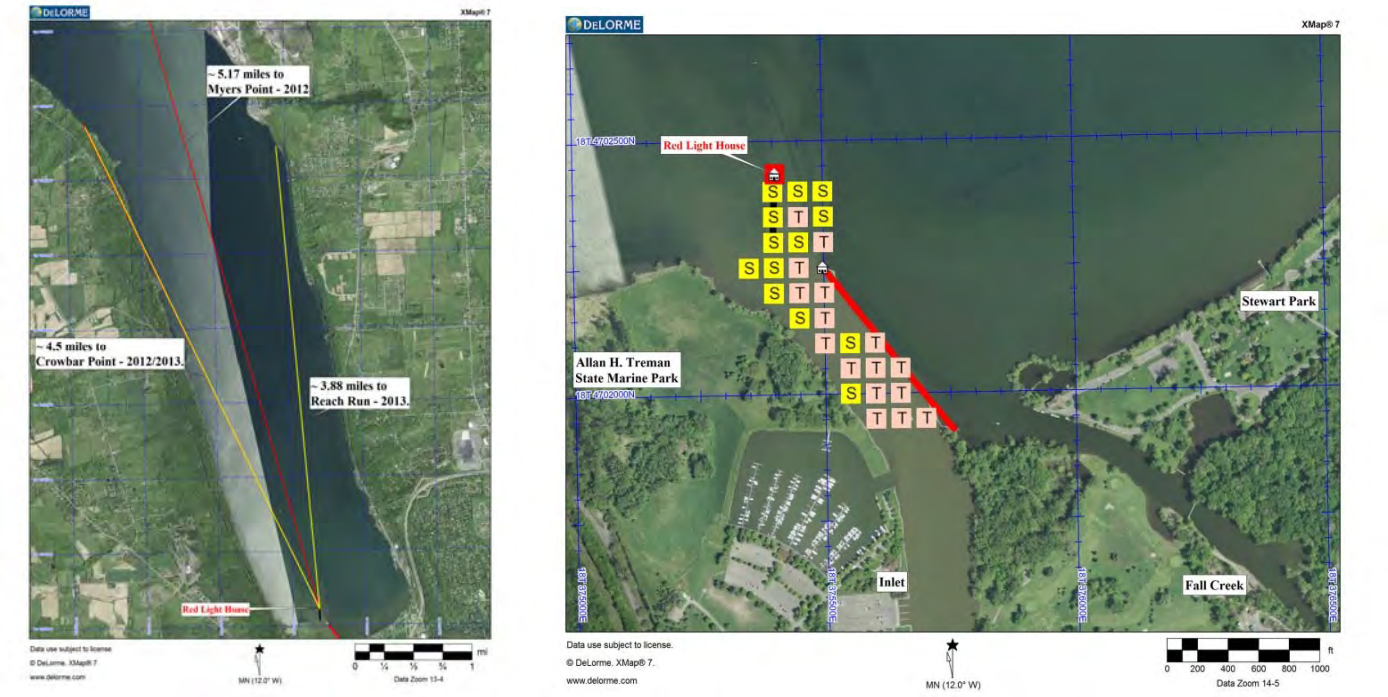


Figure 5. The map on the left shows the overall distance sampled by rake-toss along the narrow sides of Cayuga in 2013. Map on the right is of the Lighthouse area (LH) of the inlet with the 29 sampling locations.

Determining the density of subterranean hydrilla turions (tubers) within the area of previous hydrilla growth is a very important monitoring task that attempts to address future growth of hydrilla from past production of reproductive propagules. Since the fall of 2011 and the identification of hydrilla in the Cayuga Inlet, we have been measuring tuber numbers in areas that initially had dense vegetative growth of hydrilla. Summary graphs of tuber density numbers follow in the results section of this report.

Our method uses the "Haller Hydrilla Sediment Corer", a post-hole digger that produces consistent sized cores from the sediments of the Cayuga Inlet infestation. The corer removes a sediment plug with a surface area of 173 cm^2 and is approximately 22 cm in length that we place in an individual plastic bag. We process cores individually by hand washing them through small mesh screens. At the washing station, the biologist separates the collected tubers into germinated or non-germinated growth stages. Prior to December 4, 2012 the tuber sampling crew collected ten cores at each of the four locations on each sampling date, from that date to the present we increased the numbers of cores from each location to 22 collected on each date.

Graphs in the Results section show in the top graph total tubers found (germinated and non-germinated) and in a second graph non-germinated tubers found per 173 cm^2 surface area. The non-germinated tuber graph is an estimate of propagules (tubers) left in sediment that have the potential to germinate and grow sometime in the future.

Figure 6. Map above shows the four locations in the Cayuga Inlet where we routinely conduct sediment core removals while the three additional photos show sample collection and processing.

The discovery of Hydrilla growing in the Southeast corner of Cayuga Lake on August 21, 2013 prompted discussion within the local hydrilla task force as to a course of action. With the upcoming Labor Day holiday and the potential for increased traffic on the lake in the area where we found the robust growth, the task force recommendation was to remove the growth by hand. During the last week in August, we set up a mesh barrier around the hydrilla beds and hand-removed vegetative growth along with some root and tuber growth in the sediment. After plant removal, we placed a benthic barrier on the lake bottom before removing the surrounding mesh barrier.

Figure 7. Hydrilla growth in the SE corner of Cayuga Lake found August 21, 2013 and removed by August 30, 2013.

Results

This report summarizes and displays the results of the 2013 aquatic plant species monitoring along with 2011 - 2012 aquatic plant and hydrilla tuber monitoring history for Cayuga Lake and the Cayuga Inlet. We summarize and display the results of the 2013 aquatic plant species monitoring of Cayuga Lake and the Cayuga Inlet in the tables and figures that follow. Table 2 (page 16) summarizes the occurrences of individual aquatic plant species collected by the rake-toss survey method in Cayuga Lake, the Lighthouse (LH) inlet area and the Cayuga Inlet proper.

Figure 8 below shows contrasting abundances of the individual species *Elodea sp.,* a native and *Myriophyllum spicatum,* a non-native, from the lake survey and are examples of following Map Lake-1 through Map Lake-23 (pages 18-40). Similar maps follow for the Cayuga Inlet for both per-herbicide and post-herbicide evaluations as Map Inlet-1 through Map Inlet-24 (pages 41-64).

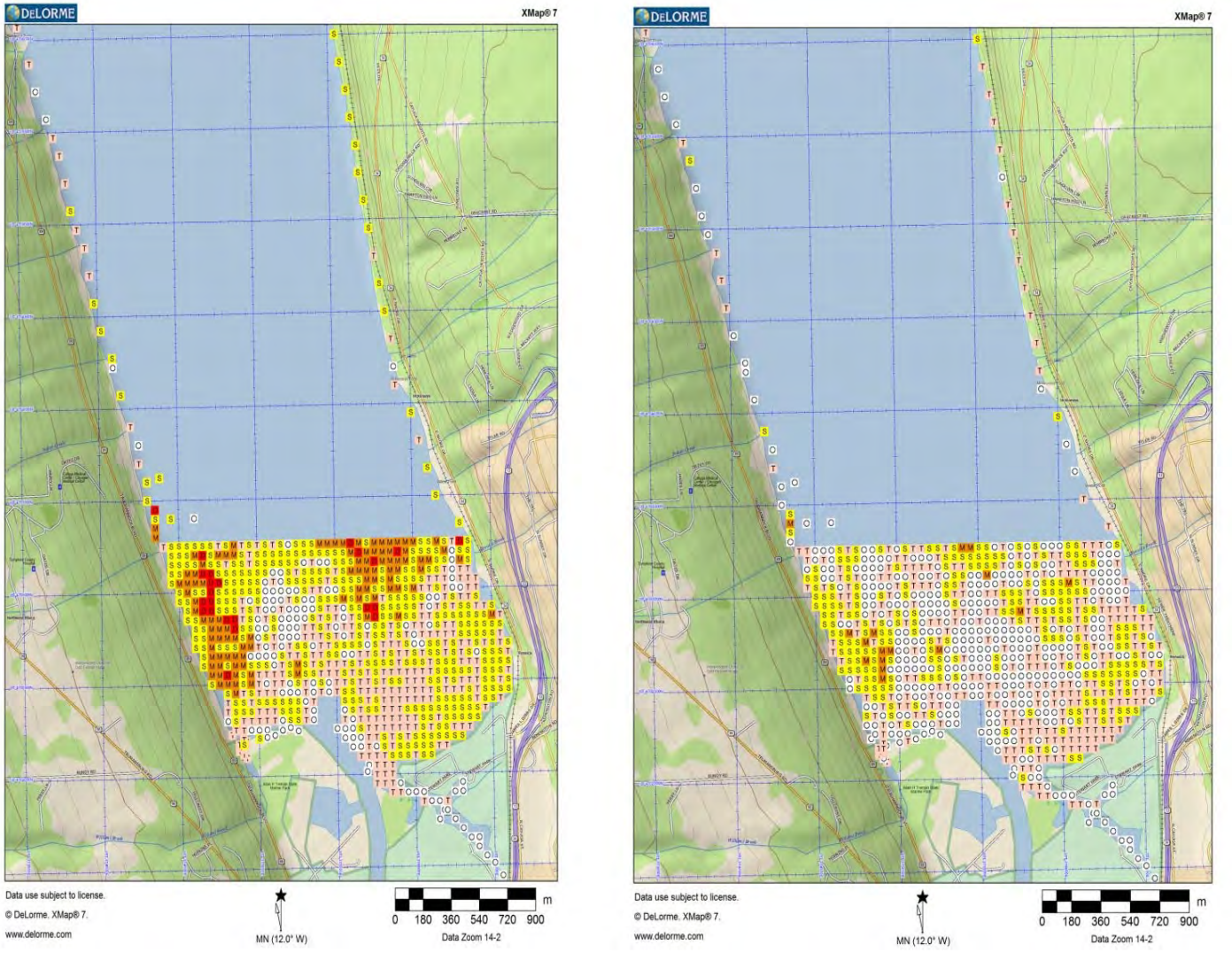


Figure 8. The map on the left is the native species *Elodea sp*. and on the right the non-native invader *Myriophyllum spicatum.*

Figure 9 below depicts individual species abundance, as part of the whole survey and in the case of *Potamogeton pusillus* is an example where plant phenology is likely the cause of the decrease in abundance

between the pre and post-herbicide surveys. *P. pusillus* grows rapidly in the spring, flowers, dies back and disappears in mid-July. Pie charts for Cayuga Lake, Lighthouse Area and the Cayuga Inlet follow as Lake-Pie 1 through Lake-Pie 5, Lighthouse-Pie 1 through Lighthouse-Pie 6 and Inlet-Pie 1 through Inlet-Pie 7 (pages 76-94).

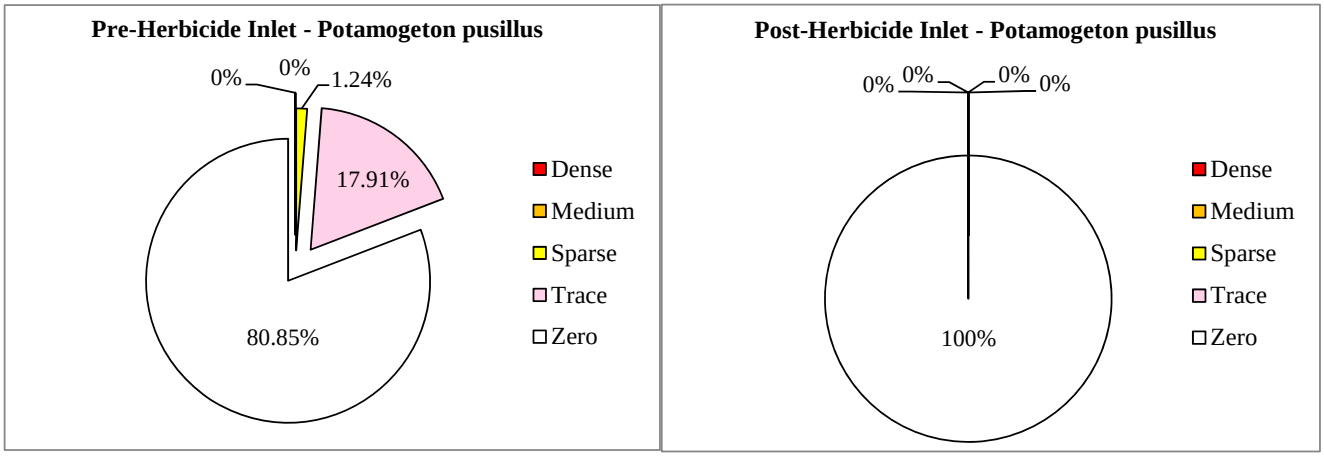


Figure 9. Abundance category percentages of *P. pusillus* measured in the 402 Pre-herbicide and 446 Post-herbicide rake-tosses made in the Inlet proper in 2013 as an example of contrasting the pre-herbicide with the post-herbicide values with caution.

The post-herbicide evaluations of the Cayuga Inlet in 2013 reports no hydrilla located by the post-herbicide rake-toss survey suggesting that the ongoing herbicide treatment is preventing new growth of hydrilla in the inlet area and of primary importance preventing new hydrilla tuber formation. However, as in late 2012 we again found, on November 18, 2013, a hydrilla fragment in the Lighthouse area at the entrance to the lake. The fragment found was about 3 inches in length with a single root. We do expect to find fragments in this area and we have located additional fragments at the mouth of Fall Creek in Cayuga Lake while conducting the rake toss survey in 2013. The high velocity stream flow and heavy feeding by waterfowl in Fall Creek after the discovery of hydrilla on August 8, 2013 caused at the very least, thousands of hydrilla fragments to enter the lake from the new Fall Creek infestation.

On August 21, 2013, we found two patches of hydrilla growing in the Southeast corner of Cayuga Lake. We believe both locations originated from the introduction of a single plant, fragment or tuber at each of the two locations prior to the spring of 2013. The extent of growth and its removal suggested all vegetative growth found in late August 2013 arose from a single propagule at each of the two locations.

While the report contains a large data set of aquatic plant information, we suggest caution with any in-depth analysis because we only have a two-year baseline. Importantly, consideration in any analysis of this aquatic plant data is that individual species have different annual life cycles and can vary greatly in plant occurrence and mass throughout each seasonal growth period due to distinctive phenology (See Figure 9). These changes in plant mass of individual species may occur rapidly over as short of a period as two weeks.

However, when comparisons of relative abundance ratings, of all species combined, for years 2012 and 2013 shown in Figures 10 & 11 that follow, differences are very few. The abundance ratings or categories estimating mass of all aquatic plants in total, changed very little from one year to the next for Cayuga Lake, Lighthouse area and the Inlet. Overall, the aquatic plant community remains stable when considering mass with larger shifts between individual species through the growing season.

The field-recorded rake-toss data are in tables Data 1 – Data 6 (pages 99 – 200) and new locations of hydrilla discoveries in 2013 are in table Coordinates 1 (pages 201-202).

Table 2. Occurrences of aquatic plant species recorded by the line intercept grid survey method in Cayuga Lake, the Lighthouse Area (LH) of the Inlet and the Cayuga Inlet. Included are the pre and post-herbicide evaluations of the Lighthouse area (LH) and the Cayuga Inlet along with the post-herbicide treatment evaluation of Fall Creek (FC).

Scientific Name	Common Name	Lake		Pre-herbicide LH		Post-herbicide LH		Pre-herbicide Inlet		Post-herbicide Inlet		Post-herbicide Fall Ck	
		FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%
Ceratophyllum demersum	coontail, hornwort	1437	74.0	16	27.6	28	38.9	26	6.5	44	9.9	13	8.7
Chara vulgaris	chara, muskgrass	135	7.0	0	0	2	2.8	0	0	0	0	0	0
Elodea sp.	elodea, common waterweed	1430	73.6	24	41.4	28	38.9	30	7.4	12	2.7	27	18.0
Fontinalis sp.	water moss	7	0.4	0	0	0	0	1	0.2	1	0	1	0.7
Heteranthera dubia	water stargrass	332	17.1	0	0	3	4.2	2	0.5	2	0.4	20	13.3
Hydrilla verticillata	**hydrilla, water thyme**	**17**	**0.9**	**0**	**0**	**1**	**1.4**	**16**	**4.0**	**0**	**0**	**28**	**18.7**
Lemna minor	small duckweed	14	0.7	0	0	0	0	0	0	0	0	2	1.3
Lemna trisulca	forked duckweed, star duckweed	0	0	0	0	0	0	0	0	0	0	0	0
Myriophyllum spicatum	**Eurasian watermilfoil**	**834**	**42.9**	**4**	**6.9**	**3**	**4.2**	**14**	**3.5**	**4**	**0.9**	**9**	**6.0**
Najas flexilis	slender naiad, bushy naiad	203	10.5	1	1.7	0	0	1	0.2	0	0	0	0
Najas guadalupensis	southern naiad	32	1.6	0	0	0	0	0	0	0	0	0	0
Najas minor	**brittle naiad**	**132**	6.8	**2**	**3.4**	**0**	**0**	**41**	**10.2**	**0**	**0**	**0**	**0**
Nitella flexilis	nitella, stonewort	5	0.3	0	0	0	0	0	0	0	0	0	0
Nitellopsis obtusa	**starry stonewort**	**1304**	**67.1**	**40**	**69**	**37**	**51.4**	**20**	**5.0**	**5**	**1.1**	**0**	**0**
Nuphar advena	yellow pond lily	4	0.2	0	0	0	0	0	0	0	0	0	0
Nymphaea odorata	white water lily	3	0.2	0	0	0	0	0	0	0	0	2	1.3
Potamogeton crispus	**curly-leaf pondweed**	**324**	**16.7**	**32**	**55.2**	**12**	**16.7**	**46**	**11.4**	**0**	**0**	**1**	**0.7**
Potamogeton foliosus	leafy pondweed	26	1.3	0	0	0	0	0	0	0	0	0	0
Potamogeton praelongus	white-stem pondweed	9	0.5	0	0	0	0	0	0	0	0	0	0
Potamogeton pusillus	small pondweed	208	10.7	38	65.5	2	2.8	77	19.1	0	0	0	0
Potamogeton richardsonii	clasping-leaf pondweed	0	0	0	0	0	0	0	0	0	0	0	0
Potamogeton zosteriformis	flat-stem pondweed	24	1.2	0	0	0	0	3	0.7	0	0	0	0
Ranunculus trichophyllus	white water crowfoot	46	2.4	0	0	1	1.4	0	0	0	0	0	0
Spirodela polyrhiza	great duckweed	0	0	0	0	0	0	0	0	0	0	0	0
Stuckenia pectinata	sago pondweed	192	9.9	0	0	0	0	1	0.2	7	1.6	0	0
Stuckenia vaginata	sheathed pondweed	18	0.9	0	0	0	0	0	0	0	0	0	0
Vallisneria americana	wild celery, eel grass	486	25.0	0	0	1	1.4	0	0	1	0.2	3	2.0
Wolffia columbiana	watermeal	0	0	0	0	0	0	0	0	1	0.2	0	0
Zannichellia palustris	horned pondweed	8	0.4	0	0	0	0	0	0	0	0	0	0
Pithophora sp.	benthic algae	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0.4**	**0**	**0**
filamentous algae	filamentous algae	**122**	**6.3**	**0**	**0**	**3**	**4.2**	**65**	**16**	**0**	**0**	**0**	**0**
Total occurrences, in all rake-tosses, of all species		7230		157		118		278		79		106	
		Mean		Mean		Mean		Mean		Mean		Mean	
Plant Species Occurrence (species per rake-toss)		**3.72**		**2.71**		**1.64**		**0.69**		**0.17**		**0.71**	
Non-native Species Occurrence (species per rake-toss)		**1.34**		**1.34**		**0.74**		**0.34**		**0.02**		**0.25**	
Native Plant Occurrence (species per rake-toss)		**2.21**		**1.36**		**0.86**		**0.35**		**0.15**		**0.32**	
		FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%
Plant Frequency (rake-tosses with a plant species)		**1877**	**96.65**	**55**	**94.83**	**56**	**77.78**	**160**	**39.80**	**58**	**13.00**	**97**	**64.67**
Non-native Plant Frequency (rake-tosses with a non-native plant)		**1686**	**86.82**	**50**	**86.21**	**43**	**59.72**	**103**	**25.62**	**8**	**1.79**	**117**	**78.00**
Native Plant Frequency (rake-tosses with a native plant)		**1717**	**88.41**	**45**	**77.59**	**42**	**58.33**	**117**	**29.10**	**53**	**11.88**	**116**	**77.33**
Number of Rake-tosses		**1942**		**58**		**72**		**402**		**446**		**150**	

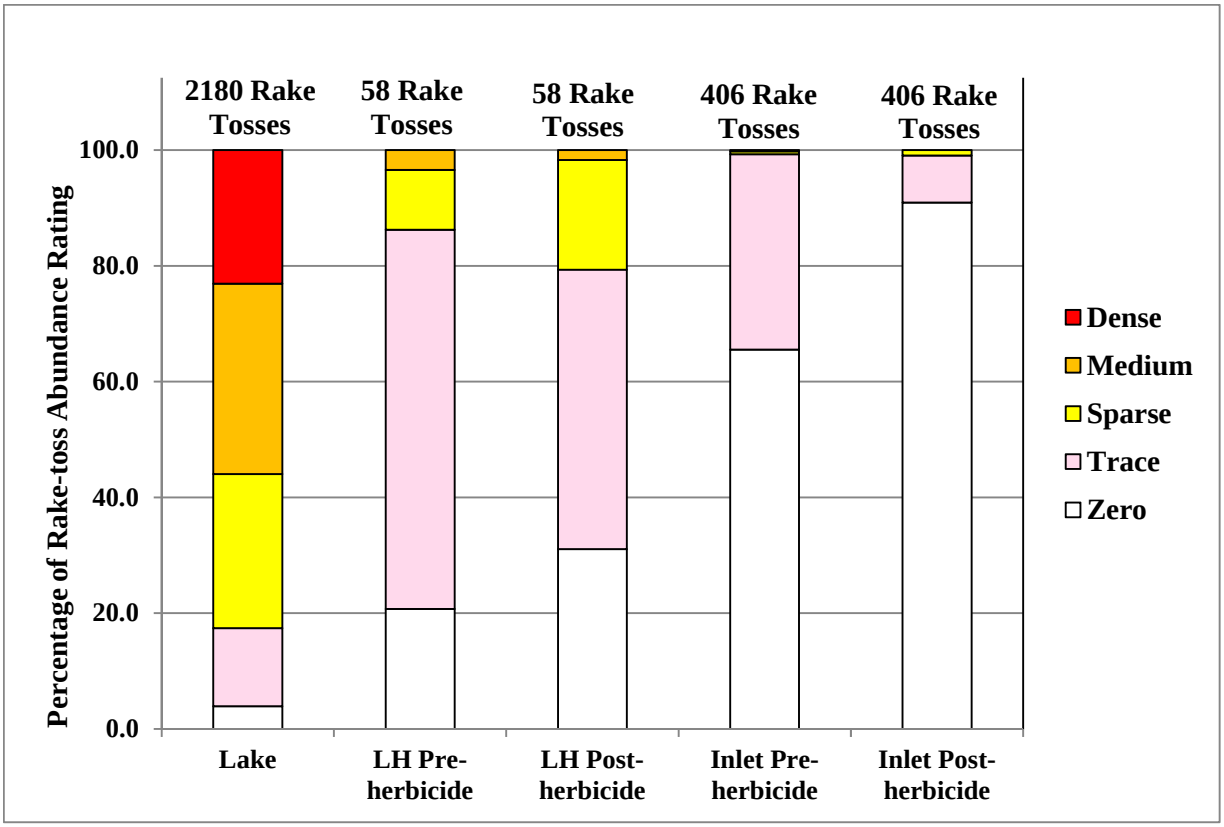


Figure 10. Summary of all rake-toss abundance ratings of all species combined for all rake-tosses made in the 2012 surveys of Cayuga Lake, the Lighthouse Area of the Inlet and the Inlet proper.

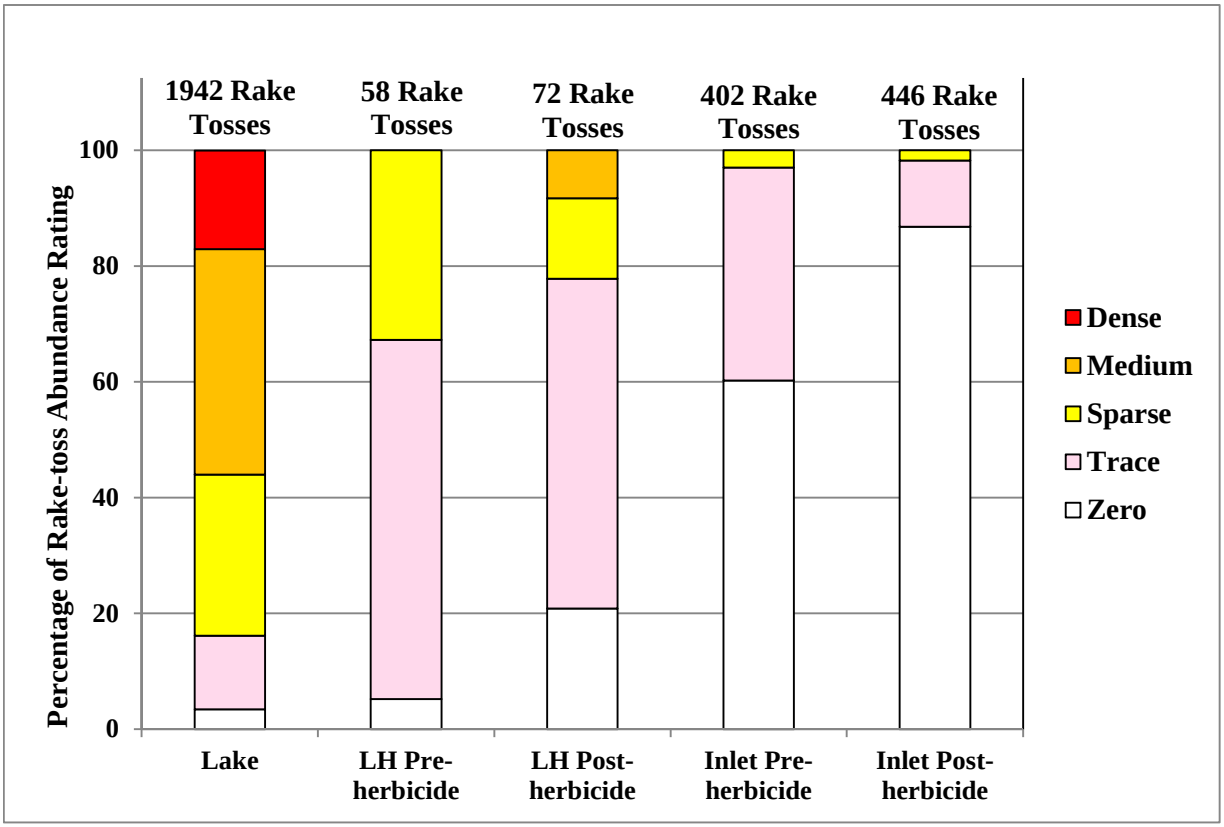
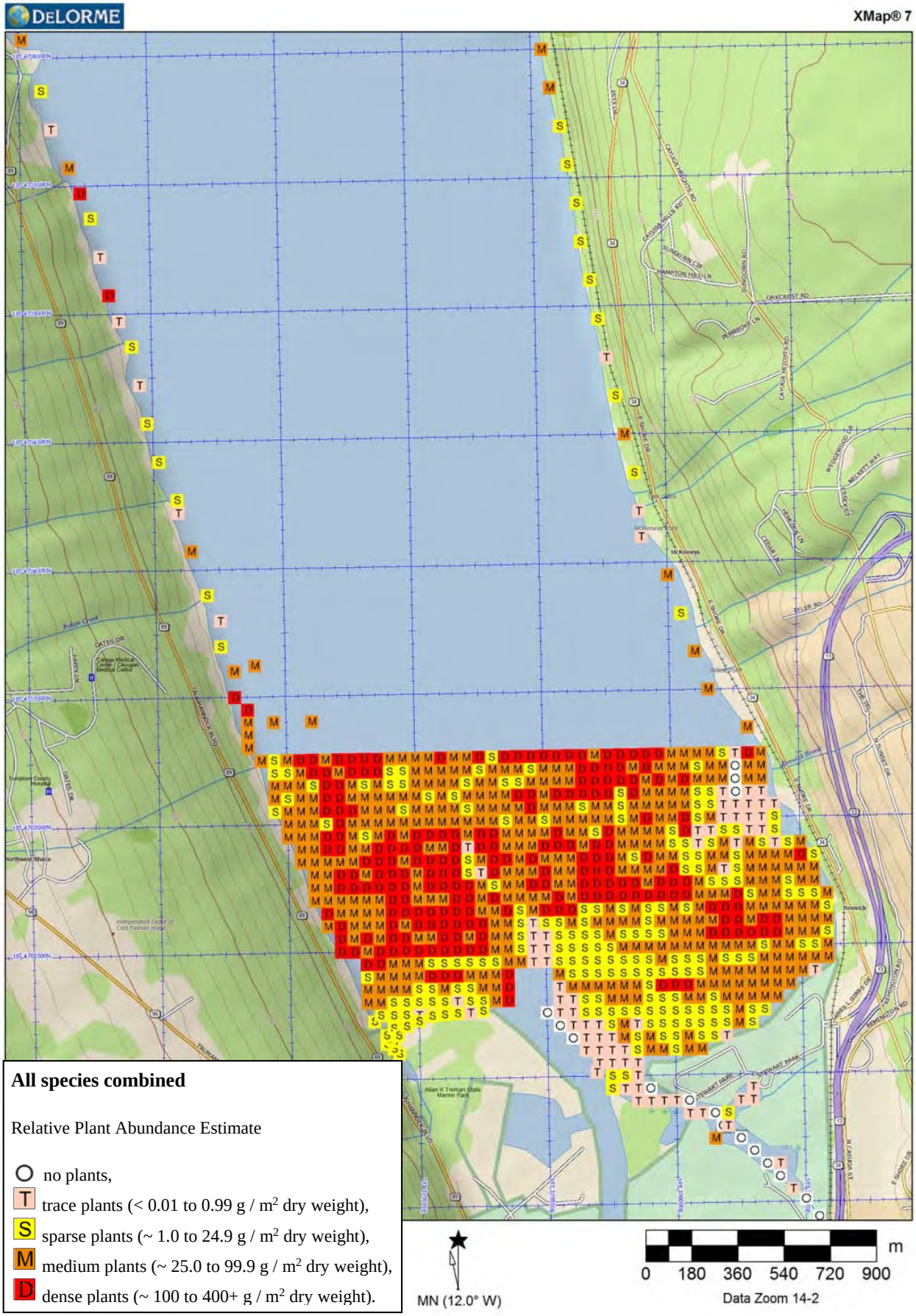
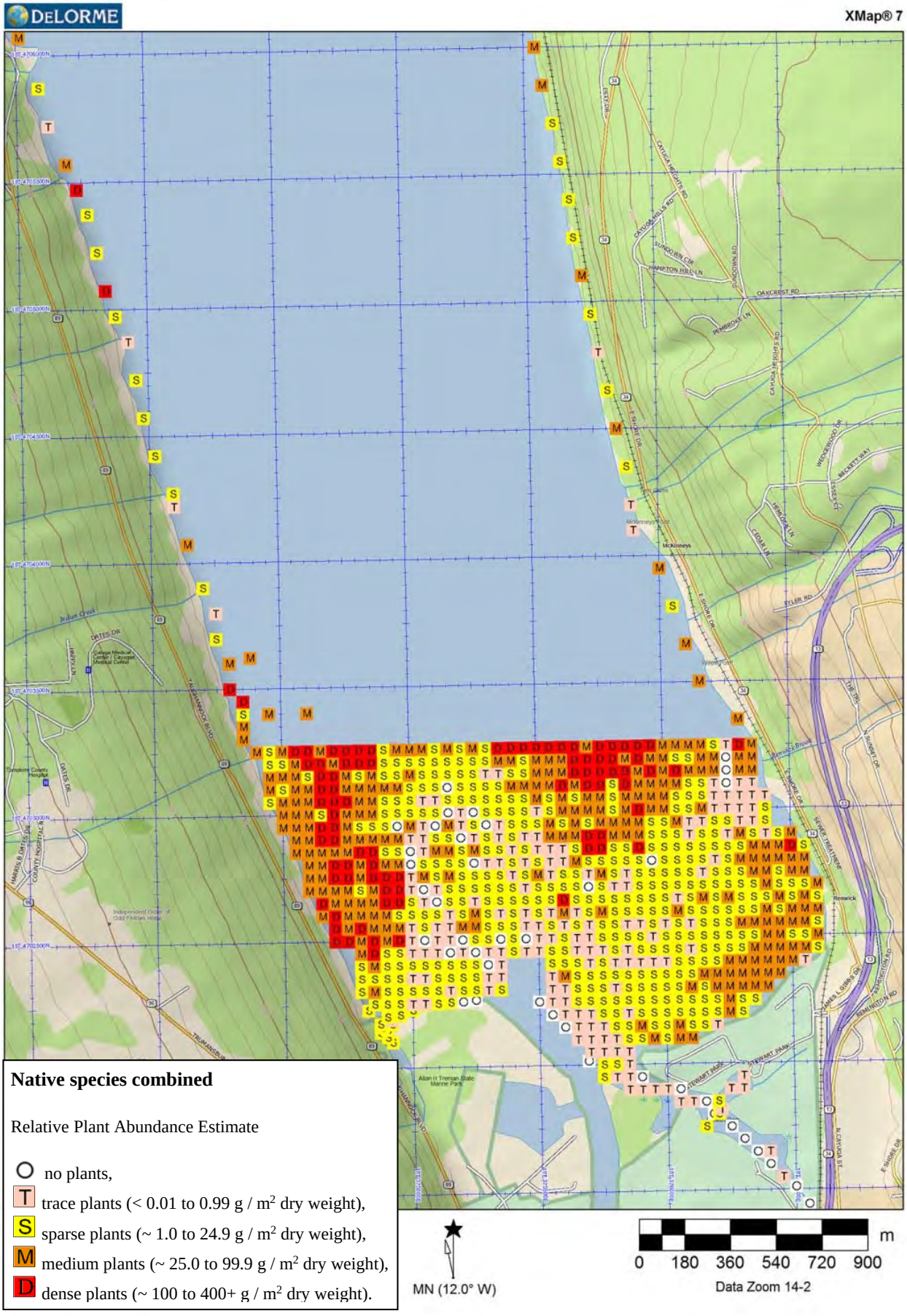


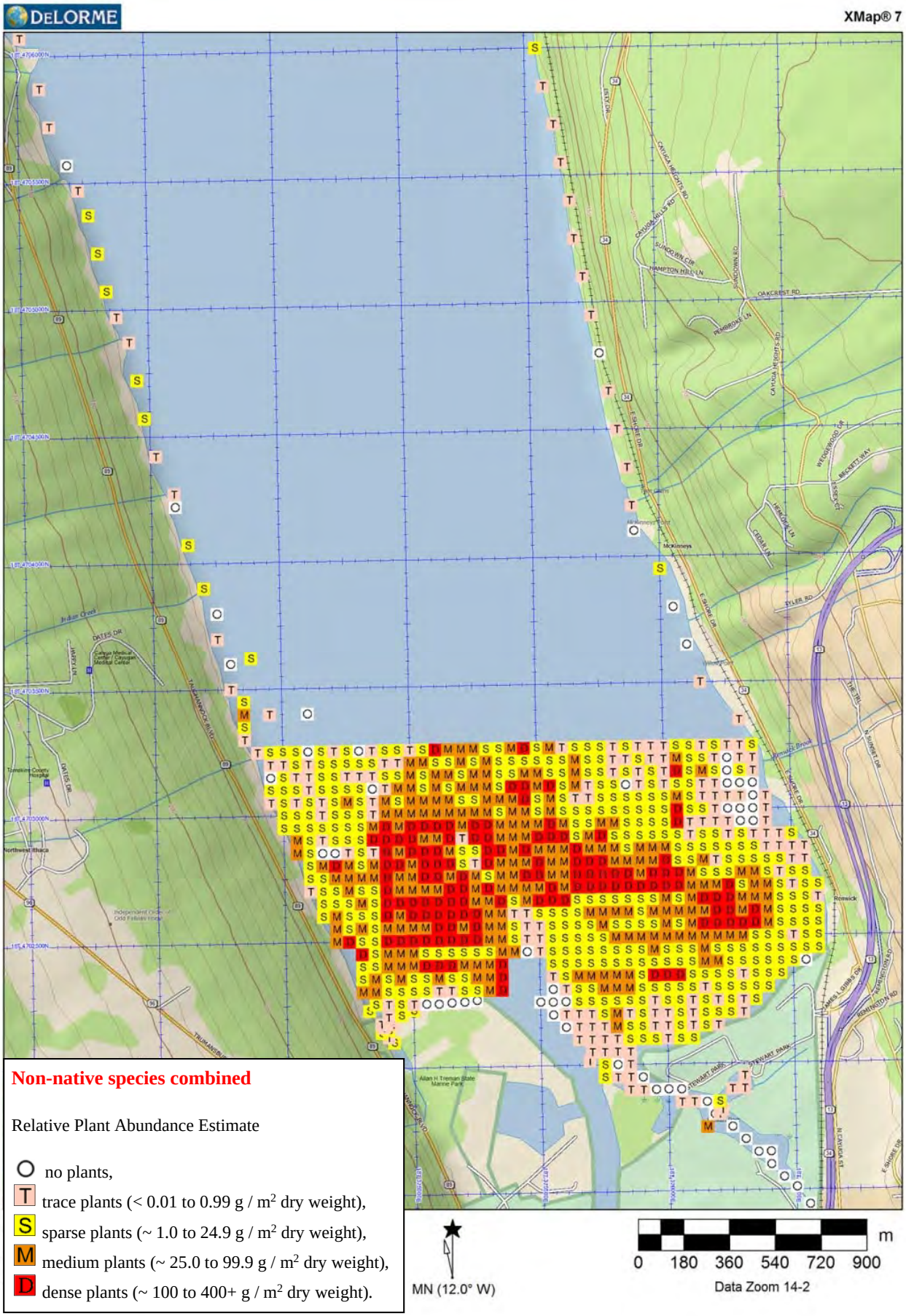
Figure 11. Summary of all rake-toss abundance ratings of all species combined for all rake-tosses made in the 2013 surveys of Cayuga Lake, the Lighthouse Area of the Inlet and the Inlet proper.



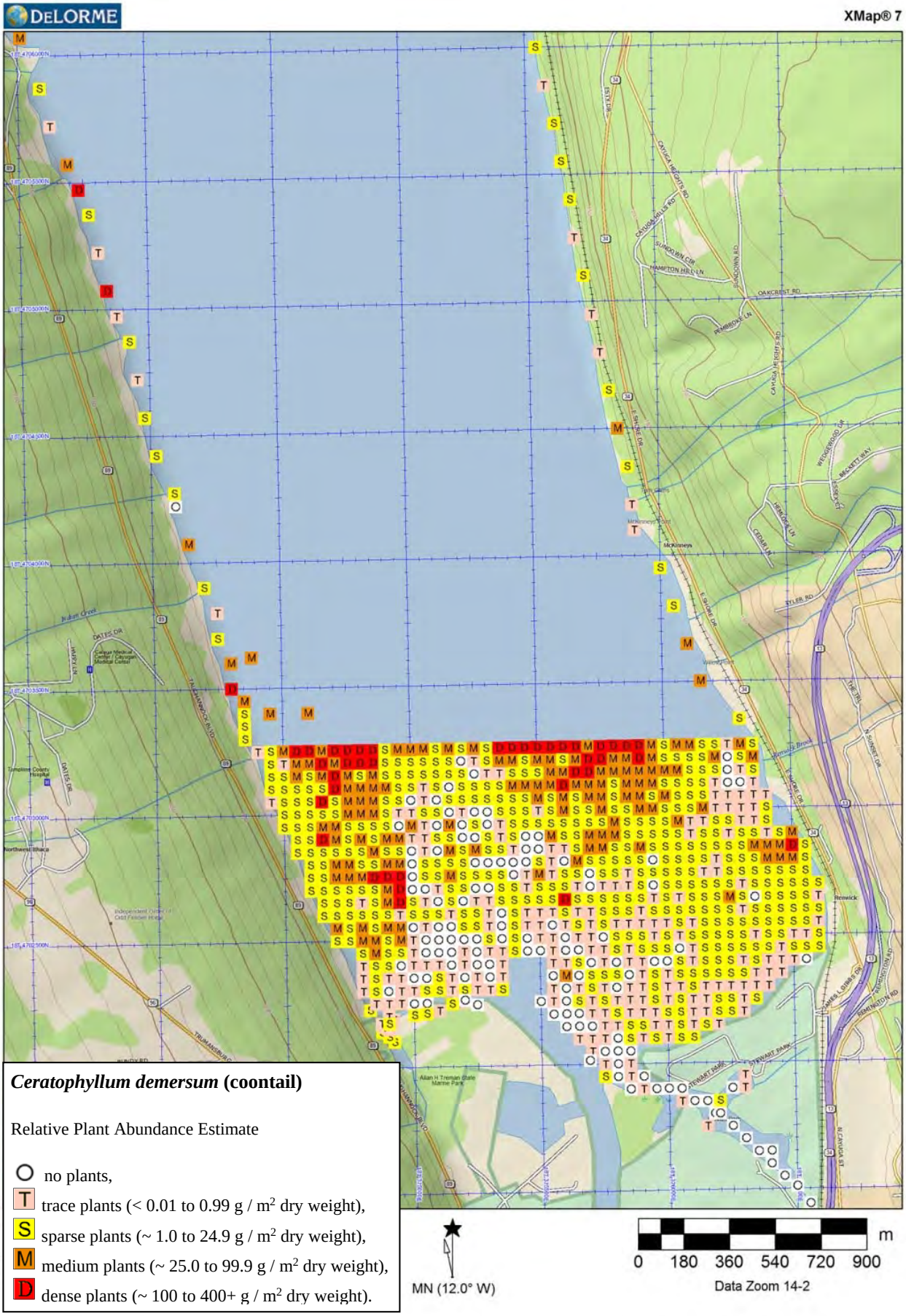
Map Lake-1. All species combined as abundance by two rake tosses.



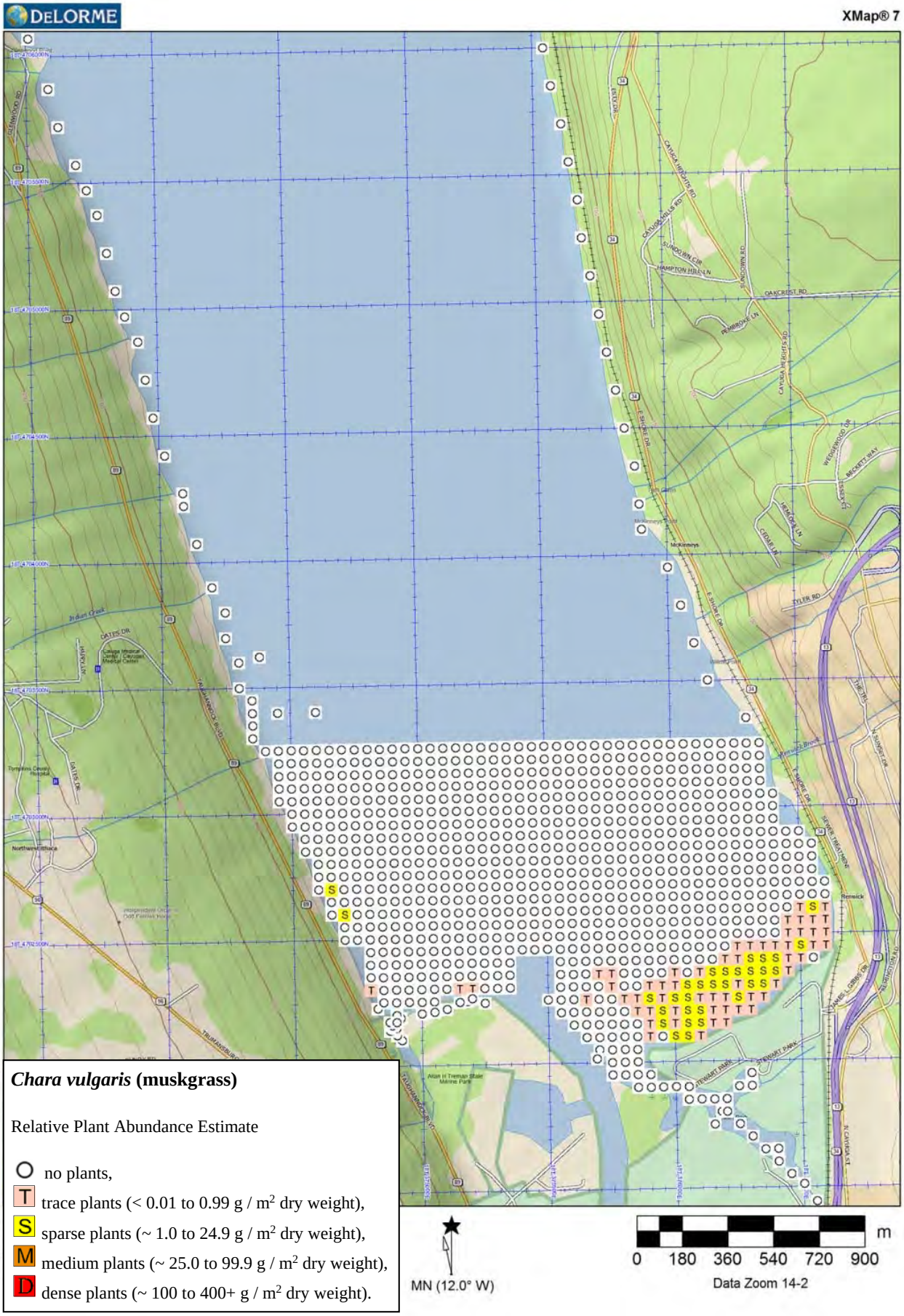
Map Lake-2. Native species combined as abundance by two rake tosses.



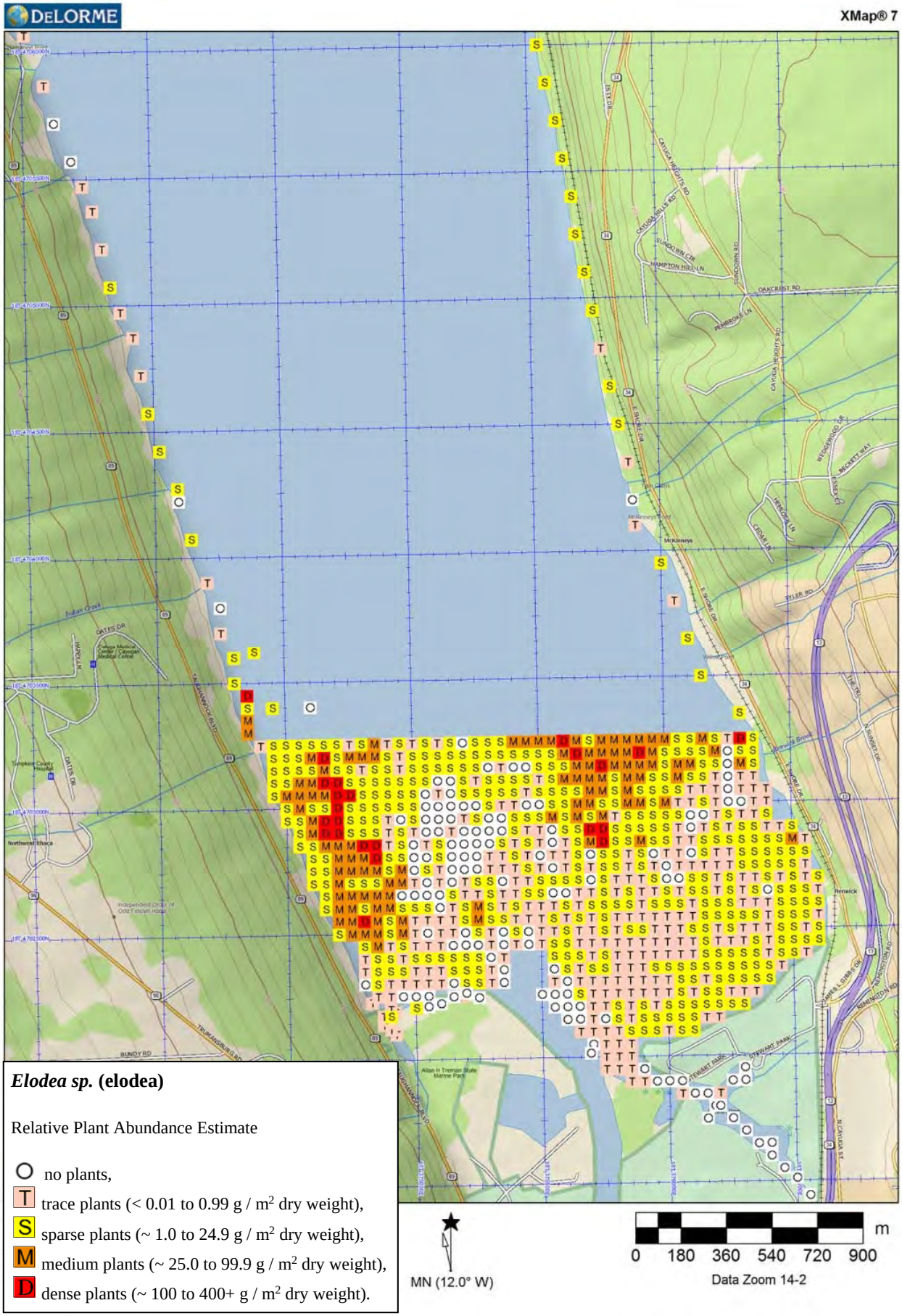
Map Lake-3. Non-native species combined as abundance by two rake tosses.



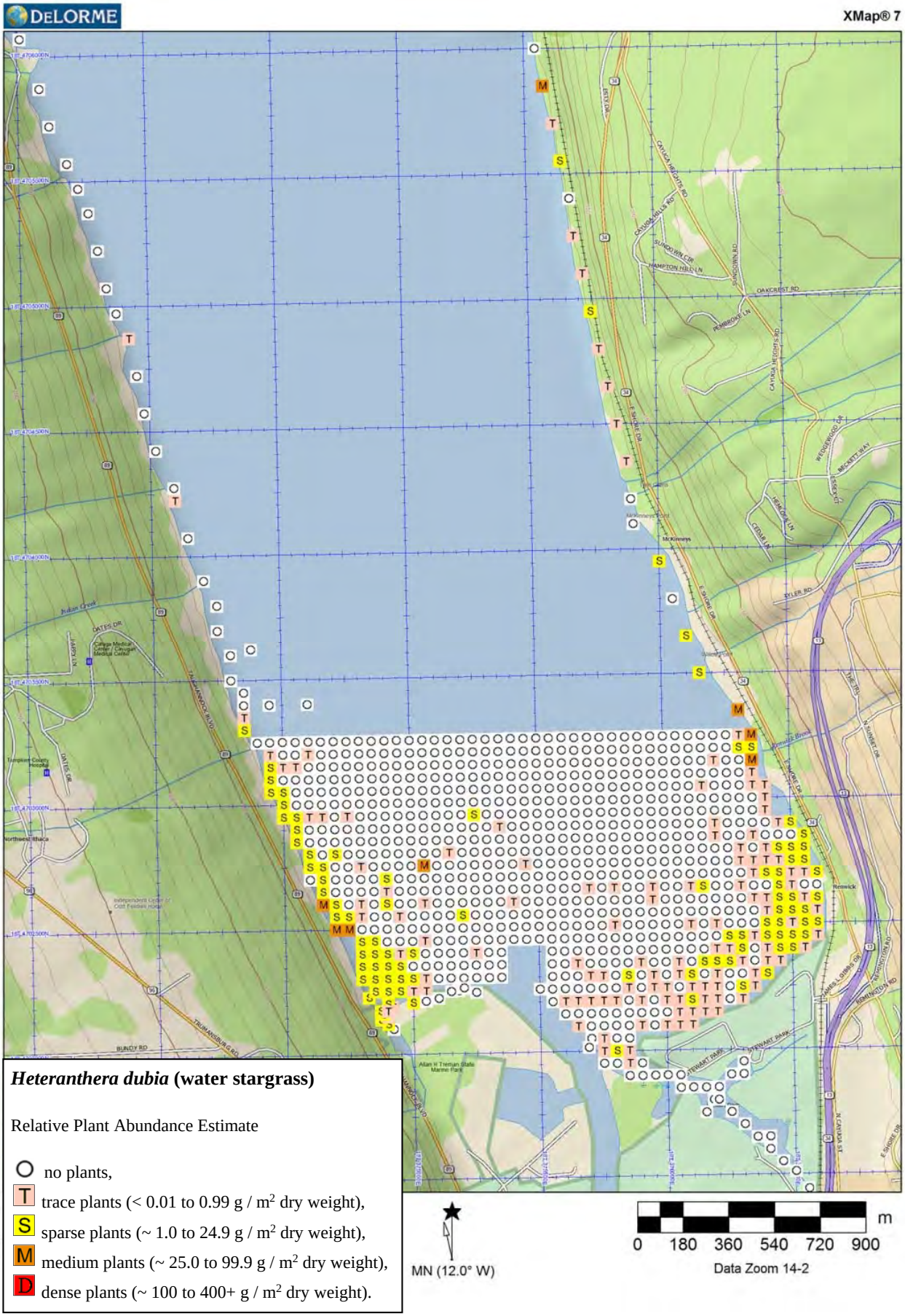
Map Lake-4. *Ceratophyllum demersum* (coontail) as abundance by two rake tosses.



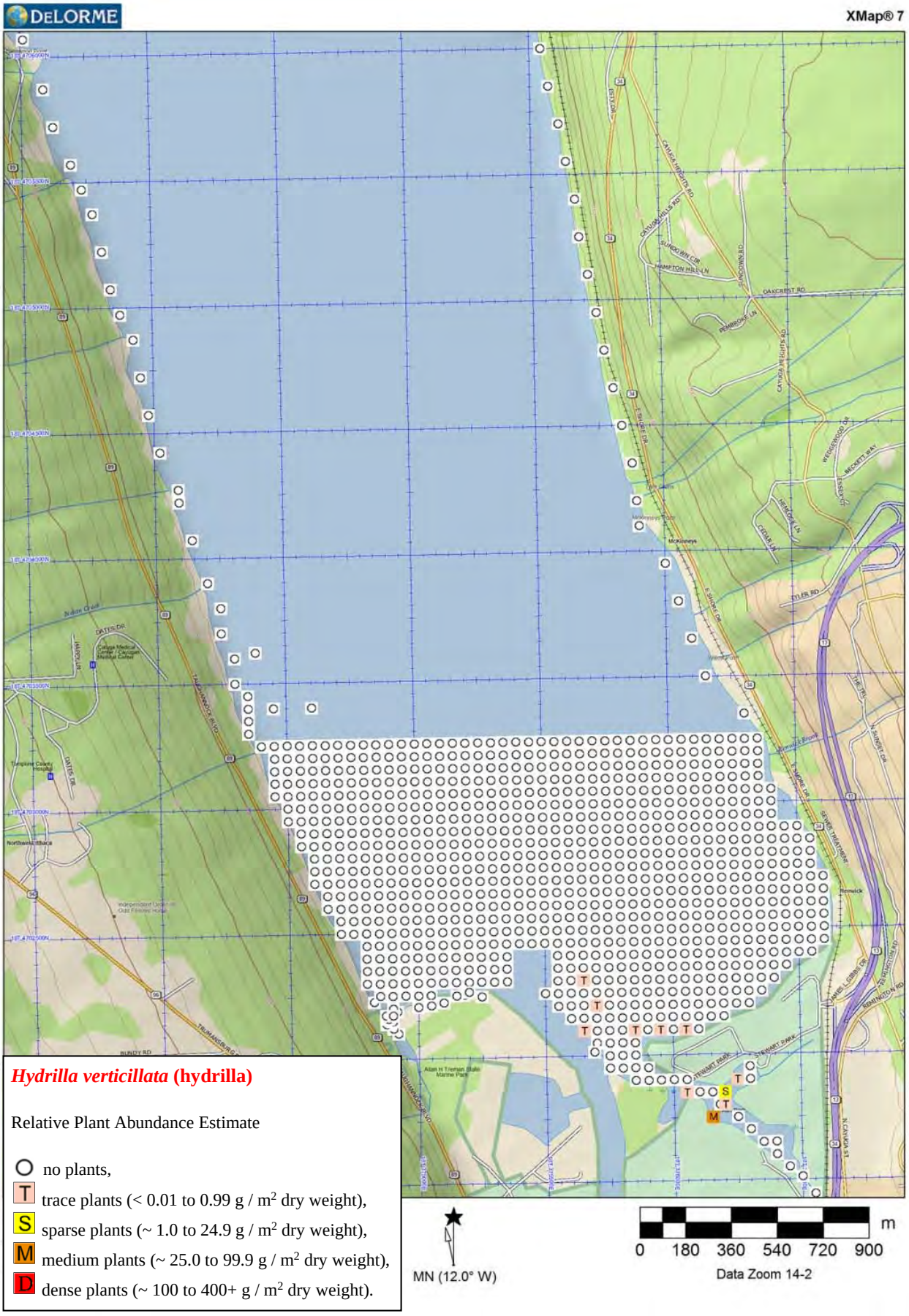
Map Lake-5. *Chara vulgaris* (muskgrass) as abundance by two rake tosses.



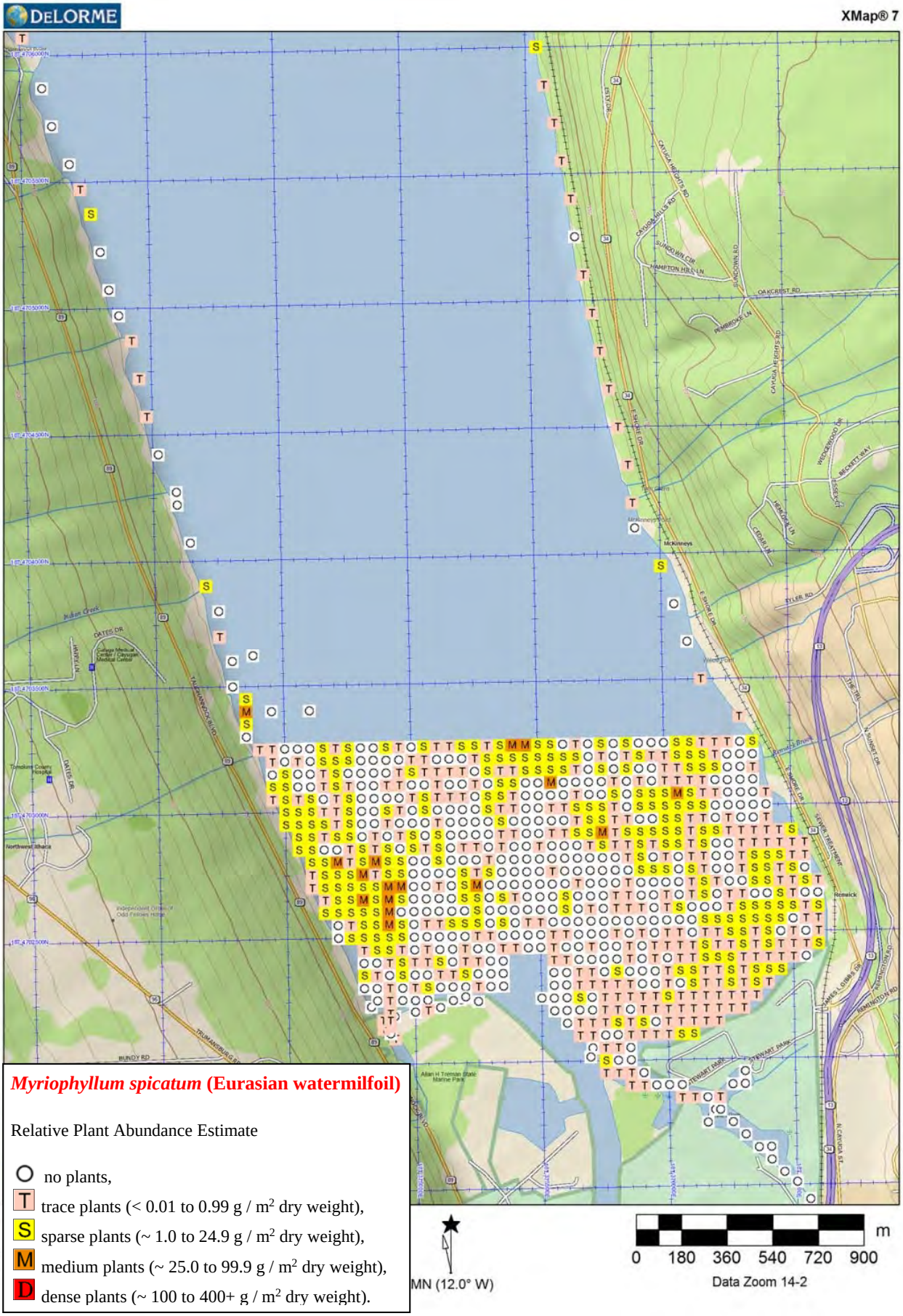
Map Lake-6. *Elodea sp.* (elodea) as abundance by two rake tosses.



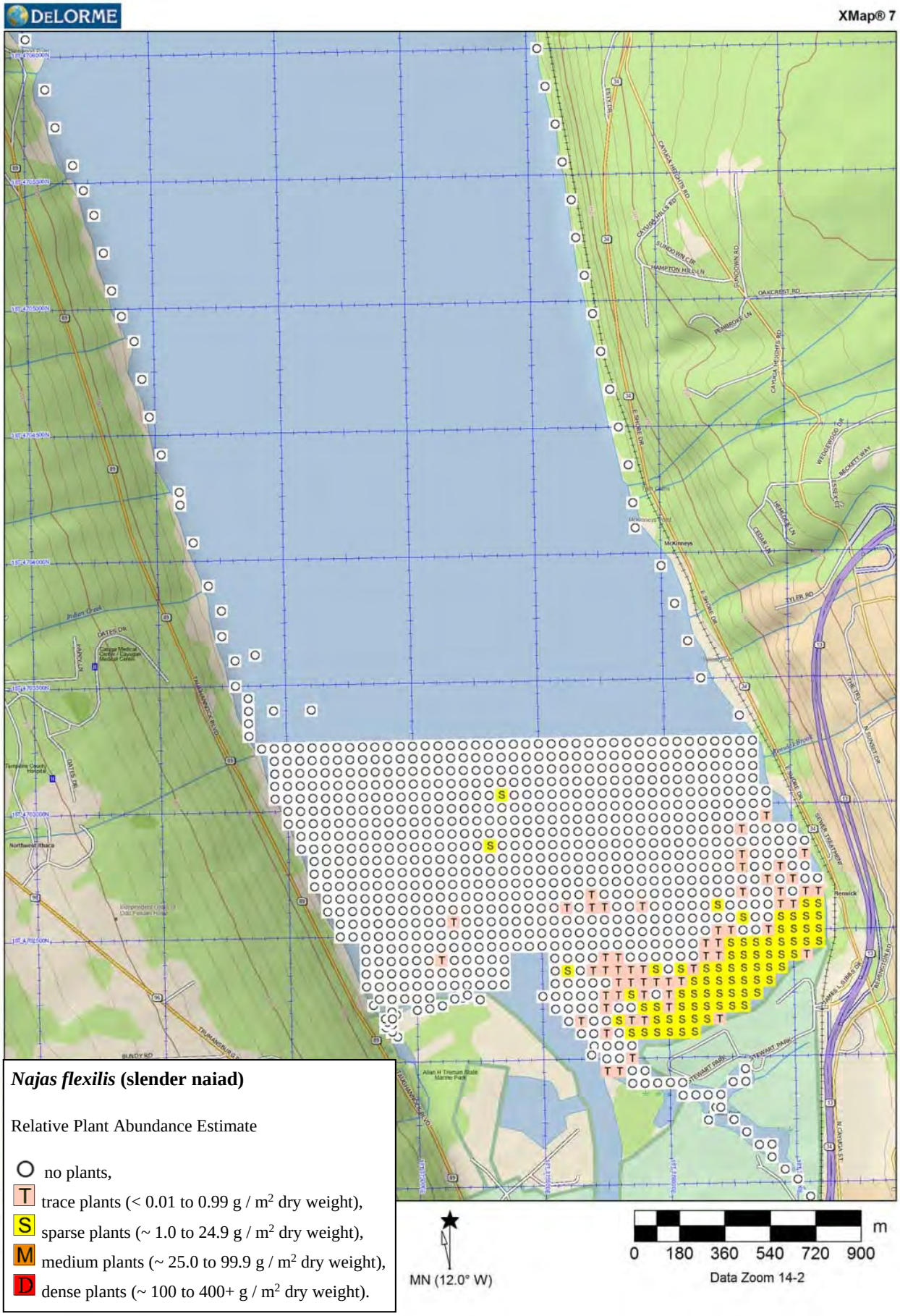
Map Lake-7. *Heteranthera dubia* (water stargrass) as abundance by two rake tosses.



Map Lake-8. *Hydrilla verticillata* (hydrilla) as abundance by two rake tosses.

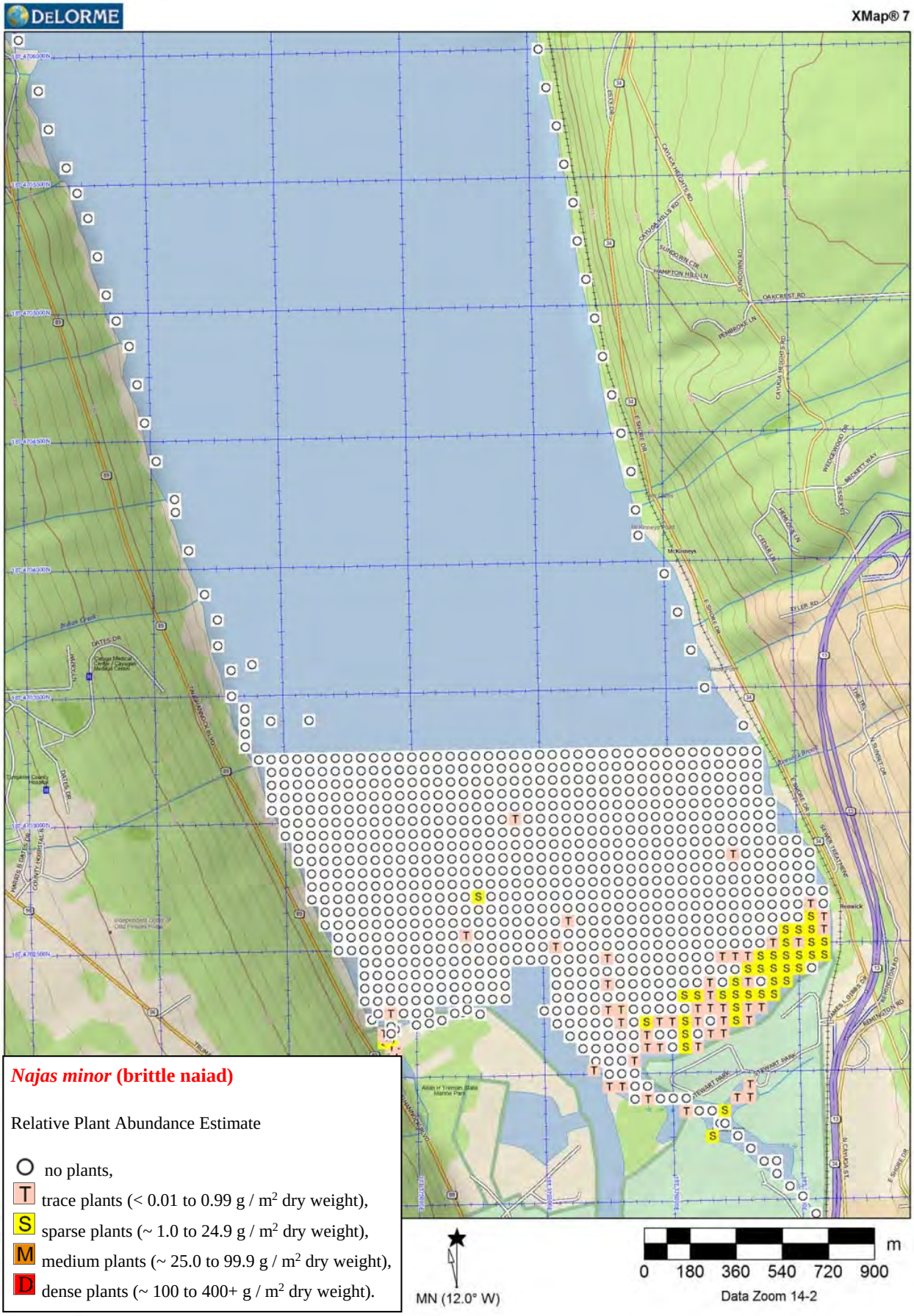


Map Lake-9. *Myriophyllum spicatum* (Eurasian watermilfoil) as abundance by two rake tosses.

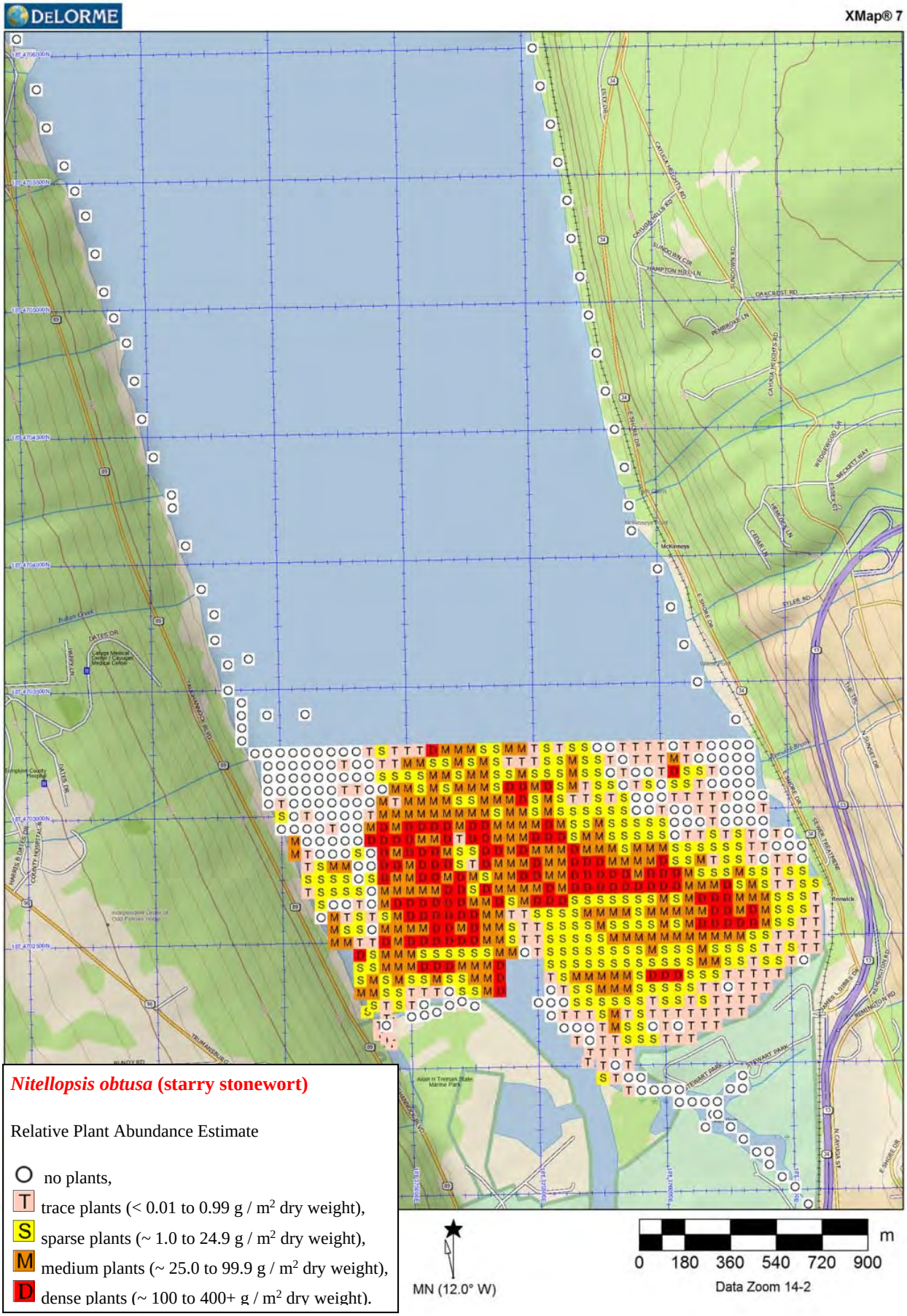


Map Lake-10. *Najas flexilis* (slender naiad) as abundance by two rake tosses.

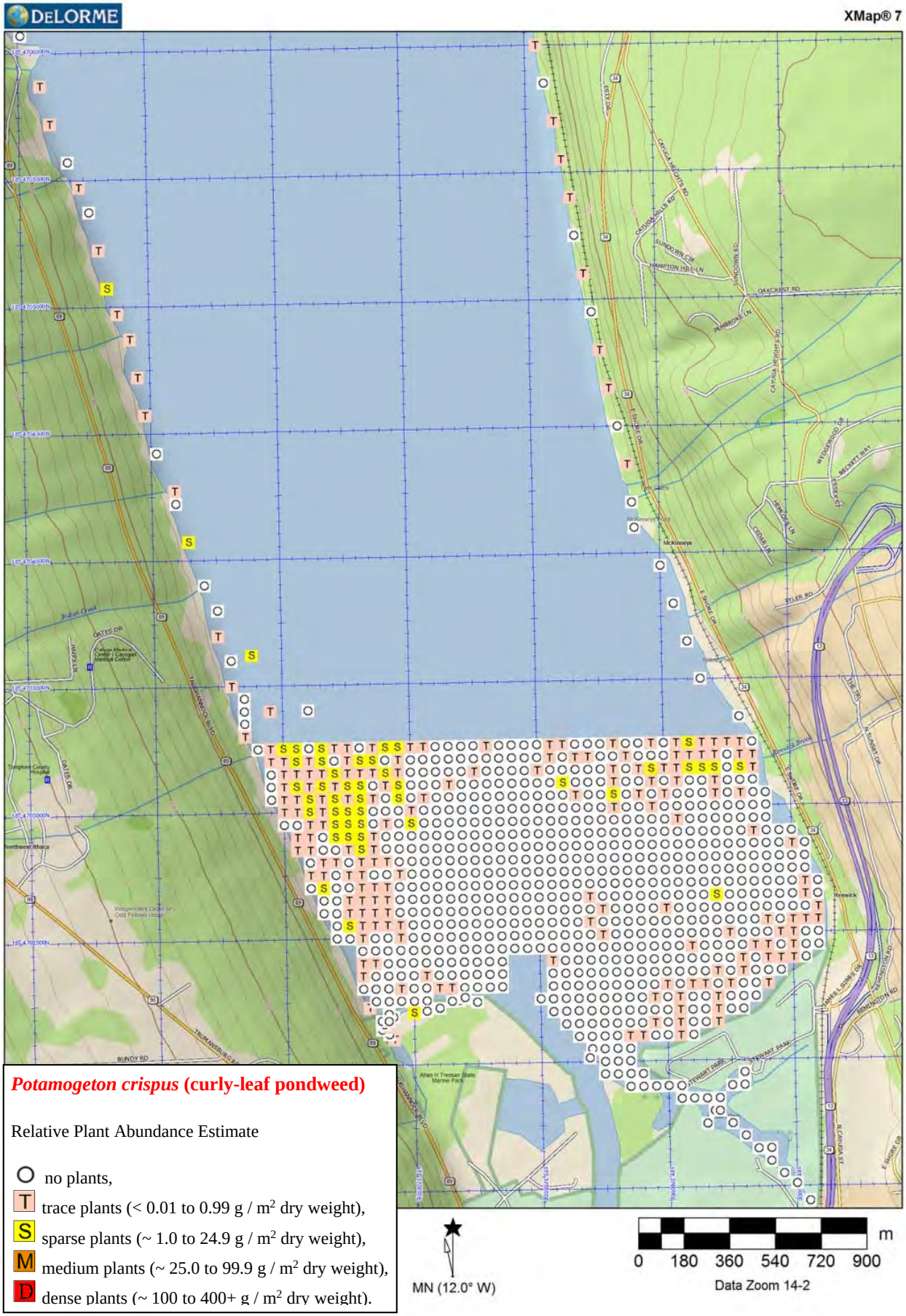
Map Lake-11. *Najas guadalupensis* (southern naiad) as abundance by two rake tosses.



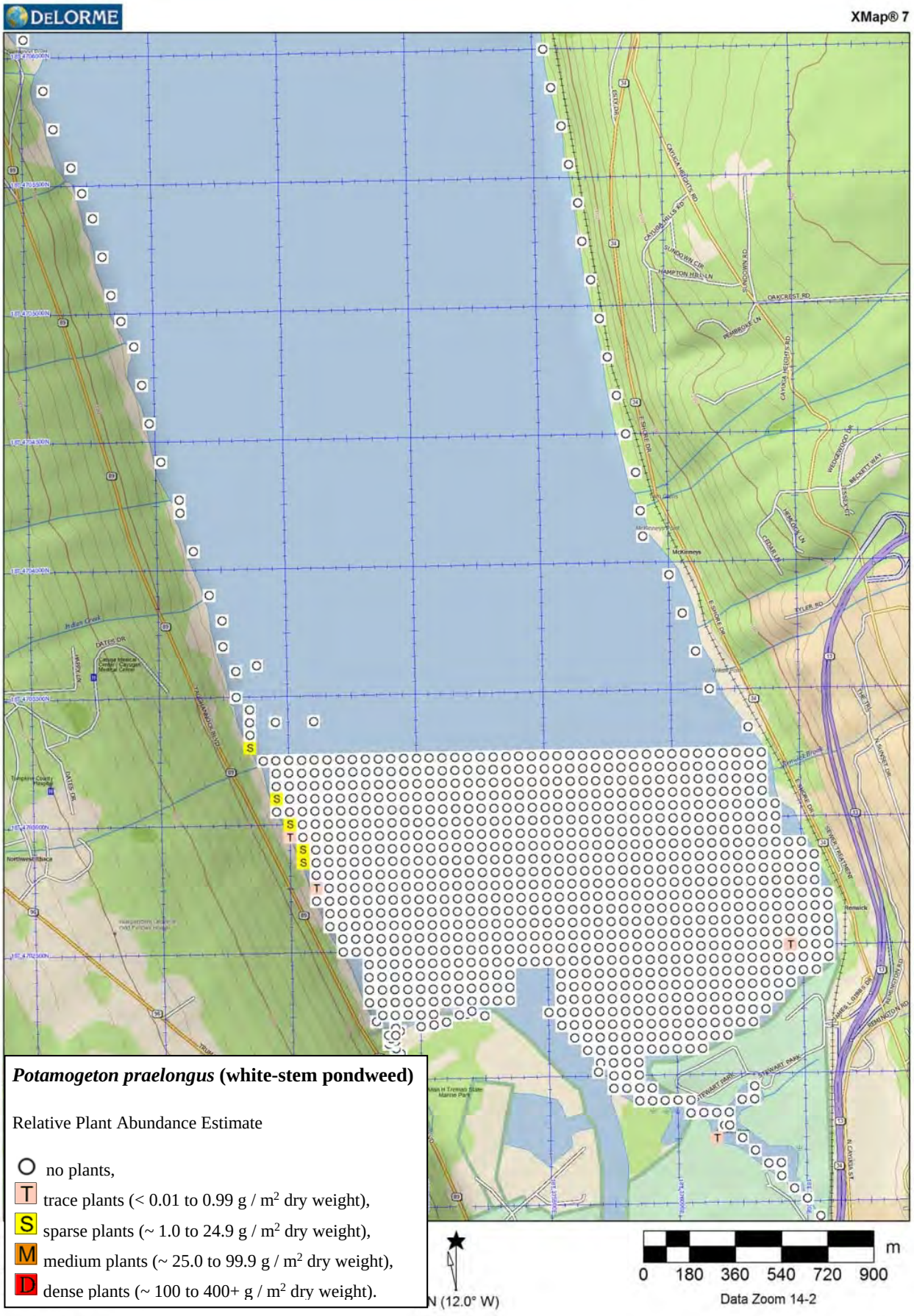
Map Lake-12. *Najas minor* (brittle naiad) as abundance by two rake tosses.



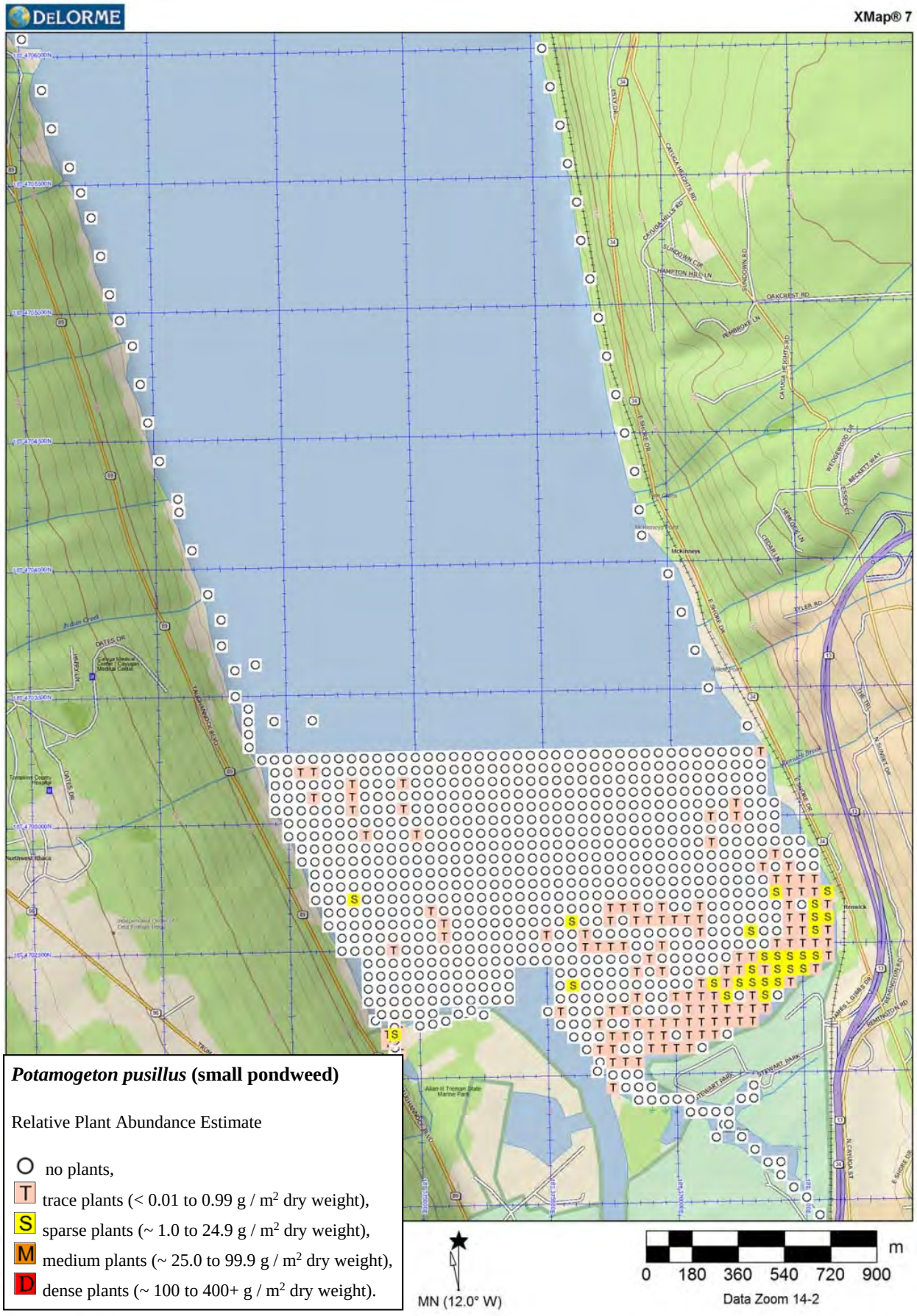
Map Lake-13. *Nitellopsis obtusa* (starry stonewort) as abundance by two rake tosses.



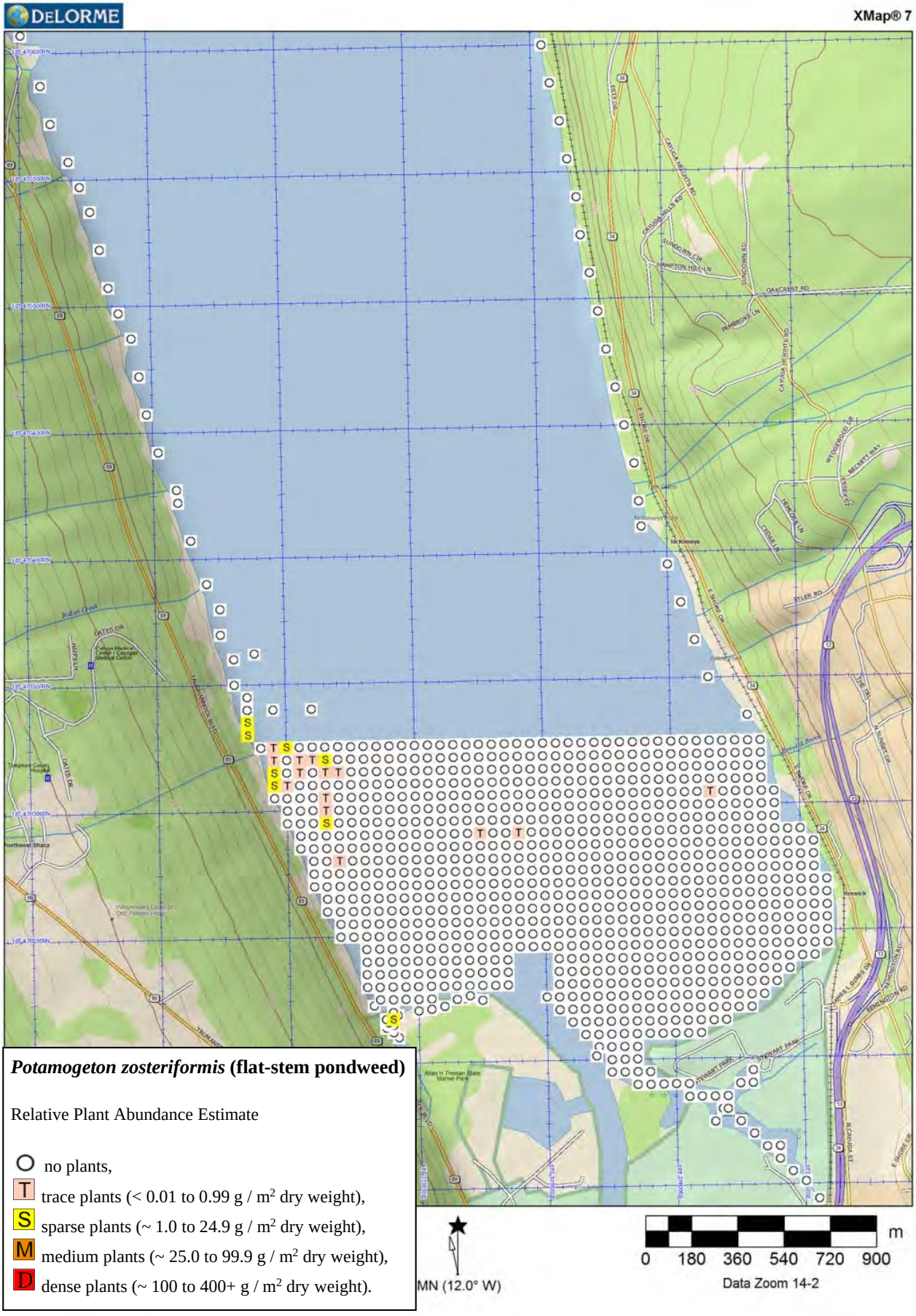
Map Lake-14. *Potamogeton crispus* (curly-leaf pondweed) as abundance by two rake tosses.



Map Lake-15. *Potamogeton praelongus* (white-stem pondweed) as abundance by two rake tosses.

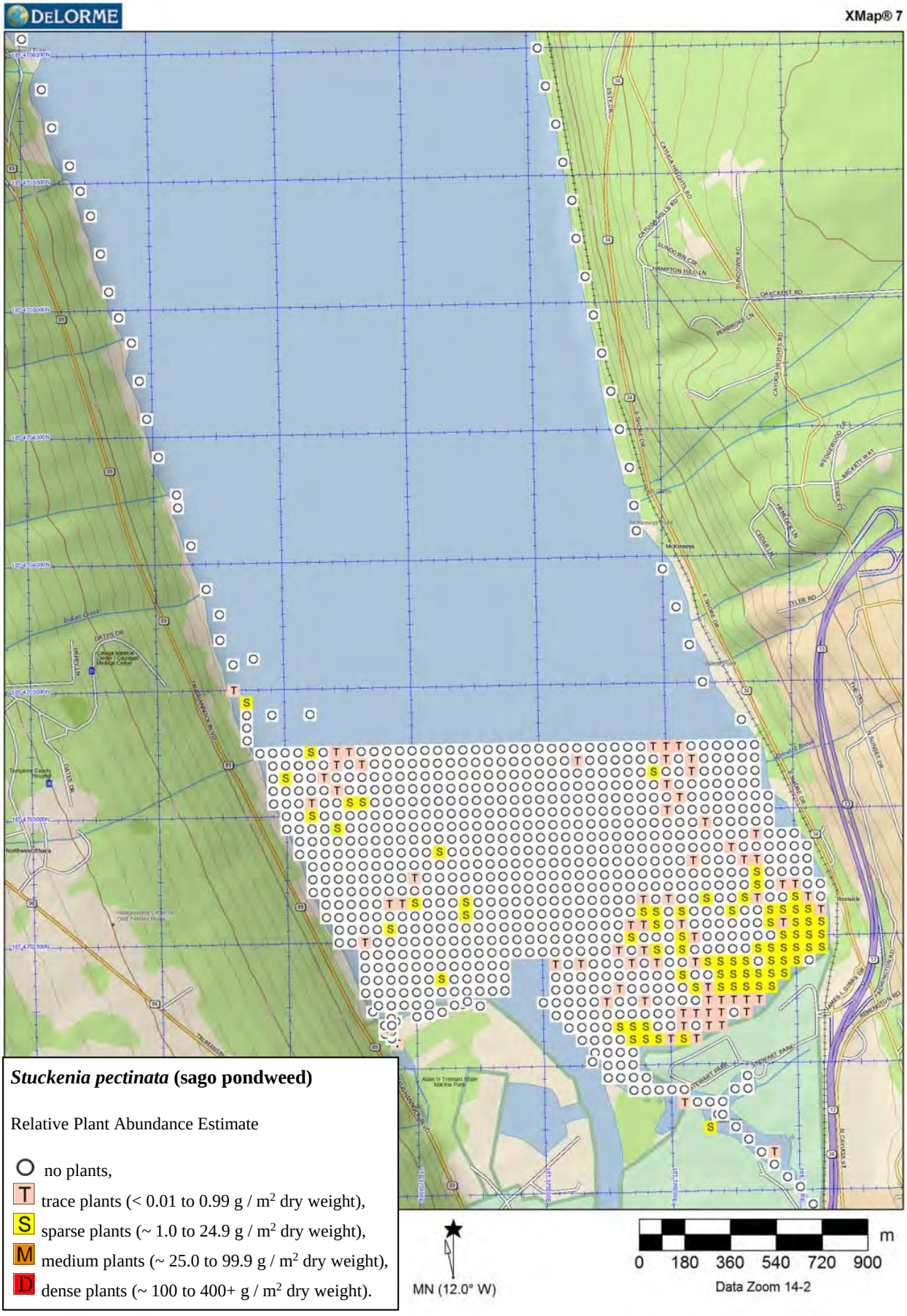


Map Lake-16. *Potamogeton pusillus* (small pondweed) as abundance by two rake tosses.

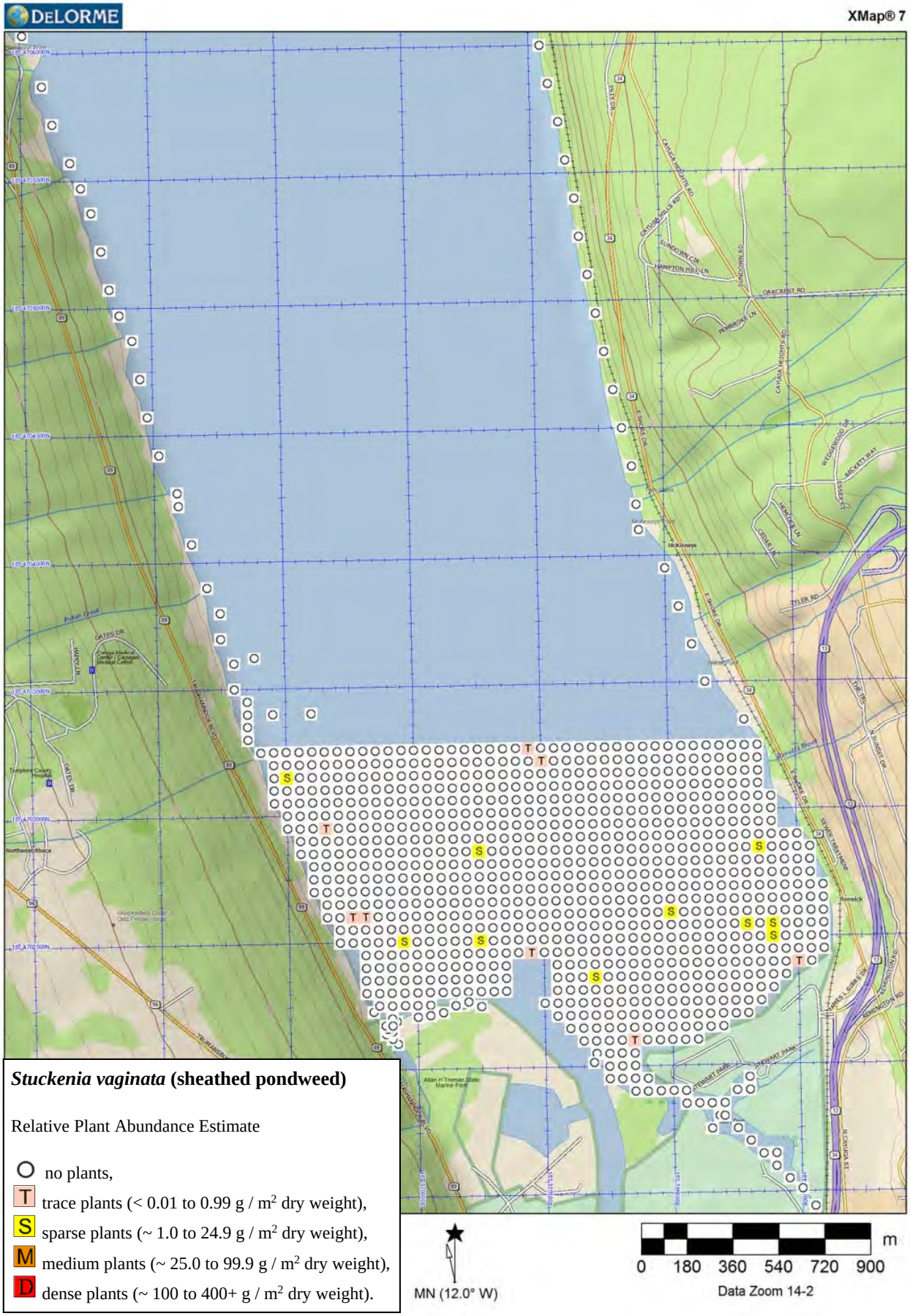


Map Lake-17. *Potamogeton zosteriformis* (flat-stem pondweed) as abundance by two rake tosses.

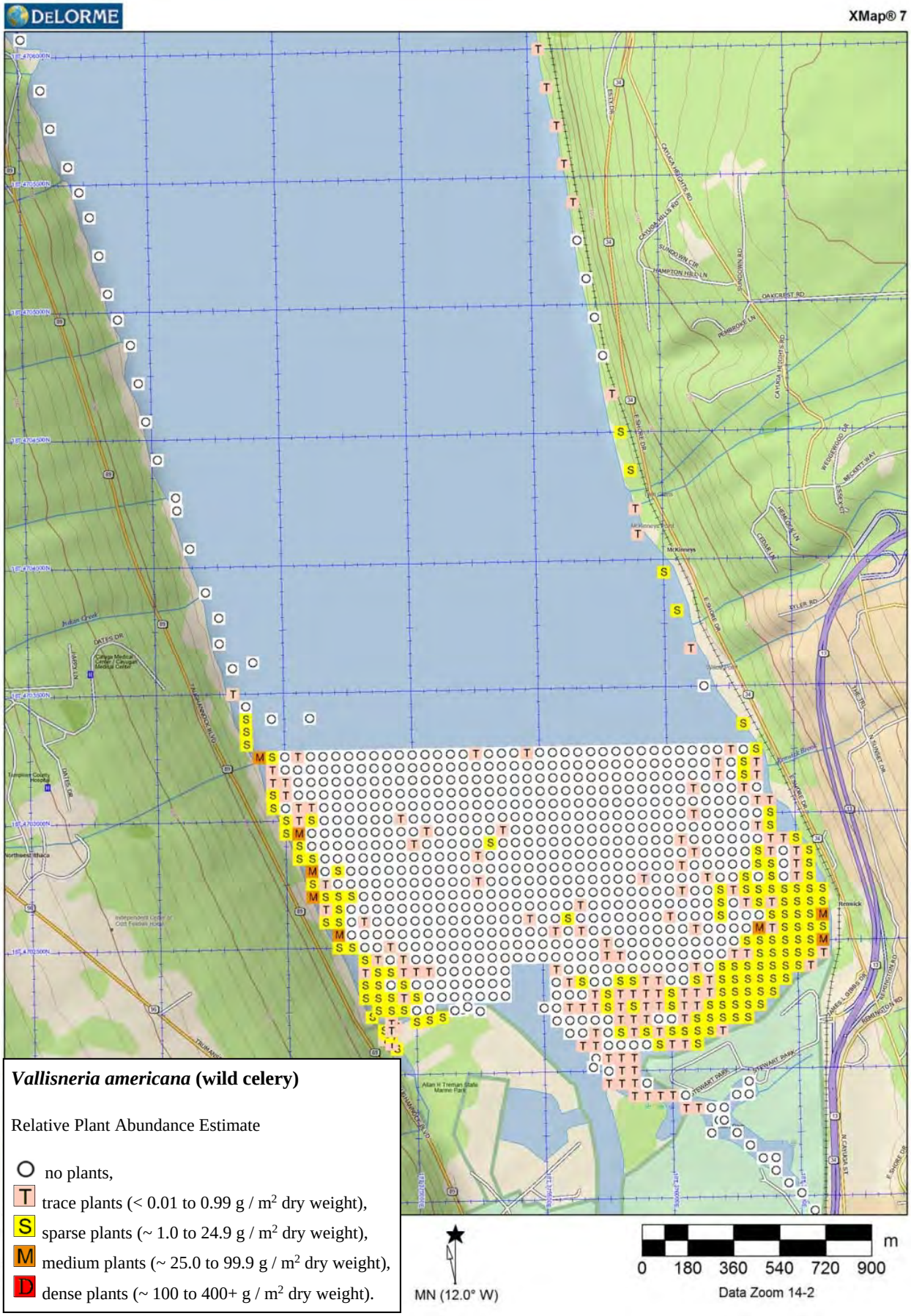
Map Lake-18. *Ranunculus trichophyllus* (white water crowfoot) as abundance by two rake tosses.



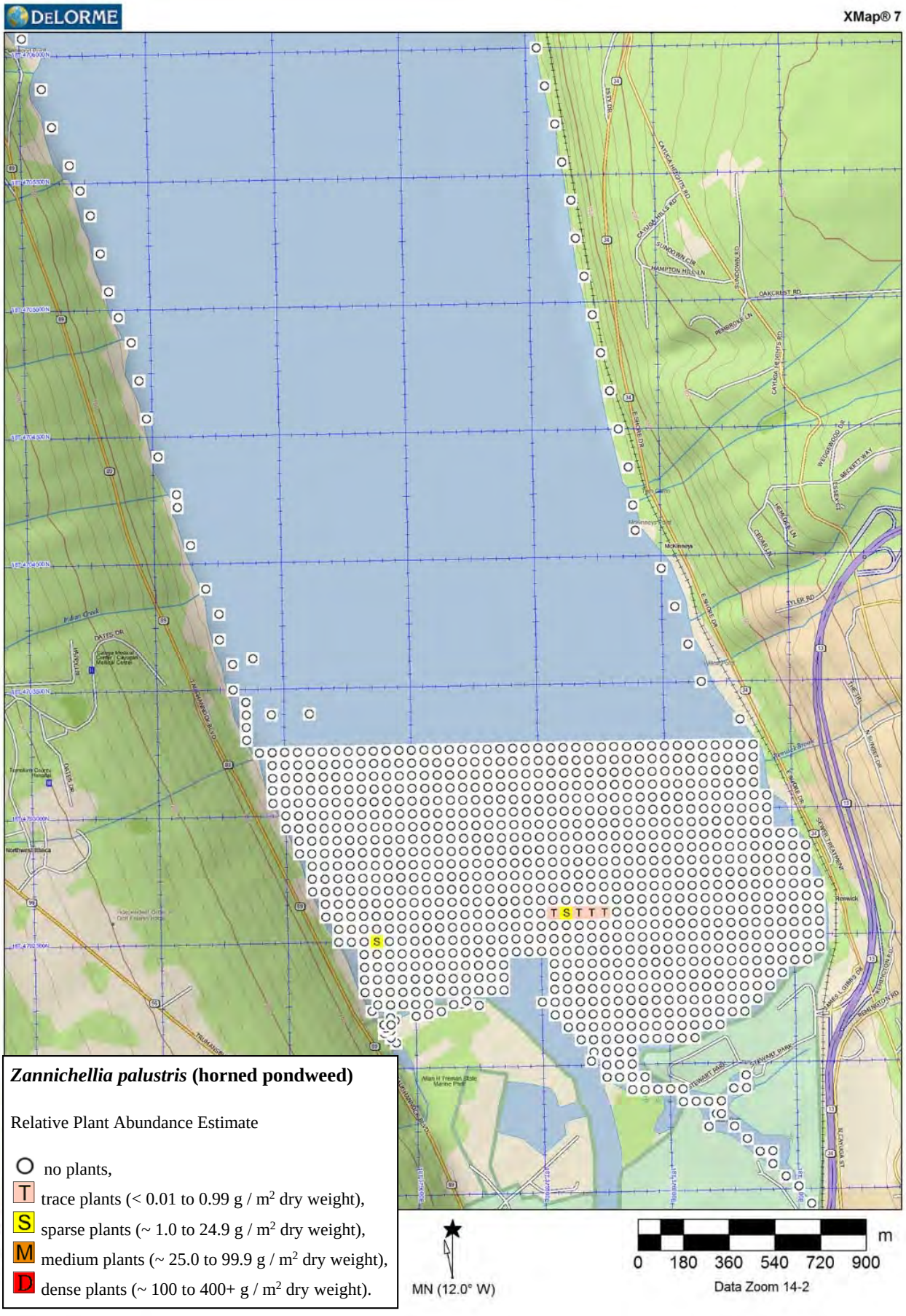
Map Lake-19. *Stuckenia pectinata* (sago pondweed) as abundance by two rake tosses.



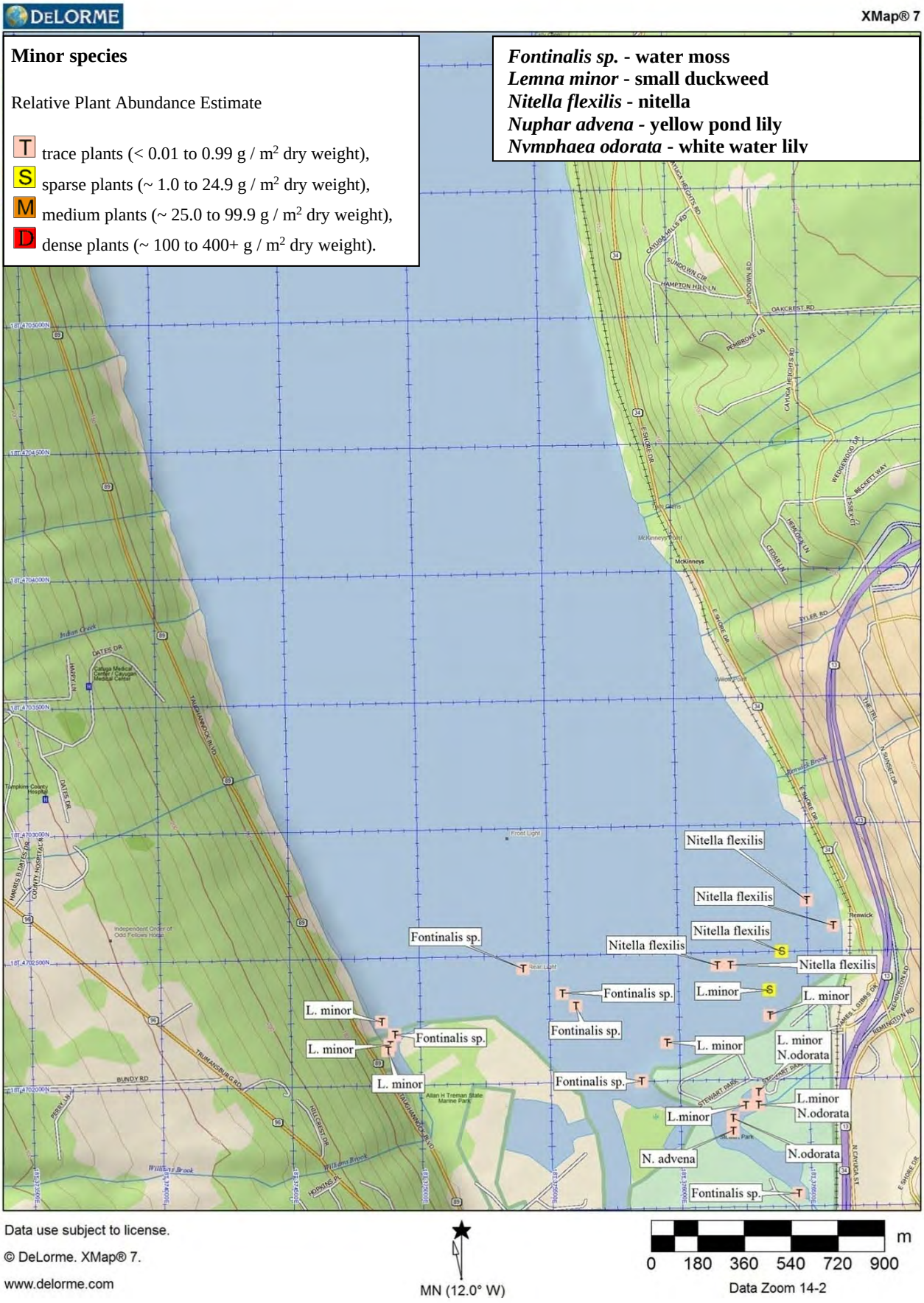
Map Lake-20. *Stuckenia vaginata* (sheathed pondweed) as abundance by two rake tosses.



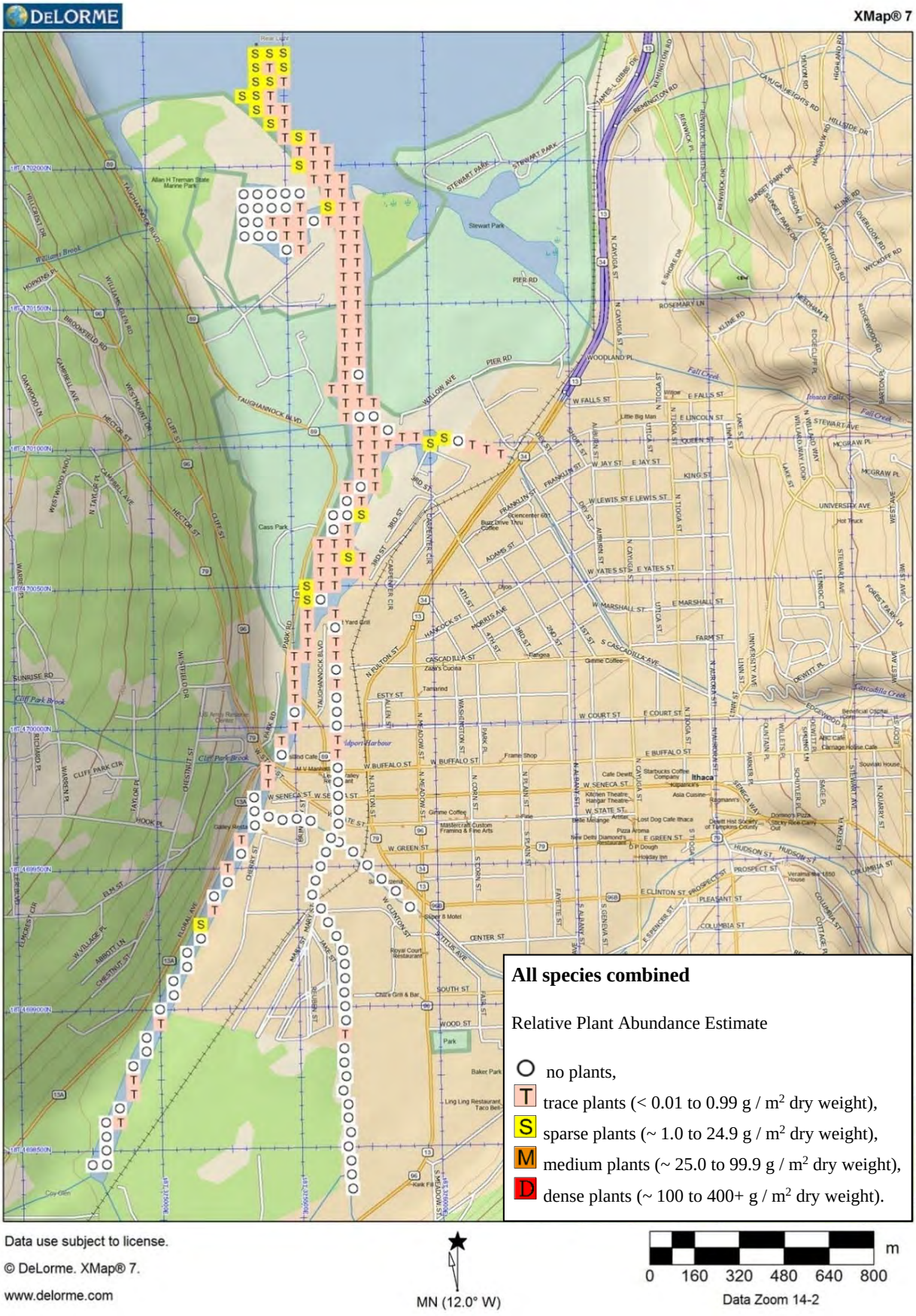
Map Lake-21. *Vallisneria americana* (wild celery) as abundance by two rake tosses.



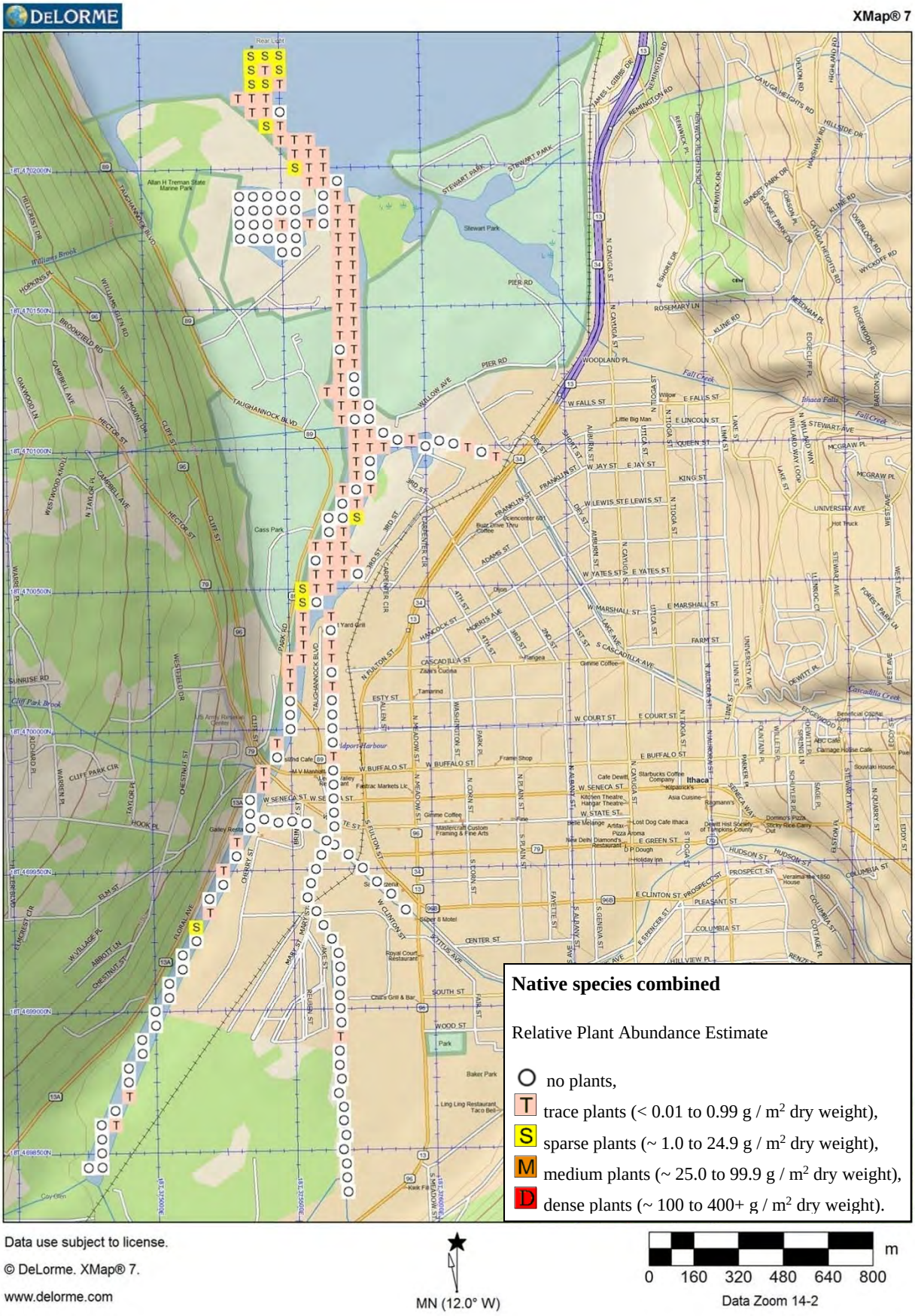
Map Lake-22. *Zannichellia palustris* (horned pondweed) as abundance by two rake tosses.



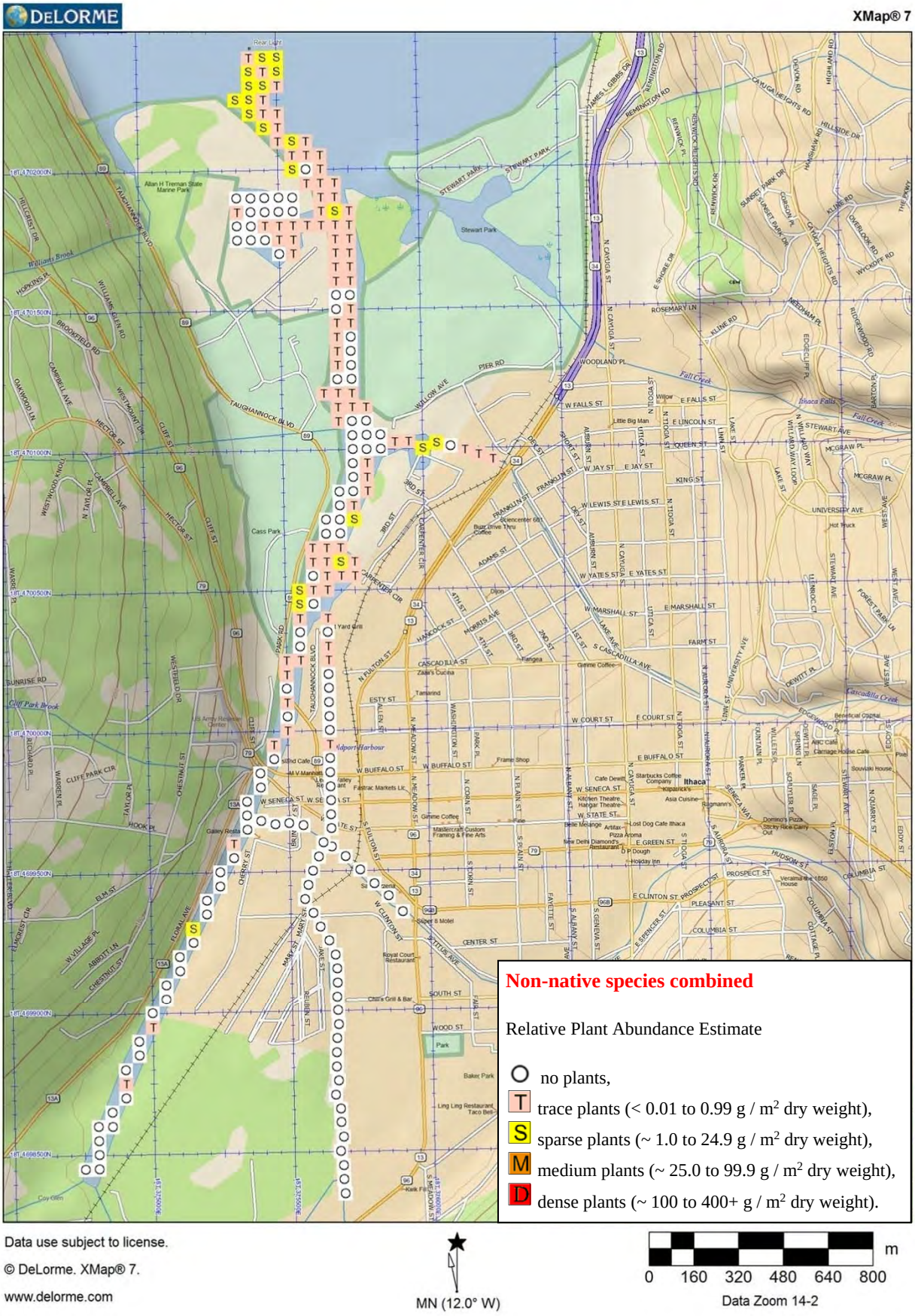
Map Lake-23. Minor species as densities by two rake tosses.



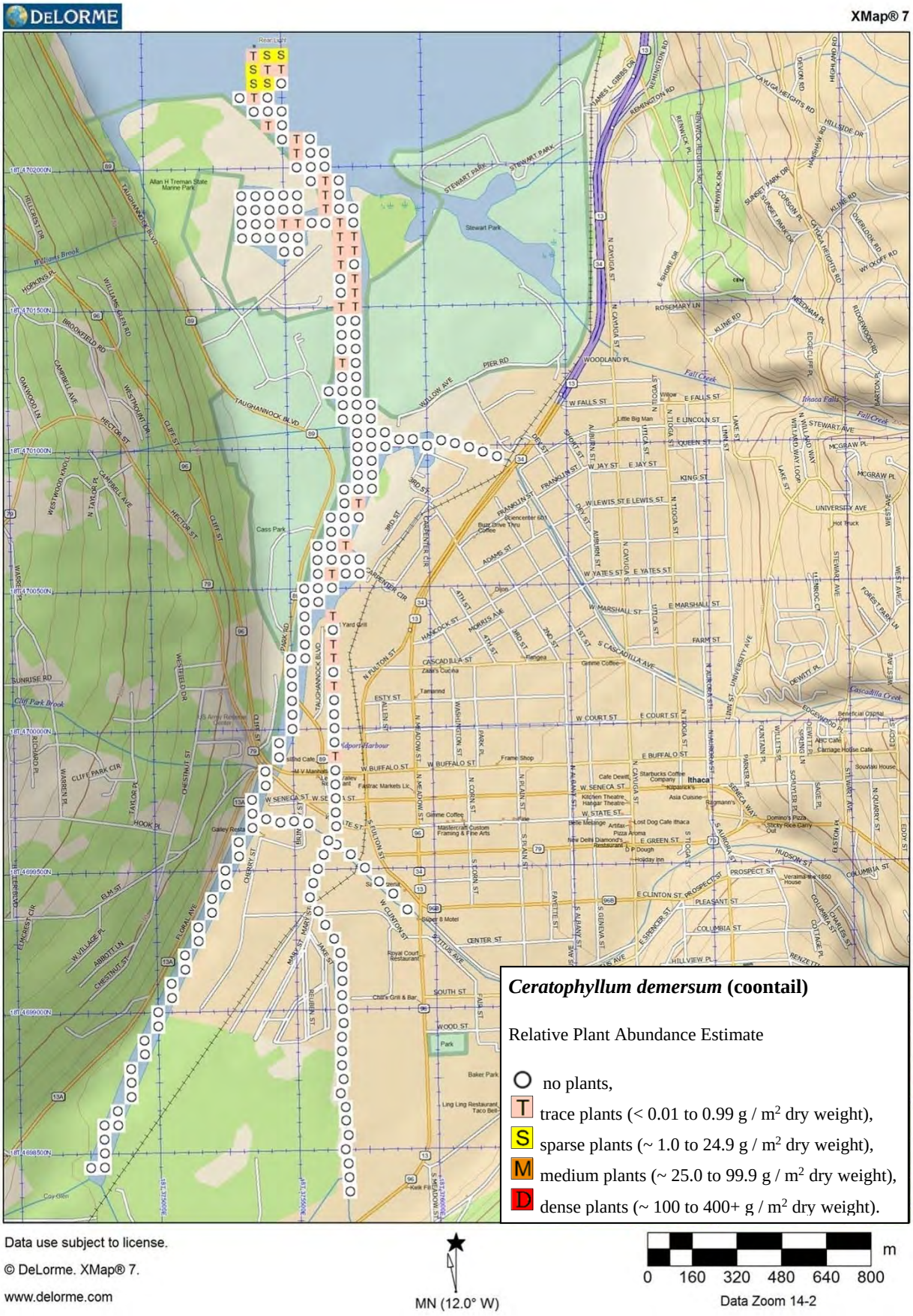
Map Inlet-1. All species combined as abundance by two rake tosses.



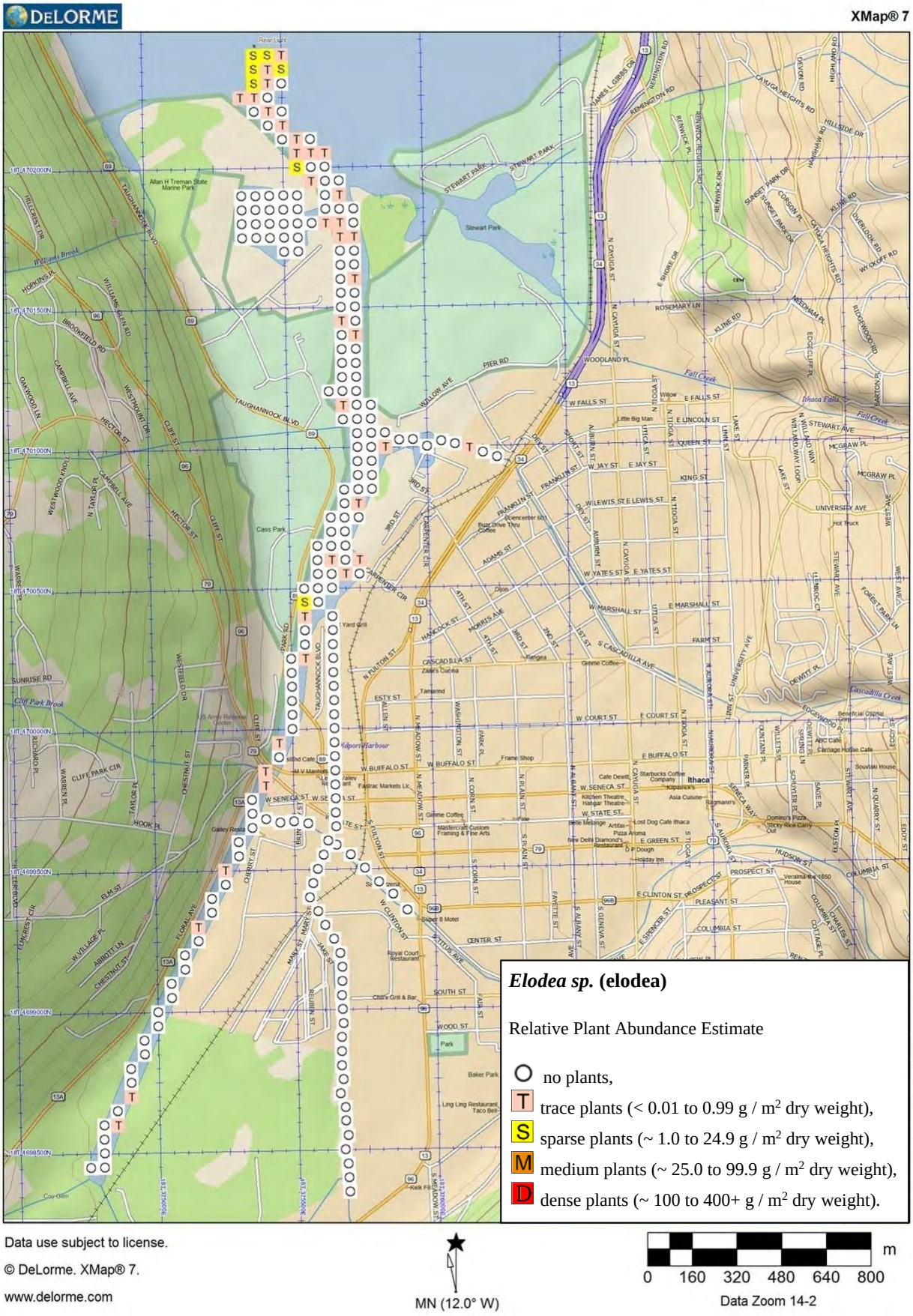
Map Inlet-2. Native species combined as abundance by two rake tosses.



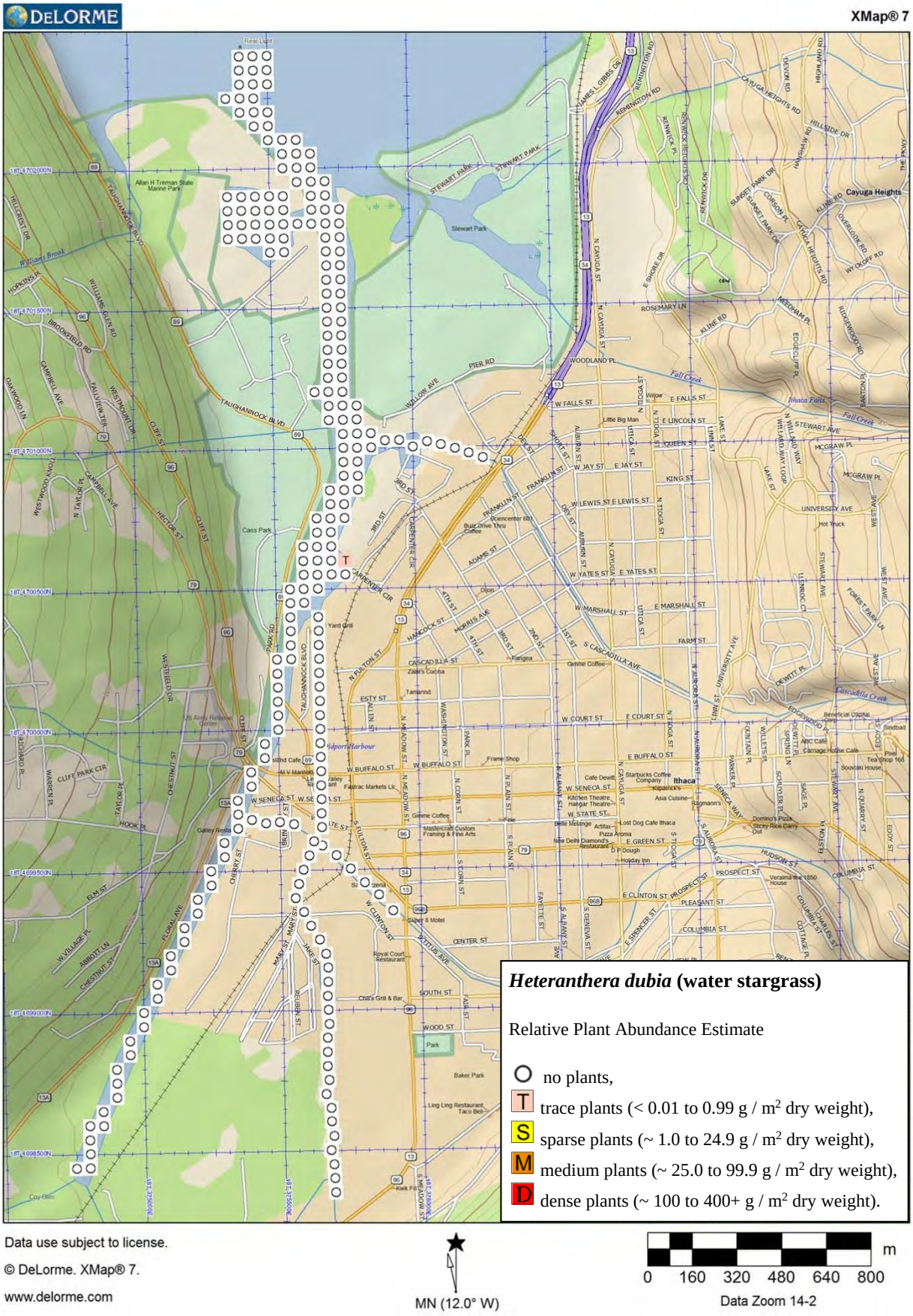
Map Inlet-3. Non-native species combined as abundance by two rake tosses.



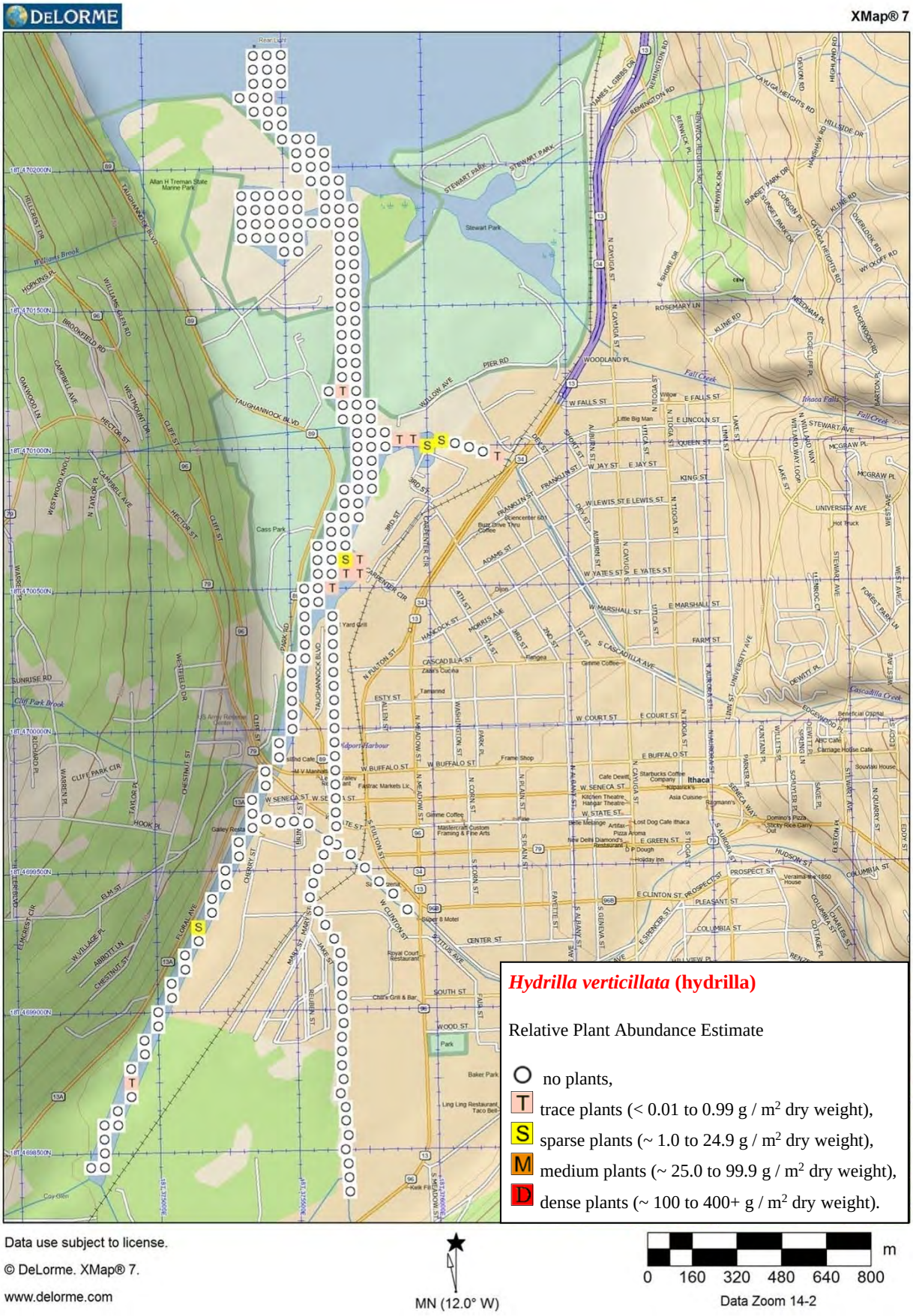
Map Inlet-4. *Ceratophyllum demersum* (coontail) as abundance by two rake tosses.



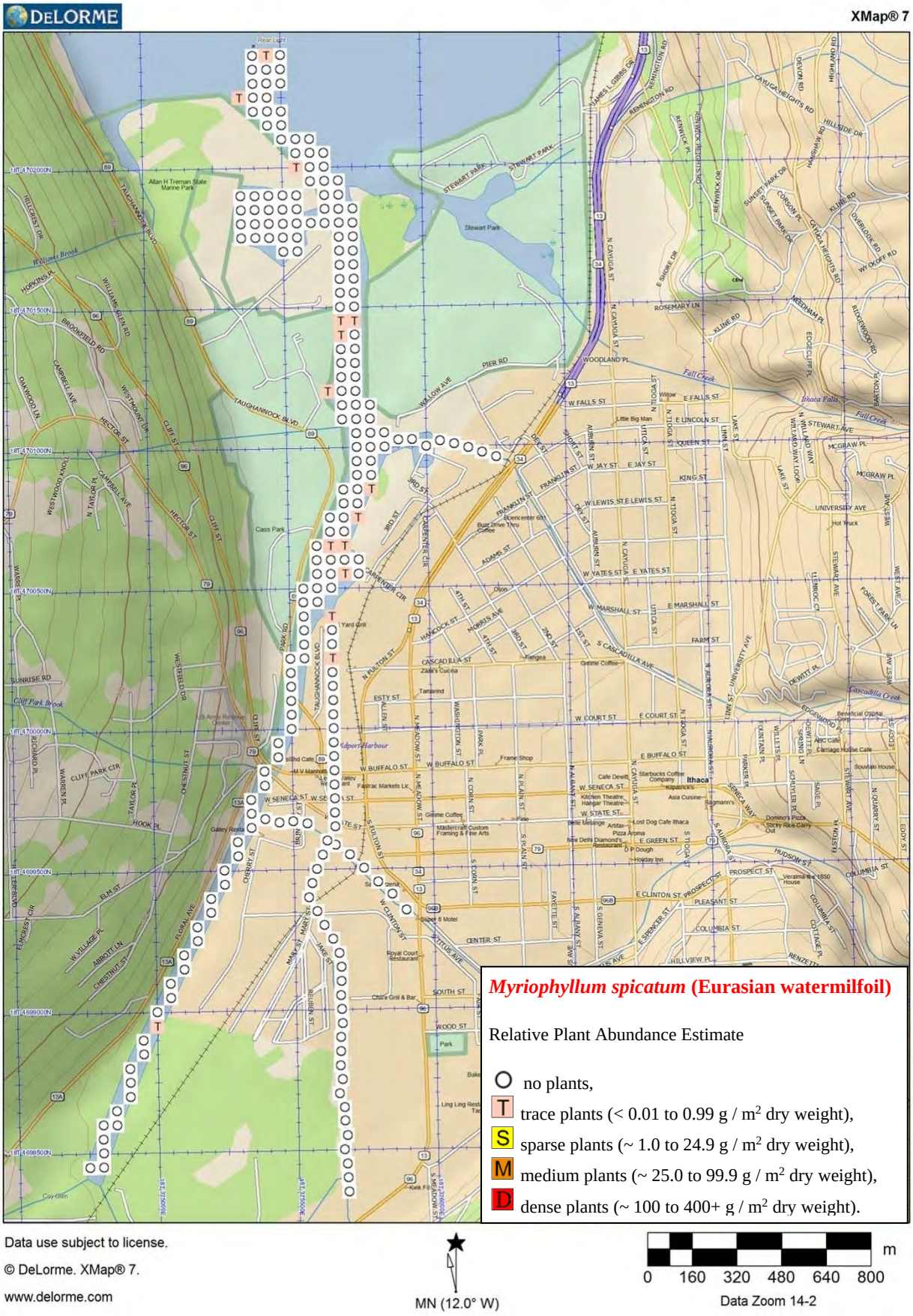
Map Inlet-5. *Elodea sp.* (elodea) as abundance by two rake tosses.



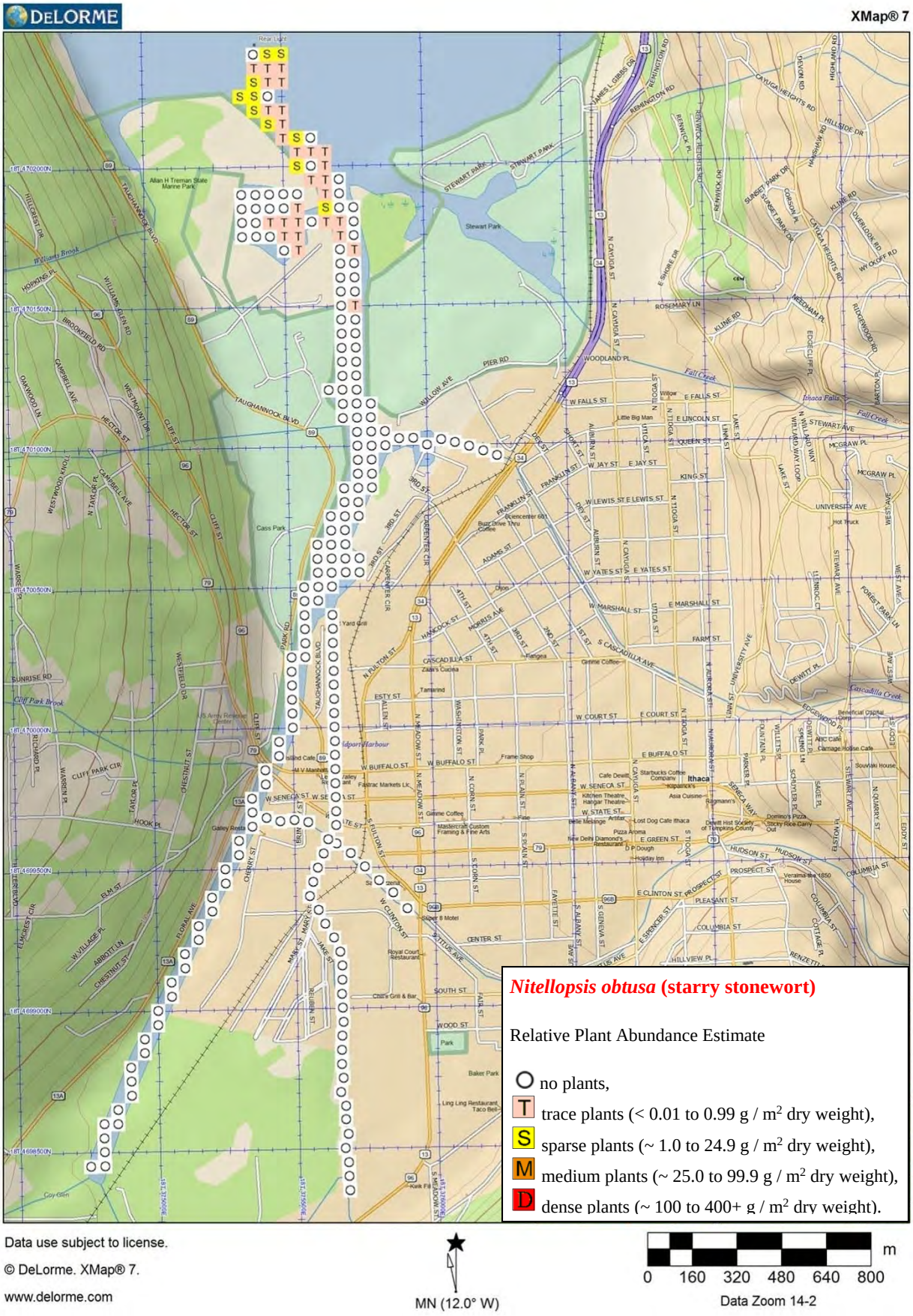
Map Inlet-6. *Heteranthera dubia* (water stargrass) as abundance by two rake tosses.



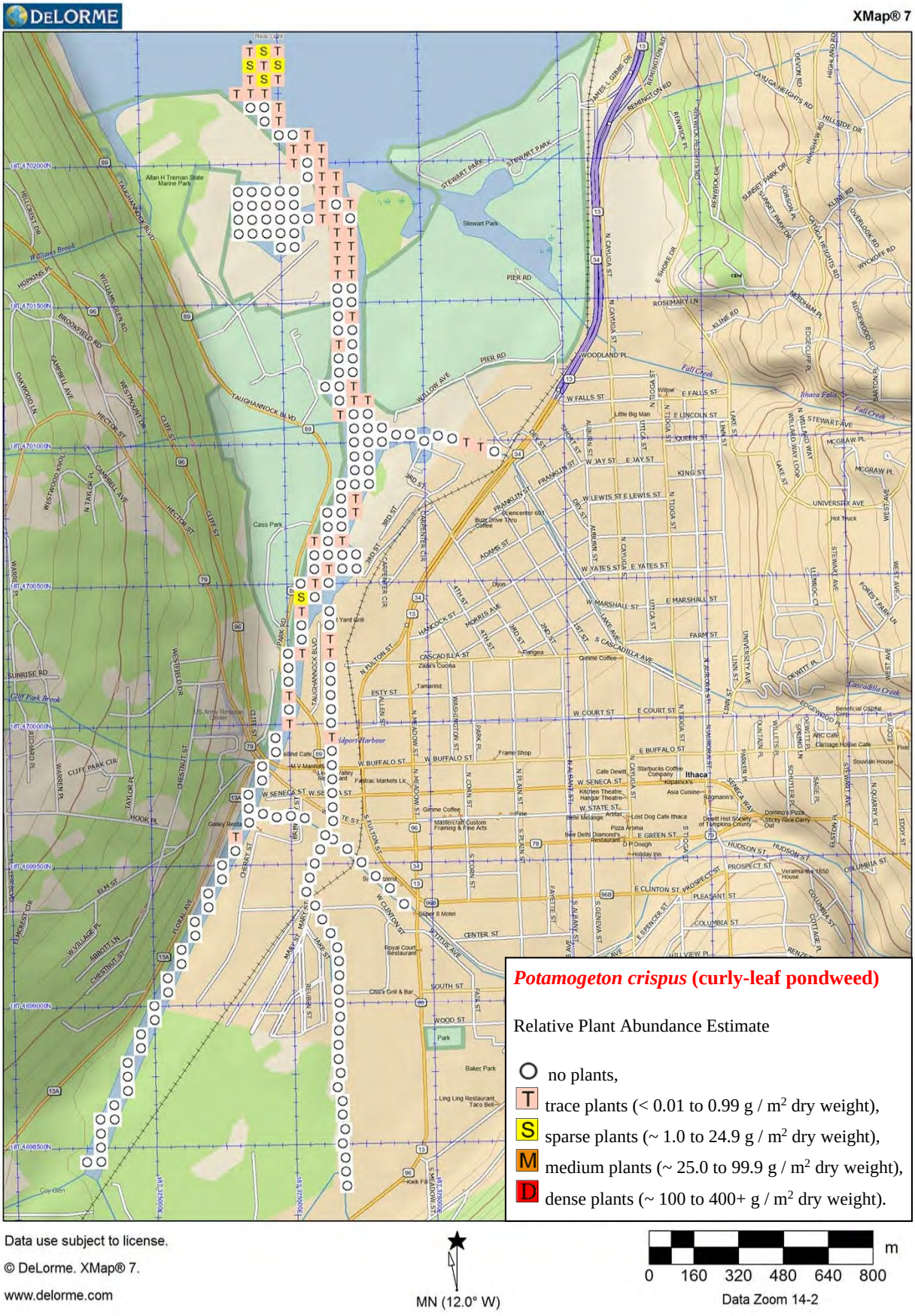
Map Inlet-7. *Hydrilla verticillata* (hydrilla) as abundance by two rake tosses.



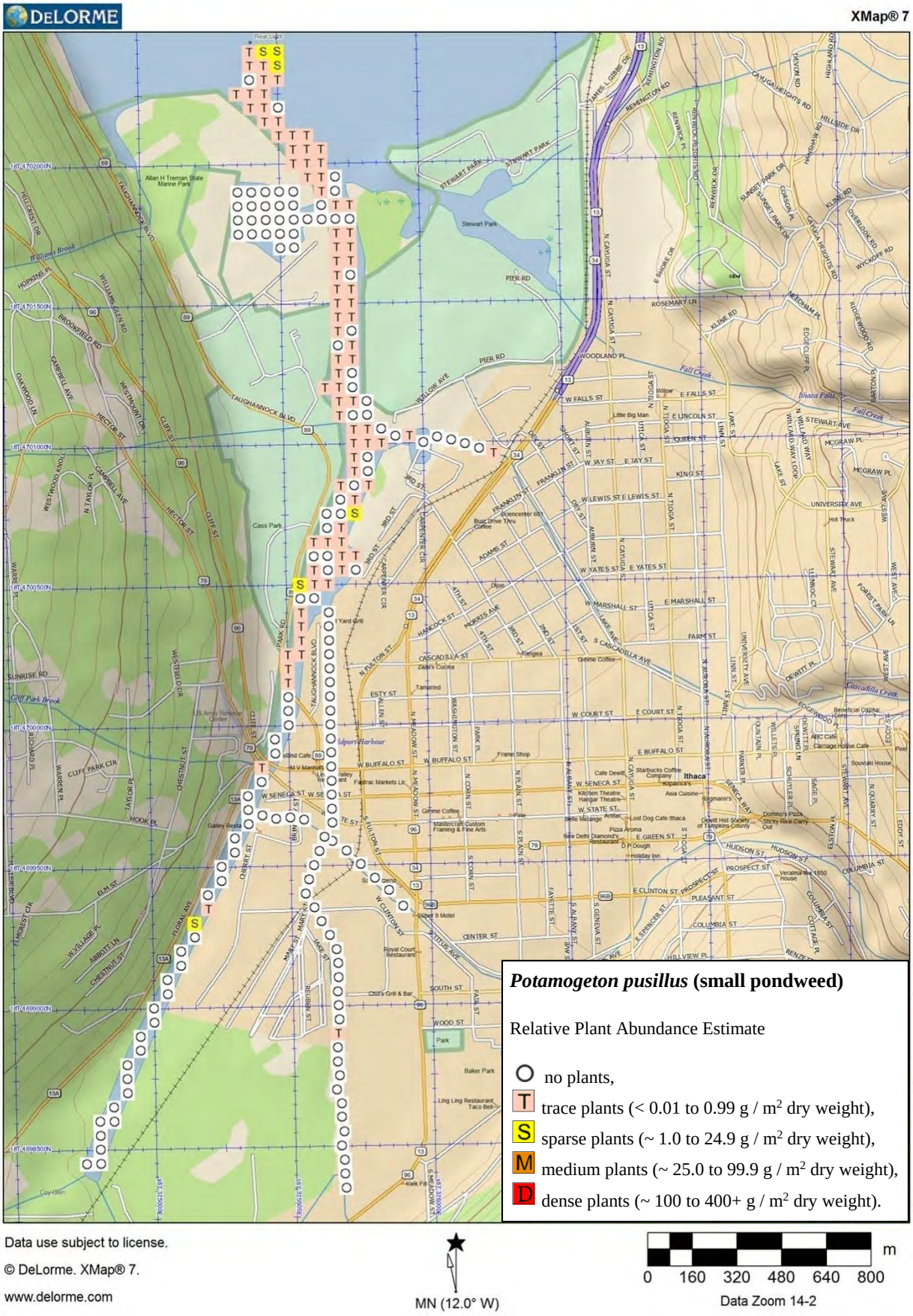
Map Inlet-8. *Myriophyllum spicatum* (Eurasian watermilfoil) as abundance by two rake tosses.



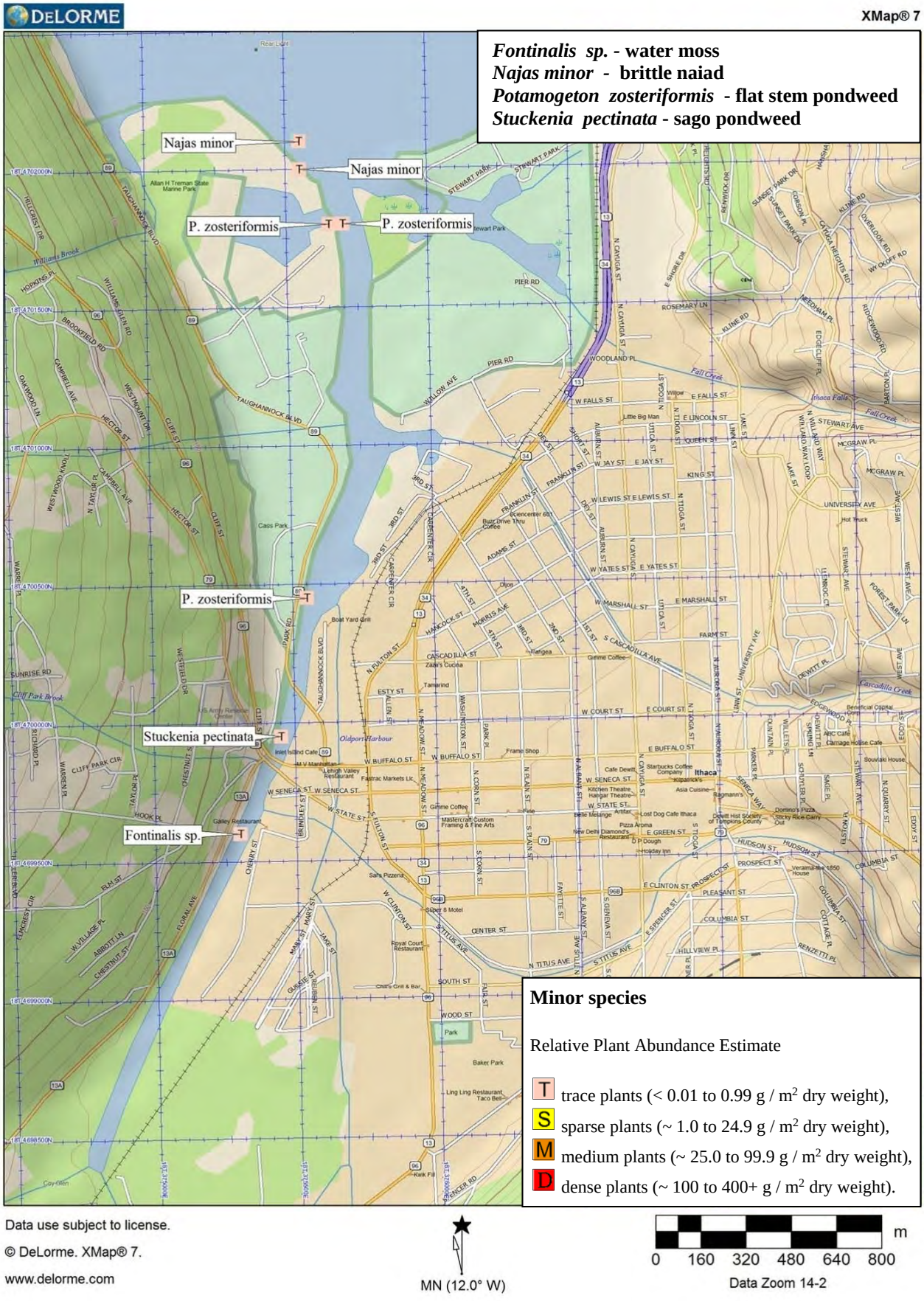
Map Inlet-9. *Nitellopsis obtusa* (starry stonewort) as abundance by two rake tosses.



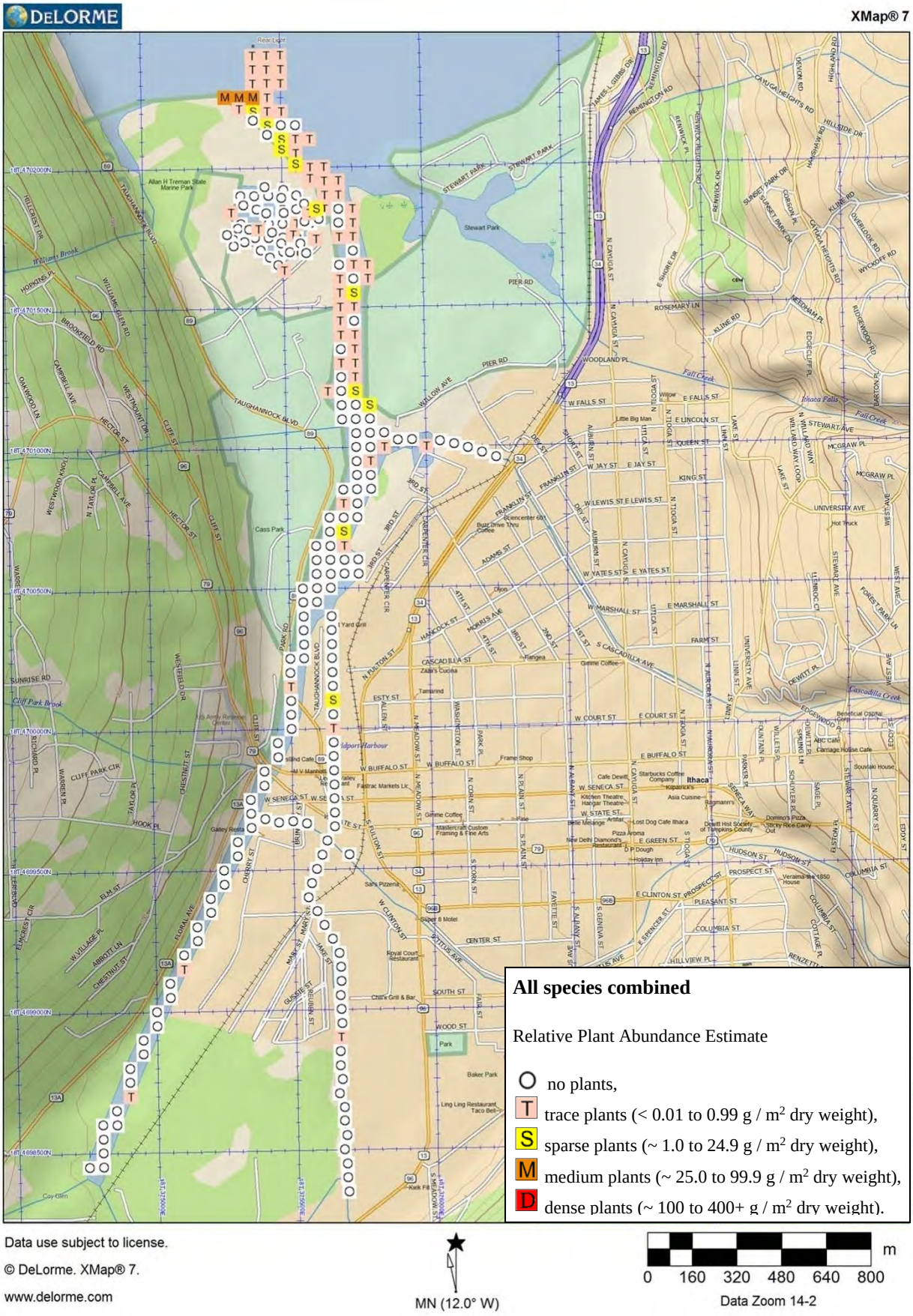
Map Inlet-10. *Potamogeton crispus* (curly-leaf pondweed) as abundance by two rake tosses.



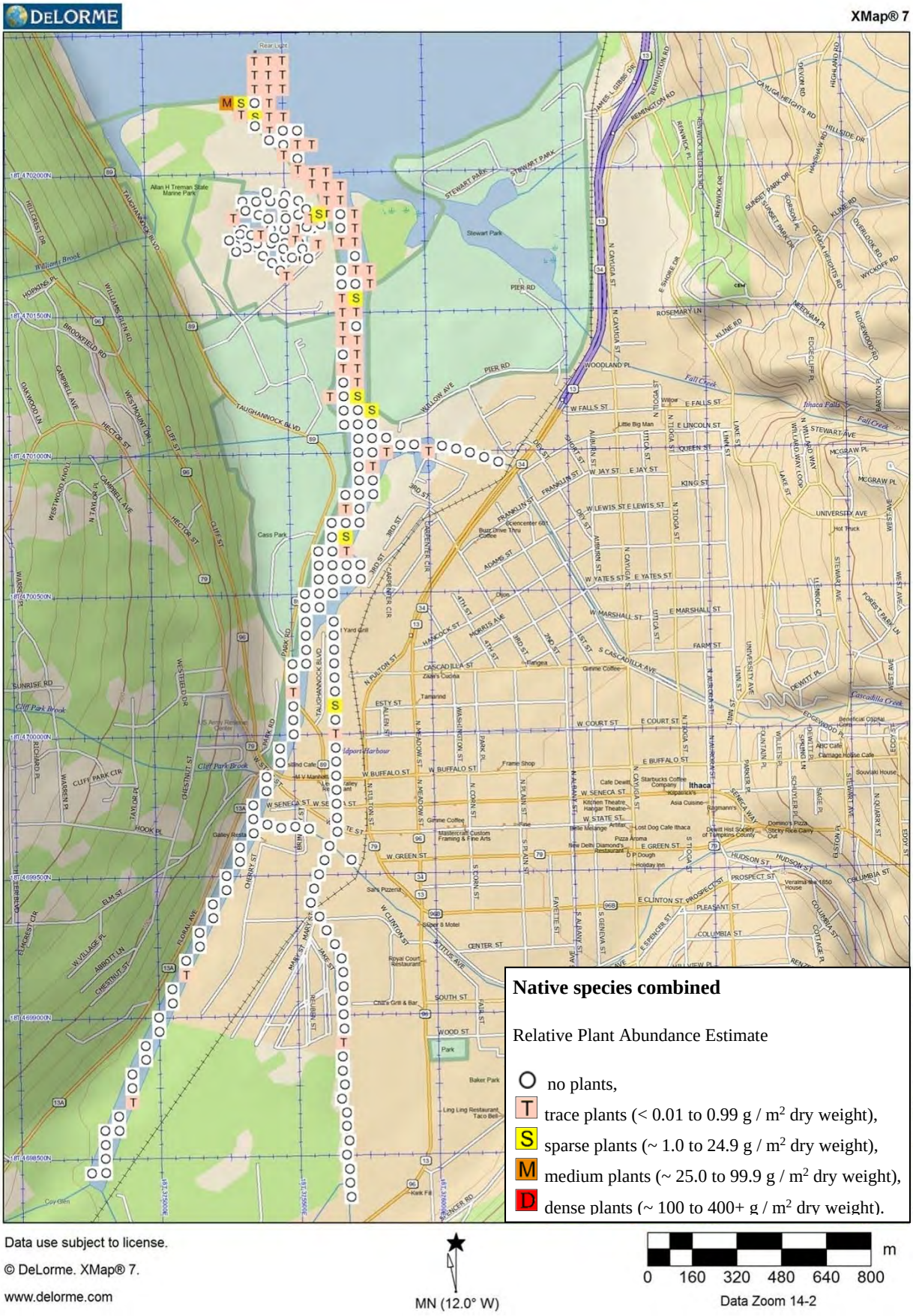
Map Inlet-11. *Potamogeton pusillus* (small pondweed) as abundance by two rake tosses.



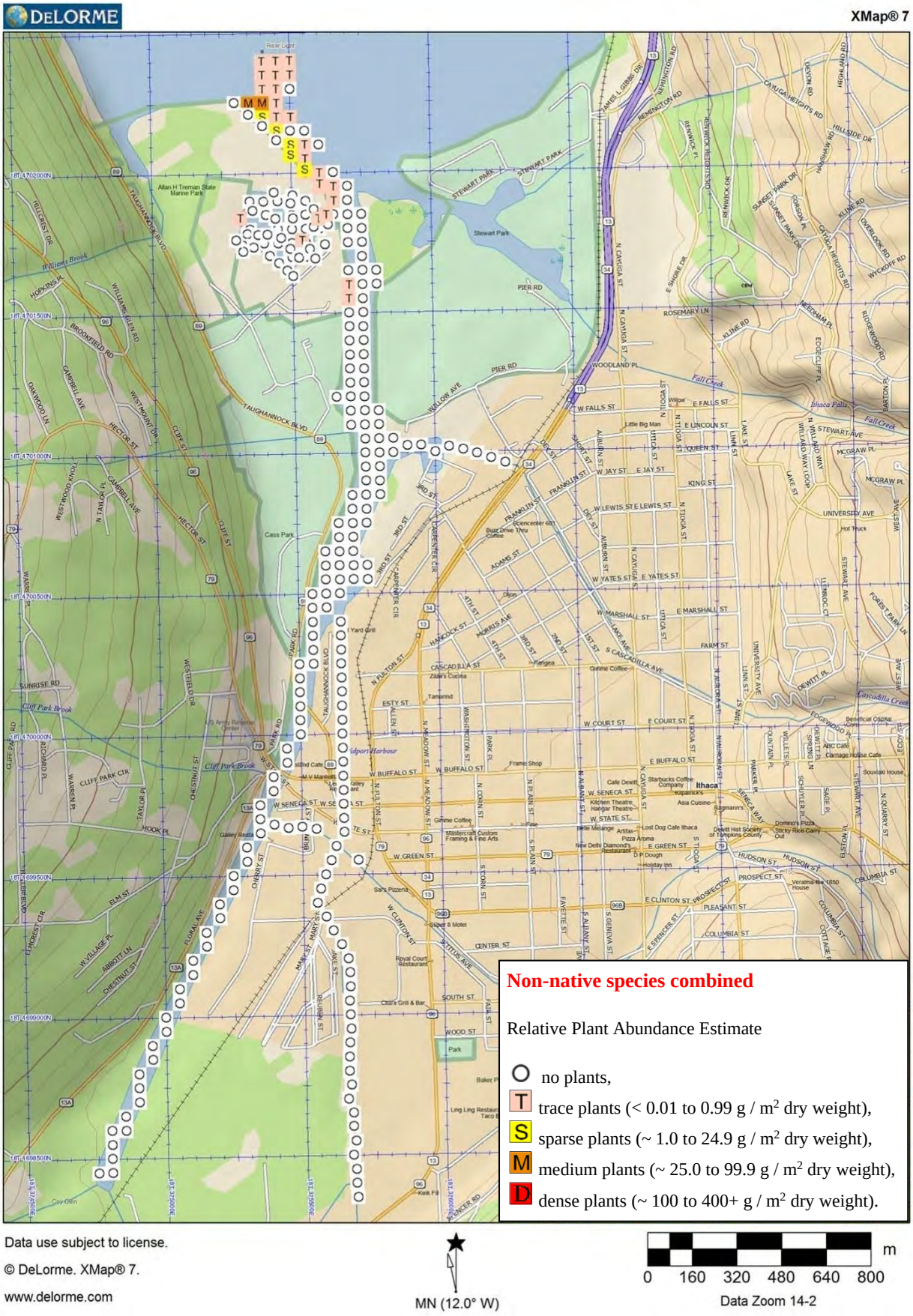
Map Inlet-12. Minor species found in the Inlet and Lighthouse Area as abundance by two rake tosses.



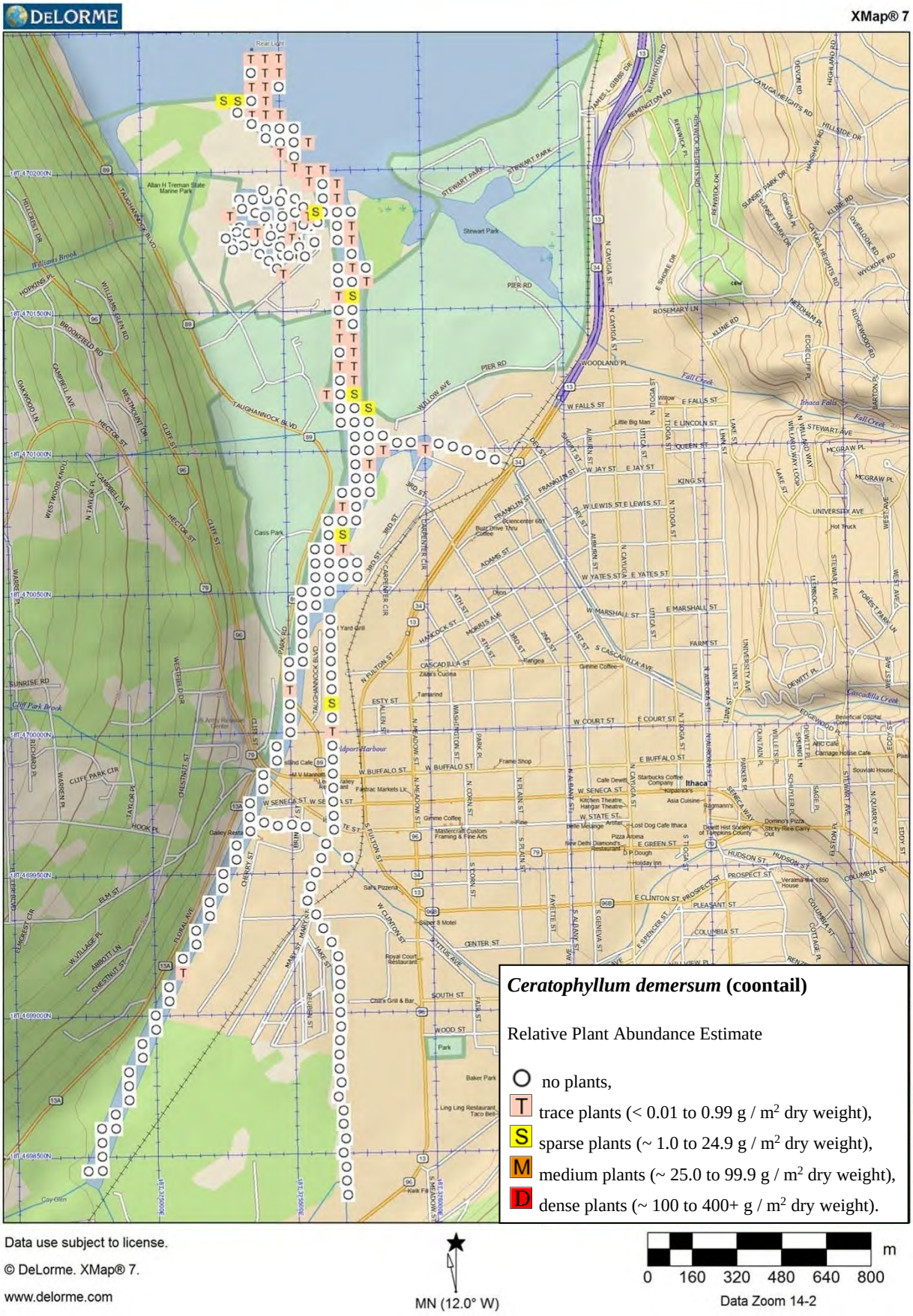
Map Inlet-13. All species combined post-herbicide as abundance by two rake tosses.



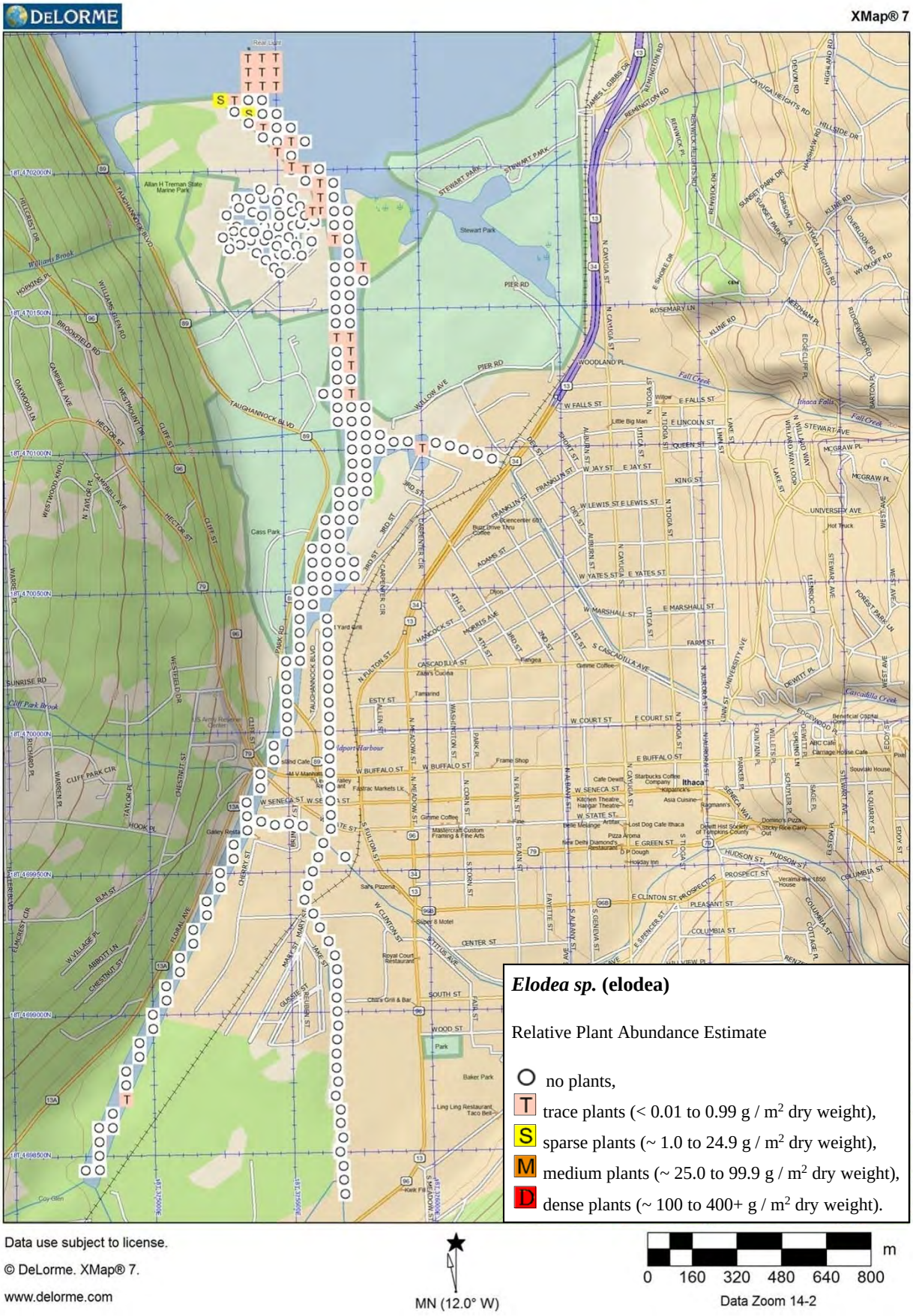
Map Inlet-14. Native species combined post-herbicide as abundance by two rake tosses.



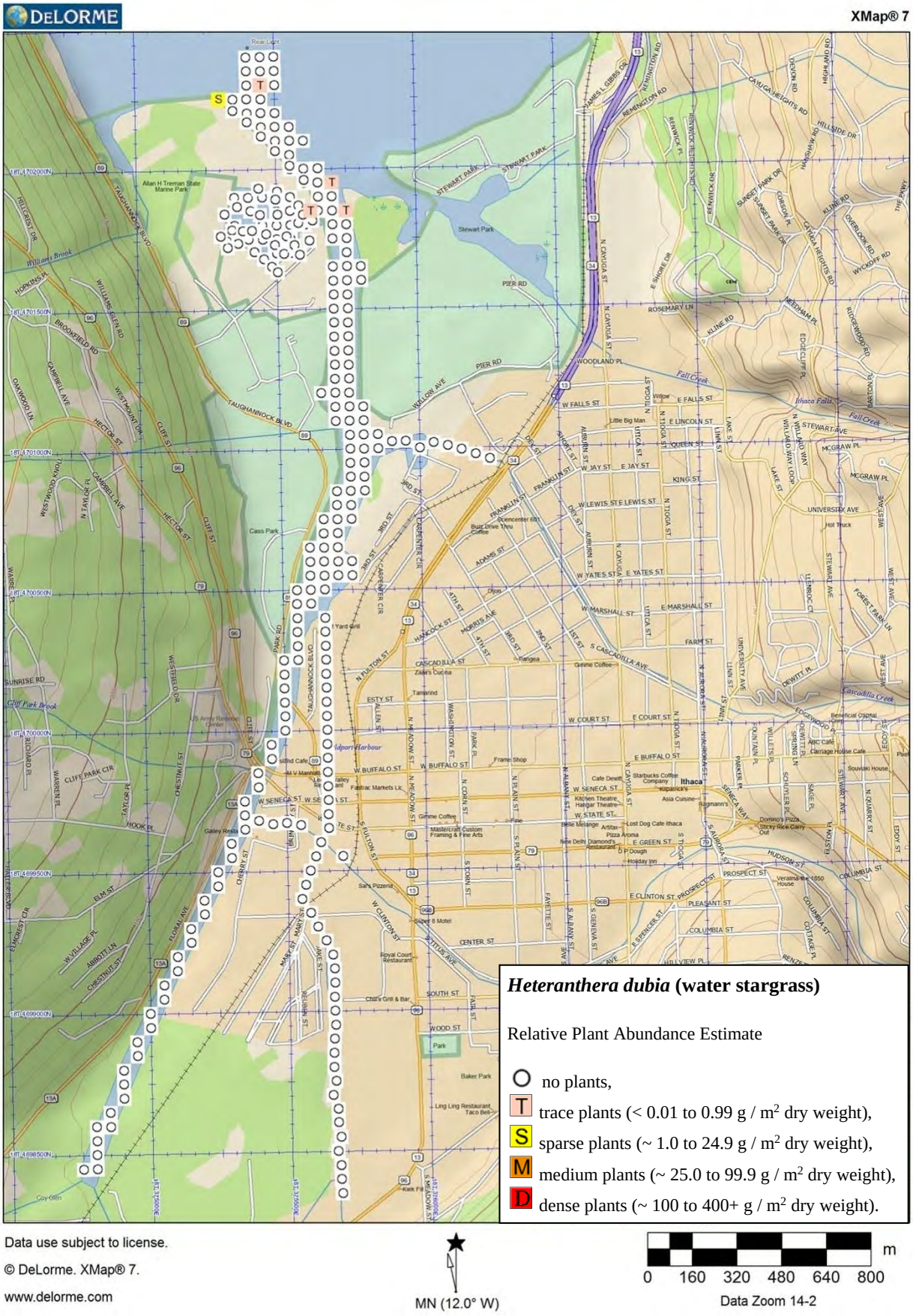
Map Inlet-15. Non-native species combined post-herbicide as abundance by two rake tosses.



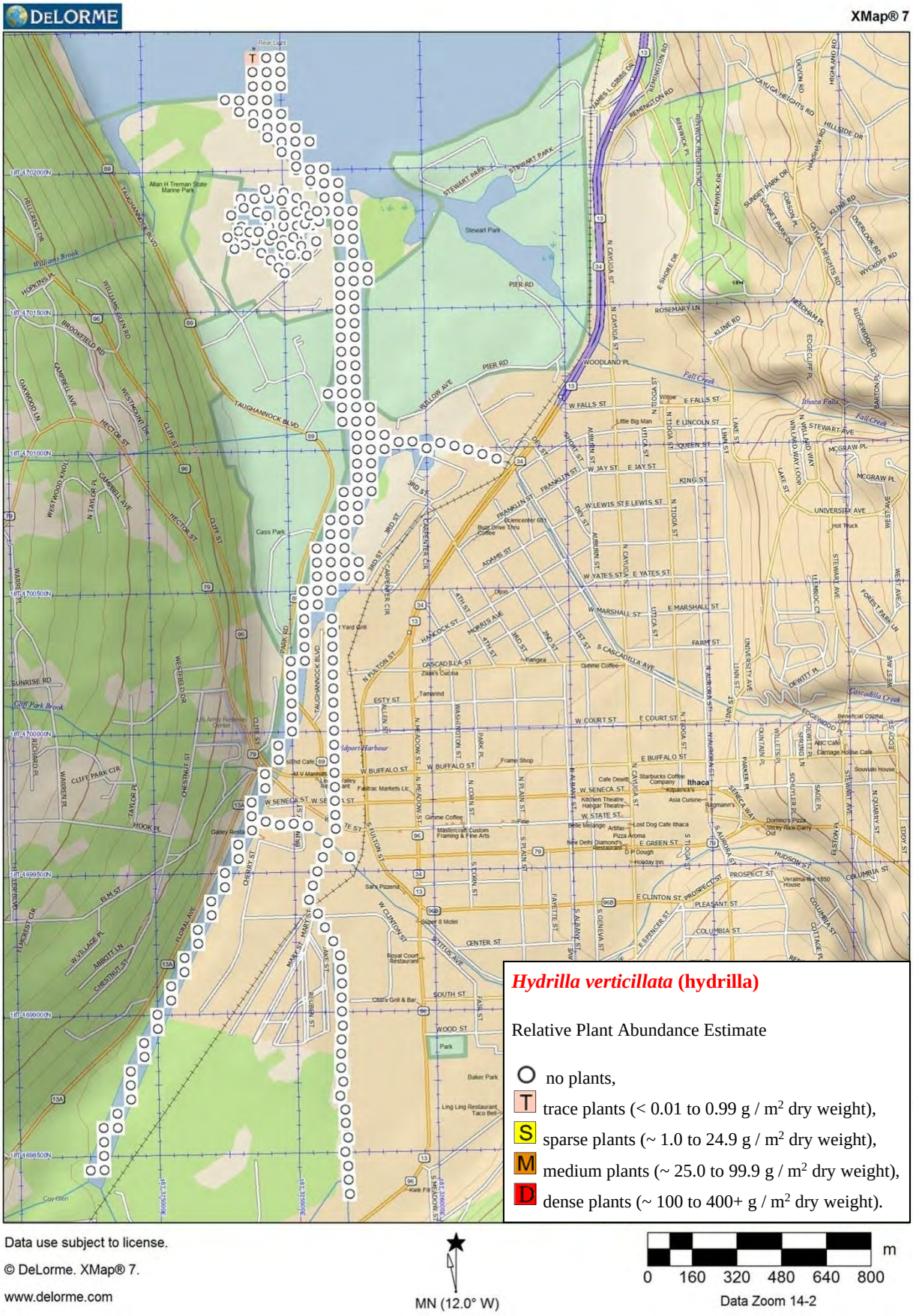
Map Inlet-16. *Ceratophyllum demersum* (coontail) post-herbicide as abundance by two rake tosses.



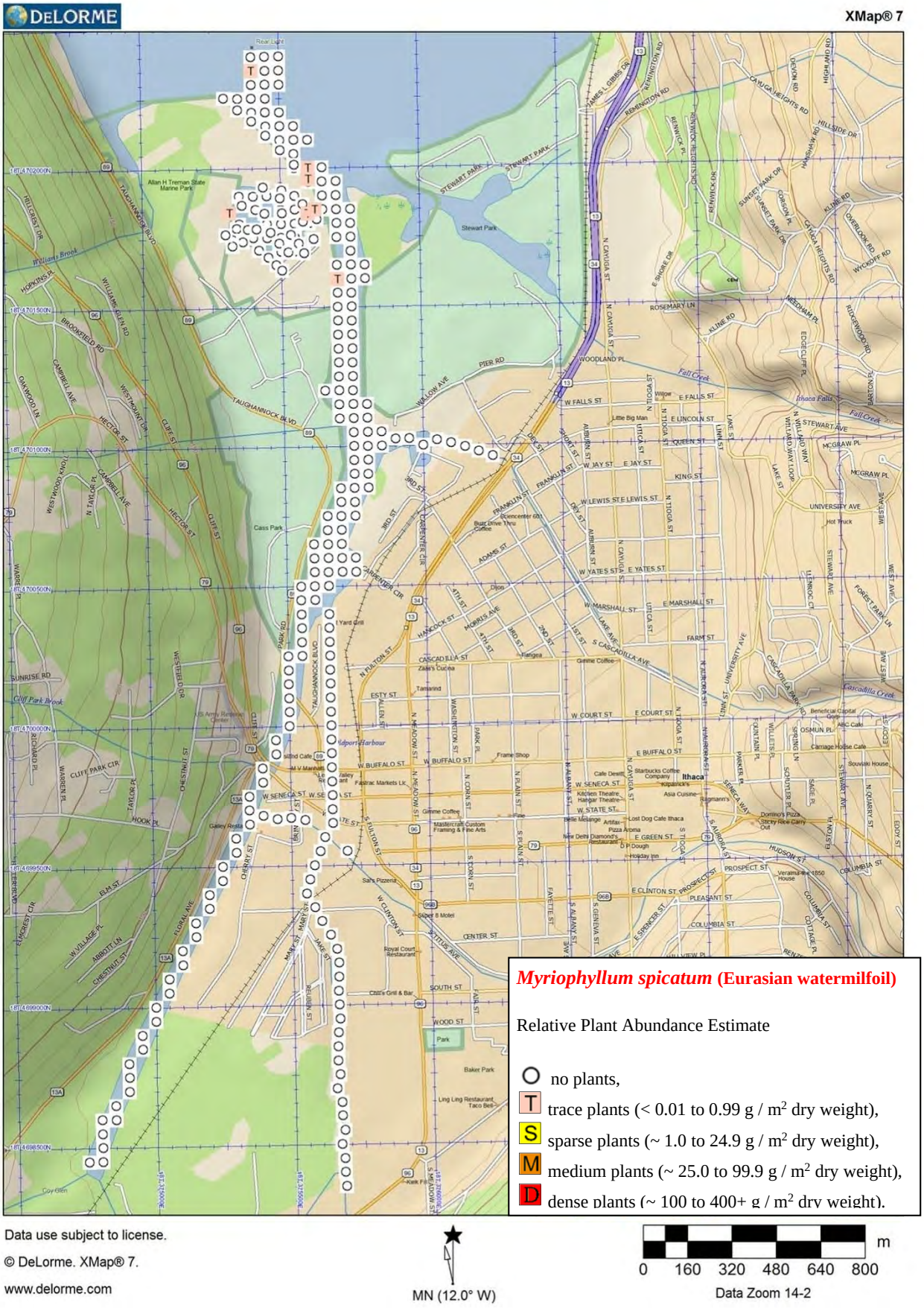
Map Inlet-17. *Elodea sp.* (elodea) post-herbicide as abundance by two rake tosses.



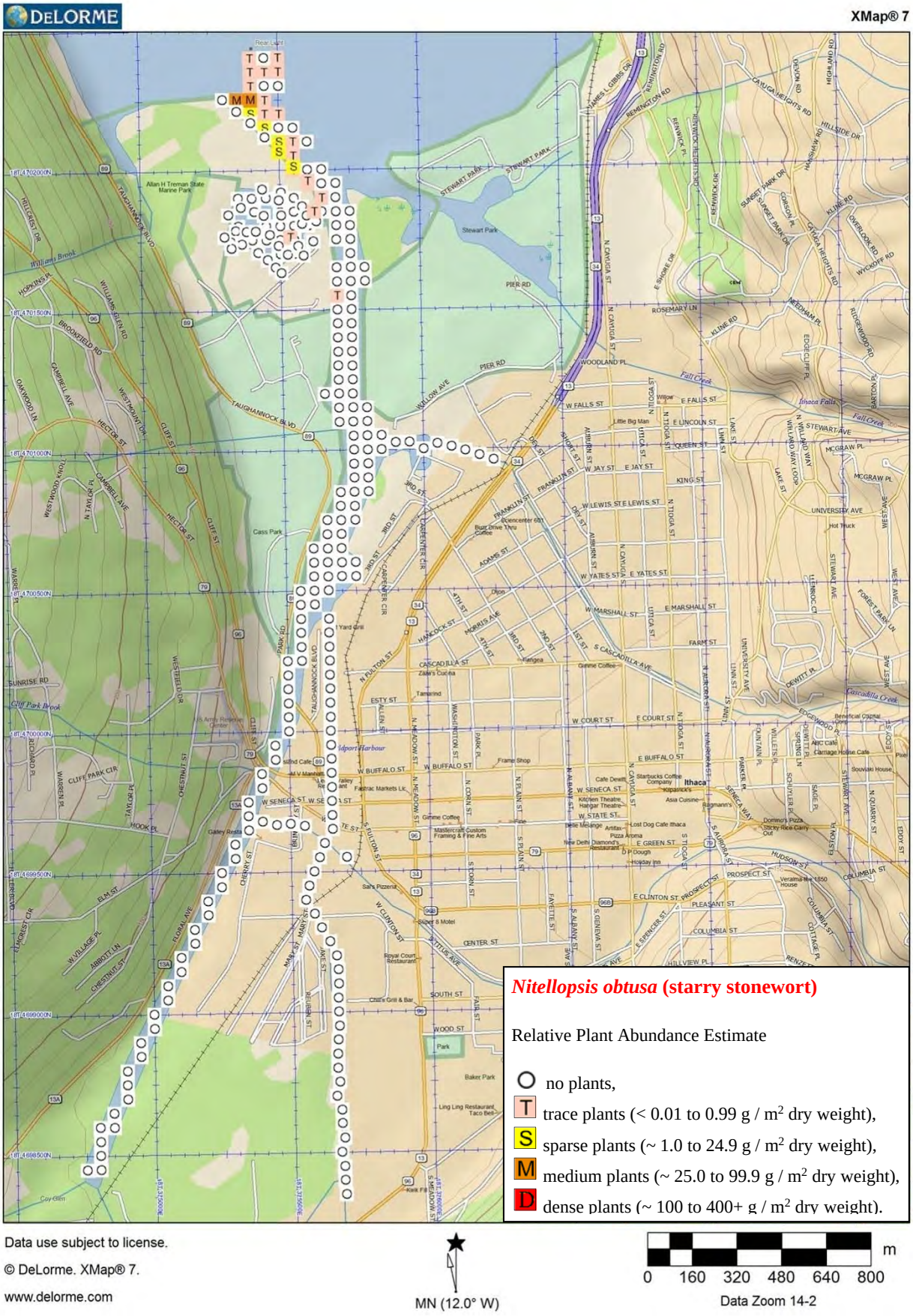
Map Inlet-18. *Heteranthera dubia* (water stargrass) post-herbicide as abundance by two rake tosses.



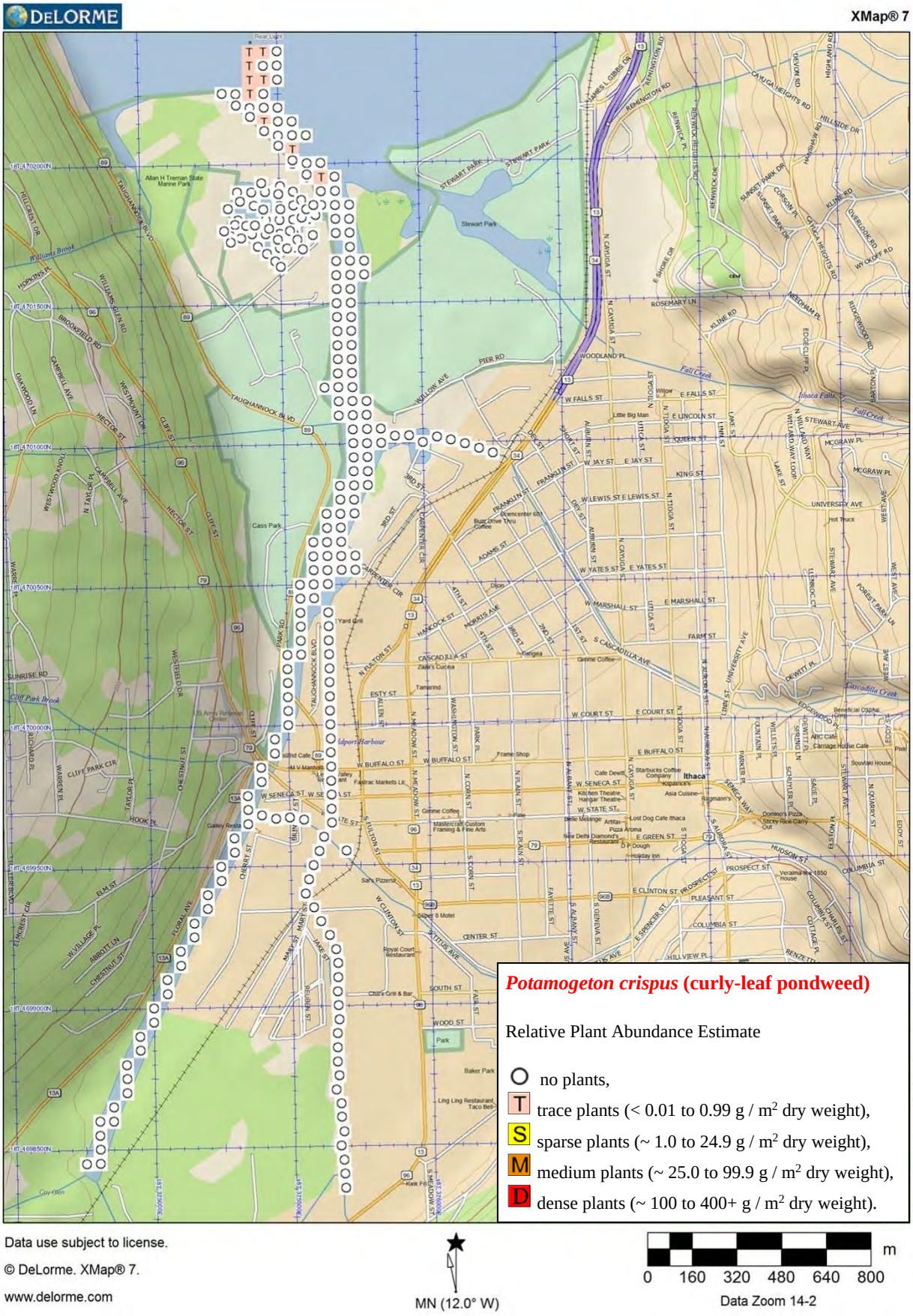
Map Inlet-19. *Hydrilla verticillata* (hydrilla) post-herbicide as abundance by two rake tosses.



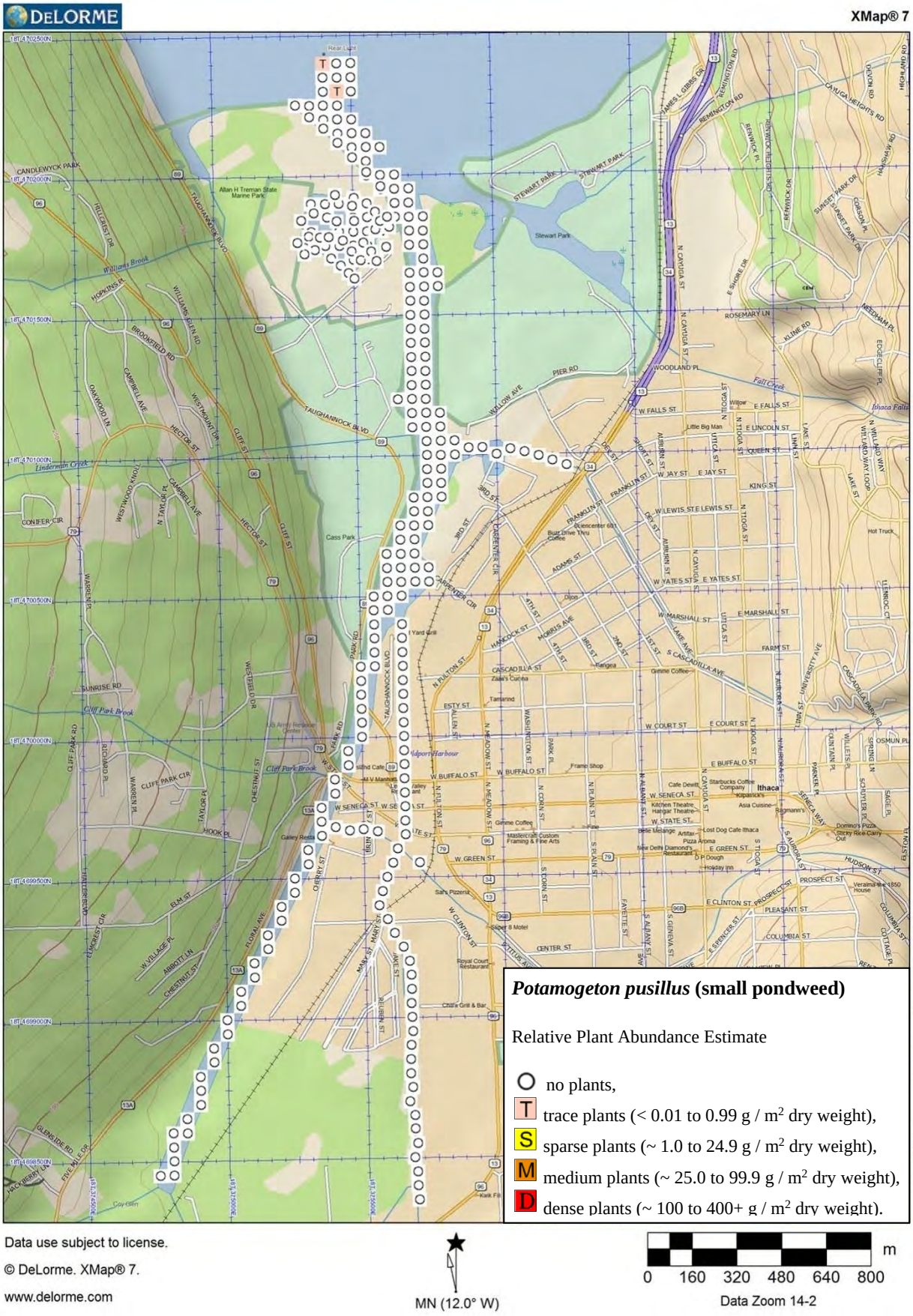
Map Inlet-20. *Myriophyllum spicatum* (Eurasian watermilfoil) post-herbicide as abundance by two rake tosses.



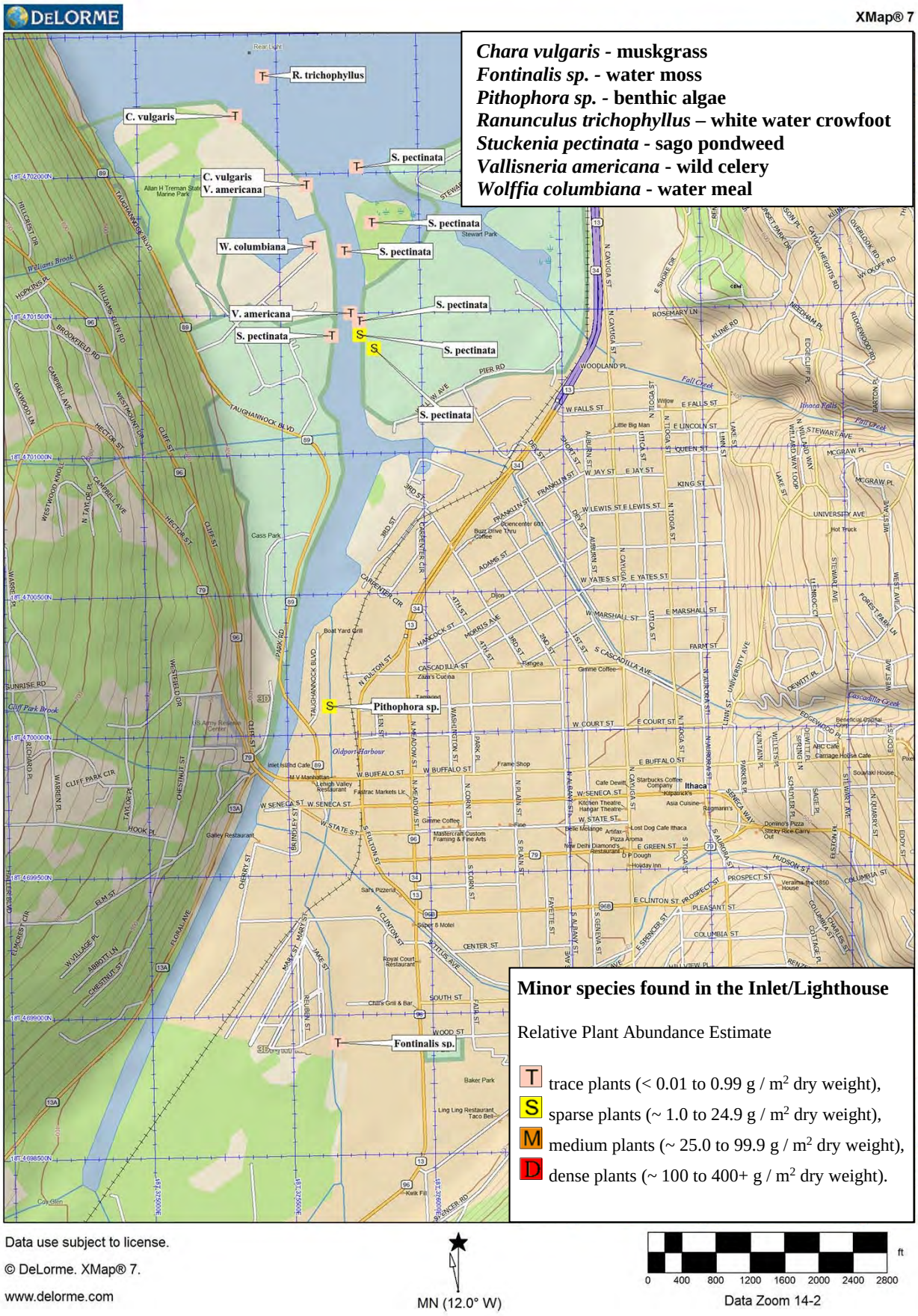
Map Inlet-21. *Nitellopsis obtusa* (starry stonewort) post-herbicide as abundance by two rake tosses.



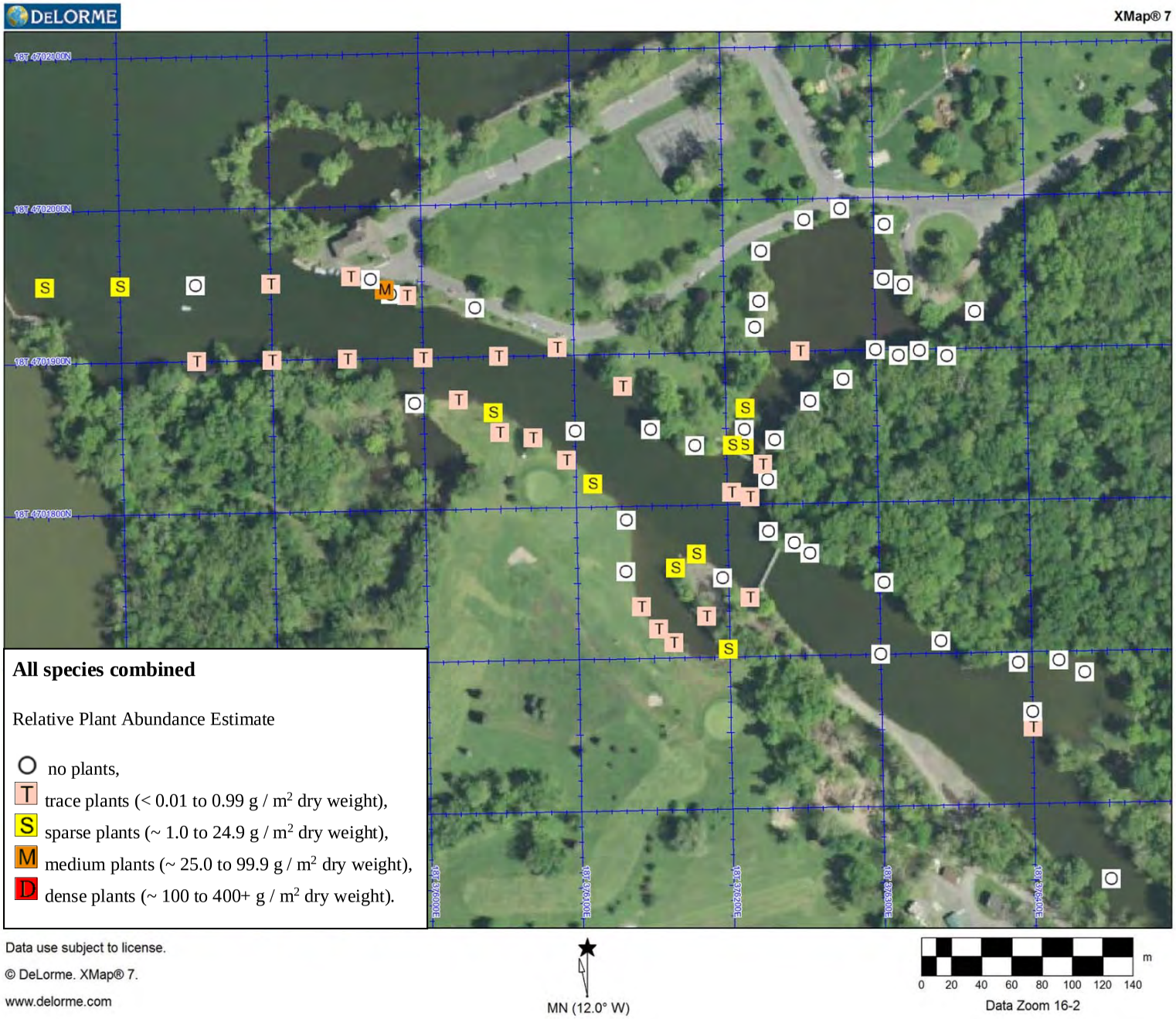
Map Inlet-22. *Potamogeton crispus* (curly-leaf pondweed) post-herbicide as abundance by two rake tosses.



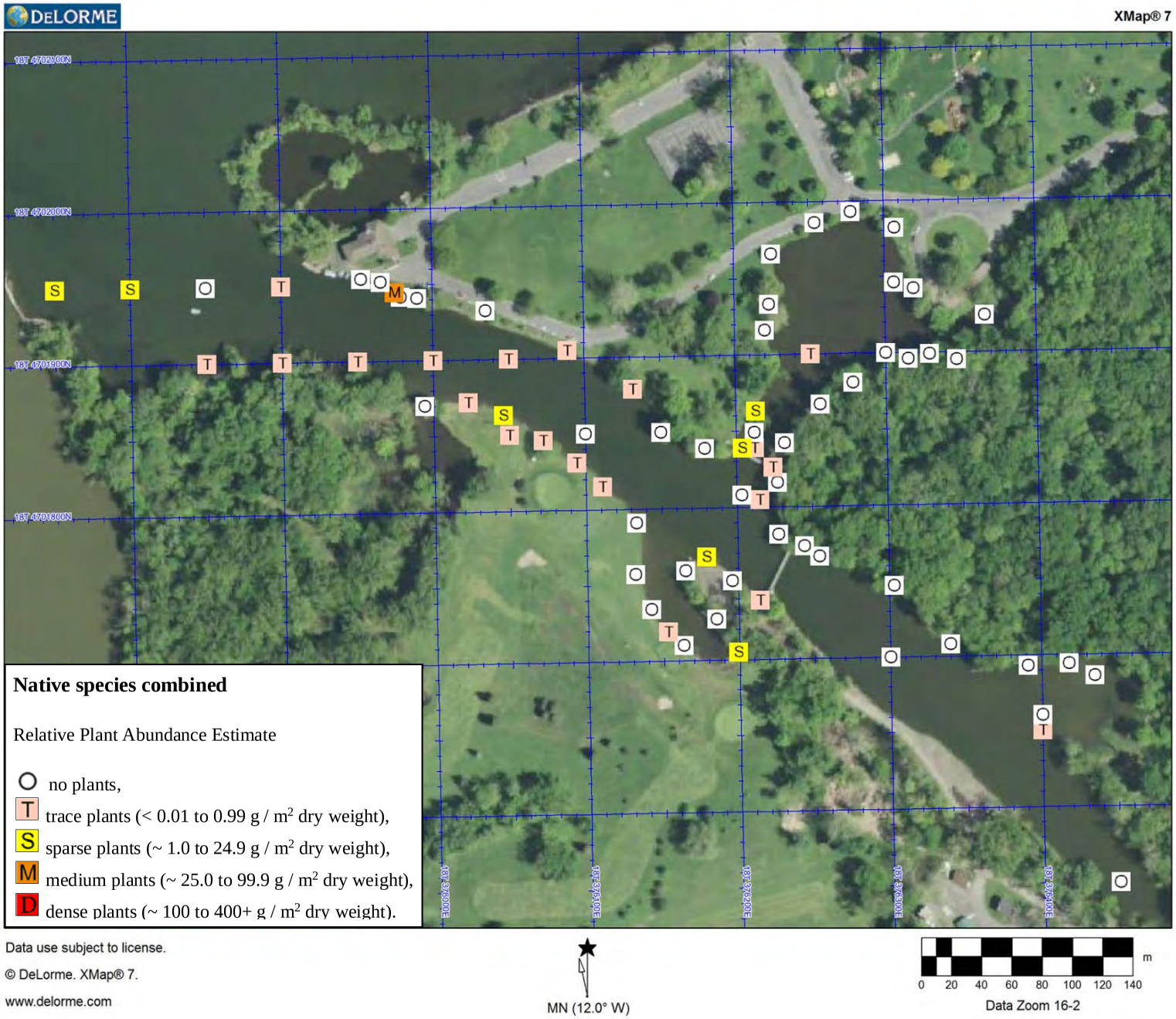
Map Inlet-23. *Potamogeton pusillus* (small pondweed) post-herbicide as abundance by two rake tosses.



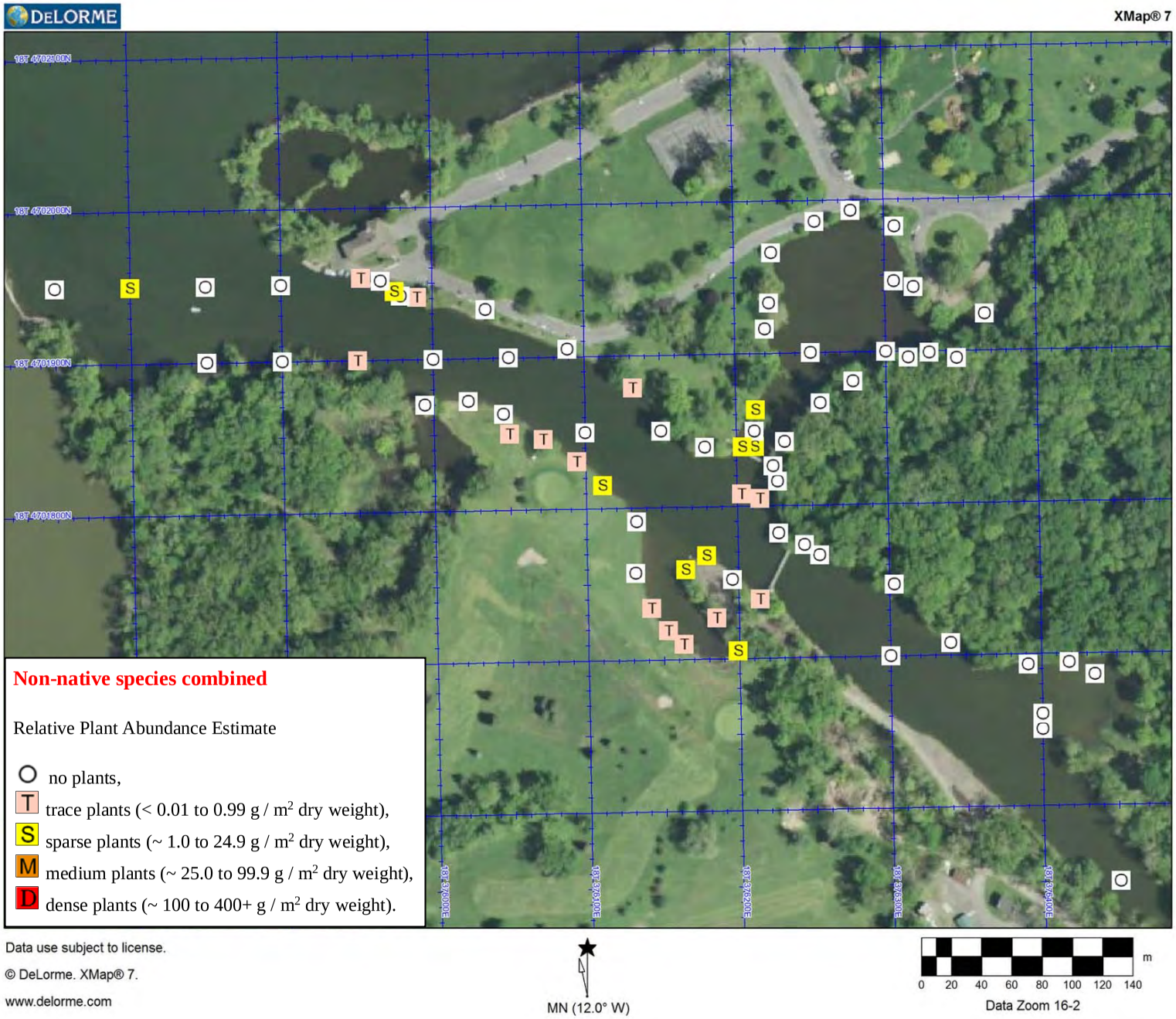
Map Inlet-24. Post-herbicide minor species in Inlet/Lighthouse Area as abundance by two rake tosses.



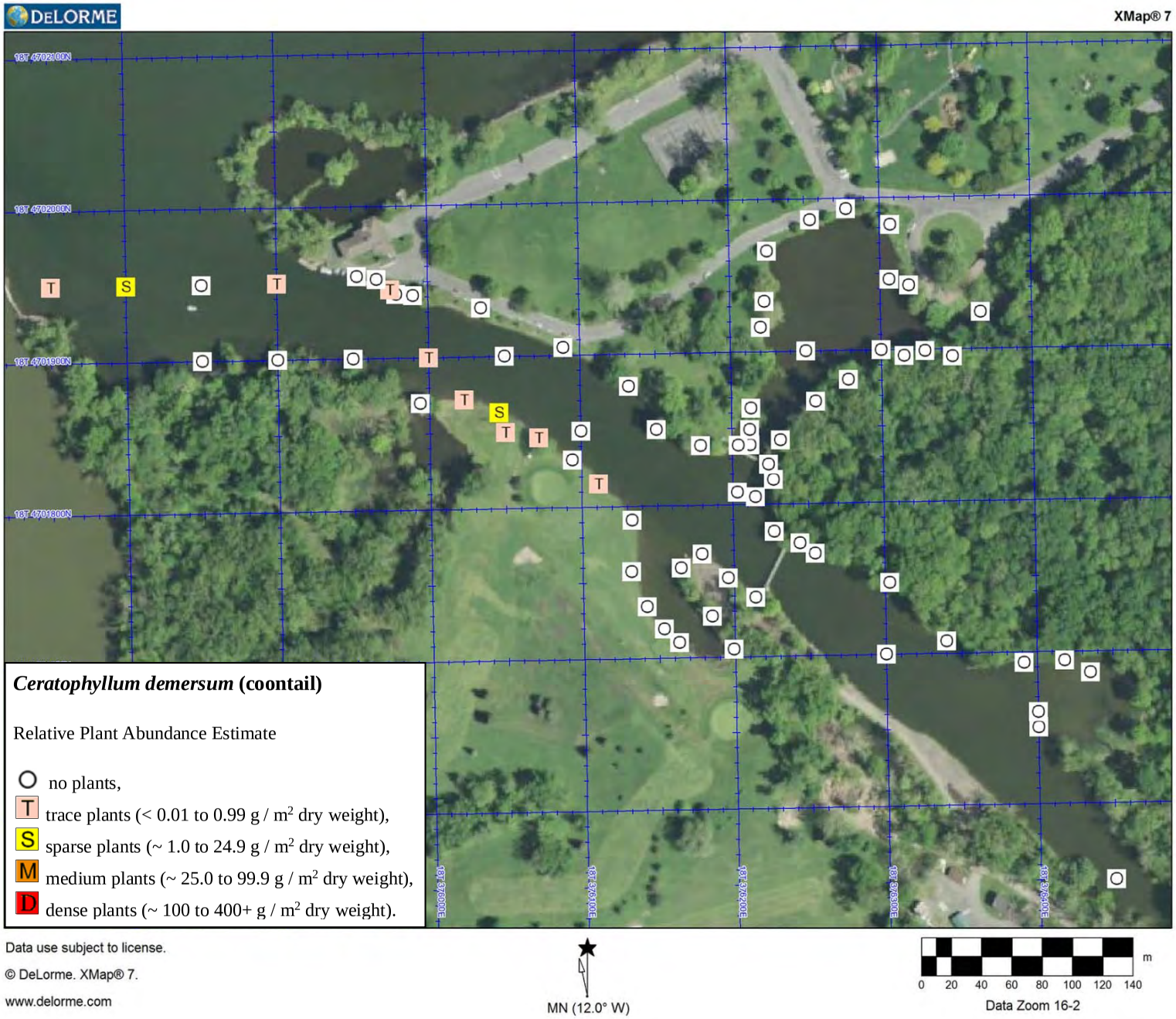
Map Fall Creek-1. All species combined post-herbicide as abundance by two rake tosses.



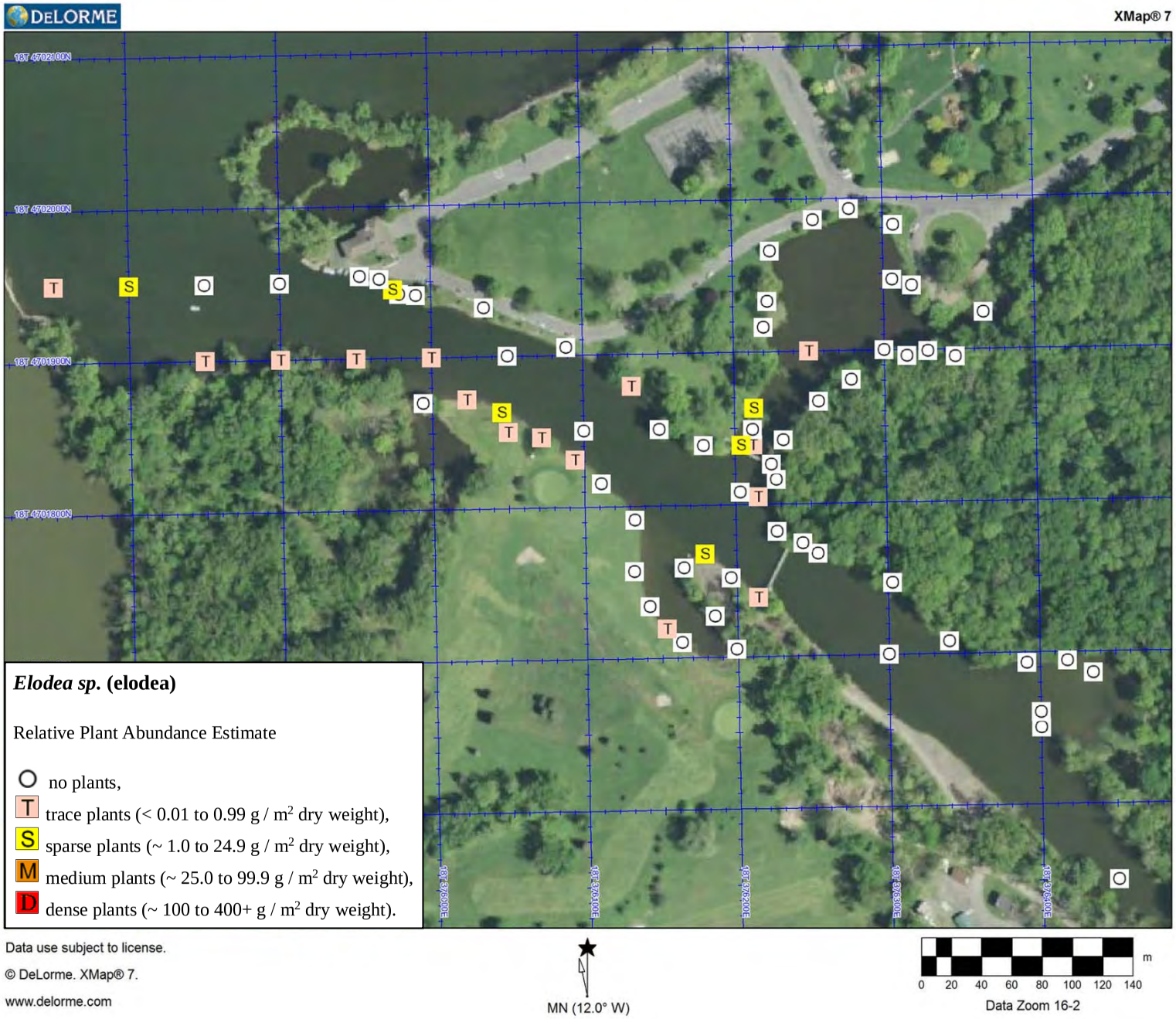
Map Fall Creek-2. Native species combined post-herbicide as abundance by two rake tosses.



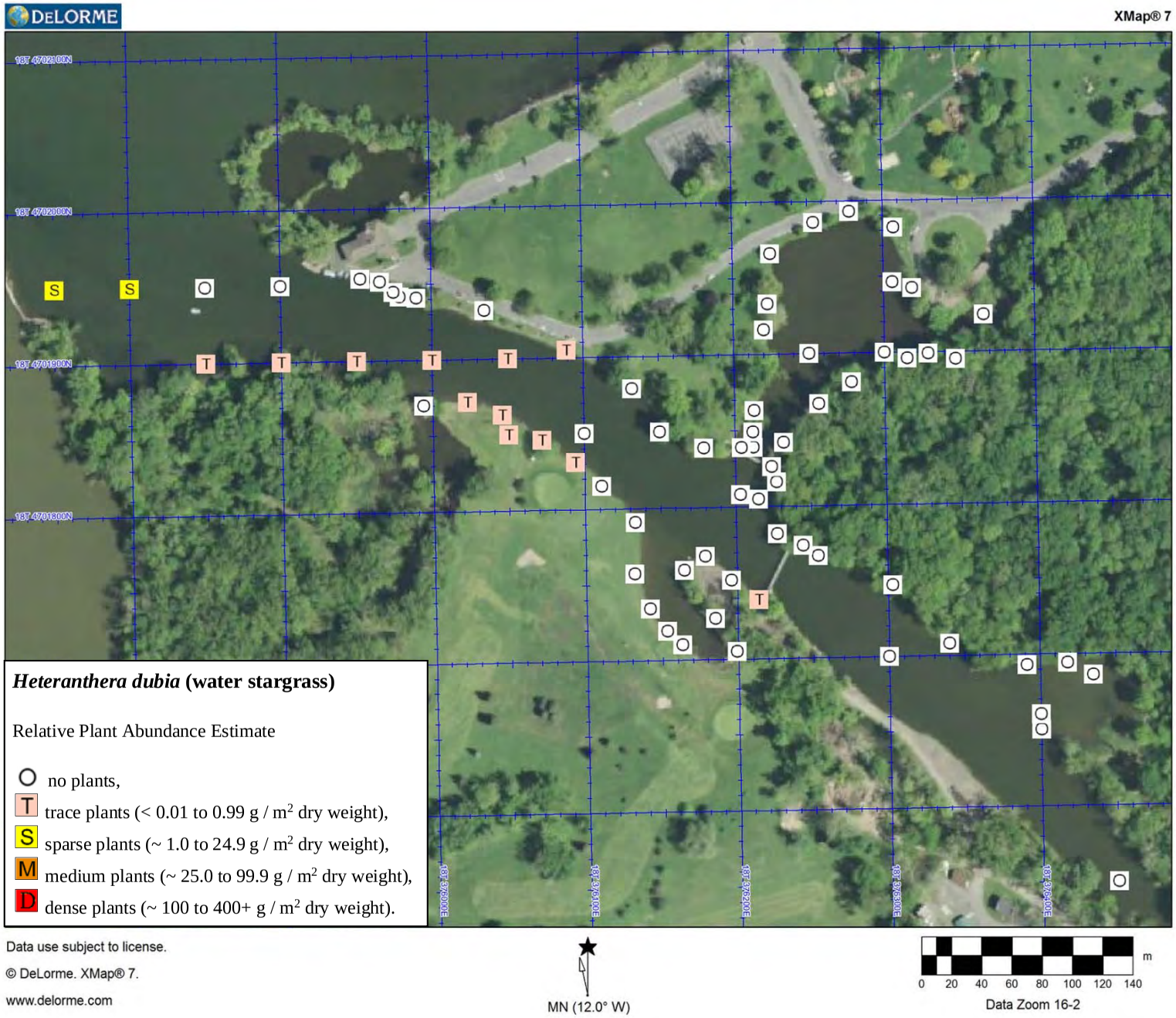
Map Fall Creek-3. Non-native species combined post-herbicide as abundance by two rake tosses.



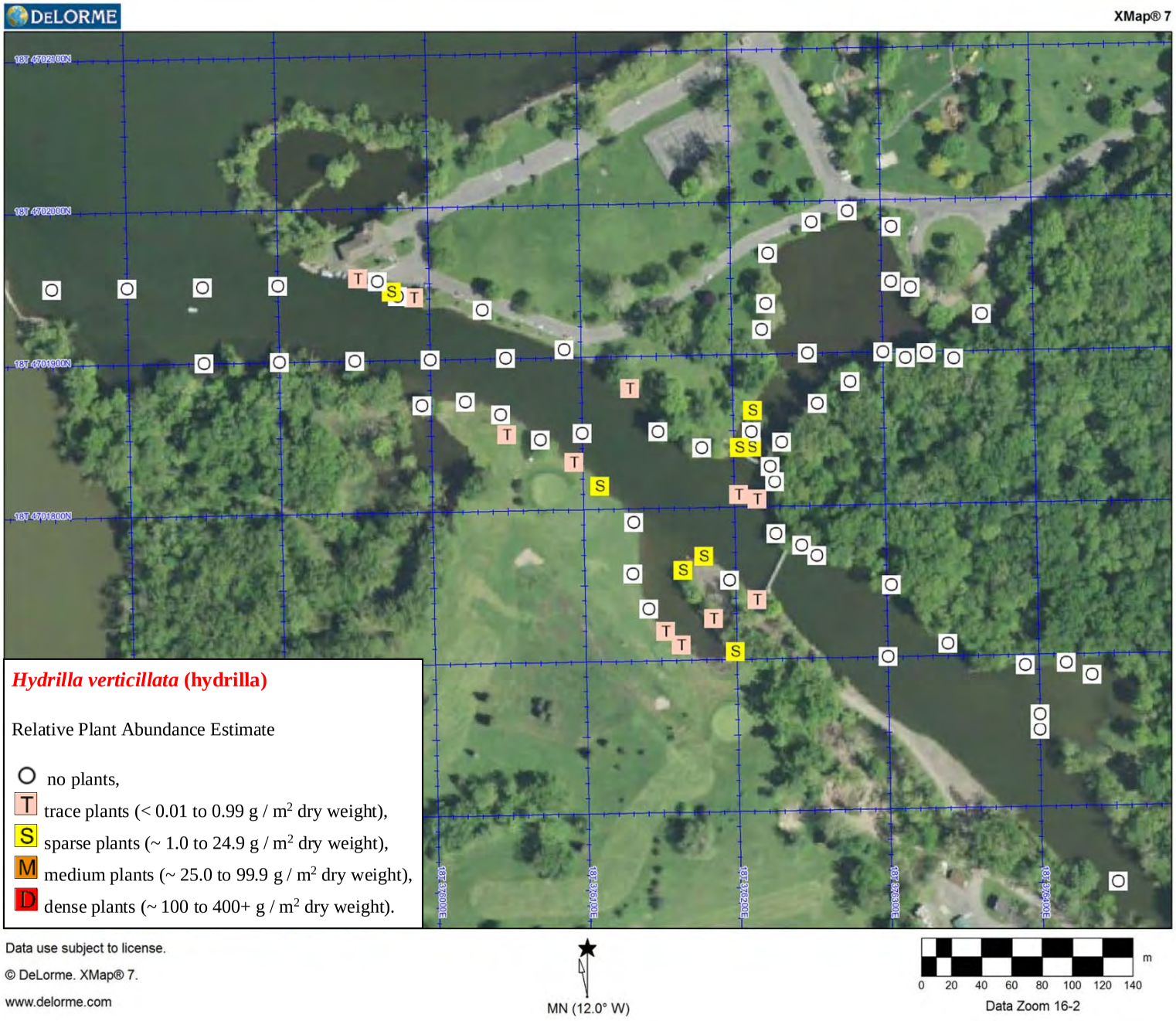
Map Fall Creek-4. *Ceratophyllum demersum* (coontail) post-herbicide as abundance by two rake tosses.



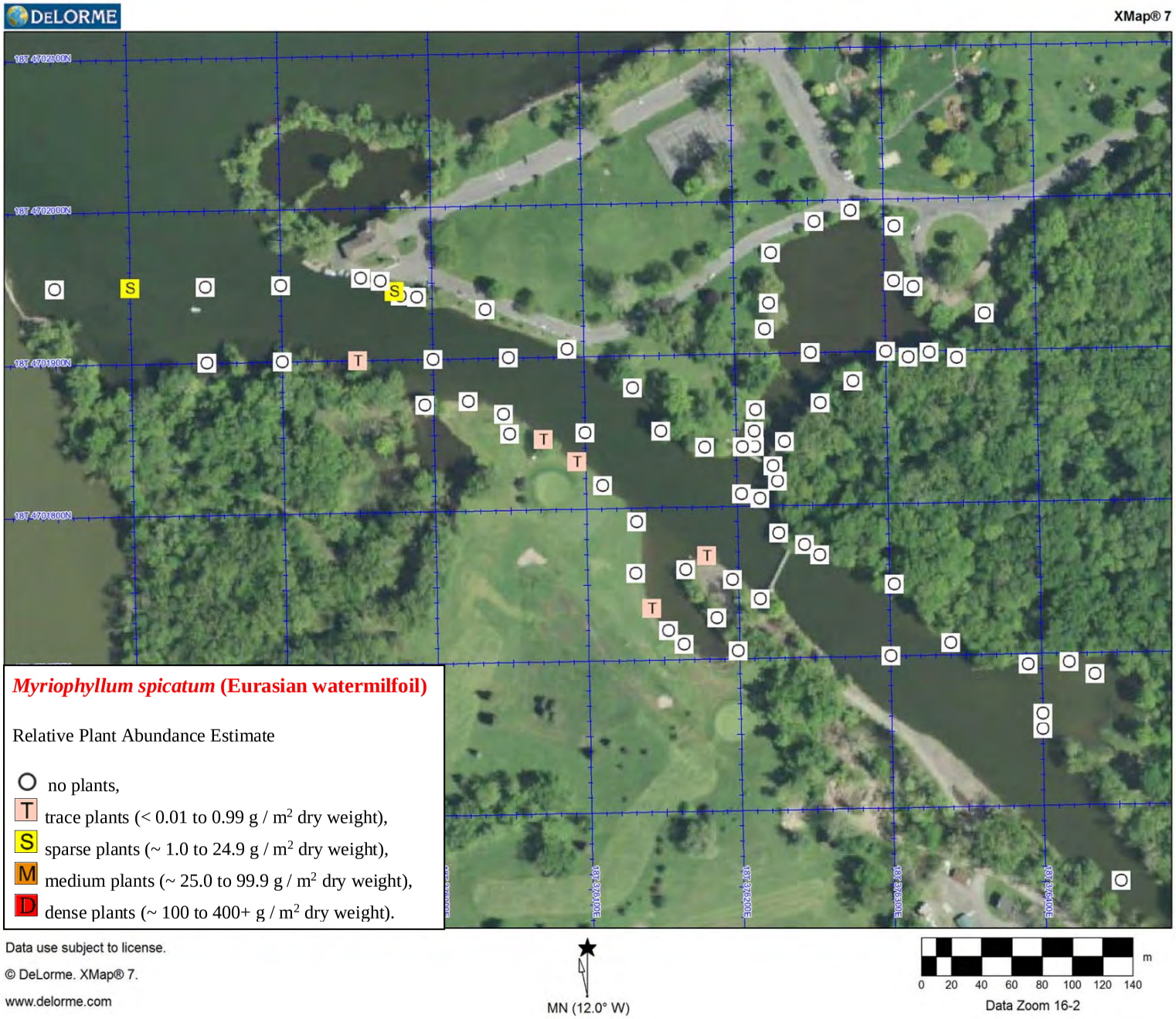
Map Fall Creek-5. *Elodea sp.* (elodea) post-herbicide as abundance by two rake tosses.



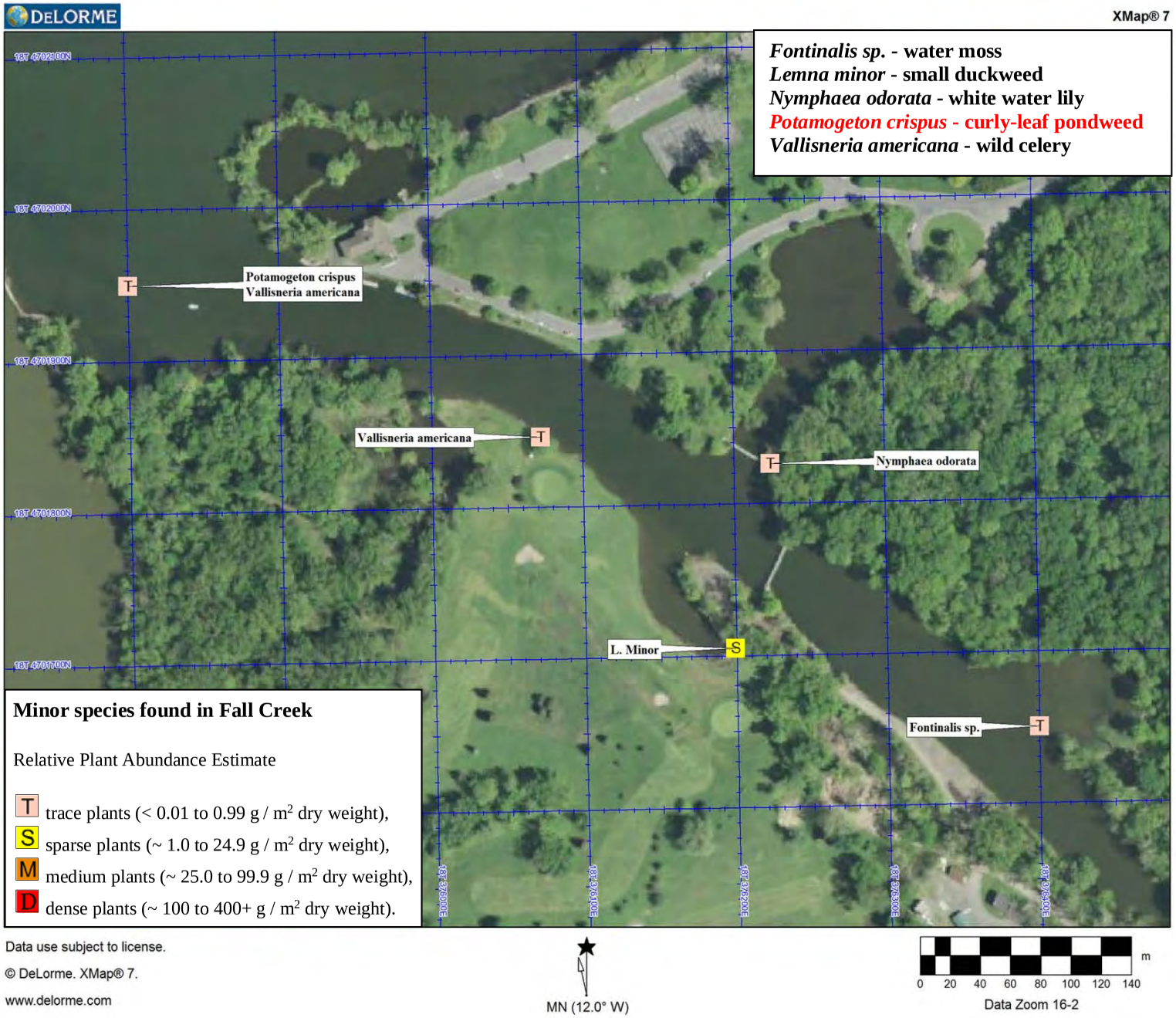
Map Fall Creek-6. *Heteranthera dubia* (water stargrass) post-herbicide as abundance by two rake tosses.



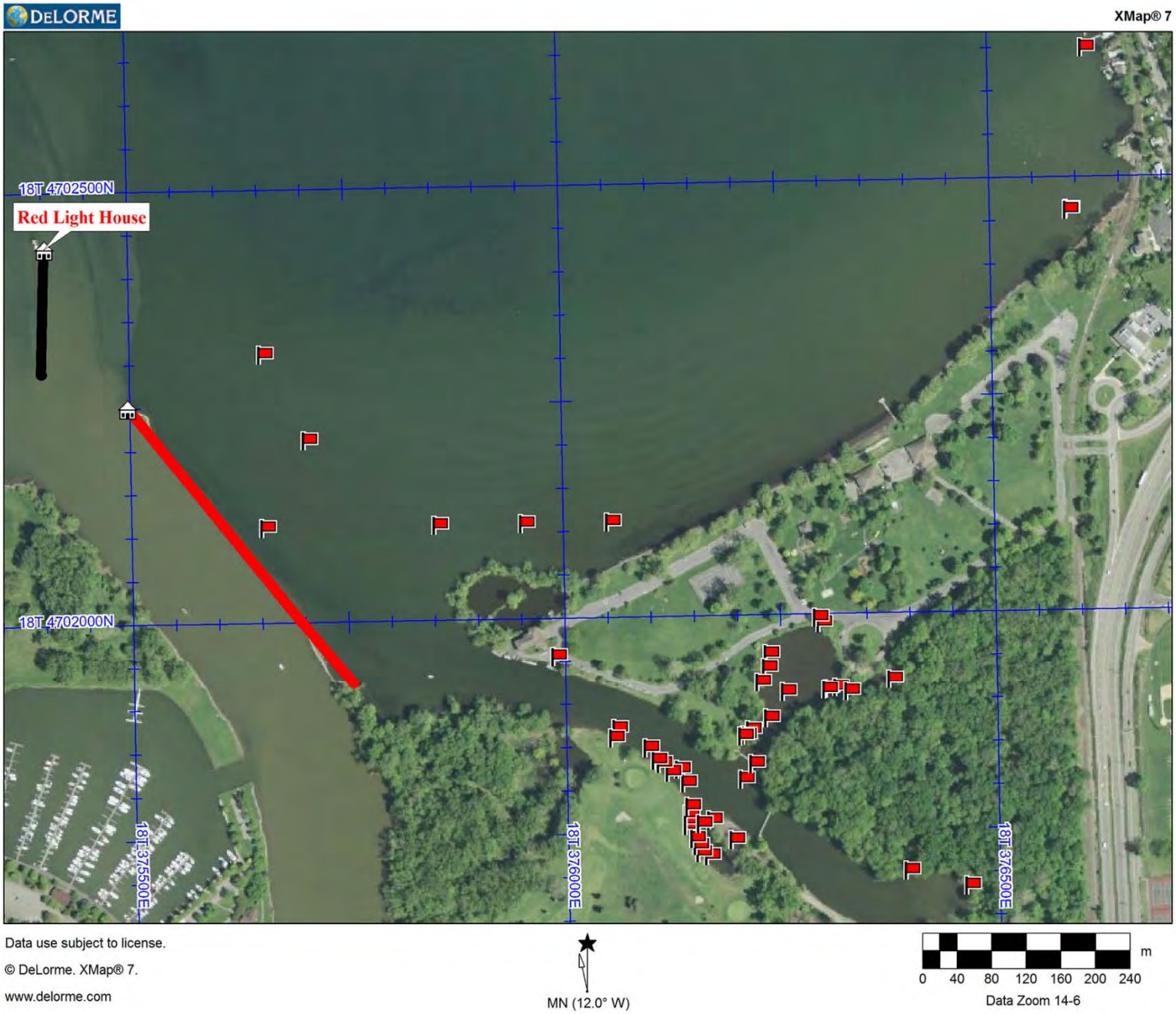
Map Fall Creek-7. *Hydrilla verticillata* (hydrilla) post-herbicide as abundance by two rake tosses.



Map Fall Creek-8. *Myriophyllum spicatum* (Eurasian watermilfoil) post-herbicide as abundance by two rake tosses.

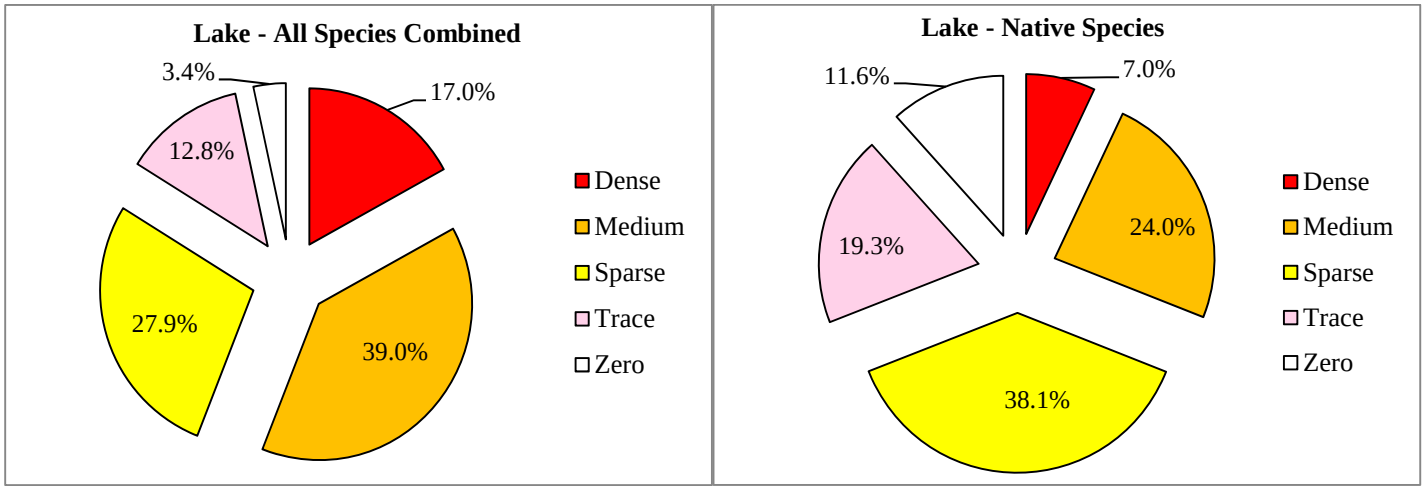


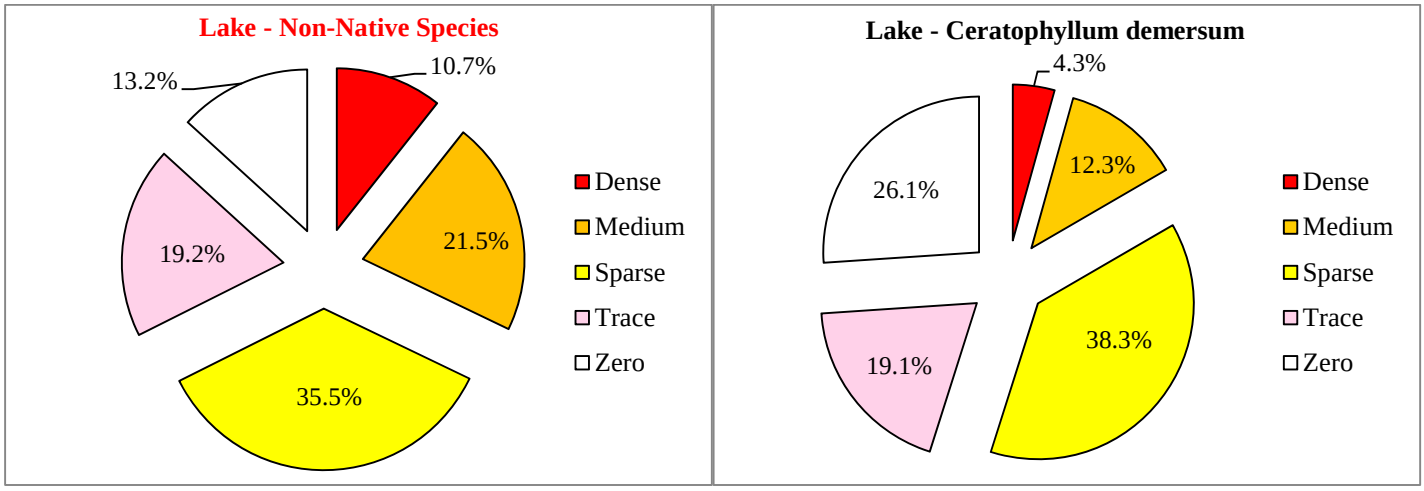
Map Fall Creek-9. Post-herbicide minor species found in Fall Creek as abundance by two rake tosses.

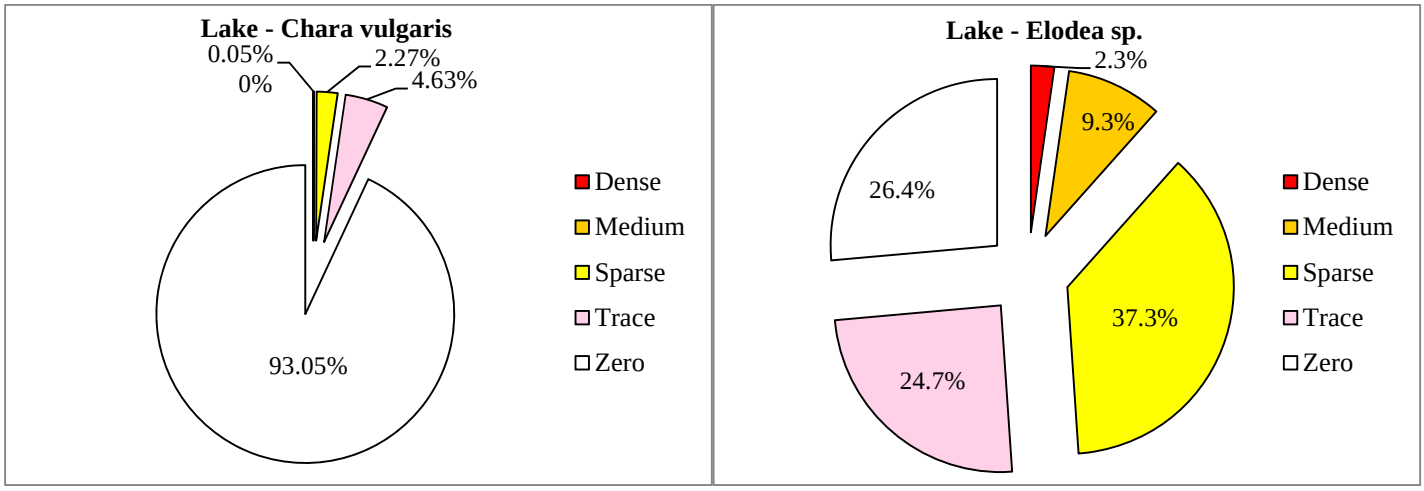


New Hydrilla-1. Pre-herbicide *Hydrilla verticillata* finds in Fall Creek and Cayuga Lake.

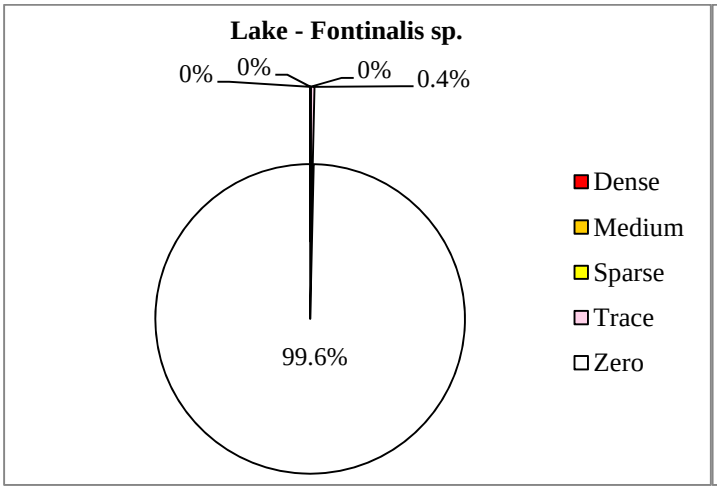
New Hydrilla-2. Post-herbicide *Hydrilla verticillata* finds in Fall Creek and Lighthouse transition zone between Inlet and Lake.

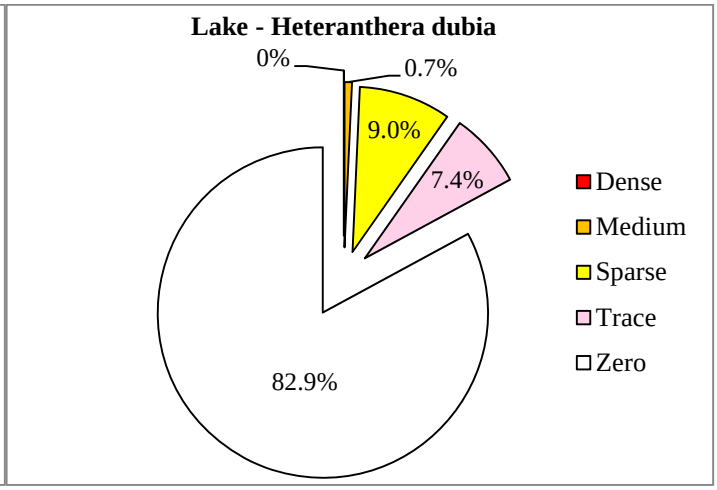


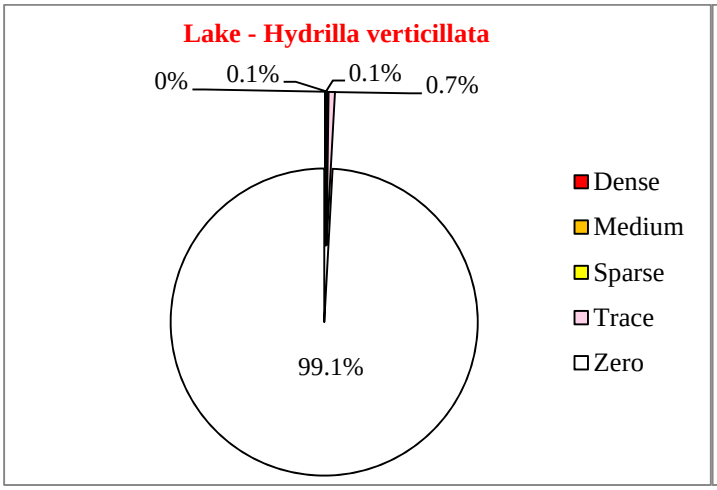


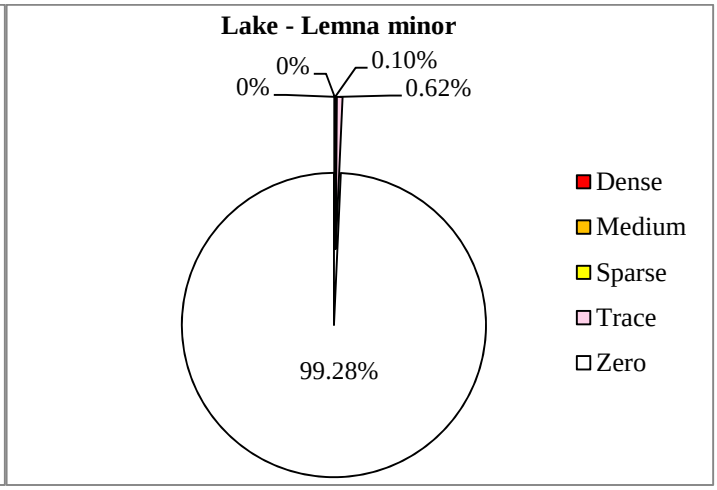


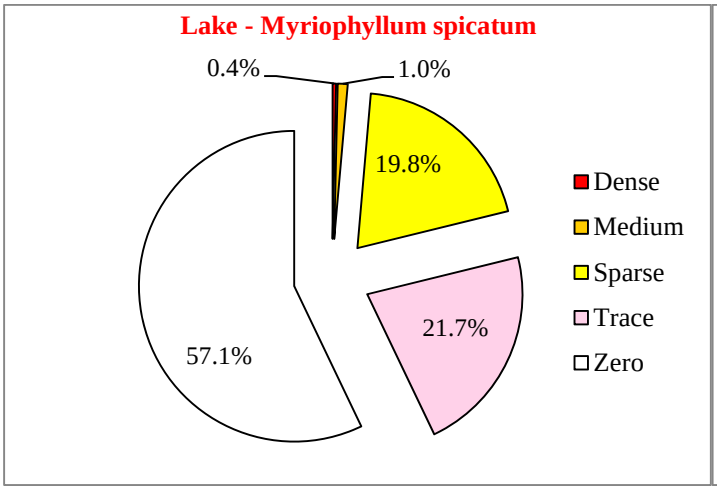
Lake-Pie 1. Percentages of each abundance category of the total 1942 rake-tosses made in Cayuga Lake in 2013 for all species combined, Native species, Non-Native species, *Ceratophyllum demersum*, *Chara vulgaris* and *Elodea sp.*

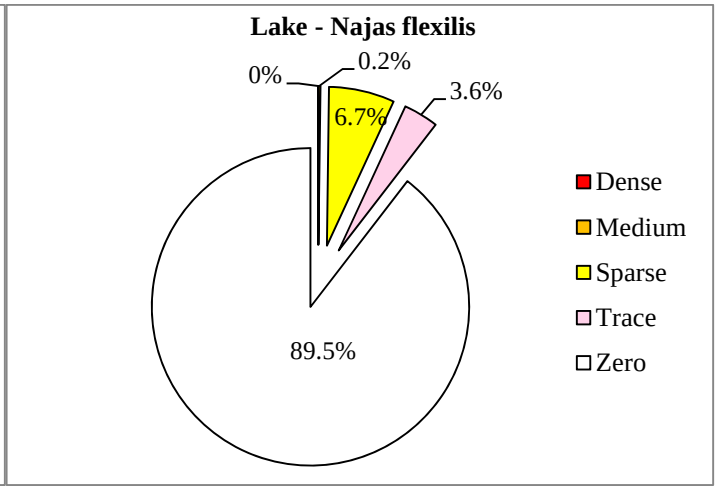




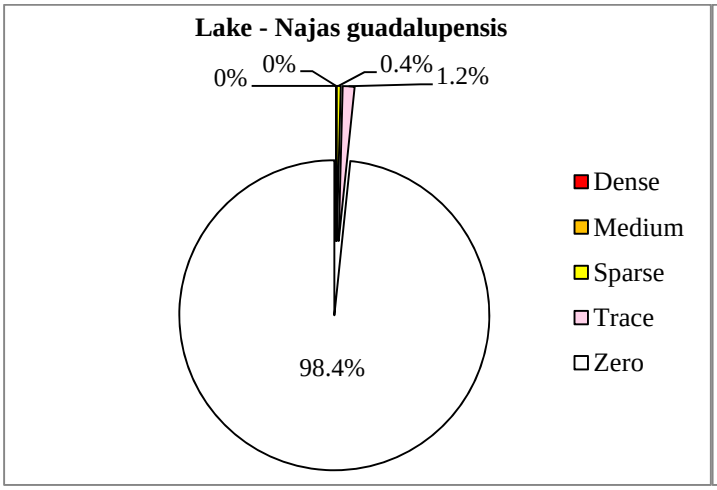


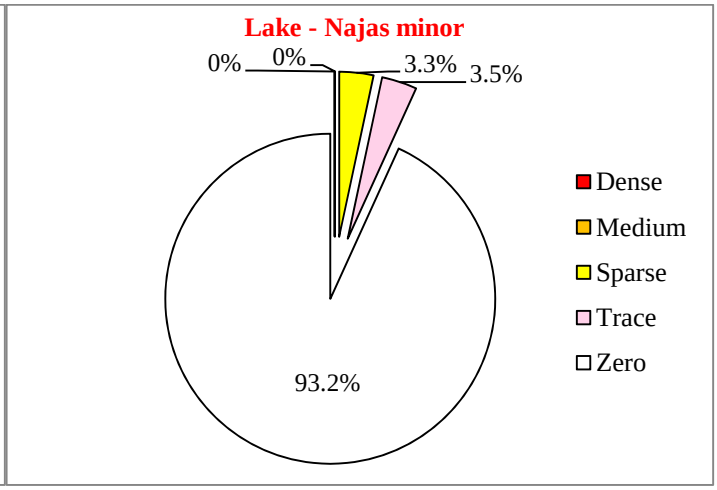


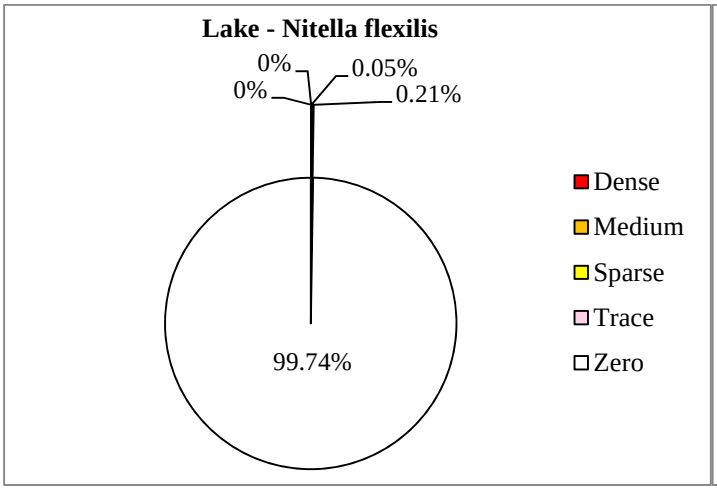


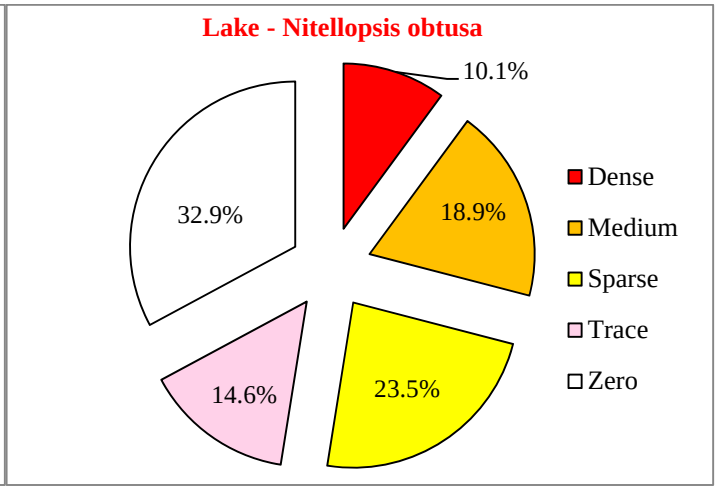


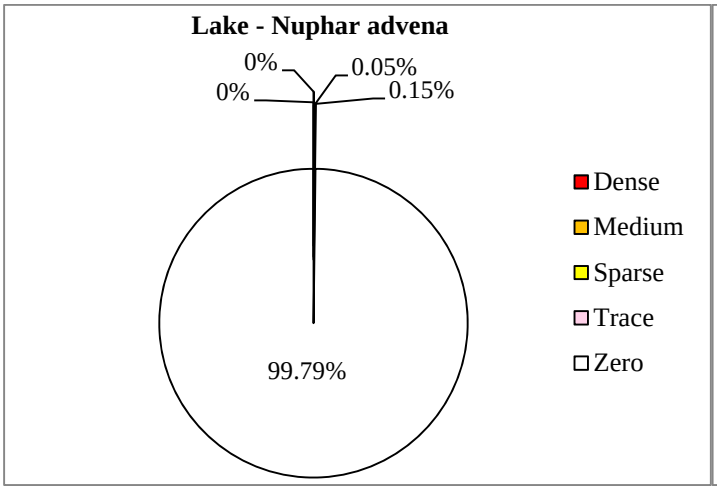
Lake-Pie 2. Percentages of each abundance category of the total 1942 rake-tosses made in Cayuga Lake in 2013 for *Fontinalis sp. Heteranthera dubia, Hydrilla verticillata, Lemna minor, Myriophyllum spicatum* and *Najas flexilis.*

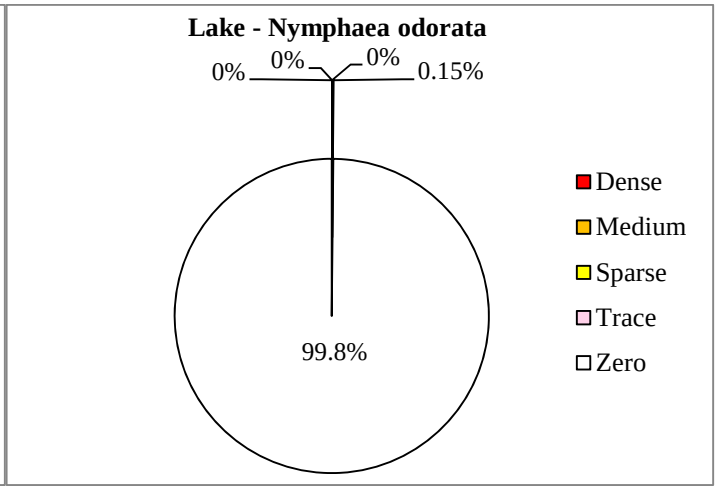




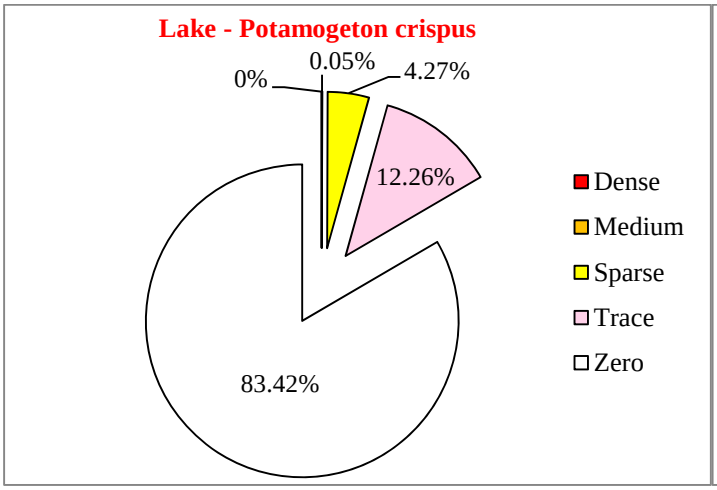


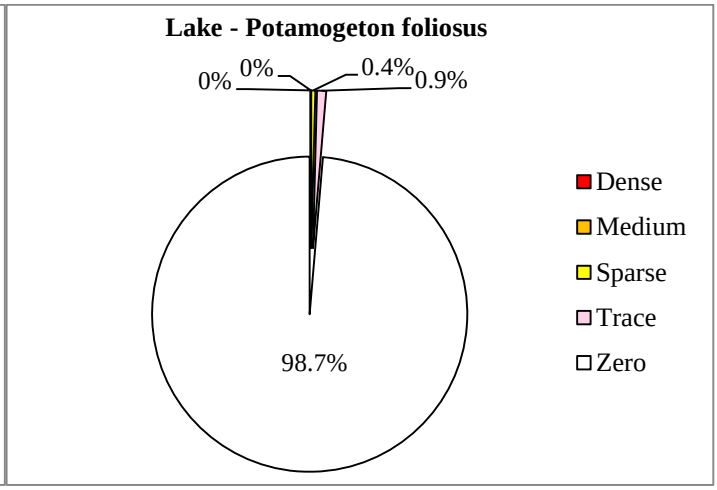


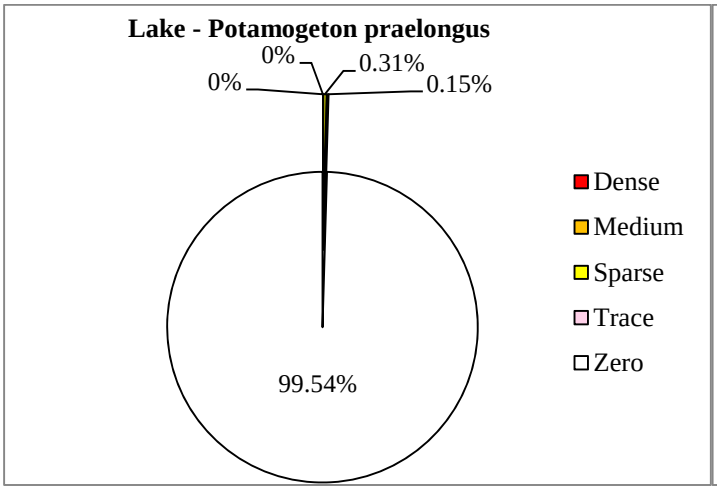


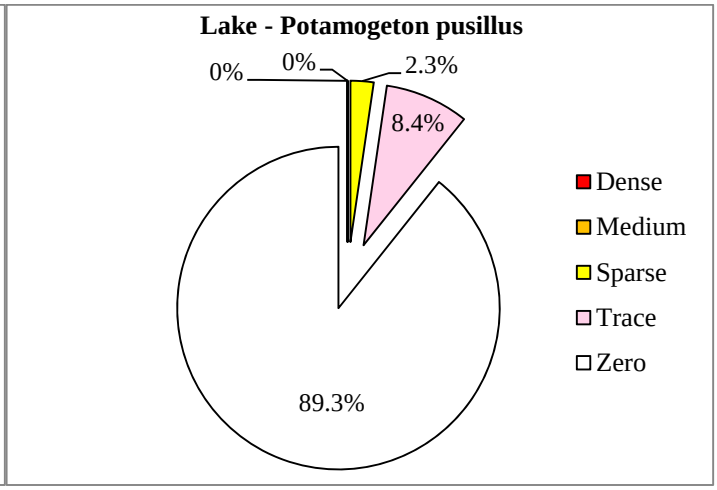


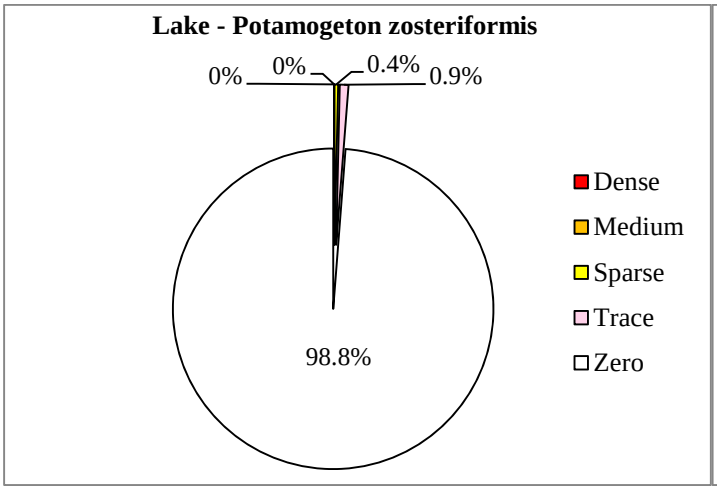
Lake-Pie 3. Percentages of each abundance category of the total 1942 rake-tosses made in Cayuga Lake in 2013 for *Najas guadalupensis*, *Najas minor*, *Nitella flexilis*, *Nitellopsis obtusa*, *Nuphar advena* and *Nymphaea odorata*.

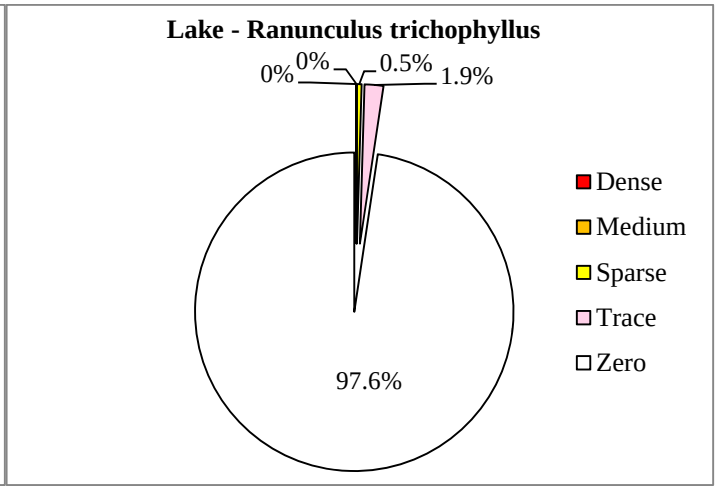




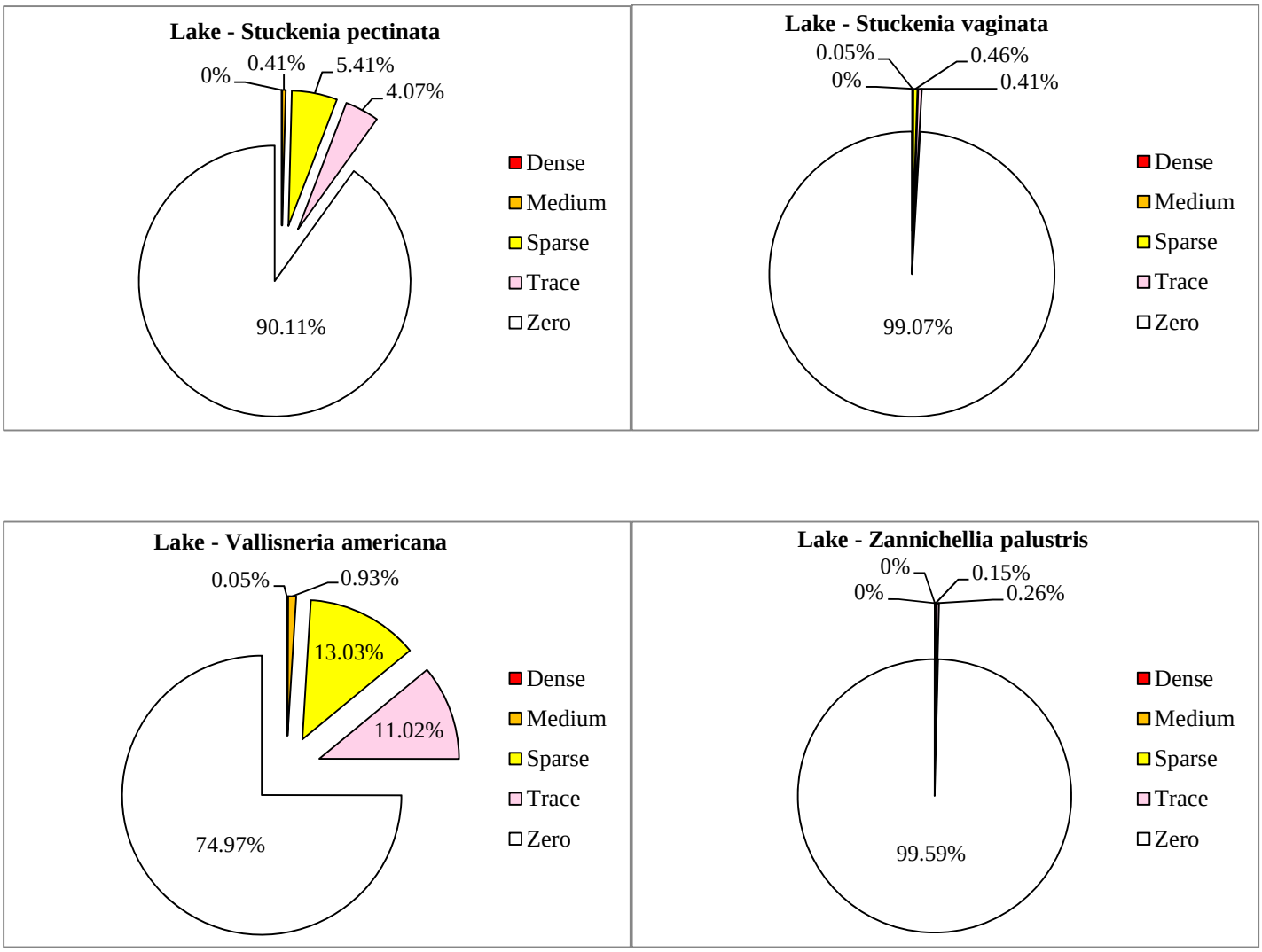




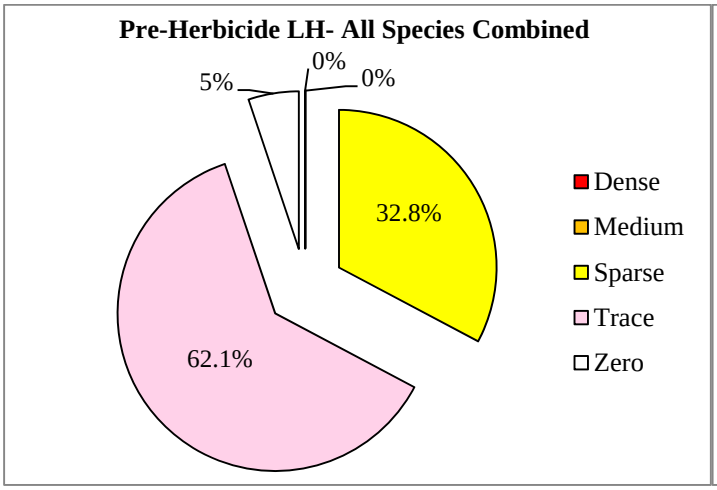


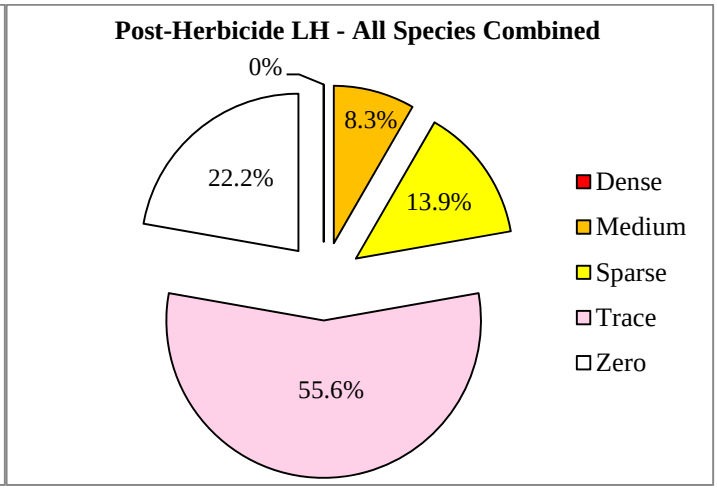


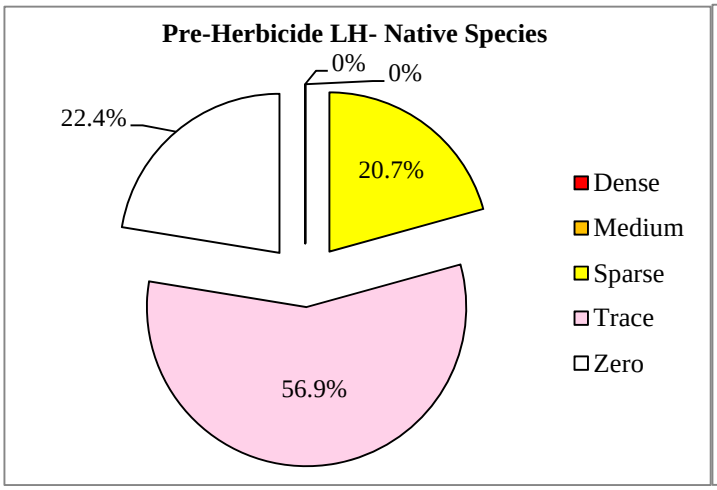
Lake-Pie 4. Percentages of each abundance category of the total 1942 rake-tosses made in Cayuga Lake in 2013 for *Potamogeton crispus,* *Potamogeton foliosus*, *Potamogeton praelongus*, *Potamogeton pusillus*, *Potamogeton zosteriformis* and *Ranunculus trichophyllus*.

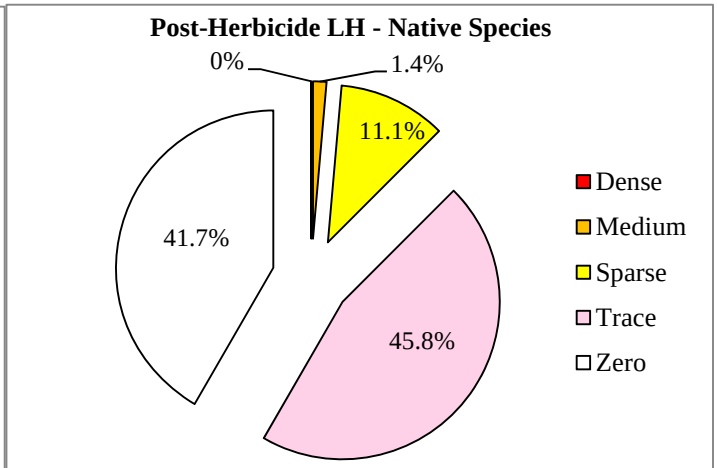


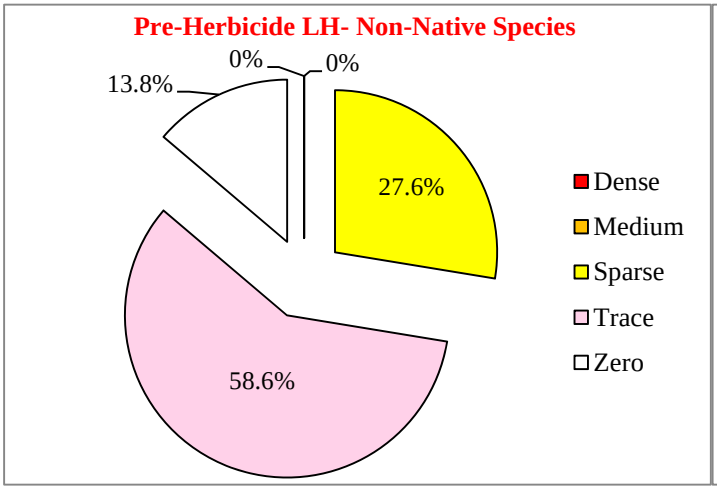
Lake-Pie 5. Percentages of each abundance category of the total 1942 rake-tosses made in Cayuga Lake in 2013 for *Stuckenia pectinata*, *Stuckenia vaginata*, *Vallisneria americana* and *Zannichellia palustris*.

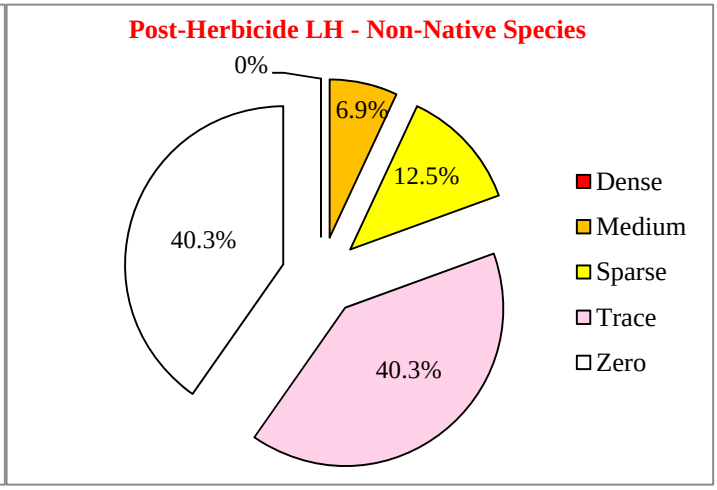




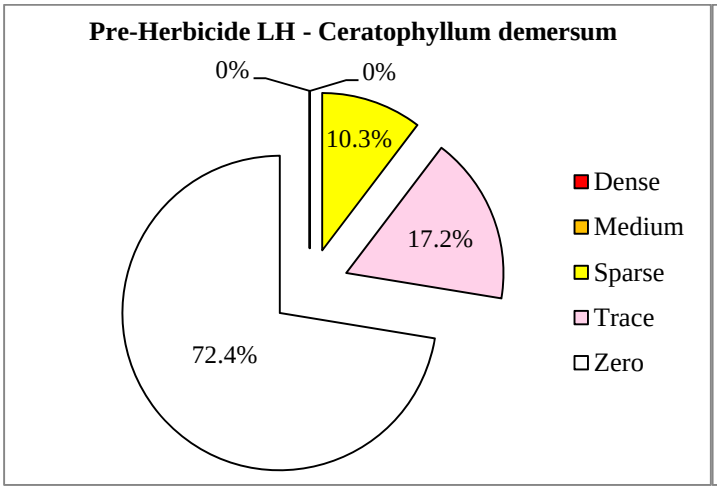


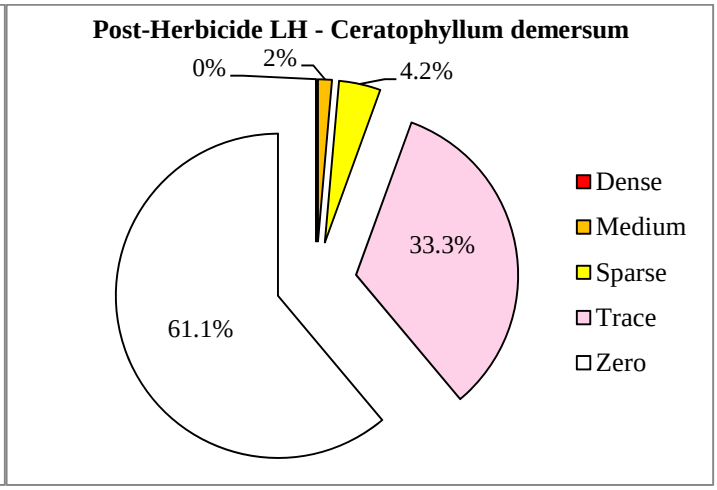


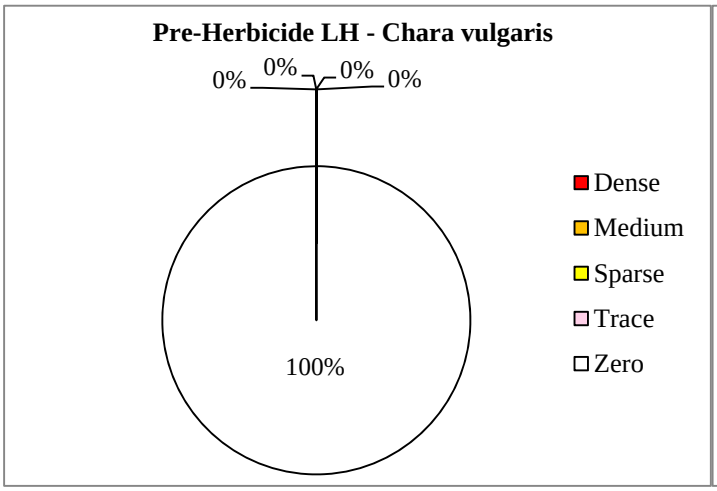


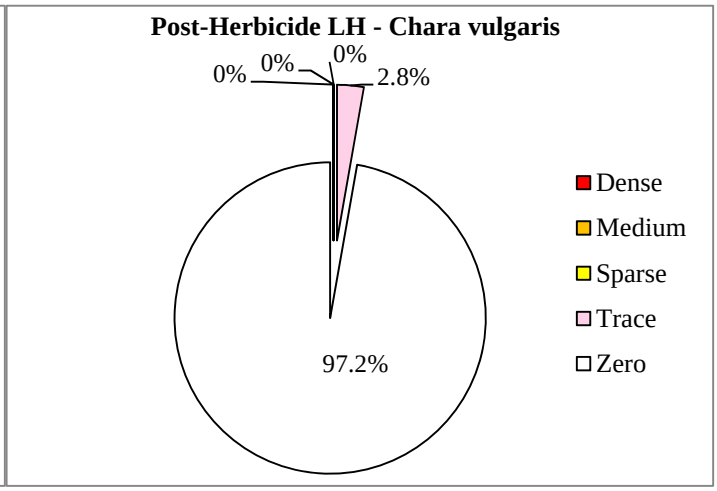


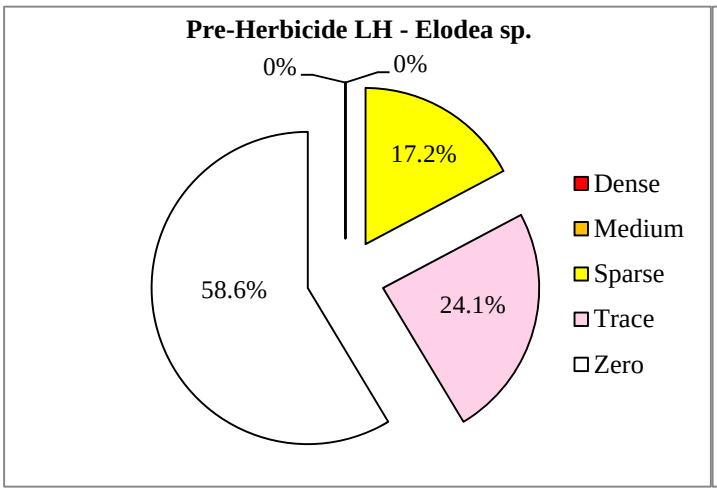
Lighthouse-Pie 1. Percentages of each abundance category of the total 58 pre-herbicide and 72 post-herbicide rake-tosses made in the Lighthouse Area of the Inlet in 2013 to contrast the pre-herbicide with the post-herbicide values of each grouping of species.

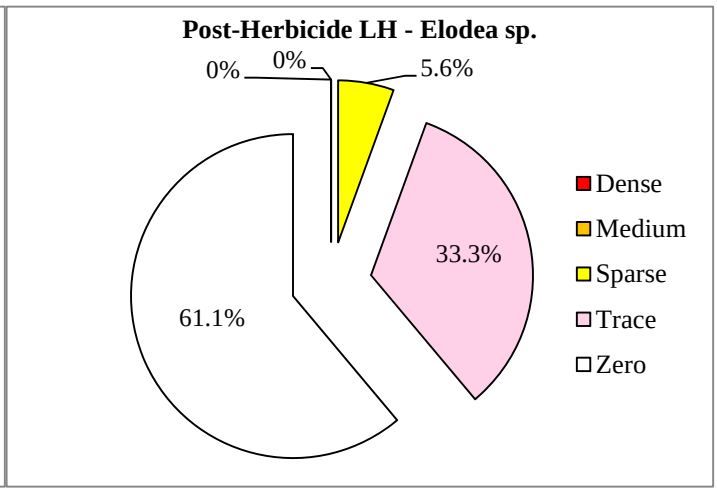




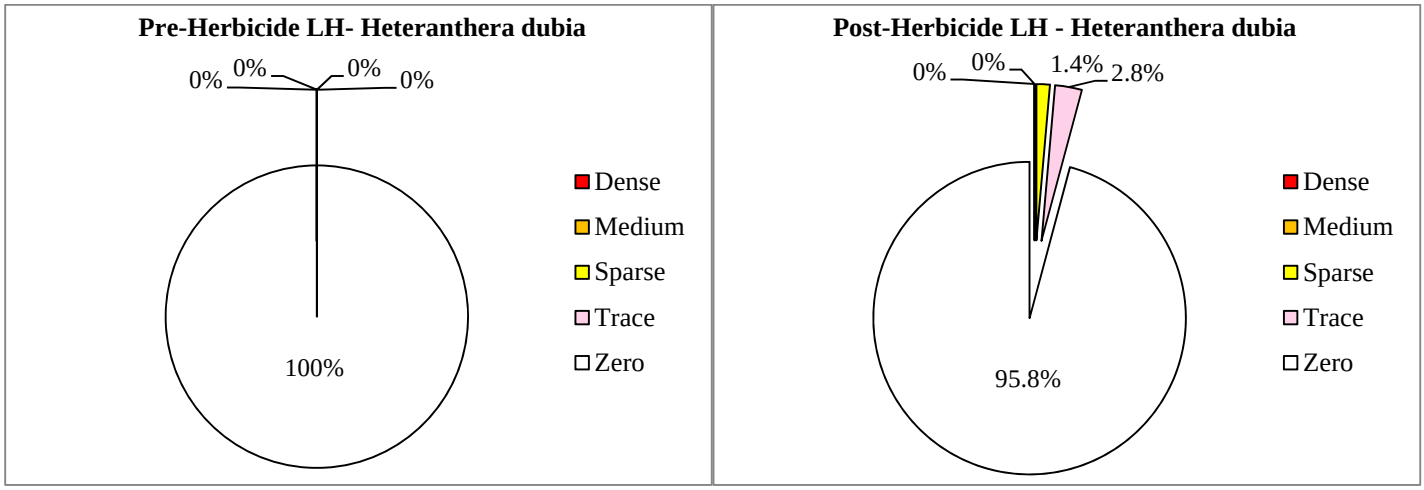


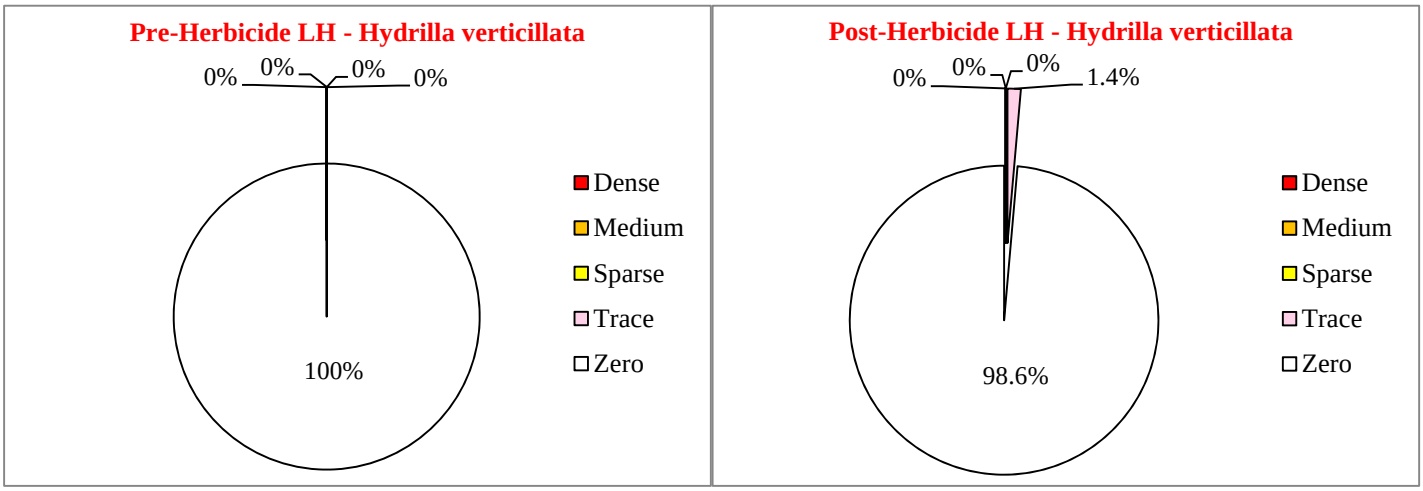


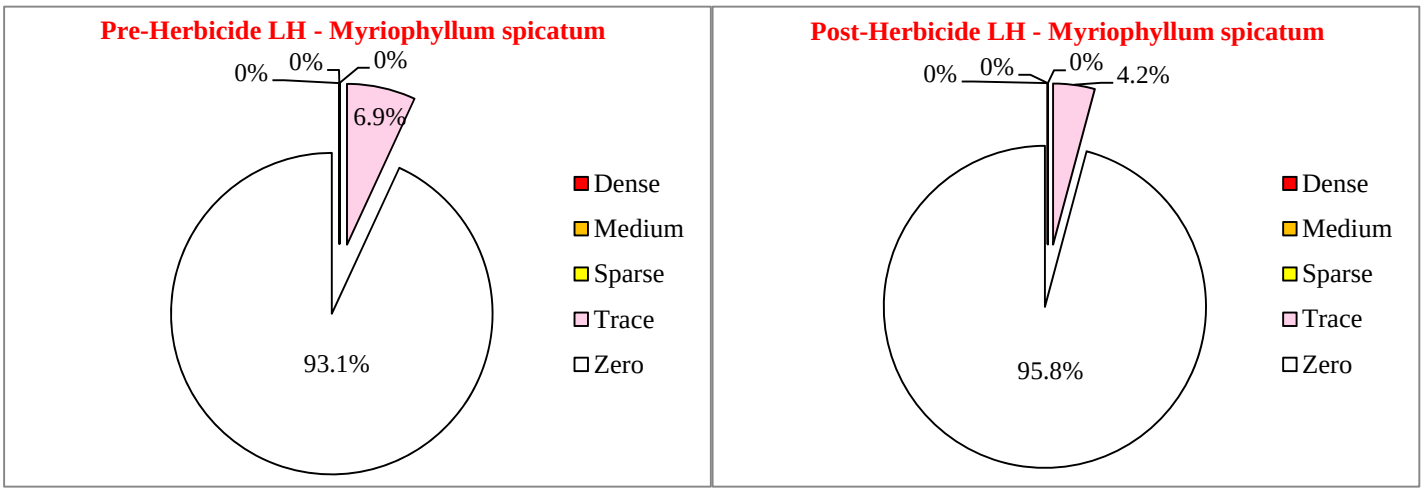




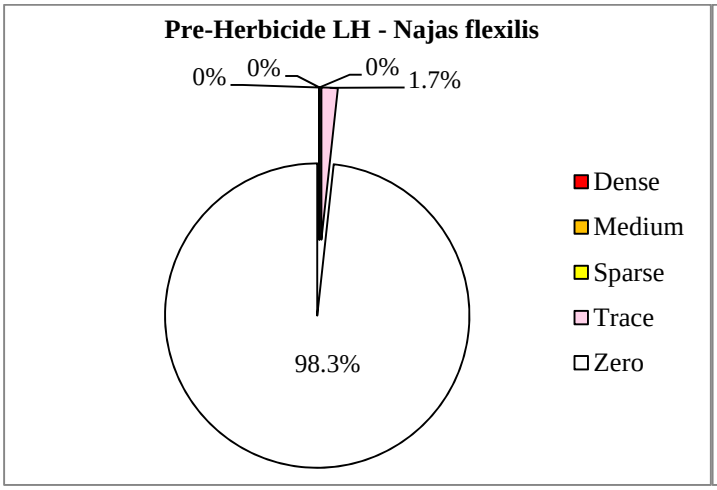
Lighthouse-Pie 2. Percentages of each abundance category of the total 58 pre-herbicide and 72 post-herbicide rake-tosses made in the Lighthouse Area of the Inlet in 2013 to contrast the pre-herbicide with the post-herbicide values for *Ceratophyllum demersum, Chara vulgaris* and *Elodea sp*.

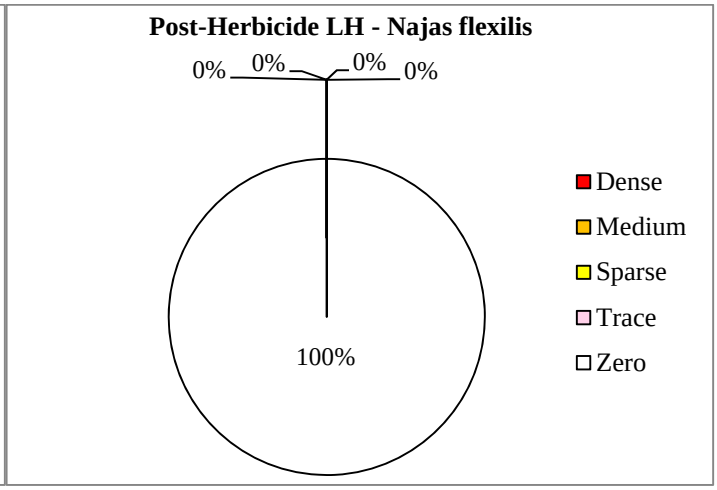


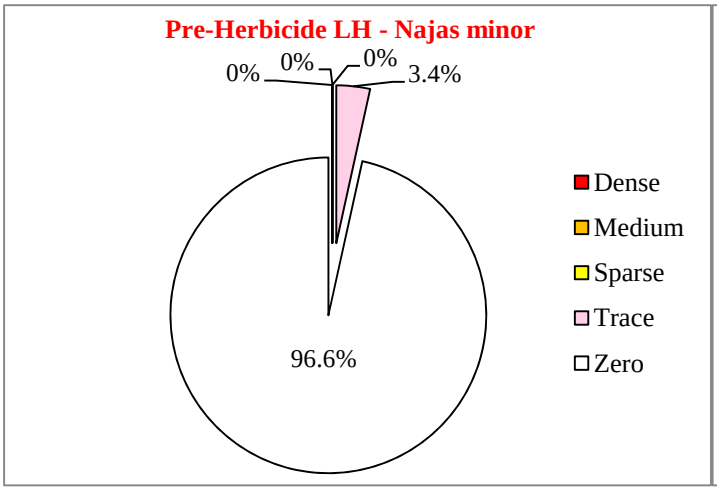


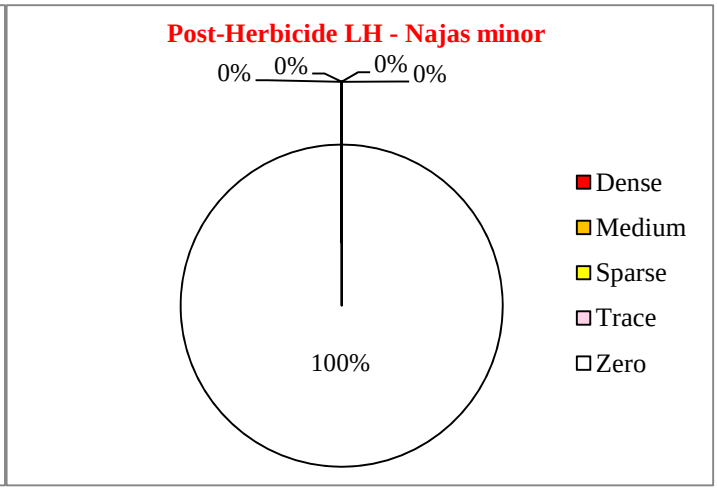


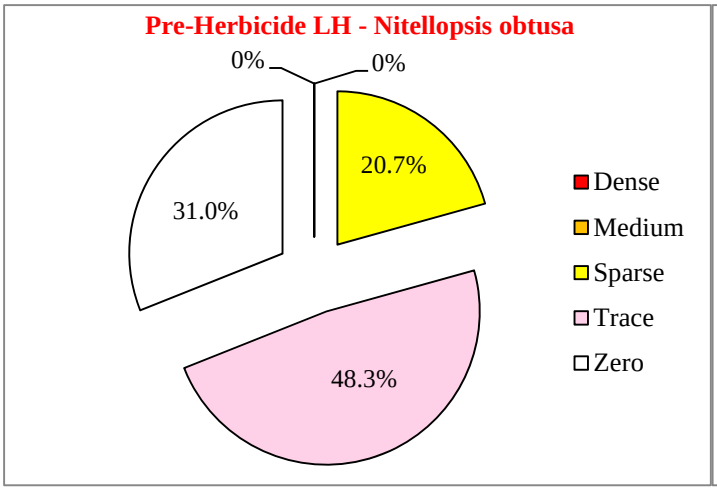
Lighthouse-Pie 3. Percentages of each abundance category of the total 58 pre-herbicide and 72 post-herbicide rake-tosses made in the Lighthouse Area of the Inlet in 2013 to contrast the pre-herbicide with the post-herbicide values for *Heteranthera dubia*, *Hydrilla verticillata* and *Myriophyllum spicatum*.

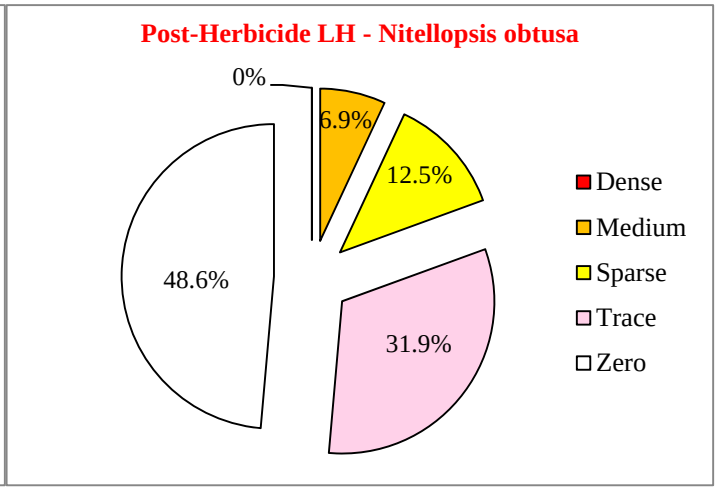




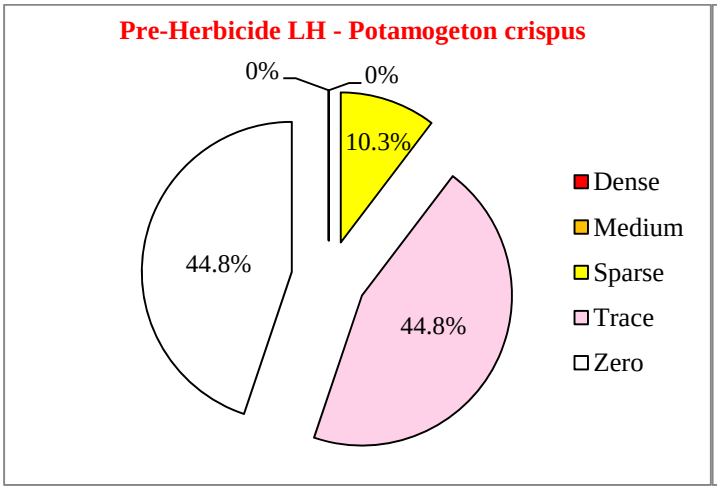


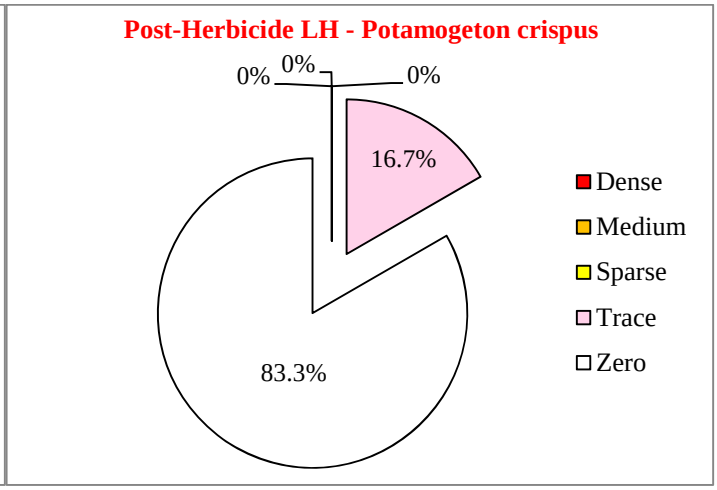


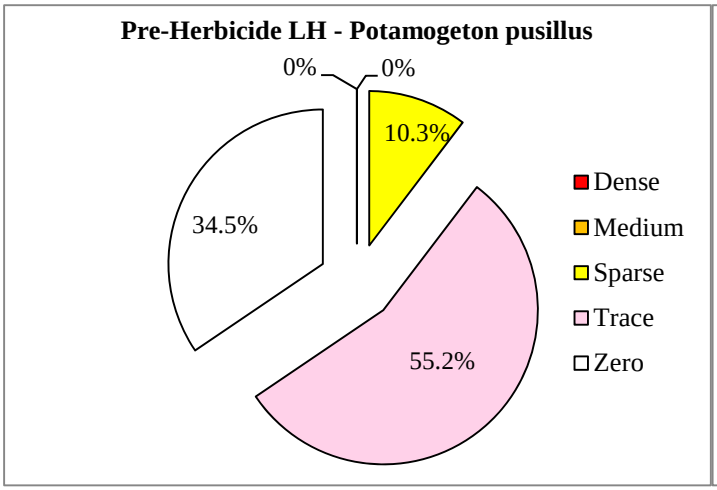


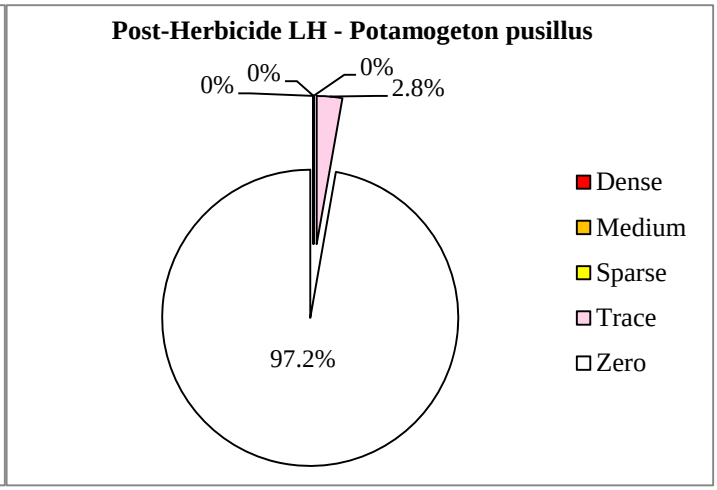


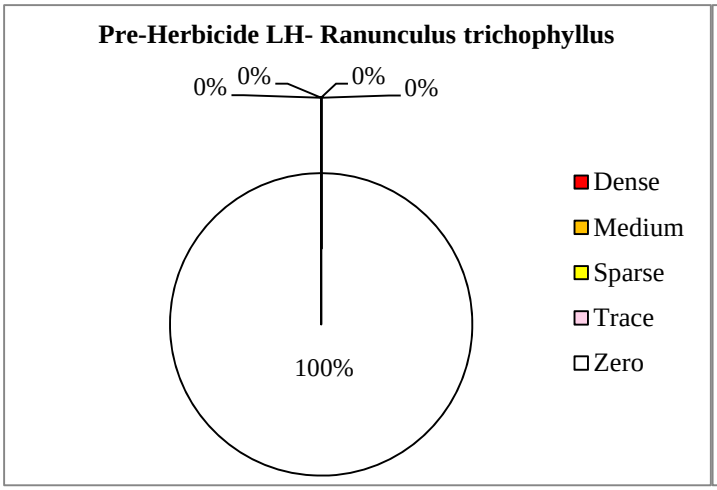
Lighthouse-Pie 4. Percentages of each abundance category of the total 58 pre-herbicide and 72 post-herbicide rake-tosses made in the Lighthouse Area of the Inlet in 2013 to contrast the pre-herbicide with the post-herbicide values for *Najas flexilis*, *Najas minor* and *Nitellopsis obtusa*.

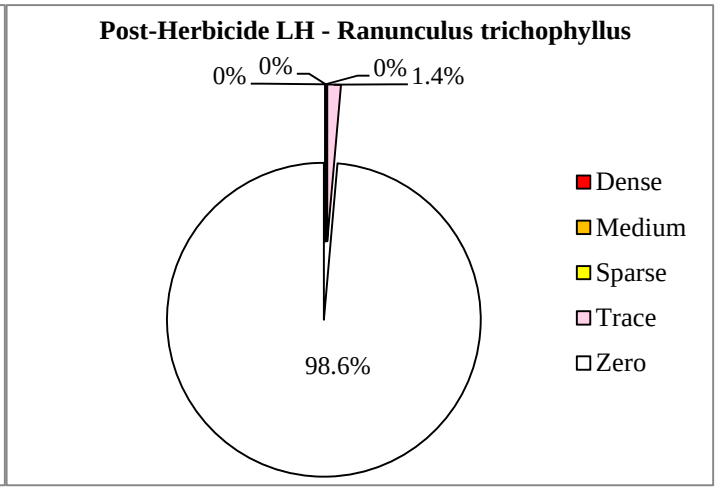




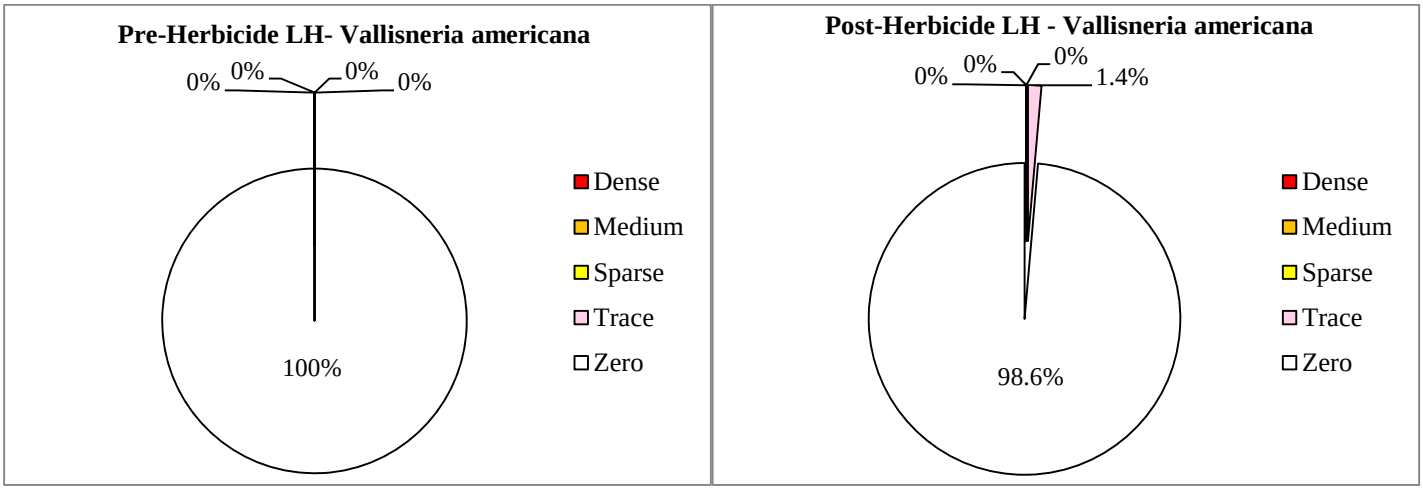




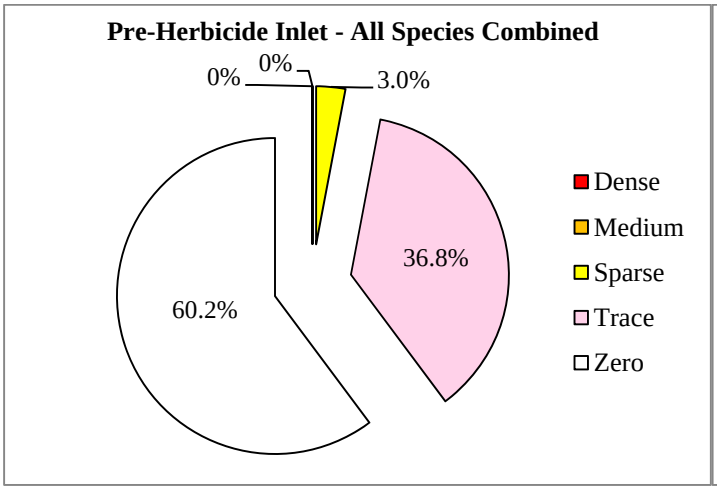


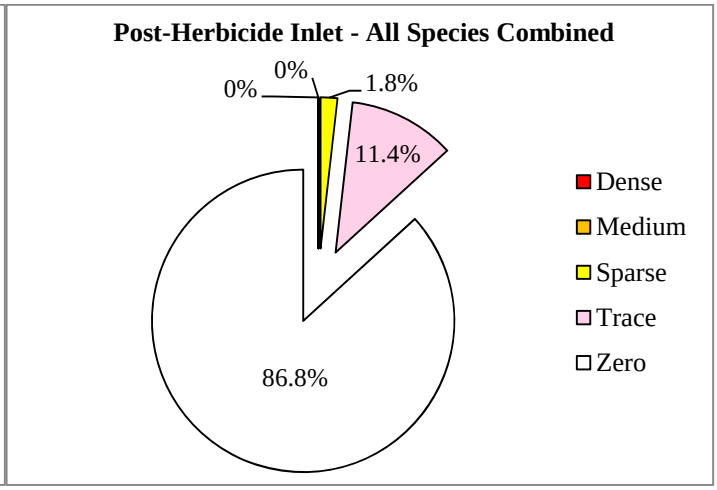


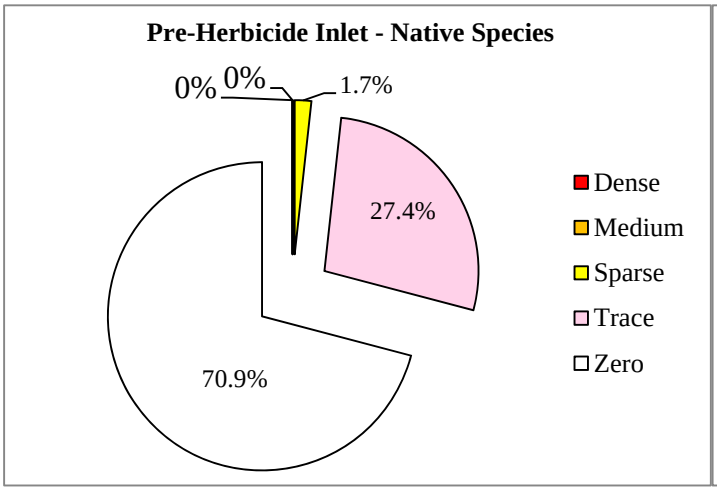
Lighthouse-Pie 5. Percentages of each abundance category of the total 58 pre-herbicide and 72 post-herbicide rake-tosses made in the Lighthouse area of the Inlet in 2013 to contrast the pre-herbicide with the post-herbicide values for *Potamogeton crispus, Potamogeton pusillus* and *Ranunculus trichophyllus*.

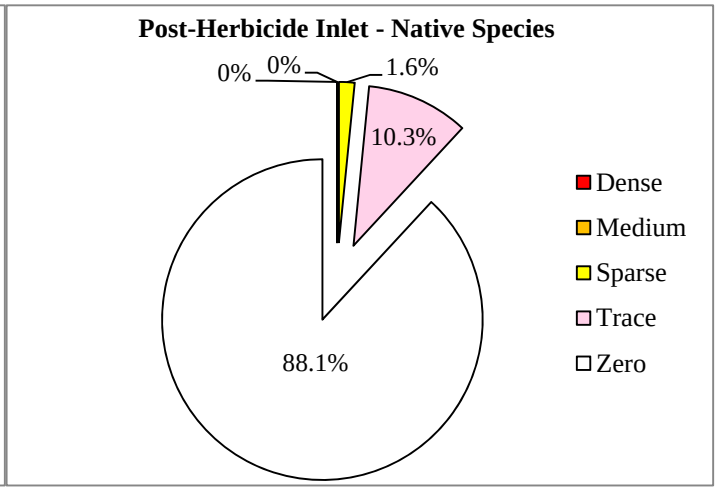


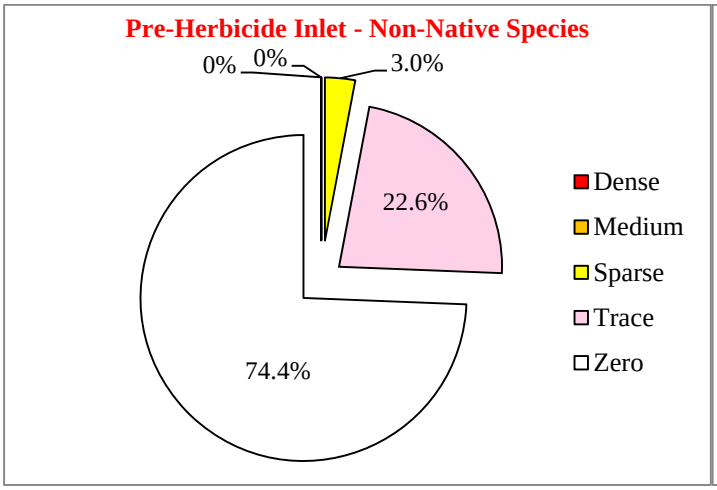
Lighthouse-Pie 6. Percentages of each abundance category of the total 58 pre-herbicide and 72 post-herbicide rake-tosses made in the Lighthouse area of the Inlet in 2013 to contrast the pre-herbicide with the post-herbicide values for *Vallisneria americana.*

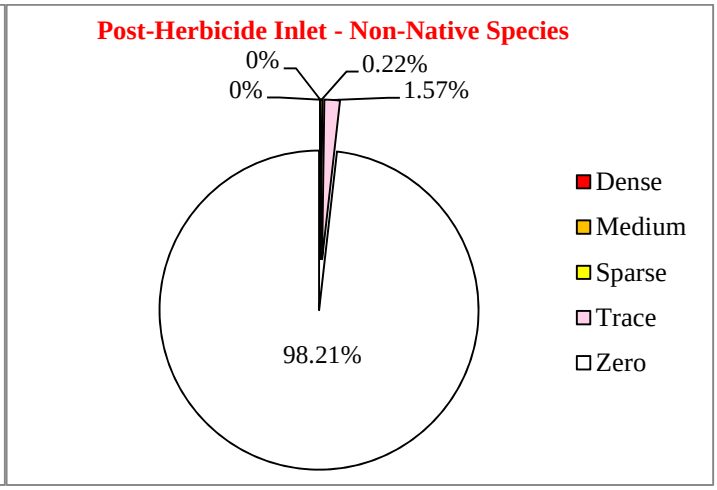




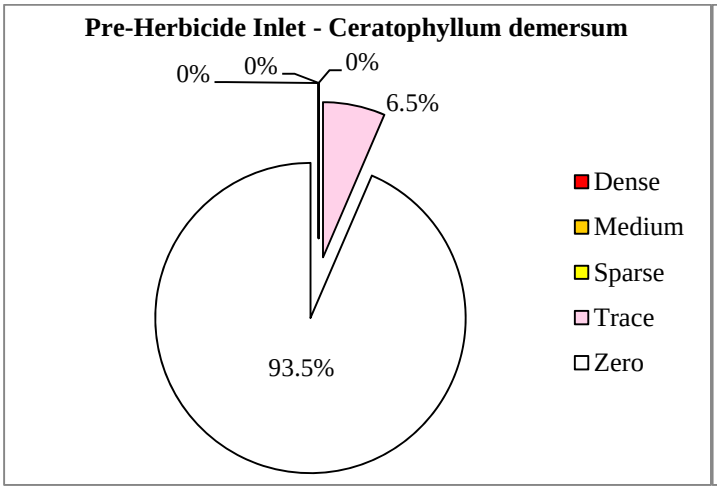


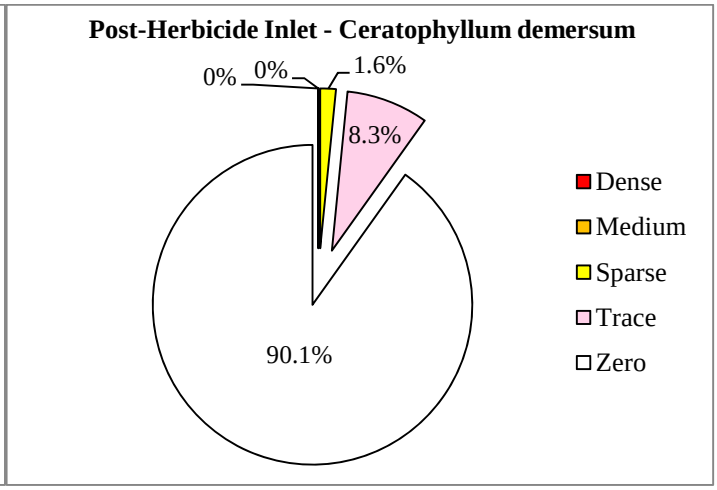


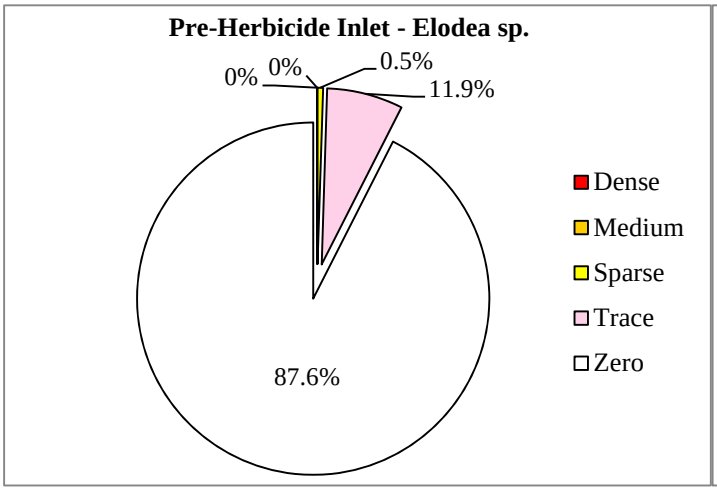


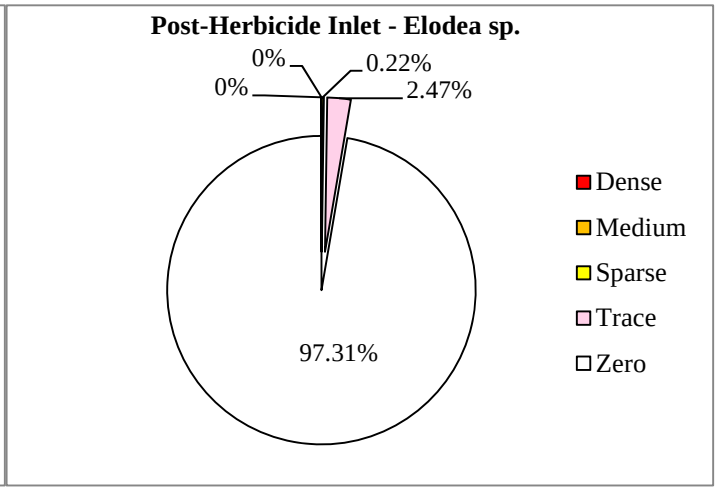


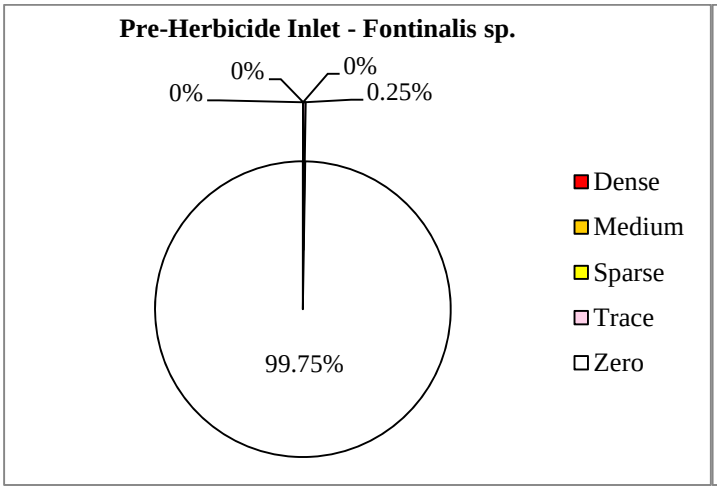
Inlet-Pie 1. Percentages of each abundance category of the total 402 pre-herbicide and 446 post-herbicide rake-tosses made in the Inlet proper in 2013 to contrast the pre-herbicide with the post-herbicide values of each species' grouping.

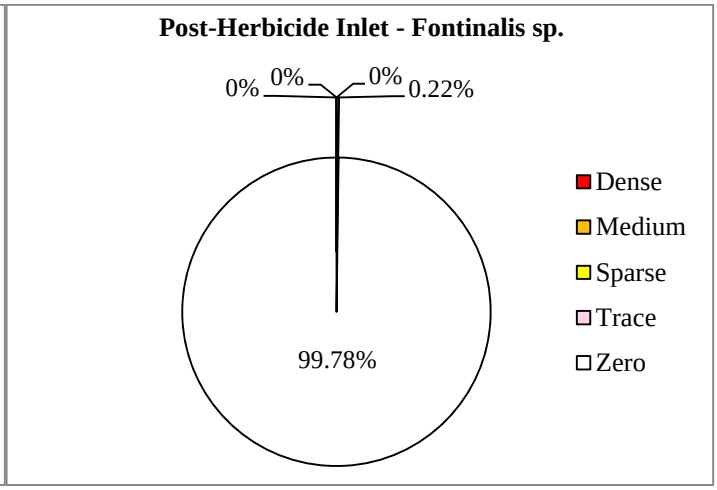




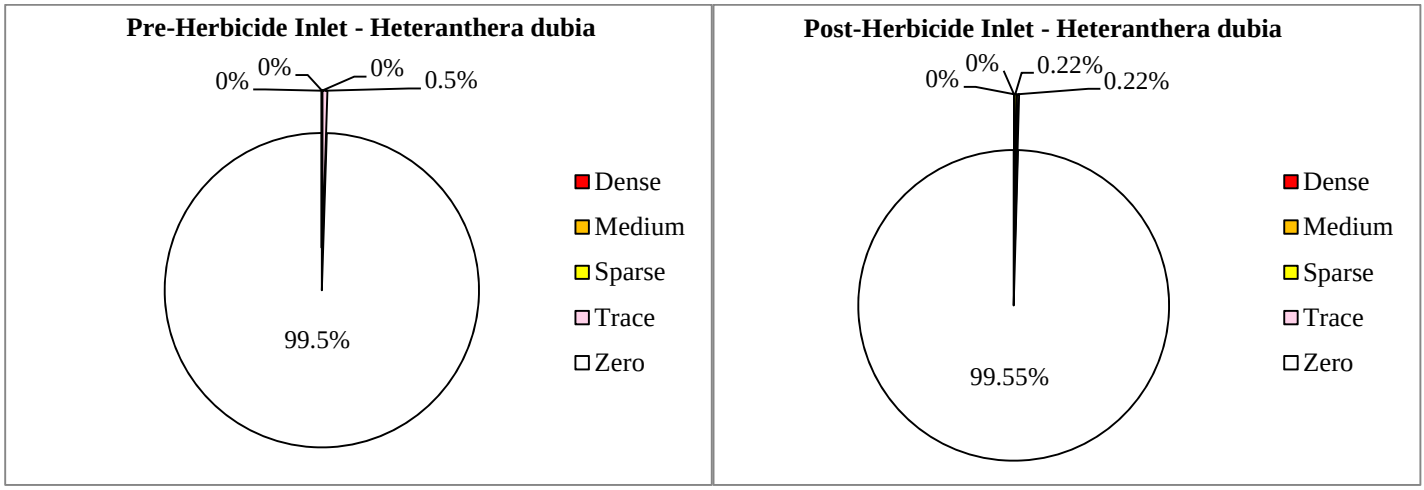


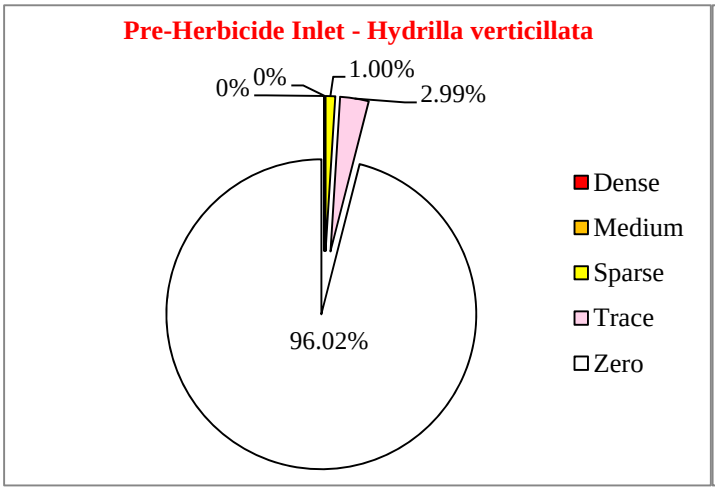


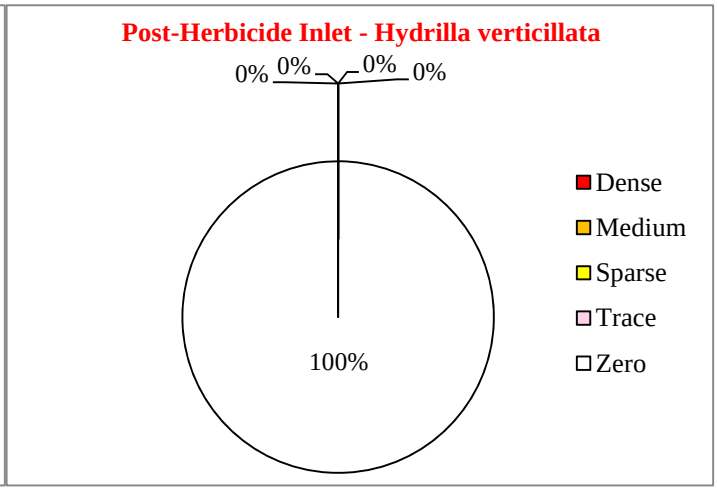


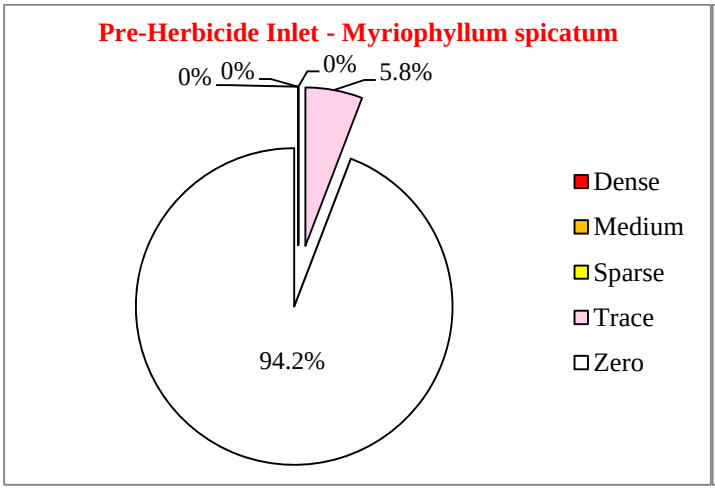


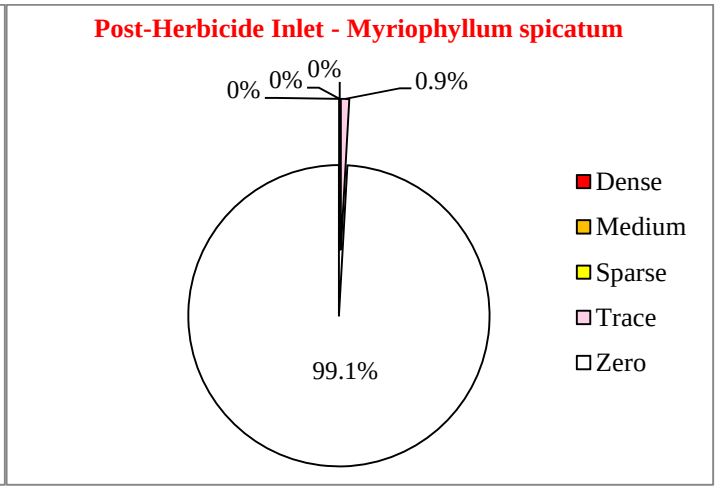
Inlet-Pie 2. Percentages of each abundance category of the total 402 pre-herbicide and 446 post-herbicide rake-tosses made in the Inlet proper in 2013 to contrast the pre-herbicide with the post-herbicide values for *Ceratophyllum demersum, Elodea sp*. and *Fontinalis sp.*.



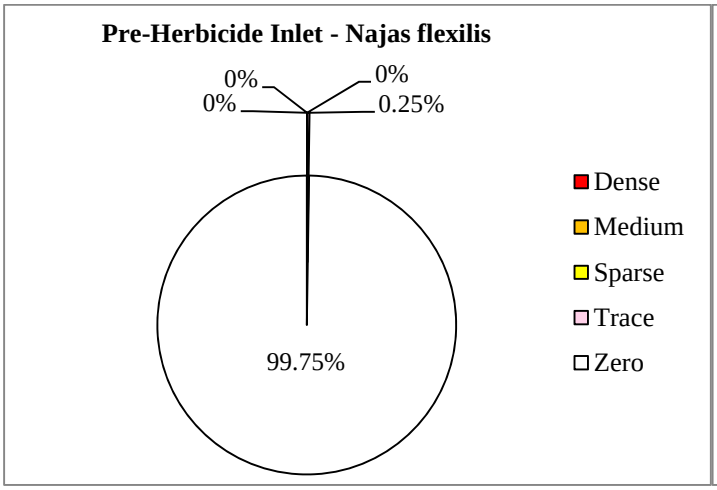


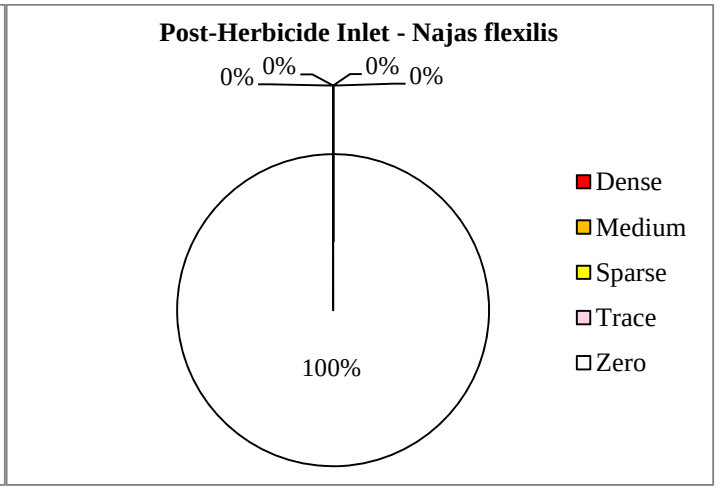


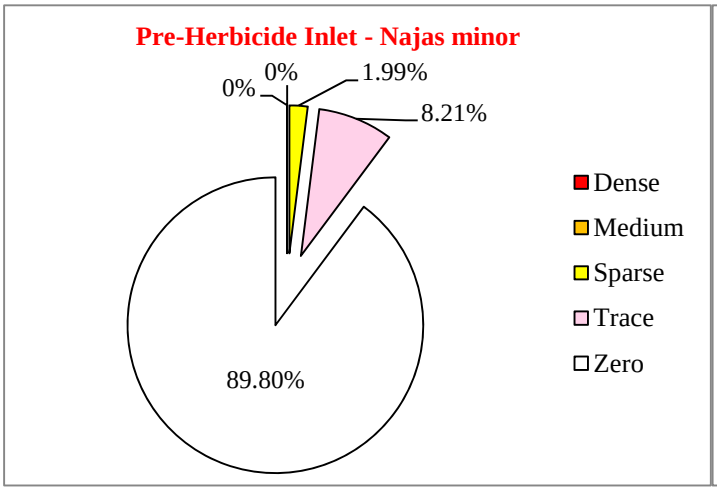


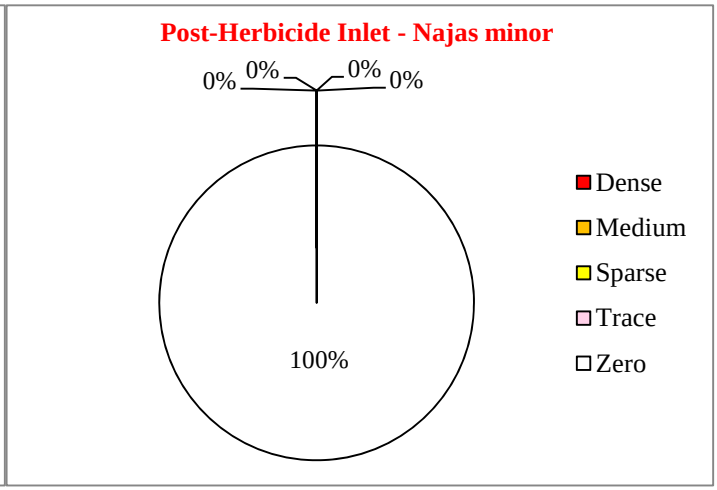


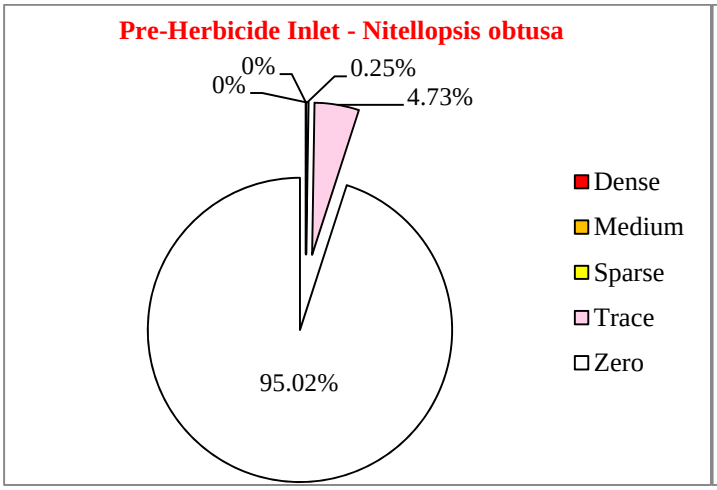
Inlet-Pie 3. Percentages of each abundance category of the total 402 pre-herbicide and 446 post-herbicide rake-tosses made in the Inlet proper in 2013 to contrast the pre-herbicide with the post-herbicide values for *Heteranthera dubia*, *Hydrilla verticillata* and *Myriophyllum spicatum* .

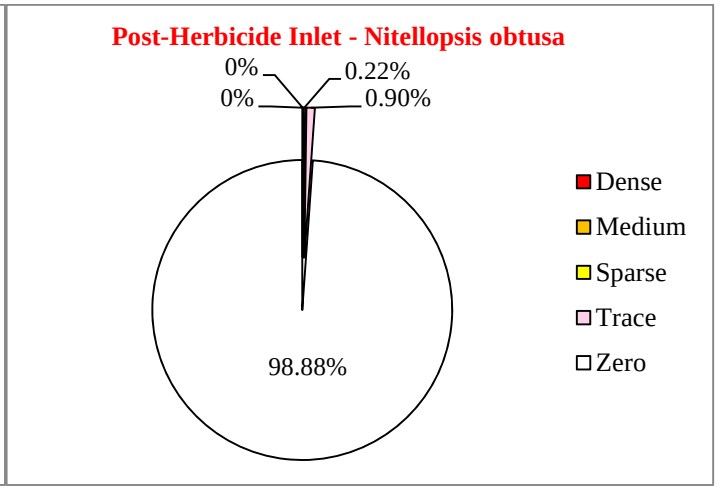




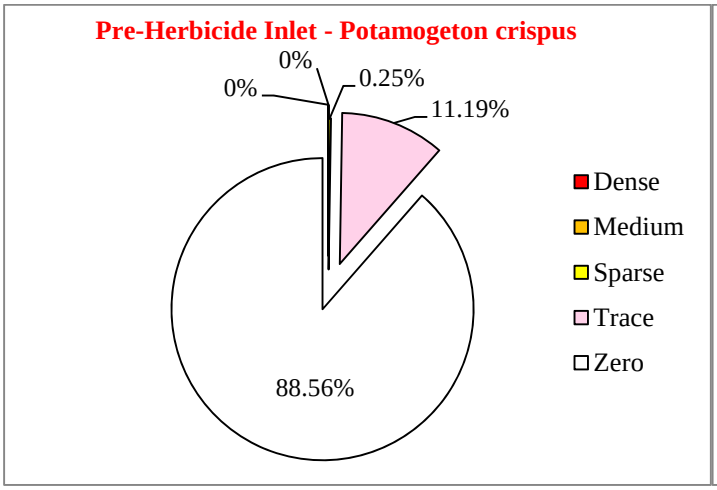


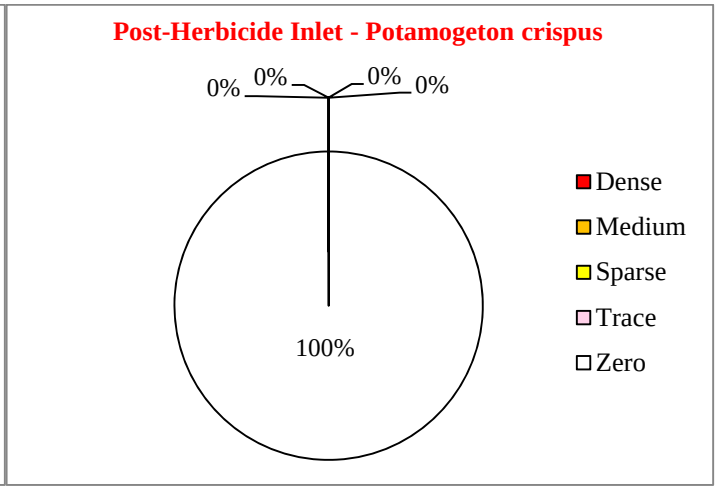


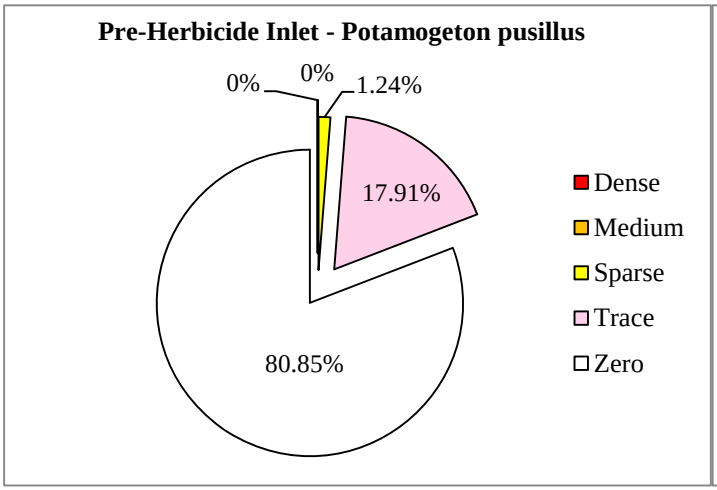


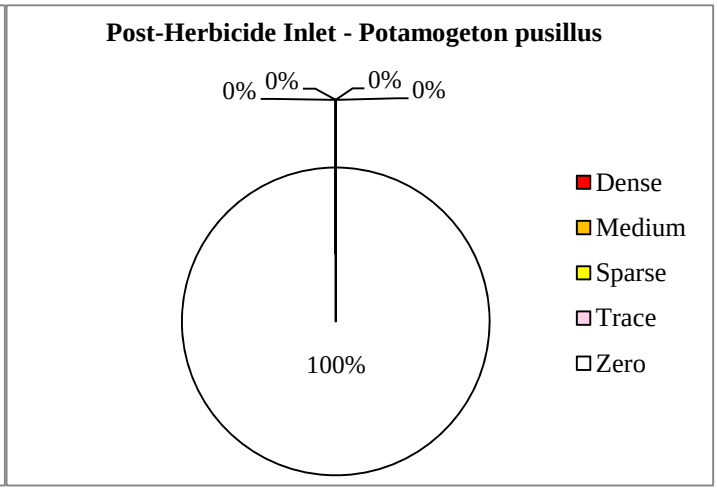


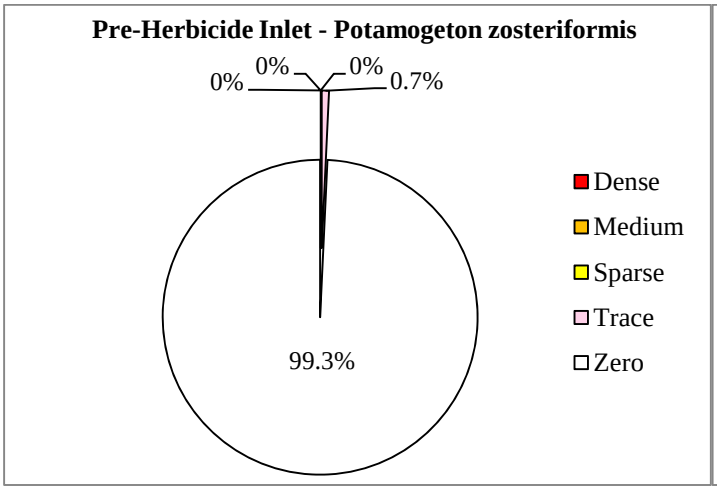
Inlet-Pie 4. Percentages of each abundance category of the 402 pre-herbicide and 446 post-herbicide rake-tosses made in the Inlet proper in 2013 to contrast the pre-herbicide with the post-herbicide values for *Najas flexilis*, *Najas minor* and *Nitellopsis obtusa*.

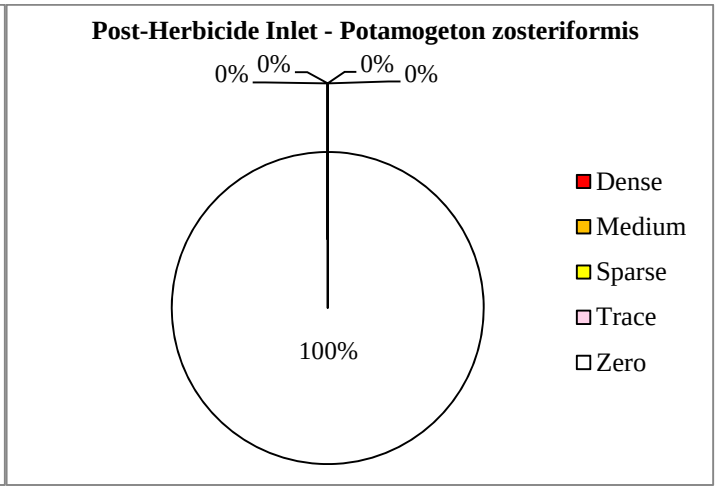




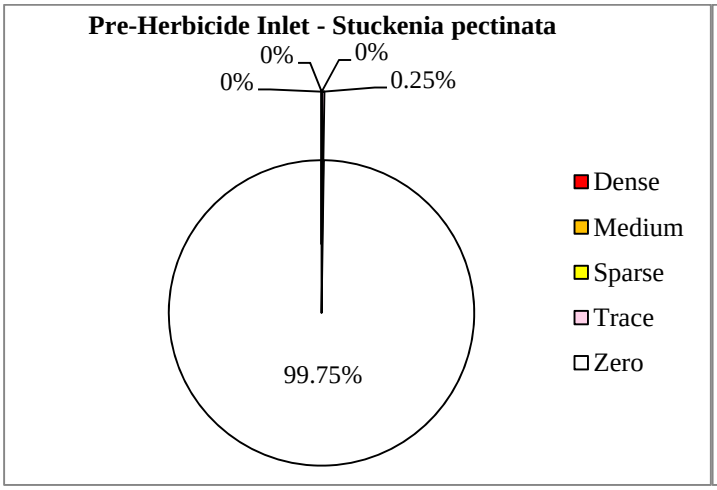


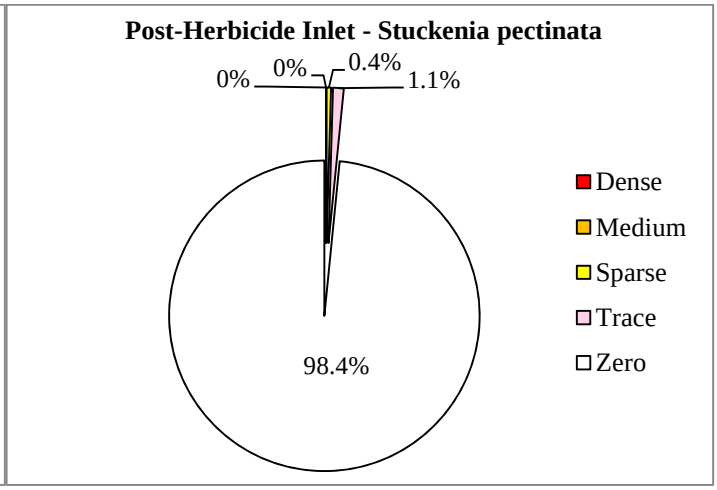


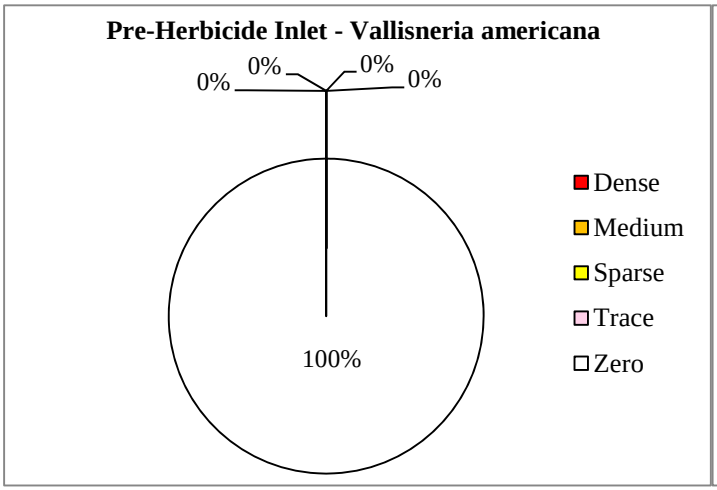


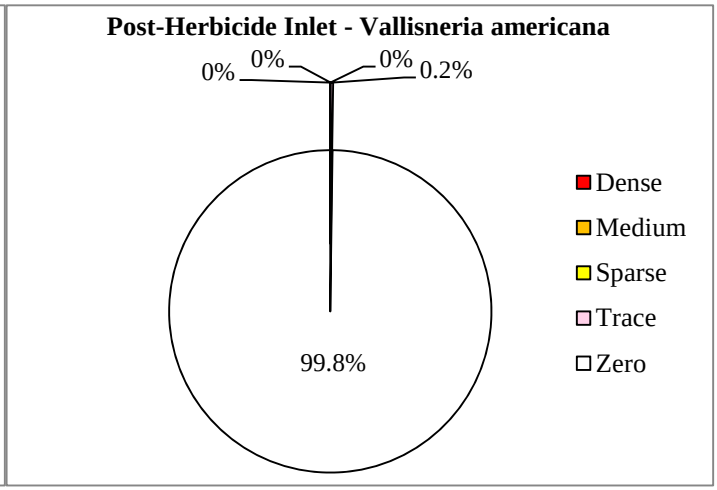


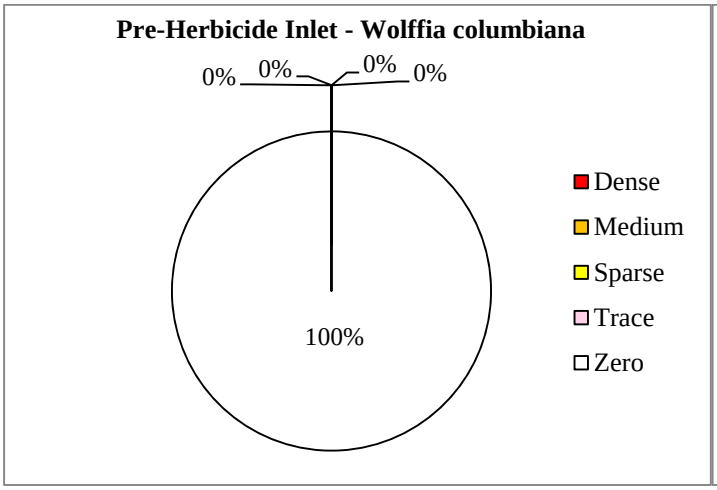
Inlet-Pie 5. Percentages of each abundance category of the total 402 pre-herbicide and 446 post-herbicide rake-tosses made in the Inlet proper in 2013 to contrast the pre-herbicide with the post-herbicide values for *Potamogeton crispus, Potamogeton pusillus* and *Potamogeton zosteriformis*.

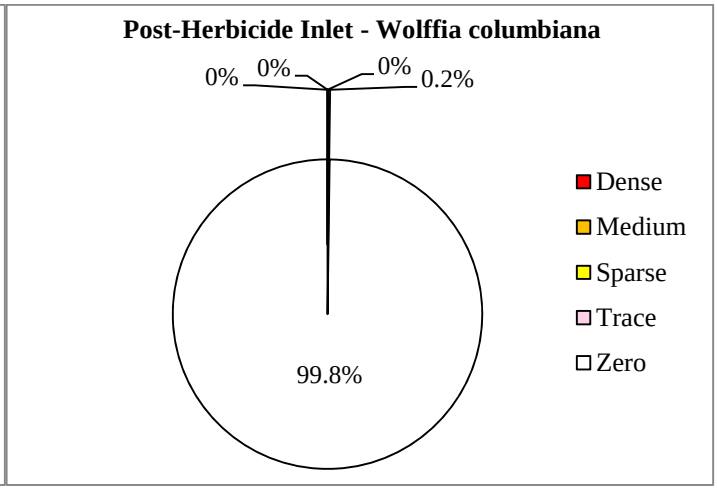




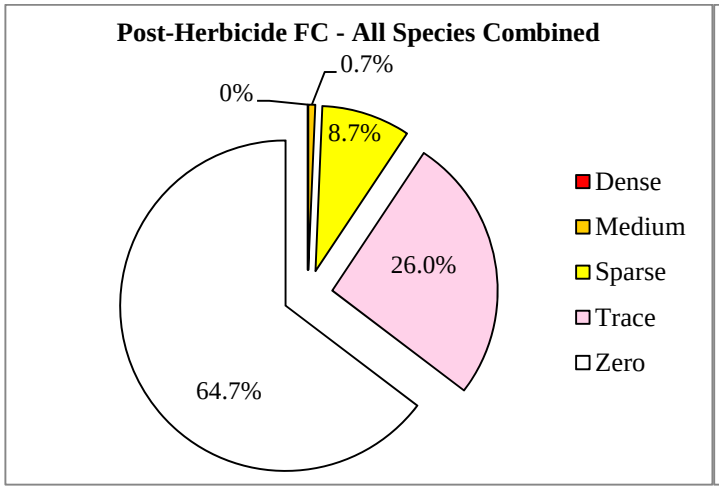


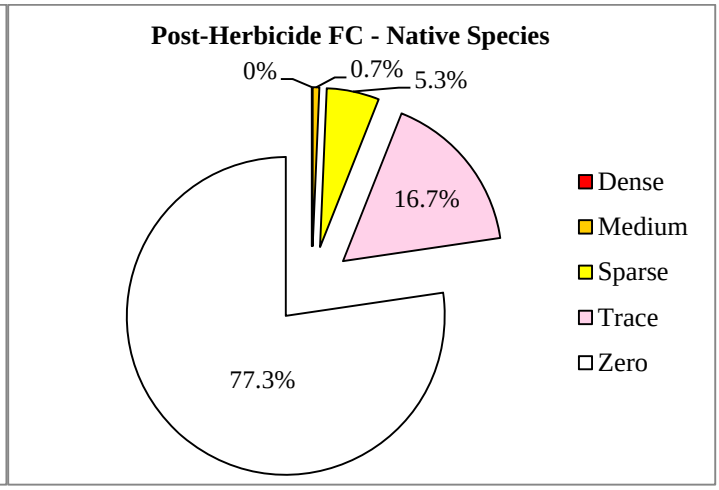


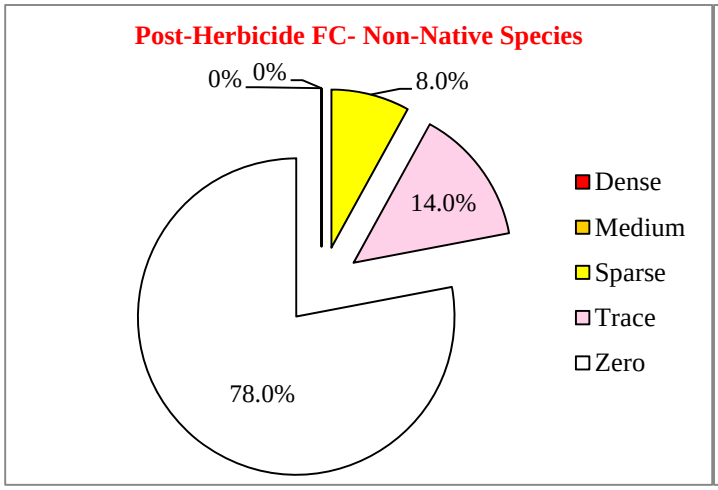


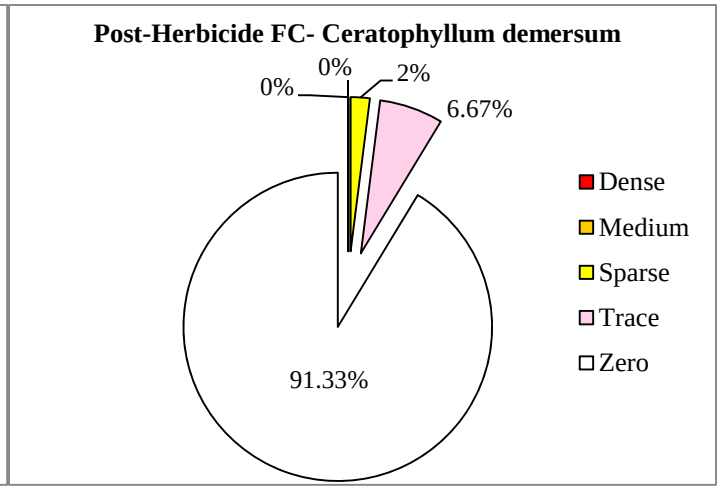


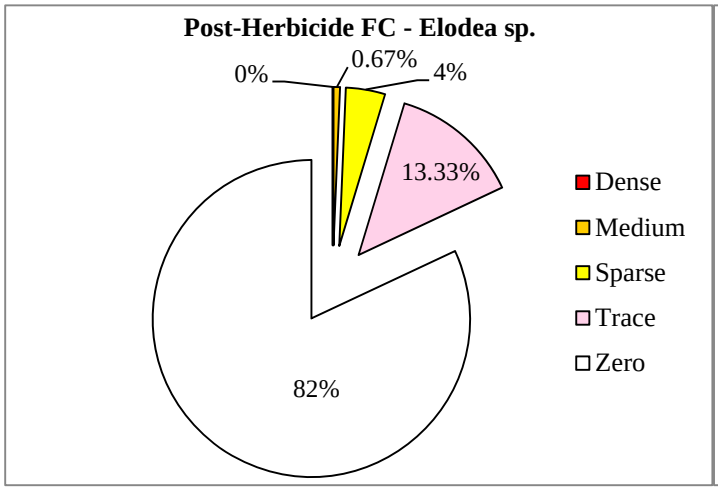
Inlet-Pie 6. Percentages of each abundance category of the total 402 pre-herbicide and 446 post-herbicide rake-tosses made in the Inlet proper in 2013 to contrast the pre-herbicide with the post-herbicide values for *Stuckenia pectinata, Vallisneria americana* and *Wolffia columbiana.*

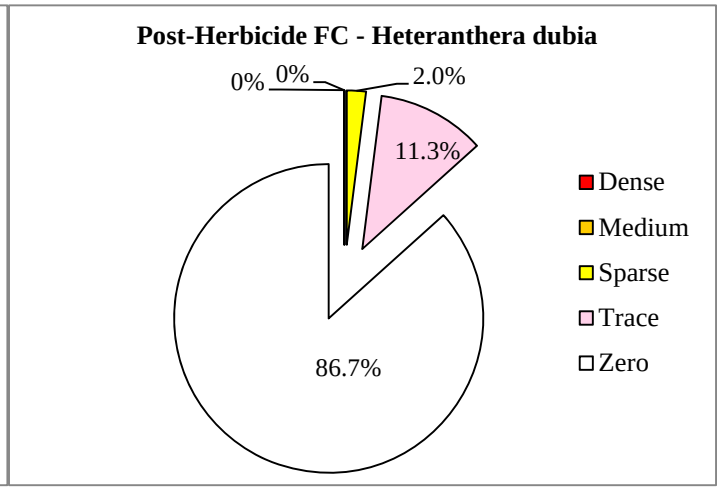




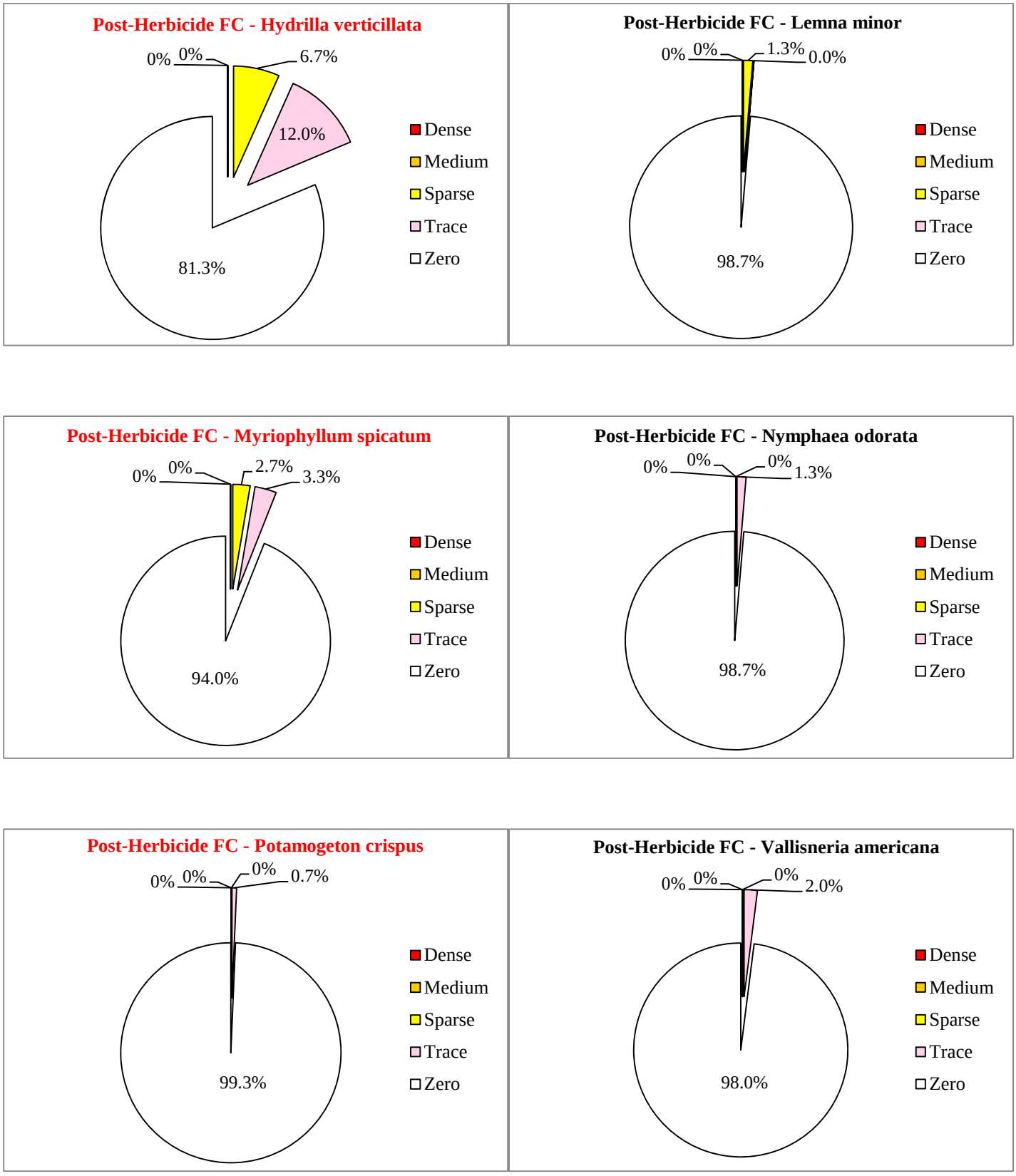




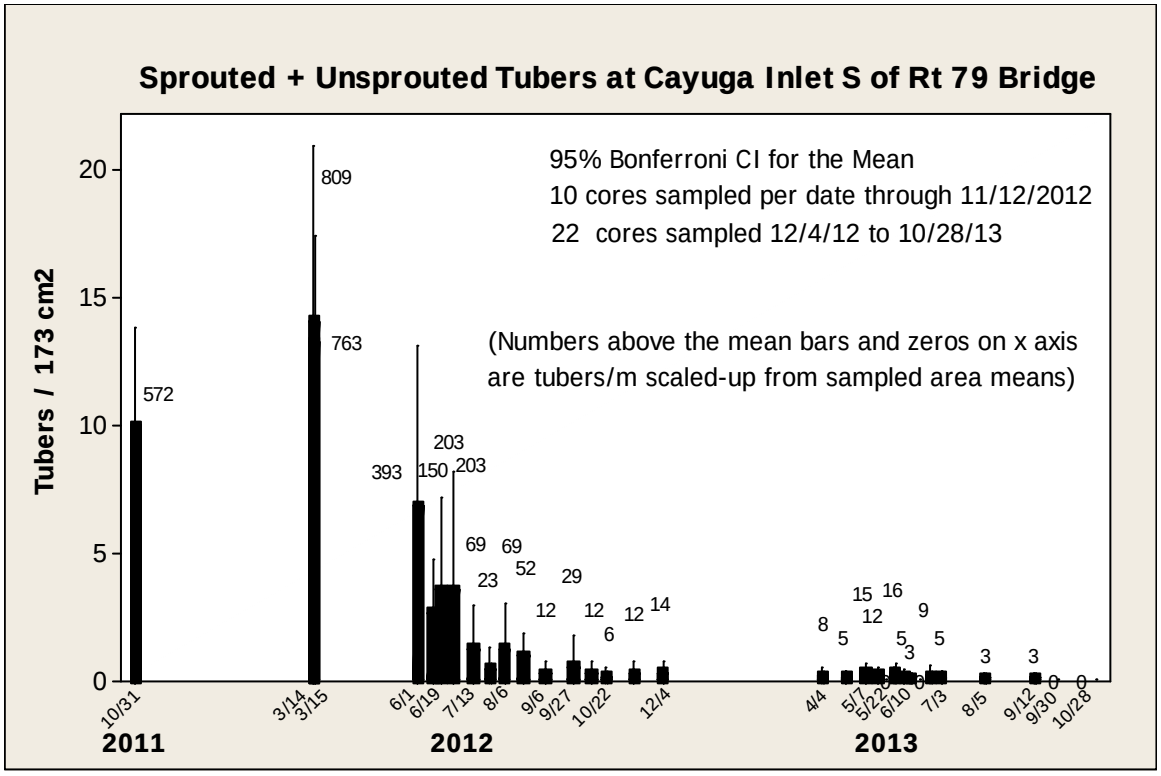


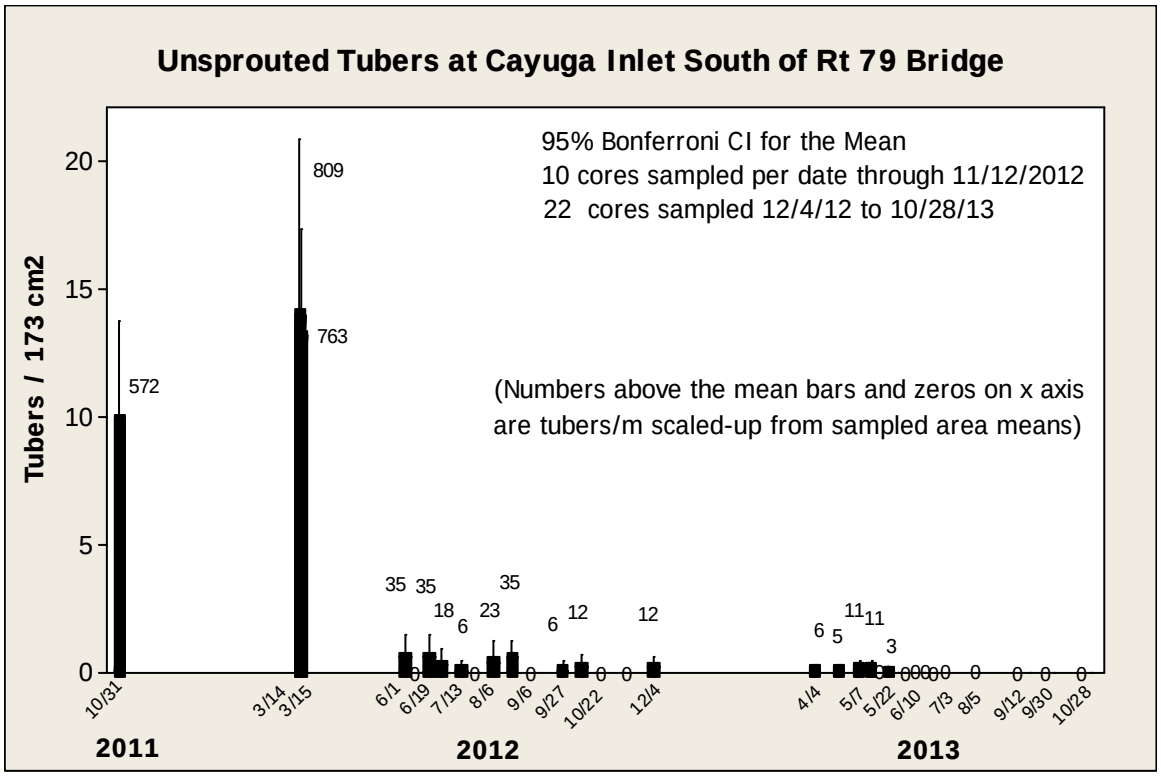


Fall Creek-Pie 1. Percentages of each abundance category of the total 150 post-herbicide rake-tosses made in the Fall Creek Area after the Fall 2013 herbicide treatment for All Species Combined, Native species, Non-Native species, *Ceratophyllum demersum, Elodea sp.* and *Heteranthera dubia.*

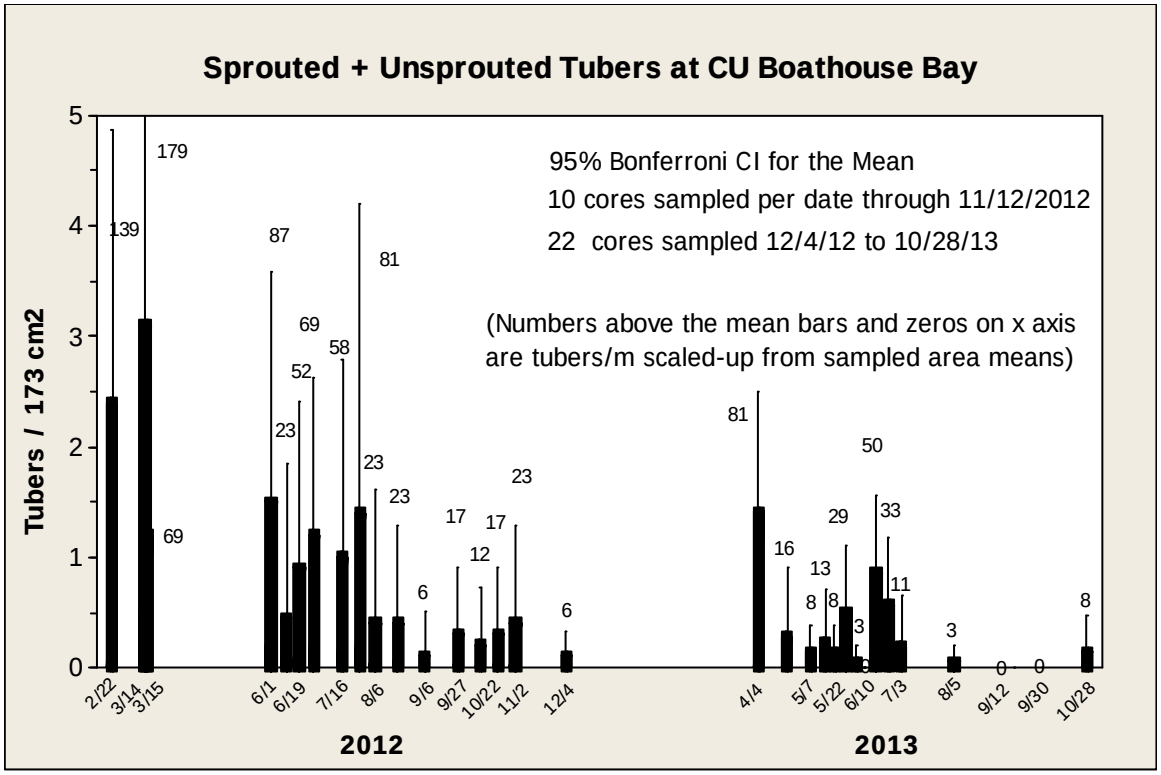


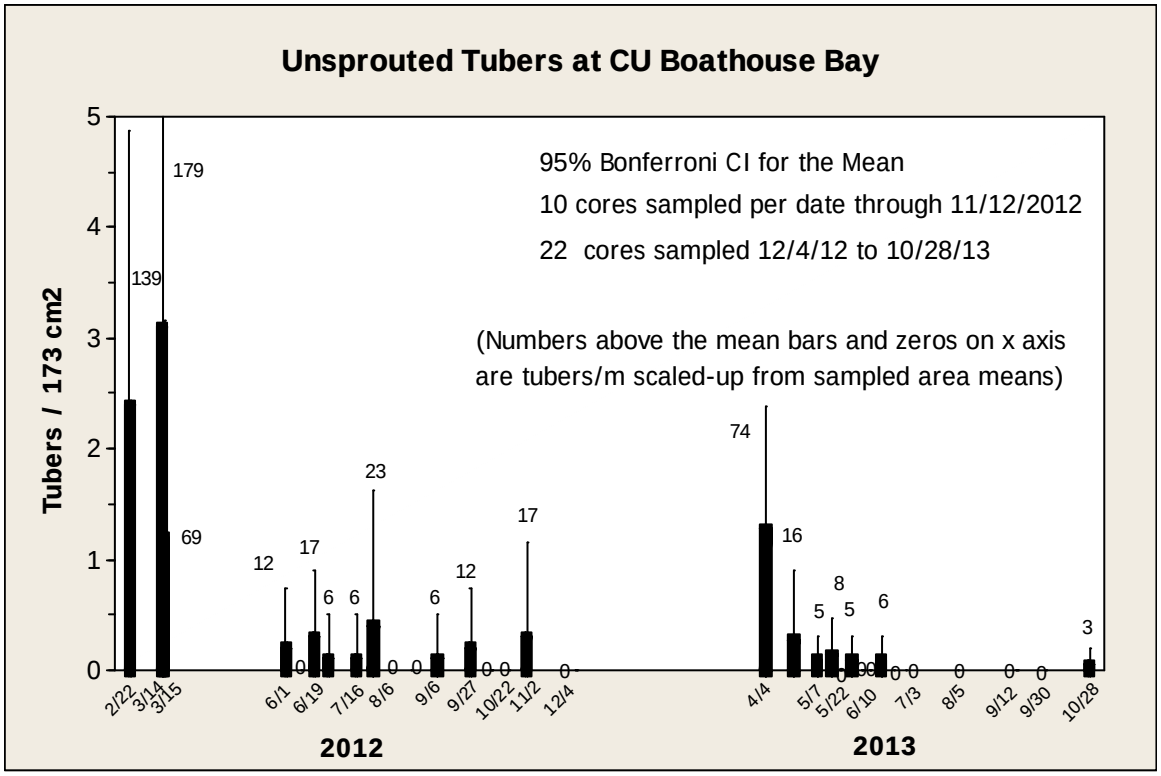
Fall Creek-Pie 2. Percentages of each abundance category of the total 150 post-herbicide rake-tosses made in the Fall Creek Area after the Fall 2013 herbicide treatment for *Hydrilla verticillata, Lemna minor, Myriophyllum spicatum, Nymphaea odorata, Potamogeton crispus* and *Vallisneria americana.*



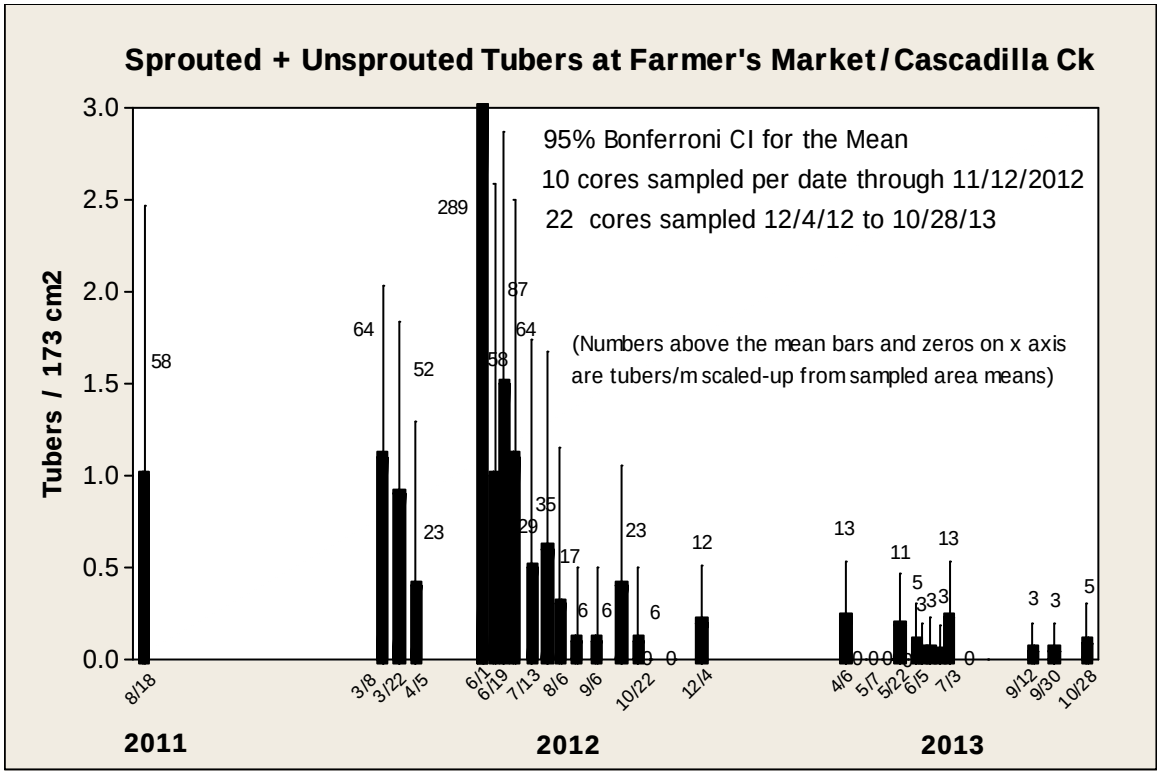


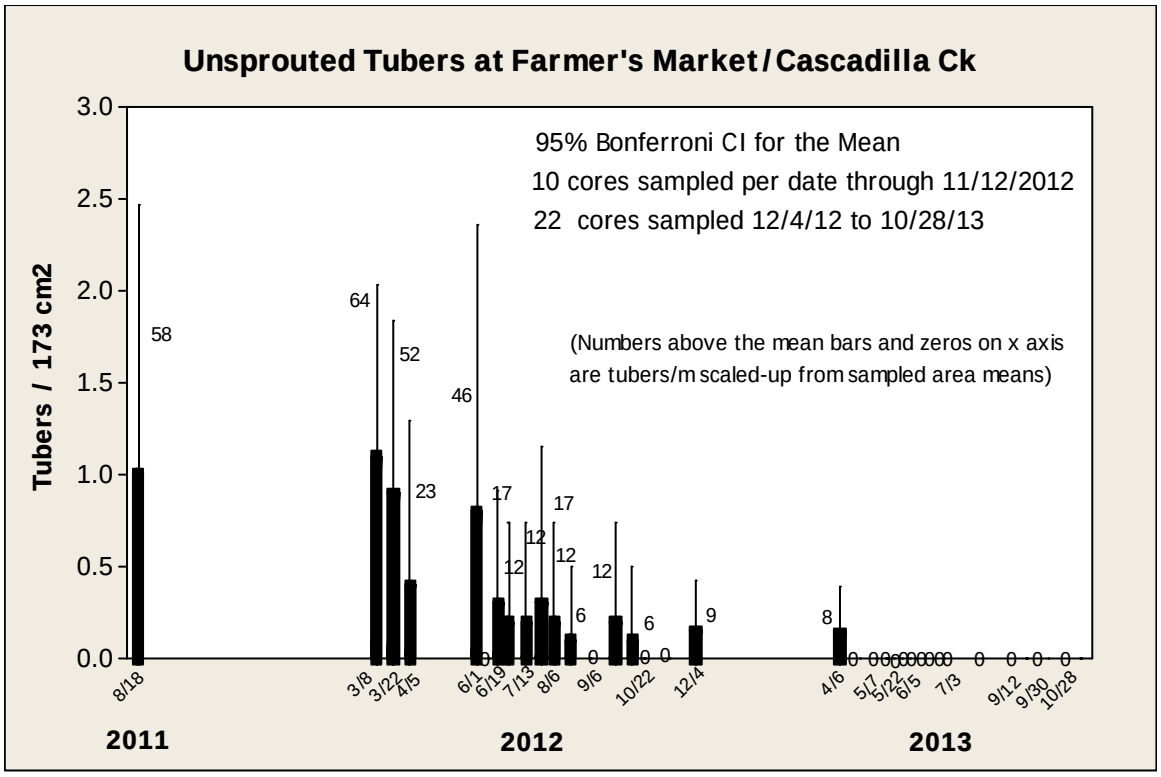
Tuber 1. Density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area Cayuga Inlet south of Rt.79 Bridge. Total tubers (top graph) and un-sprouted tubers (bottom graph).



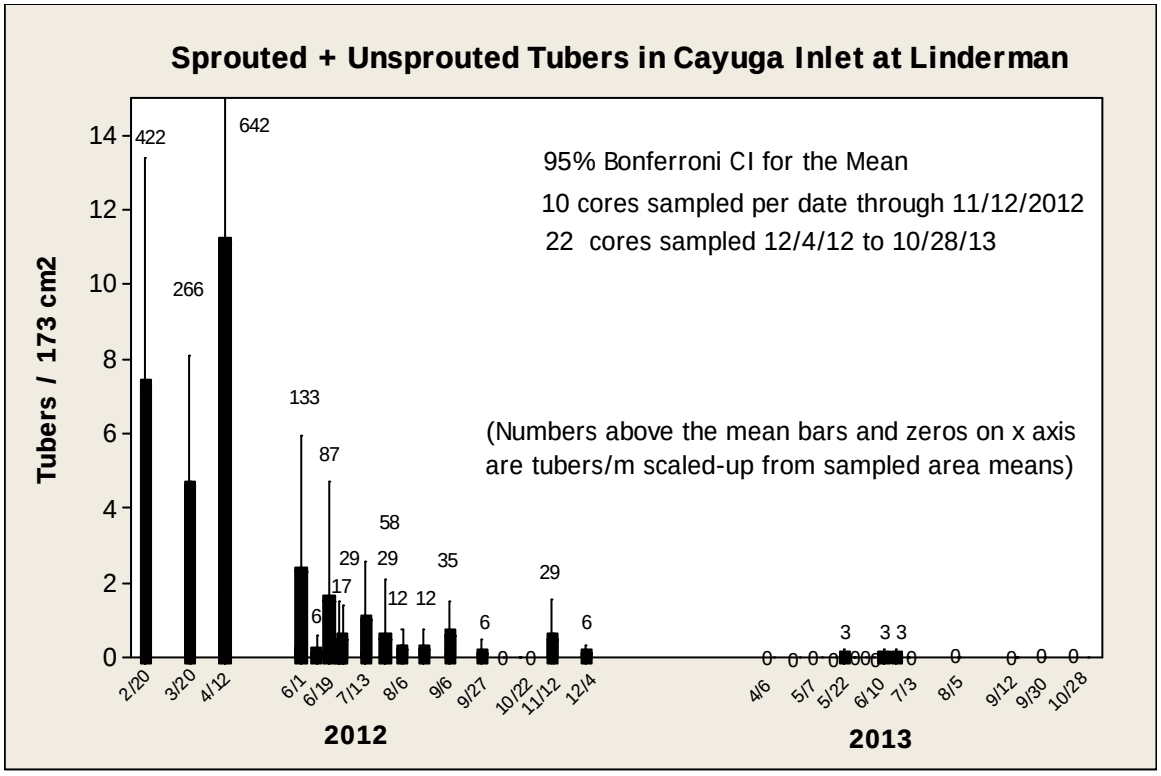


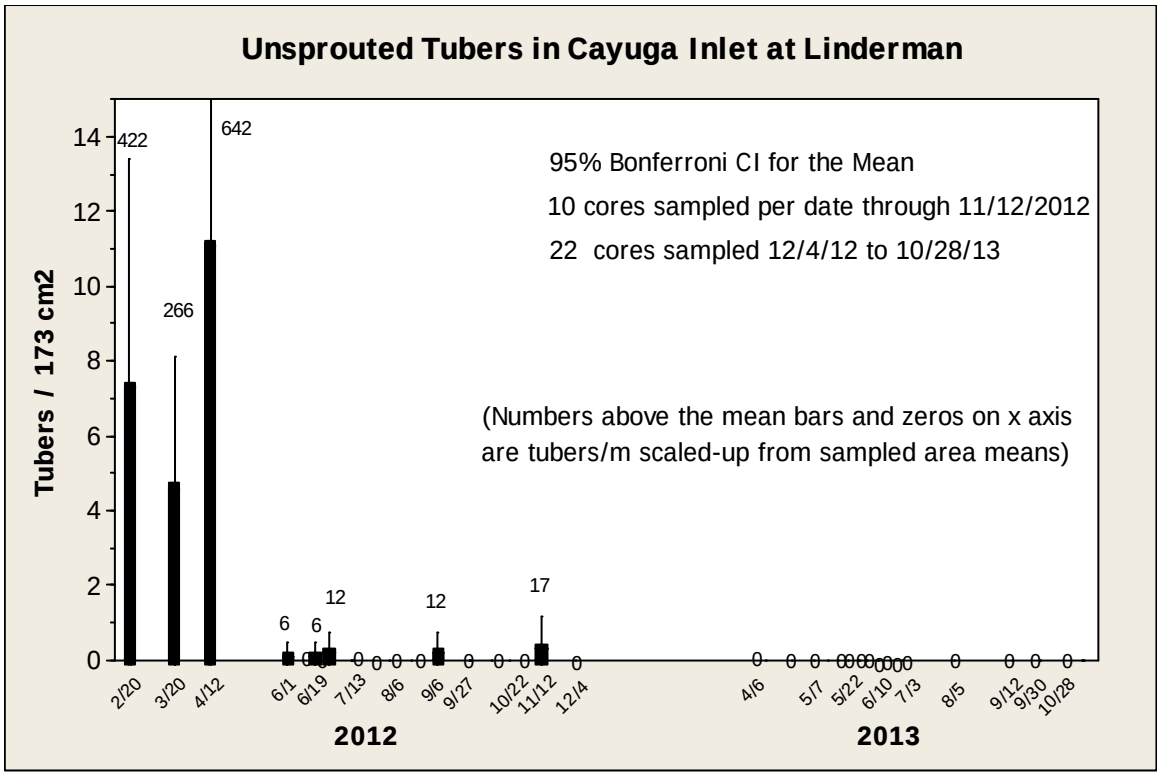
Tuber 2. Density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area CU Boathouse Bay. Total tubers (top graph) and un-sprouted tubers (bottom graph).





Tuber 3. Density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area Farmer's Market/Cascadilla Ck. Total tubers (top graph) and un-sprouted tubers (bottom graph).





Tuber 4. Density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area Cayuga Inlet at Linderman. Total tubers (top graph) and un-sprouted tubers (bottom graph).

Data 1. Cayuga Lake and Fall Creek rake-toss pre-herbicide measurements recorded in 2013. Each rake-toss is recorded as either D = dense; M = medium; S = sparse; T = trace; or O = zero as an abundance rating. The values for each plant species in each row is the biologist's percentage estimate as part of the whole rake-toss.

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/21	376600	4702450	0.6	1	T	50	1	5						20	3				1						15							5			+	8	2	6
8/21	376600	4702450	0.6	2	M	20	0.01	30		2				23	5		5		0.01				0.01					0.01		15		0.01				12	3	9
8/26	376600	4702500	0.8	1	M	10		4		15				2	8		3		0.01									0.01		8		50				10	3	7
8/26	376600	4702500	0.8	2	M	5	0.01	0.01		20					15		5								0.01					5		50				9	1	8
8/26	376600	4702550	0.9	1	S	5	0.01	10		10				1	20		4		0.01			0.01	3		7					10		30				13	4	9
8/26	376600	4702550	0.9	2	S	2		5		3					15		10		1				1							38		25				9	2	7
8/26	376600	4702600	1.0	1	M	5		5		5				5	5		0.01	0.01	0.01			0.01			5					0.01		70				12	4	8
8/26	376600	4702600	1.0	2	S	4	0.01	1		15				5	15		5		0.01						4			0.01		1		50				12	3	9
8/26	376600	4702650	1.2	1	S			10																								90				2	0	2
8/26	376600	4702650	1.2	2	S	5		5							9				1						5							75				6	1	5
8/26	376600	4702700	1.4	1	M	25		8		10				0.01					7						10							40				7	2	5
8/26	376600	4702700	1.4	2	S	10								0.01																		90				3	1	2
8/8	376550	4701442	0.7	1	O																															0	0	0
8/8	376550	4701442	0.7	2	O																															0	0	0
8/21	376550	4702400	0.5	1	T																				30							70			+	2	0	2
8/21	376550	4702400	0.5	2	T			10		15					5										15							55				5	0	5
8/21	376550	4702450	0.8	1	M	20	0.01	2		40				0.01	2		20		2						0.01					5		9			+	11	3	8
8/21	376550	4702450	0.8	2	M	0.01	0.01	10		30				0.01	15		15		0.01						10					5		15			+	11	3	8
8/26	376550	4702500	0.9	1	S	3		4		6					15		6		0.01						1					15		50				9	2	7
8/26	376550	4702500	0.9	2	S		0.01	1		12					26		12		0.01						5					6		38				9	2	7
8/26	376550	4702550	1.1	1	M	2	0.01	6						0.01	10		40								2							40				8	2	6
8/26	376550	4702550	1.1	2	M	5	0.01	5		5				0.01	20		10		0.01			0.01			5					20		30				12	4	8
8/26	376550	4702600	1.3	1	M	10	0.01	6		1				0.01	11		0.01		11						0.01					11		50				11	3	8
8/26	376550	4702600	1.3	2	M	5	5	5		0.01					35		5		20				0.01		5					5		15				11	2	9
8/26	376550	4702650	1.6	1	M	35		8									1		25						1					0.01		30				7	2	5
8/26	376550	4702650	1.6	2	S	20		13							6				6			0.01			13					0.01		42				8	2	6
8/26	376550	4702700	2.0	1	S	5		10						20					10			0.01			5							50				7	3	4
8/26	376550	4702700	2	2	S	30		5		5				10					20						0.01							30				7	2	5
8/26	376550	4702750	2.2	1	S	15		10		5									0.01													70				5	1	4

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/26	376550	4702750	2.2	2	M	30		0.01		10									8																	6	1	5
8/26	376550	4702800	2.3	1	S	80		0.01		5																										4	0	4
8/26	376550	4702800	2.3	2	M	20		4		3				3	0.01																					6	1	5
8/26	376550	4702850	3	1	S	50		10		40																	0.01					0.01				5	0	5
8/26	376550	4702850	3	2	S	50		5						5																		40				4	1	3
8/8	376500	4701510	0.6	1	O																															0	0	0
8/8	376500	4701510	0.6	2	O																															0	0	0
8/21	376500	4702400	0.8	1	M	2	0.01	5		15				0.01	17		16							5							30	0.01	10			+	11	2	9
8/21	376500	4702400	0.8	2	M	0.01	0.01	5		10				1	10		10		0.01				1		0.01						25		38				12	4	8
8/21	376500	4702450	0.9	1	M		5	5		0.01					20		15		5				0.01		15						20		15		+		10	3	7
8/21	376500	4702450	0.9	2	M	5		0.01		10				0.01	5		10		0.01	10				10							20		30				11	3	8
8/26	376500	4702500	1.0	1	S	3	0.01	7		3				0.01	30		10		0.01						10			0.01			30		7		+		12	3	9
8/26	376500	4702500	1	2	S	5	0.01	20						0.01	20		5		0.01						5						5		40		+		11	4	7
8/26	376500	4702550	1.2	1	S	6		0.01		7					6				2						2						7		70		+		8	1	7
8/26	376500	4702550	1.2	2	M	10	0.01	5		3					23		5		12				0.01		2						12		28		+		11	3	8
8/26	376500	4702600	1.6	1	S	10	0.01	1						5	0.01				0.01												70		14				8	2	6
8/26	376500	4702600	1.6	2	M	10		6		24				9	1				20							0.01						10		20				9	2	7
8/26	376500	4702650	2.1	1	S	4		1		4				1					70														20				6	2	4
8/26	376500	4702650	2.1	2	M	10		10		0.01				0.01					65												10		5				7	2	5
8/26	376500	4702700	2.4	1	S	75		10							4				10							0.01						1				6	1	5
8/26	376500	4702700	2.4	2	S	40		20		0.01				0.01				0.01	5							0.01						30				9	2	7
8/26	376500	4702750	2.6	1	S	60		20		20									0.01													0.01				5	1	4
8/26	376500	4702750	2.6	2	M	60		10		5				15					4													3				7	2	5
8/26	376500	4702800	2.6	1	M	90		5		5																										3	0	3
8/26	376500	4702800	2.6	2	M	80		20		0.01				0.01					0.01													0.01				6	2	4
8/26	376500	4702850	2.6	1	D	80		20						0.01									0.01													4	2	2
8/26	376500	4702850	2.6	2	S	85		15																								0.01				3	0	3
8/27	376500	4702900	2.4	1	M	70		13		15																						2				4	0	4
8/27	376500	4702900	2.4	2	M	78		10		0.01				10																		2				5	1	4
8/8	376450	4701550	0.7	1	O																															0	0	0
8/8	376450	4701550	0.7	2	T				100																											1	0	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/20	376450	4702350	0.8	1	S		0.01			10				5	10		10		5				0.01									55				10	3	7
8/20	376450	4702350	0.8	2	M	3		2						6	30		2		1							1					45	10				9	3	6
8/20	376450	4702400	0.8	1	M		0.01	10							15		15		5				10		5					30	10				9	2	7
8/20	376450	4702400	0.8	2	M	1		4		10				0.01	15		5		0.01				0.01		0.01					35	30				11	4	7
8/21	376450	4702450	1.0	1	M	0.01		0.01						0.01	35		10						5		5					25	20				9	2	7
8/21	376450	4702450	1.0	2	M	0.01	0.01	5		5				0.01	20		5		0.01						5					20	40			+	11	3	8
8/27	376450	4702500	2.4	1	M	4	1	4		6					80				0.01				0.01	0.01	1					4					11	3	8
8/27	376450	4702500	2.4	2	M	5	1	15		10					24		10		0.01						1										10	2	8
8/26	376450	4702550	1.6	1	S	10	0.01	10		5				5	15				10																2	2	7
8/26	376450	4702550	1.6	2	M	5		5		40				10	15	0.01	5		15							0.01										3	3	7
8/26	376450	4702600	2.1	1	M	20		3		7				10	15	0.01			30							0.01					20					9	2	7
8/26	376450	4702600	2.1	2	S			1						4					80																	4	2	2
8/26	376450	4702650	2.3	1	M	20		0.01		10									40																	5	1	4
8/26	376450	4702650	2.3	2	M	25		5		10				5	0.01				30							0.01										8	2	6
8/26	376450	4702700	2.6	1	S	40		10		15				5					10																	7	2	5
8/26	376450	4702700	2.6	2	S	50		2		15				2		0.01			0.01						1											8	2	6
8/26	376450	4702750	2.8	1	S	70		20		0.01				5					5																	5	2	3
8/26	376450	4702750	2.8	2	S	60		30		2				3	0.01				2							3										7	2	5
8/26	376450	4702800	2.8	1	M	60		10						30					0.01							0.01										5	2	3
8/26	376450	4702800	2.8	2	M	50		35		10				5					0.01							0.01										6	2	4
8/26	376450	4702850	3	1	S	75		15						10																						3	1	2
8/26	376450	4702850	3	2	M	80		20						0.01		0.01																				4	1	3
8/27	376450	4702900	3.1	1	S	95		0.01		5				0.01																						4	1	3
8/27	376450	4702900	3.1	2	S	70		5						10					0.01																	5	2	3
8/8	376400	4701600	0.9	1	O																															0	0	0
8/8	376400	4701600	0.9	2	O																															0	0	0
8/8	376400	4701650	0.8	1	T																									100						1	0	1
8/8	376400	4701650	0.8	2	O																															0	0	0
8/20	376400	4702300	0.8	1	M		0.01	10		10					30				0.01											10		30				8	2	6
8/20	376400	4702300	0.8	2	M	0.01	0.01	10		30				0.01	17		17		0.01				1	4		0.01					25					12	4	8
8/20	376400	4702350	0.9	1	M	3	0.01	5							15		15		0.01					1		1					20					10	2	8

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/20	376400	4702350	0.9	2	M		5	5		2				5	30		5		0.01						10					10		28				10	3	7
8/20	376400	4702400	1	1	M	3	7	2						0.01	50		2		4				1		1					10		20			+	11	4	7
8/20	376400	4702400	1	2	M			0.01		0.01					30		5		0.01					5						15		40				9	2	7
8/21	376400	4702450	1.1	1	M	0.01		1						0.01	63		3						3		10					4		15				9	3	6
8/21	376400	4702450	1.1	2	M	4	1	1		5				9	40		15		1					4	1					5		15			+	12	3	9
8/29	376400	4702500	1.6	1	M	14		2		5				4			2	10	6						2					4		40			+	10	3	7
8/29	376400	4702500	1.6	2	S	10								5	8				2											15		75				5	2	3
8/27	376400	4702550	2.0	1	D	1		0.01		0.01				14					45											20		0.01				8	2	6
8/27	376400	4702550	2.0	2	S	30								35					35			0.01								20						4	3	1
8/27	376400	4702600	2.1	1	S									5					95																	2	0	0
8/27	376400	4702600	2.1	2	D	10		0.01		0.01				10					40											20		20				7	2	5
8/27	376400	4702650	2.6	1	S	5													95												0.01	2				3	1	2
8/27	376400	4702650	2.6	2	M	3													95													2				3	1	2
8/27	376400	4702700	2.8	1	M	3		10		3				10	0.01	0.01			18					6								50				9	2	7
8/27	376400	4702700	2.8	2	M	15		15		5				25					30													10			+	6	2	4
8/27	376400	4702750	2.9	1	S	5		0.01						5																		90				4	1	3
8/27	376400	4702750	2.9	2	M	10		10		0.01				30					8							2						40				7	2	5
8/27	376400	4702800	3	1	M	70		15		0.01				15																						4	1	3
8/27	376400	4702800	3	2	M	60		20						5					1													15				4	1	3
8/27	376400	4702850	3.1	1	M	69		30						0.01												0.01										5	2	3
8/27	376400	4702850	3.1	2	M	70		30																								0.01				3	0	3
8/27	376400	4702900	3.3	1	T	80		20																												2	0	2
8/27	376400	4702900	3.3	2	T	45		5						45																		5				4	1	3
8/29	376400	4702950	3.4	1	S	40		20		10				2	0.01	8																20				7	1	6
8/29	376400	4702950	3.4	2	T	60		40																												2	0	2
8/29	376400	4703000	3.3	1	S	40		8		4						8																40				5	0	5
8/29	376400	4703000	3.3	2	S	75		5								5			5													10				5	1	4
8/29	376400	4703050	2.7	1	T	4		4		18				2		2																70				6	1	5
8/29	376400	4703050	2.7	2	T	9		5		1						80																5				5	0	5
8/8	376350	4701650	0.8	1	O																															0	0	0
8/8	376350	4701650	0.8	2	O																															0	0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/20	376350	4702250	0.8	1	S	40		0.01						0.01			10		0.01																	9	3	6
8/20	376350	4702250	0.8	2	S	15	0.01	8		3		7		3	25				3						8					3		25				11	2	9
8/20	376350	4702300	0.9	1	M	0.01	5	10		0.01					27		21													16		21				9	1	8
8/20	376350	4702300	0.9	2	M	0.01	0.01	5						5	15		30		0.01				0.01		5					10		30				11	3	8
8/20	376350	4702350	1	1	M		8	5				4		5	35										6					2		35				8	1	7
8/20	376350	4702350	1	2	M	0.01	1	10						6	26				0.01				5		5					26		26				10	2	8
8/20	376350	4702400	1.2	1	S	1	1	1							15				1				5		1							75			+	8	1	7
8/20	376350	4702400	1.2	2	M	4	5	10						0.01	30		5		20				10		1							35				9	2	7
8/21	376350	4702450	1.3	1	M		1	5						0.01	30		5		20						5					4		30				9	3	6
8/21	376350	4702450	1.3	2	M	11		3		2					11				23				0.01								45		5		+	8	2	6
8/29	376350	4702500	2	1	S	2								2					16													80				4	2	2
8/29	376350	4702500	2	2	S	5		0.01						5					20													70				5	2	3
8/27	376350	4702550	2.2	1	D	2		2						4					60													32				5	2	3
8/27	376350	4702550	2.2	2	D	5		5						5					80													5				5	2	3
8/27	376350	4702600	2.5	1	D	3								2					95																+	3	2	1
8/27	376350	4702600	2.5	2	M			2		1				2					95																+	4	2	2
8/27	376350	4702650	2.7	1	M			2											98																	2	1	1
8/27	376350	4702650	2.7	2	S			10											40													40				4	1	3
8/27	376350	4702700	2.9	1	M	5		0.01						5					70													20				5	2	3
8/27	376350	4702700	2.9	2	M	5		1		2				5					62													10				7	2	5
8/27	376350	4702750	3	1	M	44		15		1				25					15																	5	2	3
8/27	376350	4702750	3	2	M	19		22		2				3					50													4				6	2	4
8/27	376350	4702800	3.1	1	M	50		25						8					2							0.01						15				6	2	4
8/27	376350	4702800	3.1	2	S	50		30						5					5													0.01				6	2	4
8/27	376350	4702850	3.3	1	M	63		10						2																		25				4	1	3
8/27	376350	4702850	3.3	2	M	45		45		2				0.01					3												5					6	2	4
8/27	376350	4702900	3.4	1	T	70		15						15																						3	1	2
8/27	376350	4702900	3.4	2	S	75		15											1				8								1					5	2	3
8/29	376350	4702950	3.5	1	T	55		40																								5				3	0	3
8/29	376350	4702950	3.5	2	T	90		10																												2	0	2
8/29	376350	4703000	3.6	1	T	100																														1	0	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/29	376350	4703000	3.6	2	T	70		30																												2	**0**	2
8/29	376350	4703050	3.6	1	T	80		10		5																						5				4	**0**	4
8/29	376350	4703050	3.6	2	T	80		10								5																				4	**0**	4
8/29	376350	4703100	3.4	1	T	15		10		75																										3	**0**	3
8/29	376350	4703100	3.4	2	T	48		50		2																										3	**0**	3
11/6	376350	4703150	3	1	M	15		5		80				**0.01**																		0.01				5	**1**	4
11/6	376350	4703150	3	2	M	50		10		35													**3**									2				5	**1**	4
11/6	376350	4703200	2.6	1	M	85		5		10																						0.01				4	**0**	4
11/6	376350	4703200	2.6	2	M	70		15		15													**0.01**									0.01				5	**1**	4
11/6	376350	4703250	2.5	1	M	10		20		60				**10**																		0.01				5	**1**	4
11/6	376350	4703250	2.5	2	M	5		30		40				**10**												0.01						15				6	**1**	5
8/8	376300	4701700	1.4	1	O																															0	**0**	0
8/8	376300	4701700	1.4	2	O																															0	**0**	0
8/19	376300	4701900	0.9	1	T	100																														1	**0**	1
8/19	376300	4701900	0.9	2	T	20						1					**29**				50															4	**1**	3
8/19	376300	4701950	0.6	1	T							1									99															2	**0**	2
8/19	376300	4701950	0.6	2	T	10						1					**89**																			3	**1**	2
8/20	376300	4702200	0.4	1	S	0.01	0.01	25		0.01				5	20				**0.01**																	9	**2**	7
8/20	376300	4702200	0.4	2	S	0.01	0.01	30		2				**2**	30		**2**		**0.01**																	11	**3**	8
8/20	376300	4702250	0.8	1	S	0.01	0.01	5		15					40		**5**		**0.01**																	10	**2**	8
8/20	376300	4702250	0.8	2	S		4	5		3				**2**	66		**2**																			9	**2**	7
8/20	376300	4702300	0.9	1	S		0.01	15							25		**15**		**0.01**																	8	**2**	6
8/20	376300	4702300	0.9	2	M	0.01	10	2						**0.01**	30		**3**		**1**																	9	**3**	6
8/20	376300	4702350	1	1	M	8	1	0.01						**0.01**	35		**1**						**0.01**													10	**3**	7
8/20	376300	4702350	1	2	M	5	5	5		0.01					40				**0.01**																	10	**1**	9
8/20	376300	4702400	1.3	1	M	0.01		10		10				**0.01**	30		**5**		**0.01**																	9	**3**	6
8/20	376300	4702400	1.3	2	M	3	30	8						**2**	40		**0.01**		**7**				**0.01**	0.01											+	12	**4**	8
8/21	376300	4702450	1.6	1	S	20		5		10				**20**	5				**36**						2						2				8	**2**	6
8/21	376300	4702450	1.6	2	S	15	0.01	5		10				**5**	15		**5**		**40**						5											9	**3**	6
8/29	376300	4702500	2.2	1	M	2		1						**5**					**90**													2				5	**2**	3
8/29	376300	4702500	2.2	2	M	5								**15**					**60**													20				4	**2**	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/27	376300	4702550	2.5	1	M			0.01						5	5				90																		2	2
8/27	376300	4702550	2.5	2	D	1		1						10					70						8						10						4	4
8/27	376300	4702600	2.7	1	M									5					95																	0	2	0
8/27	376300	4702600	2.7	2	M	3		3											94																	3	1	2
8/27	376300	4702650	3	1	M	2		1						2	1				94																	5	2	3
8/27	376300	4702650	3	2	M	5		2		0.01									78												15	0.01				6	1	5
8/27	376300	4702700	3	1	S																											100				1	0	1
8/27	376300	4702700	3	2	S	10		5											85													2				3	1	2
8/27	376300	4702750	3.1	1	M	15		5		1				2					75														30				6	2	4
8/27	376300	4702750	3.1	2	S	30		5						1	1				33																		6	2	4
8/27	376300	4702800	3.3	1	S	40		20											40																		3	1	2
8/27	376300	4702800	3.3	2	M	50		18		0.01				0.01	2				30												0.01						7	2	5
8/27	376300	4702850	3.4	1	T	50		20											30																		3	1	2
8/27	376300	4702850	3.4	2	M	60		18						2					20																		4	2	2
8/27	376300	4702900	3.5	1	T	90		5							5																					3	0	3
8/27	376300	4702900	3.5	2	M	75		20						1					4																		4	2	2
8/29	376300	4702950	3.6	1	T	75		25																													2	0	2
8/29	376300	4702950	3.6	2	T	60		40																													2	0	2
8/29	376300	4703000	3.7	1	T	100																															1	0	1
8/29	376300	4703000	3.7	2	O																																0	0	0
8/29	376300	4703050	3.7	1	T	80		20																													2	0	2
8/29	376300	4703050	3.7	2	T	49		50															1														3	1	2
8/29	376300	4703100	3.7	1	T																																1	0	1
8/29	376300	4703100	3.7	2	T			100																													1	0	1
11/6	376300	4703150	3.5	1	M	2		98																													2	0	2
11/6	376300	4703150	3.5	2	M			50								10							35									5					4	1	3
11/6	376300	4703200	2.5	1	M	50		25		15																						10					4	0	4
11/6	376300	4703200	2.5	2	M	10		30		30						0.01							0.01									30					6	1	5
11/6	376300	4703250	3.4	1	D	2		98															0.01														3	1	2
11/6	376300	4703250	3.4	2	D	60		40		0.01																											3	0	3
11/20	376300	4703350	2.1	1	M	0.01		10		85				0.01															5								5	1	4

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/20	376300	4703350	2.1	2	M	40		15		20																		5								5	**0**	5
8/8	376250	4701750	1.6	1	O																															0	**0**	0
8/8	376250	4701750	1.6	2	O																															0	**0**	0
8/19	376250	4701900	0.7	1	T						**20**						**80**																			2	**2**	0
8/19	376250	4701900	0.7	2	T						**99**	1																								2	**1**	1
8/20	376250	4702200	0.8	1	S	7	0.01	30							15			**0.01**							0.01												7	**1**	6
8/20	376250	4702200	0.8	2	M	10	0.01	15						**0.01**	25		**15**			**0.01**																	7	**2**	5
8/20	376250	4702250	0.9	1	M	10	5	1						**0.01**	39		**4**							2												9	**3**	6
8/20	376250	4702250	0.9	2	S	5	2	2						**2**	40		**2**														7					8	**2**	6
8/20	376250	4702300	1	1	M			6						**4**	15								**0.01**								60					6	**2**	4
8/20	376250	4702300	1	2	S	1	5	20						**4**	25		**20**														0.01					8	**2**	6
8/20	376250	4702350	1.2	1	M	2	2	5		4				**2**	45		**5**		**0.01**						5											10	**3**	7
8/20	376250	4702350	1.2	2	M	5	5	5						**5**	15										5						30					8	**1**	7
8/20	376250	4702400	1.4	1	S	8	2	2		5					8		**3**								2						70					8	**1**	7
8/20	376250	4702400	1.4	2	M	5		5						**5**	10		**20**														35					7	**2**	5
8/21	376250	4702450	1.8	1	S	25	0.01	5		20				**5**	10		**25**																			9	**3**	6
8/21	376250	4702450	1.8	2	S	20		2		10				**10**	8		**35**														15					7	**2**	5
8/29	376250	4702500	2.5	1	M	8		4						**17**			**70**					**1**														5	**3**	2
8/29	376250	4702500	2.5	2	M	4		5						**10**	1		**80**																			5	**2**	3
8/27	376250	4702550	2.6	1	D	8		1						**1**			**90**																		+	4	**2**	2
8/27	376250	4702550	2.6	2	M												**100**																			1	**1**	0
8/27	376250	4702600	2.9	1	M			1						**1**			**96**																			4	**2**	2
8/27	376250	4702600	2.9	2	D	2		2									**90**														6					4	**1**	3
8/27	376250	4702650	3	1	D	18		2									**80**																	+		3	**1**	2
8/27	376250	4702650	3	2	D	10		0.01						**0.01**			**90**																			4	**2**	2
8/27	376250	4702700	3.1	1	M	5		0.01									**95**														0.01					4	**1**	3
8/27	376250	4702700	3.1	2	D	5		5									**90**																			3	**1**	2
8/27	376250	4702750	3.3	1	S	15											**85**																			2	**1**	1
8/27	376250	4702750	3.3	2	S	5		5									**90**																			3	**1**	2
8/27	376250	4702800	3.3	1	T	10		10									**80**																			3	**1**	2
8/27	376250	4702800	3.3	2	S	70		5									**25**																			3	**1**	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/27	376250	4702850	3.5	1	T	99													1																	2	1	1
8/27	376250	4702850	3.5	2	S	40		20									1		35																	6	2	4
8/27	376250	4702900	3.5	1	T	80		15						2					3																	4	2	2
8/27	376250	4702900	3.5	2	T	85		10											5																	3	1	2
8/29	376250	4702950	3.8	1	S	47		47			6																									3	1	2
8/29	376250	4702950	3.8	2	T	95		5																												2	0	2
8/29	376250	4703000	3.7	1	T	96										2									2										3	0	3
8/29	376250	4703000	3.7	2	T	100																														1	0	1
8/29	376250	4703050	3.9	1	T	80													19						1											3	1	2
8/29	376250	4703050	3.9	2	T	99													1																	2	1	1
8/29	376250	4703100	4	1	O																															0	0	0
8/29	376250	4703100	4	2	O																															0	0	0
11/6	376250	4703150	3.4	1	O																															0	0	0
11/6	376250	4703150	3.4	2	O																															0	0	0
11/6	376250	4703200	3.6	1	O																															0	0	0
11/6	376250	4703200	3.6	2	O																															0	0	0
11/6	376250	4703250	4	1	T	50																	50													2	1	1
11/6	376250	4703250	4	2	T	60		10			50			10						0.01																5	2	3
8/19	376212	4701818	1.1	1	T																50															2	1	1
8/19	376212	4701818	1.1	2	T						50										50															2	1	1
8/8	376200	4701800	1.5	1	T			33			34										33															3	1	2
8/8	376200	4701800	1.5	2	S						5						5				90															3	2	1
8/8	376200	4701850	0.3	1	S	30		5			10			1			54																			5	3	2
8/8	376200	4701850	0.3	2	S						70			5			20				5								0.01							5	3	2
8/20	376200	4702150	0.5	1	T	4	4	25		25				25	9		4		0.01				2												+	10	4	6
8/20	376200	4702150	0.5	2	T	15		40						15	10		5		1												10		4			8	3	5
8/20	376200	4702200	0.9	1	S	10	0.01	10		0.01				5	40		0.01		0.01							0.01						35				10	3	7
8/20	376200	4702200	0.9	2	S	10		10		2				3	50		10		5				0.01			0.01				0.01		10			+	11	4	7
8/20	376200	4702250	1	1	S	10	5	20						5	50		0.01		0.01							0.01						10			+	10	4	6
8/20	376200	4702250	1	2	S	10	5	20		10				0.01	40				0.01												1					9	2	7
8/20	376200	4702300	1.2	1	M		30	10							15		5		2						2					6					8	2	6

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/20	376200	4702300	1.2	2	S	14	10	19		14				0.01	14		5	5													5				11	3	8
8/20	376200	4702350	1.3	1	S	4	30	2		0.01					10		5	50				0.01			2							0.01				10	3	7
8/20	376200	4702350	1.3	2	M	10	0.01	5		5					5			25							0.01						25				9	1	8
8/20	376200	4702400	1.8	1	M	10		5						5				60												5	15				6	2	4
8/20	376200	4702400	1.8	2	M	10	2	2		2				25	2			35							2						20				9	2	7
8/29	376200	4702450	2.3	1	S	0.01									0.01			100																	3	1	2
8/29	376200	4702450	2.3	2	S	20		8						8			1	60																+	6	3	3	2
8/29	376200	4702500	2.8	1	M	6		2						2				90																	4	2	2	2
8/29	376200	4702500	2.8	2	M	15		1		3					1			80																	5	1	4	4
8/27	376200	4702550	2.9	1	D	2		2										96																	3	1	2	2
8/27	376200	4702550	2.9	2	D	5		4						1				90																	4	2	2	2
8/27	376200	4702600	3.0	1	M	5		2										93																	3	1	2	2
8/27	376200	4702600	3.0	2	D	7		1							1			90															1		5	1	4	2
8/27	376200	4702650	3.1	1	D	2												95				1											2	+	4	2	2	2
8/27	376200	4702650	3.1	2	D	1		0.01										95															4		4	1	3	2
8/27	376200	4702700	3.3	1	M	10												70															20		3	1	2	2
8/27	376200	4702700	3.3	2	M	10		2						3				80															5		5	2	3	2
8/27	376200	4702750	3.3	1	S	7		3										90																	3	1	2	2
8/27	376200	4702750	3.3	2	S	5		3										92																	3	1	2	2
8/27	376200	4702800	3.5	1	T	90												10																	2	1	1	1
8/27	376200	4702800	3.5	2	T	2		3										95																	3	1	2	2
8/27	376200	4702850	3.5	1	S	15		10		1								74																	4	1	3	3
8/27	376200	4702850	3.5	2	M	30		10										60																	3	1	2	2
8/27	376200	4702900	3.8	1	M	40		20		1				4				35																	5	2	3	2
8/27	376200	4702900	3.8	2	T									100																					1	1	0	1
8/29	376200	4702950	3.8	1	S	100												0.01																	2	1	1	1
8/29	376200	4702950	3.8	2	S	95		5										0.01																	3	1	2	2
8/29	376200	4703000	3.8	1	T	85		10										5																	3	1	2	2
8/29	376200	4703000	3.8	2	T	96		4																											2	0	2	2
8/29	376200	4703050	3.9	1	T	100																													1	0	1	1
8/29	376200	4703050	3.9	2	T	80		7						10					2			1													5	3	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/29	376200	4703100	4	1	T	90		10																												2	**0**	2
8/29	376200	4703100	4	2	T	50		49															**1**													3	**1**	2
11/6	376200	4703150	3.5	1	S	10		85						**0.01**									**5**													4	**2**	2
11/6	376200	4703150	3.5	2	M	35		30		3				**10**					**0.01**				**20**									2				7	**3**	4
11/6	376200	4703200	4	1	M	50		49						**1**									**0.01**													4	**2**	2
11/6	376200	4703200	4	2	M	49		50						**1**																		0.01				4	**1**	3
11/6	376200	4703250	4	1	S	70		30															**0.01**													3	**1**	2
11/6	376200	4703250	4	2	S	70		10						**5**									**15**													4	**2**	2
8/8	376180	4701800	2.0	1	O																															0	**0**	0
8/8	376180	4701800	2.0	2	O																															0	**0**	0
8/8	376150	4701750	0.5	1	M	1					**78**						**20**													1					4	**2**	2
8/8	376150	4701750	0.5	2	M						**70**						**10**							0.01						20					4	**2**	2
8/15	376150	4701850	1.2	1	O																															0	**0**	0
8/15	376150	4701850	1.2	2	O																															0	**0**	0
8/20	376150	4702150	0.8	1	T	10		30		10				**5**	10				**5**				5								25					8	**2**	6
8/20	376150	4702150	0.8	2	S	20	0.01	10						**10**	35		**5**		**0.01**												5	15				9	**3**	6
8/20	376150	4702200	0.8	1	S	5	0.01	10						**7**	30				**8**						0.01							40				8	**2**	6
8/20	376150	4702200	0.8	2	S	5	0.01	25		5				**5**	50																	5				8	**1**	7
8/20	376150	4702250	1	1	S	0.01	5	15		0.01				**0.01**	15				**5**													60				9	**2**	7
8/20	376150	4702250	1	2	S	5	2	15		5				**10**	30		**2**		**15**												0.01	15				11	**3**	8
8/20	376150	4702300	1.2	1	T	10	25	10						**10**	25				**1**												15					8	**2**	6
8/20	376150	4702300	1.2	2	S	2	45	12			**10**				25		**2**		**2**				**0.01**			0.01					2					11	**4**	7
8/20	376150	4702350	1.5	1	S	5	5	15						**5**	40		**5**		**20**							1										9	**3**	6
8/20	376150	4702350	1.5	2	M	5	5	10		30					35				**10**							5										7	**1**	6
8/20	376150	4702400	2.2	1	M	0.01		2						**18**	0.01				**80**																	5	**2**	3
8/20	376150	4702400	2.2	2	M	20		5						**0.01**					**50**												25					5	**2**	3
8/29	376150	4702450	2.6	1	M	2		7						**7**					**83**																	5	**2**	3
8/29	376150	4702450	2.6	2	S	10		2						**2**	2				**84**																	5	**2**	3
8/29	376150	4702500	2.9	1	M	10		5											**85**																+	3	**1**	2
8/29	376150	4702500	2.9	2	M	16		3						**1**					**80**																+	4	**2**	2
8/27	376150	4702550	3.0	1	D	16		2						**2**					**80**																	4	**2**	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/27	376150	4702550	3.0	2	M	7													93																		2	1	1
8/27	376150	4702600	3.0	1	M	14		1											85																		3	1	2
8/27	376150	4702600	3.0	2	M	20		10											70																		3	1	2
8/27	376150	4702650	3.1	1	D	8								2					90																+		3	2	1
8/27	376150	4702650	3.1	2	D	5		5		5									80																		5	1	4
8/27	376150	4702700	3.3	1	M	20		8						2					70																		4	2	2
8/27	376150	4702700	3.3	2	M	25								2					73																		3	2	1
8/27	376150	4702750	3.5	1	T	20								10					55													15					4	2	2
8/27	376150	4702750	3.5	2	S	8		2											90																		3	1	2
8/27	376150	4702800	3.6	1	S	1		3						1					95																		4	2	2
8/27	376150	4702800	3.6	2	M	15		8						2					75																		4	2	2
8/27	376150	4702850	3.6	1	M	45		5						5					45																		4	2	2
8/27	376150	4702850	3.6	2	S	80		0.01						5					15																		4	2	2
8/27	376150	4702900	3.8	1	S	65		5						25					5						0.01												5	2	3
8/27	376150	4702900	3.8	2	T	100																															1	0	1
8/29	376150	4702950	3.9	1	T	50								50																							2	1	1
8/29	376150	4702950	3.9	2	T	50								49																1							3	1	2
8/29	376150	4703000	3.9	1	S	75		20						5					0.01							0.01										5	2	3
8/29	376150	4703000	3.9	2	M	85		5						10																							3	1	2
8/29	376150	4703050	4	1	S	85		5		1				5					2																		6	2	4
8/29	376150	4703050	4	2	S	90		10						0.01					0.01																		4	2	2
8/29	376150	4703100	4.1	1	S	80		18											2																		3	1	2
8/29	376150	4703100	4.1	2	S	80		15						5																							3	1	2
11/6	376150	4703150	3.8	1	M	30		20						0.01					40				10														5	3	2
11/6	376150	4703150	3.8	2	M	35		15						20					10				20														5	3	2
11/6	376150	4703200	4	1	M	30		40						30									0.01														4	2	2
11/6	376150	4703200	4	2	M	50		25						25									0.01														4	2	2
11/6	376150	4703250	4	1	M	0.01		100						0.01									0.01														4	2	2
11/6	376150	4703250	4	2	M	10		87											0.01				3														4	2	2
11/20	376150	4703500	3	1	S	60		40		0.01														0.01													4	0	4
11/20	376150	4703500	3	2	M	80		15		4				1																							4	1	3

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/15	376100	4701850	2.0	1	O																															0	0
8/15	376100	4701850	2	2	T									5																			95				2	1	1
8/15	376100	4702100	0.8	1	M	40	0.01	40						10	3		2		1									0.01				4				10	3	7
8/15	376100	4702100	0.8	2	S	35		35		10				5	5													5				5				7	1	6
8/15	376100	4702150	1	1	S		5	15		8				2	25																	45				6	1	5
8/15	376100	4702150	1	2	S	5	15	15						5	29				1							1							29				8	2	6
8/15	376100	4702200	1.1	1	S	5	10	10		40				0.01	20		0.01		5							0.01											11	3	8
8/15	376100	4702200	1.1	2	S	5	20	15		0.01				5	29		5									5			1				15				10	2	8
8/20	376100	4702250	1.2	1	S			5						0.01	90				0.01														5			+	5	2	3
8/20	376100	4702250	1.2	2	S	15	1	5		0.01				0.01	60		5		0.01							4							10				9	2	7
8/20	376100	4702300	1.3	1	S	3	15	15						3	20				20				1			1							1				10	3	7
8/20	376100	4702300	1.3	2	M	10	10	10		10				5	5		5		10														35				9	3	6
8/20	376100	4702350	1.8	1	M	2		2						2					60																		5	2	3
8/20	376100	4702350	1.8	2	S	20	5	10						20	10				35							0.01											7	2	5
8/12	376100	4702400	2.5	1	S	0.01		0.01						0.01					100																		5	2	3
8/12	376100	4702400	2.5	2	S	6		4						2					73																		5	2	3
8/12	376100	4702450	2.8	1	S	1		0.01											99																	+	3	1	2
8/12	376100	4702450	2.8	2	S	2		6						2					90				0.01													+	5	3	2
8/12	376100	4702500	3	1	M	1				0.01									98														1				4	1	3
8/12	376100	4702500	3	2	M	5		5											90																		3	1	2
8/12	376100	4702550	3.3	1	M	0.01		0.01											100							0.01							0.01				5	1	4
8/12	376100	4702550	3.3	2	S	5		1											94							0.01											4	1	3
8/12	376100	4702600	3.3	1	M	9		0.01											90							1											4	1	3
8/12	376100	4702600	3.3	2	M	5		0.01											95							0.01											4	1	3
8/12	376100	4702650	3.4	1	M	8		2		0.01									90							0.01											5	1	4
8/12	376100	4702650	3.4	2	M	5		5						0.01		0.01			90																		5	2	3
8/29	376100	4702700	3.5	1	M	15		5											80																		3	1	2
8/29	376100	4702700	3.5	2	S	20		5						15					60																	+	4	2	2
8/29	376100	4702750	3.6	1	S	7		2						1					90																		4	2	2
8/29	376100	4702750	3.6	2	M	10								10					80																		3	2	1
8/29	376100	4702800	3.7	1	S	45								5					45										5								4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/29	376100	4702800	3.7	2	T	49								50					1																	3	2	1
8/29	376100	4702850	3.8	1	T	50								50					50																	2	1	1
8/29	376100	4702850	3.8	2	S	45		0.01						5					45														5			5	2	3
8/29	376100	4702900	3.9	1	T	45								45					10																	3	2	1
8/29	376100	4702900	3.9	2	T	90								10																						2	1	1
8/29	376100	4702950	4	1	O																															0	0	0
8/29	376100	4702950	4	2	T	50								50																						2	1	
8/29	376100	4703000	4	1	T	50								49																			1			3	1	
8/29	376100	4703000	4	2	S	65		5						20																		10				4	1	
8/29	376100	4703050	4	1	S	48		2						48					2																	4	2	
8/29	376100	4703050	4	2	S	70								29					1																	3	2	
8/29	376100	4703100	4.2	1	S	75		7						5					13																	4	2	
8/29	376100	4703100	4.2	2	S	75		9						5					10														1			5	2	3
11/6	376100	4703150	4	1	M	45		45						5					0.01				5													5	3	2
11/6	376100	4703150	4	2	M	30		45						0.01					25				0.01								0.01					6	3	3
11/6	376100	4703200	4.1	1	S	10		30						60					0.01																	4	2	2
11/6	376100	4703200	4.1	2	S	10		40						50					0.01				0.01								0.01					6	3	3
11/6	376100	4703250	4.2	1	M	85		5						10					0.01				0.01													5	3	2
11/6	376100	4703250	4.2	2	M	50		38						7					0.01				5													5	3	2
11/20	376100	4703650	2.5	1	M	40		20		40																										4	0	4
11/20	376100	4703650	2.5	2	M	80		15		5																										3	0	3
8/15	376050	4701850	0.9	1	T	10					5			10			10																			5	3	2
8/15	376050	4701850	0.9	2	T	81		4						2			1						1								1		10			7	2	5
8/15	376050	4701900	3.0	1	O																															0	0	0
8/15	376050	4701900	3	2	O																															0	0	0
8/15	376050	4702100	0.8	1	M	10	30	25		0.01				5	15		5		0.01				0.01								10		0.01			12	4	8
8/15	376050	4702100	0.8	2	S	1	5	24			0.01			10	25		25		0.01							0.01					10		0.01			11	4	7
8/15	376050	4702150	1	1	M	11	45	11		0.01				0.01	23	0.01	5						0.01										5			10	3	7
8/15	376050	4702150	1	2	S	10	10	10							10		2								1						7		50			8	1	7
8/15	376050	4702200	1.2	1	S	23	5	22						5	10		10		10						5						10					9	3	6
8/15	376050	4702200	1.2	2	S	25	25	5		0.01				10	20		10		5				0.01		0.01								0.01			11	4	7

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/21	376050	4702250	1.3	1	S		0.01	13							2				85																	4	1	3
8/21	376050	4702250	1.3	2	S	20	20	25						0.01	20				10			0.01			0.01							5					9	3	6
8/21	376050	4702300	1.5	1	T										60		10		10						20											2	2	2
8/21	376050	4702300	1.5	2	M	1	39	5		0.01	2				1		15		38						1							0.01				4	2	2
8/21	376050	4702350	2.0	1	M	1		0.01						0.01	1				98																	9	2	7
8/21	376050	4702350	2.0	2	D	2		5		0.01				2	2				84												5					5	2	2
8/12	376050	4702400	2.7	1	S	10		10											80																	3	1	2
8/12	376050	4702400	2.7	2	S	10		0.01						0.01					90																	4	2	2
8/12	376050	4702450	2.8	1	S									0.01					100																	2	0	2
8/12	376050	4702450	2.8	2	S			0.01						5					70												25					4	2	2
8/12	376050	4702500	3.0	1	S	0.01		0.01											100																	3	1	2
8/12	376050	4702500	3.0	2	M			1						1					80												18					4	2	2
8/12	376050	4702550	3.3	1	S	9		1											90																	3	1	2
8/12	376050	4702550	3.3	2	M	40		1											58												1					4	1	3
8/12	376050	4702600	3.4	1	M	25		5						0.01					68						2											5	2	3
8/12	376050	4702600	3.4	2	M	40		10						5					40						0.01						5					6	2	4
8/12	376050	4702650	3.4	1	T	5													95																	2	1	1
8/12	376050	4702650	3.4	2	S	7		3											90																	3	1	2
10/30	376050	4702700	3.3	1	D														100																	1	1	0
10/30	376050	4702700	3.3	2	D	10													90																	3	1	2
10/30	376050	4702750	3.4	1	D	1		0.01											99																	3	1	2
10/30	376050	4702750	3.4	2	D	0.01		0.01											100																	3	1	2
8/29	376050	4702800	3.7	1	S	30		1											69																	3	1	2
8/29	376050	4702800	3.7	2	S	30		9											60														1			4	1	3
8/29	376050	4702850	3.8	1	S	30								10					60																	3	2	1
8/29	376050	4702850	3.8	2	S	5		5						10					80																	4	2	2
8/29	376050	4702900	4	1	S	65		10						15																			10			4	1	3
8/29	376050	4702900	4	2	S	95								4																			1			3	1	2
11/6	376050	4702950	3.7	1	D	30		0.01						70									0.01													4	2	2
11/6	376050	4702950	3.7	2	D	10		1						89																						3	1	2
11/6	376050	4703000	4	1	D	2								98																						2	1	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/6	376050	4703000	4	2	D	3		0.01						97																						3	1	2
11/6	376050	4703050	4	1	M	45		15						40					0.01																	4	2	2
11/6	376050	4703050	4	2	M	10		7						80																3					4	1	3
11/6	376050	4703100	4	1	M	40		30						0.01					30																	4	2	2
11/6	376050	4703100	4	2	M	10		80						0.01					10				0.01													5	3	2
11/6	376050	4703150	4.1	1	D	20		30						0.01					50																	4	2	2
11/6	376050	4703150	4.1	2	D	5		45						0.01					50				0.01													5	3	2
11/6	376050	4703200	4.2	1	M	10		20						15					55				0.01													5	3	2
11/6	376050	4703200	4.2	2	M	8		40						0.01					50				2													5	3	2
11/6	376050	4703250	4.3	1	M	65		20						12									0.01								3					5	2	2
11/6	376050	4703250	4.3	2	M	50		45						5									0.01													4	2	2
11/20	376050	4703800	3.1	1	S	50		1																								49				3	0	3
11/20	376050	4703800	3.1	2	S																											100				1	0	1
8/15	376000	4701900	1.5	1	T																											100				1	0	1
8/15	376000	4701900	1.5	2	T																											100				1	0	1
8/15	376000	4702100	1	1	S	5	10	10						10	60				0.01													0.01				8	2	6
8/15	376000	4702100	1	2	S	5	40	5		5				5	20											5					15					8	1	7
8/15	376000	4702150	1	1	T									10	10				10													70				4	2	2
8/15	376000	4702150	1	2	S	5	10	27							27				5													26				6	1	5
8/15	376000	4702200	1.1	1	T		2	48							48				2																	4	1	3
8/15	376000	4702200	1.1	2	S	50	10	15		0.01				0.01	5		5		10							5										9	3	6
8/21	376000	4702250	1.3	1	S	0.01	5	5						30	0.01				30													30			+	7	2	5
8/21	376000	4702250	1.3	2	S	10	20	10		10					0.01				40													10				7	1	6
8/21	376000	4702300	1.6	1	S	5	5	5						1	10				74							0.01					0.01				8	2	6
8/21	376000	4702300	1.6	2	S			0.01											30				0.01									70				4	2	2
8/21	376000	4702350	2.2	1	M	0.01	0.01	2						3					95																+	5	2	3
8/21	376000	4702350	2.2	2	D			5						0.01					95																+	3	2	1
8/12	376000	4702400	2.7	1	S			1											99																	2	1	1
8/12	376000	4702400	2.7	2	S			0.01											100																	2	1	1
8/12	376000	4702450	3.0	1	S	20		10											70																	3	1	2
8/12	376000	4702450	3.0	2	S	0.01		1						0.01					99																	4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Valisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/12	376000	4702500	3.2	1	S	0.01		0.01											100																		3	1	2
8/12	376000	4702500	3.2	2	M	5		0.01						0.01					95				0.01														4	2	2
8/12	376000	4702550	3.3	1	M			1											99																	2	1	1
8/12	376000	4702550	3.3	2	S	9		1											90																	3	1	2
8/12	376000	4702600	3.3	1	M	5		0.01											95							0.01										4	1	3
8/12	376000	4702600	3.3	2	M	5		5						0.01					70				0.01			0.01					20	0.01				8	3	5
8/12	376000	4702650	3.5	1	S	20		0.01						0.01					80																	4	2	2
8/12	376000	4702650	3.5	2	M	5		5											90											0.01						4	1	3
10/30	376000	4702700	3.3	1	D	1													99																	2	1	1
10/30	376000	4702700	3.3	2	D	5													95																	2	1	1
10/30	376000	4702750	3.5	1	D	1													99																	2	1	1
10/30	376000	4702750	3.5	2	D	4								6					90																	3	2	1
10/30	376000	4702800	3.6	1	D	0.01		0.01						0.01					100																	4	2	2
10/30	376000	4702800	3.6	2	M	5													95																	2	1	1
10/30	376000	4702850	3.6	1	M			1						5					94																	3	2	1
10/30	376000	4702850	3.6	2	M	30		30						5					35																	4	2	2
10/30	376000	4702900	3.7	1	S	5		20						75					0.01																	4	2	2
10/30	376000	4702900	3.7	2	S	25		35						5					35																	4	2	2
11/17	376000	4702950		1	S	30		30						20					20																	4	2	2
11/17	376000	4702950		2	S	20		45						5					30																	4	2	2
11/17	376000	4703000		1	M	20		60						20					0.01																	4	2	2
11/17	376000	4703000		2	M	45		55						0.01																0.01						4	1	3
11/17	376000	4703050		1	M	70		30						0.01									0.01													4	2	2
11/17	376000	4703050		2	M	40		50						10																						3	1	2
11/17	376000	4703100		1	S	45		50						5																						3	1	2
11/17	376000	4703100		2	M	40		59																						1						3	0	3
11/17	376000	4703150		1	S	69		30						1																						3	1	2
11/17	376000	4703150		2	M	70		30											0.01				0.01													4	2	2
11/17	376000	4703200		1	S	30		64						1					5												0.01					5	2	3
11/17	376000	4703200		2	M	70		30											0.01																	3	1	2
11/17	376000	4703250		1	M	45		55																												2	0	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/17	376000	4703250		2	M	30		70											**0.01**											0.01						4	**1**	3
11/20	376000	4703950	2	1	M	73		5		7				**10**																		5				5	**1**	4
11/20	376000	4703950	2	2	S			10						**10**																		80				3	**1**	2
8/15	375950	4701900	0.8	1	T																											100				1	**0**	1
8/15	375950	4701900	0.8	2	O																															0	**0**	0
8/15	375950	4702100	1	1	S	2		5						**2**	10				**6**													75				6	**2**	4
8/15	375950	4702100	1	2	M	10		10			**0.01**			**0.01**	34		**0.01**		**35**						1					10		0.01				10	**4**	6
8/15	375950	4702150	1.1	1	S		30	50							20										0.01											4	**0**	4
8/15	375950	4702150	1.1	2	S	1	40	5				15			39							**0.01**											0.01				7	**1**	6
8/21	375950	4702200	1.2	1	T	25		20							25				**30**																	4	**1**	3
8/21	375950	4702200	1.2	2	S	8	40	10						**2**	30		**0.01**		**10**							0.01										8	**3**	5
8/21	375950	4702250	1.3	1	T	5	1	4											**88**				**1**										1				6	**2**	4
8/21	375950	4702250	1.3	2	S	75	5	5		5				**0.01**					**10**																		6	**2**	4
8/21	375950	4702300	1.6	1	S	88	0.01	1		1					0.01				**10**																		7	**1**	6
8/21	375950	4702300	1.6	2	S	0.01	0.01	3											**90**																		5	**1**	4
8/21	375950	4702350	2.2	1	M			5											**95**																	2	**1**	1
8/21	375950	4702350	2.2	2	D	2		5							3				**90**																	5	**1**	4
8/12	375950	4702400	2.8	1	S			2						**0.01**					**98**																	3	**2**	1
8/12	375950	4702400	2.8	2	S			1											**98**						0.01											4	**1**	3
8/12	375950	4702450	3.0	1	S			0.01						**0.01**					**100**																		3	**2**	1
8/12	375950	4702450	3.0	2	M	10													**70**												20					3	**1**	2
8/12	375950	4702500	3.1	1	S			3											**97**																	2	**1**	1
8/12	375950	4702500	3.1	2	M	1		0.01											**98**						1											4	**1**	3
8/12	375950	4702550	3.3	1	S	5		1											**94**																	3	**1**	2
8/12	375950	4702550	3.3	2	S	1		1											**49**												49					4	**1**	3
8/12	375950	4702600	3.4	1	M	5		5		0.01									**90**						0.01											5	**1**	4
8/12	375950	4702600	3.4	2	M	5		0.01							15				**80**						0.01						15					5	**1**	4
8/12	375950	4702650	3.6	1	S	10		5		0.01									**85**																	4	**1**	3
8/12	375950	4702650	3.6	2	S	2		0.01											**95**						3											4	**1**	3
10/30	375950	4702700	3.4	1	D														**100**																	1	**1**	0
10/30	375950	4702700	3.4	2	D			10											**90**																	2	**1**	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/30	375950	4702750	3.5	1	D	0.01		0.01											100																		3	1	2
10/30	375950	4702750	3.5	2	D	2								2					96																		3	2	1
10/30	375950	4702800	3.6	1	M														100																	1	1	0
10/30	375950	4702800	3.6	2	M														100																	1	1	0
10/30	375950	4702850	3.6	1	M	10		5						0.01					85																	4	2	2
10/30	375950	4702850	3.6	2	M	10													90																	2	1	1
10/30	375950	4702900	3.8	1	S	0.01		30						0.01					70																	4	2	2
10/30	375950	4702900	3.8	2	M	20		15						5					60																	4	2	2
11/17	375950	4702950		1	M	30		30											40																	3	1	2
11/17	375950	4702950		2	S	20		30											50																	3	1	2
11/17	375950	4703000		1	M	70		30																												2	0	2
11/17	375950	4703000		2	M	40		50						10									0.01													4	2	2
11/17	375950	4703050		1	S	30		40						30																						3	1	2
11/17	375950	4703050		2	M	50		50						0.01																						3	1	2
11/17	375950	4703100		1	M	80		20											0.01				0.01													4	2	2
11/17	375950	4703100		2	M	65		30											5																	3	1	2
11/17	375950	4703150		1	D	45		50															3													4	1	3
11/17	375950	4703150		2	M	40		60																												2	0	2
11/17	375950	4703200		1	M	60		40						0.01					0.01																	4	2	2
11/17	375950	4703200		2	M	30		70											0.01																	3	1	2
11/17	375950	4703250		1	D	40		60											0.01																	3	1	2
11/17	375950	4703250		2	M	50		50															0.01								0.01					4	1	3
8/15	375900	4701900	0.7	1	T									30			70																			2	2	0
8/15	375900	4701900	0.7	2	T	40		40						10																			10			4	1	3
8/15	375900	4701950	2.9	1	O																															0	0	0
8/15	375900	4701950	2.9	2	O																															0	0	0
8/15	375900	4702100	1.1	1	T														10							10					80					3	1	2
8/15	375900	4702100	1.1	2	M	2	0.01	10		2				0.01	10		0.01		69				0.01			2					5					11	4	7
8/15	375900	4702150	1.2	1	S	15	0.01	5						10	15		5		48							1						1				9	3	6
8/15	375900	4702150	1.2	2	M	10	0.01	5						5												1					74		5			7	1	6
8/21	375900	4702200	1.2	1	S			25		10				10			20		20							5		5				5			8	3	5

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/21	375900	4702200	1.2	2	S	0.01	0.01	30							40			10																		+	8	2	6
8/21	375900	4702250	1.3	1	S	0.01	5	5							10			79													1	0.01					8	1	7
8/21	375900	4702250	1.3	2	S	15	30	10						5	0.01			40																		7	2	5
8/21	375900	4702300	1.7	1	S	5		5							0.01			90															0.01			5	1	4
8/21	375900	4702300	1.7	2	S		5	5										80														10			4	1	3
8/21	375900	4702350	2.2	1	S	5									5			90														0.01			4	1	3
8/21	375900	4702350	2.2	2	S	0.01		3		0.01					5			92																	5	1	4
8/8	375900	4702400	2.6	1	S	3		2										95																	3	1	2
8/8	375900	4702400	2.6	2	S			10										90																	2	1	1
8/12	375900	4702450	2.9	1	S	15		5										80																	3	1	2
8/12	375900	4702450	2.9	2	S	5		1										92							1										5	1	4
8/12	375900	4702500	3.2	1	M	2		8										90																	3	1	2
8/12	375900	4702500	3.2	2	M	10		1						1				88																	4	2	2
8/12	375900	4702550	3.3	1	S			1										99																	2	1	1
8/12	375900	4702550	3.3	2	S	1		1										90																	4	1	3
8/12	375900	4702600	3.5	1	S	10		10						0.01				75																	5	2	3
8/12	375900	4702600	3.5	2	S	5		5							0.01			50							0.01										6	1	5
8/12	375900	4702650	3.6	1	S	3		2										95																	3	1	2
8/12	375900	4702650	3.6	2	S	50		5										43													2				4	1	3
10/30	375900	4702700	3.3	1	D	1		0.01										99																	3	1	2
10/30	375900	4702700	3.3	2	D	2		0.01										98																	3	1	2
10/30	375900	4702750	3.6	1	M	1		0.01										99																	3	1	2
10/30	375900	4702750	3.6	2	M	50		10						9				30														1			5	2	3
10/30	375900	4702800	3.7	1	M			0.01						5				95																	3	2	1
10/30	375900	4702800	3.7	2	M	10		5						0.01				85																	4	2	2
10/30	375900	4702850	3.8	1	D	35		35						10				20																	4	2	2
10/30	375900	4702850	3.8	2	D	30		30						10				30																	4	2	2
10/30	375900	4702900	4	1	M	15		40						5				40																	4	2	2
10/30	375900	4702900	4	2	M	40		30						10				20																	4	2	2
11/17	375900	4702950		1	M	40		20										40																	3	1	2
11/17	375900	4702950		2	M	10		50										40																	3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/17	375900	4703000		1	D	40		60						0.01																						3	1	2
11/17	375900	4703000		2	M	20		60						20																						3	1	2
11/17	375900	4703050		1	M	50		45						5									0.01												4	2	2
11/17	375900	4703050		2	M	70		30						0.01																					3	1	2
11/17	375900	4703100		1	M	60		40											0.01																3	1	2
11/17	375900	4703100		2	M	45		55						0.01																					3	1	2
11/17	375900	4703150		1	M	60		40																											2	0	2
11/17	375900	4703150		2	M	50		50															0.01												3	1	2
11/17	375900	4703200		1	D	50		45						5					0.01																4	2	2
11/17	375900	4703200		2	D	60		40																											2	0	2
11/17	375900	4703250		1	D	70		30											0.01																3	1	2
11/17	375900	4703250		2	M	50		50																											2	0	2
11/20	375900	4704100	4.5	1	T	45		50																									5		3	0	3
11/20	375900	4704100	4.5	2	T	90		8																									2		3	0	3
11/20	375892	4704200	2.5	1	T									100																					1	1	0
11/20	375892	4704200	2.5	2	T	90								1																			9		3	1	2
11/20	375877	4704350	2	1	S	45		10		15				15									0.01										15		6	2	4
11/20	375877	4705350	2	2	T	30		30						10																			30		4	1	3
8/15	375850	4701900	0.9	1	T			10						50					40																3	2	1
8/15	375850	4701900	0.9	2	T			5						20					55																4	2	2
8/15	375850	4701950	2.0	1	T	58		2		10				15																					5	1	4
8/15	375850	4701950	2	2	T																												100		1	0	1
8/15	375850	4702000	1.4	1	T	10		10	10	50																							20		5	0	5
8/15	375850	4702000	1.4	2	T										50				50																2	1	1
8/15	375850	4702050	1.8	1	T			50											50																2	1	1
8/15	375850	4702050	1.8	2	T			10									44		44						1								1		5	2	3
8/15	375850	4702100	1.1	1	S	44		5			2			0.01					5												44	0.01			7	3	4
8/15	375850	4702100	1.1	2	S	20		12							25				25				5								13				6	2	4
8/15	375850	4702150	1.4	1	T			30											70																2	1	1
8/15	375850	4702150	1.4	2	S	20		7						3					40												20	5			7	2	5
8/21	375850	4702200	1.2	1	T	10	10	50						20					20			10													+	5	1	4

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/21	375850	4702200	1.2	2	T		1	40											50							1						8				5	1	4
8/21	375850	4702250	1.3	1	S	5	5	5						0.01	0.01				15														70				7	2	5
8/21	375850	4702250	1.3	2	S		1	5		0.01					40				49														5				6	1	5
8/21	375850	4702300	1.6	1	M			1											99																	2	1	1
8/21	375850	4702300	1.6	2	S	5		5		20				0.01	0.01				60							0.01							0.01				8	2	6
8/21	375850	4702350	2.2	1	M			1							0.01				75														24				4	1	3
8/21	375850	4702350	2.2	2	M			2							3				95																	3	1	2
8/8	375850	4702400	2.5	1	S			3						0.01					95												2					4	2	2
8/8	375850	4702400	2.5	2	S	6								2					90						2											4	2	2
8/12	375850	4702450	3.0	1	S	5		0.01						0.01					95																	4	2	2
8/12	375850	4702450	3.0	2	S			5											95																	2	1	1
8/12	375850	4702500	3.1	1	M	10		10											70												10					4	1	3
8/12	375850	4702500	3.1	2	M	4		1											90												5					4	1	3
8/12	375850	4702550	3.3	1	S	6		4											90																	3	1	2
8/12	375850	4702550	3.3	2	S			1											95												4					3	1	2
8/12	375850	4702600	3.4	1	M	5		5											89							1										4	1	3
8/12	375850	4702600	3.4	2	M	4		2						2					91							1										5	2	3
8/12	375850	4702650	3.6	1	S	20		14						1					65																	4	2	2
8/12	375850	4702650	3.6	2	M	50		10						0.01					40							0.01										5	2	3
10/30	375850	4702700	3.5	1	D			0.01											100																	2	1	1
10/30	375850	4702700	3.5	2	S	0.01								0.01					100																	3	2	1
10/30	375850	4702750	3.5	1	M	0.01		0.01											100																	3	1	2
10/30	375850	4702750	3.5	2	D	0.01													100																	2	1	1
10/30	375850	4702800	3.7	1	M	0.01								0.01					100																	3	2	1
10/30	375850	4702800	3.7	2	M	8		2						0.01					90																	4	2	2
10/30	375850	4702850	4	1	S	25		25						0.01					50																	4	2	2
10/30	375850	4702850	4	2	S	40		40						5					15																	4	2	2
10/30	375850	4702900	4	1	M	10		25						5					60																	4	2	2
10/30	375850	4702900	4	2	M	50		50						0.01					0.01																	4	2	2
11/17	375850	4702950		1	M	30		60											10																	3	1	2
11/17	375850	4702950		2	M	20		20						0.01					60																	4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/17	375850	4703000		1	M	60		35											5																	3	**1**	2
11/17	375850	4703000		2	M	20		80																													2	**0**	2
11/17	375850	4703050		1	M	40		50											**10**																	3	**1**	2
11/17	375850	4703050		2	M	60		40																													2	**0**	2
11/17	375850	4703100		1	M	20		80																													2	**0**	2
11/17	375850	4703100		2	D	40		60																													2	**0**	2
11/17	375850	4703150		1	D	50		45						**5**					**0.01**																	4	**2**	2
11/17	375850	4703150		2	M	70		30																													2	**0**	2
11/17	375850	4703200		1	M	55		45						**0.01**																						3	**1**	2
11/17	375850	4703200		2	M	60		40															**0.01**													3	**1**	2
11/17	375850	4703250		1	D	79		20						**1**																						3	**1**	2
11/17	375850	4703250		2	M	50		50											**0.01**																	3	**1**	2
11/20	375840	4704500	2.7	1	M	85		15						**0.01**																						4	**1**	3
11/20	375840	4704500	2.7	2	S	30		13		13				**14**																						5	**1**	4
11/20	375808	4704650	2.2	1	S	10		83		5												**2**														5	**1**	4
11/20	375808	4704650	2.2	2	S	40		40						**10**								**10**														4	**2**	2
8/15	375800	4701950	1.4	1	T			5							10				**80**																5	0.01	4	**1**	3
8/15	375800	4701950	1.4	2	T									**95**			**5**																			2	**2**	0
8/15	375800	4702000	1.5	1	O																															0	**0**	0
8/15	375800	4702000	1.5	2	S			0.01		100																										3	**0**	3
8/15	375800	4702050	1.3	1	T									**69**					**1**																15	**2**	2
8/15	375800	4702050	1.3	2	T			75						**10**					**5**							5									5	**2**	3
8/15	375800	4702100	1.1	1	O																															0	**0**	0
8/15	375800	4702100	1.1	2	T			80											**20**																2	**1**	1
8/15	375800	4702150	1.2	1	S	5		5						**20**	5				**55**																6	**2**	4
8/15	375800	4702150	1.2	2	M	1		5						**0.01**	5				**73**						1										8	**2**	6
8/21	375800	4702200	1.3	1	S	3		0.01		5				**3**			**0.01**		**84**																7	**3**	4
8/21	375800	4702200	1.3	2	M	10		5		0.01				**0.01**					**85**																5	**2**	3
8/21	375800	4702250	1.3	1	S	5		10						**5**	0.01				**70**														10		6	**2**	4
8/21	375800	4702250	1.3	2	S		0.01	5									**0.01**		**95**						0.01										5	**2**	3
8/21	375800	4702300	1.8	1	S														**100**														0.01		2	**1**	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Valisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/21	375800	4702300	1.8	2	M			1						1	1				96												1						5	2	3
8/21	375800	4702350	2.3	1	M	1		0.01											99																		3	1	2
8/21	375800	4702350	2.3	2	M	10		0.01						5	0.01				80														5				6	2	4
8/8	375800	4702400	2.5	1	S			5											95																	2	1	1
8/8	375800	4702400	2.5	2	S			5							1				94																	3	1	2
8/12	375800	4702450	2.8	1	T														99														1			2	1	1
8/12	375800	4702450	2.8	2	S	20		5											70									0.01		5						5	1	4
8/12	375800	4702500	3.0	1	M	5		1		0.01				0.01					94						0.01											6	2	4
8/12	375800	4702500	3.0	2	S	0.01		2											98																	3	1	2
8/12	375800	4702550	3.3	1	S	5		5											90																	3	1	2
8/12	375800	4702550	3.3	2	S	3		7											90																	3	1	2
8/12	375800	4702600	3.3	1	M	49		2		1									49																	3	1	2
8/12	375800	4702600	3.3	2	M	5		20						0.01					75																	4	2	2
8/12	375800	4702650	3.5	1	S	15		7		1				1					75						1											6	2	4
8/12	375800	4702650	3.5	2	S	45		5											45						5											4	1	3
10/30	375800	4702700	3.5	1	D														100																	1	1	0
10/30	375800	4702700	3.5	2	D	0.01		0.01											100																	3	1	2
10/30	375800	4702750	3.6	1	D	0.01		0.01											100																	3	1	2
10/30	375800	4702750	3.6	2	D	2		2											96																	3	1	2
10/30	375800	4702800	3.8	1	M	0.01													100																	2	1	1
10/30	375800	4702800	3.8	2	M	6		4											90																	3	1	2
10/30	375800	4702850	4	1	M	10		5						0.01					85																	4	2	2
10/30	375800	4702850	4	2	M	5		5						1					89																	4	2	2
10/30	375800	4702900	4.1	1	M	90		5						0.01					5																	4	2	2
10/30	375800	4702900	4.1	2	M	8		70						2					20																	4	2	2
11/17	375800	4702950		1	M	80													20																	2	1	1
11/17	375800	4702950		2	M	40		0.01						0.01					60																	4	2	2
11/18	375800	4703000		1	S	30		35						0.01					35																	4	2	2
11/18	375800	4703000		2	S	20		59						11					10				0.01													5	3	2
11/18	375800	4703050		1	S	40		40											0.01				20													4	2	2
11/18	375800	4703050		2	S	50		10						20					10				10													5	3	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/18	375800	4703100		1	S	8		70											20			2														4	2	2
11/18	375800	4703100		2	S	70		15						3					10			2														5	3	2
11/17	375800	4703150		1	M	40		60																												2	0	2
11/17	375800	4703150		2	D	70		30															0.01													3	1	2
11/17	375800	4703200		1	D	45		55											0.01																	3	1	2
11/17	375800	4703200		2	M	40		60																												2	0	2
11/17	375800	4703250		1	D	60		40															0.01													3	1	2
11/17	375800	4703250		2	D	70		30																												2	0	2
11/20	375775	4704800	2	1	T	60				40																										2	0	2
11/20	375775	4704800	2	2	T			8						90						95			2													3	2	2
8/15	375750	4701950	1.4	1	S	1		2						1	5				84	85						5					2				7	2	2
8/15	375750	4701950	1.4	2	S	20		5									5		60	75						5					20				6	2	4
8/15	375750	4702000	1.7	1	S	10		0.01		10				80					0.01	30											5				5	2	3
8/15	375750	4702000	1.7	2	T	10		10						70					10	85											15				4	1	2
8/15	375750	4702050	1.4	1	T					100										77											10				1	0	1
8/15	375750	4702050	1.4	2	T			10						82					5	85						1					2				5	2	3
8/15	375750	4702100	1.3	1	T	85													10	85						5									3	1	2
8/15	375750	4702100	1.3	2	T			50							10				40	85															3	1	2
8/15	375750	4702150	1.1	1	T	89								5					5	95						1									4	2	2
8/15	375750	4702150	1.1	2	O																															0	0	0
8/21	375750	4702200	1.3	1	S			5		0.01				0.01	0.01				95	85																5	2	3
8/21	375750	4702200	1.3	2	S	5		10											85																	3	1	2
8/21	375750	4702250	1.4	1	S			3									2		75												20					4	2	2
8/21	375750	4702250	1.4	2	S	40		0.01						10	5				30												5					8	2	6
8/21	375750	4702300	1.6	1	M		0.01	0.01											85												15					4	1	3
8/21	375750	4702300	1.6	2	S	10		1		1				1					77												10					6	2	4
8/21	375750	4702350	2.2	1	M	10		5							0.01				85																	4	1	3
8/21	375750	4702350	2.2	2	M		0.01	5										0.01	95																	4	2	2
8/8	375750	4702400	2.5	1	S	5		10											85																	3	1	2
8/8	375750	4702400	2.5	2	S			10							5				85																	3	1	2
8/12	375750	4702450	2.8	1	S			2											98																	2	1	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/12	375750	4702450	2.8	2	T	40		1									1	57																		5	2	3
8/12	375750	4702500	3.0	1	S			15										80				5			0.01										4	2	2
8/12	375750	4702500	3.0	2	S			13										85							2							0.01			4	1	3
8/12	375750	4702550	3.1	1	S			0.01										100																	2	1	1
8/12	375750	4702550	3.1	2	M	15		5										80																	3	1	2
8/12	375750	4702600	3.3	1	M	40		10										50							0.01										5	1	4
8/12	375750	4702600	3.3	2	M	25		25							0.01			50				0.01												0.01		5	2	3
8/12	375750	4702650	3.5	1	T	50												50																		2	1	1
8/12	375750	4702650	3.5	2	M	50		10										40							0.01										4	1	3
10/30	375750	4702700	3.5	1	S	0.01		30										70																		3	1	2
10/30	375750	4702700	3.5	2	D													100																		1	1	0
10/30	375750	4702750	3.5	1	M	40		1										59																		3	1	2
10/30	375750	4702750	3.5	2	D	10		5										85																		3	1	2
10/30	375750	4702800	3.7	1	D	0.01		0.01										100																		3	1	2
10/30	375750	4702800	3.7	2	D	3		2										95																		3	1	2
10/30	375750	4702850	4	1	D	45		50						5																						3	1	2
10/30	375750	4702850	4	2	D	10		50						0.01				40																		4	2	2
10/30	375750	4702900	4	1	D	5		15						20				60																		4	2	2
10/30	375750	4702900	4	2	D	20		70						5				5																		4	2	2
11/17	375750	4702950		1	D	10		30						10				50																		4	2	2
11/17	375750	4702950		2	M	15		20						5				60																		4	2	2
11/17	375750	4703000		1	M	55		30						0.01				15																		4	2	2
11/17	375750	4703000		2	M	50		45						5																						3	1	2
11/17	375750	4703050		1	M	40		55										5																		3	1	2
11/17	375750	4703050		2	M	60		30										10																		3	1	2
11/17	375750	4703100		1	M	60		30										10																		3	1	2
11/17	375750	4703100		2	D	30		70										0.01																		3	1	2
11/17	375750	4703150		1	D	30		65										5																		3	1	2
11/17	375750	4703150		2	D	45		50						5				0.01																		4	2	2
11/17	375750	4703200		1	D	65		30										5																		3	1	2
11/17	375750	4703200		2	D	60		40						0.01				0.01																		4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/17	375750	4703250		1	D	80		20																												2	0	2
11/17	375750	4703250		2	D	40		59						1																						3	1	2
11/20	375746	4704950	3.5	1	T	97		2						1																						3	1	2
11/20	375746	4704950	3.5	2	S	8		30		60				2																						4	1	3
11/20	375715	4705100	3.2	1	T					100																										1	0	1
11/20	375715	4705100	3.2	2	S	40		40		2				3									15													5	2	3
8/15	375700	4702050	1.8	1	T														100																	1	1	0
8/15	375700	4702050	1.8	2	T	100																														1	0	1
8/15	375700	4702100	1.3	1	T	100																														1	0	1
8/15	375700	4702100	1.3	2	T			10						5											75								10			4	1	3
8/15	375700	4702150	1.1	1	O																															0	0	0
8/15	375700	4702150	1.1	2	T			55						5											10								40			3	1	2
8/21	375700	4702200	1.1	1	T	35		40		5	10																									5	1	4
8/21	375700	4702200	1.1	2	T														100																	1	1	0
8/21	375700	4702250	1.3	1	T	10		10											79														1			4	1	3
8/21	375700	4702250	1.3	2	S			10											85														5			3	1	2
8/21	375700	4702300	1.6	1	S	10		10		5				5					70																	5	2	3
8/21	375700	4702300	1.6	2	S	10		0.01		10				10					70														0.01			6	2	4
8/21	375700	4702350	2.1	1	M	10	1	5							1				83																	5	1	4
8/21	375700	4702350	2.1	2	M		0.01	5						2					86													5				6	2	4
8/8	375700	4702400	2.3	1	T														100																	1	1	0
8/8	375700	4702400	2.3	2	S			5											95																	2	1	1
8/12	375700	4702450	2.8	1	T	1		3											96																	3	1	2
8/12	375700	4702450	2.8	2	S	1		4						6					89																	4	2	2
8/12	375700	4702500	2.9	1	S			0.01											100																	2	1	1
8/12	375700	4702500	2.9	2	S	5		5											90							0.01									4	1	3
8/12	375700	4702550	3	1	S	0.01		0.01											100				0.01													4	2	2
8/12	375700	4702550	3	2	S			1											99																	2	1	1
8/12	375700	4702600	3.2	1	S	1		3						1	1				93																1	6	2	4
8/12	375700	4702600	3.2	2	M	2		3							0.01				95															0.01		5	1	4
8/12	375700	4702650	3.4	1	T	50		4		1									45																	4	1	3

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/12	375700	4702650	3.4	2	S	60		10							0.01				30			0.01														5	2	3
10/30	375700	4702700	3.4	1	D														100																	1	1	0
10/30	375700	4702700	3.4	2	M														100																	1	1	0
10/30	375700	4702750	3.5	1	D			0.01											100																	2	1	1
10/30	375700	4702750	3.5	2	D														100																	1	1	0
10/30	375700	4702800	3.6	1	D	5													95																	2	1	1
10/30	375700	4702800	3.6	2	M														100																	1	1	0
10/30	375700	4702850	3.8	1	D	30		40						0.01					30																	4	2	2
10/30	375700	4702850	3.8	2	D	20		40											40																	3	1	2
10/30	375700	4702900	4	1	D	40		40						10					10																	4	2	2
10/30	375700	4702900	4	2	D	30		50						5					15																	4	2	2
11/18	375700	4702950		1	S	0.01		80						5					15																	4	2	2
11/18	375700	4702950		2	S	60		20						15					5																	4	2	2
11/17	375700	4703000		1	M	45		50											5																	3	1	2
11/17	375700	4703000		2	M	30		65						5																					3	1	2
11/17	375700	4703050		1	M	45		55											0.01																	3	1	2
11/17	375700	4703050		2	M	69		30											1																	3	1	2
11/17	375700	4703100		1	M	57		40											3																	3	1	2
11/17	375700	4703100		2	D	60		40																												2	0	2
11/17	375700	4703150		1	D	65		30											5																	3	1	2
11/17	375700	4703150		2	D	65		35																												2	0	2
11/17	375700	4703200		1	D	55		35											10				0.01													4	2	2
11/17	375700	4703200		2	D	60		35											5																	3	1	2
10/23	375700	4703250		1	M	25		20											55																	3	1	2
10/23	375700	4703250		2	M	85		5											10																	3	1	2
8/21	375690	4702015	0.6	1	T												95		5																	2	2	0
8/21	375690	4702015	0.6	2	O																															0	0	0
11/20	375683	4705250	4.5	1	S	10		90		0.01																										3	0	3
11/20	375683	4705250	4.5	2	O																															0	0	0
11/20	375669	4705400	4.8	1	S	45		55						0.01																						3	1	2
11/20	375669	4705400	4.8	2	S	75		20														4	1													4	1	3

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/21	375650	4702100	1.8	1	T	90		5											5																	3	1	2
8/21	375650	4702100	1.8	2	T					40	10			20					20													10					5	3	2
8/15	375650	4702150	1.4	1	T									100																						1	1	0
8/15	375650	4702150	1.4	2	T										100																					1	0	1
8/21	375650	4702200	1.3	1	T													100																		1	1	0
8/21	375650	4702200	1.3	2	T					60								40																		2	1	1
8/21	375650	4702250	1.4	1	T	30	5	30						30				30															5				5	1	4
8/21	375650	4702250	1.4	2	S	30		20						25				25																		4	2	2
8/21	375650	4702300	1.5	1	S	10		5						5				80																		4	2	2
8/21	375650	4702300	1.5	2	T	40		5			1			1				53																		5	3	2
8/21	375650	4702350	2.0	1	M					0.01				0.01				95															5			4	2	2
8/21	375650	4702350	2.0	2	M			3										97																		2	1	1
8/8	375650	4702400	2.3	1	S			15										85																		2	1	1
8/8	375650	4702400	2.3	2	S	25		15										55													5					4	1	3
8/12	375650	4702450	2.8	1	T			5										95																		2	1	1
8/12	375650	4702450	2.8	2	S			10										90																		2	1	1
8/12	375650	4702500	2.9	1	S	5												95			0.01														3	1	2
8/12	375650	4702500	2.9	2	S			5										95																		2	1	1
8/12	375650	4702550	3.1	1	S			44										55				1														3	1	2
8/12	375650	4702550	3.1	2	S	40		5										55				0.01											0.01			5	1	4
8/12	375650	4702600	3.1	1	S	2		1										97																		3	1	2
8/12	375650	4702600	3.1	2	S	6		2										90																2		4	1	3
8/12	375650	4702650	3.4	1	S	70		10										20																		3	1	2
8/12	375650	4702650	3.4	2	S	4		3										90															3			4	1	3
10/30	375650	4702700	3.3	1	D	0.01		1						0.01				99																		4	2	2
10/30	375650	4702700	3.3	2	D													100																		1	1	0
10/30	375650	4702750	3.5	1	D	1		1										98																		3	1	2
10/30	375650	4702750	3.5	2	D	0.01		0.01										100																		3	1	2
10/30	375650	4702800	3.5	1	D	25		5										70																		3	1	2
10/30	375650	4702800	3.5	2	D	5		5										90																		3	1	2
10/30	375650	4702850	3.7	1	D	1		1										98																		3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/30	375650	4702850	3.7	2	D	0.01		0.01											**100**																		3	**1**	2
10/30	375650	4702900	4	1	M	25		25						**10**					**40**																		4	**2**	2
10/30	375650	4702900	4	2	M	45		45						**0.01**					**10**																		4	**2**	2
11/17	375650	4702950		1	M	45		40						**0.01**					**15**																		4	**2**	2
11/17	375650	4702950		2	M	20		60											**20**																		3	**1**	2
10/23	375650	4703000		1	M	40		40						**5**					**15**																		4	**2**	2
10/23	375650	4703000		2	M	15		80						**3**					**2**																		4	**2**	2
10/23	375650	4703050		1	S	70		30											**0.01**				**0.01**														4	**2**	2
10/23	375650	4703050		2	S	80		15						**5**					**0.01**																		5	**1**	2
10/23	375650	4703100		1	D	10		20											**70**																		3	**1**	2
10/23	375650	4703100		2	M	48		50											**2**																		3	**1**	2
10/23	375650	4703150		1	D	40		50						**0.01**					**10**																		4	**2**	2
10/23	375650	4703150		2	D	50		25											**25**																		3	**1**	2
10/23	375650	4703200		1	D	60		10											**30**				**0.01**														5	**2**	3
10/23	375650	4703200		2	D	10		80						**5**					**5**																		4	**2**	2
10/23	375650	4703250		1	D	60		30						**0.01**					**10**																		4	**2**	2
10/23	375650	4703250		2	D	50		45											**5**																		3	**1**	2
11/20	375636	4705550	2.3	1	S	20		60		10				**5**									**5**														6	**2**	4
11/20	375636	4705550	2.3	2	S	5		70		20				**5**																							4	**1**	3
11/20	375610	4705700	4.5	1	S	10		70		10				**5**																							5	**1**	4
11/20	375610	4705700	4.5	2	S	70		20						**10**									**0.01**										0.01				5	**2**	3
8/21	375600	4702150	0.6	1	O																																0	**0**	0
8/21	375600	4702150	0.6	2	O																																0	**0**	0
8/21	375600	4702200	1.5	1	T														**100**																		1	**1**	0
8/21	375600	4702200	1.5	2	T					100																											1	**0**	1
8/21	375600	4702250	1.4	1	T																												100				1	**0**	1
8/21	375600	4702250	1.4	2	T																												100				1	**0**	1
8/21	375600	4702300	1.5	1	T				100																												1	**0**	1
8/21	375600	4702300	1.5	2	T														**100**																		1	**1**	0
8/21	375600	4702350	1.9	1	S	1		49											**50**							0.01										4	**1**	3
8/21	375600	4702350	1.9	2	M	80		5							5				**5**							5							0.01				6	**1**	5

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #		Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/8	375600	4702400	2.1	1	S				30						**10**					**60**																3	**2**	1
8/8	375600	4702400	2.1	2	S		5		25											**70**																3	**1**	2
8/12	375600	4702450	2.6	1	S				3											**97**																2	**1**	1
8/12	375600	4702450	2.6	2	S				30											**70**																2	**1**	1
8/12	375600	4702500	2.8	1	S				25						**5**					**70**																3	**2**	1
8/12	375600	4702500	2.8	2	S				10											**90**																2	**1**	1
8/12	375600	4702550	2.9	1	S		5													**95**																2	**1**	1
8/12	375600	4702550	2.9	2	T				1											**99**																2	**1**	1
8/12	375600	4702600	3.0	1	S		5		10						**0.01**	5				**75**																2	**2**	4
8/12	375600	4702600	3	2	M		30		20						**15**			**0.01**		**10**							5								10	6	**3**	5
10/30	375600	4702650	3	1	D		50								**0.01**					**50**																3	**2**	1
10/30	375600	4702650	3	2	D		50								**1**					**49**																3	**2**	1
10/30	375600	4702700	3	1	M		5		5											**90**																3	**1**	2
10/30	375600	4702700	3	2	M															**100**																1	**1**	0
10/30	375600	4702750	3.2	1	M		9		1											**90**																3	**1**	2
10/30	375600	4702750	3.2	2	M		39		1											**60**																3	**1**	2
10/30	375600	4702800	3.4	1	M															**100**																1	**1**	0
10/30	375600	4702800	3.4	2	M				0.01											**100**																2	**1**	1
10/30	375600	4702850	3.6	1	M				0.01											**100**																2	**1**	1
10/30	375600	4702850	3.6	2	M		1													**99**																2	**1**	1
10/30	375600	4702900	3.7	1	M		0.01													**100**																2	**1**	1
10/30	375600	4702900	3.7	2	D		10		10						**0.01**					**80**																4	**2**	2
11/17	375600	4702950		1	M		10		10											**80**																3	**1**	2
11/17	375600	4702950		2	M		10		20											**70**																3	**1**	2
10/23	375600	4703000		1	M		50		40						**0.01**					**10**																4	**2**	2
10/23	375600	4703000		2	M		85		5											**10**																3	**1**	2
10/23	375600	4703050		1	M		60		40																											2	**0**	2
10/23	375600	4703050		2	M		90		5											**5**																3	**1**	2
10/23	375600	4703100		1	D		45		50											**5**																3	**1**	2
10/23	375600	4703100		2	D		95		3											**1**																4	**2**	2
10/23	375600	4703150		1	M		60		20						**10**					**10**																4	**2**	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/23	375600	4703150		2	M	90		8						2					0.01																	4	2	2
10/23	375600	4703200		1	M	25		25						25					25																	4	2	2
10/23	375600	4703200		2	M	35		60						2					3																	4	2	2
10/23	375600	4703250		1	D	50		50											0.01				0.01													4	2	2
10/23	375600	4703250		2	D	50		50																												2	0	2
11/20	375572	4705850	3	1	M			5		95				0.01																		0.01				4	1	3
11/20	375572	4705850	3	2	S	14		50		35																						1				4	0	4
8/21	375550	4702200	0.6	1	O																															0	0	0
8/21	375550	4702200	0.6	2	O																															0	0	0
8/21	375550	4702250	1.5	1	T	100																														1	0	1
8/21	375550	4702250	1.5	2	T																				100											1	0	1
8/21	375550	4702300	1.8	1	O																															0	0	0
8/21	375550	4702300	1.8	2	T	60		40																												2	0	2
8/21	375550	4702350	1.8	1	T				50										50																	2	1	2
8/21	375550	4702350	1.8	2	T				100																											1	0	1
8/8	375550	4702400	2.2	1	S			35											60				0.01													4	2	2
8/8	375550	4702400	2.2	2	M	0.01		44						0.01					55																	5	2	3
8/12	375550	4702450	2.5	1	S	0.01		50						0.01					50																	4	2	2
8/12	375550	4702450	2.5	2	S			20											80																	2	1	1
8/12	375550	4702500	2.7	1	S			1											99																	2	1	1
8/12	375550	4702500	2.7	2	S	9		1						0.01			0.01		90																	5	3	2
8/12	375550	4702550	2.7	1	T			1											99																	2	1	1
8/12	375550	4702550	2.5	2	S			19											80															1		3	1	2
8/12	375550	4702600	2.9	1	T	5		5											90																	3	1	2
8/12	375550	4702600	2.9	2	S	5		5											89																1	4	1	3
10/30	375550	4702650	2.7	1	M	5													95																	2	1	1
10/30	375550	4702650	2.7	2	D	5													95																	2	1	1
10/30	375550	4702700	2.8	1	D			0.01											100																	2	1	1
10/30	375550	4702700	2.8	2	D	5		5											90																	3	1	2
10/30	375550	4702750	3.3	1	M	1								0.01					99																	3	2	1
10/30	375550	4702750	3.3	2	M	1													99																	2	1	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/30	375550	4702800	3.3	1	M														100																		1	1	0
10/30	375550	4702800	3.3	2	M	0.01		0.01											100																		3	1	2
10/30	375550	4702850	3.5	1	M	0.01													100																		2	1	1
10/30	375550	4702850	3.5	2	M														100																		1	1	0
10/30	375550	4702900	3.6	1	D	0.01		0.01											100																		3	1	2
10/30	375550	4702900	3.6	2	D	1								1					98																		3	2	1
11/18	375550	4702900		1	D									0.01					100																		2	2	0
11/18	375550	4702900		2	D	25													75																		2	1	1
11/17	375550	4702950		1	D	5		25											70																		3	1	2
11/17	375550	4702950		2	D	5		5											90																		3	1	2
10/23	375550	4703000		1	M	15		5						0.01					80																		4	2	2
10/23	375550	4703000		2	M	1													99																		2	1	1
10/23	375550	4703050		1	M	20		10											70																		3	1	2
10/23	375550	4703050		2	M	20													80																		2	1	1
10/23	375550	4703100		1	D	25		5						20					50																		4	2	2
10/23	375550	4703100		2	D			1						4					95																		3	2	1
10/23	375550	4703150		1	M	20		20						20					40																		4	2	2
10/23	375550	4703150		2	M	80		5						5					10																		4	2	2
10/23	375550	4703200		1	M	30		20						10					40																		4	2	2
10/23	375550	4703200		2	M	90		5											4				1														4	2	2
10/23	375550	4703250		1	D	60		30											10				0.01														4	2	2
10/23	375550	4703250		2	D	80		10						5					5																		4	2	2
11/20	375543	4706000	3.5	1	M	42		50						5									3														4	2	2
11/20	375543	4706000	3.5	2	T			90																									10			2	0	2
11/20	375524	4706150	2.5	1	S	5		10		25				20																			40			5	1	4
11/20	375524	4706150	2.5	2	T			80						20																						2	1	1
8/21	375500	4702250	2.1	1	O																															0	0	0
8/21	375500	4702250	2.1	2	O																															0	0	0
8/12	375500	4702450	2.5	1	O																															0	0	0
8/12	375500	4702450	2.5	2	T			80											20																		2	1	1
8/12	375500	4702500	2.6	1	T			10											90																		2	1	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
8/12	375500	4702500	2.6	2	T	55		40											5																		3	1	2
8/12	375500	4702550	2.5	1	T			50											50																		2	1	1
8/12	375500	4702550	2.5	2	T	20		20						20					20						20												5	2	3
8/12	375500	4702600	2.8	1	S			1											99																		2	1	1
8/12	375500	4702600	2.8	2	S	10		10											80																		3	1	2
10/30	375500	4702650	2.6	1	M	10		0.01											90																		3	1	2
10/30	375500	4702650	2.6	2	D	1		4											95																		3	1	2
10/30	375500	4702700	2.6	1	M	5													95																		2	1	1
10/30	375500	4702700	2.6	2	M			40											60																		2	1	1
10/30	375500	4702750	3	1	D	0.01		0.01											100																		3	1	2
10/30	375500	4702750	3	2	D	25		0.01											75																		3	1	2
10/30	375500	4702800	3.2	1	D														100																		1	0	1
10/30	375500	4702800	3.2	2	D	4													96																		2	1	1
10/30	375500	4702850	3.4	1	S			0.01											100																		2	1	1
10/30	375500	4702850	3.4	2	M									2					98																		2	2	0
10/30	375500	4702900	3.4	1	M														100																		1	1	0
10/30	375500	4702900	3.4	2	M														100																		1	1	0
11/18	375500	4702900		1	D			0.01											100																		2	1	1
11/18	375500	4702900		2	D														100																		1	1	0
10/30	375500	4702950	3.4	1	M	5		5											90																		3	1	2
10/30	375500	4702950	3.4	2	M			0.01											100																		2	1	1
10/23	375500	4703000		1	S														100																		1	0	1
10/23	375500	4703000		2	S	10													90																		2	1	1
10/23	375500	4703050		1	M	25		25											50																		3	1	2
10/23	375500	4703050		2	M	90		8											2																		3	1	2
10/23	375500	4703100		1	M	0.01													100																		2	1	1
10/23	375500	4703100		2	M	90		0.01											10																		3	1	2
10/23	375500	4703150		1	M	25		25						25					25				0.01														5	3	2
10/23	375500	4703150		2	M	45		5						5					45																		4	2	2
10/23	375500	4703200		1	M	90		5						5																					0.01	4	1	3
10/23	375500	4703200		2	M	70		30						0.01					0.01																		4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/23	375500	4703250		1	D	70		20						10					0.01																	4	2	2
10/23	375500	4703250		2	D	90		8						2																							3	1	2
11/20	375492	4706300	2.9	1	T					80				10																		10				3	1	2
11/20	375492	4706300	2.9	2	T					90				8																		2				3	1	2
11/20	375462	4706450	2.8	1	T			5		50				5																		40				4	1	3
11/20	375462	4706450	2.8	2	T	2								8																		90				3	1	2
8/12	375450	4702450	2.6	1	O																															0	0	0
8/12	375450	4702450	2.6	2	T																										100					1	0	1
8/12	375450	4702500	2.6	1	T														100																	1	1	0
8/12	375450	4702500	2.6	2	T														100																	1	1	0
8/12	375450	4702550	2.6	1	T	25		25						25					25																	4	2	2
8/12	375450	4702550	2.6	2	O					2																										0	0	0
8/12	375450	4702600	2.7	1	T														100																	1	1	0
8/12	375450	4702600	2.7	2	T	25		25											25														25			4	1	3
10/30	375450	4702650	2.5	1	M														100																	1	1	0
10/30	375450	4702650	2.5	2	M	10		20											70																	3	1	2
10/30	375450	4702700	2.6	1	M	1		1											98																	3	1	2
10/30	375450	4702700	2.6	2	M			0.01											100																	2	1	1
10/30	375450	4702750	2.8	1	D			0.01											100																	2	1	1
10/30	375450	4702750	2.8	2	M	1		8		1				90					90																	4	1	3
10/30	375450	4702800	2.8	1	M			0.01											100																	2	1	1
10/30	375450	4702800	2.8	2	M			2											98																	2	1	1
10/30	375450	4702850	3.1	1	D			0.01											100																	2	1	1
10/30	375450	4702850	3.1	2	D			5											95																	2	1	1
10/30	375450	4702900	3.3	1	M														100																	1	1	0
10/30	375450	4702900	3.3	2	M			0.01											100																	2	1	1
11/17	375450	4702950		1	M	5		5											90																	3	1	2
11/17	375450	4702950		2	M			0.01											100																	2	1	1
10/23	375450	4703000		1	S	50													50																	2	1	1
10/23	375450	4703000		2	M														100																+	1	1	0
10/23	375450	4703050		1	D														100																	1	1	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/23	375450	4703050		2	M	20		0.01											80																	3	1	2
10/23	375450	4703100		1	D	30		10											60																	3	1	2
10/23	375450	4703100		2	D	2													98																	2	1	1
10/23	375450	4703150		1	M	40													60																	2	1	1
10/23	375450	4703150		2	M	20								10					70																	3	2	1
10/23	375450	4703200		1	S	80		10											10																	3	1	2
10/23	375450	4703200		2	S	50		10						40																						3	1	2
10/23	375450	4703250		1	D			15						20					65									0.01	0.01							5	2	3
10/23	375450	4703250		2	D	90		6						2					2																	4	2	1
10/18	375400	4702450	2.9	1	T			70	1					10					19																	4	2	2
10/18	375400	4702450	2.9	2	M	10		2											88																	3	1	2
10/18	375400	4702500	2.8	1	S	50		20											30																	3	1	2
10/18	375400	4702500	2.8	2	S	50		1											49																	3	1	2
10/18	375400	4702550	2.6	1	S	50		10											40																	3	1	2
10/18	375400	4702550	2.6	2	S	50		2											48																	3	1	2
10/18	375400	4702600	2.6	1	S	60		25		10									5																	4	1	3
10/18	375400	4702600	2.6	2	S	90		7											3																	3	1	2
10/18	375400	4702650	2.6	1	S	15		5						0.01					80																	4	2	2
10/18	375400	4702650	2.6	2	S	50		4						1					45																	4	2	2
10/18	375400	4702700	2.7	1	M	5		0.01											95																	3	1	2
10/18	375400	4702700	2.7	2	M	1		1											98																	3	1	2
10/18	375400	4702750	2.9	1	M														100																	1	1	0
10/18	375400	4702750	2.9	2	S			1											99																	2	1	1
10/18	375400	4702800	3	1	M			5											95																+	2	1	1
10/18	375400	4702800	3	2	M														100																	1	1	0
10/18	375400	4702850	3.2	1	M	1		0.01											99																	3	1	2
10/18	375400	4702850	3.2	2	S														100																	1	1	0
10/18	375400	4702900	3.3	1	M	58		10						2					30				0.01												+	5	2	3
10/18	375400	4702900	3.3	2	M			2											98																	2	1	1
10/18	375400	4702950	3.4	1	M	10		10											80																	3	1	2
10/18	375400	4702950	3.4	2	M	4		1											95																	3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/23	375400	4703000		1	M	9											1		90																	3	2	1
10/23	375400	4703000		2	M	50		0.01						0.01					50																		4	2	2
10/23	375400	4703050		1	M									0.01					100																	2	2	0
10/23	375400	4703050		2	M	20		10						0.01					70																	4	2	2
10/23	375400	4703100		1	D	18								2					80																	3	2	1
10/23	375400	4703100		2	M	50		5						5					40																	4	2	2
10/23	375400	4703150		1	S									0.01					100																	2	2	0
10/23	375400	4703150		2	S	40								10					50																	3	2	1
10/23	375400	4703200		1	M	65		10						25					0.01																	4	2	2
10/23	375400	4703200		2	S	90		8						2																					3	1	2
10/23	375400	4703250		1	D	50		10						15					25																	4	2	2
10/23	375400	4703250		2	D	70		20						10																					3	1	2
11/20	375385	4706750	1	1	M	50		25		15				5					0.01															5	6	2	4	2
11/20	375385	4706750	1	2	S	25		25		10				5					5															30	6	2	4	2
10/16	375350	4702300		1	D	10													90																2	1	1
10/16	375350	4702300		2	D														100																1	1	0
10/16	375350	4702350		1	M														100															+	1	1	0
10/16	375350	4702350		2	D	0.01													100																2	1	1
10/16	375350	4702400		1	M	3													97																2	1	1
10/16	375350	4702400		2	D			0.01											100															+	2	1	1
10/16	375350	4702450		1	M	0.01													100															+	2	1	1
10/16	375350	4702450		2	S									1					99																2	2	0
10/16	375350	4702500	1.9	1	M														100																1	1	0
10/16	375350	4702500	1.9	2	T														100																1	1	0
10/18	375350	4702550	2.3	1	M			5						8					87																3	2	1
10/18	375350	4702550	2.3	2	M														100																1	1	0
10/18	375350	4702600	2.3	1	M			0.01											100																2	1	1
10/18	375350	4702600	2.3	2	M			1											99																2	1	1
10/18	375350	4702650	2.4	1	M			0.01											100																2	1	1
10/18	375350	4702650	2.4	2	D	8								2					90																3	2	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/18	375350	4702700	2.8	1	M	5													95																	+	2	1	1
10/18	375350	4702700	2.8	2	M														100																		1	1	0
10/18	375350	4702750	2.8	1	M	0.01													100																	+	2	1	1
10/18	375350	4702750	2.8	2	M	4		1											95																		3	1	2
10/18	375350	4702800	2.9	1	S														100																		1	1	0
10/18	375350	4702800	2.9	2	M			0.01											100																		2	1	1
10/18	375350	4702850	3.1	1	S									0.01					100																		2	2	0
10/18	375350	4702850	3.1	2	D	1		1											98																		3	1	2
10/18	375350	4702900	3.1	1	M					0.01									100																		2	1	1
10/18	375350	4702900	3.1	2	M	1								1					98																		3	1	2
10/18	375350	4702950	3.4	1	M									5					94															1			3	2	1
10/18	375350	4702950	3.4	2	M	1													99																		2	1	1
10/23	375350	4703000		1	S	60		3											37																		3	1	2
10/23	375350	4703000		2	S	90								5					5																		3	2	1
10/23	375350	4703050		1	M	10		5											85																		3	1	2
10/23	375350	4703050		2	M	10		10						10					60																		5	2	3
10/23	375350	4703100		1	M	60		5						35																						3	1	2
10/23	375350	4703100		2	S	4													96																		2	1	1
10/23	375350	4703150		1	S	5		5											90																		3	1	2
10/23	375350	4703150		2	S									0.01					100																		2	2	0
11/16	375350	4703200		1	M	80		10						0.01					10																		4	2	2
11/16	375350	4703200		2	M	45		30						5					20																		4	2	2
10/23	375350	4703250		1	M	80		4						11					5																		4	2	2
10/23	375350	4703250		2	D	80		10						10					0.01																		4	2	2
10/16	375300	4702300	1.7	1	M			0.01											100																		2	1	1
10/16	375300	4702300	1.7	2	M	1													99																		2	1	1
10/16	375300	4702350	1.7	1	S														100																		1	1	0
10/16	375300	4702350	1.7	2	M			1											99																		2	1	1
10/16	375300	4702400	1.8	1	M														100																		1	1	0
10/16	375300	4702400	1.8	2	T														100																		1	1	0
10/16	375300	4702450	1.9	1	S	5		0.01											95																		3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/16	375300	4702450	1.9	2	S	5													95																		2	1	1
10/16	375300	4702500	2	1	M									0.01					100																		2	2	0
10/16	375300	4702500	2	2	M	20		0.01											80																		3	1	2
10/18	375300	4702550	2	1	S	10		15											75																		3	1	2
10/18	375300	4702550	2	2	M			1											99																		2	1	1
10/18	375300	4702600	2.4	1	M	3		10											87																+		3	1	2
10/18	375300	4702600	2.4	2	M			0.01											100																		2	1	1
10/18	375300	4702650	2.5	1	M	0.01		5											95																		3	1	2
10/18	375300	4702650	2.5	2	S														100																		1	0	0
10/18	375300	4702700	2.5	1	D														100																		1	0	0
10/18	375300	4702700	2.5	2	D			3											97																		2	1	1
10/18	375300	4702750	2.8	1	S			5						30					65																		3	2	1
10/18	375300	4702750	2.8	2	S	90		2						5					3																		4	2	2
10/18	375300	4702800	3	1	D			0.01						0.01					100																		3	2	1
10/18	375300	4702800	3	2	S									0.01					100																		2	0	2
10/18	375300	4702850	3.1	1	D	5													95																+		2	1	1
10/18	375300	4702850	3.1	2	D	3									2				95																		3	1	2
10/18	375300	4702900	3.2	1	D														100																		1	1	0
10/18	375300	4702900	3.2	2	D	2													96															2			3	1	2
10/18	375300	4702950	3.4	1	D														100																		1	1	0
10/18	375300	4702950	3.4	2	D														100																		1	1	0
11/20	375300	4703000	2.5	1	M			0.01						5					95																		3	2	1
11/20	375300	4703000	2.5	2	M			5											95																		2	1	1
11/20	375300	4703050	2.6	1	M	5		5											90																		3	1	2
11/20	375300	4703050	2.6	2	M	10								10					80																+		3	2	1
11/20	375300	4703100	2.9	1	M			9											91																		2	1	1
11/20	375300	4703100	2.9	2	M	10													90																		2	1	1
11/20	375300	4703150	3	1	M	1								5					94																		3	2	1
11/20	375300	4703150	3	2	M														100																		1	1	0
11/20	375300	4703200	3.1	1	M	50		5						15					30																		4	2	2
11/20	375300	4703200	3.1	2	M	5													95																		2	1	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/20	375300	4703250	3.4	1	S	5		0.01						5					90																	4	2	2
11/20	375300	4703250	3.4	2	S	40		18						1					40				1													5	3	2
11/20	375299	4706850	3	1	M	5		5		65				10																		15				6	2	4
11/20	375299	4706850	3	2	S	10		50		20				10																		10				5	1	4
10/16	375250	4702300	1.5	1	S	5		3											92				1												+	3	1	2
10/16	375250	4702300	1.5	2	S	9		50						1					40																	4	2	2
10/16	375250	4702350	1.8	1	M	0.01		5											95																+	3	1	2
10/16	375250	4702350	1.8	2	S														100																	1	0	1
10/16	375250	4702400	1.9	1	M			3		0.01				0.01					97																+	4	2	2
10/16	375250	4702400	1.9	2	S			20											80																	2	1	1
10/16	375250	4702450	2	1	S														100																	1	0	1
10/16	375250	4702450	2	2	S														100																	1	0	1
10/16	375250	4702500	2.1	1	D			10						0.01					86												4					4	2	2
10/16	375250	4702500	2.1	2	M			9						1					90																	3	2	1
10/18	375250	4702550	2.2	1	D	5		30											65				1													3	1	2
10/18	375250	4702550	2.2	2	M	3		2						10					85																	4	2	2
10/18	375250	4702600	2.3	1	D	10		15						5					70																+	4	2	2
10/18	375250	4702600	2.3	2	D	2		50											48																	3	1	2
10/18	375250	4702650	2.5	1	S														100																	1	1	0
10/18	375250	4702650	2.5	2	M	1		2						7				25	90																	4	2	2
10/18	375250	4702700	2.6	1	M			60											15																	3	2	1
10/18	375250	4702700	2.6	2	M			4						95					1																	3	2	1
10/18	375250	4702750	2.7	1	M	4								0.01					96														0.01				4	2	2
10/18	375250	4702750	2.7	2	M														100																	1	1	0
10/18	375250	4702800	2.9	1	T														100																	1	1	0
10/18	375250	4702800	2.9	2	T														100																	1	1	0
10/18	375250	4702850	3.1	1	S	5								0.01					50													45				4	2	2
10/18	375250	4702850	3.1	2	M	90								2					8														0.01			4	2	2
10/18	375250	4702900	3.3	1	D														100								0.01								2	1	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/18	375250	4702900	3.3	2	D														100																	1	0
10/18	375250	4702950	3.5	1	D														100																	1	0
10/18	375250	4702950	3.5	2	D	1		3		1									95																	4	1	3
11/20	375250	4703000	2.5	1	M														100																	1	1	0
11/20	375250	4703000	2.5	2	M														100																	1	1	0
11/16	375250	4703050		1	T	5		5											90																	3	1	2
11/16	375250	4703050		2	M	30		10											60																	3	1	2
11/16	375250	4703100		1	M	20		0.01											80																	3	1	2
11/16	375250	4703100		2	S			0.01						5					95																	3	2	1
11/16	375250	4703150		1	M														100																	1	1	0
11/16	375250	4703150		2	M			40											60				0.01													3	2	1
11/16	375250	4703200		1	S														100																	1	1	0
11/16	375250	4703200		2	S	10		25						15					50																	4	2	2
11/20	375250	4703250	3.4	1	D	20		5						10					65																	4	2	2
11/20	375250	4703250	3.4	2	S	10		10						9					70																	5	2	3
11/20	375231	4707000	3	1	S	5		40		40				5								5														6	2	4
11/20	375231	4707000	3	2	T																															1	0	1
10/16	375200	4702300	1.5	1	S	43	9	43											5																	4	1	3
10/16	375200	4702300	1.5	2	S	5		55											40																	3	1	2
10/16	375200	4702350	2	1	S			25						25					50																	3	2	1
10/16	375200	4702350	2	2	S			10											90																	2	1	1
10/16	375200	4702400	1.9	1	M	0.01													100																	2	1	1
10/16	375200	4702400	1.9	2	M			9						1					90																	3	2	1
10/16	375200	4702450	2.1	1	T	40								10					50																	3	2	1
10/16	375200	4702450	2.1	2	S														100																	1	1	0
10/16	375200	4702500	2.1	1	D														100																	1	1	0
10/16	375200	4702500	2.1	2	M														100																	1	1	0
10/18	375200	4702550	2.3	1	M	0.01		40		10				0.01			0.01		50																	6	3	3
10/18	375200	4702550	2.3	2	M	20		10						10					60																	4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/18	375200	4702600	2.3	1	D			0.01											95												5					3	1	2
10/18	375200	4702600	2.3	2	D	8		2											90																	3	1	2
10/18	375200	4702650	2.6	1	D									5					91												4					3	2	1
10/18	375200	4702650	2.6	2	D			0.01											100																	2	1	1
10/18	375200	4702700	2.8	1	D	5		0.01											95																	3	1	2
10/18	375200	4702700	2.8	2	D									5					95																	2	2	0
10/18	375200	4702750	3	1	M														100																	1	0	1
10/18	375200	4702750	3	2	D	8								2					90																	3	2	1
10/18	375200	4702800	3.1	1	S	50													50																	2	1	1
10/18	375200	4702800	3.1	2	S														100																	1	1	0
10/18	375200	4702850	3.2	1	S	75													25																	2	1	1
10/18	375200	4702850	3.2	2	T	1								1					98																	3	2	1
10/18	375200	4702900	3.4	1	T														100																	1	1	0
10/18	375200	4702900	3.4	2	O																															0	0	0
10/18	375200	4702950	3.6	1	M														100																	1	1	0
10/18	375200	4702950	3.6	2	T			1											99																	2	1	1
11/20	375200	4703000	2.5	1	M														100																	1	1	0
11/20	375200	4703000	2.5	2	M	3													97																	2	1	1
11/16	375200	4703050		1	S			70											30																	2	1	1
11/16	375200	4703050		2	S	20		39						1					40																	4	2	2
11/16	375200	4703100		1	M	10		20											70																	3	1	2
11/16	375200	4703100		2	S	0.01		10											90																	3	1	2
11/16	375200	4703150		1	S	20		40											40																	3	1	2
11/16	375200	4703150		2	T	0.01		30						10					60																	4	2	2
11/16	375200	4703200		1	M			10											90																	2	1	1
11/16	375200	4703200		2	S			0.01											100																	2	1	1
11/20	375200	4703250	3.4	1	M	5								5					90																	3	2	1
11/20	375200	4703250	3.4	2	S														100																	1	1	0
11/20	375197	4707150	3.5	1	T			100																												1	0	1
11/20	375197	4707150	3.5	2	S	5		80		5				5																						5	1	4
10/16	375180	4702250	1.1	1	T	90		5											5																+	3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/16	375180	4702250	1.1	2	T	50		50																												2	**0**	2
11/20	375167	4707300	3.7	1	T									**66**									**1**													2	**2**	0
11/20	375167	4707300	3.7	2	S	10		20						**20**								50														4	**1**	3
10/21	375150	4702253		1	S	100																														1	**0**	1
10/21	375150	4702253	2.6	2	O																															0	**0**	0
10/16	375150	4702300	1.6	1	T		100																												+	1	**0**	1
10/16	375150	4702300	1.6	2	T	99																	**1**													2	**1**	1
10/16	375150	4702350	2.1	1	S									**0.01**					**100**																+	2	**2**	0
10/16	375150	4702350	2.1	2	S	0.01		29						**1**					**70**																+	4	**2**	2
10/16	375150	4702400	2.1	1	D			2											**98**																+	2	**1**	1
10/16	375150	4702400	2.1	2	D			3											**97**																	2	**1**	1
10/16	375150	4702450	2.2	1	S														**100**																	1	**1**	0
10/16	375150	4702450	2.2	2	S														**100**																	1	**1**	0
10/16	375150	4702500	2.3	1	D														**100**																	1	**1**	0
10/16	375150	4702500	2.3	2	M			0.01											**100**																	2	**1**	1
10/18	375150	4702550	2.5	1	D			0.01						**5**	0.01				**95**																	4	**2**	2
10/18	375150	4702550	2.5	2	S														**100**																	1	**1**	0
10/18	375150	4702600	2.5	1	D	0.01		0.01											**100**																	3	**1**	2
10/18	375150	4702600	2.5	2	M			1						**99**																						2	**1**	1
10/18	375150	4702650	2.6	1	D	5		5						**90**																						3	**1**	2
10/18	375150	4702650	2.6	2	M									**100**																						1	**1**	0
10/18	375150	4702700	2.8	1	D									**100**																						1	**1**	0
10/18	375150	4702700	2.8	2	D	10								**90**																						2	**1**	1
10/18	375150	4702750	3	1	D	70								**30**																						2	**1**	1
10/18	375150	4702750	3	2	M	2								**98**																						2	**1**	1
10/18	375150	4702800	3	1	D									**100**																						1	**1**	0
10/18	375150	4702800	3	2	D	1				0.01				**99**																						3	**1**	2
10/18	375150	4702850	3.3	1	D	40								**60**																						2	**1**	1
10/18	375150	4702850	3.3	2	T	50								**50**																						2	**1**	1
10/18	375150	4702900	3.4	1	D	0.01								**100**																						2	**1**	1
10/18	375150	4702900	3.4	2	M	28		2						**70**																						3	**1**	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/18	375150	4702950	3.6	1	D	30													70																	+	2	1	1
10/18	375150	4702950	3.6	2	M	20													80																		2	1	1
11/20	375150	4703000	2.6	1	M														100																		1	1	0
11/20	375150	4703000	2.6	2	M														100																		1	1	0
11/20	375150	4703050	3	1	M	20								0.01					80																		3	2	1
11/20	375150	4703050	3	2	S														100																		1	1	0
11/16	375150	4703100		1	S														100																		1	1	0
11/16	375150	4703100		2	S														100			0.01														2	2	0
11/16	375150	4703150		1	M	5		5											90																		3	1	2
11/16	375150	4703150		2	M	30		30						0.01					40																		4	2	2
11/16	375150	4703200		1	M	20		15											65																		3	1	2
11/16	375150	4703200		2	S	15		15											70																		3	1	2
11/20	375150	4703250	3.5	1	M	80		5						3					12																		4	2	2
11/20	375150	4703250	3.5	2	M	5													95																		2	1	1
11/20	375145	4707450	3	1	S	20		70						0.01									10														5	2	3
11/20	375145	4707450	3	2	T			20		20				20																						4	1	3
11/20	375133	4707600	2	1	S			87		5						5																				3	0	4
11/20	375133	4707600	2	2	T			30		20				30																						4	1	3
11/20	375113	4707750	1.9	1	T					1				19																						3	1	2
11/20	375113	4707750	1.9	2	T																															1	0	1
10/21	375100	4702250		1	S	0.01																														2	0	2
10/21	375100	4702250		2	T																															1	0	1
10/16	375100	4702300	1.6	1	T	84		10											5				1													4	2	2
10/16	375100	4702300	1.6	2	S	98		2																					0.01						+	3	0	3
10/16	375100	4702350	2.2	1	M	10		0.01						2					78																	+	5	2	3
10/16	375100	4702350	2.2	2	S			1											99																	+	2	1	1
10/16	375100	4702400	2.3	1	D	0.01		6						4					90									0.01								+	5	2	3
10/16	375100	4702400	2.3	2	M			2					1						97																		3	1	2
10/16	375100	4702450	2.4	1	S			4											96																	+	2	1	1
10/16	375100	4702450	2.4	2	T			10											90																		2	1	1
10/16	375100	4702500	2.4	1	D			0.01											100																		2	1	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/16	375100	4702500	2.4	2	D			0.01											100																	2	1	1
10/18	375100	4702550	2.5	1	D									0.01					100							0.01										+	3	2	2
10/18	375100	4702550	2.5	2	M			0.01											100																	2	1	1
10/18	375100	4702600	2.7	1	D	2													98							0.01										3	1	2
10/18	375100	4702600	2.7	2	M														100																	1	1	0
10/18	375100	4702650	2.7	1	D														100																	1	1	0
10/18	375100	4702650	2.7	2	D														100																	1	1	0
10/18	375100	4702700	2.9	1	M	0.01		0.01						0.01					100																	4	2	2
10/18	375100	4702700	2.9	2	M														100																	1	1	0
10/18	375100	4702750	3	1	M	5													95																	2	1	1
10/18	375100	4702750	3	2	D			0.01											100																	2	1	1
10/18	375100	4702800	3.1	1	M	5													95																	2	1	1
10/18	375100	4702800	3.1	2	D	10		5						5					80																	4	2	2
10/18	375100	4702850	3.3	1	D														80																	2	1	1
10/18	375100	4702850	3.3	2	D			4						6					90																	3	2	1
10/18	375100	4702900	3.5	1	S														100																	1	1	0
10/18	375100	4702900	3.5	2	M	15								10					75																	3	2	1
10/18	375100	4702950	3.6	1	D														100																	1	1	0
10/18	375100	4702950	3.6	2	D									0.01					100																	2	2	0
11/20	375100	4703000	2.7	1	M														100																	1	1	0
11/20	375100	4703000	2.7	2	M	5													95																	2	1	1
11/20	375100	4703050	3	1	M			0.01											100																	2	1	1
11/20	375100	4703050	3	2	M									2					98																	2	2	0
11/16	375100	4703100		1	S	5													95																	2	1	1
11/16	375100	4703100		2	M	20								0.01					80																	3	2	1
11/16	375100	4703150		1	M	20								0.01					80																	3	2	1
11/16	375100	4703150		2	M	5		5											90																	3	1	2
11/16	375100	4703200		1	M	20		40											40																	3	1	2
11/16	375100	4703200		2	S	5		15											80																	3	1	2
11/20	375100	4703250	3.5	1	D	5								0.01					95																	3	2	1
11/20	375100	4703250	3.5	2	S	80		3											17																	3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/20	375090	4707900	3.5	1	T			50						25																			25				3	1	2
11/20	375090	4707900	3.5	2	T									99																			1				2	1	1
11/20	375064	4708050	2.5	1	O																																0	0	0
11/20	375064	4708050	2.5	2	T			60						39																		1				3	1	2
10/21	375050	4702245		1	S	20								10																		70				3	1	2
10/21	375050	4702245		2	T	50																										50				2	0	2
10/16	375050	4702250	0.6	1	T		100																												+	1	0	1
10/16	375050	4702250	0.6	2	T		100																												+	1	0	1
10/16	375050	4702300	1.6	1	S	30		5						30					5										30							5	2	3
10/16	375050	4702300	1.6	2	S	90		2		5																			3							4	0	4
10/16	375050	4702350	2.1	1	S			0.01											100																	2	1	1
10/16	375050	4702350	2.1	2	S														100				0.01													2	0	2
10/16	375050	4702400	2.3	1	D	0.01		1						0.01					99														0.01				5	2	3
10/16	375050	4702400	2.3	2	D														100														0.01				2	1	1
10/16	375050	4702450	2.4	1	T			20						50					30																		3	2	1
10/16	375050	4702450	2.4	2	S			4		1									95																		3	1	2
10/16	375050	4702500	2.5	1	D														100																		1	1	0
10/16	375050	4702500	2.5	2	D														100																	+	1	1	0
10/18	375050	4702550	2.6	1	M	1		1											98																		3	1	2
10/18	375050	4702550	2.6	2	M	2		0.01						2					96																		4	2	2
10/18	375050	4702600	2.7	1	D	1		1		0.01									98																		4	1	3
10/18	375050	4702600	2.7	2	D	1		1											98																		3	1	2
10/18	375050	4702650	2.8	1	D	0.01													100				0.01														3	1	2
10/18	375050	4702650	2.8	2	M	1													99																		2	1	1
10/18	375050	4702700	3	1	M														100																		1	1	0
10/18	375050	4702700	3	2	M														100																		1	1	0
10/18	375050	4702750	3.1	1	D	1				39									60																		3	1	2
10/18	375050	4702750	3.1	2	D	3		1		1									95																		4	1	3
10/18	375050	4702800	3.3	1	D	3													97																		2	1	1
10/18	375050	4702800	3.3	2	M														100																		1	1	0
10/18	375050	4702850	3.3	1	D	0.01		0.01						0.01					100																		4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/18	375050	4702850	3.3	2	M			1						2					97																	3	2	1
10/18	375050	4702900	3.5	1	M	0.01													100																	2	1	1
10/18	375050	4702900	3.5	2	M														100																	1	1	0
10/18	375050	4702950	3.7	1	M	2													98																	2	1	1
10/18	375050	4702950	3.7	2	D														100													0.01				2	1	1
11/20	375050	4703000	2.8	1	M	20													80																	2	1	1
11/20	375050	4703000	2.8	2	M									10					90																	2	0	0
11/20	375050	4703050	3	1	S														100				0.01													2	0	0
11/20	375050	4703050	3	2	M	3								7					90																	2	1	1
11/16	375050	4703100		1	S	10		40											50																	1	1	2
11/16	375050	4703100		2	S			40											60																	1	1	1
11/16	375050	4703150		1	M	20		10											70																	3	1	2
11/16	375050	4703150		2	S	20		40						10					30																	4	2	2
11/16	375050	4703200		1	M	10		40											50																	3	1	2
11/16	375050	4703200		2	M	10								0.01					90																	3	2	1
11/20	375050	4703250	3.5	1	M	95		5						0.01																						3	1	2
11/20	375050	4703250	3.5	2	M	45		45						7					0.01				3													5	3	2
11/20	375047	4708200	3.1	1	O																															0	0	0
11/20	375047	4708200	3.1	2	T									25																						2	1	1
11/20	375020	4708350	1.8	1	O																															0	0	0
11/20	375020	4708350	1.8	2	T			30						40																						3	1	2
10/21	375000	4702226		1	S																															1	0	1
10/21	375000	4702226		2	S	20		20		20													20													5	1	4
10/16	375000	4702250	0.9	1	O																													+		0	0	0
10/16	375000	4702250	0.9	2	T					99									1															+	+	2	1	1
10/16	375000	4702300	1.5	1	S	0.01		10		40									10															+		5	1	4
10/16	375000	4702300	1.5	2	S	4				80				4					2																	5	2	3
10/16	375000	4702350	2.1	1	S			0.01											100																	2	1	1
10/16	375000	4702350	2.1	2	S														100																	1	1	0
10/16	375000	4702400	2.3	1	M	1		5		4									90													0.01				5	1	4
10/16	375000	4702400	2.3	2	S					1				1					97													1				4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/16	375000	4702450	2.4	1	T	40		20											40																	+	3	1	2
10/16	375000	4702450	2.4	2	M														100																		1	1	0
10/16	375000	4702500	2.5	1	D														100																		1	1	0
10/16	375000	4702500	2.5	2	S	2		2											96																		3	1	2
10/18	375000	4702550	2.7	1	M			0.01											100																		2	1	1
10/18	375000	4702550	2.7	2	M														100																		1	1	0
10/18	375000	4702600	2.8	1	D			5											95																		2	1	1
10/18	375000	4702600	2.8	2	D	2		1											97																		3	1	2
10/18	375000	4702650	3	1	D	6													89												5						3	1	2
10/18	375000	4702650	3	2	D														100																	+	1	1	0
10/18	375000	4702700	3	1	M			1											99																		2	1	1
10/18	375000	4702700	3	2	T														100																		1	1	0
10/18	375000	4702750	3.1	1	M														100																		1	1	0
10/18	375000	4702750	3.1	2	M														99												1						2	1	1
10/18	375000	4702800	3.2	1	S														100																		1	1	0
10/18	375000	4702800	3.2	2	M														100																		1	1	0
10/18	375000	4702850	3.4	1	D									1					99																		2	2	0
10/18	375000	4702850	3.4	2	D									2					98																		2	2	0
10/18	375000	4702900	3.5	1	D									1					99																		2	2	0
10/18	375000	4702900	3.5	2	T	92		3											4													1					4	1	3
10/18	375000	4702950	3.9	1	D	30		0.01											70				0.01			0.01											5	2	3
10/18	375000	4702950	3.9	2	M	10		5											80				5														4	2	2
11/20	375000	4703000	3.7	1	M														100																		1	1	0
11/20	375000	4703000	3.7	2	M	3		10											87				0.01														4	2	2
11/20	375000	4703050	3	1	T														100																		1	1	0
11/20	375000	4703050	3	2	M			4						1					95																		3	2	1
11/16	375000	4703100		1	S	20		30											50																		3	1	2
11/16	375000	4703100		2	M	10		20											70																		3	1	2
11/16	375000	4703150		1	M	20		30											50																		3	1	2
11/16	375000	4703150		2	M	30		30						10					30																		4	2	2
11/16	375000	4703200		1	M	20													80																		2	1	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/16	375000	4703200		2	M	10		30						0.01					60																	4	2	2
11/20	375000	4703250	3.5	1	M	100		0.01														0.01														3	1	2
11/20	375000	4703250	3.5	2	S	80		7											3				3													4	2	2
11/20	374984	4708500	4.6	1	O																															0	0	0
11/20	374984	4708500	4.6	2	T														100				100													1	1	0
10/21	374950	4702206		1	S	50														25												25				3	1	2
10/21	374950	4702206		2	T	30		20						20																		30				4	1	3
10/16	374950	4702250	1	1	S					15									65													20			+	3	1	2
10/16	374950	4702250	1	2	S	0.01				25									50													25				4	1	3
10/16	374950	4702300	1.3	1	S			0.01		35									60				0.01									5				5	2	3
10/16	374950	4702300	1.3	2	S	3		2		85									10																	4	1	3
10/16	374950	4702350	2	1	M			10		30									55													5				4	1	3
10/16	374950	4702350	2	2	M	1		5		5				4					80													5				6	2	4
10/16	374950	4702400	2.3	1	M			2						5					92													1				4	2	2
10/16	374950	4702400	2.3	2	S			3		2									95																	3	1	2
10/16	374950	4702450	2.4	1	M	9		5						2					84													0.01				5	2	3
10/16	374950	4702450	2.4	2	M	4		1											95																	3	1	2
10/16	374950	4702500	2.5	1	D	20		60						10					10																	4	2	2
10/16	374950	4702500	2.5	2	D	10		20						5					60				0.01	0.01								5				7	3	4
10/28	374950	4702550	2.5	1	D	25		20		0.01				5					50																	5	2	3
10/28	374950	4702550	2.5	2	M	8		20						2					70				0.01													5	3	2
10/28	374950	4702600	2.6	1	M	0.01		40											60																	3	1	2
10/28	374950	4702600	2.6	2	M	1													99																	2	1	1
10/28	374950	4702650	2.7	1	D	50								1					49												0.01					4	2	2
10/28	374950	4702650	2.7	2	D	50													50																	2	1	1
11/23	374950	4702700		1	D	70		0.01						10					20																	4	2	2
11/23	374950	4702700		2	D	60		20						15					5																	4	2	2
11/23	374950	4702750		1	D	80		5						5					10				0.01													5	3	2
11/23	374950	4702750		2	D	60		25											15																	3	1	2
11/23	374950	4702800		1	D	15		5						5					75																	4	2	2
11/23	374950	4702800		2	D	20		5						0.01					75																	4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/23	374950	4702850		1	M	10		0.01											90																	3	1	2
11/23	374950	4702850		2	M	5		10											85																	3	1	2
11/23	374950	4702900		1	D	10		5											85																	3	1	2
11/23	374950	4702900		2	D	15		0.01						0.01					85																	4	2	2
10/18	374950	4702950	3.8	1	M														100																	1	1	0
10/18	374950	4702950	3.8	2	M														100																	1	1	0
11/20	374950	4703000	2.7	1	M	0.01		3											97																	3	1	2
11/20	374950	4703000	2.7	2	M	2		6						2					90																	5	2	3
11/20	374950	4703050	3.1	1	S	55		25											0.01				20													4	2	2
11/20	374950	4703050	3.1	2	T	30		30															30			10										3	1	2
11/20	374950	4703100	3.2	1	M	45		2											50				3													2	1	2
11/20	374950	4703100	3.2	2	M	16		20			2			2					60				2													3	1	2
11/20	374950	4703150	3.4	1	S	15		10											75																	1	1	2
11/20	374950	4703150	3.4	2	S	90		3						2					1				3			1										6	3	3
11/20	374950	4703200	3.5	1	T	30		40															30													3	1	2
11/20	374950	4703200	3.5	2	S	90		4											1				5													4	2	2
11/20	374950	4703250	3.5	1	M	88		7											0.01				5													4	2	2
11/20	374950	4703250	3.5	2	S	48		48						2									2													4	2	2
8/20	374920	4702100	0.5	1	S	39		2									5		2																	6	2	4
8/20	374920	4702100	0.5	2	S	15								4			3		3				2			1										7	4	3
10/21	374919	4702171		1	S	30		30						10					20				10													5	3	2
10/21	374919	4702171		2	S	60		10		10													10													5	1	4
8/20	374917	4702188	0.5	1	T	85		5		5														3													6	0	6
8/20	374917	4702188	0.5	2	T					5									5						1								1				3	1	2
8/20	374900	4702120	0.6	1	T			50									50																			2	1	1
8/20	374900	4702120	0.6	2	S	44				50						1	2		1																	6	2	4
8/20	374900	4702150	0.9	1	S												10		1																	3	2	1
8/20	374900	4702150	0.9	2	S	5		5		15				1			10		1				0.01													8	4	4
10/16	374900	4702200	0.4	1	S	13		12	0.01	50				12					0.01																	7	2	5
10/16	374900	4702200	0.4	2	S			1		98																									+	3	0	3
10/16	374900	4702250	1.1	1	S	0.01		1		60							0.01		15														24				6	2	4

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Valisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/16	374900	4702250	1.1	2	S	5		5		20				0.01																						+	5	1	4
10/16	374900	4702300	1.6	1	S			3		25									52																		4	1	3
10/16	374900	4702300	1.6	2	S					2				5					3													90					4	2	2
10/16	374900	4702350	2	1	M	0.01		15		25									60																	+	4	1	3
10/16	374900	4702350	2	2	S	2				18									80																		3	1	2
10/16	374900	4702400	2.1	1	M	5		10		3				0.01					81														1				6	2	4
10/16	374900	4702400	2.1	2	M	3				7									80														10				4	1	3
10/16	374900	4702450	2.4	1	S	4		15						2					79																		4	2	2
10/16	374900	4702450	2.4	2	M	4		0.01						5					91																		4	2	2
10/16	374900	4702500		1	D	0.01		10						10					80							0.01							0.01				6	2	4
10/16	374900	4702500	2.5	2	M	70		20						8					2														0.01			+	5	1	3
11/6	374900	4702550	2.5	1	M	10		45						45																							3	1	2
11/6	374900	4702550	2.5	2	D	40		8						20					30				0.01									2					6	3	3
11/6	374900	4702600	2.4	1	D	15		15		1				60					9				0.01													+	6	3	3
11/6	374900	4702600	2.4	2	M	0.01		47						50									3														4	2	2
11/6	374900	4702650	2.7	1	D	40		20		0.01				20					20				0.01						0.01								8	3	5
11/6	374900	4702650	2.7	2	D	10		30						10					50				0.01														5	3	2
11/6	374900	4702700	2.8	1	D	0.01		0.01						50					50																		4	2	2
11/6	374900	4702700	2.8	2	D	60		25		10				5									0.01														5	2	3
11/6	374900	4702750	2.9	1	D	90		5						5					0.01																	+	4	2	2
11/6	374900	4702750	2.9	2	D	10		5											85																		3	1	2
11/6	374900	4702800	3	1	D	15								5					80																		3	2	1
11/6	374900	4702800	3	2	D	20		10						10					60				0.01														5	3	2
11/6	374900	4702850	3.1	1	D	8		0.01						2					90																		4	2	2
11/6	374900	4702850	3.1	2	M									0.01					100																		2	2	0
11/6	374900	4702900	3.3	1	D	70													30																		2	1	1
11/6	374900	4702900	3.3	2	D	0.01		0.01											100																		3	1	2
11/6	374900	4702950	3.5	1	D	2		0.01						0.01					98																		4	2	2
11/6	374900	4702950	3.5	2	D			0.01						0.01					100				0.01														4	3	1
11/15	374900	4703000	3.3	1	M	0.01													100																		2	1	1
11/15	374900	4703000	3.3	2	M	5		5						5					85																		4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/18	374900	4703050		1	M	5		5											90																	3	1	2
11/18	374900	4703050		2	M	15		15											70																	3	1	2
11/18	374900	4703100		1	M	80		20						0.01																					3	1	2
11/18	374900	4703100		2	M	60		40						0.01									0.01												4	2	2
11/18	374900	4703150		1	S	80		20															0.01												3	1	2
11/18	374900	4703150		2	S	30		20											30				20												4	2	2
11/18	374900	4703200		1	S	100																													1	0	1
11/18	374900	4703200		2	S	70		30											0.01																3	1	2
11/18	374900	4703250		1	M	40		0.01						10					40				10												5	3	2
11/18	374900	4703250		2	S	85		10															5												3	1	2
11/20	374900	4708650	2.2	1	T									75																		25			2	1	1
11/20	374900	4708650	2.2	2	T									100																					1	1	0
8/20	374881	4702160	0.7	1	S	5		5		65		0.01		0.01			5		0.01						0.01								20			10	3	7
8/20	374881	4702160	0.7	2	S	10		1		45		0.01		2			1		0.01						1			0.01					40			12	3	9
8/20	374873	4702138	0.3	1	S	30		5		20		0.01		5			20		5						3			3					6			11	3	8
8/20	374873	4702138	0.3	2	T	25				25		2													23								25			5	0	5
8/20	374872	4702173	0.8	1	S	55		1		4		0.01		1			3		0.01									1					35			11	3	8
8/20	374872	4702173	0.8	2	S	10		10		35		0.01		2			2		3									3					30			11	3	8
8/20	374872	4702173	0.5	1	T	10				60												20														4	0	4
8/20	374872	4702173	0.5	2	S	15		1		35				3			5		1														40			7	3	4
10/16	374850	4702250	1.2	1	S	0.01		0.01		30		0.01							20														50			6	1	5
10/16	374850	4702250	1.2	2	S	7		0.01		10									3														80			5	1	4
10/16	374850	4702300	1.6	1	M	10		5		15									60														10			5	1	4
10/16	374850	4702300	1.6	2	M	1		5		40									49														5			5	1	4
10/16	374850	4702350	1.9	1	M	5		10		23				2					40														20			6	2	4
10/16	374850	4702350	1.9	2	M	3		2		10									80														5			5	1	4
10/16	374850	4702400	2.1	1	M	0.01		8		57									5														30			5	1	4
10/16	374850	4702400	2.1	2	M	15				5									70				2										8			5	2	3
10/16	374850	4702450	2.3	1	D	40		31		10				4					15														0.01			6	2	4
10/16	374850	4702450	2.3	2	M	80		10		8									2																	4	1	3
10/16	374850	4702500	2.3	1	D	60		25						10					0.01																5	2	3

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/16	374850	4702500	2.3	2	M	75		17						5																				3		4	1	3
11/6	374850	4702550	2.4	1	S	10		50						40					0.01				0.01					0.01							+	5	2	3
11/6	374850	4702550	2.4	2	M	15		80						5					0.01				0.01												4	2	2
11/23	374850	4702600		1	M	10		60						30					0.01																4	2	2
11/23	374850	4702600		2	M	40		40						20									0.01												4	2	2
11/23	374850	4702650		1	M	20		70						10																					3	1	2
11/23	374850	4702650		2	M	40		50						10									0.01												4	2	2
11/23	374850	4702700		1	M	30		60						10									0.01												4	2	2
11/23	374850	4702700		2	S	40		30						30																					3	1	2
11/23	374850	4702750		1	D	60		30												10															3	1	2
11/23	374850	4702750		2	D	70		20						0.01						10															4	2	2
11/23	374850	4702800		1	D	10		50						40									0.01												4	2	2
11/23	374850	4702800		2	D	10		70						20									0.01												4	2	2
11/23	374850	4702850		1	M	10		90						0.01									0.01					0.01								5	2	3
11/23	374850	4702850		2	D	30		70																				0.01							3	0	3
11/23	374850	4702900		1	D	5		10											85				0.01												4	2	2
11/23	374850	4702900		2	D	0.01		5						0.01					95																	4	2	2
11/6	374850	4702950	3.5	1	M	30		0.01											70																	3	1	2
11/6	374850	4702950	3.5	2	M	6		4											90																	3	1	2
11/16	374850	4703000		1	M	80		20											0.01																	3	1	2
11/16	374850	4703000		2	M	70		30																												2	0	2
11/16	374850	4703050		1	M	75		25															0.01													3	1	2
11/16	374850	4703050		2	M	80		20																												2	0	2
11/16	374850	4703100		1	M	95		5																												2	0	2
11/16	374850	4703100		2	S	90		10																												2	0	2
11/16	374850	4703150		1	S	90		10																												2	0	2
11/16	374850	4703150		2	M	85		15															0.01													3	1	2
11/16	374850	4703200		1	D	80		20																												2	0	2
11/16	374850	4703200		2	M	60		35															5													3	1	2
11/16	374850	4703250		1	D	80		20											0.01				0.01													4	2	2
11/16	374850	4703250		2	D	90		10															0.01													3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/16	374826	4702227	0.5	1	S			1		25									40			1													+	5	2	3
10/16	374826	4702227	0.5	2	S	80		10											5																+	4	1	3
10/16	374800	4702300	1.5	1	M	3				5									62																	4	1	3
10/16	374800	4702300	1.5	2	M	0.01	0.01			5									90													5				5	1	4
10/16	374800	4702350	1.6	1	M	0.01		3		10									40								0.01					40				7	2	5
10/16	374800	4702350	1.6	2	S	0.01				10									80				0.01									7				6	3	3
10/16	374800	4702400	2	1	S	0.01				30									70													0.01				4	1	3
10/16	374800	4702400	2	2	S			5		5									85				1									4				5	2	3
10/16	374800	4702450	2	1	D	10		10		5				0.01					71													4				4	2	4
10/16	374800	4702450	2	2	M	3		7		10									70													10				5	1	4
10/16	374800	4702500	2.2	1	M	37		60						0.01					0.01				0.01								3					6	3	3
10/16	374800	4702500	2.2	2	M	55		40						5																					3	1	2
11/6	374800	4702550	2.3	1	D	25		50						10					15				0.01													5	3	2
11/6	374800	4702550	2.3	2	D	20		80		0.01				0.01									0.01					0.01								6	2	4
11/15	374800	4702600	2.4	1	M	10		50		1				30					7				1					1								8	3	5
11/15	374800	4702600	2.4	2	M	30		30						40													0.01	0.01				0.01				5	1	4
11/15	374800	4702650	2.6	1	M		0.01	60						40					0.01				0.01													4	3	1
11/15	374800	4702650	2.6	2	M	3		50						45					0.01				2													5	3	2
11/15	374800	4702700	2.6	1	S									70					30																	2	2	0
11/15	374800	4702700	2.6	2	M	40		40						20					0.01				0.01													5	3	2
11/15	374800	4702750	2.9	1	S	5		60		2				33																						4	1	3
11/15	374800	4702750	2.9	2	D	30		25		0.01				45					0.01				0.01													5	2	3
11/15	374800	4702800	3	1	M	10		45						45					0.01				0.01					0.01								5	2	3
11/15	374800	4702800	3	2	M			90						7									3													3	2	1
11/15	374800	4702850	3.2	1	M	10		85											5				5					0.01								4	1	3
11/15	374800	4702850	3.2	2	D	10		85						2					1				1					1								6	3	3
11/15	374800	4702900	3.3	1	M	50		49											1				1													3	1	2
11/15	374800	4702900	3.3	2	M	70		15											15																	3	1	2
11/15	374800	4702950	3.5	1	S	30		30											30			10														4	1	3
11/15	374800	4702950	3.5	2	S	80		15											5									0.01								4	1	3
11/18	374800	4703000		1	M	85		10											5																+	3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/18	374800	4703000		2	T			50														50														2	1	1
11/18	374800	4703050		1	M	75		10														5								10						4	1	3
11/18	374800	4703050		2	M	70		30														0.01								0.01						4	1	3
11/18	374800	4703100		1	S	60		20											10			10														4	2	2
11/18	374800	4703100		2	M	80		5											0.01			15														4	2	2
11/18	374800	4703150		1	S	80		10														10														3	1	2
11/18	374800	4703150		2	S	95																5														2	1	1
11/18	374800	4703200		1	M	70		20														9								1						4	1	3
11/18	374800	4703200		2	D	70		20														10														3	1	2
11/18	374800	4703250		1	D	100		0.01																												2	0	2
11/18	374800	4703250		2	D	98		2																												2	0	2
11/6	374750	4702500	2	1	D	10		20		40				10			20						2									0.01				6	2	4
11/6	374750	4702500	2	2	D	10		10		10				10			50						4									10				6	2	4
11/6	374750	4702550	2.1	1	M	4		87		5				2			0.01						2													6	3	3
11/6	374750	4702550	2.1	2	M	35		35		10							10						10													5	2	3
11/23	374750	4702600		1	M	30		50						20			0.01											0.01								5	2	3
11/23	374750	4702600		2	M	30		40						30									0.01							0.01						5	2	3
11/23	374750	4702650		1	M	30		60						10																						3	1	2
11/23	374750	4702650		2	M	25		70						5									0.01													4	2	2
11/15	374750	4702700	2.6	1	M	3		10						5			75												7							5	2	3
11/15	374750	4702700	2.6	2	M	10		70						10					10								5									5	1	4
11/23	374750	4702750		1	D	40		40						10					10				0.01													5	3	2
11/23	374750	4702750		2	M	60		30						0.01			10																			4	2	2
11/23	374750	4702800		1	D	40		40									20																			3	1	2
11/23	374750	4702800		2	D	30		40						0.01			30																			4	2	2
11/23	374750	4702850		1	S	40		60															0.01													3	1	2
11/23	374750	4702850		2	M	30		69						0.01									1													4	2	2
11/23	374750	4702900		1	S	30		60						0.01									10													4	2	2
11/23	374750	4702900		2	M	40		50						5									5													4	2	2
11/15	374750	4702950	3.3	1	S	8		45		2				0.01									45													5	2	3
11/15	374750	4702950	3.3	2	M	40		45						5									10													4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/18	374750	4703000		1	M	45		45															10														3	1	2
11/18	374750	4703000		2	M	50		30						5									15														4	2	2
11/18	374750	4703050		1	D	5		90						5									0.01			0.01										5	2	3
11/18	374750	4703050		2	D	30		50						15									0.01													5	2	3
11/18	374750	4703100		1	M	80		15						0.01									5							5						4	2	2
11/18	374750	4703100		2	M	40		60						0.01					0.01				0.01			0.01										6	3	3
11/18	374750	4703150		1	M	95		5															0.01			0.01										4	1	3
11/18	374750	4703150		2	M	96		4																												2	0	2
11/18	374750	4703200		1	M	95		5											0.01				0.01													4	2	2
11/18	374750	4703200		2	D	70		25						5						10			0.01													4	2	2
11/18	374750	4703250		1	D	99		0.01						1																0.01						4	1	3
11/18	374750	4703250		2	D	98								2									0.01							0.01						4	2	2
10/28	374700	4702500	1.5	1	M	30		10		60																						0.01				4	0	4
10/28	374700	4702500	1.5	2	D	10		15		25									40													10				5	1	4
10/28	374700	4702550	1.8	1	D	30		30		10									20													10				5	1	4
10/28	374700	4702550	1.8	2	D	10		10											60													20				4	1	3
10/28	374700	4702600	1.7	1	M	3	2	60		15				15																		5				6	1	5
10/28	374700	4702600	1.7	2	D	10	5	30		15									30													10				6	1	5
11/23	374700	4702650		1	M	30		59						1																		10				4	1	3
11/23	374700	4702650		2	M	10		65						5																		20				4	1	3
11/23	374700	4702700		1	M	15		70						5					10													0.01				5	2	3
11/23	374700	4702700		2	M	20		60											0.01									0.01					20				5	1	4
11/23	374700	4702750		1	M	40		40						5					15																	4	2	2
11/23	374700	4702750		2	D	40		40						10					10																	4	2	2
11/15	374700	4702800	2.7	1	D	10		10						10					70													0.01				5	2	3
11/15	374700	4702800	2.7	2	D	60		12		3				20					0.01				0.01					0.01				5				8	3	5
11/23	374700	4702850		1	M	30		70																												2	0	2
11/23	374700	4702850		2	M	40		60																												2	0	2
11/23	374700	4702900		1	D	25		70															5													3	1	2
11/23	374700	4702900		2	M	35		60						5									0.01													4	2	2
11/15	374700	4702950	3.2	1	D	30		60															0.01							10						4	1	3

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/15	374700	4702950	3.2	2	D	45		50						0.01					0.01			5														5	3	2
11/18	374700	4703000		1	S	40		60														0.01														3	1	2
11/18	374700	4703000		2	D	5		80						0.01								15														4	2	2
11/18	374700	4703050		1	M	5		90														5														3	1	2
11/18	374700	4703050		2	D	6		90						0.01								4														4	2	2
11/18	374700	4703100		1	D	60		40																						0.01						3	0	3
11/18	374700	4703100		2	D	45		45						10								0.01								0.01						5	2	3
11/18	374700	4703150		1	D	80		10						5								5					0.01									5	2	3
11/18	374700	4703150		2	D	80		10						5								5														4	2	2
11/18	374700	4703200		1	M	100																														1	0	1
11/18	374700	4703200		2	M	80		12						5															3							4	1	3
11/18	374700	4703250		1	D	100		0.01						0.01															0.01							4	1	3
11/18	374700	4703250		2	D	98		2						0.01								0.01														4	2	2
10/28	374650	4702600	1.5	1	M	20		20		50																	10									4	0	4
10/28	374650	4702600	1.5	2	M	2		10		40				20													28									5	1	4
10/28	374650	4702650	1.5	1	D	0.01		15						0.01				5									80									5	2	3
10/28	374650	4702650	1.5	2	M	15		15		30								20									20									5	1	4
11/15	374650	4702700	2.1	1	M	30		20		10				10				29									1									6	2	4
11/15	374650	4702700	2.1	2	M	20	5	25		20				5				10				5					10									8	3	5
11/15	374650	4702750	2.1	1	M	25		40		5				30				0.01				0.01					0.01									8	3	5
11/15	374650	4702750	2.1	2	M	10		30		35				10				15									0.01									7	2	5
11/23	374650	4702800		1	M	30		40						10				20				0.01														5	3	2
11/23	374650	4702800		2	M	20		30						20				30																		4	2	2
11/23	374650	4702850		1	M	20		80																												2	0	2
11/23	374650	4702850		2	M	30		70																												2	0	2
11/23	374650	4702900		1	D	30		70																												2	0	2
11/23	374650	4702900		2	D	60		40						0.01								0.01														3	1	2
11/15	374650	4702950	3.1	1	D	60		40		0.01																										4	1	3
11/15	374650	4702950	3.1	2	D	0.01		85						10														5			0.01					5	1	4
11/15	374650	4703000	3.2	1	S	35		60														0.01					5									4	1	3
11/15	374650	4703000	3.2	2	S	6		90						4																						3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/18	374650	4703050		1	D	80		20																												3	1	2
11/18	374650	4703050		2	M	0.01		99																			1									3	0	3
11/18	374650	4703100		1	D	1		99						0.01								0.01														4	2	2
11/18	374650	4703100		2	M	25		70														5						0.01								4	1	3
11/18	374650	4703150		1	D	60		40						0.01																						4	2	2
11/18	374650	4703150		2	M	4		90						2								2					0.01			2						6	2	4
11/18	374650	4703200		1	D	40		59						1								0.01					0.01									5	2	3
11/18	374650	4703200		2	D	45		40						5								8					2									5	2	3
11/18	374650	4703250		1	M	80		15						5								0.01														4	2	2
11/18	374650	4703250		2	M	45		45														10														3	1	2
11/23	374600	4702700		1	M	5		35						0.01																		60				4	1	3
11/23	374600	4702700		2	M	10		20						0.01					0.01													70				5	2	3
11/15	374600	4702750	1.5	1	M			12		60									5						3							20				5	1	4
11/15	374600	4702750	1.5	2	S	45		0.01		0.01				9								1										45				6	2	4
11/15	374600	4702800	2.2	1	M	10		15		0.01				5				0.01														70				6	2	4
11/15	374600	4702800	2.2	2	M	5		20		5				18				0.01										2				50				7	2	5
11/15	374600	4702850	2.3	1	M	20		60						15								0.01										5				5	2	3
11/15	374600	4702850	2.3	2	S	10		65						15				0.01				5										5				6	3	3
11/23	374600	4702900		1	M	10		80						10								0.01														4	2	2
11/23	374600	4702900		2	M	15		70						15																						3	1	2
11/15	374600	4702950	2.6	1	M	9		80		1				9								1														5	2	3
11/15	374600	4702950	2.6	2	M	30		45						25																						3	1	2
11/15	374600	4703000	3	1	M	15		45						15								10										15				5	2	3
11/15	374600	4703000	3	2	M	5		30						30					0.01			0.01									30	5				7	3	4
11/15	374600	4703050	3	1	M	40		59														0.01									1					4	1	3
11/15	374600	4703050	3	2	M	15		70						5								10										0.01				5	2	3
11/15	374600	4703100	3.3	1	M	20		80														0.01			0.01											4	1	3
11/15	374600	4703100	3.3	2	M	5		95																												2	0	2
11/15	374600	4703150	3.6	1	S	50		50																												2	0	2
11/15	374600	4703150	3.6	2	S	60		40														0.01														3	1	2
11/15	374600	4703200	3.8	1	S	59		40		0.01												1			0.01		0.01									6	1	5

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/15	374600	4703200	3.8	2	D	60		40														0.01														3	1	2
11/15	374600	4703250	4.1	1	D	98		1																						1						3	0	3
11/15	374600	4703250	4.1	2	S	95		5																												2	0	2
11/22	374600	4703400	3.5	1	M	100																														1	0	1
11/22	374600	4703400	3.5	2	M	100																														1	0	1
11/15	374550	4702850	2.1	1	M	0.01		5		5				5					80				0.01										5			7	3	4
11/15	374550	4702850	2.1	2	M	15		15		15				10					20					5									20			7	2	5
11/15	374550	4702900	2.2	1	M	0.01		5		0.01				0.01					85														10			6	2	4
11/15	374550	4702900	2.2	2	M	30		10		10				25		0.01			0.01				0.01	5									20			10	3	7
11/15	374550	4702950	2.1	1	M	3		5																									92			3	0	3
11/15	374550	4702950	2.1	2	M	5		30		5				20		0.01																	40			6	1	5
11/15	374550	4703000	2.7	1	M	35		35						30					0.01				0.01										0.01			5	2	3
11/15	374550	4703000	2.7	2	M	26		70		20													0.01						4							4	1	3
11/15	374550	4703050	3	1	M	40		60						0.01					0.01				0.01					0.01								5	2	3
11/15	374550	4703050	3	2	M	5		95											0.01				0.01													3	1	2
11/15	374550	4703100	3	1	M			100															0.01													2	1	1
11/15	374550	4703100	3	2	M	25		70						0.01					5				0.01													3	1	2
11/15	374550	4703150	3.4	1	M	60		40											0.01				3					0.01								4	1	3
11/15	374550	4703150	3.4	2	M	60		35		2									3									1								4	1	3
11/15	374550	4703200	3.6	1	M	50		49																	0.01											4	0	4
11/15	374550	4703200	3.6	2	M	70		25						0.01					5				0.01													4	2	2
11/15	374550	4703250	3.6	1	M	95		5											0.01				0.01										0.01			4	1	3
11/15	374550	4703250	3.6	2	D	85		10											5																	3	1	2
11/15	374500	4702950	1.9	1	M	20		40		20				20										0.01									0.01			6	1	5
11/15	374500	4702950	1.9	2	M	10		20		30				10		0.01																	30			6	1	5
11/15	374500	4703000	2	1	S	10		30		30						8			10				1					1								8	2	6
11/15	374500	4703000	2	2	M	10		20		20				5					30					5									10			7	2	5
11/15	374500	4703050	2.6	1	M	60		35						5									0.01													4	2	2
11/15	374500	4703050	2.6	2	M	10		60		7				20					1				1						1							7	3	4
11/15	374500	4703100	2.7	1	S	40		40						19									0.01					1								5	2	3
11/15	374500	4703100	2.7	2	S			94						3					3				3										0.01			4	2	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #		Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/15	374500	4703150	2.8	1	M	70	0.01								15								0.01														7	2	5
11/15	374500	4703150	2.8	2	S	0.01			45						45								5														5	2	3
11/15	374500	4703200	3.2	1	S				100																												1	0	1
11/15	374500	4703200	3.2	2	S	0.01			100														0.01														3	1	2
11/15	374500	4703250	3.5	1	M	90			5														5														3	1	2
11/15	374500	4703250	3.5	2	M	75			10														10					5									4	1	3
11/15	374450	4703050	1.8	1	S	2	0.01		5		90																						3				4	0	4
11/15	374450	4703050	1.8	2	S	0.01	15		15		15				0.01																		70				5	1	4
11/15	374450	4703100	2.3	1	M	15	20		1		20				4		0.01											0.01					60				7	1	6
11/15	374450	4703100	2.3	2	M	15	15		15		15				15										15			10					15				7	1	6
11/15	374450	4703150	2.5	1	M	20	65		10		65																	5									4	0	4
11/15	374450	4703150	2.5	2	T	20	75		5		75																										4	0	4
11/15	374450	4703200	2.6	1	S	40	7		40		7				1		1											1					10				7	1	6
11/15	374450	4703200	2.6	2	T	30			30								30						9										1				5	1	4
11/15	374450	4703250	2.9	1	S	30			30						10		10						5										15				6	2	4
11/15	374450	4703250	2.9	2	S	50			45						0.01								2					0.01					3				6	2	4
11/22	374450	4703400	3.1	1	M	75			25														0.01														3	1	2
11/22	374450	4703400	3.1	2	M	75			25														0.01														3	1	2
11/15	374400	4703250	2.4	1	M	0.01																											100				2	0	2
11/15	374400	4703250	2.4	2	S		0.01		15						15																		85				3	1	2
11/22	374381	4703622	4.4	1	M	80	15		15														5														3	1	2
11/22	374381	4703622	4.4	2	M	80	17		17														3														3	1	2
11/21	374350	4703300	2.5	1	M	5	85		85														0.01		8								2				5	1	4
11/21	374350	4703300	2.5	2	M	10	70		70		5																			5	5		5				6	0	6
11/22	374350	4703350	2.6	1	S	25	50		50		5						0.01											20					0.01				6	0	6
11/22	374350	4703350	2.6	2	M	5	70		70						10													0.01					15				5	1	4
11/22	374350	4703400	3	1	M	15	25		25						50		10																				4	1	3
11/22	374350	4703400	3	2	M	5	5		5						80		5																5				5	1	4
11/21	374350	4703450		1	D	10	80		80						10																						3	1	2
11/21	374350	4703450		2	M	60	20		20						5																15						4	1	3
11/22	374300	4703500	2.6	1	D	98	2		2																								0.01				3	0	3

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/22	374300	4703500	2.6	2	S	45		45														0.01								10						4	1	3
11/22	374300	4703600	4.1	1	M	70		30																												2	0	2
11/22	374300	4703600	4.1	2	S	80		20																												2	0	2
11/22	374300	4703700	2.5	1	O	70		13						10								7													+	4	2	2
11/22	374250	4703700	2.5	2	S	85		5						5								5														4	2	2
11/22	374250	4703800	6	1	T	100																														1	0	1
11/22	374250	4703800	6	2	T					100																										1	0	1
11/22	374200	4703900	5.2	1	S	60		0.01						40																					+	3	1	2
11/22	374200	4703900	5.2	2	S	50		0.01						50																						3	1	2
11/22	374142	4704072	4.4	1	M	90		5														5														3	1	2
11/22	374142	4704072	4.4	2	S	85		15																												2	0	2
11/22	374093	4704222	2	1	O																															0	0	0
11/22	374093	4704222	2	2	T					100																										1	0	1
11/22	374090	4704272	7.9	1	O																															0	0	0
11/22	374090	4704272	7.9	2	S	19		80														1														3	1	2
11/22	374021	4704422	2.5	1	S	80		20																											+	2	0	2
11/22	374021	4704422	2.5	2	S	10		90																											+	2	0	2
11/22	373978	4704572	1.4	1	S	50		35						5		5						5														5	2	3
11/22	373978	4704572	1.4	2	S	40		47						5								8														4	2	2
11/22	373951	4704722	5.7	1	T	72		25						1								2														4	2	2
11/22	373951	4704722	5.7	2	T	100																														1	0	1
11/22	373923	4704872	2.6	1	T	40		40						19								1														4	2	2
11/22	373923	4704872	2.6	2	S	70		10		5				10								5														5	2	3
11/22	373874	4704972	2.5	1	T																	100														1	1	0
11/22	373874	4704972	2.5	2	T	50		10														40														3	1	2
11/22	373837	4705072	2.6	1	D	80		10														10														3	1	2
11/22	373837	4705072	2.6	2	M	97																3														2	1	1
11/22	373806	4705222	2.4	1	T	20		80																												2	0	2
11/22	373806	4705222	2.4	2	T	30		50														20														3	1	2
11/22	373771	4705372	2.5	1	S	15								85																						2	1	1
11/22	373771	4705372	2.5	2	S	1		1						98																						3	1	2

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/22	373731	4705471	3.8	1	M	95		3						2									0.01														4	2	2
11/22	373731	4705471	3.8	2	D	100																														1	0	1
11/22	373690	4705571	2	1	M	100																														1	0	1
11/22	373690	4705571	2	2	M	100																														1	0	1
11/22	373623	4705721	3.6	1	T	70																	30													2	1	1
11/22	373623	4705721	3.6	2	T	100																														1	0	1
11/22	373586	4705872	2.7	1	O																															0	0	0
11/22	373586	4705872	2.7	2	S	95		1															4													3	1	2
11/22	373511	4706071	2.8	1	M	99		0.01						1																						3	1	2
11/22	373511	4706071	2.8	2	S	99										1																				2	0	2
11/22	373431	4706222	2	1	D	100		0.01																												2	0	2
11/22	373431	4706222	2	2	D	100																														1	0	1
11/22	373402	4706322	3.3	1	S	100																														1	0	1
11/22	373402	4706322	3.3	2	M	100		0.01																												2	0	2
11/22	373348	4706472	2.9	1	M	80	20																0.01													3	1	2
11/22	373348	4706472	2.9	2	S	87	10							3									0.01													4	2	2
11/22	373306	4706622	1.7	1	M	100																														1	0	1
11/22	373306	4706622	1.7	2	M	100																														1	0	1
11/22	373296	4706722	2.3	1	S	95																	5													2	1	1
11/22	373296	4706722	2.3	2	M	100																														1	0	1
11/22	373269	4706872	11	1	O																															0	0	0
11/22	373269	4706872	11	2	O																															0	0	0
11/22	373162	4707022	2.5	1	M	100																														1	0	1
11/22	373162	4707022	2.5	2	M	100																														1	0	1
11/22	373131	4707122	2.5	1	T	90								5									5													3	2	1
11/22	373131	4707122	2.5	2	M	95		2						2																			1				4	1	3
11/22	373050	4707450	14	1	O																															0	0	0
11/22	373050	4707450	14	2	O																															0	0	0
11/22	373039	4707372	8.4	1	O																															0	0	0
11/22	373039	4707372	8.4	2	O																															0	0	0

Date sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/22	373000	4707550	4.1	2	S	100								**834**	203	32	**132**	5	1304	4	3	**324**	26	9	208	0	24	46	0	192	18	486	0	8	122				
11/22	373000	4707650	5.8	1	T	100																														1	**0**	1
11/22	373000	4707650	5.8	2	O																															0	**0**	0
11/22	372925	4707800	3.9	1	D	100																														1	**0**	1
11/22	372925	4707800	3.9	2	M	100																														1	**0**	1
11/22	372900	4707900	3.1	1	M	100																														1	**0**	1
11/22	372900	4707900	3.1	2	M	99		1																												2	**0**	2
11/22	372800	4708100	1.5	1	T	40		20						**20**																			20				4	**1**	3
11/22	372800	4708100	1.5	2	S	50		50																									0.01				3	**0**	3
11/22	372800	4708200	3.5	1	T	90																**10**														2	**1**	1
11/22	372800	4708200	3.5	2	S	100																														1	**0**	1
11/22	372750	4708250	1.6	1	M	100		0.01																												2	**0**	2
11/22	372750	4708250	1.6	2	M	95		1		1				**2**		1																				5	**1**	4
11/22	372750	4708350	2.7	1	M	90		5								5																				3	**0**	3
11/22	372750	4708350	2.7	2	M	100																														1	**0**	1
11/22	372700	4708350	2.5	1	T									**100**																						1	**1**	0
11/22	372700	4708350	2.5	2	T			30						**50**																			20				3	**1**	2
11/22	372700	4708525	2.3	1	M	65		10						**25**																						3	**1**	2
11/22	372700	4708525	2.3	2	M	97		2						**1**																						3	**1**	2
11/22	372600	4708600	1.5	1	T	35		35						**30**																						3	**1**	2
11/22	372600	4708600	1.5	2	S	40		10		25				**15**																			10				5	**1**	4
11/22	372550	4708700	2.2	1	M	50		37						**8**								**5**														4	**2**	2
11/22	372550	4708700	2.2	2	M	90		9						**1**																						3	**1**	2
11/22	372450	4708850	3.4	1	T																	**100**														1	**1**	0
11/22	372450	4708850	3.4	2	T	1		50		3				**6**								**40**														5	**2**	3
11/22	372300	4708950	4.1	1	S	95		5																												2	**0**	2
11/22	372300	4708950	4.1	2	T	100																														1	**0**	1
						1437	135	1430	7	332	**17**	14	0																										
	Rake-toss	1942																																					
	"O"	66																																					
	"T"	248																																					
	"S"	541																																					
	"M"	757																																					
	"D"	330																																					

Data 2. Lighthouse rake-toss pre-herbicide measurements recorded in 2013. Each rake-toss is recorded as either D = dense; M = medium; S = sparse; T = trace; or O = zero as an abundance rating. The values for each plant species in each row is the biologist's percentage estimate as part of the whole rake-toss.

Date Samplesd in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2012	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/10	375700	4701950	0.8	1	T																	100														1	1	0
7/10	375700	4701950	0.8	2	O																															0	0	0
7/10	375650	4701950	2.5	1	O																															0	0	0
7/10	375650	4701950	2.5	2	T	20													20			30			30											4	2	2
7/10	375650	4702000	4	1	T														70			30														2	2	0
7/10	375650	4702000	4	2	T														97			2			1											3	2	1
7/10	375650	4702050	3.0	1	T			25											25			25			25											4	2	2
7/10	375650	4702050	3.0	2	T			38														60			2											3	1	2
7/10	375600	4701950	1	1	T			50											50																	2	1	1
7/10	375600	4701950	1	2	T														60						40											2	1	1
7/10	375600	4702000	2	1	T																				100											1	0	1
7/10	375600	4702000	2	2	T																				100											1	0	1
7/10	375600	4702050	2.2	1	T			1											98			1														3	2	1
7/10	375600	4702050	2.2	2	T																				100											1	0	1
7/10	375600	4702100	3.3	1	T																	100														1	1	0
7/10	375600	4702100	3.3	2	T																	30			70											2	1	1
7/10	375550	4702000	1	1	T												5		89			1			5											4	3	1
7/10	375550	4702000	1	2	S			75						0.01					15			5			5											5	3	2
7/10	375550	4702050	1.0	1	T			5											50			35			10											4	2	2
7/10	375550	4702050	1.0	2	T	95													3						2											3	1	2
7/10	375550	4702100	2.0	1	T														100																	1	1	0
7/10	375550	4702100	2.0	2	S	1		1									1		96						1											5	2	3
7/10	375500	4702100	1.5	1	T														99						1											2	1	1
7/10	375500	4702100	1.5	2	T														100																	1	1	0
7/10	375500	4702150	2.5	1	T			1											98			1														3	2	1
7/10	375500	4702150	2.5	2	T			1											97			1			1											4	2	2
7/10	375500	4702200	4.0	1	O																															0	0	0
7/10	375500	4702200	4.0	2	T														40			60														2	2	0
7/10	375500	4702300	1.8	1	T														45			40			15											3	2	1

Date Sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2012	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
		58				16	0	24	0	0	0	0	0	4	1	0	2	0	40	0	0	32	0	0	38	0	0	0	0	0	0	0	0	0	0				
7/10	375500	4702300	1.8	2	T																																	
7/10	375500	4702350	2.3	1	S			25																														
7/10	375500	4702350	2.3	2	S	1		97																														
7/10	375500	4702400	2.5	1	S	0.01		2																														
7/10	375500	4702400	2.5	2	S	20		10																														
7/10	375450	4702150	1.5	1	S																																	
7/10	375450	4702150	1.5	2	S	10																																
7/10	375450	4702200	2.3	1	T																																	
7/10	375450	4702200	2.3	2	T			5																														
7/10	375450	4702250	2.8	1	T																																	
7/10	375450	4702250	2.8	2	T																																	
7/10	375450	4702300	2.8	1	T																																	
7/10	375450	4702300	2.8	2	S	20		10																														
7/10	375450	4702350	2.0	1	T			10																														
7/10	375450	4702350	2.0	2	T	1																																
7/10	375450	4702400	2.5	1	S			8						5	5																							
7/10	375450	4702400	2.5	2	S	55		10						0.01																								
7/10	375400	4702200	1.0	1	S																																	
7/10	375400	4702200	1.0	2	S																																	
7/10	375400	4702250	2.3	1	S	0.01		0.01																														
7/10	375400	4702250	2.3	2	T	2																																
7/10	375400	4702300	2.8	1	T	99																																
7/10	375400	4702300	2.8	2	S	50		25																														
7/10	375400	4702350	3.0	1	S	37		32																														
7/10	375400	4702350	3.0	2	T			38																														
7/10	375400	4702400	3.0	1	T	100																																
7/10	375400	4702400	3.0	2	S			100																														
7/10	375350	4702250	2.0	1	S									1					98						1													
7/10	375350	4702250	2.0	2	S			2											94				1		3												
7/10																																						
	Rake-toss																																					
	"O"	3																																				
	"T"	36																																				
	"S"	19																																				
	"M"	0																																				
	"D"	0																																				

Data 3. Lighthouse rake-toss post-herbicide measurements recorded in 2013. Each rake-toss is recorded as either D = dense; M = medium; S = sparse; T= trace; or O = zero as an abundance rating. The values for each plant species in each row is the biologist's percentage estimate as part of the whole rake-toss.

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/21	375700	4701950	1	T	50				50																										2	0	2
11/21	375700	4701950	2	T	100																														1	0	1
11/21	375650	4701950	1	T																	100														1	1	0
11/21	375650	4701950	2	T			100																												1	0	1
11/21	375650	4702000	1	T	100																														1	0	1
11/21	375650	4702000	2	O																															0	0	0
11/21	375600	4701950	1	T	5													95																	2	1	1
11/21	375600	4701950	2	T			2											98																	2	1	1
10/21	375600	4701960	1	T														100																+	1	1	0
10/21	375600	4701960	2	T	5	5							10					75														5		+	5	2	3
11/21	375600	4702000	1	T																															0	0	0
11/21	375600	4702000	2	T	35		30						35																						3	1	2
11/21	375600	4702100	1	O																															0	0	0
11/21	375600	4702100	2	T	100																														1	0	1
11/21	375550	4702000	1	T														100																	1	1	0
11/21	375550	4702000	2	T	5													95																	2	1	1
10/21	375550	4702011	1	S														100																	1	1	0
10/21	375550	4702011	2	S	5		5											90																	3	1	2
11/21	375550	4702050	1	T														100																	1	1	0
11/21	375550	4702050	2	T														50			50														2	2	0
11/21	375550	4702100	1	T														100																	1	1	0
11/21	375550	4702100	2	T			50											50																	2	1	1
11/21	375550	4702150	1	O																															0	0	0
11/21	375550	4702150	2	O																															0	0	0
10/21	375500	4702064	1	S	9		1											90																	3	1	2
10/21	375500	4702064	2	T	60													40																+	2	1	1
11/21	375500	4702100	1	T														100																	1	1	0
11/21	375500	4702100	2	S														100																	1	1	0
11/21	375500	4702150	1	O																															0	0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/21	375500	4702150	2	O																															0	0
11/18	375500	4702200	1	T	60													40																	2	1	1
11/18	375500	4702200	2	O																															0	0	0
11/18	375500	4702300	1	T			100																												1	0	1
11/18	375500	4702300	2	T			100																												1	0	1
11/18	375500	4702350	1	O																															0	0	0
11/18	375500	4702350	2	T	3		95											2																	3	1	2
11/18	375500	4702400	1	T	40		60																												2	0	2
11/18	375500	4702400	2	T			50											50																	2	1	1
10/21	375450	4702117	1	O																															0	0	0
10/21	375450	4702117	2	O																															0	0	0
11/21	375450	4702150	1	S														100			0.01														2	2	0
11/21	375450	4702150	2	S			10											90			0.01														3	2	1
11/18	375450	4702200	1	T														100																	1	1	0
11/18	375450	4702200	2	T	97													3																	2	1	1
11/18	375450	4702250	1	O																															0	0	0
11/18	375450	4702250	2	T	99													1																	2	1	1
11/18	375450	4702300	1	T	95																3			2											3	1	2
11/18	375450	4702300	2	T	45		45		9												1														4	1	3
11/18	375450	4702350	1	T	5		95																												2	0	2
11/18	375450	4702350	2	T			95											4										1							3	1	2
11/18	375450	4702400	1	T	35		35														30														3	1	2
11/18	375450	4702400	2	O																															0	0	0
10/21	375400	4702168	1	O																															0	0	0
10/21	375400	4702168	2	O																															0	0	0
11/18	375400	4702200	1	S			1											99																	2	1	1
11/18	375400	4702200	2	S	0.01		40											60																	3	1	2
11/18	375400	4702250	1	M														100																	1	1	0
11/18	375400	4702250	2	M														99			1														2	2	0
11/18	375400	4702300	1	T	95		5																												2	0	2
11/18	375400	4702300	2	T			49											1			50														3	2	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/18	375400	4702350	1	T			50											45				5													3	2	1
11/18	375400	4702350	2	T			90						5					5																	3	2	1
11/18	375400	4702400	1	T	80		9			1											10														4	2	2
11/18	375400	4702400	2	T	45		50											2			2	1													5	2	3
10/21	375350	4702210	1	T		100																													1	0	1
10/21	375350	4702210	2	O																															0	0	0
11/18	375350	4702250	1	M														100																	1	1	0
11/18	375350	4702250	2	S	50		2											48																	3	1	2
10/16	375350	4702250	1	M	40													60																	2	1	1
10/16	375350	4702250	2	M	1		1											98																	3	1	2
10/21	375300	4702253	1	M	70		20		10																										3	0	3
10/21	375300	4702253	2	S			100																												1	0	1
	Rake-toss	72			28	2	28	0	3	1	0	0	3	0	0	0	0	37	0	0	12	0	0	2	0	0	1	0	0	0	1	0	0	3			
	"O"	15																																			
	"T"	41																																			
	"S"	10																																			
	"M"	6																																			
	"D"	0																																			

Data 4. Inlet proper rake-toss pre-herbicide measurements recorded in 2013. Each rake-toss is recorded as either D = dense; M = medium; S = sparse; T = trace; or O = zero as an abundance rating. The values for each plant species in each row is the biologist's percentage estimate as part of the whole rake-toss.

Date Samplesd in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/10	376250	4700959	0.5	1	T						100																								1	1	0
7/10	376250	4700959	0.5	2	T																				100										1	0	1
7/10	376200	4700976	1.2	1	T																	100													1	1	0
7/10	376200	4700976	1.2	2	T																	100													1	1	0
7/10	376150	4700993	1.0	1	T			100																											1	0	1
7/10	376150	4700993	1.0	2	T																	100													1	1	0
7/9	376100	4701007	1.3	1	O																														0	0	0
7/9	376100	4701007	1.3	2	O																														0	0	0
7/9	376050	4701018	0.8	1	S						90						10																		2	2	0
7/9	376050	4701018	0.8	2	O																														0	0	0
7/10	376000	4701000	1.0	1	T						30						70																		2	2	0
7/10	376000	4701000	1.0	2	S						97						3																		2	2	0
7/10	375950	4701025	1.0	1	O																														0	0	0
7/10	375950	4701025	1.0	2	T						40						40								20										3	2	1
7/9	375900	4699350		1	O																														0	0	0
7/9	375900	4699350		2	O																														0	0	0
7/10	375900	4701025	0.9	1	T						60						40																		2	2	0
7/10	375900	4701025	0.9	2	O																														0	0	0
7/9	375850	4699408		1	O																														0	0	0
7/9	375850	4699408		2	O																														0	0	0
7/10	375850	4701000	1.3	1	O																														0	0	0
7/10	375850	4701000	1.3	2	T			99																	1										2	0	2
7/10	375850	4701050	1.3	1	O																														0	0	0
7/10	375850	4701050	1.3	2	O																														0	0	0
7/9	375800	4699451		1	O																														0	0	0
7/9	375800	4699451		2	O																														0	0	0
7/10	375800	4700850		1	T																				100										1	0	1
7/10	375800	4700850		2	T									30			35								35										3	2	1
7/10	375800	4700900	1.3	1	T												100																		1	1	0

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/10	375800	4700900	1.3	2	T												100																			1	0	1
7/10	375800	4700950	1.8	1	O																															0	0	0
7/10	375800	4700950	1.8	2	T												100																			1	0	1
7/10	375800	4701000	2.5	1	O																															0	0	0
7/10	375800	4701000	2.5	2	T																				100											1	0	1
7/10	375800	4701050	2.5	1	T																				100											1	0	1
7/10	375800	4701050	2.5	2	T																				100											1	0	1
7/10	375800	4701100	2.5	1	O																															0	0	0
7/10	375800	4701100	2.5	2	O																															0	0	0
7/10	375800	4701150	2.3	1	O																															0	0	0
7/10	375800	4701150	2.3	2	T																		100													1	0	1
7/9	375750	4699501		1	O																															0	0	0
7/9	375750	4699501		2	O																															0	0	0
7/9	375750	4700550	1.5	1	T												100																			1	0	1
7/9	375750	4700550	1.5	2	T						100																									1	0	1
7/9	375750	4700600	1.3	1	T					2	95						2																			4	2	4
7/9	375750	4700600	1.3	2	T			1		1	93						5																			4	2	4
7/10	375750	4700750	1.0	1	S									2			30					3			65										4	3	4
7/10	375750	4700750	1.0	2	S		0.01										40					0.01			60										4	2	4
7/10	375750	4700800	1.5	1	T	50		25																	25										3	0	3
7/10	375750	4700800	1.5	2	T																	100													1	1	1
7/10	375750	4700850	3.5	1	O																															0	0	0
7/10	375750	4700850	3.5	2	O																															0	0	0
7/10	375750	4700900	2.5	1	O																															0	0	0
7/10	375750	4700900	2.5	2	T																				100											1	1	1
7/10	375750	4700950	3.5	1	T																				100											1	0	1
7/10	375750	4700950	3.5	2	T																				100											1	0	1
7/10	375750	4701000	3.3	1	O																															0	0	0
7/10	375750	4701000	3.3	2	T																				100											1	0	1
7/10	375750	4701050	2.8	1	O																															0	0	0
7/10	375750	4701050	2.8	2	T																				100											1	0	1

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/10	375750	4701100	3.0	1	O																														0	0	0
7/10	375750	4701100	3.0	2	O																														0	0	0
7/10	375750	4701150	2.8	1	T																	95				5									2	1	1
7/10	375750	4701150	2.8	2	O																														0	0	0
7/10	375750	4701200	3.3	1	O																														0	0	0
7/10	375750	4701200	3.3	2	T																	100													1	1	0
7/10	375750	4701250	3.3	1	O																														0	0	0
7/10	375750	4701250	3.3	2	O																														0	0	0
7/10	375750	4701300	3.0	1	O																														0	0	0
7/10	375750	4701300	3.0	2	T																				100										1	0	1
7/10	375750	4701350	3.0	1	T																				100										1	0	1
7/10	375750	4701350	3.0	2	T																				100										1	0	1
7/10	375750	4701400	2.8	1	O																														0	0	0
7/10	375750	4701400	2.8	2	T			100																											1	0	1
7/10	375750	4701450	2.5	1	T																		50			50									2	1	1
7/10	375750	4701450	2.5	2	T									99												1									2	1	1
7/10	375750	4701500	2.5	1	T														60							40									2	1	1
7/10	375750	4701500	2.5	2	T	100																													1	0	1
7/10	375750	4701550	2.8	1	T	95																				5									2	0	2
7/10	375750	4701550	2.8	2	T																					100									1	0	1
7/10	375750	4701600	2.8	1	T	95																	5												2	1	1
7/10	375750	4701600	2.8	2	T			90									5						5												3	2	1
7/10	375750	4701650	2.5	1	O																														0	0	0
7/10	375750	4701650	2.5	2	T																		95			5									2	1	1
7/10	375750	4701700	2.3	1	T	98																	2												2	1	1
7/10	375750	4701700	2.3	2	T	90													6				2			2									4	2	2
7/18	375750	4701750	2.3	1	T	100																													1	0	1
7/18	375750	4701750	2.3	2	T			98															1			1									3	1	2
7/10	375750	4701800	1.8	1	O																														0	0	0
7/10	375750	4701800	1.8	2	T												100																		1	1	0
7/10	375750	4701850	1.8	1	T																		50			50									2	1	1

Date Sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/10	375750	4701850	1.8	2	O																														0	0	0
7/9	375700	4699550		1	O																														0	0	0
7/9	375700	4699550		2	O																														0	0	0
7/9	375700	4700550	1.3	1	T			1			**97**			**1**																					4	2	2	2
7/9	375700	4700550	1.3	2	T						**98**						**1**							1											3	2	1	1
7/9	375700	4700600	0.8	1	S												**99**							1										+	2	1	1	1
7/9	375700	4700600	0.8	2	S						**99**						**1**																		+	2	2	2	0
7/10	375700	4700650	2.3	1	T									**50**				2.3				**50**														2	2	2	0
7/10	375700	4700650	2.3	2	T	1								**1**								**97**			1											4	2	2	2
7/10	375700	4700700	2.3	1	T																				100										1	0	1	1
7/10	375700	4700700	2.3	2	O																														0	0	0	0
7/10	375700	4700750	2.3	1	O																														0	0	0	0
7/10	375700	4700750	2.3	2	O																														0	0	0	0
7/10	375700	4700800	3.0	1	O																														0	0	0	0
7/10	375700	4700800	3.0	2	O																														0	0	0	0
7/10	375700	4700850	3.5	1	T																				100										1	0	1	1
7/10	375700	4700850	3.5	2	O																														0	0	0	0
7/10	375700	4701100	0.5	1	T													50				**25**			25										3	2	2	1
7/10	375700	4701100	0.5	2	T																	**1**			99									+	2	1	1	1
7/10	375700	4701150	1.3	1	T			10										**80**							10										3	1	2	2
7/10	375700	4701150	1.3	2	T													**100**																	1	1	0	1
7/10	375700	4701200	1.3	1	T																				100										1	0	1	1
7/10	375700	4701200	1.3	2	T						**1**							**97**							2										3	2	1	1
7/10	375700	4701250	1.3	1	T																				100										1	0	1	1
7/10	375700	4701250	1.3	2	T																				100										1	0	1	1
7/10	375700	4701300	1.5	1	O																														0	0	0	0
7/10	375700	4701300	1.5	2	T	94											**3**								3										3	**1**	2	
7/10	375700	4701350	3.0	1	O																														0	**0**	0	
7/10	375700	4701350	3.0	2	T																	**100**													1	**1**	0	
7/10	375700	4701400	2.3	1	T									**92**			**4**								4										3	**2**	1	
7/10	375700	4701400	2.3	2	T																				100										1	**0**	1	

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/10	375700	4701450	2.8	1	T																														1	0	1
7/10	375700	4701450	2.8	2	T		1							1																					3	1	2
7/10	375700	4701500	2.8	1	T	100																													1	0	1
7/10	375700	4701500	2.8	2	T																														1	0	1
7/10	375700	4701550	2.5	1	T																														1	0	1
7/10	375700	4701550	2.5	2	T																														1	0	1
7/10	375700	4701600	2.8	1	T																	100													1	1	0
7/10	375700	4701600	2.8	2	T																				100										1	0	1
7/10	375700	4701650	3.0	1	O																														0	0	0
7/10	375700	4701650	3.0	2	T	50																	1		49										3	1	2
7/10	375700	4701700	2.8	1	T																				100										1	0	1
7/10	375700	4701700	2.8	2	T	40																	35		25										3	1	2
7/18	375700	4701750	2.8	1	T			69									20						10		1										4	2	2
7/18	375700	4701750	2.8	2	T	97		1									1						1												4	2	2
7/10	375700	4701800	3.0	1	T	98													2																2	1	1
7/10	375700	4701800	3.0	2	T			10											30				30				30								4	2	2
7/10	375700	4701850	3.3	1	T																	100													1	0	1
7/10	375700	4701850	3.3	2	O																														0	0	0
7/10	375700	4701900	3.5	1	O																														0	0	0
7/10	375700	4701900	3.5	2	T			95															5												2	1	1
7/9	375678	4698350		1	O																														0	0	0
7/9	375678	4698350		2	O																													+	0	0	0
7/9	375675	4698400		1	O																														0	0	0
7/9	375675	4698400		2	O																													+	0	0	0
7/9	375675	4698550		1	O																														0	0	0
7/9	375675	4698550		2	O																														0	0	0
7/9	375674	4698450		1	O																													+	0	0	0
7/9	375674	4698450		2	O																													+	0	0	0
7/9	375667	4698602		1	O																														0	0	0
7/9	375667	4698602		2	O																													+	0	0	0
7/9	375667	4698650		1	O																														0	0	0

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/9	375667	4698650		2	O																														0	0	0	0
7/9	375664	4698500		1	O																														0	0	0	0
7/9	375664	4698500		2	O																														0	0	0	0
7/9	375664	4698950		1	O																														0	0	0	0
7/9	375664	4698950		2	O																														0	0	0	0
7/9	375663	4699100		1	O																														0	0	0	0
7/9	375663	4699100		2	O																														0	0	0	0
7/9	375663	4699150		1	O																														0	0	0	0
7/9	375663	4699150		2	O																														0	0	0	0
7/9	375662	4699000		1	O																														0	0	0	0
7/9	375662	4699000		2	O																														0	0	0	0
7/9	375661	4698750		1	O																														0	0	0	0
7/9	375661	4698750		2	O																														0	0	0	0
7/9	375660	4699050		1	O																														0	0	0	0
7/9	375660	4699050		2	O																														0	0	0	0
7/9	375658	4698900		1	O																														0	0	0	0
7/9	375658	4698900		2	T			100																											1	1	0	0
7/9	375657	4699200		1	O																														0	0	0	0
7/9	375657	4699200		2	O																														0	0	0	0
7/9	375656	4698850		1	O																														0	0	0	0
7/9	375656	4698850		2	O																														0	0	0	0
7/9	375655	4698800		1	O																														0	0	0	0
7/9	375655	4698800		2	O																														0	0	0	0
7/9	375650	4698700		1	O																														+	0	0	0
7/9	375650	4698700		2	O																															0	0	0
7/9	375650	4699585		1	O																															0	0	0
7/9	375650	4699585		2	O																															0	0	0
7/9	375650	4699650		1	O																															0	0	0
7/9	375650	4699650		2	O																															0	0	0
7/9	375650	4699700		1	O																															0	0	0
7/9	375650	4699700		2	O																															0	0	0

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/9	375650	4699750		1	O																														0	0	0
7/9	375650	4699750		2	O																														0	0	0
7/9	375650	4699800		1	O																														0	0	0
7/9	375650	4699800		2	O																														0	0	0
7/9	375650	4699850		1	O																														0	0	0
7/9	375650	4699850		2	O																														0	0	0
7/9	375650	4699900		1	O																														0	0	0
7/9	375650	4699900		2	T	100																													1	0	0
7/9	375650	4699950		1	O																														0	0	0
7/9	375650	4699950		2	T																		100												1	0	0
7/9	375650	4700000		1	O																														0	0	0
7/9	375650	4700000		2	O																														0	0	0
7/9	375650	4700050		1	T	100																													1	0	0
7/9	375650	4700050		2	O																														0	0	0
7/9	375650	4700100		1	O																														0	0	0
7/9	375650	4700100		2	O																														0	0	0
7/9	375650	4700150		1	T	100																													1	0	0
7/9	375650	4700150		2	O																														0	0	0
7/9	375650	4700200		1	O																														0	0	0
7/9	375650	4700200		2	O																														0	0	0
7/9	375650	4700250		1	T	50								50																					2	1	0
7/9	375650	4700250		2	T	50																	50												2	1	0
7/9	375650	4700300		1	T	100																													1	0	0
7/9	375650	4700300		2	T																		100												1	1	0
7/9	375650	4700350	2.5	1	O																														0	0	0
7/9	375650	4700350	2.5	2	O																														0	0	0
7/9	375650	4700400	2.5	1	O																														0	0	0
7/9	375650	4700400	2.5	2	T	30								35				35																	3	2	1
7/9	375650	4700500	2.3	1	T						98							1								1								3	2	1
7/9	375650	4700500	2.3	2	O																														0	0	0
7/9	375650	4700550	1.8	1	T																		100												1	1	0

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/9	375650	4700550	1.8	2	T	100																														1	0	1
7/9	375650	4700600	2.5	1	T			60									40																		+	2	1	1
7/9	375650	4700600	2.5	2	O																															0	0	0
7/10	375650	4700650	2.0	1	O																															0	0	0
7/10	375650	4700650	2.0	2	T									50									50													2	1	1
7/10	375650	4700700	3.3	1	O																															0	0	0
7/10	375650	4700700	3.3	2	O																															0	0	0
7/10	375650	4700750	2.0	1	O																															0	0	0
7/10	375650	4700750	2.0	2	O																															0	0	0
7/10	375650	4701200	1.3	1	T									98										2												2	1	1
7/10	375650	4701200	1.3	2	T									25										75												2	1	1
7/10	375650	4701800	1.3	1	T														100																	1	1	0
7/10	375650	4701800	1.3	2	T			1											95				2					2								4	2	2
7/10	375650	4701850	2.3	1	T														99				1													2	2	0
7/10	375650	4701850	2.3	2	S	3											1		95				1													4	3	1
7/10	375650	4701900	2.5	1	T														99				1													2	2	0
7/10	375650	4701900	2.5	2	T	1													96				1			2										4	2	2
7/9	375635	4699250		1	O																														+	0	0	0
7/9	375635	4699250		2	O																														+	0	0	0
7/9	375621	4699600		1	O																															0	0	0
7/9	375621	4699600		2	O																															0	0	0
7/9	375605	4699300		1	O																															0	0	0
7/9	375605	4699300		2	O																														+	0	0	0
7/9	375603	4699550		1	O																														+	0	0	0
7/9	375603	4699550		2	O																														+	0	0	0
7/9	375600	4700450	2.3	1	O																														+	0	0	0
7/9	375600	4700450	2.3	2	O																															0	0	0
7/9	375600	4700500	2.5	1	T																		95	5												2	1	1
7/9	375600	4700500	2.5	2	O																															0	0	0
7/9	375600	4700550	2.5	1	T																			100												1	0	1
7/9	375600	4700550	2.5	2	O																															0	0	0

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/9	375600	4700600	2.3	1	T												100																			1	1	0
7/9	375600	4700600	2.3	2	T												100																			1	1	0
7/10	375600	4700650	2.3	1	O																															0	0	0
7/10	375600	4700650	2.3	2	T														50			50													2	1	1
7/18	375600	4701800	2.5	1	O																															0	0	0
7/18	375600	4701800	2.5	2	O																															0	0	0
7/9	375582	4699500		1	O																															0	0	0
7/9	375582	4699500		2	O																															0	0	0
7/9	375581	4699350		1	O																															0	0	0
7/9	375581	4699350		2	O																															0	0	0
7/9	375564	4699450		1	O																															0	0	0
7/9	375564	4699450		2	O																														+	0	0	0
7/9	375551	4699400		1	O																														+	0	0	0
7/9	375551	4699400		2	O																														+	0	0	0
7/9	375550	4699663		1	O																															0	0	0
7/9	375550	4699663		2	O																															0	0	0
7/9	375550	4700250	2.8	1	O																															0	0	0
7/9	375550	4700250	2.8	2	T			90											5				5												+	3	1	2
7/9	375550	4700300	3.3	1	O																															0	0	0
7/9	375550	4700300	3.3	2	T																				100											1	0	1
7/9	375550	4700350	3.3	1	O																															0	0	0
7/9	375550	4700350	3.3	2	T																				100											1	0	1
7/9	375550	4700400	3.0	1	T			100																												1	0	1
7/9	375550	4700400	3.0	2	T																		50		50											2	1	1
7/9	375550	4700450	2.5	1	S			35															30													3	2	1
7/9	375550	4700450	2.5	2	S			8									85										7									3	1	2
7/9	375550	4700500	1.8	1	S												90								10										+	2	1	1
7/9	375550	4700500	1.8	2	S												70								30											2	1	1
7/18	375550	4701700	2.5	1	O																															0	0	0
7/18	375550	4701700	2.5	2	T													100																		1	1	0
7/18	375550	4701750	2.5	1	O																															0	0	0

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/18	375550	4701750	2.5	2	T														100																	1	0	0
7/18	375550	4701800	2.5	1	T														100																	1	0	0
7/18	375550	4701800	2.5	2	T	60													40																	2	1	1
7/18	375550	4701850	2.8	1	O																															0	0	0
7/18	375550	4701850	2.8	2	T														100																	1	1	0
7/18	375550	4701900	1.8	1	O																															0	0	0
7/18	375550	4701900	1.8	2	O																															0	0	0
7/9	375500	4699671		1	O																															0	0	0
7/9	375500	4699671		2	O																															0	0	0
7/9	375500	4700000	1.8	1	T														100																	1	0	0
7/9	375500	4700000	1.8	2	O																															0	0	0
7/9	375500	4700050	2.8	1	O																															0	0	0
7/9	375500	4700050	2.8	2	O																															0	0	0
7/9	375500	4700100	3.3	1	O																														+	0	0	0
7/9	375500	4700100	3.3	2	T																	100														1	1	0
7/9	375500	4700150	3.5	1	O																															0	0	0
7/9	375500	4700150	3.5	2	T													100								100										1	0	1
7/9	375500	4700200	2.3	1	T													100																		1	1	0
7/9	375500	4700200	2.3	2	T																					100									+	1	0	1
7/9	375500	4700250	1.8	1	T													100																		1	1	0
7/9	375500	4700250	1.8	2	T																					100									+	1	0	1
7/18	375500	4701700	2.5	1	O																															0	0	0
7/18	375500	4701700	2.5	2	O																															0	0	0
7/18	375500	4701750	2.8	1	O																															0	0	0
7/18	375500	4701750	2.8	2	T															100																1	1	0
7/18	375500	4701800	2.8	1	T	80														20																2	1	1
7/18	375500	4701800	2.8	2	O																															0	0	0
7/10	375500	4701850	2.8	1	O																															0	0	0
7/10	375500	4701850	2.8	2	O																															0	0	0
7/18	375500	4701900	2.8	1	O																															0	0	0
7/18	375500	4701900	2.8	2	O																															0	0	0

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/9	375450	4699667		1	O																														0	0	0
7/9	375450	4699667		2	O																														0	0	0
7/9	375450	4699900	3.5	1	O																														0	0	0
7/9	375450	4699900	3.5	2	O																														0	0	0
7/9	375450	4699950	2.5	1	T			50									50																	+	1	1	1
7/9	375450	4699950	2.5	2	T			1									50												49					+	3	1	2
7/18	375450	4701750	2.5	1	O																														0	0	0
7/18	375450	4701750	2.5	2	O																														0	0	0
7/18	375450	4701800	2.8	1	T														100																1	1	0
7/18	375450	4701800	2.8	2	T														100																1	1	0
7/10	375450	4701850	2.8	1	O																														0	0	0
7/10	375450	4701850	2.8	2	O																														0	0	0
7/18	375450	4701900	3.0	1	O																														0	0	0
7/18	375450	4701900	3.0	2	O																														0	0	0
7/9	375400	4699681		1	O																														0	0	0
7/9	375400	4699681		2	O																														0	0	0
7/9	375400	4699800	4.0	1	O																														0	0	0
7/9	375400	4699800	4.0	2	T			100																											1	0	1
7/9	375400	4699850	3.3	1	T																	100													1	0	1
7/9	375400	4699850	3.3	2	T			100																											1	0	1
7/18	375400	4701750	2.8	1	O																														0	0	0
7/18	375400	4701750	2.8	2	O																														0	0	0
7/10	375400	4701800	2.8	1	O																														0	0	0
7/10	375400	4701800	2.8	2	O																														0	0	0
7/18	375400	4701850	2.8	1	O																														0	0	0
7/18	375400	4701850	2.8	2	O																														0	0	0
7/18	375400	4701900	2.8	1	O																														0	0	0
7/18	375400	4701900	2.8	2	O																														0	0	0
7/9	375350	4699650	1.8	1	O																													+	0	0	0
7/9	375350	4699650	1.8	2	O																													+	0	0	0
7/9	375350	4699700	2.5	1	O																														0	0	0

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/9	375350	4699700	2.5	2	O																														0	0	0	0
7/9	375350	4699750	2.3	1	O																														0	0	0	0
7/9	375350	4699750	2.3	2	O																														0	0	0	0
7/18	375350	4701750	2.5	1	O																														0	0	0	0
7/18	375350	4701750	2.5	2	O																														0	0	0	0
7/10	375350	4701800	2.8	1	O																														0	0	0	0
7/10	375350	4701800	2.8	2	O																														0	0	0	0
7/18	375350	4701850	2.3	1	O																														0	0	0	0
7/18	375350	4701850	2.3	2	O																														0	0	0	0
7/18	375350	4701900	2.3	1	O																														0	0	0	0
7/18	375350	4701900	2.3	2	O																														0	0	0	0
7/18	375300	4699550	2.0	1	O																														0	0	0	0
7/18	375300	4699550	2.0	2	O																														+	0	0	0
7/9	375300	4699600	2.3	1	T																	**100**													+	1	**1**	0
7/9	375300	4699600	2.3	2	T				100																										+	1	0	1
7/18	375250	4699450	2.5	1	O																															0	0	0
7/18	375250	4699450	2.5	2	O																															0	0	0
7/18	375250	4699500	2.5	1	O																														+	0	0	0
7/18	375250	4699500	2.5	2	T			100																											+	1	0	1
7/18	375200	4699350	2.3	1	O																															0	0	0
7/18	375200	4699350	2.3	2	T																					100									+	1	0	1
7/18	375200	4699400	2.0	1	O																															0	0	0
7/18	375200	4699400	2.0	2	O																															0	0	0
7/18	375150	4699250	2.0	1	O																															0	0	0
7/18	375150	4699250	2.0	2	O																															0	0	0
7/18	375150	4699300	1.0	1	S						**70**						**0.01**								30										3	**2**	**1**	1
7/18	375150	4699300	1.0	2	T			80			**20**																							+	2	**1**	1
7/18	375100	4699150	2.0	1	O																															0	**0**	0
7/18	375100	4699150	2.0	2	O																															0	**0**	0
7/18	375100	4699200	0.5	1	O																															0	**0**	0
7/18	375100	4699200	0.5	2	O																															0	**0**	0

Date Sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/18	375050	4699050	2.0	1	O																														0	0	0
7/18	375050	4699050	2.0	2	O																														0	0	0
7/18	375050	4699100	1.0	1	O																														0	0	0
7/18	375050	4699100	1.0	2	O																														0	0	0
7/18	375000	4698950	1.8	1	O																														0	0	0
7/18	375000	4698950	1.8	2	T									100																					+	1	1	0
7/18	375000	4699000	0.5	1	O																														0	0	0
7/18	375000	4699000	0.5	2	O																														0	0	0
7/18	374950	4698850	1.5	1	O																														0	0	0
7/18	374950	4698850	1.5	2	O																														0	0	0
7/18	374950	4698900	0.3	1	O																														0	0	0
7/18	374950	4698900	0.3	2	O																														0	0	0
7/18	374900	4698700	1.8	1	T			100																											1	1	0
7/18	374900	4698700	1.8	2	T			60							40																				2	0	0
7/18	374900	4698750	1.8	1	O																														0	0	0
7/18	374900	4698750	1.8	2	T						100																								1	1	0
7/9	374900	4698800	1.8	1	O																														0	0	0
7/9	374900	4698800	1.8	2	O																														0	0	0
7/9	374850	4698600	2.0	1	T			100																											1	0	0
7/9	374850	4698600	2.0	2	O																														+	0	0
7/18	374850	4698650	1.8	1	O																															0	0
7/18	374850	4698650	1.8	2	O																															0	0
7/18	374800	4698450	0.5	1	O																															0	0
7/18	374800	4698450	0.5	2	O																															0	0
7/18	374800	4698500	0.9	1	O																															0	0
7/18	374800	4698500	0.9	2	O																															0	0
7/18	374800	4698550	1.8	1	O																															0	0
7/18	374800	4698550	1.8	2	O																															0	0
7/18	374800	4698600	0.3	1	O																															0	0
7/18	374800	4698600	0.3	2	O																															0	0

Date Sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Depth (m) 2013	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
7/18	374750	4698450	0.5	1	O																																
7/18	374750	4698450	0.5	2	O																																
						26	0	30	1	2	16	0	0	14	1	0	41	0	20	0	0	46	0	0	77	0	3	0	0	1	0	0	0	0	65	0	0	0
	Rake-toss	402																																				
	"O"	242																																				
	"T"	148																																				
	"S"	12																																				
	"M"	0																																				
	"D"	0																																				

Data 5. Inlet proper rake-toss post-herbicide measurements recorded in 2013. Each rake-toss is recorded as either D = dense; M = medium; S = sparse; T = trace; or O = zero as an abundance rating. The values for each plant species in each row is the biologist's percentage estimate as part of the whole rake-toss.

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	374750	4698450	1	O																															0	0	0
11/5	374750	4698450	2	O																															0	0	0
11/5	374800	4698450	1	O																															0	0	0
11/5	374800	4698450	2	O																															0	0	0
11/5	374800	4698500	1	O																															0	0	0
11/5	374800	4698500	2	O																															0	0	0
11/5	374800	4698550	1	O																															0	0	0
11/5	374800	4698550	2	O																															0	0	0
11/5	374800	4698600	1	O																															0	0	0
11/5	374800	4698600	2	O																															0	0	0
11/5	374850	4698600	1	O																															0	0	0
11/5	374850	4698600	2	O																															0	0	0
11/5	374850	4698650	1	O																															0	0	0
11/5	374850	4698650	2	O																															0	0	0
11/5	374900	4698700	1	T			100																												1	0	1
11/5	374900	4698700	2	O																															0	0	0
11/5	374900	4698750	1	O																															0	0	0
11/5	374900	4698750	2	O																															0	0	0
11/5	374900	4698800	1	O																															0	0	0
11/5	374900	4698800	2	O																															0	0	0
11/5	374950	4698850	1	O																															0	0	0
11/5	374950	4698850	2	O																															0	0	0
11/5	374950	4698900	1	O																															0	0	0
11/5	374950	4698900	2	O																															0	0	0
11/5	375000	4698950	1	O																															0	0	0
11/5	375000	4698950	2	O																															0	0	0
11/5	375000	4699000	1	O																															0	0	0
11/5	375000	4699000	2	O																															0	0	0
11/5	375050	4699050	1	O																															0	0	0

Date sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	375050	4699050	2	O	100																														0	0	0
11/5	375050	4699100	1	O																															0	0	0
11/5	375050	4699100	2	O																															0	0	0
11/5	375100	4699150	1	T																															0	0	1
11/5	375100	4699150	2	O																															0	0	0
11/5	375100	4699200	1	O																															0	0	0
11/5	375100	4699200	2	O																															0	0	0
11/5	375150	4699250	1	O																															0	0	0
11/5	375150	4699250	2	O																															0	0	0
11/5	375150	4699300	1	O																															0	0	0
11/5	375150	4699300	2	O																															0	0	0
11/5	375200	4699350	1	O																															0	0	0
11/5	375200	4699350	2	O																															0	0	0
11/5	375200	4699400	1	O																															0	0	0
11/5	375200	4699400	2	O																															0	0	0
11/5	375250	4699450	1	O																															0	0	0
11/5	375250	4699450	2	O																															0	0	0
11/5	375250	4699500	1	O																															0	0	0
11/5	375250	4699500	2	O																															0	0	0
11/5	375300	4699550	1	O																															0	0	0
11/5	375300	4699550	2	O																															0	0	0
11/5	375300	4699600	1	O																															0	0	0
11/5	375300	4699600	2	O																															0	0	0
11/5	375350	4699650	1	O																															0	0	0
11/5	375350	4699650	2	O																															0	0	0
11/5	375550	4699663	1	O																															0	0	0
11/5	375550	4699663	2	O																															0	0	0
11/5	375450	4699667	1	O																															0	0	0
11/5	375450	4699667	2	O																															0	0	0
11/5	375500	4699671	1	O																															0	0	0
11/5	375500	4699671	2	O																															0	0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	375400	4699681	1	O																																0	0
11/5	375400	4699681	2	O																																0	0
11/5	375350	4699700	1	O																																0	0
11/5	375350	4699700	2	O																																0	0
11/5	375350	4699750	1	O																																0	0
11/5	375350	4699750	2	O																																0	0
11/5	375650	4699750	1	O																																0	0
11/5	375650	4699750	2	O																																0	0
11/5	375400	4699800	1	O																																0	0
11/5	375400	4699800	2	O																																0	0
11/5	375650	4699800	1	O																																0	0
11/5	375650	4699800	2	O																																0	0
11/5	375400	4699850	1	O																																0	0
11/5	375400	4699850	2	O																																0	0
11/5	375650	4699850	1	O																																0	0
11/5	375650	4699850	2	O																																0	0
11/5	375450	4699900	1	O																																0	0
11/5	375450	4699900	2	O																																0	0
11/5	375650	4699900	1	O																																0	0
11/5	375650	4699900	2	O																																0	0
11/5	375450	4699950	1	O																																0	0
11/5	375450	4699950	2	O																																0	0
11/5	375650	4699950	1	O																																0	0
11/5	375650	4699950	2	O																																0	0
11/5	375500	4700000	1	O																																0	0
11/5	375500	4700000	2	O																																0	0
11/5	375650	4700000	1	T	100																														1	0	0
11/5	375650	4700000	2	O																																0	0
11/5	375500	4700050	1	O																																0	0
11/5	375500	4700050	2	O																																0	0
11/5	375650	4700050	1	O																																0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	375650	4700050	2	O																																0	0	0
11/5	375500	4700100	1	O																																0	0	0
11/5	375500	4700100	2	O																																0	0	0
11/5	375650	4700100	1	S	20																													80		1	0	1
11/5	375650	4700100	2	S																														100		0	0	0
11/5	375500	4700150	1	T	100																															1	0	1
11/5	375500	4700150	2	O																																0	0	0
11/5	375650	4700150	1	O																																0	0	0
11/5	375650	4700150	2	O																																0	0	0
11/5	375500	4700200	1	O																																0	0	0
11/5	375500	4700200	2	O																																0	0	0
11/5	375650	4700200	1	O																																0	0	0
11/5	375650	4700200	2	O																																0	0	0
11/5	375500	4700250	1	O																																0	0	0
11/5	375500	4700250	2	O																																0	0	0
11/5	375550	4700250	1	O																																0	0	0
11/5	375550	4700250	2	O																																0	0	0
11/5	375650	4700250	1	O																																0	0	0
11/5	375650	4700250	2	O																																0	0	0
11/5	375550	4700300	1	O																																0	0	0
11/5	375550	4700300	2	O																																0	0	0
11/5	375650	4700300	1	O																																0	0	0
11/5	375650	4700300	2	O																																0	0	0
11/5	375550	4700350	1	O																																0	0	0
11/5	375550	4700350	2	O																																0	0	0
11/5	375650	4700350	1	O																																0	0	0
11/5	375650	4700350	2	O																																0	0	0
11/5	375550	4700400	1	O																																0	0	0
11/5	375550	4700400	2	O																																0	0	0
11/5	375650	4700400	1	O																																0	0	0
11/5	375650	4700400	2	O																																0	0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	375550	4700450	1	O	100																														1	0	0
11/5	375550	4700450	2	O																															0	0	0
11/5	375600	4700450	1	O																															0	0	0
11/5	375600	4700450	2	O																															0	0	0
11/5	375550	4700500	1	O																															0	0	0
11/5	375550	4700500	2	O																															0	0	0
11/5	375600	4700500	1	O																															0	0	0
11/5	375600	4700500	2	O																															0	0	0
11/5	375650	4700500	1	O																															0	0	0
11/5	375650	4700500	2	O																															0	0	0
11/5	375600	4700550	1	O																															0	0	0
11/5	375600	4700550	2	O																															0	0	0
11/5	375650	4700550	1	O																															0	0	0
11/5	375650	4700550	2	O																															0	0	0
11/5	375700	4700550	1	O																															0	0	0
11/5	375700	4700550	2	O																															0	0	0
11/5	375750	4700550	1	O																															0	0	0
11/5	375750	4700550	2	O																															0	0	0
11/5	375600	4700600	1	O																															0	0	0
11/5	375600	4700600	2	O																															0	0	0
11/5	375650	4700600	1	O																															0	0	0
11/5	375650	4700600	2	O																															0	0	0
11/5	375700	4700600	1	O																															0	0	0
11/5	375700	4700600	2	O																															0	0	0
11/5	375750	4700600	1	O																															0	0	0
11/5	375750	4700600	2	O																															0	0	0
11/5	375600	4700650	1	O																															0	0	0
11/5	375600	4700650	2	O																															0	0	0
11/5	375650	4700650	1	O																															0	0	0
11/5	375650	4700650	2	O																															0	0	0
11/5	375700	4700650	1	T	100																														1	0	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	375700	4700650	2	O																																0	0	0
11/5	375650	4700700	1	O																																0	0	0
11/5	375650	4700700	2	O																																0	0	0
11/5	375700	4700700	1	S	100																															0	0	1
11/5	375700	4700700	2	O																																0	0	0
11/5	375650	4700750	1	O																																0	0	0
11/5	375650	4700750	2	O																																0	0	0
11/5	375700	4700750	1	O																																0	0	0
11/5	375700	4700750	2	O																																0	0	0
11/5	375750	4700750	1	O																																0	0	0
11/5	375750	4700750	2	O																																0	0	0
11/5	375700	4700800	1	T	100																															1	0	1
11/5	375700	4700800	2	O																																0	0	0
11/5	375750	4700800	1	O																																0	0	0
11/5	375750	4700800	2	O																																0	0	0
11/5	375700	4700850	1	O																																0	0	0
11/5	375700	4700850	2	O																																0	0	0
11/5	375750	4700850	1	O																																0	0	0
11/5	375750	4700850	2	O																																0	0	0
11/5	375800	4700850	1	O																																0	0	0
11/5	375800	4700850	2	O																																0	0	0
11/5	375750	4700900	1	O																																0	0	0
11/5	375750	4700900	2	O																																0	0	0
11/5	375800	4700900	1	O																																0	0	0
11/5	375800	4700900	2	O																																0	0	0
11/5	375750	4700950	1	O																																0	0	0
11/5	375750	4700950	2	O																																0	0	0
11/5	375800	4700950	1	O																																0	0	0
11/5	375800	4700950	2	T	100																															1	1	1
11/5	376250	4700959	1	O																																0	0	0
11/5	376250	4700959	2	O																																0	0	0

Date sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	376200	4700976	1	O																																0	0
11/5	376200	4700976	2	O																																0	0
11/5	376150	4700993	1	O																																0	0
11/5	376150	4700993	2	O																																0	0
11/5	375750	4701000	1	O																																0	0
11/5	375750	4701000	2	O																																0	0
11/5	375800	4701000	1	O																																0	0
11/5	375800	4701000	2	O																																0	0
11/5	375850	4701000	1	T	100																															1	0
11/5	375850	4701000	2	O																																0	0
11/5	376000	4701000	1	T	50		50																													2	0
11/5	376000	4701000	2	O																																0	0
11/5	376100	4701007	1	O																																0	0
11/5	376100	4701007	2	O																																0	0
11/5	376050	4701018	1	O																																0	0
11/5	376050	4701018	2	O																																0	0
11/5	375900	4701025	1	O																																0	0
11/5	375900	4701025	2	O																																0	0
11/5	375950	4701025	1	O																																0	0
11/5	375950	4701025	2	O																																0	0
11/5	375750	4701050	1	O																																0	0
11/5	375750	4701050	2	O																																0	0
11/5	375800	4701050	1	O																																0	0
11/5	375800	4701050	2	O																																0	0
11/5	375850	4701050	1	O																																0	0
11/5	375850	4701050	2	O																																0	0
11/5	375700	4701100	1	O																																0	0
11/5	375700	4701100	2	O																																0	0
11/5	375750	4701100	1	O																																0	0
11/5	375750	4701100	2	O																																0	0
11/5	375800	4701100	1	O																																0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	375800	4701100	2	O	0																															0	0	0
11/5	375700	4701150	1	O	0																															0	0	0
11/5	375700	4701150	2	O	0																															0	0	0
11/5	375750	4701150	1	O	0																															0	0	0
11/5	375750	4701150	2	O	0																															0	0	0
11/5	375800	4701150	1	S	80																								20							2	2	2
11/5	375800	4701150	2	O	0																															0	0	0
11/5	375650	4701200	1	T	50																								50							2	0	2
11/5	375650	4701200	2	O	0																															0	0	0
11/5	375700	4701200	1	O	0																															0	0	0
11/5	375700	4701200	2	O	0																															0	0	0
11/5	375750	4701200	1	S	100																															1	0	1
11/5	375750	4701200	2	S	50		10																						40							3	0	3
11/5	375700	4701250	1	O	0																															0	0	0
11/5	375700	4701250	2	O	0																															0	0	0
11/5	375750	4701250	1	T	50																								50							2	0	2
11/5	375750	4701250	2	T	100																															1	0	1
11/5	375700	4701300	1	T	100																															1	0	1
11/5	375700	4701300	2	O																																0	0	0
11/5	375750	4701300	1	T	80		20																													2	0	2
11/5	375750	4701300	2	O	0																															0	0	0
11/5	375700	4701350	1	O	0																															0	0	0
11/5	375700	4701350	2	O	0																															0	0	0
11/5	375750	4701350	1	T	100		0																													2	0	2
11/5	375750	4701350	2	T	100																															1	0	1
11/5	375700	4701400	1	T	100																															1	0	1
11/5	375700	4701400	2	T	50		50																													2	0	2
11/5	375750	4701400	1	T	100		0																													2	0	2
11/5	375750	4701400	2	O																																0	0	0
11/5	375700	4701450	1	T	100																															1	0	1
11/5	375700	4701450	2	O	0																															0	0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	375750	4701450	1	O																																0	0	0
11/5	375750	4701450	2	O																																0	0	0
11/5	375700	4701500	1	O																																0	0	0
11/5	375700	4701500	2	T																																1	0	1
11/5	375750	4701500	1	O																																0	0	0
11/5	375750	4701500	2	T																											100					1	0	1
11/5	375700	4701550	1	T														100																		1	0	1
11/5	375700	4701550	2	T	50													50																		2	1	2
11/5	375750	4701550	1	T	100																															1	0	1
11/5	375750	4701550	2	S	100																															1	0	1
11/5	375700	4701600	1	T									100																							1	1	1
11/5	375700	4701600	2	O																																0	0	0
11/5	375750	4701600	1	O																																0	0	0
11/5	375750	4701600	2	O																																0	0	0
11/5	375800	4701600	1	T	50																															2	0	2
11/5	375800	4701600	2	O																																0	0	0
11/5	375700	4701650	1	O																																0	0	0
11/5	375700	4701650	2	O																																0	0	0
11/5	375750	4701650	1	T	100																															1	0	1
11/5	375750	4701650	2	T	100																															1	0	1
11/5	375800	4701650	1	T			100																													1	0	1
11/5	375800	4701650	2	O																																0	0	0
11/5	375500	4701700	1	O																																0	0	0
11/5	375500	4701700	2	O																																0	0	0
11/5	375550	4701700	1	T	100																															1	0	1
11/5	375550	4701700	2	O																																0	0	0
11/5	375750	4701700	1	O																																0	0	0
11/5	375750	4701700	2	O																																0	0	0
11/5	375350	4701750	1	T	100																															1	0	1
11/5	375350	4701750	2	O																																0	0	0
11/5	375400	4701750	1	O																																0	0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	375400	4701750	2	O																																0	0	0
11/5	375450	4701750	1	O																																0	0	0
11/5	375450	4701750	2	O																																0	0	0
11/5	375500	4701750	1	O																																0	0	0
11/5	375500	4701750	2	O																																0	0	0
11/5	375550	4701750	1	O																																0	0	0
11/5	375550	4701750	2	O																																0	0	0
11/5	375700	4701750	1	T			100																													1	1	1
11/5	375700	4701750	2	O																																0	0	0
11/5	375750	4701750	1	T	100																															1	1	1
11/5	375750	4701750	2	T	100																															1	1	1
11/5	375350	4701800	1	O																																0	0	0
11/5	375350	4701800	2	O																																0	0	0
11/5	375450	4701800	1	O																																0	0	0
11/5	375450	4701800	2	O																																0	0	0
11/5	375500	4701800	1	O																																0	0	0
11/5	375500	4701800	2	O																																0	0	0
11/5	375550	4701800	1	T		100																														1	0	1
11/5	375550	4701800	2	O																																0	0	0
11/5	375600	4701800	1	O																																0	0	0
11/5	375600	4701800	2	O																																0	0	0
11/5	375700	4701800	1	O																																0	0	0
11/5	375700	4701800	2	O																																0	0	0
11/5	375750	4701800	1	O																																0	0	0
11/5	375750	4701800	2	T	50																															2	0	2
11/5	375500	4701850	1	O																																0	0	0
11/5	375500	4701850	2	O																																0	0	0
11/5	375550	4701850	1	O																																0	0	0
11/5	375550	4701850	2	O																																0	0	0
11/5	375650	4701850	1	O																																0	0	0
11/5	375650	4701850	2	T			100																													1	1	1

Date sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	375700	4701850	1	O																																0	0	0
11/5	375700	4701850	2	O																																0	0	0
11/5	375750	4701850	1	O																																0	0	0
11/5	375750	4701850	2	T					100																											1	0	0
11/5	375350	4701900	1	O																																0	0	0
11/5	375350	4701900	2	O																																0	0	0
11/5	375400	4701900	1	O																																0	0	0
11/5	375400	4701900	2	O																																0	0	0
11/5	375450	4701900	1	O																																0	0	0
11/5	375450	4701900	2	O																																0	0	0
11/5	375500	4701900	1	O																																0	0	0
11/5	375500	4701900	2	O																																0	0	0
11/5	375550	4701900	1	O																																0	0	0
11/5	375550	4701900	2	O																																0	0	0
11/5	375650	4701900	1	T			100																													1	0	0
11/5	375650	4701900	2	T														100																		1	0	0
11/5	375700	4701900	1	T	100																															1	0	0
11/5	375700	4701900	2	O																																0	0	0
10/23	375678	4698350	1	O																																0	0	0
10/23	375678	4698350	2	O																																0	0	0
10/23	375675	4698400	1	O																																0	0	0
10/23	375675	4698400	2	O																																0	0	0
10/23	375674	4698450	1	O																																0	0	0
10/23	375674	4698450	2	O																																0	0	0
10/23	375664	4698500	1	O																																0	0	0
10/23	375664	4698500	2	O																																0	0	0
10/23	375675	4698550	1	O																																0	0	0
10/23	375675	4698550	2	O																																0	0	0
10/23	375667	4698602	1	O																																0	0	0
10/23	375667	4698602	2	O																																0	0	0
10/23	375667	4698650	1	O																																0	0	0

Date sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
10/23	375663	4699100	2	O																															0	0	0
10/23	375663	4699150	1	O																															0	0	0
10/23	375663	4699150	2	O																															0	0	0
10/23	375662	4699000	1	O																															0	0	0
10/23	375662	4699000	2	O																															0	0	0
10/23	375661	4698750	1	O																															0	0	0
10/23	375661	4698750	2	O																															0	0	0
10/23	375660	4699050	1	O																															0	0	0
10/23	375660	4699050	2	O																															0	0	0
10/23	375658	4698900	1	O																															0	0	0
10/23	375658	4698900	2	T				100																											1	0	0
10/23	375657	4699200	1	O																															0	0	0
10/23	375657	4699200	2	O																															0	0	0
10/23	375656	4698850	1	O																															0	0	0
10/23	375656	4698850	2	O																															0	0	0
10/23	375655	4698800	1	O																															0	0	0
10/23	375655	4698800	2	O																															0	0	0
10/23	375650	4698700	1	O																															0	0	0
10/23	375650	4698700	2	O																															0	0	0
10/23	375650	4699650	1	O																															0	0	0
10/23	375650	4699650	2	O																															0	0	0
10/23	375650	4699700	1	O																															0	0	0
10/23	375650	4699700	2	O																															0	0	0
11/5	375650	4699750	1	O																															0	0	0
11/5	375650	4699750	2	O																															0	0	0
11/5	375650	4699800	1	O																															0	0	0
11/5	375650	4699800	2	O																															0	0	0
11/5	375650	4699850	1	O																															0	0	0
11/5	375650	4699850	2	O																															0	0	0
11/5	375650	4699900	1	O																															0	0	0
11/5	375650	4699900	2	O																															0	0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
10/23	375564	4699450	1	O																															0	0	0
10/23	375564	4699450	2	O																															0	0	0
10/23	375582	4699500	1	O																															0	0	0
10/23	375582	4699500	2	O																															0	0	0
10/23	375603	4699550	1	O																															0	0	0
10/23	375603	4699550	2	O																															0	0	0
10/23	375700	4699550	1	O																															0	0	0
10/23	375700	4699550	2	O																															0	0	0
10/23	375621	4699600	1	O																															0	0	0
10/23	375621	4699600	2	O																															0	0	0
10/23	375650	4699650	1	O																															0	0	0
10/23	375650	4699650	2	O																															0	0	0
10/23	375650	4699700	1	O																															0	0	0
10/23	375650	4699700	2	O																															0	0	0
10/21	375340	4701785	1	O																															0	0	0
10/21	375340	4701785	2	O																															0	0	0
10/21	375360	4701867	1	O																															0	0	0
10/21	375360	4701867	2	O																															0	0	0
10/21	375324	4701744	1	O																															0	0	0
10/21	375324	4701744	2	O																															0	0	0
10/21	375362	4701736	1	O																															0	0	0
10/21	375362	4701736	2	O																															0	0	0
10/21	375380	4701781	1	O																															0	0	0
10/21	375380	4701781	2	O																															0	0	0
10/21	375408	4701852	1	O																															0	0	0
10/21	375408	4701852	2	O																															0	0	0
10/21	375324	4701722	1	O																															0	0	0
10/21	375324	4701722	2	O																															0	0	0
10/21	375412	4701781	1	T	100																														1	0	1
10/21	375412	4701781	2	T	100																														1	0	1
10/21	375442	4701838	1	O																															0	0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
10/21	375442	4701838	2	O																																0	0	0
10/21	375420	4701706	1	O																																0	0	0
10/21	375420	4701706	2	O																																0	0	0
10/21	375462	4701769	1	O																																0	0	0
10/21	375462	4701769	2	O																																0	0	0
10/21	375504	4701838	1	O																																0	0	0
10/21	375504	4701838	2	O																																0	0	0
10/21	375453	4701680	1	O																																0	0	0
10/21	375453	4701680	2	O																																0	0	0
10/21	375493	4701729	1	O																																0	0	0
10/21	375493	4701729	2	O																																0	0	0
10/21	375536	4701760	1	O																																0	0	0
10/21	375536	4701760	2	T	70													30																		2	1	1
10/21	375482	4701652	1	O																																0	0	0
10/21	375482	4701652	2	O																																0	0	0
10/21	375525	4701697	1	O																																0	0	0
10/21	375525	4701697	2	O																																0	0	0
10/21	375563	4701728	1	O																																0	0	0
10/21	375563	4701728	2	O																																0	0	0
10/21	375502	4701633	1	O																																0	0	0
10/21	375502	4701633	2	T	100																															1	0	1
10/21	375582	4701694	1	O																																0	0	0
10/21	375582	4701694	2	O																																0	0	0
10/21	375618	4701743	1	T																														100		1	0	1
10/21	375618	4701743	2	O																																0	0	0
10/21	375579	4701807	1	O																																0	0	0
10/21	375579	4701807	2	O																																0	0	0
10/21	375629	4701815	1	O																																0	0	0
10/21	375629	4701815	2	O																																0	0	0
10/21	375300	4701762	1	O																																0	0	0
10/21	375300	4701762	2	O																																0	0	0

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Pithophora sp.	filamentous algae	Total species	Non-native species	Native species
11/5	374850	4698600	1	O	0	0	0	0	0	0	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	7	0	1	0	2	0	0	0	0	0
11/5	374850	4698600	2	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374850	4698650	1	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374850	4698650	2	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374800	4698450	1	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374800	4698450	2	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374800	4698500	1	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374800	4698500	2	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374800	4698550	1	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374800	4698550	2	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374800	4698600	1	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374800	4698600	2	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374750	4698450	1	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/5	374750	4698450	2	O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rake-toss	446			44	0	12	1	2	0	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	7	0	1	0	2	0				
	"O"	387																																				
	"T"	51																																				
	"S"	8																																				
	"M"	0																																				
	"D"	0																																				

Data 6. Fall Creek rake-toss post-herbicide measurements recorded in 2013. Each rake-toss is recorded as either D = dense; M = medium; S = sparse; T = trace; or O = zero as an abundance rating. The values for each plant species in each row is the biologist's percentage estimate as part of the whole rake-toss.

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/6	376450	4701550	1	O																															0	0	0
11/6	376450	4701550	2	O																															0	0	0
10/25	376435	4701686	1	O																															0	0	0
10/25	376435	4701686	2	O																															0	0	0
10/25	376418	4701694	1	O																															0	0	0
10/25	376418	4701694	2	O																															0	0	0
11/6	376400	4701650	1	T				50												50															2	0	2
11/6	376400	4701650	2	O																															0	0	0
11/6	376400	4701660	1	O																															0	0	0
11/6	376400	4701660	2	O																															0	0	0
10/25	376391	4701693	1	O																															0	0	0
10/25	376391	4701693	2	O																															0	0	0
10/22	376366	4701924	1	O																															0	0	0
10/22	376366	4701924	2	O																															0	0	0
10/25	376347	4701895	1	O																															0	0	0
10/25	376347	4701895	2	O																															0	0	0
10/22	376340	4701708	1	O																															0	0	0
10/22	376340	4701708	2	O																															0	0	0
10/22	376329	4701899	1	O																															0	0	0
10/22	376329	4701899	2	O																															0	0	0
10/22	376319	4701942	1	O																															0	0	0
10/22	376319	4701942	2	O																															0	0	0
10/22	376315	4701896	1	O																															0	0	0
10/22	376315	4701896	2	O																															0	0	0
10/22	376307	4701982	1	O																															0	0	0
10/22	376307	4701982	2	O																															0	0	0
10/22	376306	4701946	1	O																															0	0	0
10/22	376306	4701946	2	O																															0	0	0
10/25	376303	4701747	1	O																															0	0	0

Date sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vagimata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/25	376303	4701747	2	O																															0	0
11/6	376300	4701700	1	O																															0	0
11/6	376300	4701700	2	O																															0	0
11/6	376300	4701900	1	O																															0	0
11/6	376300	4701900	2	O																															0	0
10/22	376278	4701881	1	O																															0	0
10/22	376278	4701881	2	O																															0	0
10/22	376278	4701993	1	O																															0	0
10/22	376278	4701993	2	O																															0	0
10/22	376256	4701867	1	O																															0	0
10/22	376256	4701867	2	O																															0	0
10/22	376254	4701767	1	O																															0	0
10/22	376254	4701767	2	O																															0	0
10/25	376254	4701986	1	O																															0	0
10/25	376254	4701986	2	O																															0	0
11/6	376250	4701900	1	T			100																												1	0
11/6	376250	4701900	2	O																															0	0
10/25	376244	4701774	1	O																															0	0
10/25	376244	4701774	2	O																															0	0
10/22	376232	4701842	1	O																															0	0
10/22	376232	4701842	2	O																															0	0
10/22	376227	4701782	1	O																															0	0
10/22	376227	4701782	2	O																															0	0
10/22	376227	4701816	1	O																															0	0
10/22	376227	4701816	2	O																															0	0
10/25	376225	4701966	1	O																															0	0
10/25	376225	4701966	2	O																															0	0
10/25	376224	4701826	1	T																100															1	1
10/25	376224	4701826	2	O																															0	0
10/22	376223	4701933	1	O																															0	0
10/22	376223	4701933	2	O																															0	0

Date sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/22	376220	4701916	1	O																															0	0
10/22	376220	4701916	2	O																															0	0
10/22	376215	4701805	1	O																															0	0
10/22	376215	4701805	2	T			90			10																									2	1
10/25	376214	4701739	1	O																															0	0
10/25	376214	4701739	2	T			30		35	35																									3	1
10/22	376213	4701863	1	T						100																									1	1
10/22	376213	4701863	2	S			80			20																									2	1
11/6	376212	4701839	1	S			1			99																									2	1
11/6	376212	4701839	2	O																															0	0
11/6	376212	4701849	1	O																															0	0
11/6	376212	4701849	2	O																															0	0
10/22	376204	4701839	1	S			50			50																									2	1
10/22	376204	4701839	2	O																															0	0
11/21	376203	4701808	1	T						100																									1	0
11/21	376203	4701808	2	O																															0	0
10/25	376199	4701705	1	S						50	50																								2	1
10/25	376199	4701705	2	S						50	50																								2	1
10/25	376196	4701752	1	O																															0	0
10/25	376196	4701752	2	O																															0	0
10/25	376185	4701727	1	O																															0	0
10/25	376185	4701727	2	T						100																									1	1
10/25	376179	4701768	1	S			30			60			10																						3	2
10/25	376179	4701768	2	T						99			1																						2	2
10/22	376179	4701839	1	O																															0	0
10/22	376179	4701839	2	O																															0	0
10/25	376165	4701759	1	S						100																									1	1
10/25	376165	4701759	2	S						100																									1	1
10/25	376163	4701710	1	T						100																									1	1
10/25	376163	4701710	2	T						100																									1	1
10/25	376153	4701719	1	T			10			90																									2	1

Date sampled in 2013	NAD83 X coord EAST	NAD83 Y coord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vagimata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
10/25	376153	4701719	2	T						100																									1	1	0
11/21	376150	4701850	1	O																															0	0	0
11/21	376150	4701850	2	O																															0	0	0
10/25	376142	4701734	1	T									100																						1	1	0
10/25	376142	4701734	2	O																															0	0	0
10/25	376133	4701791	1	O																															0	0	0
10/25	376133	4701791	2	O																															0	0	0
10/22	376132	4701757	1	O																															0	0	0
10/22	376132	4701757	2	O																															0	0	0
10/25	376132	4701879	1	T						100																									1	1	0
10/25	376132	4701879	2	T			95			5																									2	1	1
10/25	376111	4701815	1	T	10					90																									2	1	1
10/25	376111	4701815	2	S						100																									1	1	0
11/21	376100	4701850	1	O																															0	0	0
11/21	376100	4701850	2	O																															0	0	0
10/25	376094	4701831	1	T					60	20			20																						3	2	0
10/25	376094	4701831	2	T			10		80	10																									3	1	1
10/22	376089	4701905	1	T					100																										1	0	0
10/22	376089	4701905	2	O																															0	0	0
10/25	376072	4701846	1	T			19						80																			1			3	1	2
10/25	376072	4701846	2	T	20		70		10																										3	0	2
11/21	376050	4701850	1	T	5		45		15	35																									4	1	2
11/21	376050	4701850	2	T					100																										1	0	0
11/21	376050	4701900	1	O																															0	0	0
11/21	376050	4701900	2	T					100																										1	0	0
10/25	376046	4701863	1	T	100																														1	0	1
10/25	376046	4701863	2	S	50		49		1																										3	0	2
10/22	376035	4701932	1	O																															0	0	0
10/22	376035	4701932	2	O																															0	0	0
10/25	376023	4701872	1	T	20		70		10																										3	0	2
10/25	376023	4701872	2	T			100																												1	0	1

Date sampled in 2013	NAD83 X cord EAST	NAD83 Y cord NORTH	Rake toss #	Rake Abundance Rating	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Potamogeton crispus	Potamogeton foliosus	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	filamentous algae	Total species	Non-native species	Native species
11/21	376000	4701900	1	T	35		20		45																										3	0	2
11/21	376000	4701900	2	T	50		0.01		50																										3	0	2
10/25	375994	4701870	1	O																															0	0	0
10/25	375994	4701870	2	O																															0	0	0
10/22	375990	4701941	1	O																															0	0	0
10/22	375990	4701941	2	T						100																									1	1	0
10/22	375979	4701942	1	O																															0	0	0
10/22	375979	4701942	2	O																															0	0	0
10/22	375975	4701945	1	M	2		80			10			8																						4	2	2
10/22	375975	4701945	2	O																															0	0	0
10/22	375966	4701952	1	O																															0	0	0
10/22	375966	4701952	2	O																															0	0	0
10/22	375953	4701954	1	O																															0	0	0
10/22	375953	4701954	2	T						100																									1	1	0
11/21	375950	4701900	1	T			35		30				35																						3	1	1
11/21	375950	4701900	2	O																															0	0	0
11/21	375900	4701900	1	T			20		80																										2	0	1
11/21	375900	4701900	2	T			50		50																										2	0	1
11/21	375900	4701950	1	O																															0	0	0
11/21	375900	4701950	2	T	100																														1	0	1
11/21	375850	4701900	1	T			100																												1	0	1
11/21	375850	4701900	2	T					100																										1	0	0
11/21	375850	4701950	1	O																															0	0	0
11/21	375850	4701950	2	O																															0	0	0
11/21	375800	4701950	1	S	25		25		25				25								0.01										0				6	2	3
11/21	375800	4701950	2	S	5		10		20				60																		5				5	1	3
11/21	375750	4701950	1	T			60		40																										2	0	1
11/21	375750	4701950	2	S	1		4		95																										3	0	2
					13	0	27	1	20	28	2	0	9	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3	0	0	0				
	Rake-toss	150																																0			
	"O"	97																																			
	"T"	39																																			
	"S"	13																																			
	"M"	1																																			
	"D"	0																																			

Coordinates 1. Table of the dates and locations of hydrilla discoveries in the Cayuga Inlet during 2013, using true north and North American Datum 1983.

Date sampled	UTM X coord EAST	UTM Y coord NORTH	iMap Invasive ID #
Lake and Fall Creek Pre Treatment			
8/8/13	18T 376150	4701750	NY-320717U
8/8/13	18T 376200	4701800	NY-320718U
8/8/13	18T 376200	4701850	NY-320720U
8/13/13	18T 376162	4701754	NY-320077U
8/13/13	18T 376203	4701851	NY-320080U
8/13/13	18T 376209	4701857	NY-320079U
8/13/13	18T 376221	4701912	NY-320771U
8/13/13	18T 376229	4701929	NY-320770U
8/13/13	18T 376230	4701870	NY-320772U
8/13/13	18T 376231	4701945	NY-320078U
8/13/13	18T 376289	4701986	NY-320769U
8/13/13	18T 376293	4701980	NY-320768U
8/13/13	18T 376298	4701902	NY-320773U
8/13/13	18T 376300	4701903	NY-320081U
8/13/13	18T 376311	4701905	NY-320082U
8/13/13	18T 376324	4701900	NY-320089U
8/13/13	18T 376374	4701913	NY-320774U
8/14/13	18T 375985	4701946	NY-320780U
8/14/13	18T 376054	4701861	NY-320088U
8/14/13	18T 376090	4701838	NY-320778U
8/14/13	18T 376099	4701824	NY-320777U
8/14/13	18T 376105	4701820	NY-320776U
8/14/13	18T 376115	4701810	NY-320087U
8/14/13	18T 376126	4701813	NY-320086U
8/14/13	18T 376133	4701797	NY-320085U
8/14/13	18T 376135	4701748	NY-320766U
8/14/13	18T 376135	4701754	NY-320767U
8/14/13	18T 376135	4701761	NY-320083U
8/14/13	18T 376137	4701770	NY-320084U
8/14/13	18T 376142	4701733	NY-320765U
8/14/13	18T 376146	4701725	NY-320764U
8/14/13	18T 376149	4701717	NY-320763U
8/14/13	18T 376159	4701713	NY-320762U
8/14/13	18T 376188	4701731	NY-320775U
8/14/13	18T 376390	4701692	NY-320779U
8/14/13	18T 376460	4701674	NY-320090U
8/15/13	18T 375850	4702100	NY-320723U
8/15/13	18T 375950	4702100	NY-320724U
8/15/13	18T 376050	4701850	NY-320721U
8/15/13	18T 376050	4702100	NY-320725U
8/19/13	18T 376212	4701818	NY-320719U
8/19/13	18T 376250	4701900	NY-320722U
8/21/13	18T 375650	4702100	NY-320726U

8/21/13	18T 375650	4702300	NY-320728U
8/21/13	18T 375700	4702200	NY-320727U
8/21/13	18T 376587	4702452	NY-320783U
8/21/13	18T 376588	4702453	NY-320782U
8/21/13	18T 376608	4702639	NY-320781U
Inlet Pre Treatment			
7/18/13	18T 374900	4698750	NY-320729U
7/9/13	18T 375650	4700500	NY-320730U
7/9/13	18T 375700	4700550	NY-320731U
7/9/13	18T 375700	4700600	NY-320733U
7/9/13	18T 375750	4700550	NY-320732U
7/9/13	18T 375750	4700600	NY-320734U
7/9/13	18T 376050	4701018	NY-320737U
7/10/13	18T 375700	4701200	NY-320740U
7/10/13	18T 375900	4701025	NY-320739U
7/10/13	18T 375950	4701025	NY-320738U
7/10/13	18T 376000	4701000	NY-320736U
7/10/13	18T 376250	4700959	NY-320735U
7/18/13	18T 375150	4699300	NY-320784U
Lighthouse Post Treatment			
11/18/13	18T 375400	4702400	NY-320741U
Fall Creek Post Treatment			
10/22/13	18T 376215	4701805	NY-320742U
10/22/13	18T 375953	4701942	NY-320747U
10/22/13	18T 375975	4701929	NY-320748U
10/22/13	18T 375990	4701922	NY-320746U
10/22/13	18T 376204	4701839	NY-320744U
10/22/13	18T 376213	4701863	NY-320743U
10/22/13	18T 376224	4701826	NY-320745U
10/25/13	18T 376094	4701836	NY-320754U
10/25/13	18T 376111	4701822	NY-320753U
10/25/13	18T 376128	4701791	NY-320752U
10/25/13	18T 376153	4701719	NY-320751U
10/25/13	18T 376163	4701710	NY-320750U
10/25/13	18T 376165	4701759	NY-320756U
10/25/13	18T 376179	4701768	NY-320757U
10/25/13	18T 376185	4701727	NY-320755U
10/25/13	18T 376199	4701705	NY-320749U
10/25/13	18T 376214	4701739	NY-320758U
11/6/13	18T 376212	4701839	NY-320759U
11/21/13	18T 376050	4701850	NY-320760U
11/21/13	18T 376203	4701808	NY-320761U
Total: 82	True North	NAD 1983	

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