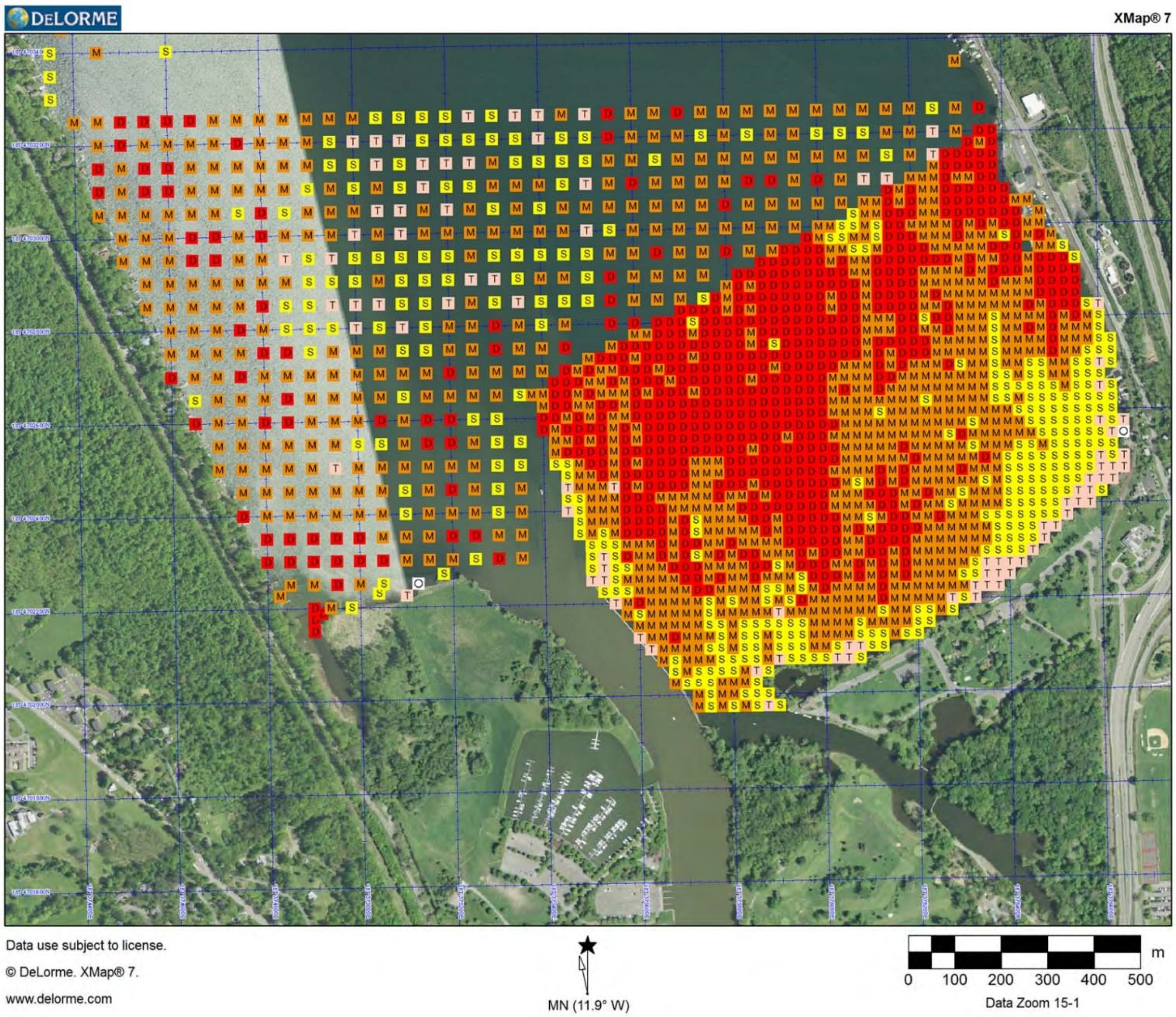
2016 Aquatic Plant Report of the Cayuga Inlet and Southern Cayuga Lake

Monoecious Hydrilla Eradication Project



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

Ithaca Hydrilla Task Force Website

www.Stophydrilla.org

Cover Map and Monitoring Numbers

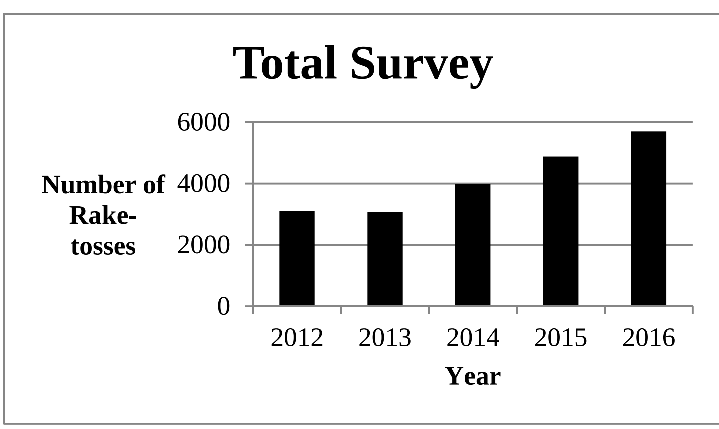
The map on the cover shows the results of our rake-toss survey describing the abundance of All Plant Species Combined (Native + Non-native) at the southern end of Cayuga Lake, Cayuga Inlet and Fall Creek during 2016. Each individual colored square represents an evaluation of the total plant species abundance 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.

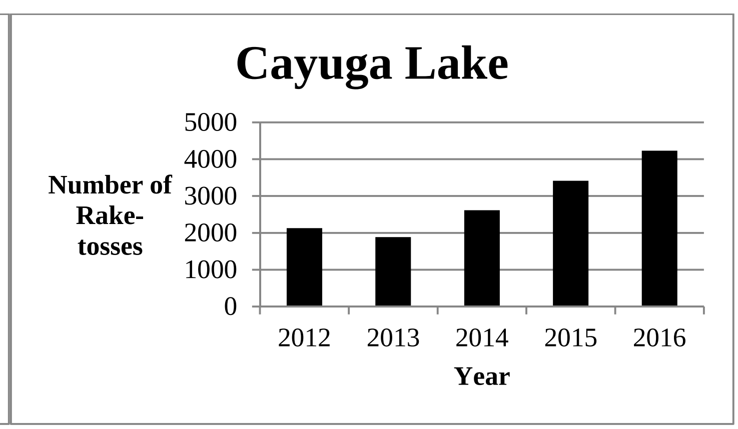
This method assumes that the data values recorded from the collections of the two-thrown rake tosses at the point of the line intercepts is representative of the aquatic plant species present with the abundance (an estimate of mass) of individual species at the time of sampling. Each colored icon is an estimate of mass within at least a 50m X 50m area and while in the southeast corner we screened on a 25m X 25m area grid. This finer search pattern allowed us to better search the lake area that we felt had the greatest probability of new hydrilla finds.

The numbers of rake tosses evaluated in 2016 within Cayuga Lake was 4230, up from 3416 in 2015, 2616 in 2014, 1886 in 2013, and 2128 in 2012. The numbers of rake tosses made in 2016 to evaluate the ongoing Cayuga Inlet and Fall Creek herbicide treatments was 1468, up from 1462 in 2015, 1364 in 2014, 1184 in 2013, and 980 in 2012.

Additionally, sediment core sampling was used to evaluate hydrilla tuber depletion, central to our eradication goal, totaled 2080 cores in 2016 down from 3,952 cores of sediment that we hand-screened in 2015. Total person-hours dedicated to our plant and sediment monitoring project in 2016 by Racine-Johnson Aquatic Ecologists was in excess of 7500.

Rake-tosses				
	Cayuga Lake	Cayuga Inlet	Fall Creek	Total
2012	2128	928	52	3108
2013	1886	978	206	3070
2014	2616	932	432	3980
2015	3416	882	580	4878
2016	4230	896	572	5698





Contents

Report to the

Tompkins County Soil and Water Conservation District, 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 and Finger Lakes PRISM. Additionally, to 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
January 2017

Tables

Figures

Introduction and Summary

We submit this 2016 annual report to Tompkins County Soil and Water Conservation District, 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 and Finger Lakes PRISM. Additionally, to 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 2016 aquatic plant evaluations from the plant monitoring surveys in the Cayuga Inlet and the south end of Cayuga Lake. This is a report of the progress to eradicate *Hydrilla verticillata* from the Cayuga Inlet, Fall Creek and the southern end of Cayuga Lake.

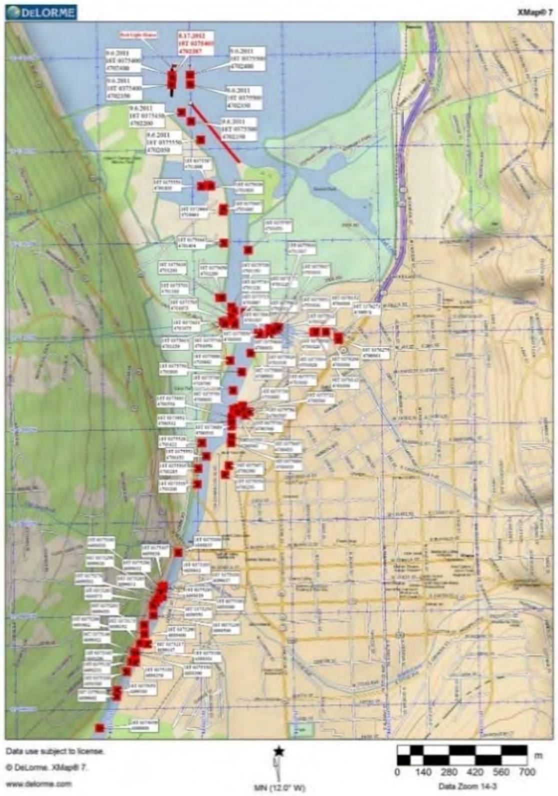
On August 5, 2011, the identification and expert verification of monoecious *Hydrilla verticillata* in the Cayuga Inlet at Ithaca, NY prompted a rapid response to stop the spread from the Cayuga Inlet of this non-native invasive to neighboring waterways. Local efforts began immediately to identify the 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 hydrilla findings in Figure 1 (findings are from the 2012 final project report and refer you to that report for details). Figure 1 further shows the progress in eradicating hydrilla growth from the Cayuga Inlet from 2013 through 2016 as measured by our rake-toss and visual plant survey methods. We did not find any hydrilla growing in the Cayuga Inlet in 2015 or 2016.

Hydrilla locations identified by this project from 2011 through 2016 are available on the website *i*MapInvasives owned by NatureServe. http://www.imapinvasives.org/new-yorklogin Funding for the NY *i*MapInvasives Project is provided by the New York State Environmental Protection Fund through the New York State Department of Environmental Conservation.

This report lists aquatic plant data collected by surveys in 2016 using the line intercept method (Madsen 1999) in Cayuga Inlet, Fall Creek and Cayuga Lake by Racine-Johnson Aquatic Ecologists of Ithaca, NY. We determined the presence and location of plant species by this line-intercept method and additionally added an estimate of each species' abundance (estimated biomass) from each rake-toss. We depict this 2016 information in tables, graphs, abundance maps and pie charts to provide the current status of the aquatic plant community. As part of the management plan in place for this project, we are required to document the progress of hydrilla eradication from known locations where various management techniques have been used. Equally important is the monitoring effort to document depletion of the non-germinated hydrilla tubers still possibly viable in the sediments. These propagules are the result of previously matured hydrilla vegetative growth. The information collected about aquatic plant biology, the effectiveness of the various control methods and specific herbicide efficacy drive the Local Hydrilla Task Force's ongoing management decisions.

The New York State and Local Hydrilla Task Force's plan of eradication for this infestation requires depletion of the population of subterranean hydrilla turions (tubers), which occurs primarily by germination, to zero. The prevention of the initiation of any new turions (tubers or axially turions) is paramount and accomplished by eliminating all new vegetative growth each season before turion formation can take place. We illustrate in this report through graphs and figures this tuber depletion and further show a dramatic decrease in hydrilla presence. Additionally, the aquatic plant community composition and changes are addressed within the project area.

This report shows continuing progress toward the goal of eliminating hydrilla from the southern end of Cayuga Lake and the tributaries flowing into the south end of the lake. In spite of this progress the major challenges of locating any hydrilla growing in the SE corner of the lake and in the backwaters of the fast-flowing Fall Creek remain. We are however encouraged by the absence of hydrilla plants at all locations except a small area in the Golf Course Lagoon and with hydrilla tuber densities at our historical locations declining to zero.



Fall 2011 and 2012

2013

2014

2015 & 2016

Figure 1. Locations in the Cayuga Inlet where rake-toss surveys identified *Hydrilla verticillata* in: 2011 and 2012 (top left), where we found hydrilla in 2013 (top right), in 2014 (bottom left) and in 2015 and 2016 (bottom right). In 2014, our rake-toss sampling found hydrilla only in the CU Boathouse Bay within the Inlet. In 2015 and 2016, our extensive searches did not find hydrilla anywhere in the Cayuga Inlet after extensive rake-toss sampling and visual monitoring.

Figure 2. Locations in 2016 where we found hydrilla by rake-toss and visual searches. In the Golf Course Lagoon in Fall Creek, we recorded 6 distinct locations with growing hydrilla. In the Cayuga Inlet and Cayuga Lake, we recorded 0 locations with the presence of hydrilla. We have listed the GPS of the locations in Figure 3 following, in the table Coordinates 1, within the Appendix of this report and entered the data into *i*MapInvasives.org. http://www.imapinvasives.org/new-yorklogin

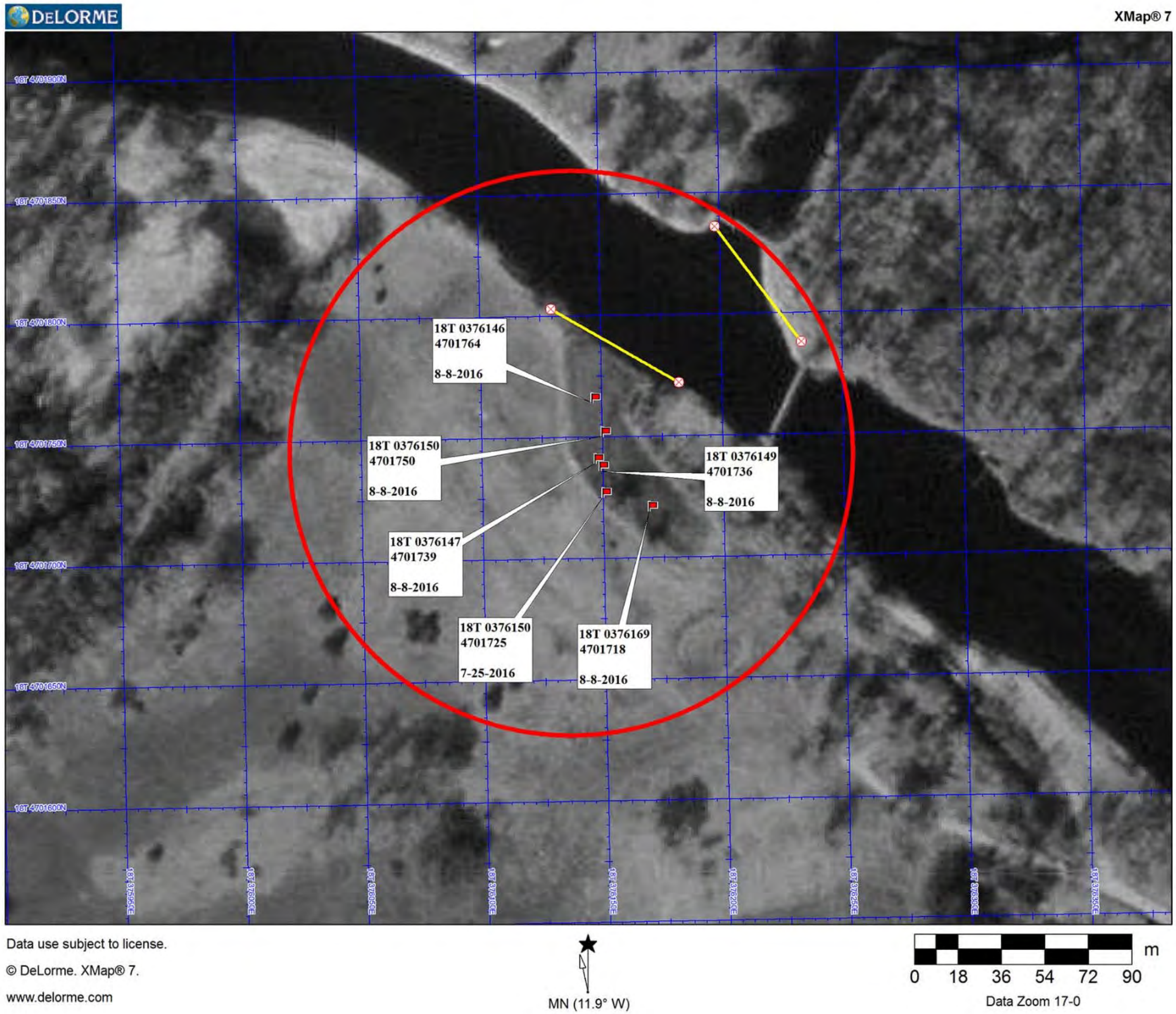


Figure 3. Locations identified in 2016, by GPS and date found, in the Golf Course Lagoon in Fall Creek. GPS locations above are the only 2016 hydrilla vegetative growth found within the entire survey area.

Figure 4. Locations in 2015 where we found hydrilla by rake-toss and visual searches. In Fall Creek we recorded 63 distinct locations with growing hydrilla and in Cayuga Lake we recorded 8 locations with the presence of hydrilla.

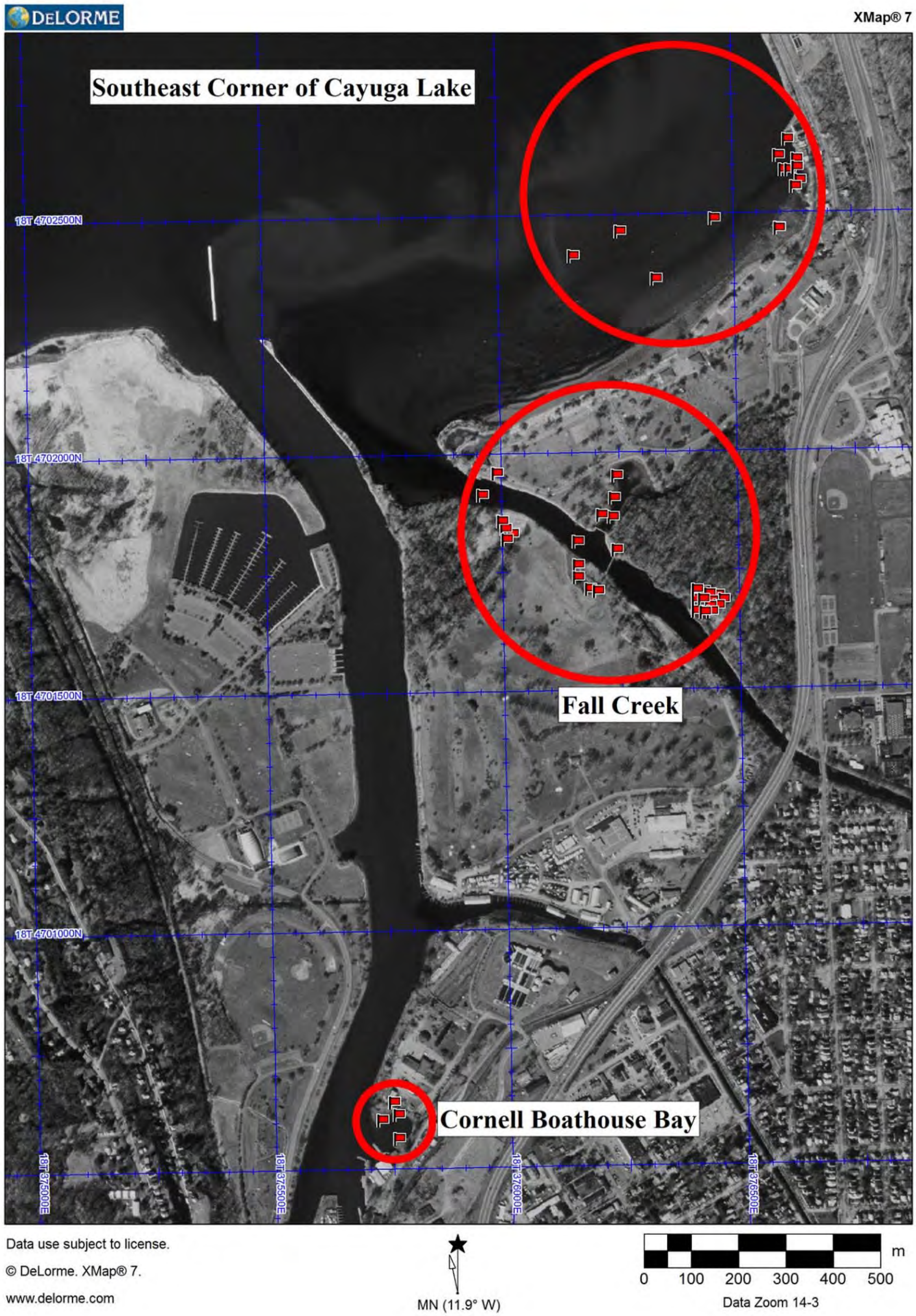


Figure 5. Locations in 2014 where we found hydrilla by rake-toss and observation. In 2015 and 2016, we did not find any hydrilla growing at the Cornell Boathouse Bay. In the SE corner of the lake the four locations with hydrilla inside the circle, to the left, did not reappear in 2015. In 2016, we did not find any hydrilla in the SE corner of the lake.

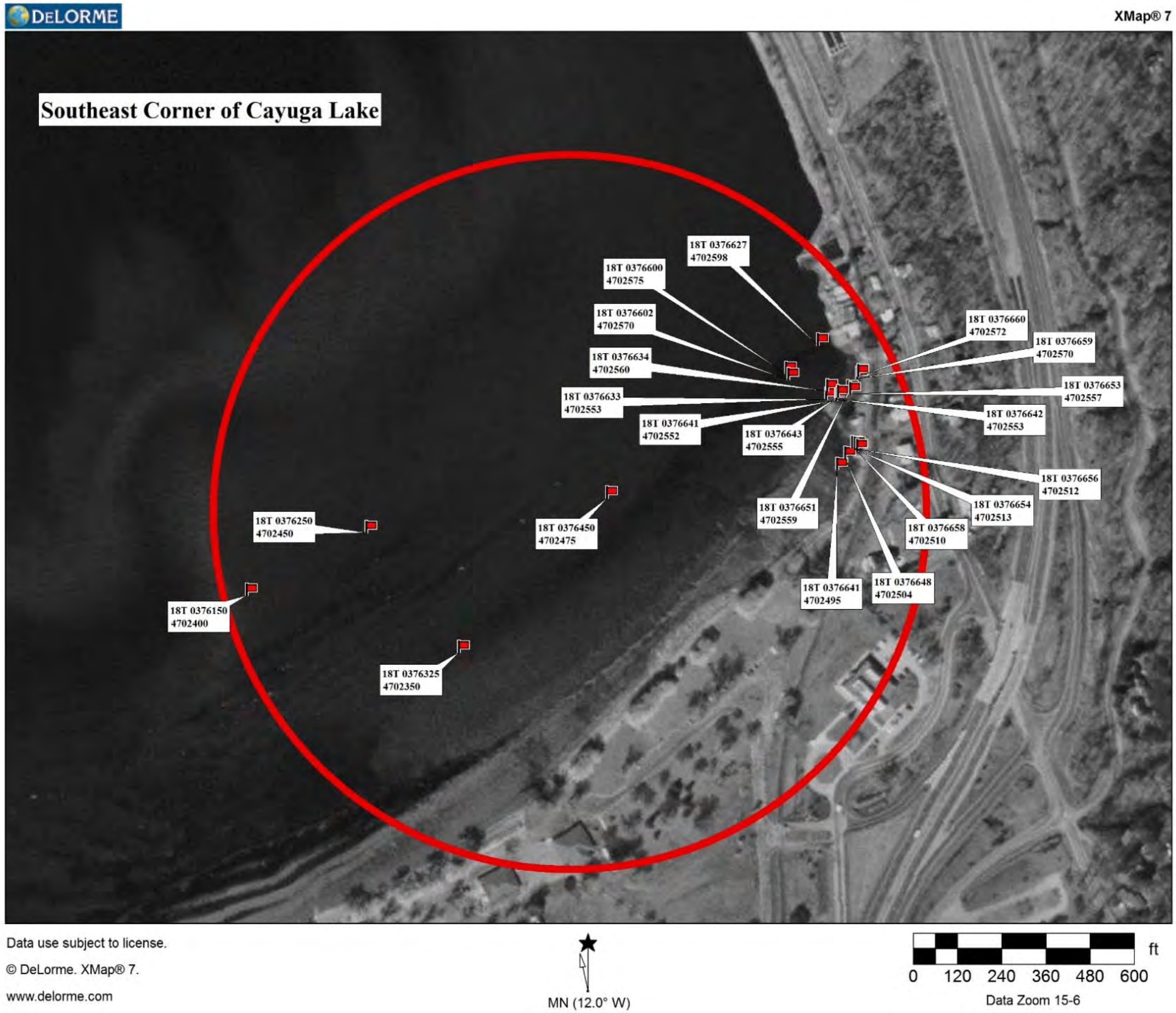


Figure 6. Locations with GPS identification where we found hydrilla by rake-toss and observation at the SE corner of Cayuga Lake in 2014. The four hydrilla finds in the extreme left within the circle in front of Stewart Park were fragments that did not materialize as rooted plants in 2015. The majority of the hydrilla finds in the SE corner were rooted patches and we covered those patches with benthic barriers in the early fall of 2014. We found no evidence of hydrilla at the benthic barrier sites in 2015 or 2016.

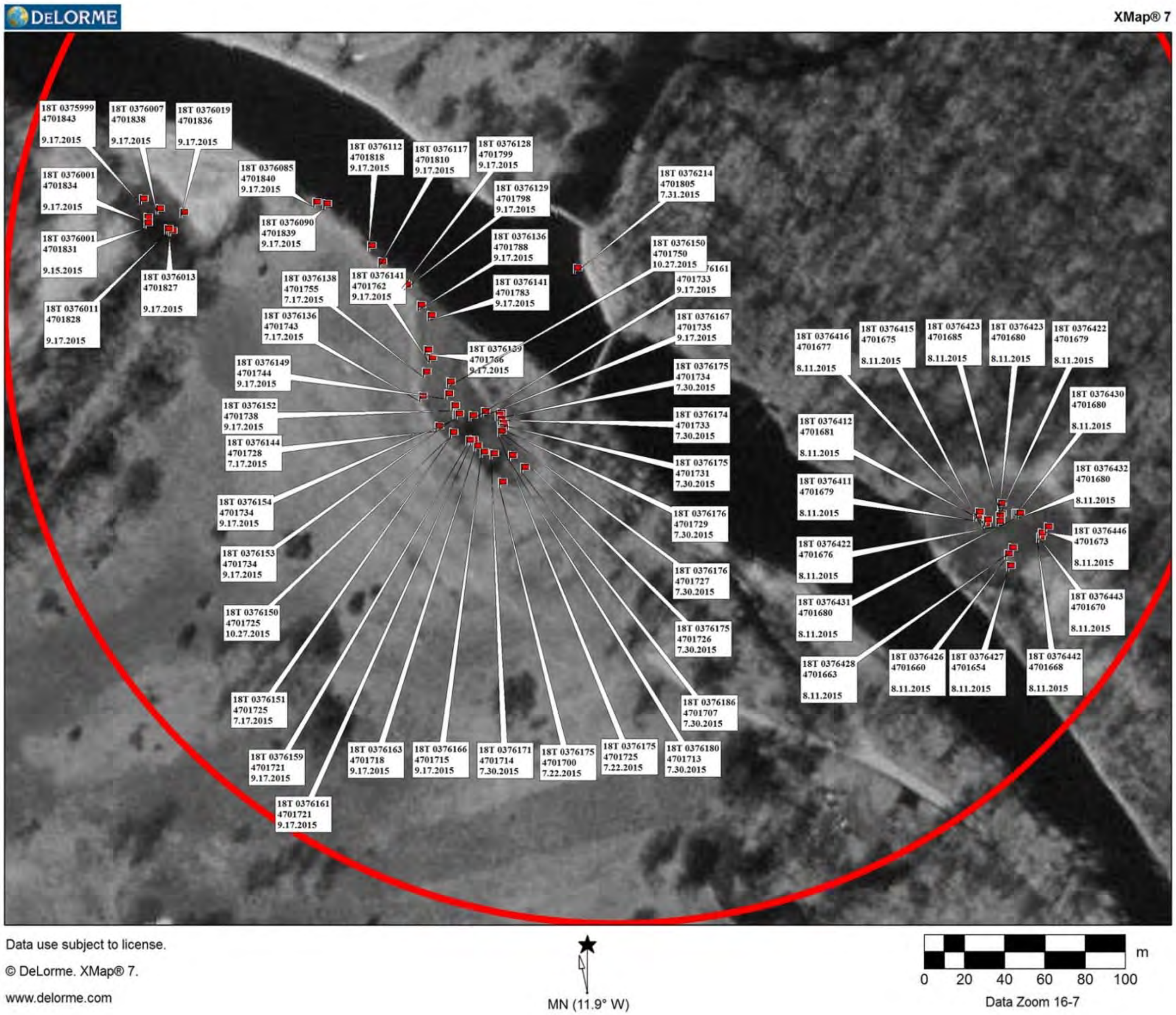


Figure 7. Locations identified in 2015 by GPS in Fall Creek, where we found hydrilla by rake-toss and observation. GPS locations above include all 2015 growing hydrilla, found before or after herbicide treatments. In 2016, we only found hydrilla in the Golf Course Lagoon area of Fall Creek where we identified tubers produced in 2015.

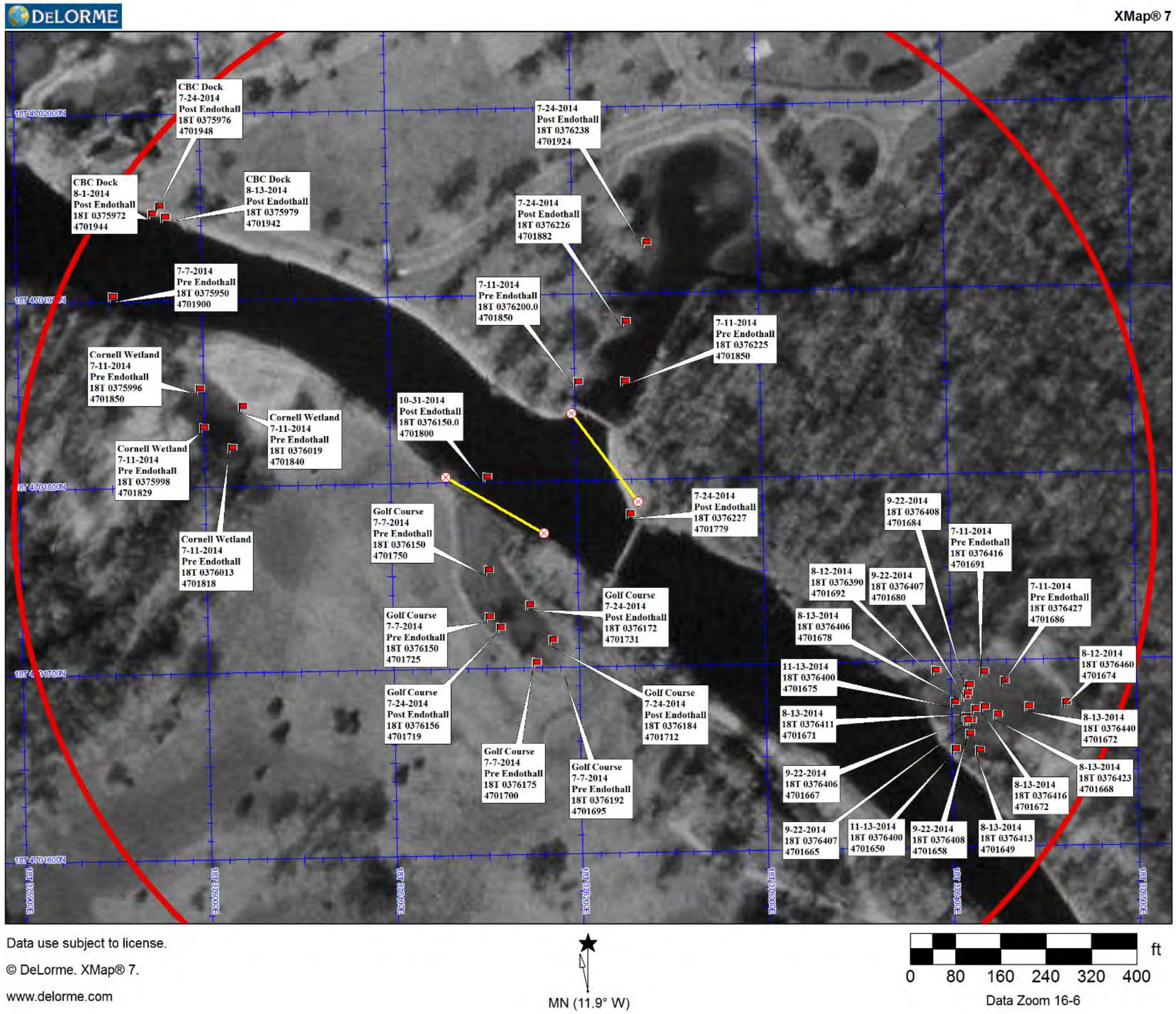


Figure 8. Locations identified by GPS where we found hydrilla in 2014 within Fall Creek (pre and post-herbicide application surveys). Locations identified above have hydrilla tubers in the sediment that need future treatments. The two yellow bars in the center are barrier curtains that aid hydrilla eradication efforts by limiting access to the Stewart Park Pond and the Golf Course Lagoon while possibly slowing the rate of dilution of herbicide treatments by limiting water flow in both areas.

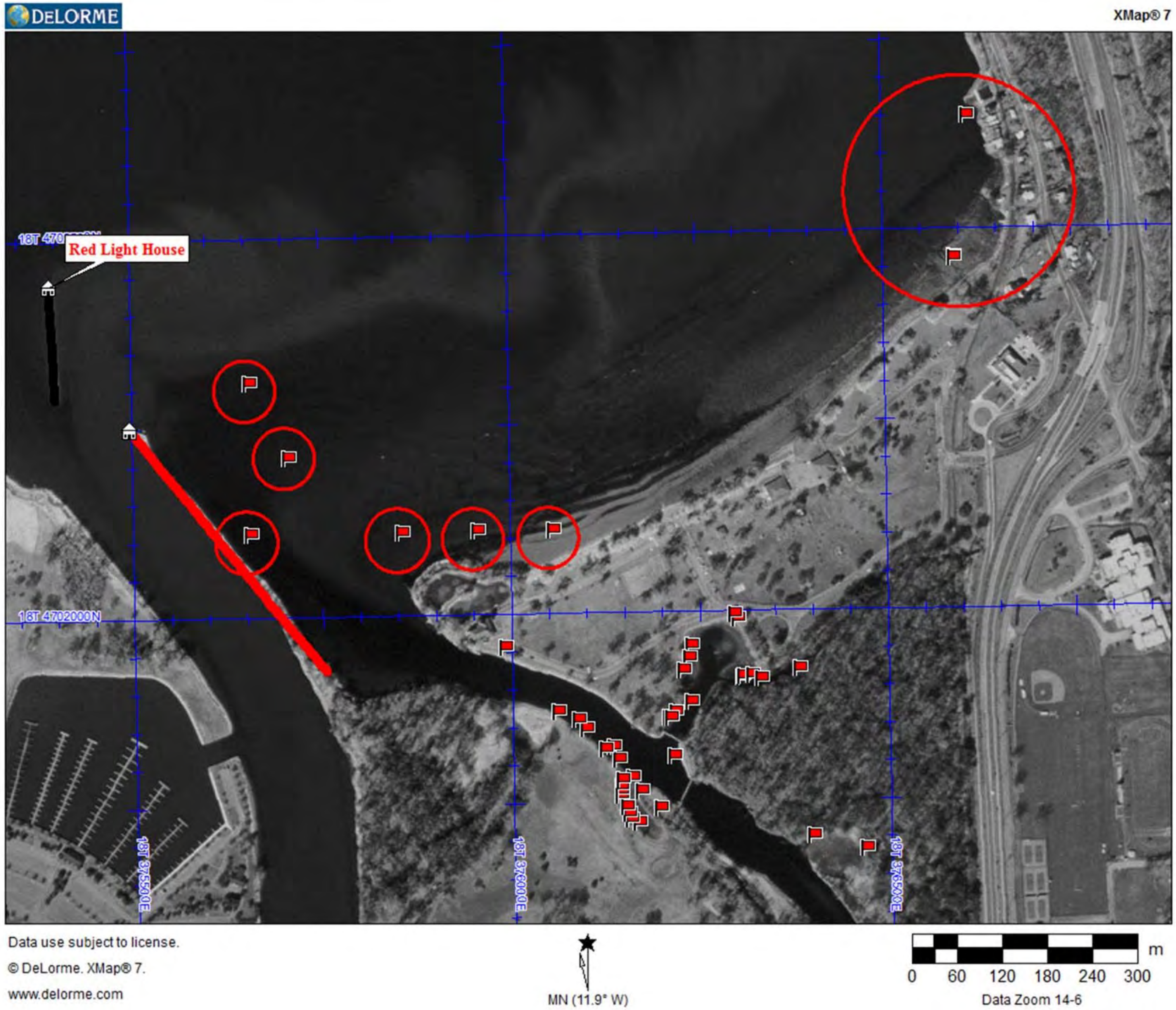


Figure 9. Locations of hydrilla in 2013 found by rake-toss. The two large rooted patches shown above in Cayuga Lake's SE corner was found on August 21, 2013. We successfully treated by hand removal and benthic barrier placement before Labor Day weekend of 2013. Hydrilla did not recur at those two locations from 2014 - 2016.

The Ithaca Hydrilla Task Force's primary eradication treatment in 2016 began with the treatment of the Cayuga Inlet on July 22, 2016 with the herbicide Sonar Genesis (fluridone liquid) dripping into the south end of the Inlet at the fish ladder, the only Inlet injection application point in 2016. Sonar H4C (fluridone pellet) was applied at Cascadilla Creek, Linderman Creek, the Cornell University Boathouse Bay and in the back channel starting between the Cornell University Crew Boathouse and the Boatyard Grill Restaurant southeast to Six Mile Creek on July 22, 2016. In Fall Creek, there was only one application of Aquathol-K (endothall) that was injected into Fall Creek on August 9 – 10, 2016 in conjunction with beginning the Sonar H4C (fluridone pellet) treatment in the backwaters of Fall Creek. At the same time, there was a Sonar H4C (pellet) "bump" or repeat treatment to the Inlet locations described above. Sonar H4C (pellet) "bump" treatments continued for both Fall Creek and the Cayuga Inlet on August 26, 2016 and finished on September 19, 2016. In 2015 and 2016, our survey crews were not able to find any hydrilla in the Inlet after extensive rake-toss sampling and visual monitoring. Because of this absence of hydrilla in 2016, there was no Aquathol-K (endothall) application in the Inlet and Sonar H4C (fluridone pellet) was not applied to the NYS Allan H. Treman Marina.

The Cayuga Inlet's monoecious biotype of hydrilla appears to germinate and emerge in late spring and often delays growth and elongation toward the surface until late July/early August. It continues to increase mass and produce turions into the late fall. We document hydrilla spring emergence and subsequent growth by monitoring both tuber germination and vegetative emergence to determine the best timing for treatment options and aid early detection of new hydrilla growth. In Cayuga Lake and upstate New York, data and experience suggest the most probable time to be able to find new areas of growth with rake-toss surveys and shallow water observations is after August 15 into the late fall.

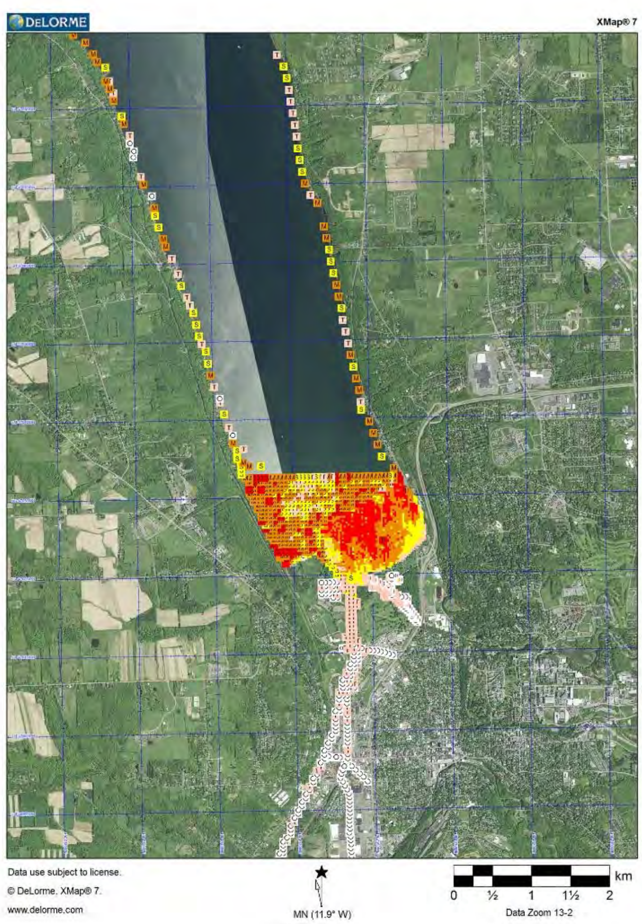


Figure 10. The pictorial above shows the total area searched in 2016 and the estimated density for All Species Combined at each rake-toss location. The hydrilla on the right was the late season hydrilla found in 2015 at 3.5 meters deep off the southeast shoreline just north of all previous hydrilla finds in the lake. We did not find hydrilla at that location or any other location in southern Cayuga Lake in 2016.

Timing of rake-toss plant monitoring depends on type and purpose of the surveys with the following dates of rake-toss surveys in 2016. Fall Creek tributary pre-herbicide monitoring began on July 25 and finished on August 8, 2016. Aquatic plant monitoring in the Cayuga Inlet and Lighthouse area started on July 11 and finished on July 18, 2016 to determine pre-herbicide plant species presence just before scheduled herbicide treatment. Plant monitoring in Southern Cayuga Lake began on July 5, 2016 and we finished on November 10, 2016. We searched by rake-toss on November 19, 2016 and confirmed that no hydrilla was present in the backwater ditch south from Six Mile Creek running past the big box stores on Route 13, an area the Local Task Force withdrew from future herbicide treatments in 2014. Cayuga Inlet and Lighthouse post-herbicide monitoring started on September 6, 2016 and finished on November 19, 2016. Fall Creek tributary post-herbicide monitoring began on November 1, 2016 and finished on November 14, 2016. In all monitoring efforts, we recorded all species within the plant communities, identified any new hydrilla locations and made observations of the efficacy of herbicide treatments in the Fall Creek Tributary and Southern Cayuga Lake.

Figure 11. A photo of hydrilla with fully developed tubers in late summer 2015 at the Golf Course Lagoon suggesting future growth from those tubers will occur in 2016, as it did. The only area where we found hydrilla in 2016.

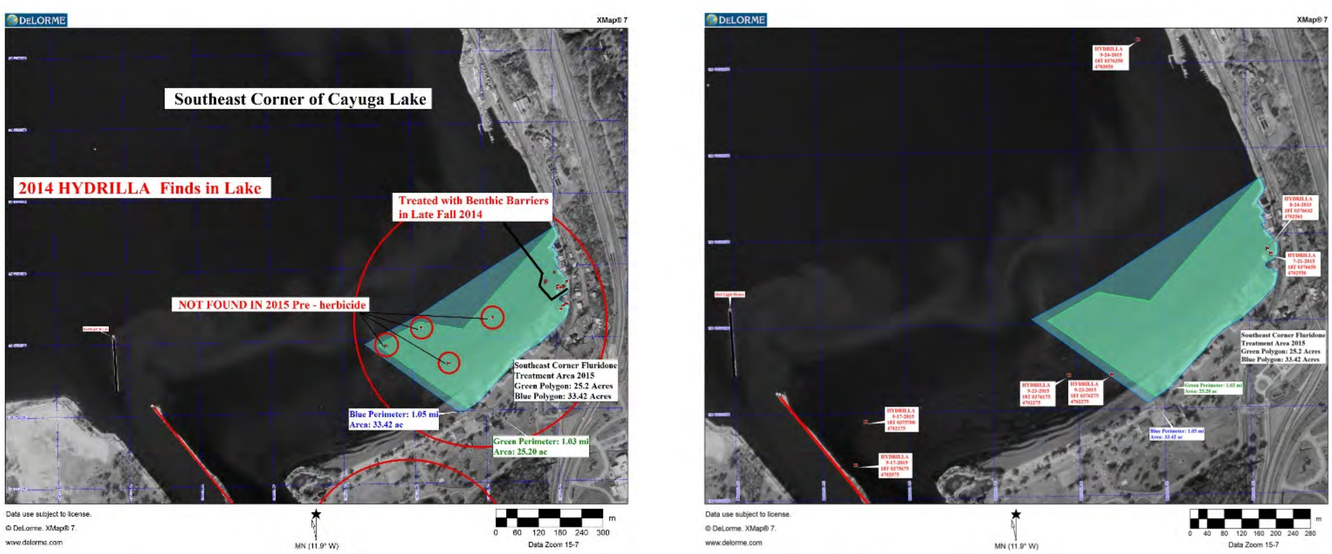


Figure 12. Herbicide treatment area in Cayuga Lake in 2015 shown as the teal green area above. Hydrilla locations in 2014 (left map) determined the area of treatment with the herbicide fluridone as Sonar H4C, a pellet formulation. Four applications of fluridone pellets applied on July 21, August 11, September 16 and October 1, 2015 constituted the chemical treatment. Prior to 2015 the 2014 hydrilla locations in the extreme SE corner (left) were treated by laying down benthic barriers in late 2014. The four 2014 hydrilla finds in the left side of the treatment zone did not appear in 2015 (right) preventing an assessment of efficacy of the Sonar H4C applications.

The discovery of hydrilla growing in the Southeast corner of Cayuga Lake on August 21, 2013 (Figure 13) 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 2 mesh barriers around the hydrilla beds and hand-removed vegetative growth along with as much root and tuber growth from the sediment as possible. After plant removal and before removing the surrounding mesh barrier, we placed a benthic barrier on the area of the lake bottom that was hand harvested. From 2014 through 2016, we observed no hydrilla growth on or near these areas that we treated with hand harvesting and benthic barriers in 2013.

Figure 13. Hydrilla growth in the SE corner of Cayuga Lake found August 21, 2013 and removed by August 30, 2013, we did not find hydrilla at these remediated locations in 2014 through 2016.

We made a change in our rake-toss sampling strategy during 2014 by using a 25m X 25m UTM search grid in place of the 50m X 50m grid to sample plant presence at Cayuga Lake's south end from the east shore at Stewart Park and to the Hog's Hole on the west shore. Because of the hydrilla finds in the lake during 2013, we decided to increase sampling locations greatly in this southern end area in 2014. We found no hydrilla west of the mouth of Fall Creek with this increased sampling but did find hydrilla fragments toward the shallow SE corner.

In 2014, we found in the SE corner of Cayuga Lake new hydrilla growth starting on July 9, 2014 with the last hydrilla found on October 31, 2014. We did not remove the hydrilla plants as we did in 2013 before placing the benthic barriers on top of the rooted growing hydrilla. Additionally, in 2014, the local task force conducted a two-day hand removal of hydrilla vegetative mass from the Fall Creek Cove, a location where herbicide treatments were ineffective at removing hydrilla. Hand removal was also used on some areas of the Golf Course Lagoon in 2015 where growth persisted in late summer/early fall. At the lagoon, both herbicides Aquathol-K and Sonar H4C were applied on August 9, 2016 with additional bump applications of Sonar H4C later.

Hydrilla found in 2014 was at a distance from the two beds of hydrilla found in 2013 and we believe these 2014 plants started from other fragments that came into the lake later than the growth found in 2013. It is possible this 2014 hydrilla came from the Fall Creek area, likely during the major August 8, 2013 rain storm. We continued to find fragments in the SE corner in 2015, which we believe, float into the lake from the Fall Creek infestation each year. In 2016, no hydrilla fragments were found in the SE corner of Cayuga Lake.

With the success of management efforts in the Cayuga Inlet, bringing our detection of growing hydrilla to zero in 2015 and 2016, the Hydrilla Task Force believes a shift to a more concentrated eradication effort in Fall Creek and the lake is required. We are well aware of the ongoing introduction of growing hydrilla and other species into Cayuga Lake from the fast-moving waters of Fall Creek. Our intense rake-toss sampling in 2015 within the lake suggests this mechanism as described below (Figure 14). The plant species depicted we identified as Carex sp., a sedge. We do not know the sedge species because all we have found in the Lake's rake-toss samples were shredded leaves and stems. This plant does not grow in Cayuga Lake but likely as an emergent aquatic plant along the edges of the Fall Creek area. As displayed in the figure below, we found the sedge in several rake-toss samples at the mouth of Fall Creek and off the SE shoreline near the Merrill Sailing Center where we found hydrilla growing in late 2015. We also recorded one sedge fragment in deeper water west of The Merrill Sailing Center finds. While waterfowl feed heavily on hydrilla and other plant species in the Fall Creek backwaters, they also release many plant fragments that float to the lake. A likely introduction of these sedge and hydrilla fragments is feeding and uprooting by waterfowl and common carp in the backwaters of Fall Creek allowing the fast-moving water to carry fragments into the lake.

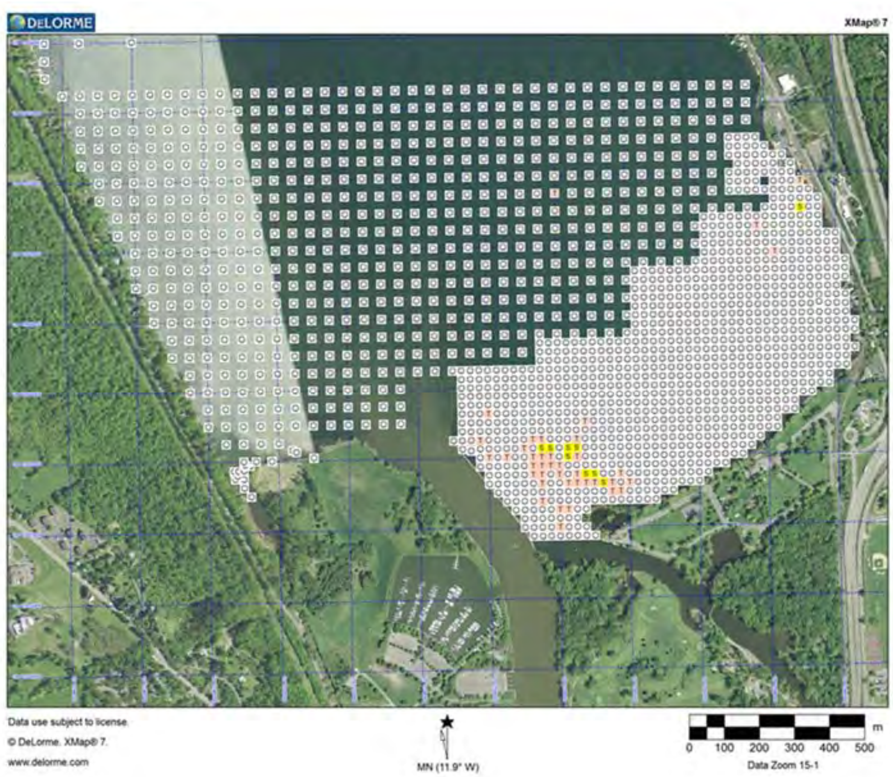


Figure 14. *Carex sp.* (sedge) as abundance found by two rake tosses in 2015 at the mouth of Fall Creek.

The following website contains detailed information about the 2011 – 2016 Cayuga Inlet, Fall Creek and southern Cayuga Lake hydrilla eradication project.

www.Stophydrilla.org

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*. Additionally, we identified all individual aquatic plant species present and estimated the relative abundance of each species to document the plant community structure. We sampled and recorded aquatic plant species presence and abundance at pre-selected locations determined by overlaying a UTM grid on maps of the Cayuga Inlet, Fall Creek Inlet and southern Cayuga Lake at Ithaca, NY in 2016 (Figure 15). Racine-Johnson Aquatic Ecologists from Ithaca NY collected the 2016 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). The monitoring crew tossed a tethered dual-headed rake off a boat to collect data from two rake tosses at each sample point of a 50m X 50m UTM (NAD 83 datum and True North) transect grid. In 2014 and continued through 2016, we added a 25m X 25m grid in areas of high probability for hydrilla presence at the near-shore southern part of the lake. This greatly increased the number of samples collected, but we felt greater collection intensity in those areas would be valuable in locating hydrilla. This increased density of sampling in the SE corner by rake-toss in 2016 is easy to see on our cover map. Hand-held and/or boat-mounted GPS equipment guided our movement to these locations. Members of the sampling crew tossed the double-headed rake at each selected location and then pulled the rake along the bottom about 10 meters. The individual throwing the rake lifted 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 enhanced the basic line intercept method described by Madsen 1999.

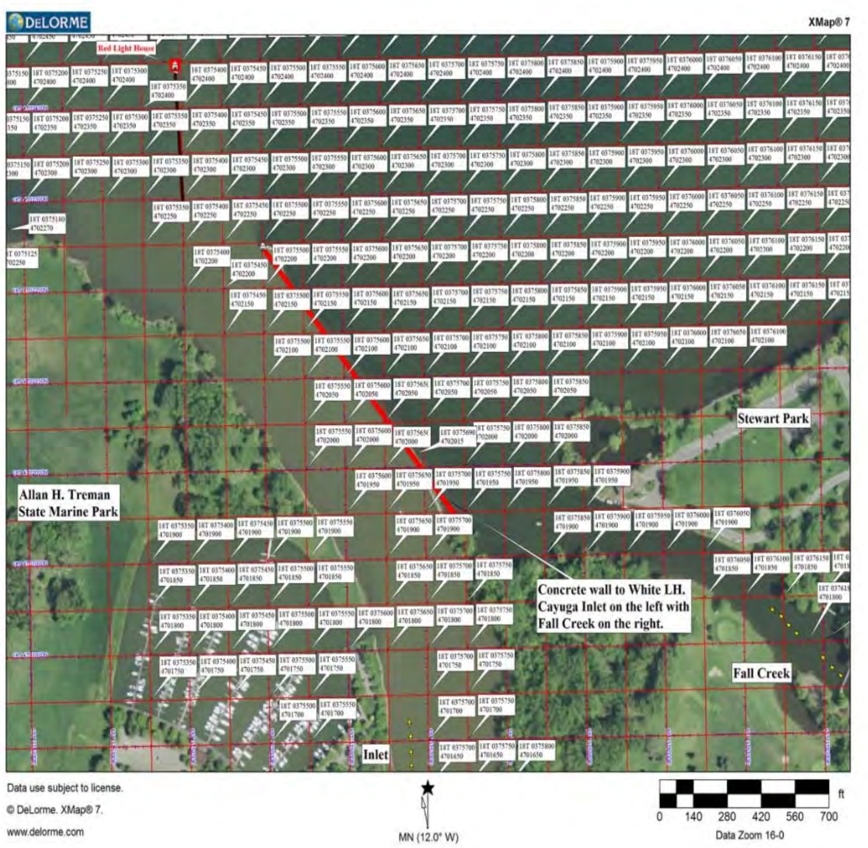


Figure 15. Example of a small section of our UTM grid used to predetermine locations to sample aquatic plant presence and abundance. Locations sampled are at points defined by the line intercepts of the NAD 1983 X coordinate East and NAD 1983 Y coordinate North. We have used this method since 2012 on this project.

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 16). 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. 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 16. Sampling team on Cayuga (left) and 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 (right).

To obtain an all-species combined (native and non-native) abundance value at a specific location for the pictorial abundance maps of Cayuga Lake, the Inlet and Fall Creek, 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, or if using a similar method estimating amount on the rake as about two tines full on a rake that is recorded as a (trace) or an abundance value rating of 1 (Table 1). If we have a rake-toss of a value rating 3 (medium) and the second rake-toss as a rating of 1 (trace), we calculate the mean as 2 or a (sparse) for that location. If we recorded one rake-toss as a (medium) and the second as a bare rake (O), the mean would be a value of 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 categories of rake-toss abundance reported in the field. Our abundance ratings originate from assumptions based on the biomass relationship to rake-toss shown in (Figure 17) 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, perform analysis and list in a report. We specifically summarize the individual rake-toss results from the data tables and show in Table 2 (pg. 29) of this report. Data tables 1- 7 in the appendix 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-24. Abundance maps were also created for Inlet pre-herbicide in Map Inlet-1 through Inlet-15, Inlet post-herbicide in Map Inlet-16 through Inlet-27, Fall Creek pre-herbicide in Map Fall Creek-1 through Fall Creek-18, Fall Creek post-herbicide in Map Fall Creek-19 through Fall Creek-28.

We show in Figures 1 – 9 specific depictions of hydrilla locations. Specific coordinate locations of new hydrilla finds in 2016 are in the appendix of this report as a table, Coordinates 1. Additionally, we recorded this data on the *i*MapInvasives website owned by NatureServe. http://www.imapinvasives.org/new-yorklogin

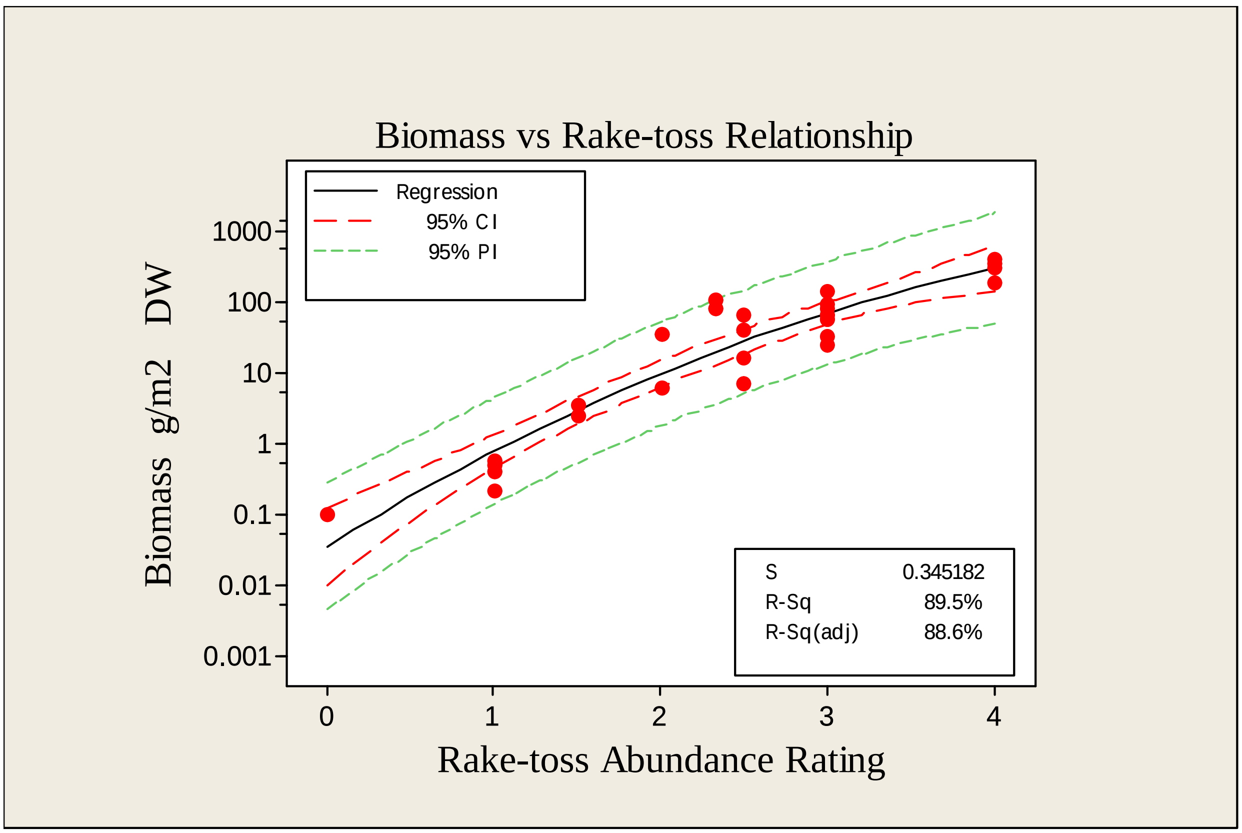


Figure 17. Best-fit line to describe the relationship between onsite estimates of abundance made with the rake-toss method of collection contrasted with an estimate of biomass (three individual in-lake biomass quadrat experiments with a description following determine the regression equation).

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 17 describes the foundation 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^{o}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 17.

In practice using the relationships in Table 1 and the 2016 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 all locations. These include: Cayuga Lake, the relative species abundance for the pre and post-herbicide Lighthouse area, pre and post-herbicide Inlet proper and pre and post-herbicide at Fall Creek.

In the Results section following, the Cayuga Lake abundance maps show the rake-toss results for the southern end of Cayuga. These results in detail are included in Table 2 and Data 1, but summarized on the Cayuga Lake Maps. The Results section also refers to the Lighthouse area (LH) in Table 2, Figure 18, Pie charts and listed in rake-toss Data 2 and Data 3. Figure 18 below shows the 29 (50m X 50m) locations of the Cayuga Inlet at the entrance to Cayuga Lake, described as the Lighthouse area (LH) now 30 locations. We feel this area (LH) needs to be a separate grouping from the Inlet "proper" evaluations because of the location at the intersection zone of the Inlet and Cayuga Lake. We treat the area distinctly in this report.

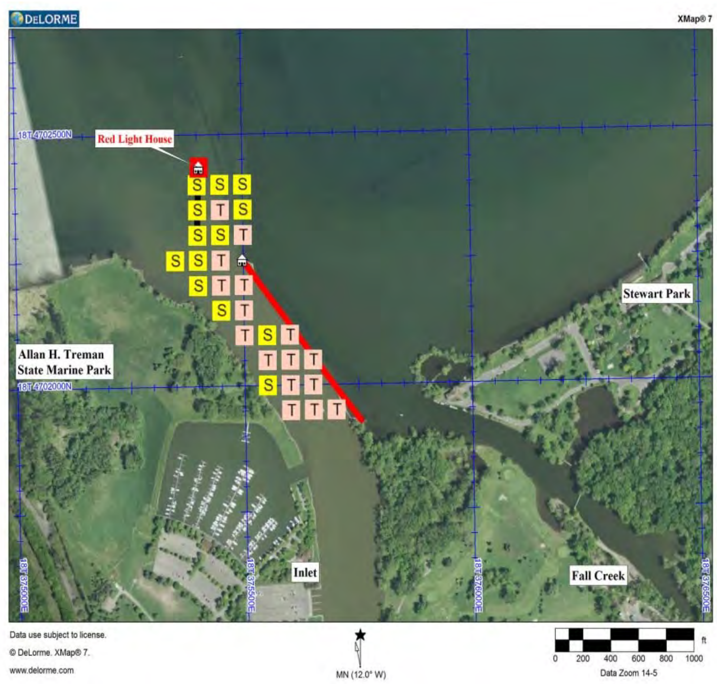


Figure 18. Map is of the Lighthouse area (LH) in 2013 with the 29 sampling locations at the transition zone between the Cayuga Inlet and Cayuga Lake. In 2014 through 2016, we evaluated by rake-toss 30 sampling locations both pre and post-herbicide.

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 potential future emergence of hydrilla from residual tubers and shape decisions of future treatment strategies. Since fall of 2011 and the identification of hydrilla in the Cayuga Inlet, we have been measuring tuber density (number of turions per unit area) in areas that initially had dense vegetative growth of hydrilla. Summary graphs of mean tuber density numbers over several years at our chosen 7 historical locations follow in the results section of this report. Graphs are an estimate of the mean tuber densities at a 95% confidence interval with the error pooled across groups. We increased sample size greatly as the tuber population decreased.

Figure 19 below describes the locations where our method of determining hydrilla turion (tuber) densities using the “Haller Hydrilla Sediment Corer”, a post-hole digger that produces consistent sized cores from the sediments of the Cayuga Inlet and Fall Creek 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. Our initial measurements suggest the majority of the tubers in the Cayuga Inlet, Fall Creek and southeast corner of Cayuga Lake are resting at 10 to 15 centimeters down from the sediment surface. We process cores individually by hand washing the sediment through fine 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 original Cayuga Inlet locations on each sampling date. From December 2012 to May 2014, we increased the numbers of cores from each location to 22 collected on each date. In June of 2014, we increased the number of cores collected on each date to 104 per location and starting in December of 2014, we doubled the number collected to 208 per location and continue that number through 2016. With a collection of 208 cores per sampling location on a date, we are sampling a minimum of 3000 pounds of wet sediment from each location collected on a date to determine tuber density.

Tuber density 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 the sediment that have the potential to germinate and grow sometime in the future.

Figure 19. Map above shows the four locations in the Cayuga Inlet and three in Fall Creek where we routinely conduct sediment core removals, while the three additional photos show sample collection and processing.

Results

This report summarizes and displays the results of the 2016 aquatic plant species monitoring along with 2011 – 2016 aquatic plant and hydrilla tuber monitoring history for Cayuga Lake and the Cayuga Inlet (Johnson 2013, 2014, 2015 and 2016). We summarize and display the results of the 2016 aquatic plant species monitoring of Cayuga Lake, the Cayuga Inlet and Fall Creek in the tables and figures that follow. Table 2 (page 29) summarizes the relative frequency of individual aquatic plant species collected by the rake-toss survey method in Cayuga Lake, the Lighthouse (LH) inlet area, the Cayuga Inlet proper and Fall Creek in 2016.

In analyzing the recorded data, we suggest caution and point out that our observations are a point-in-time at a point location. Natural factors that primarily influence aquatic macrophyte (plant) communities are generally seasonal growth patterns of a single species, available light and space, wave action and competition between species often strongly influenced by propagule production of individual species. Many other factors can also influence growth but generally to a lesser extent, such as available nutrients, sediment types and herbivores.

Figure 20 below is an example showing contrasting abundances of the dominate species *Elodea sp.*, a native and *Nitellopsis obtusa* (starry stonewort), a non-native macro-alga, from the lake survey and are examples of the following Map Lake-1 through Map Lake-24 (pages 46-69). Similar maps follow for the Cayuga Inlet and Fall Creek for both pre-herbicide and post-herbicide evaluations as Map Inlet-1 through Map Inlet-27 (pages 70-96) and Map Fall Creek-1 through Map Fall Creek-28 (pages 97-124). Maps also show areas of increased sampling in 2016, started in 2014, on a 25m X 25m UTM grid in the SE corner to improve chances of locating hydrilla that the Hydrilla Task Force will treat.

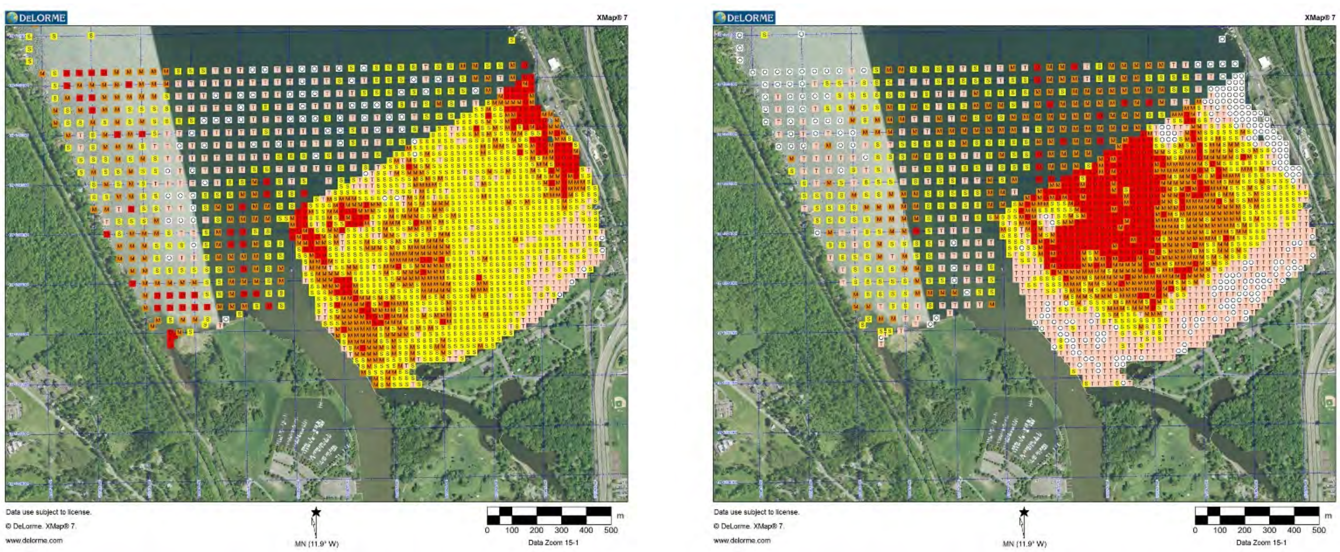


Figure 20. Maps of relative abundance of the dominate native species *Elodea sp*. (left) and non-native macro-algae invader *Nitellopsis obtusa* (starry stonewort) (right) a major dominate plant in southern Cayuga.

The 2014 post-herbicide evaluations of the Cayuga Inlet reported growing hydrilla at the Cornell University Boathouse Bay, suggesting that the ongoing herbicide treatment that has worked very well in the Cayuga Inlet allowed growth in 2014. We do not know if this hydrilla found at the Boathouse Bay matured enough in 2014 to produce new tubers. However, this discovery emphasizes the need to increase adequate monitoring in the future to locate new growth of hydrilla quickly in treated areas and of primary importance preventing possible new hydrilla tuber formation. We did find and removed high numbers of viable tubers in December 2014 from this location and interestingly did not have any growth in 2015 or 2016 at the Cornell University Boathouse Bay.

In Fall Creek with the high velocity stream flow, heavy feeding by waterfowl and major disturbances by common carp in the creek and backwaters continue to be a major challenge to the task of eliminating hydrilla. This is the area where after the discovery of hydrilla on August 8, 2013 a major rainstorm that evening caused at the very least, thousands of hydrilla fragments to enter the lake from the new Fall Creek infestation.

In evaluating the presented data and our suggested caution above we give Figure 21 below as an example that shows contrasting abundances of an individual species, *Potamogeton pusillus*, where plant phenology is likely the cause of the decrease in abundance between the pre- and post-herbicide surveys. Many aquatic plant species in this report have presence and abundance influenced by phenology. The example, *P. pusillus* grows rapidly in the spring, flowers, dies back and disappears in mid-July. There are many incidences in our data where plant life cycles need consideration in any analysis of changes over time. While *M. spicatum* in this same dataset shows almost no difference in abundance between the pre- and post-herbicide surveys.

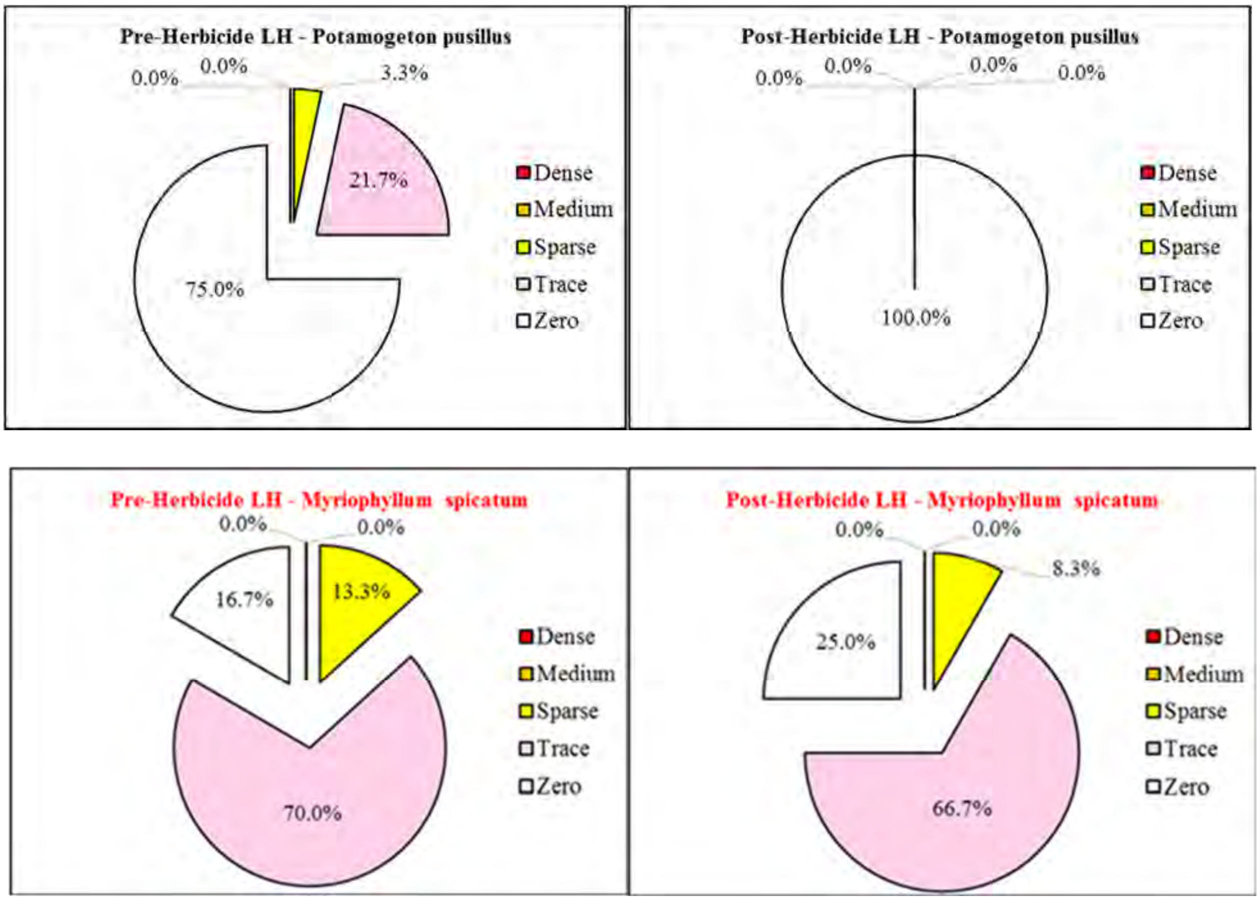


Figure 21. Abundance category percentages of *P. pusillus* and *M. spicatum* measured in the 60 pre-herbicide and 60 post-herbicide rake-tosses made in the Lighthouse area in 2016 as an example where caution should be used in drawing conclusions when contrasting the pre-herbicide with the post-herbicide values.

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 tuber development suggested all vegetative growth found in late August 2013 likely arose from a single propagule at each of the two locations. The Cayuga Lake hydrilla finds in 2014 are likely the result of the massive inflow of hydrilla from Fall Creek during the August 8, 2013 storm. Continued hydrilla fragments coming out of Fall Creek persisted in 2015 with finds at the mouth of Fall Creek. In 2016, the only hydrilla found was at the Golf Course Lagoon in Fall Creek (figure 2).

Table 2. Relative Frequency (%) of aquatic plant species in 2016 recorded by the line intercept grid survey in Cayuga Lake, the Lighthouse Area (LH), the Cayuga Inlet and Fall Creek. Included are the pre- and post-herbicide evaluations of the Lighthouse area (LH), the Inlet and Fall Creek.

Scientific Name	Common Name	Lake		Pre-herbicide LH		Post-herbicide LH		Pre-herbicide Inlet		Post-herbicide Inlet		Pre-herbicide Fall Ck		Post-herbicide Fall Ck	
		FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%
Alisma gramineum	water plantain	42	1.0	1	1.7	1	1.7	0	0.0	0	0.0	13	4.5	0	0.0
Ceratophyllum demersum	coontail, hornwort	2791	66.0	50	83.3	45	75.0	93	26.0	33	7.9	81	28.3	47	16.4
Chara vulgaris	chara, muskgrass	460	10.9	3	5.0	2	3.3	0	0.0	0	0.0	3	1.0	3	1.0
Elodea sp.	elodea, common waterweed	3917	92.6	58	96.7	58	96.7	120	33.5	71	17.0	117	40.9	88	30.8
Fontinalis sp.	water moss	4	0.1	1	1.7	0	0.0	5	1.4	0	0.0	0	0.0	2	0.7
Heteranthera dubia	water stargrass	1002	23.7	4	6.7	36	60.0	8	2.2	41	9.8	6	2.1	37	12.9
Hydrilla verticillata	**hydrilla, water thyme**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**3**	**1.0**	**0**	**0.0**
Lemna minor	small duckweed	1	0.02	0	0.0	0	0.0	0	0.0	0	0.0	42	14.7	4	1.4
Lemna trisulca	forked duckweed, star duckweed	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Marsilea quadrifolia	**European waterclover**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**3**	**1.0**	**1**	**0.3**
Myriophyllum spicatum	**Eurasian watermilfoil**	**3416**	**80.8**	**50**	**83.3**	**45**	**75.0**	**91**	**25.4**	**22**	**5.3**	**93**	**32.5**	**44**	**15.4**
Najas flexilis	slender naiad, bushy naiad	1273	30.1	12	20.0	0	0.0	8	2.2	0	0.0	59	20.6	0	0.0
Najas guadalupensis	southern naiad	21	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Najas minor	**brittle naiad**	**481**	**11.4**	**12**	**20.0**	**3**	**5.0**	**80**	**22.3**	**4**	**1.0**	**31**	**10.8**	**4**	**1.4**
Nitella flexilis	nitella, stonewort	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Nitellopsis obtusa	**starry stonewort**	**3340**	**79.0**	**44**	**73.3**	**45**	**75.0**	**13**	**3.6**	**4**	**1.0**	**23**	**8.0**	**31**	**10.8**
Nuphar advena	yellow pond lily	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Nymphaea odorata	white water lily	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0	7	2.4	5	1.7
Polygonum amphibium	water smartweed	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pontederia codorata	pickerel weed	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Potamogeton crispus	**curly-leaf pondweed**	**490**	**11.6**	**6**	**10.0**	**4**	**6.7**	**10**	**2.8**	**1**	**0.2**	**33**	**11.5**	**0**	**0.0**
Potamogeton foliosus	leafy pondweed	404	9.6	0	0.0	4	6.7	1	0.3	1	0.2	0	0.0	0	0.0
Potamogeton illinoensis	Illinois pondweed	3	0.1	1	1.7	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Potamogeton praelongus	white-stem pondweed	48	1.1	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3	0	0.0
Potamogeton pusillus	small pondweed	908	21.5	15	25.0	0	0.0	32	8.9	0	0.0	42	14.7	1	0.3
Potamogeton richardsonii	clasping-leaf pondweed	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Potamogeton zosteriformis	flat-stem pondweed	121	2.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Ranunculus trichophyllus	white water crowfoot	19	0.4	1	1.7	1	1.7	1	0.3	0	0.0	2	0.7	0	0.0
Sagittaria sp.	arrowhead	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Spirodela polyrhiza	great duckweed	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	2.1	0	0.0
Stuckenia pectinata	sago pondweed	993	23.5	2	3.3	9	15.0	2	0.6	5	1.2	78	27.3	6	2.1
Stuckenia vaginata	sheathed pondweed	384	9.1	0	0.0	0	0.0	4	1.1	0	0.0	26	9.1	0	0.0
Utricularia sp.	bladderwort	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Vallisneria americana	wild celery, eel grass	589	13.9	0	0.0	13	21.7	4	1.1	10	2.4	8	2.8	0	0.0
Wolffia columbiana	watermeal	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Zannichellia palustris	horned pondweed	300	7.1	11	18.3	0	0.0	26	7.3	4	1.0	43	15.0	5	1.7
Pithophora sp.	**benthic algae**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**
filamentous algae	**filamentous algae**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**
Total occurrences of all species from all rake tosses		21015		271		266		498		196		721		278	
		Mean		Mean		Mean		Mean		Mean		Mean		Mean	
Plant Species Occurrence (species per rake-toss)		**4.97**		**4.52**		**4.43**		**1.39**		**0.47**		**2.52**		**0.97**	
Non-native Species Occurrence (species per rake-toss)		**1.83**		**1.87**		**1.62**		**0.54**		**0.07**		**0.65**		**0.28**	
Native Plant Occurrence (species per rake-toss)		**3.14**		**2.65**		**2.82**		**0.85**		**0.39**		**1.87**		**0.69**	
		FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%	FREQ	%
Plant Frequency (rake-tosses with a plant species)		**4205**	**99.41**	**59**	**98.33**	**59**	**98.33**	**195**	**54.47**	**106**	**25.36**	**184**	**64.34**	**106**	**37.06**
Non-native Plant Frequency (rake-tosses with a non-native plant)		**4134**	**97.73**	**54**	**90.00**	**52**	**86.67**	**148**	**41.34**	**29**	**6.94**	**109**	**38.11**	**52**	**18.18**
Native Plant Frequency (rake-tosses with a native plant)		**4029**	**95.25**	**59**	**98.33**	**59**	**98.33**	**154**	**43.02**	**101**	**24.16**	**177**	**61.89**	**103**	**36.01**
Number of Rake-tosses		**4230**		**60**		**60**		**358**		**418**		**286**		**286**	

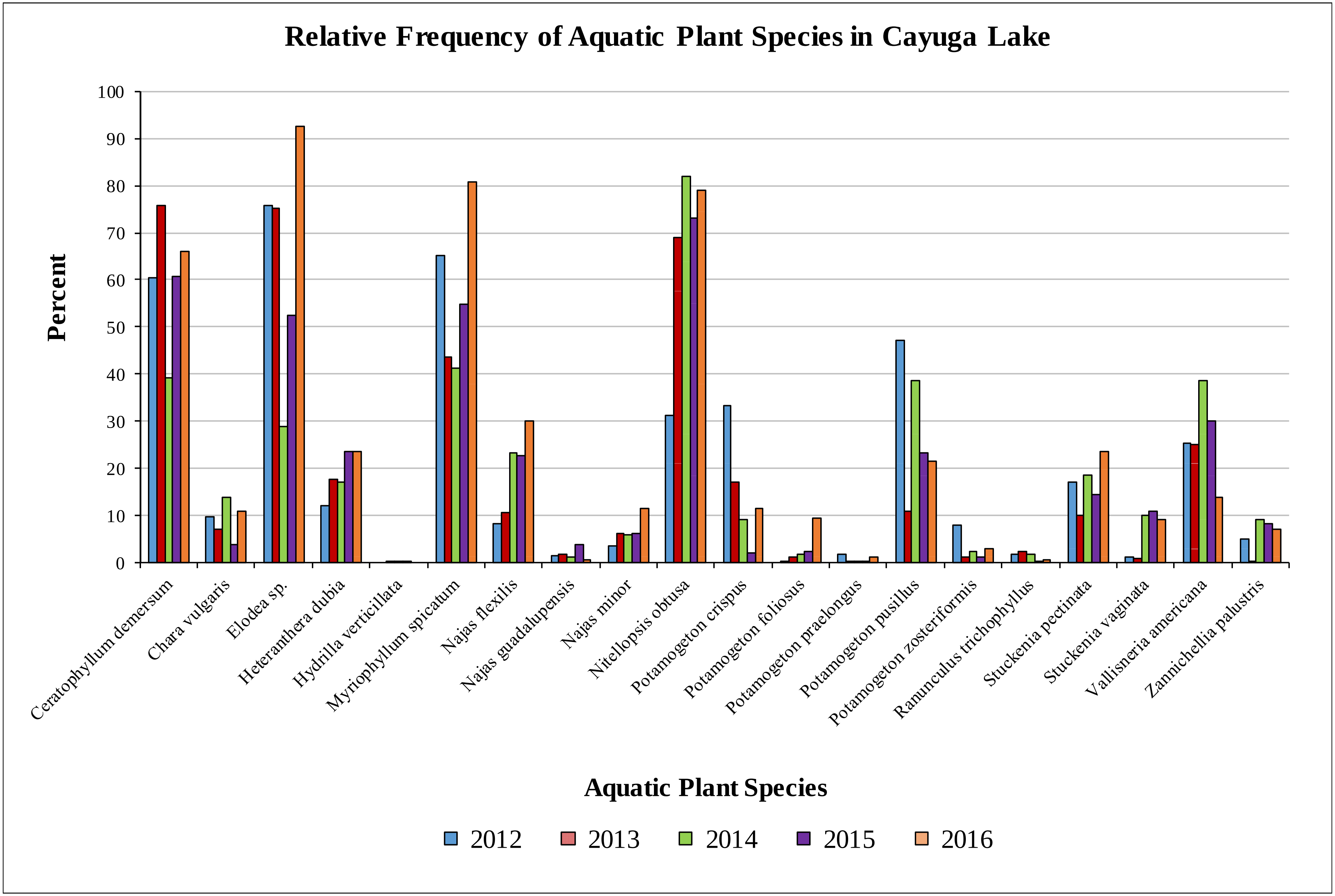
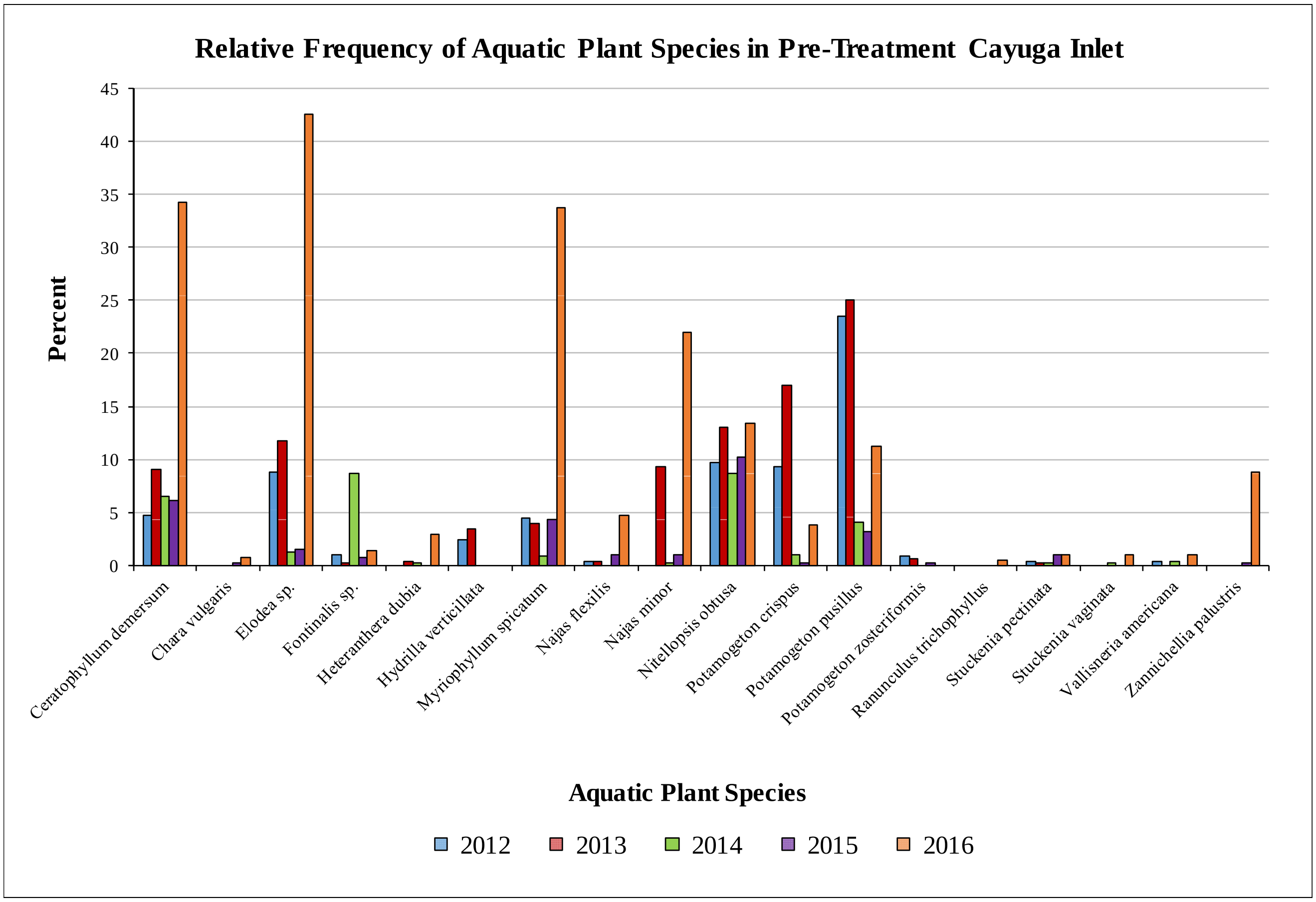


Figure 22. Percentage an individual species occurred out of all rake tosses made in the Lake during the stated year.



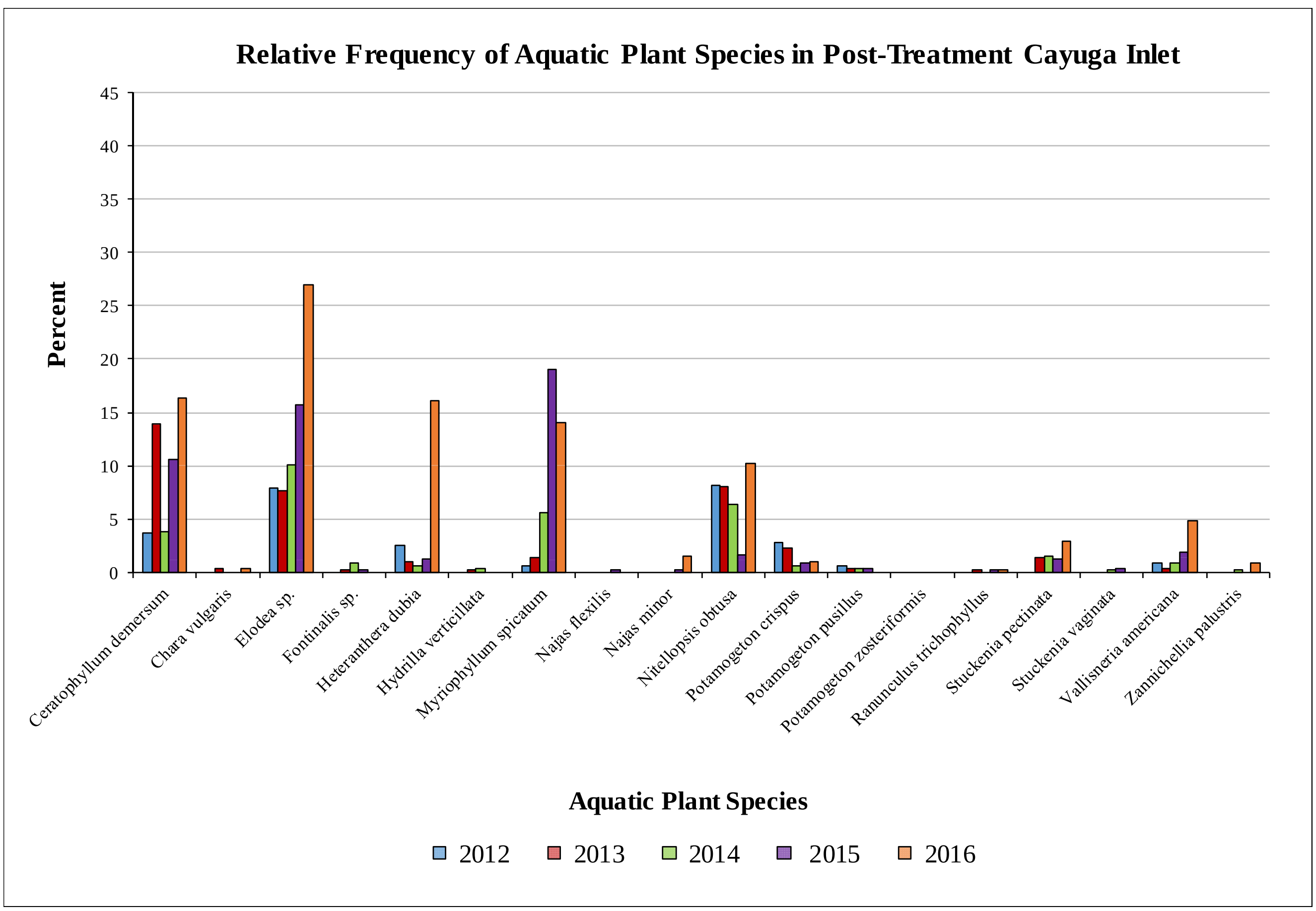
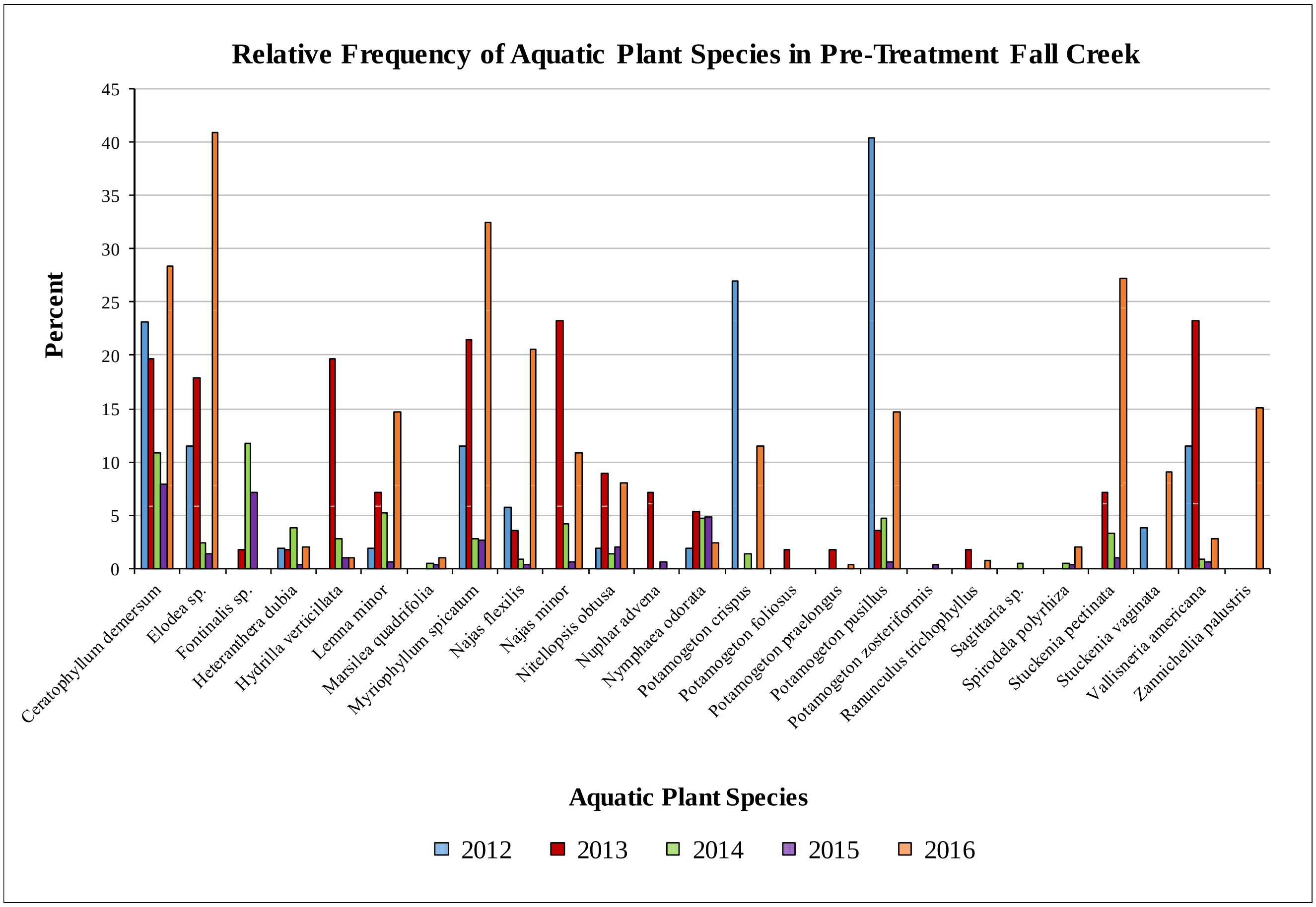


Figure 23. Percentage an individual species occurred out of all rake tosses made in the Inlet during the stated year for pre-treatment (top) and post-treatment (bottom).



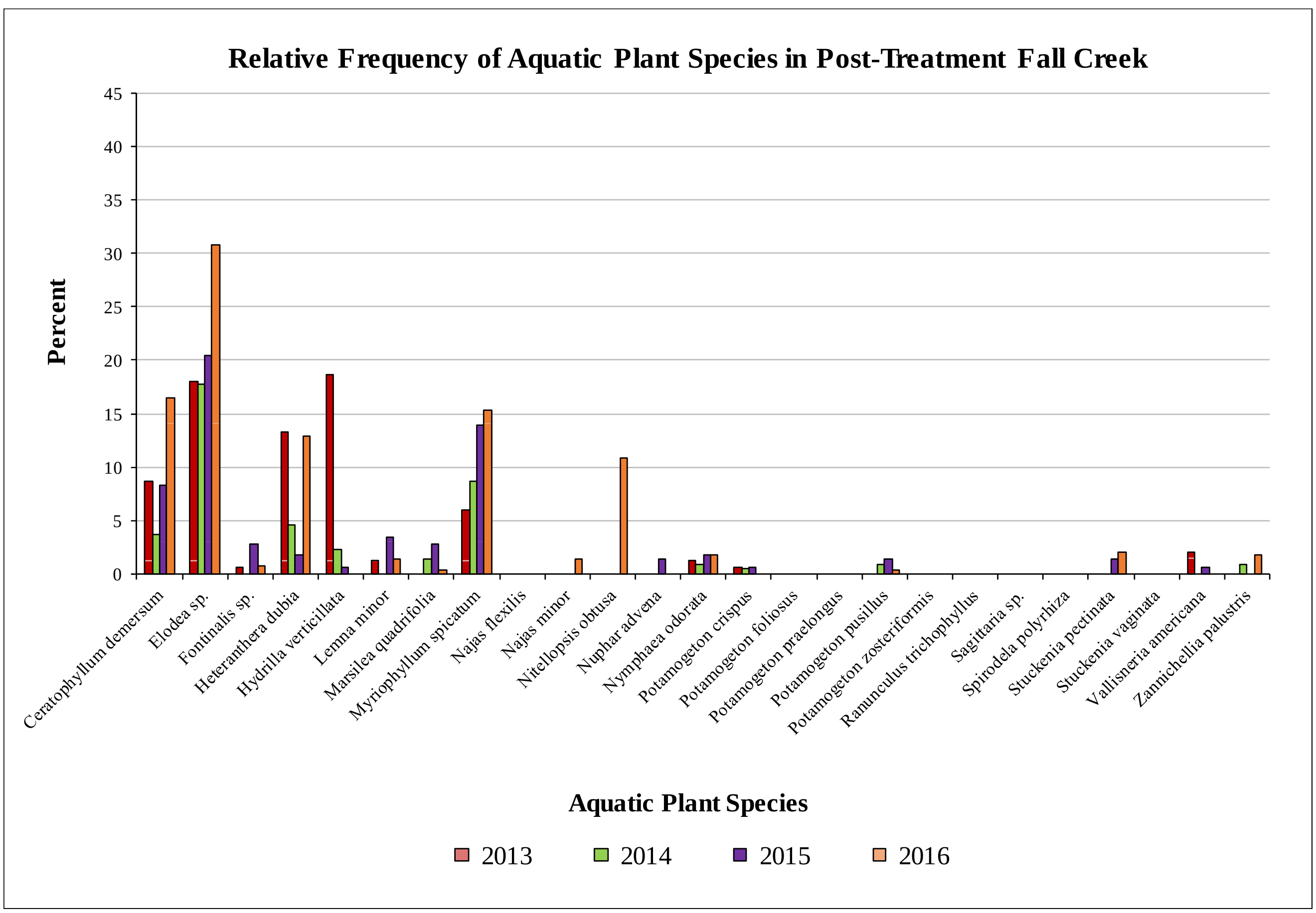


Figure 24. Percentage an individual species occurred out of all rake tosses made in Fall Creek during the stated year for pre-treatment (top) and post-treatment (bottom).

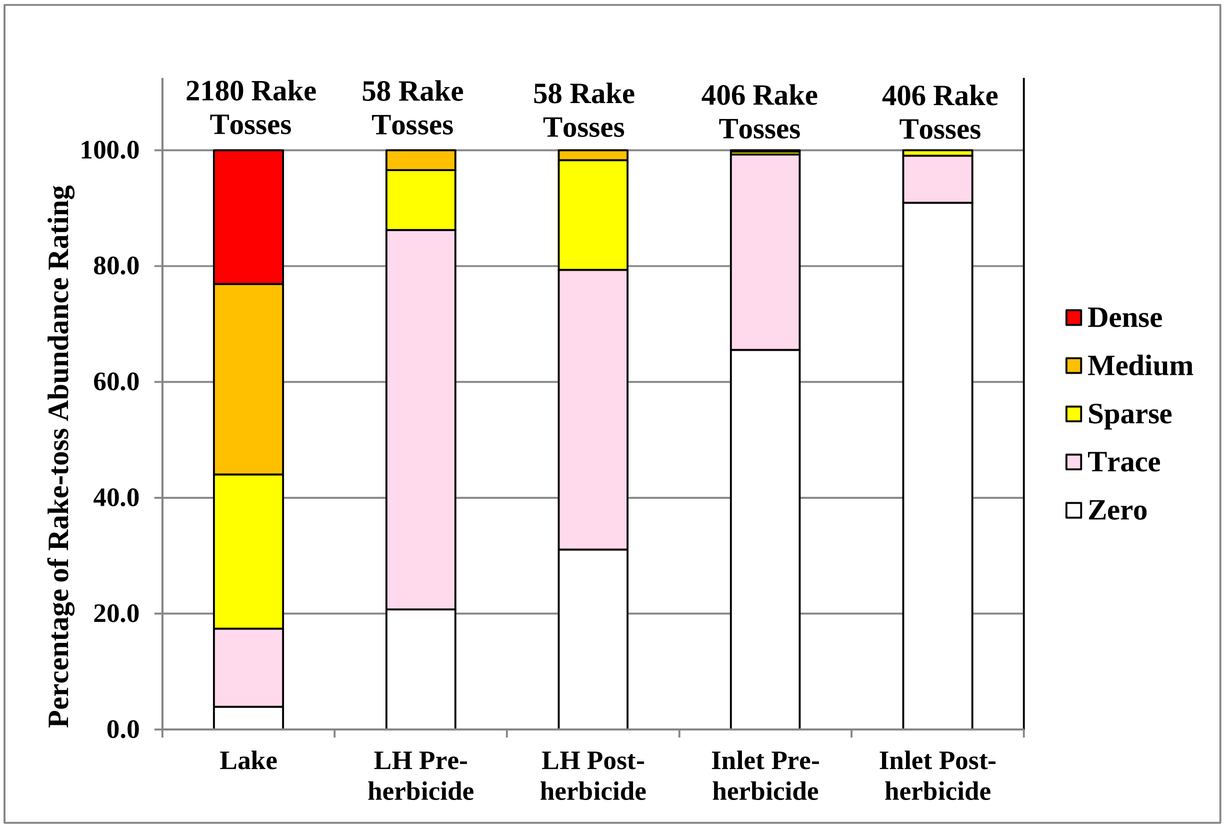


Figure 25. 2012 summary of the rake-toss abundance ratings for all rake-tosses made in surveys of Cayuga Lake, the Lighthouse Area of the Inlet and the Inlet proper.

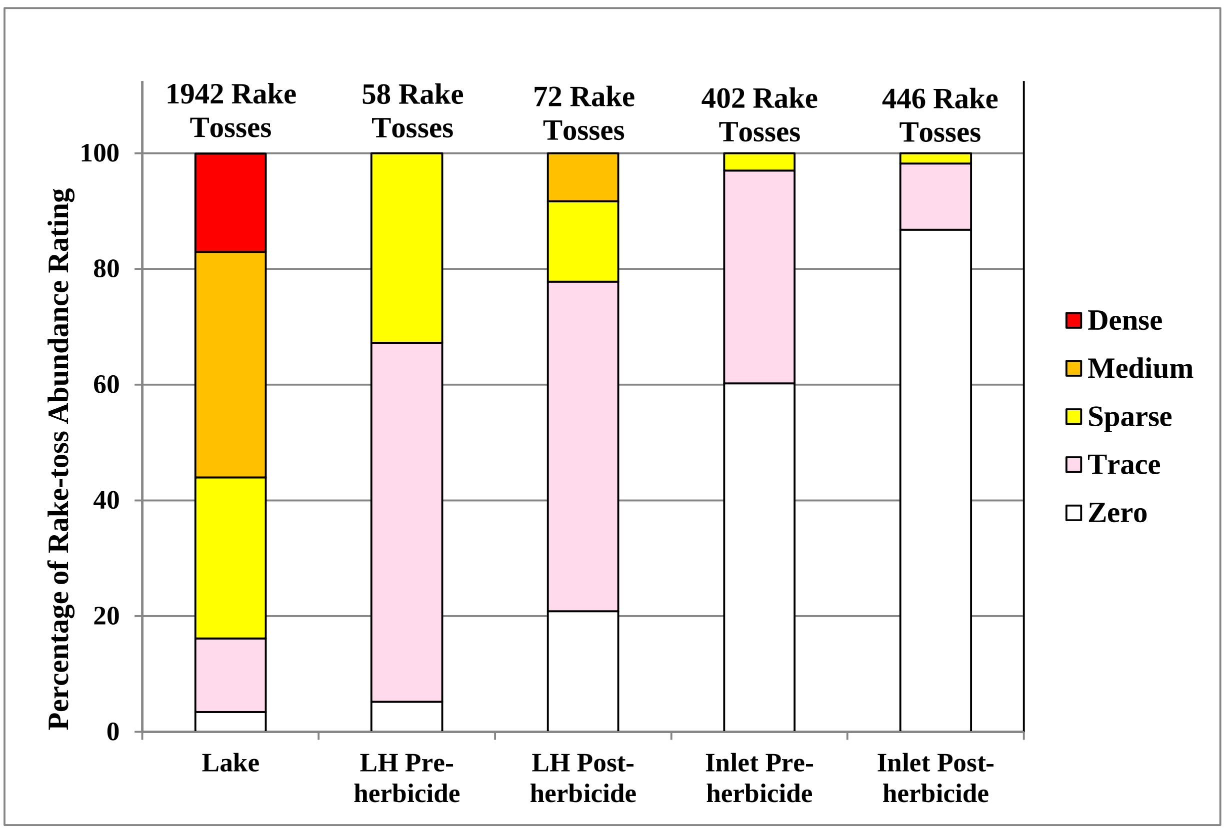


Figure 26. 2013 summary of the rake-toss abundance ratings for all rake-tosses made in surveys of Cayuga Lake, the Lighthouse Area of the Inlet and the Inlet proper.

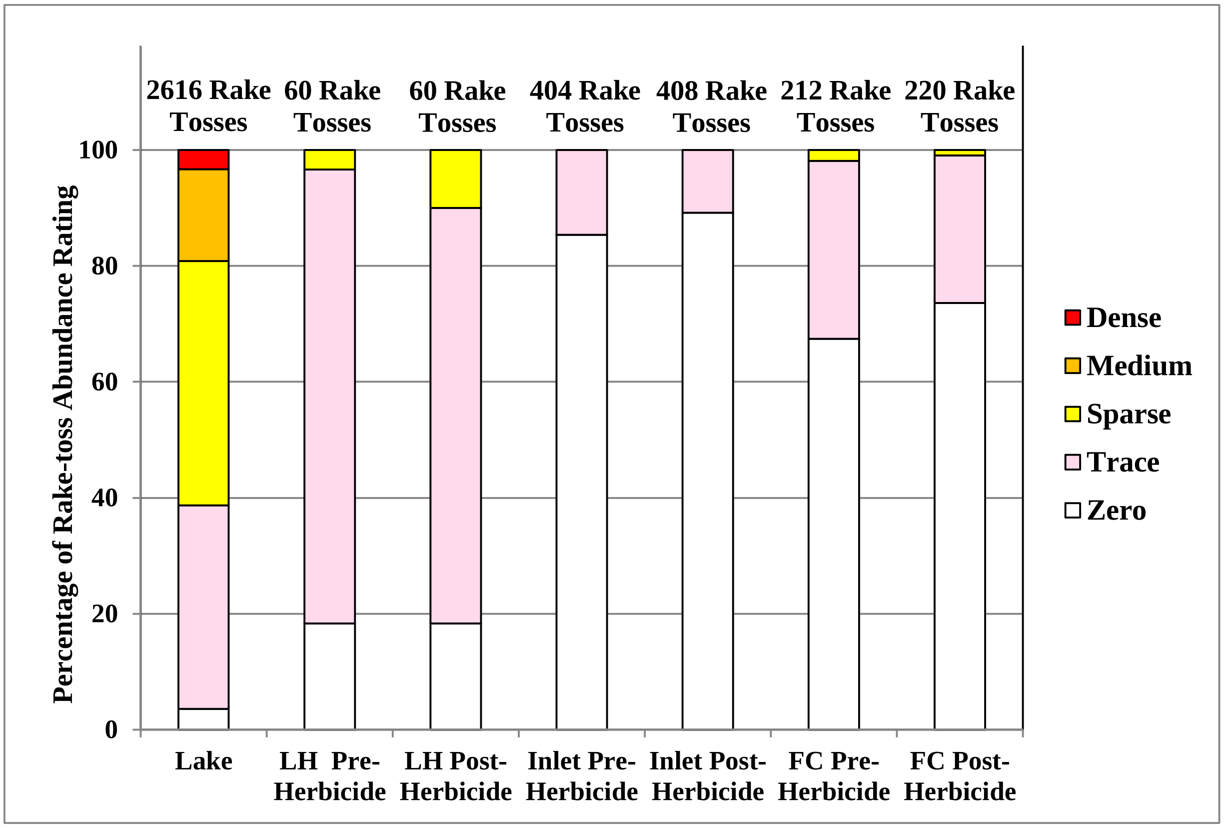


Figure 27. 2014 summary of the rake-toss abundance ratings for all rake-tosses made in surveys of Cayuga Lake, the Lighthouse Area of the Inlet, the Inlet proper and the Fall Creek area.

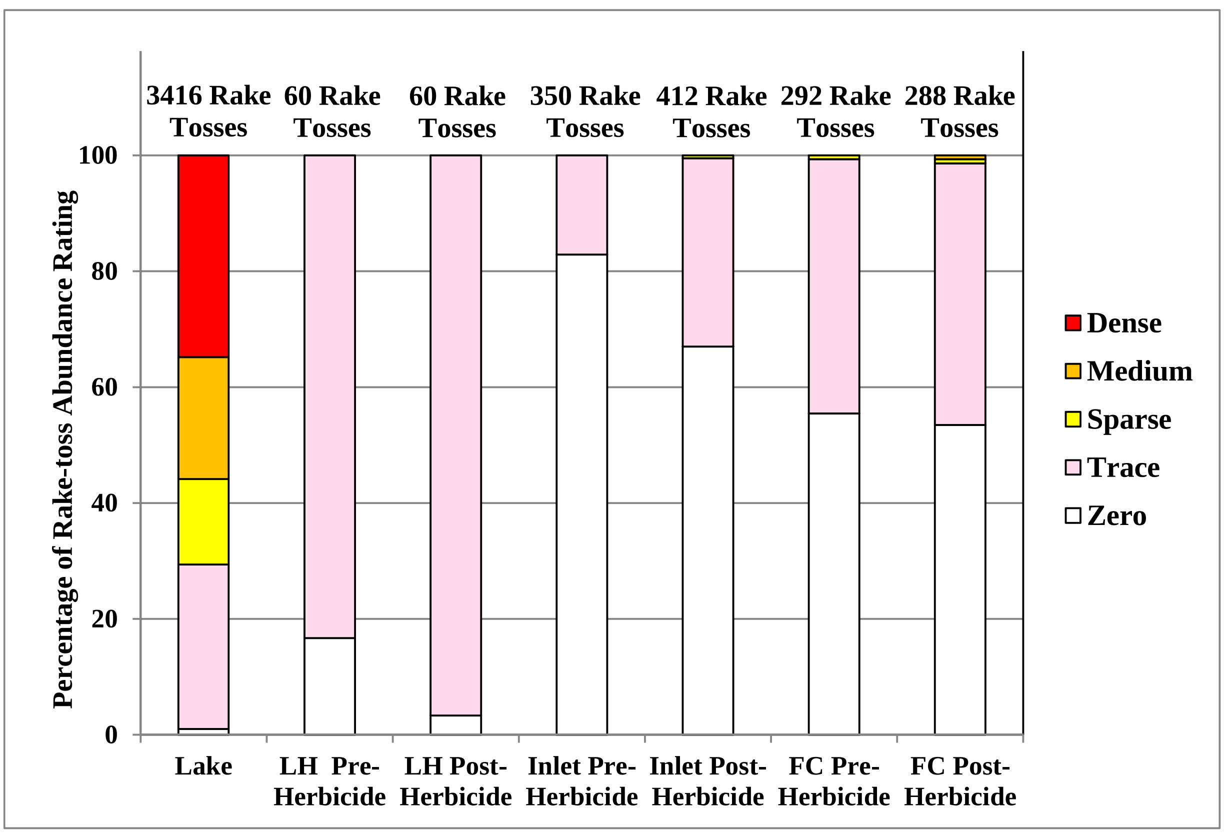


Figure 28. 2015 summary of the rake-toss abundance ratings for all rake-tosses made in surveys of Cayuga Lake, the Lighthouse Area of the Inlet, the Inlet proper and the Fall Creek area.

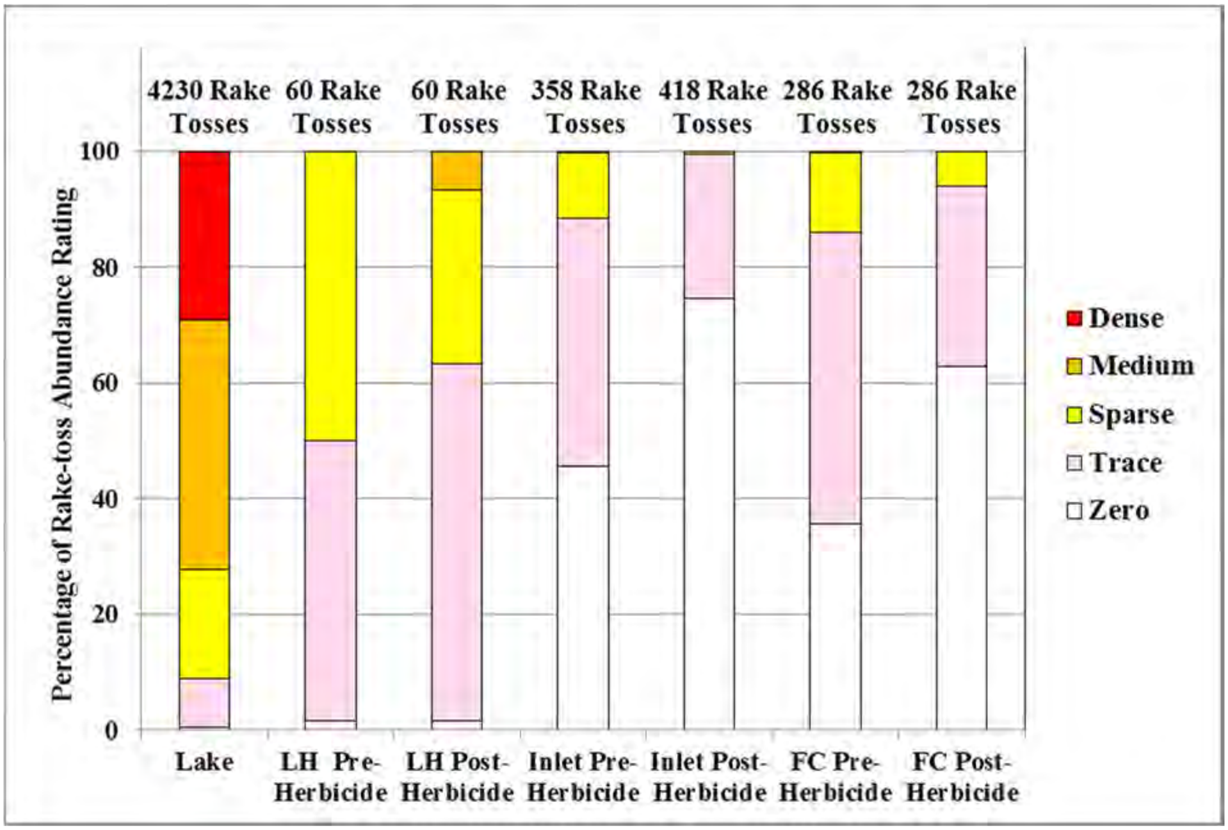


Figure 29. 2016 summary of the rake-toss abundance ratings for all rake-tosses made in surveys of Cayuga Lake, the Lighthouse Area of the Inlet, the Inlet proper and the Fall Creek area.

While this and earlier reports contains a large data set of aquatic plant information, we suggest caution with any in-depth analysis in spite of some obvious trend lines. Individual species have very different annual life cycles and can vary greatly in plant occurrence and mass throughout each seasonal growth period due to distinctive phenology (See Figure 21). These changes in plant mass of individual species may occur rapidly over as short of a period as two weeks while our collection of field data is much longer.

Data tracking the frequency of occurrence presented in Figures 22, 23 and 24 show few possible trends but we will continue to follow. Additionally, when comparisons of relative abundance ratings of all species combined, for years 2012 through 2016 shown in Figures 25-29 that follow, differences in plant mass 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. While there may be possible herbicide effects on non-target species presence and abundance from pre-treatment to post-treatment within the Lighthouse area, Inlet and Fall Creek, they do not appear to be long term effects. The data does not suggest any negative long-term effect on native or non-native plant presence or growth except for the target plant hydrilla. Overall, the aquatic plant community remains relatively stable when considering occurrence and mass with larger shifts between individual species through the growing season. We do note a very large increase in the occurrences and mass of the macro algae *Nitellopsis obtusa* in Cayuga Lake from survey measures in 2012. This plant species continues to expand its range in southern Cayuga Lake since Racine-Johnson Aquatic Ecologists first reported *Nitellopsis obtusa* from plant sampling of southern Cayuga in 2008. The field-recorded rake-toss data are in tables Data 1 - Data 7 (pages 154-334) and new locations of hydrilla discoveries in 2016 are in table Coordinates 1 (pages 335). Our hydrilla locations found in 2016 are on the web in "*i*MapInvasives" owned by NatureServe. http://www.imapinvasives.org/new-yorklogin

The graphs Tuber 1 through Tuber 7 (pages 39-45) following, show a rapid depletion of tuber numbers within the sediment from the initial discovery at all locations. These results appear to be in line with early research (Netherland 1997) that tubers may remain in the sediment up to four years before germinating and that the suggested longer time frames of management of hydrilla by herbicides to eradicate tubers may be excessive.

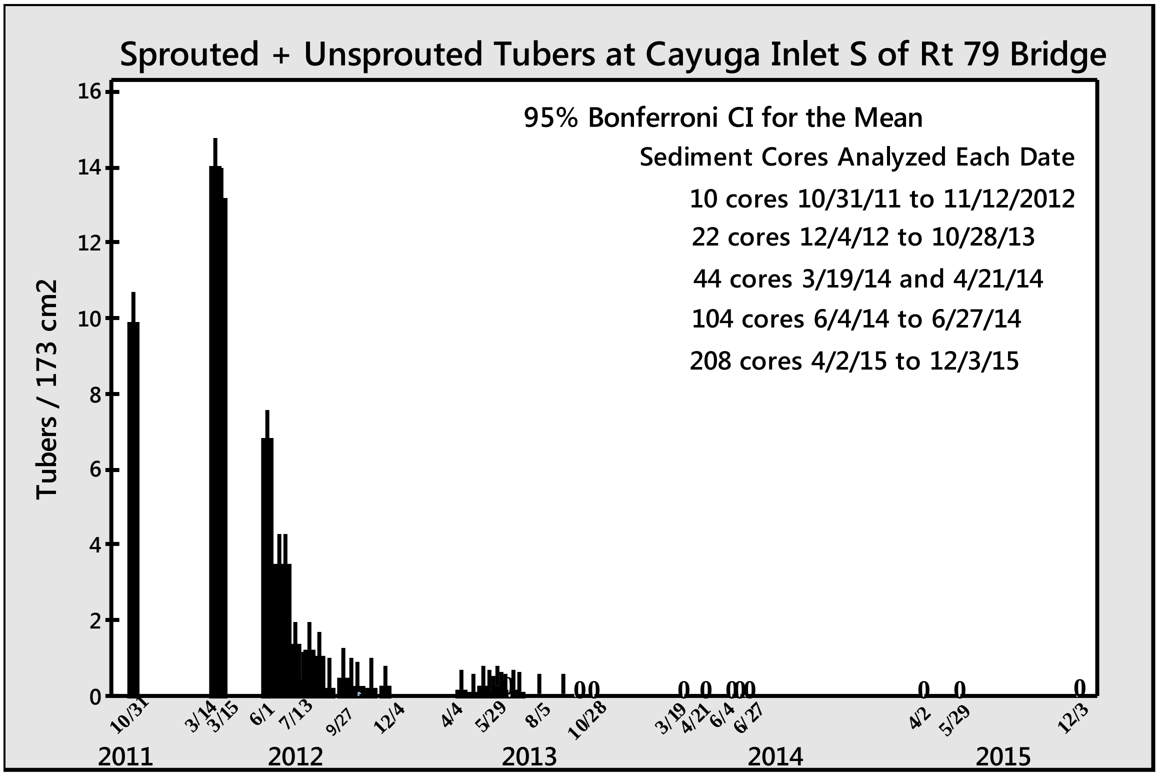
Figure 30. Historical locations of the hydrilla tuber sampling areas from which sediment samples are collected. Sediment samples are then hand-washed through fine mesh screens searching for hydrilla tubers to determine tuber presence and density. In 2016 we did not collect sediment samples from the Cayuga Inlet South of the Rt. 79 Bridge and the Inlet at Linderman Creek because of lack of any finds in 2014 and 2015.

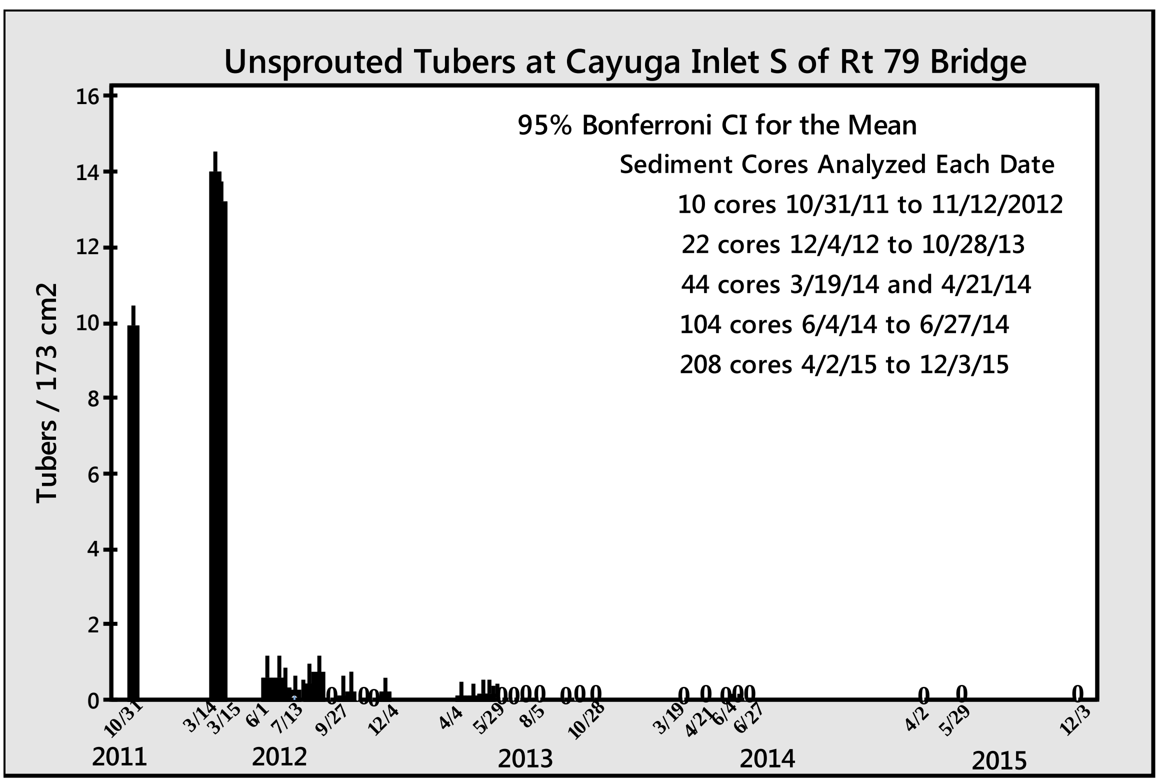
Table 3. Hydrilla tuber density in 2014 to 2016 summarized by date collected, location, number of sediment cores removed, total tubers (sprouted + un-sprouted) recovered and the number of total tubers that had not sprouted. Location SI is the Inlet south of the Rt. 79 Bridge. FM is in Cascadilla Creek near the Farmer's Market. CUB is the bay at the Cornell University Crew Boathouse. LI is in the Cayuga Inlet at the mouth of Linderman Creek. GCL is the lagoon in Fall Creek at the Golf Course. SP is the pond off Fall Creek at Stewart Park and FCC is the small cove on the east side of Fall Creek southeast of the footbridge crossing Fall Creek at Stewart Park.

2014 to 2016 Tuber Data Summary								
Date	Location	# of samples	Total Tubers	Unsprouted	Total Tubers/n	Unsprouted Tubers/n	Total Tubers/m^2	Unsprouted Tubers/m^2
3/19/2014	SI	44	0	0	0.000	0.000	0.000	0.000
4/2/2014	FM	44	2	0	0.045	0.000	2.627	0.000
4/2/2014	CUB	44	0	0	0.000	0.000	0.000	0.000
4/3/2014	LI	44	0	0	0.000	0.000	0.000	0.000
4/7/2014	GC	44	86	84	1.955	1.909	112.980	110.352
4/9/2014	GC	44	40	30	0.909	0.682	52.549	39.411
4/21/2014	SI	44	0	0	0.000	0.000	0.000	0.000
4/21/2014	FM	44	2	1	0.045	0.023	2.627	1.314
4/21/2014	CUB	44	2	1	0.045	0.023	2.627	1.314
4/21/2014	LI	44	0	0	0.000	0.000	0.000	0.000
4/28/2014	GC	88	100	95	1.136	1.080	65.686	62.401
5/20/2014	GC	88	54	21	0.614	0.239	35.470	13.794
5/27/2014	SP	88	22	9	0.250	0.102	14.451	5.912
5/29/2014	FM	104	2	0	0.019	0.000	1.112	0.000
5/30/2014	CUB	104	0	0	0.000	0.000	0.000	0.000
6/2/2014	LI	104	0	0	0.000	0.000	0.000	0.000
6/4/2014	SI	104	0	0	0.000	0.000	0.000	0.000
6/10/2014	GC	88	51	9	0.580	0.102	33.500	5.912
6/12/2014	SP	88	16	0	0.182	0.000	10.510	0.000
6/16/2014	FM	104	0	0	0.000	0.000	0.000	0.000
6/16/2014	CUB	104	1	1	0.010	0.010	0.556	0.556
6/17/2014	SI	104	0	0	0.000	0.000	0.000	0.000
6/17/2014	LI	104	0	0	0.000	0.000	0.000	0.000
6/19/2014	GC	88	79	37	0.898	0.420	51.892	24.304
6/20/2014	SP	88	15	0	0.170	0.000	9.853	0.000
6/23/2014	CUB	104	0	0	0.000	0.000	0.000	0.000
6/27/2014	SI	104	0	0	0.000	0.000	0.000	0.000
6/27/2014	FM	104	0	0	0.000	0.000	0.000	0.000
6/27/2014	LI	104	0	0	0.000	0.000	0.000	0.000
12/9/2014	GC	208	59	5	0.284	0.024	16.396	1.390
12/22/2014	CUB	208	41	17	0.197	0.082	11.394	4.724
12/22/2014	FM	208	1	0	0.005	0.000	0.278	0.000
3/16/2015	FCC	130	9	6	0.069	0.046	4.002	2.668
4/2/2015	SI	208	0	0	0.000	0.000	0.000	0.000
4/13/2015	LI	208	0	0	0.000	0.000	0.000	0.000
4/20/2015	SP	104	7	1	0.067	0.010	3.891	0.556

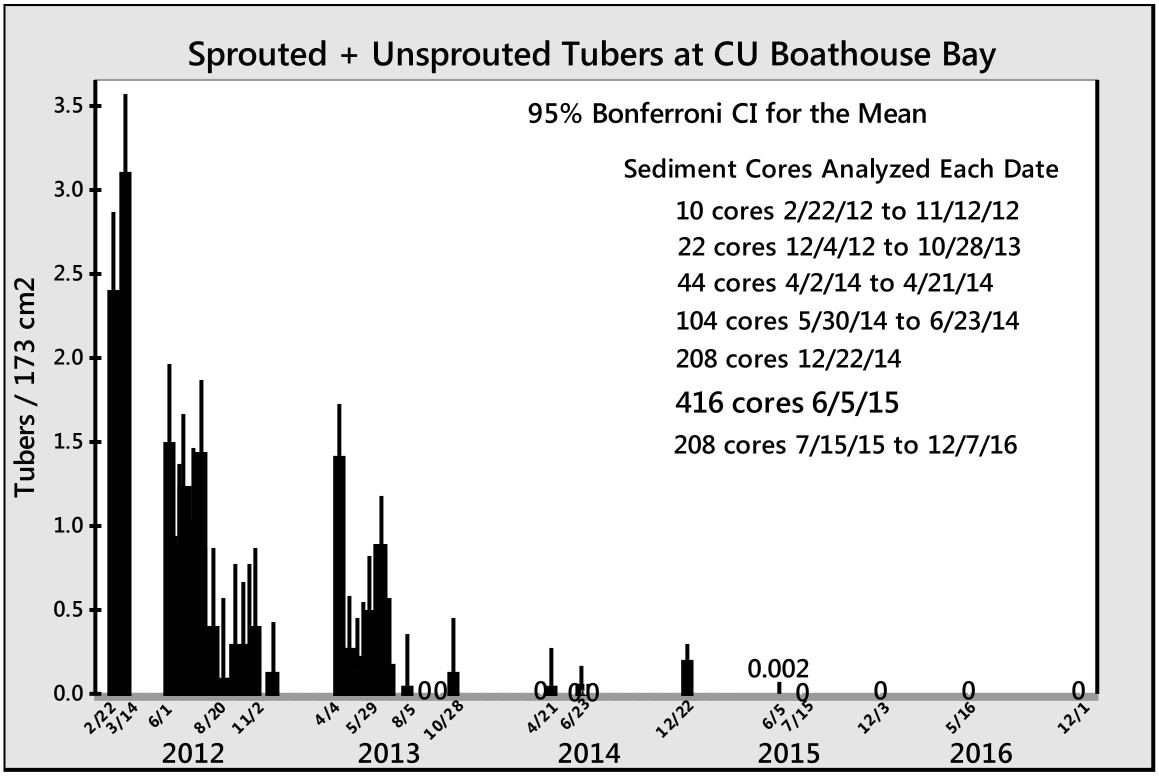
Table 3. (cont.) Hydrilla tuber density in 2014 to 2016 summarized by date collected, location, number of sediment cores removed, total tubers (sprouted + un-sprouted) recovered and the number of total tubers that had not sprouted. Location SI is the inlet south of the Rt. 79 Bridge. FM is in Cascadilla Creek near the Farmer's Market. CUB is the bay at the Cornell University Crew Boathouse. LI is in the Cayuga Inlet at the mouth of Linderman Creek. GC is the lagoon in Fall Creek at the Golf Course. SP is the pond off Fall Creek at Stewart Park and FCC is the small cove on the east side of Fall Creek southeast of the footbridge crossing Fall Creek at Stewart Park.

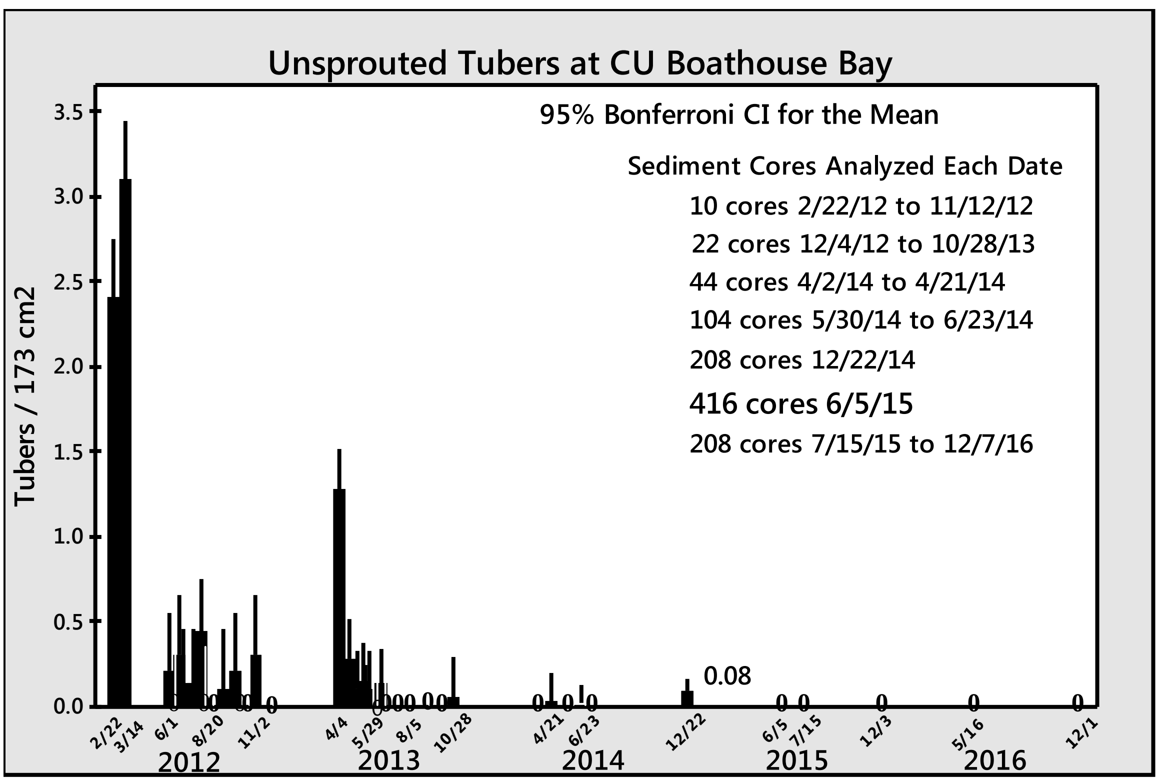
2014 to 2016 Tuber Data Summary								
Date	Location	# of samples	Total Tubers	Unsprouted	Total Tubers/n	Unsprouted Tubers/n	Total Tubers/m^2	Unsprouted Tubers/m^2
5/26/2015	LI	208	0	0	0.000	0.000	0.000	0.000
5/27/2015	FM	208	0	0	0.000	0.000	0.000	0.000
5/29/2015	SI	208	0	0	0.000	0.000	0.000	0.000
6/4/2015	CUB	208	0	0	0.000	0.000	0.000	0.000
6/5/2015	CUB	208	1	0	0.005	0.000	0.278	0.000
6/8/2015	GC	208	16	0	0.077	0.000	4.446	0.000
6/10/2015	FCC	208	6	0	0.029	0.000	1.667	0.000
6/11/2015	SP	208	4	1	0.019	0.005	1.112	0.278
6/9/2015	GC	208	17	5	0.082	0.024	4.724	1.390
7/10/2015	SP	208	3	1	0.014	0.005	0.834	0.278
7/15/2015	CUB	208	0	0	0.000	0.000	0.000	0.000
7/27/2015	FCC	208	0	0	0.000	0.000	0.000	0.000
12/3/2015	SI	208	0	0	0.000	0.000	0.000	0.000
12/3/2015	CUB	208	0	0	0.000	0.000	0.000	0.000
12/7/2015	GC	208	2	0	0.010	0.000	0.556	0.000
12/7/2015	SP	208	0	0	0.000	0.000	0.000	0.000
12/11/2015	LI	208	0	0	0.000	0.000	0.000	0.000
12/11/2015	FM	208	0	0	0.000	0.000	0.000	0.000
12/16/2015	FCC	208	0	0	0.000	0.000	0.000	0.000
5/2/2016	FM	208	0	0	0.000	0.000	0.000	0.000
5/6/2016	SP	208	0	0	0.000	0.000	0.000	0.000
5/10/2016	FCC	208	0	0	0.000	0.000	0.000	0.000
5/12/2016	GC	208	0	0	0.000	0.000	0.000	0.000
5/16/2016	CUB	208	0	0	0.000	0.000	0.000	0.000
11/14/2016	GC	208	0	0	0.000	0.000	0.000	0.000
11/16/2016	SP	208	0	0	0.000	0.000	0.000	0.000
11/28/2106	FM	208	0	0	0.000	0.000	0.000	0.000
12/1/2016	CUB	208	0	0	0.000	0.000	0.000	0.000
12/7/2016	FCC	208	0	0	0.000	0.000	0.000	0.000



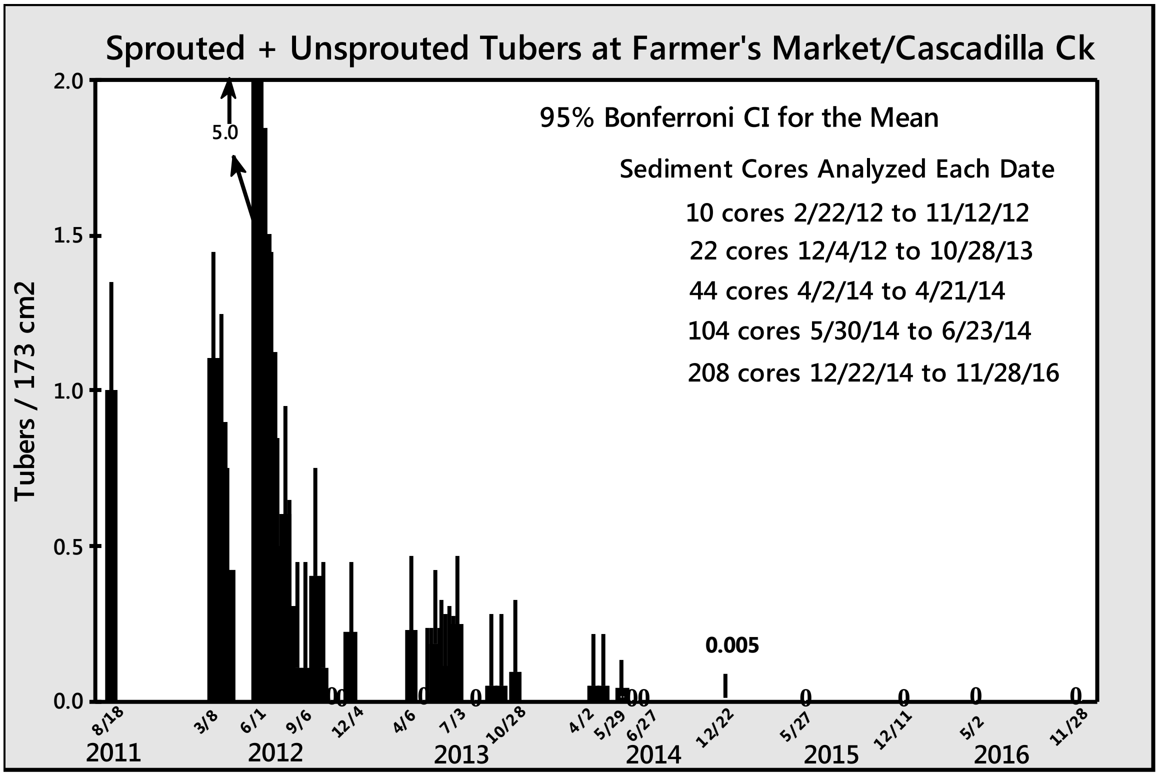


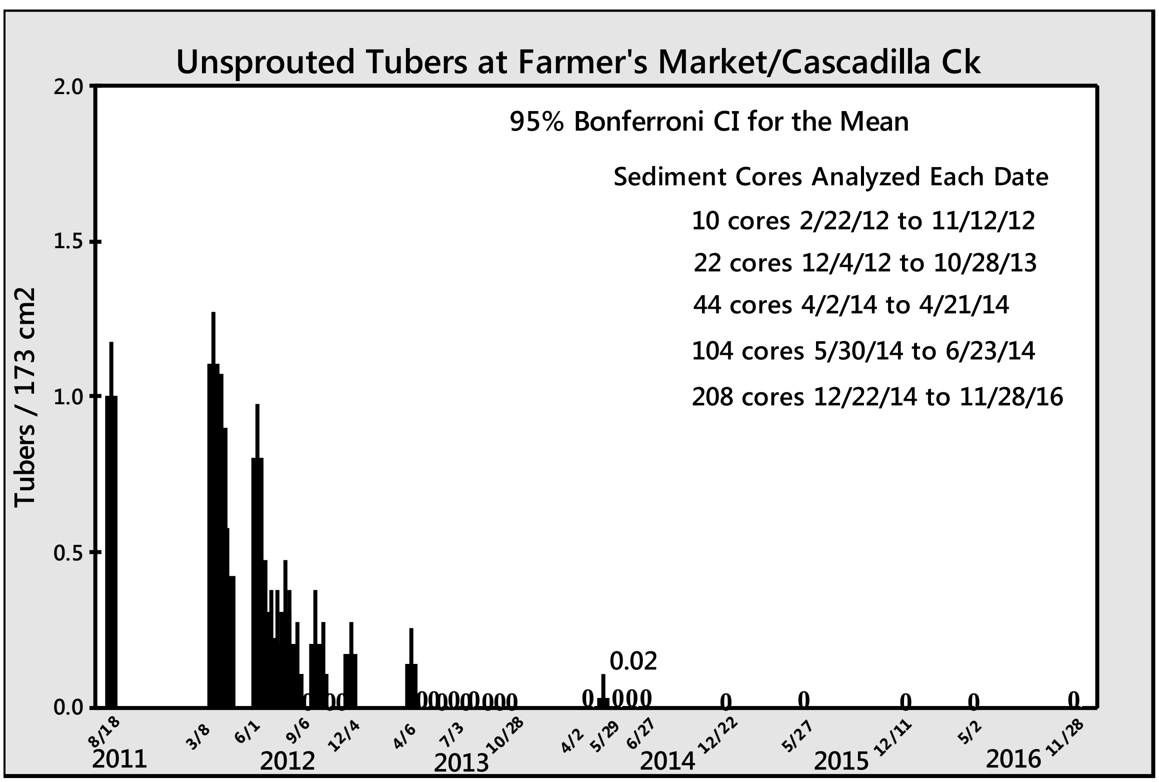
Tuber 1. Mean density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area Cayuga Inlet south of Rt.79 Bridge. Total tubers (top graph) and un-sprouted tubers (bottom graph).



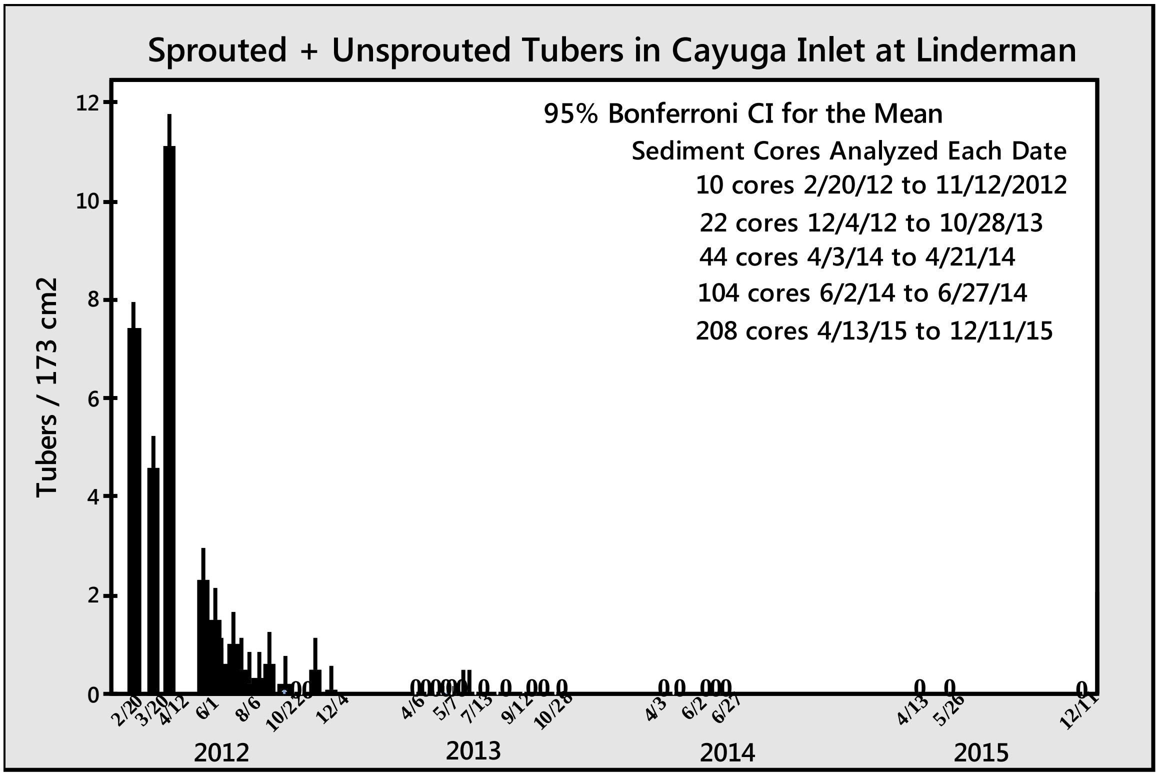


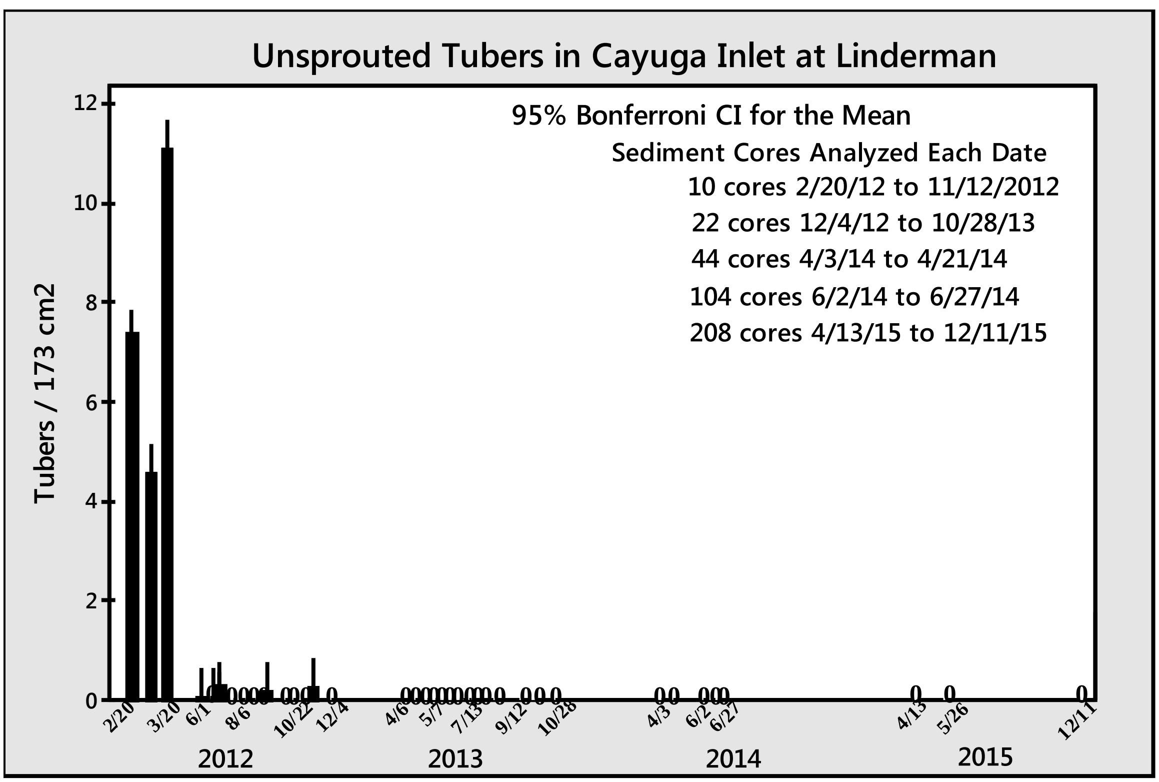
Tuber 2. Mean density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area CU Boathouse Bay. Total tubers (top graph) and un-sprouted tubers (bottom graph).



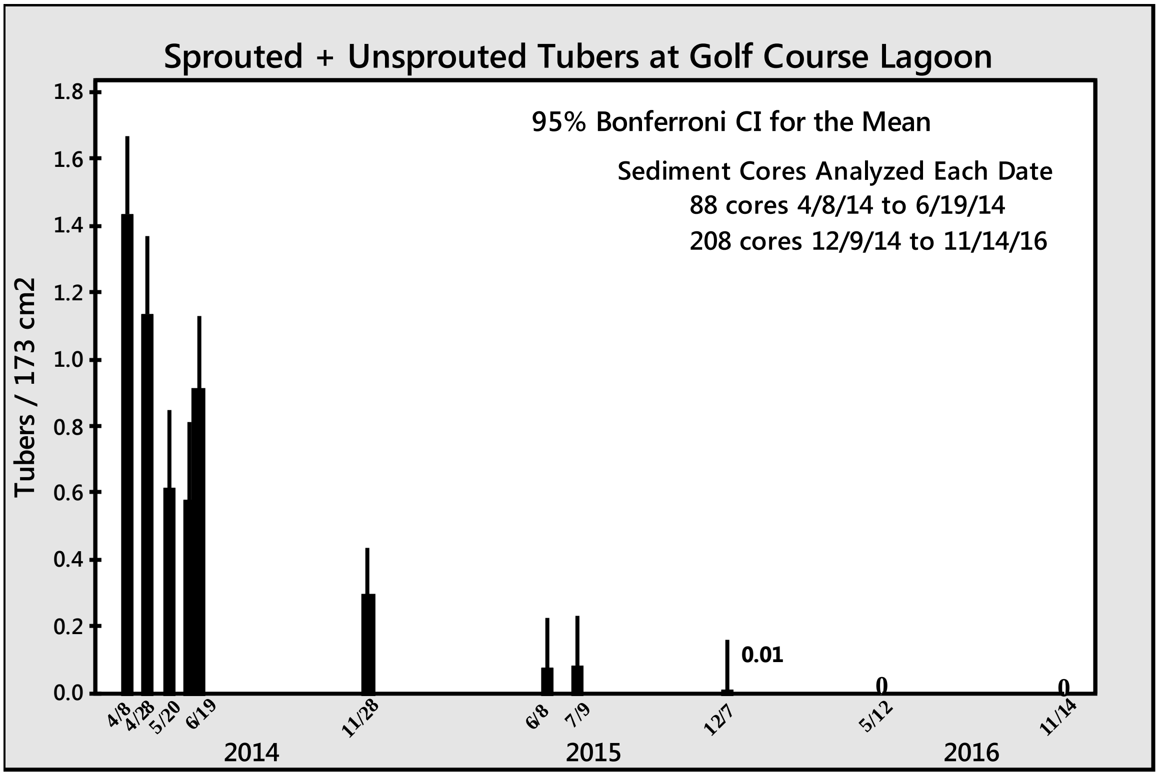


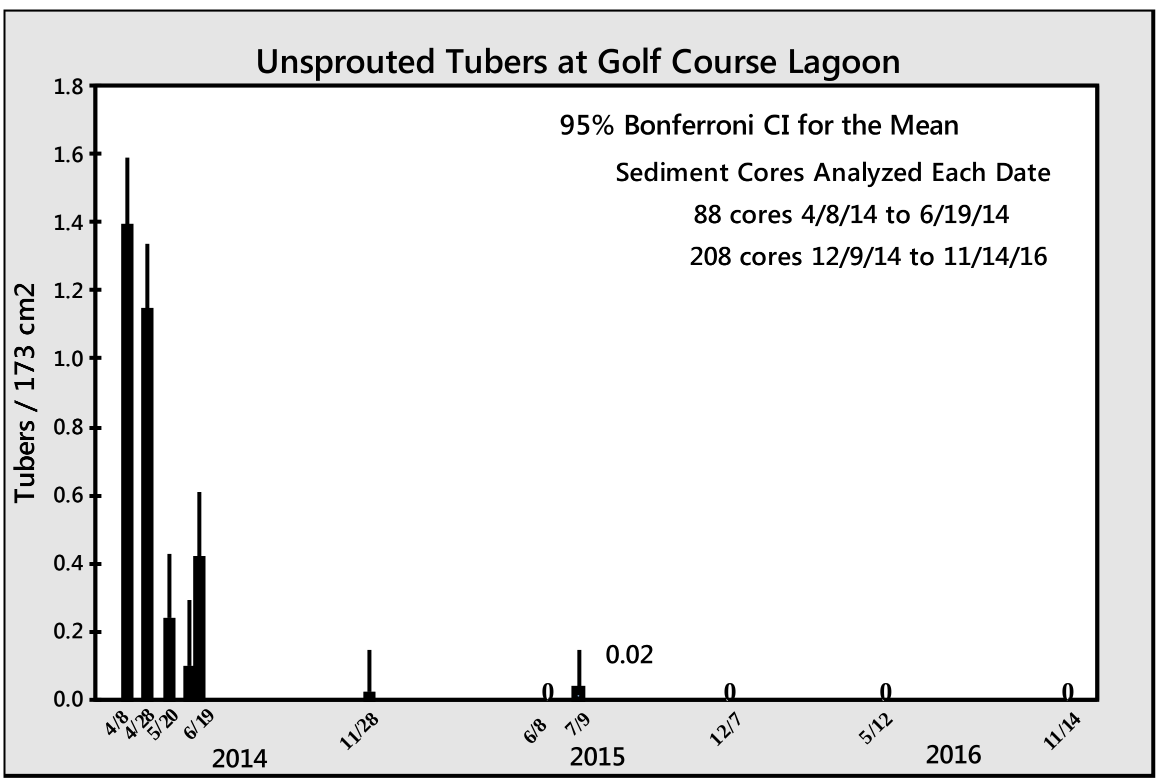
Tuber 3. Mean density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area Farmer's Market/Cascadilla Ck. Total tubers (top graph) and un-sprouted tubers (bottom graph).



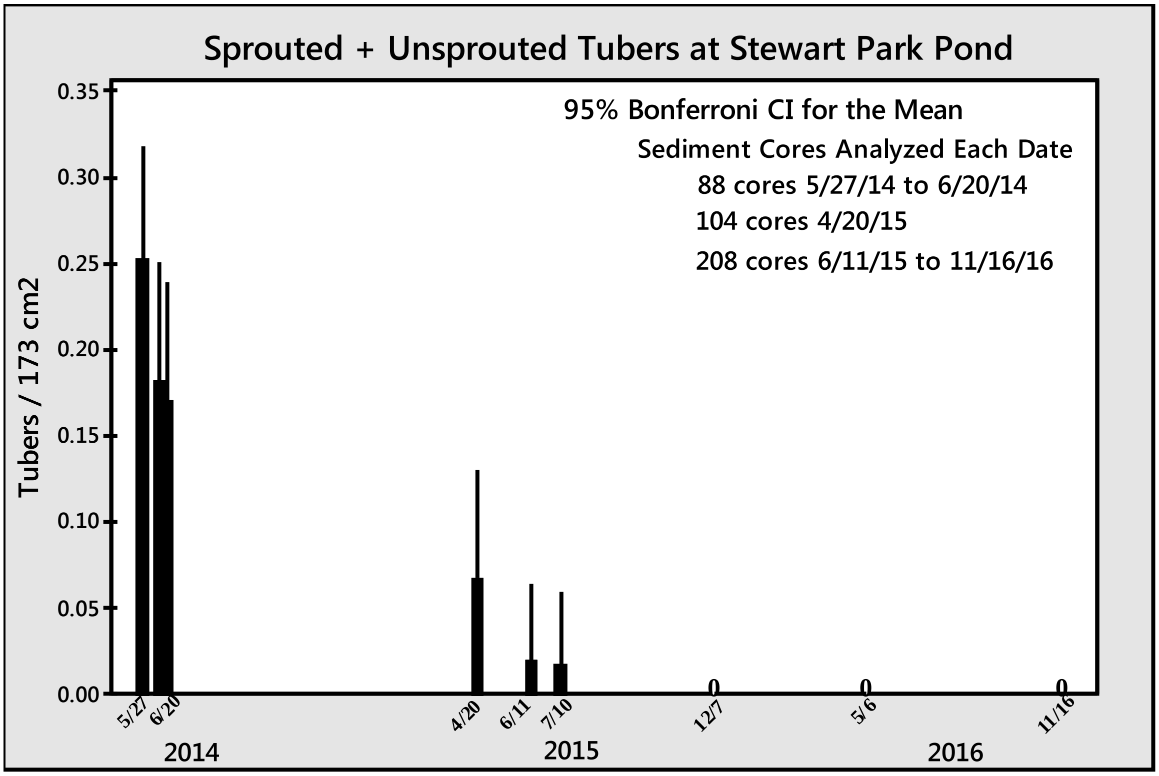


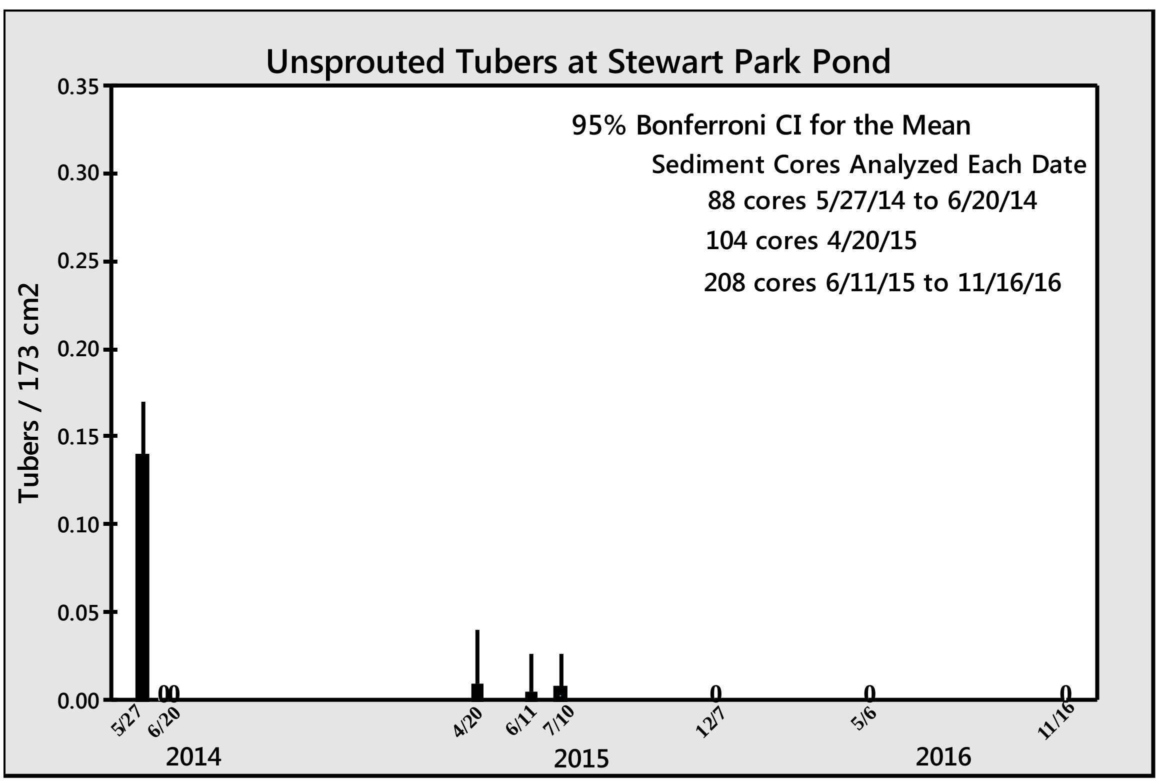
Tuber 4. Mean density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area Cayuga Inlet at Linderman. Total tubers (top graph) and un-sprouted tubers (bottom graph).



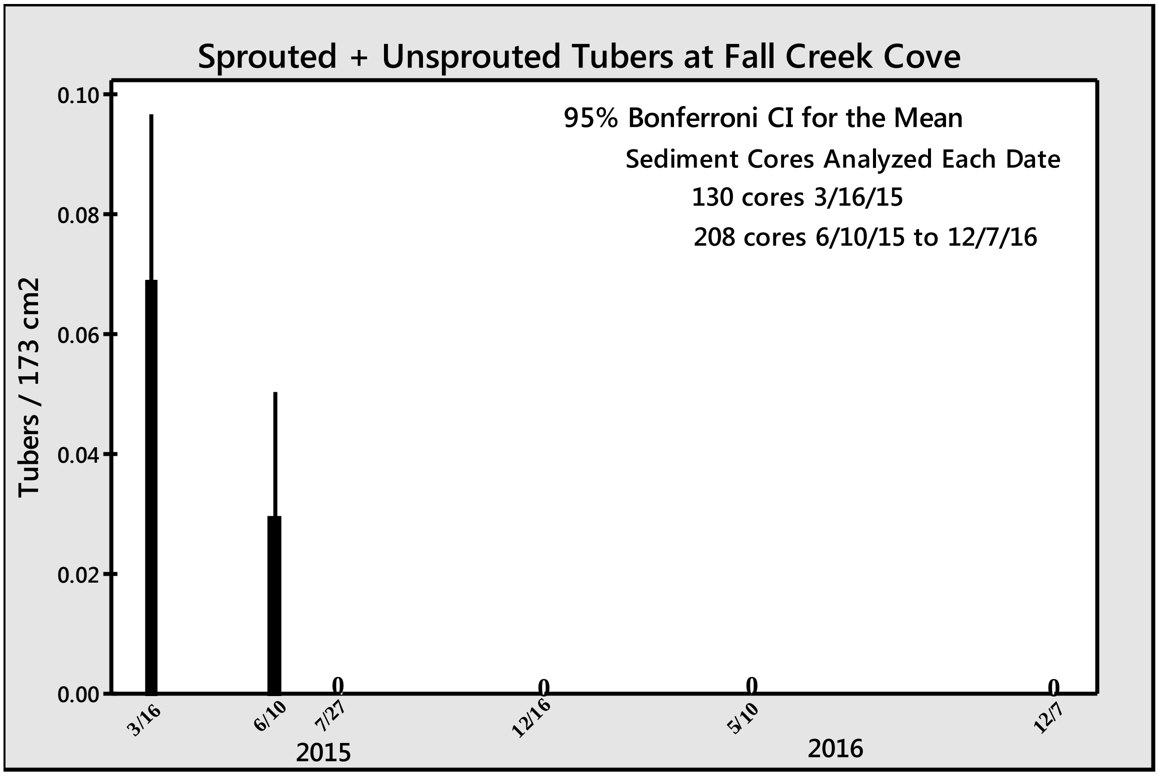


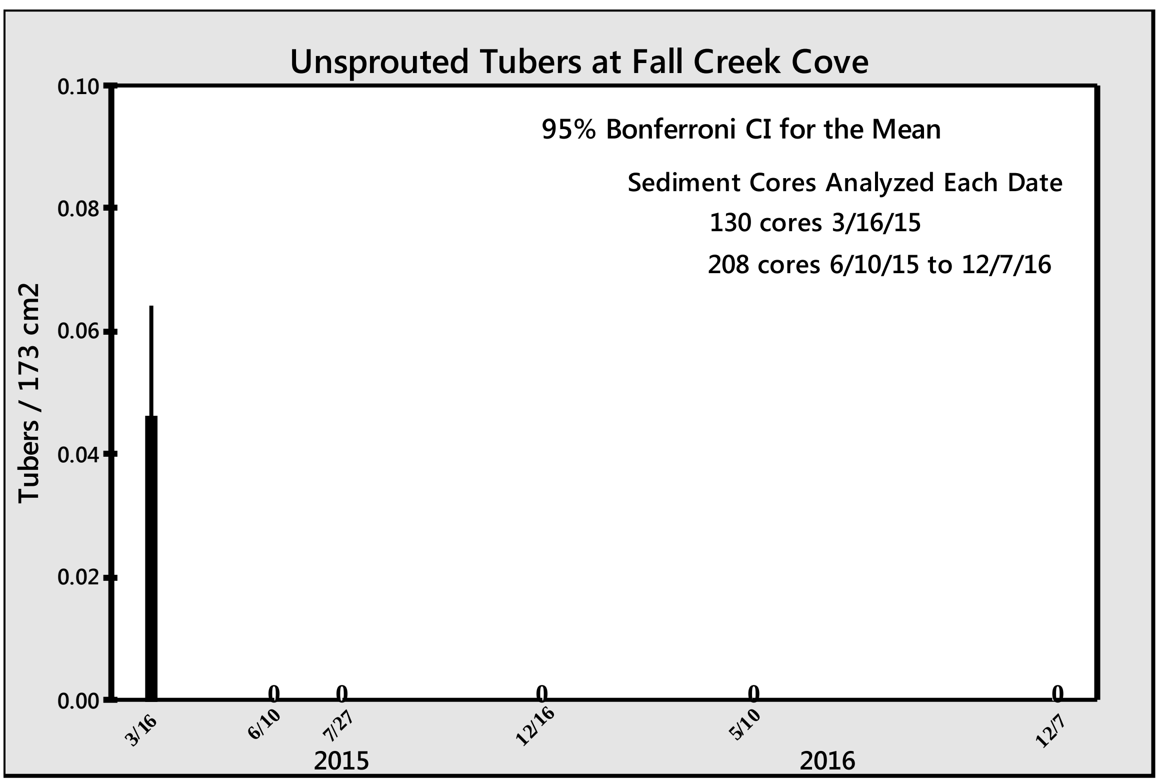
Tuber 5. Mean density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area Golf Course Lagoon. Total tubers (top graph) and un-sprouted tubers (bottom graph).



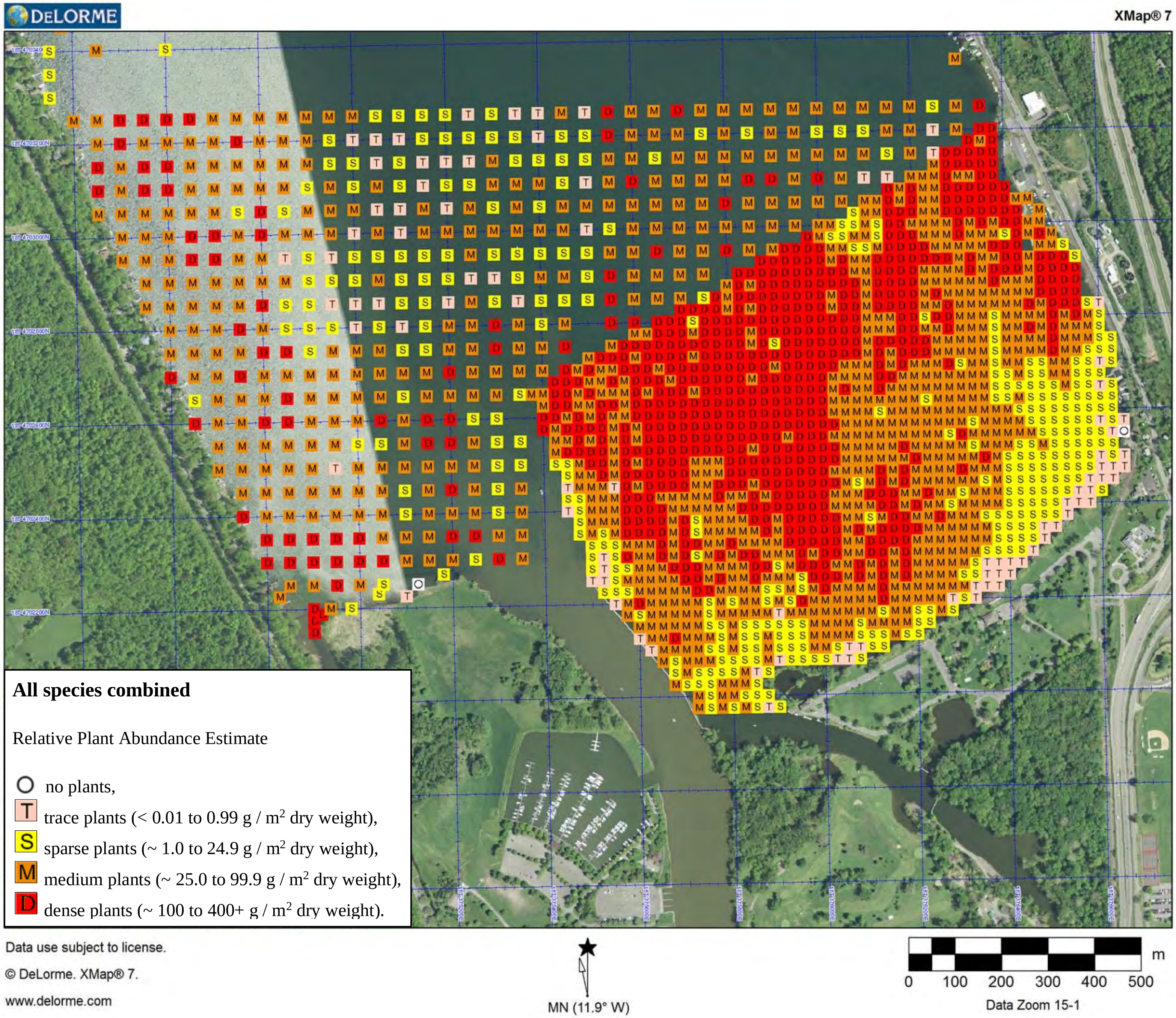


Tuber 6. Mean density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area Stewart Park Pond. Total tubers (top graph) and un-sprouted tubers (bottom graph).

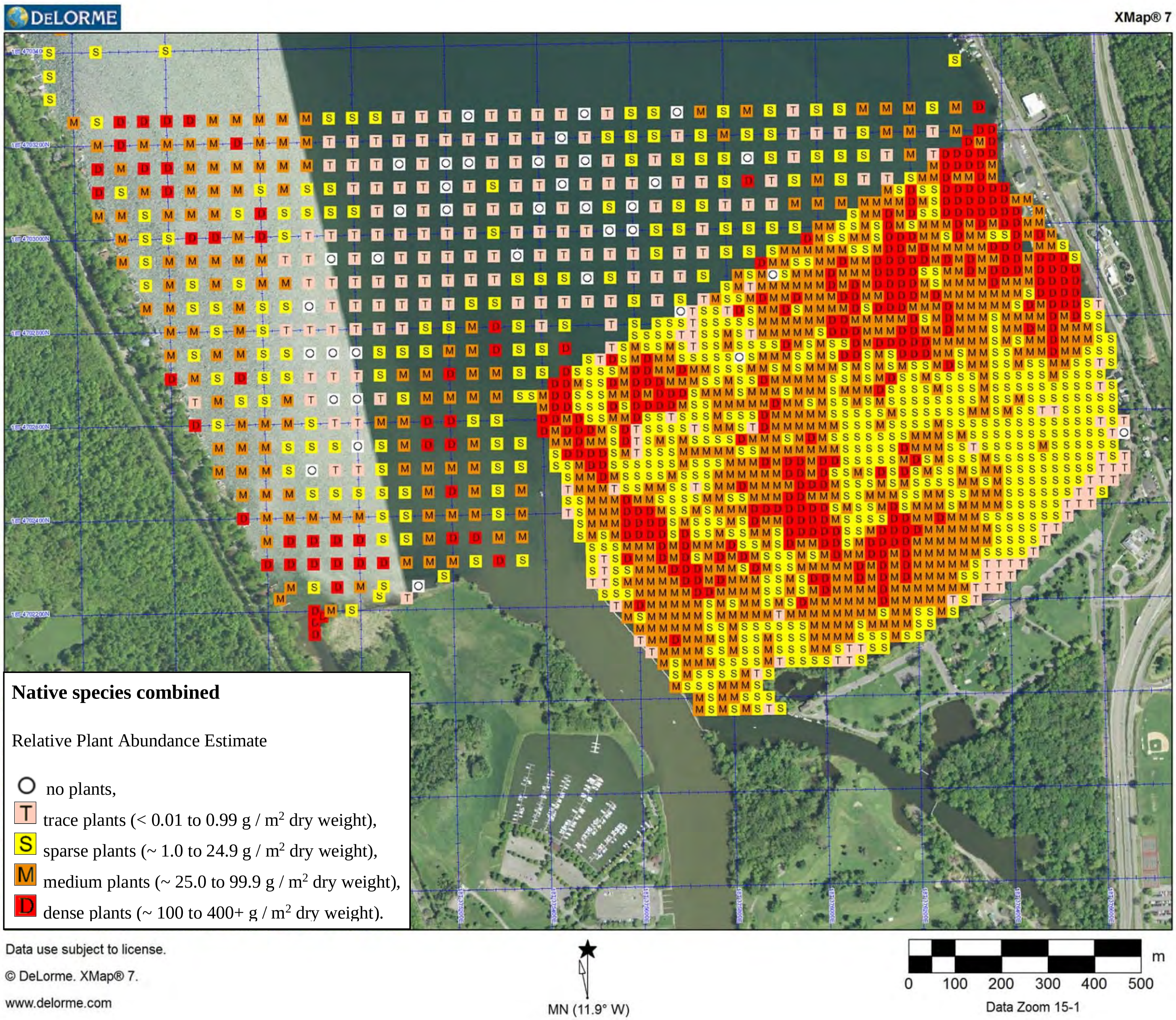




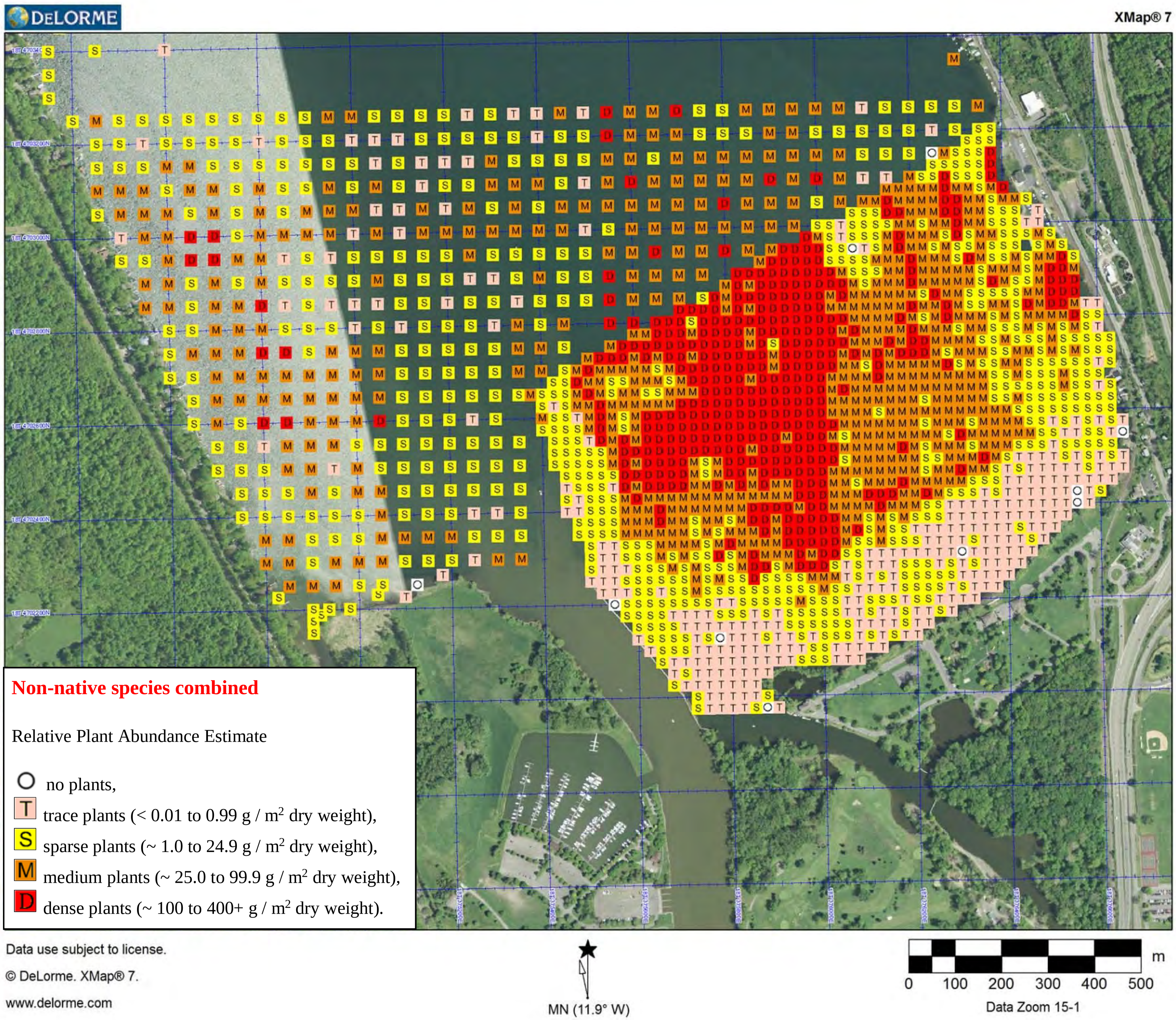
Tuber 7. Mean density of subterranean hydrilla turions (tubers) measured by screening from sediment cores extracted from the sampling area Fall Creek Cove. Total tubers (top graph) and un-sprouted tubers (bottom graph).



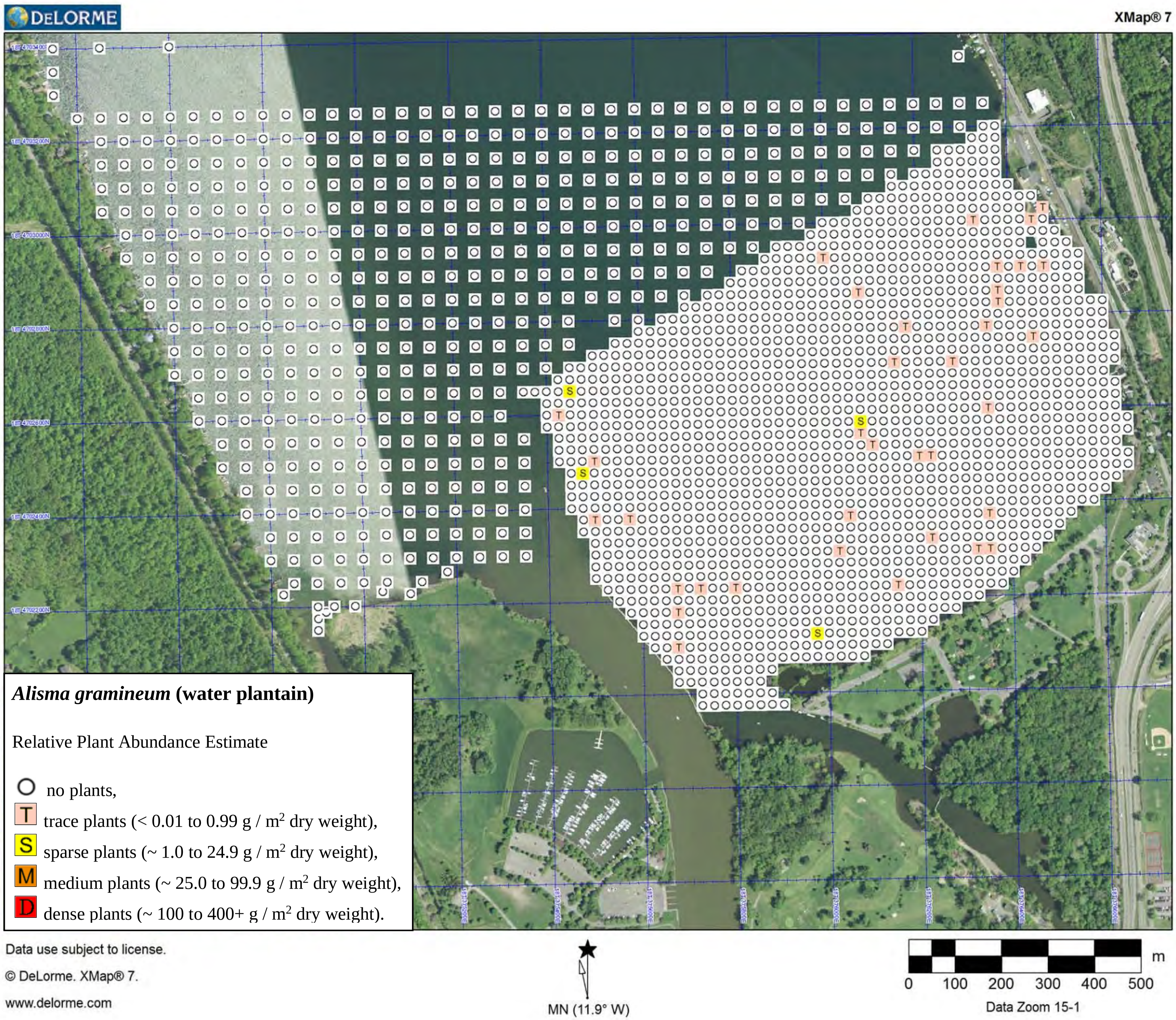
Map Lake-1. All species combined as abundance by two rake tosses.



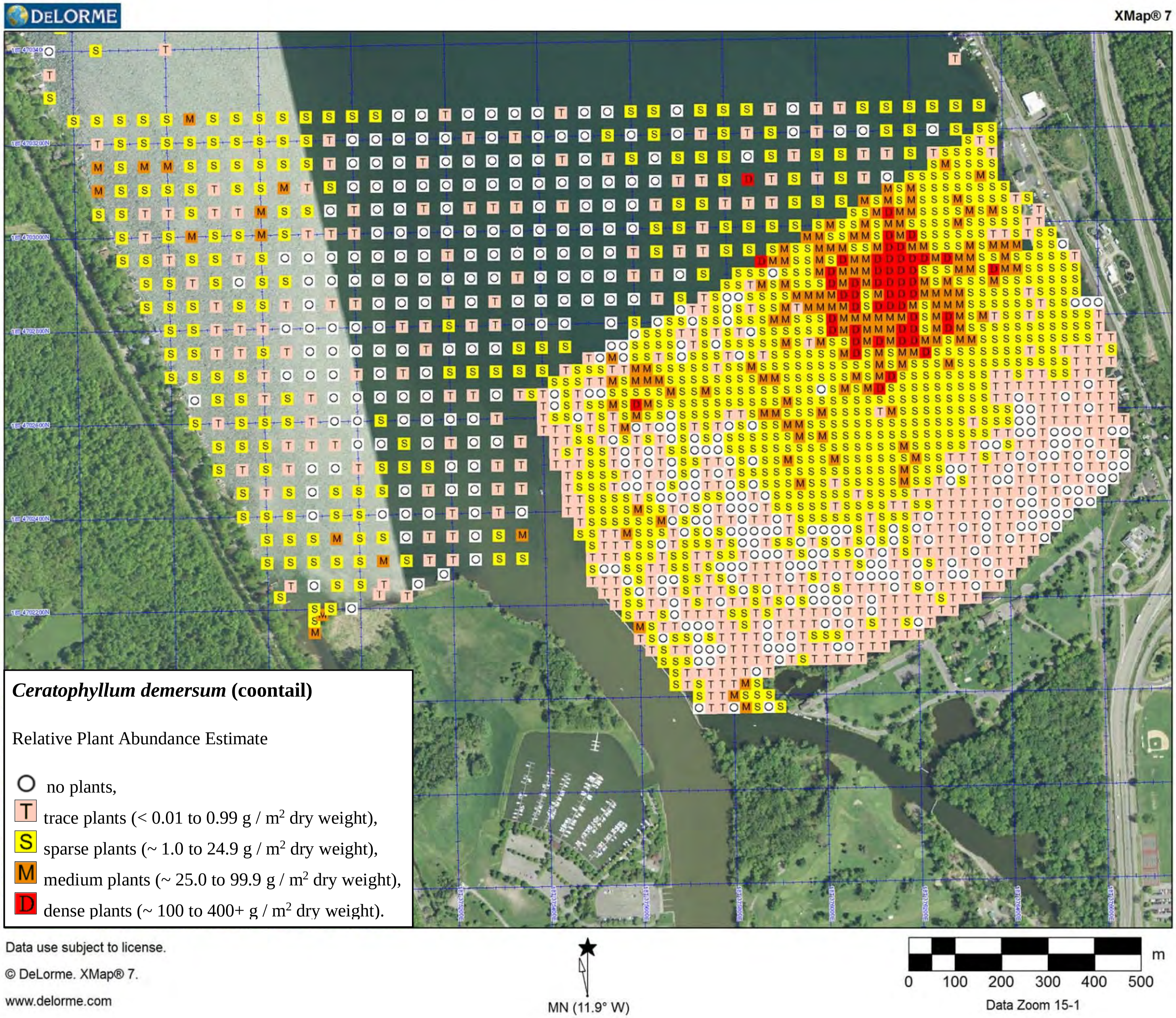
Map Lake-2. Native species combined as abundance by two rake tosses.



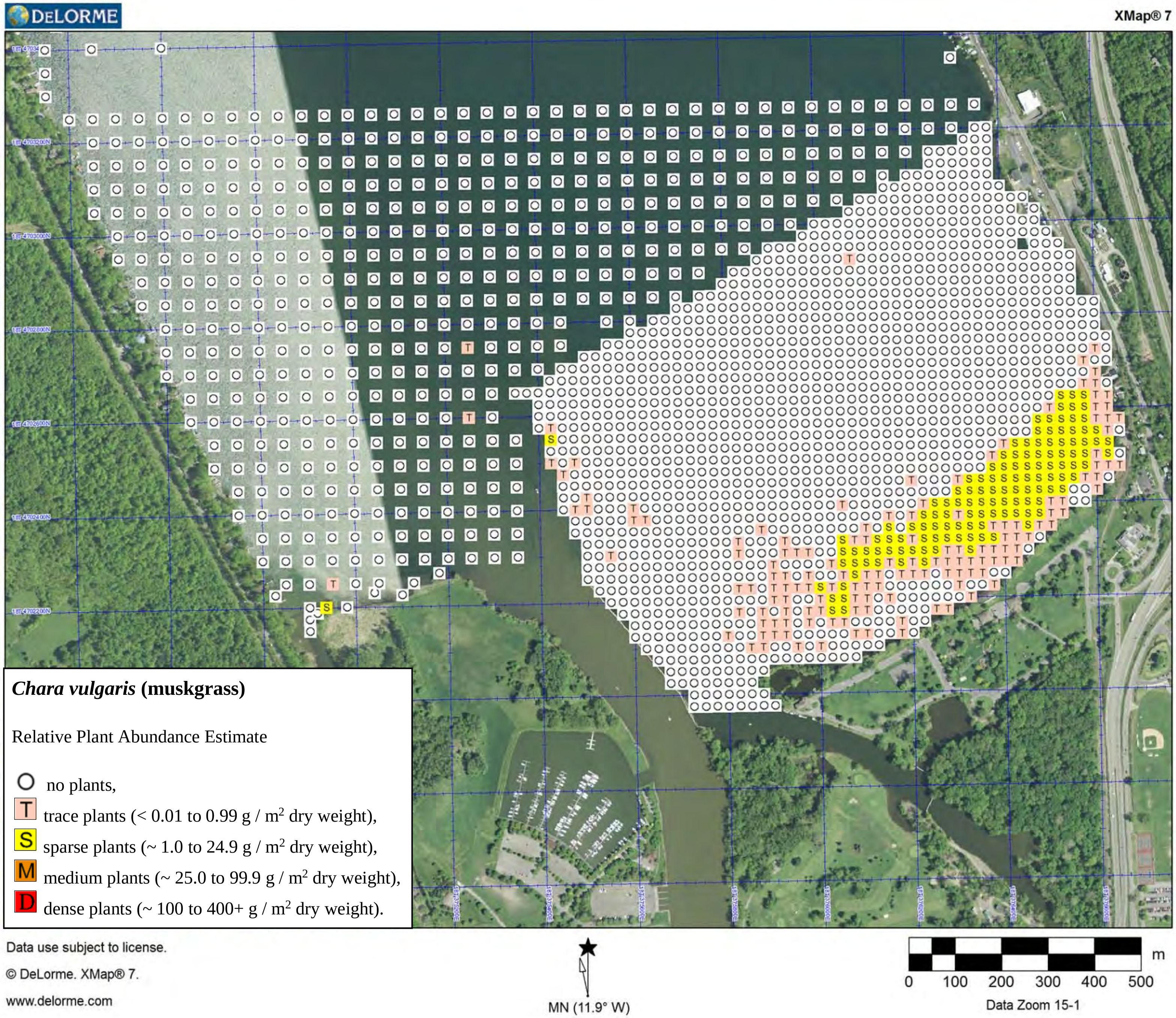
Map Lake-3. Non-native species combined as abundance by two rake tosses.



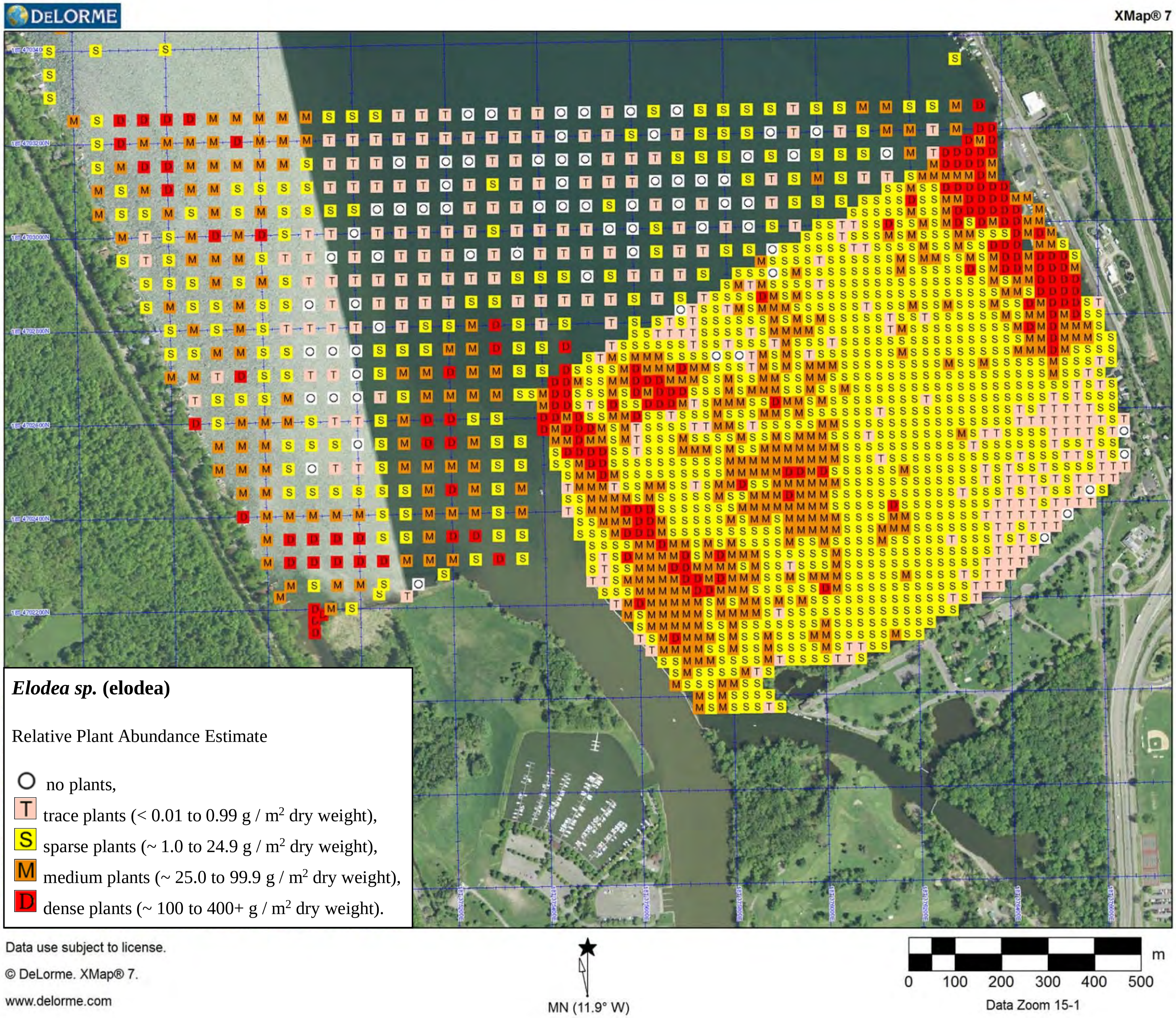
Map Lake-4. *Alisma gramineum* (water plantain) as abundance by two rake tosses.



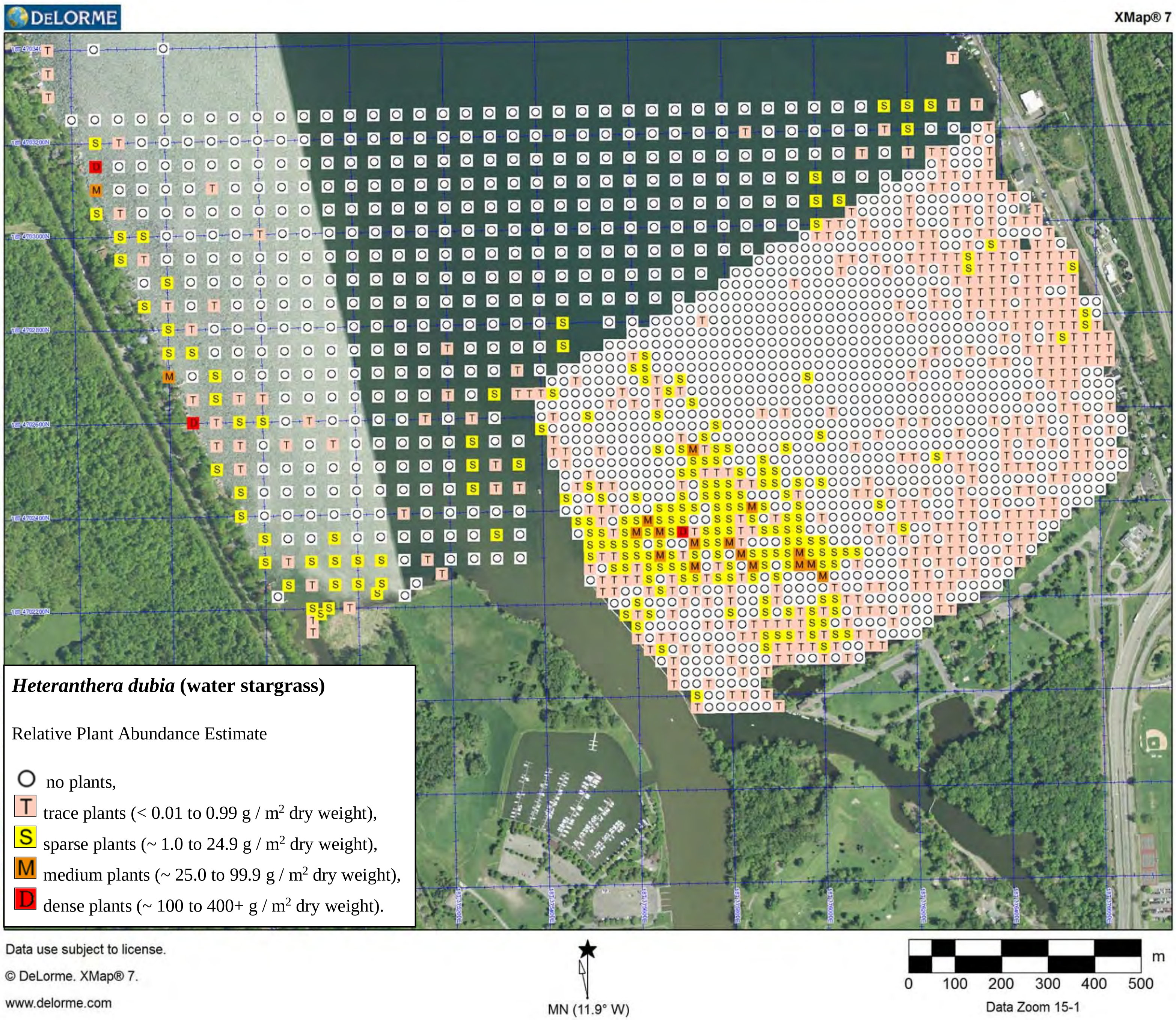
Map Lake-5. *Ceratophyllum demersum* (coontail) as abundance by two rake tosses.



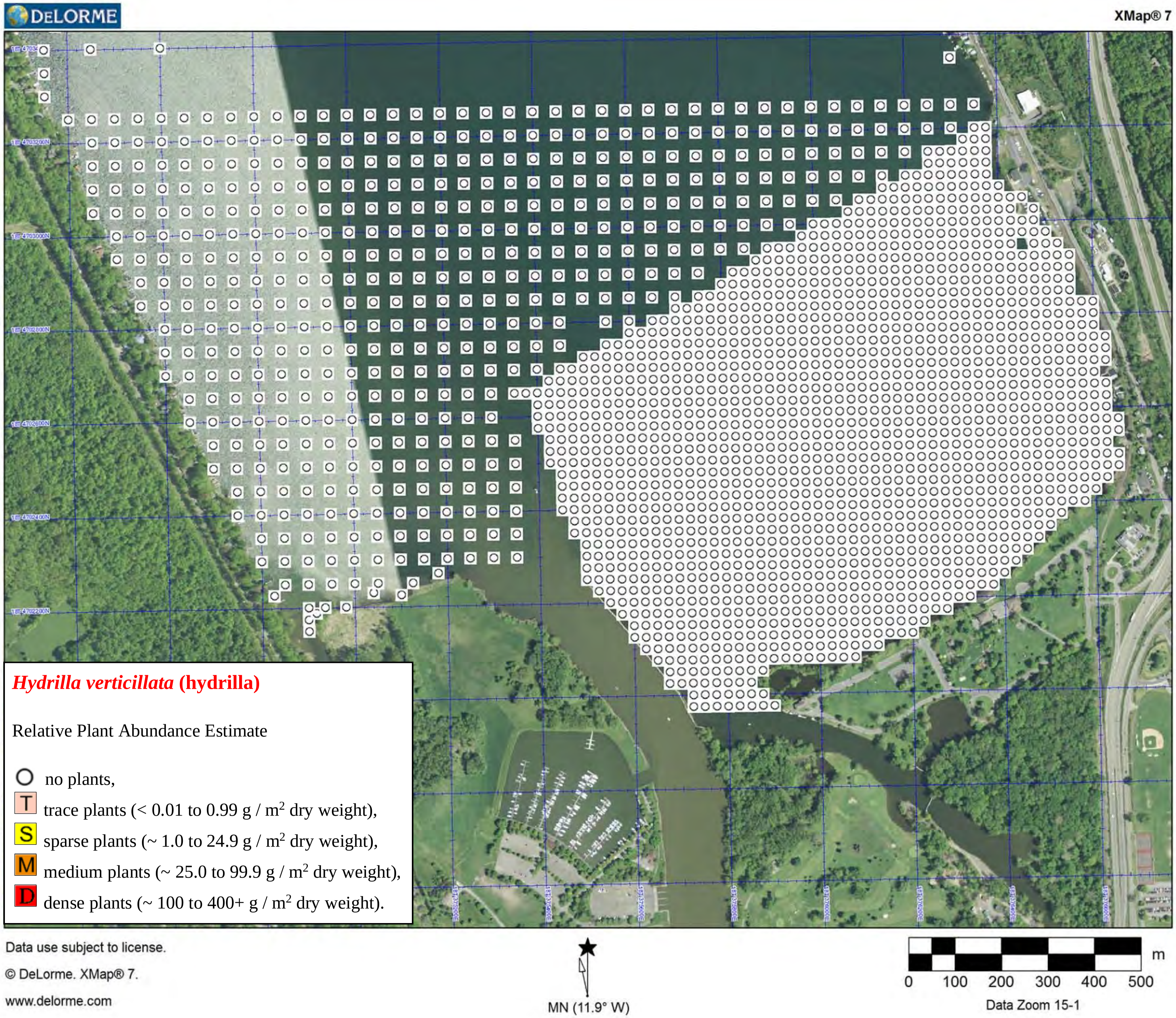
Map Lake-6. *Chara vulgaris* (muskgrass) as abundance by two rake tosses.



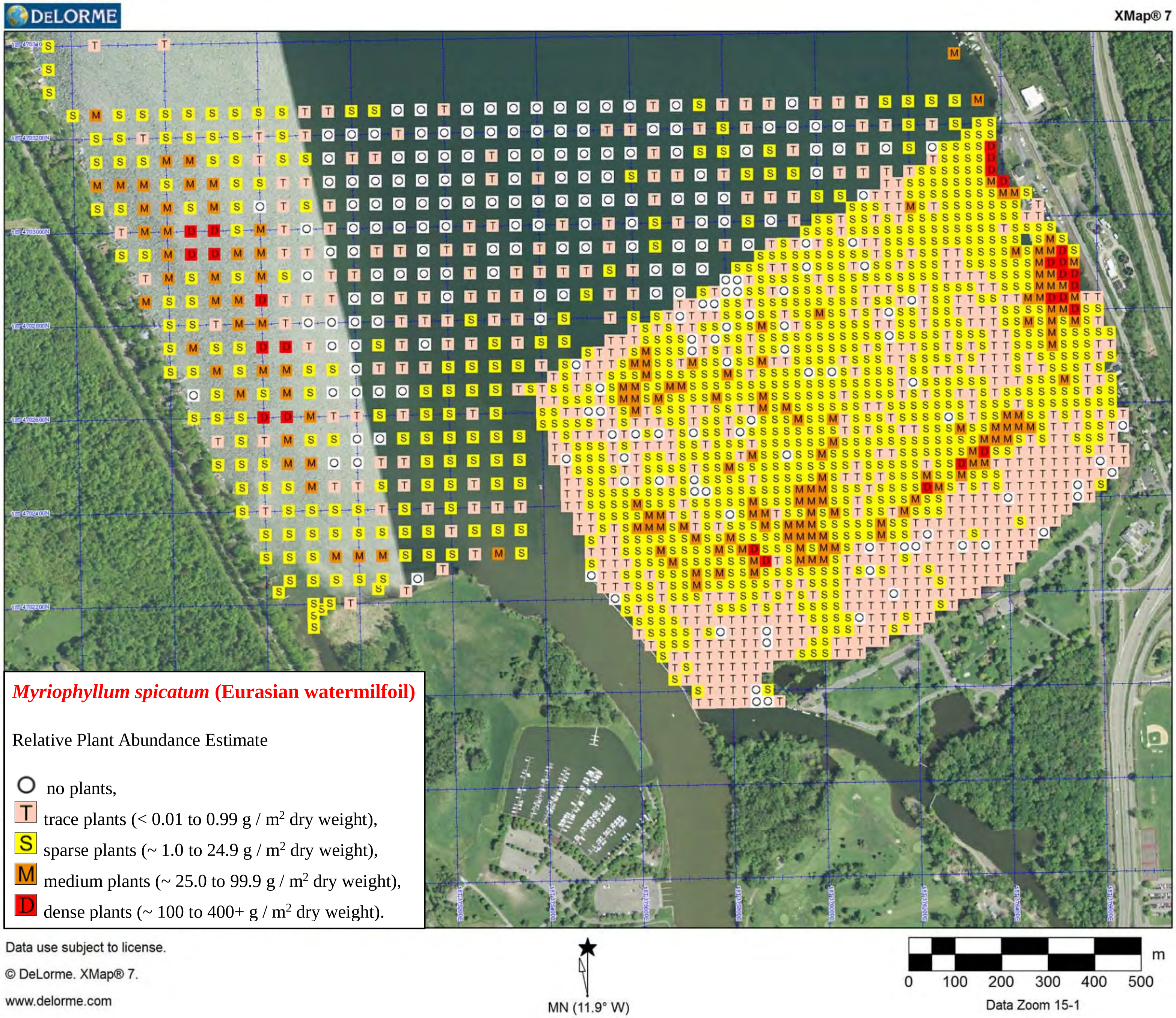
Map Lake-7. *Elodea sp.* (elodea) as abundance by two rake tosses.



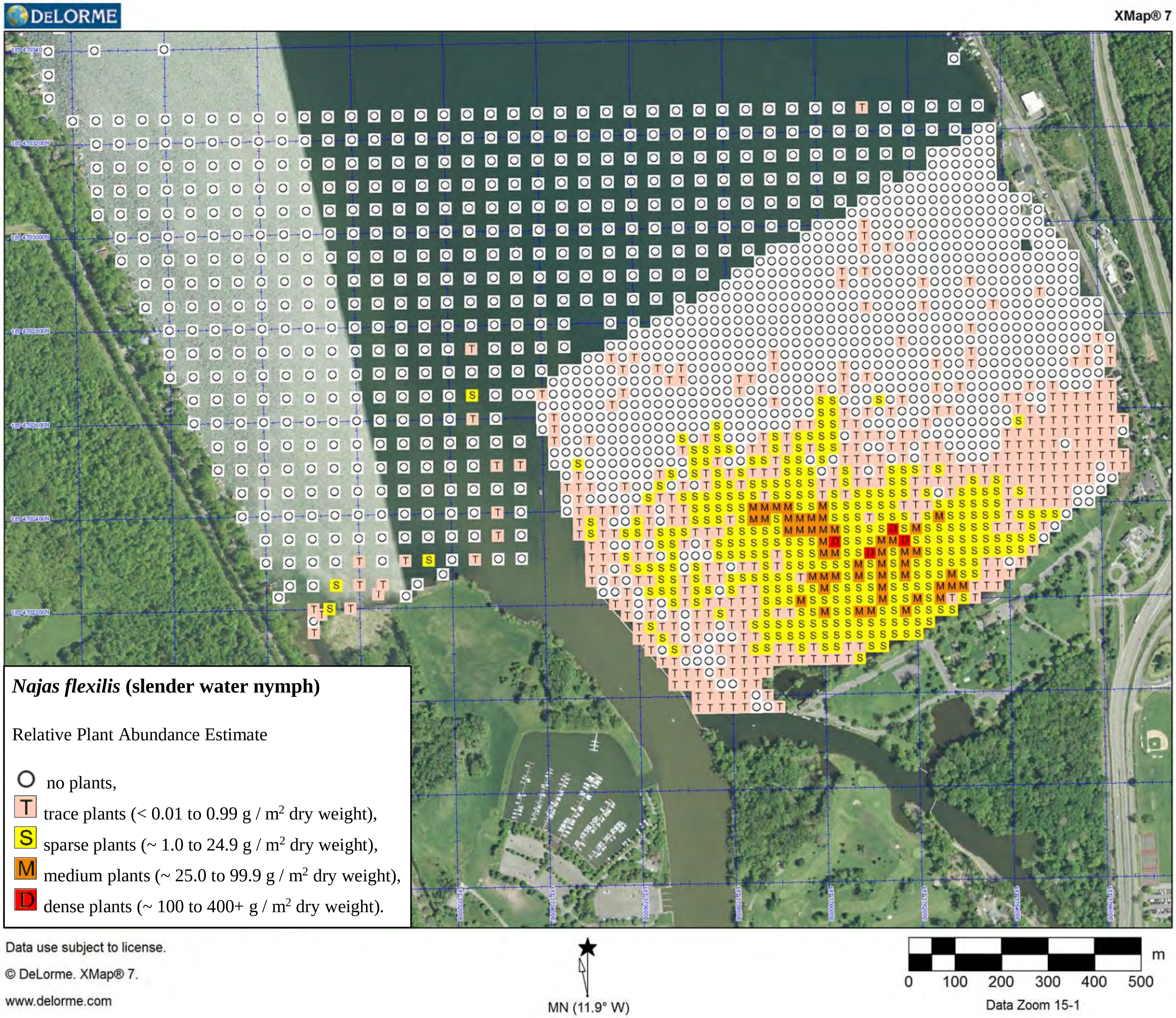
Map Lake-8. *Heteranthera dubia* (water stargrass) as abundance by two rake tosses.



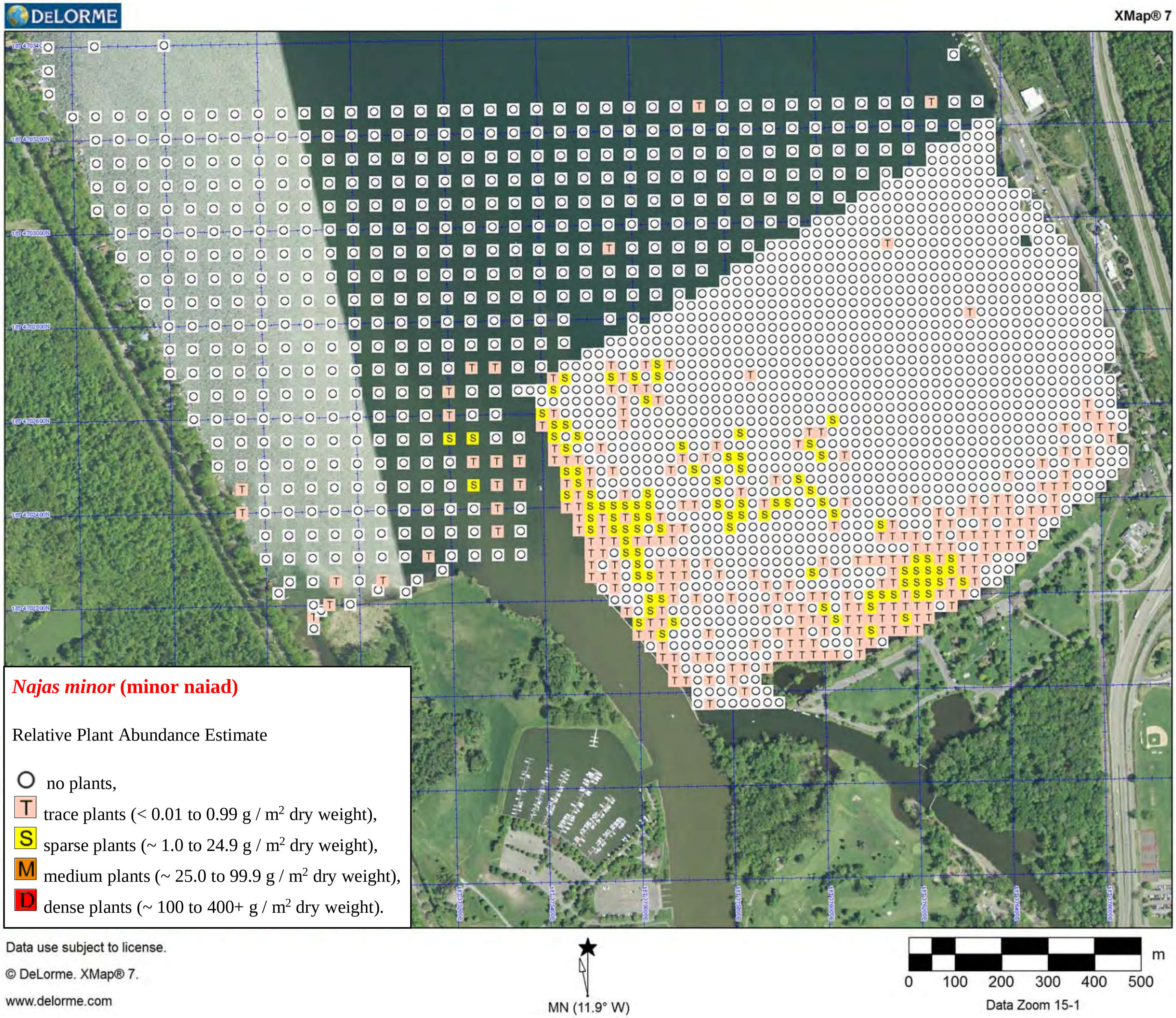
Map Lake-9. *Hydrilla verticillata* (hydrilla) as abundance by two rake tosses.



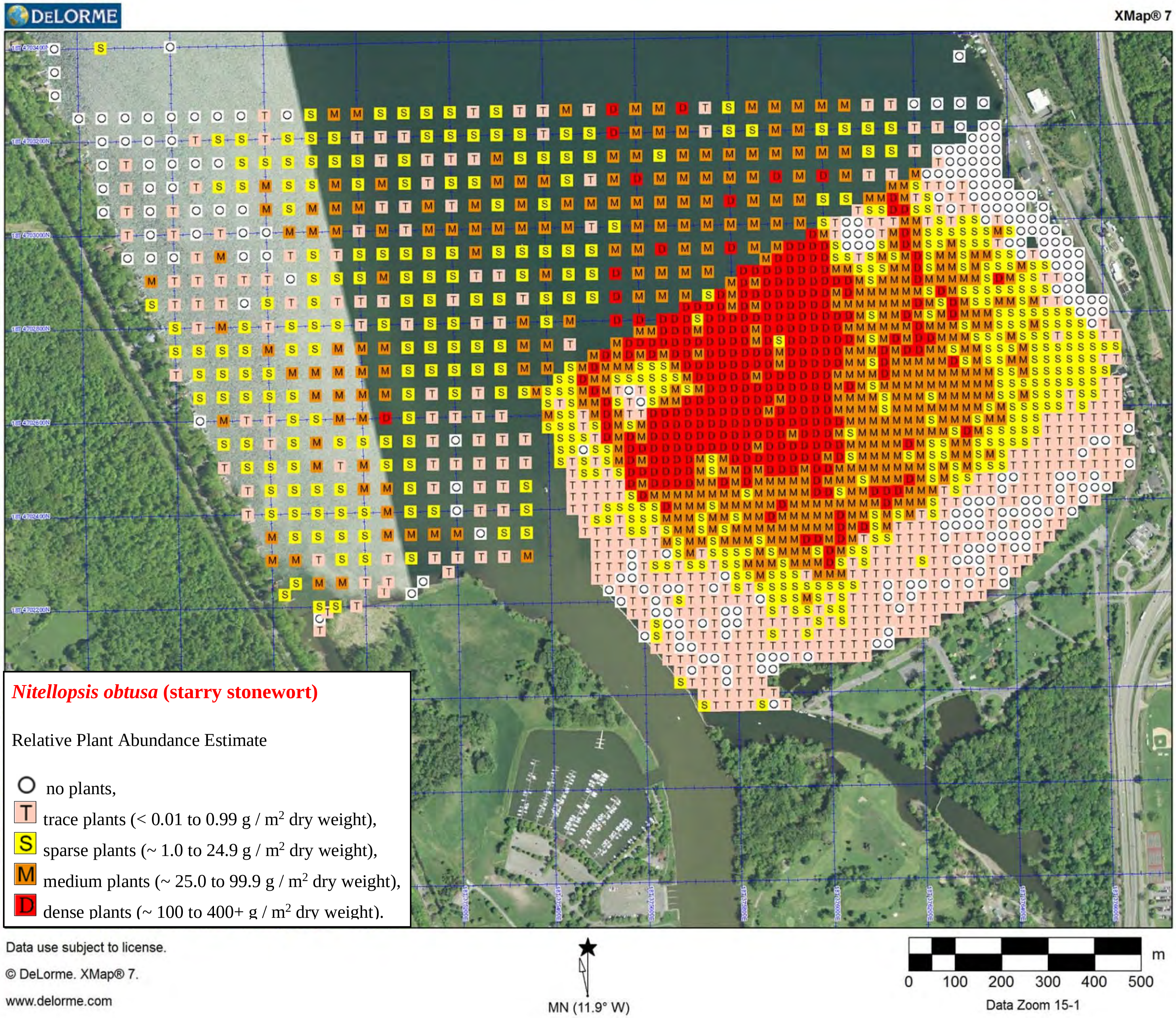
Map Lake-10. *Myriophyllum spicatum* (Eurasian watermilfoil) as abundance by two rake tosses.



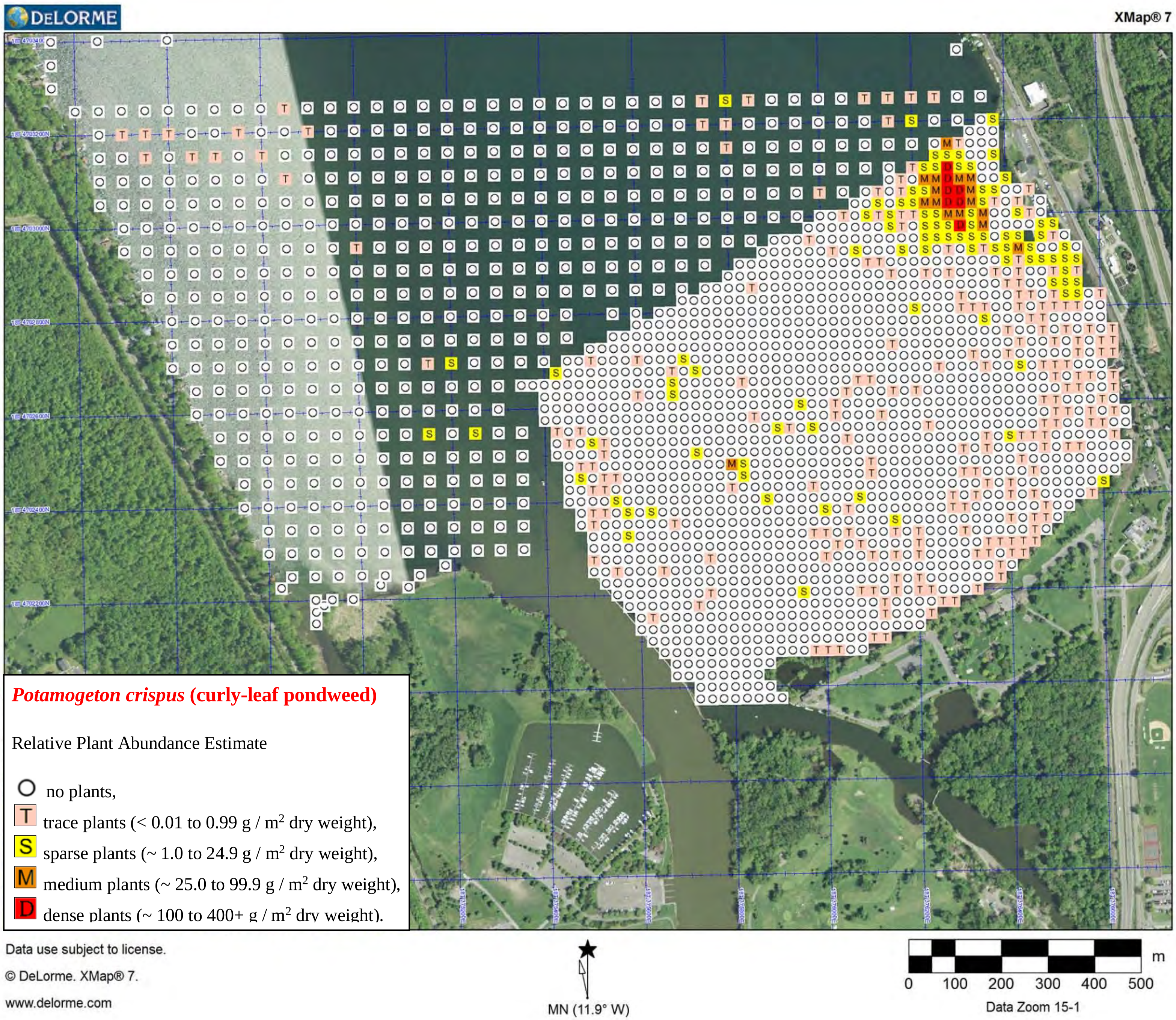
Map Lake-11. *Najas flexilis* (slender water nymph) as abundance by two rake tosses.



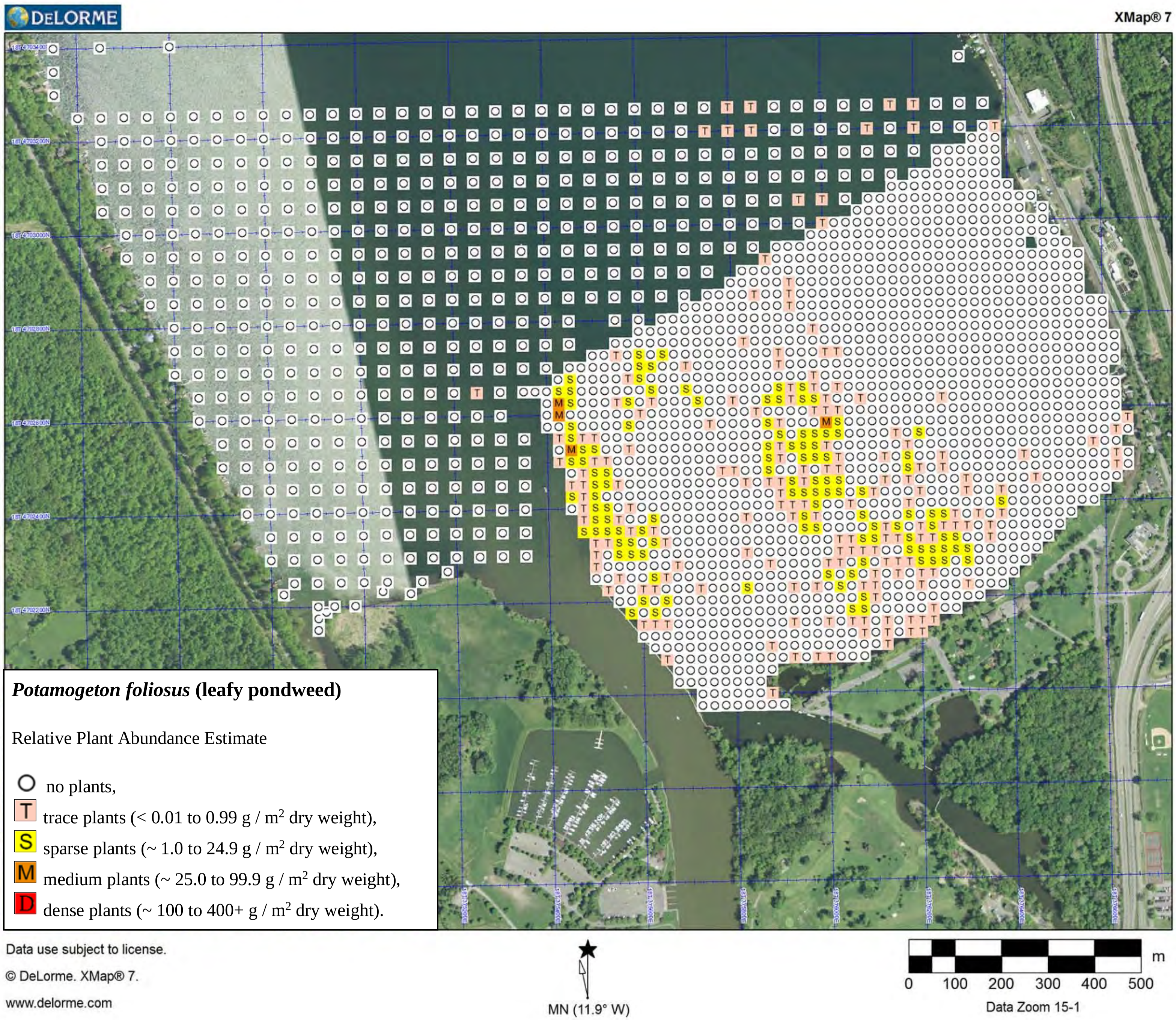
Map Lake-12. *Najas minor* (minor naiad) as abundance by two rake tosses.



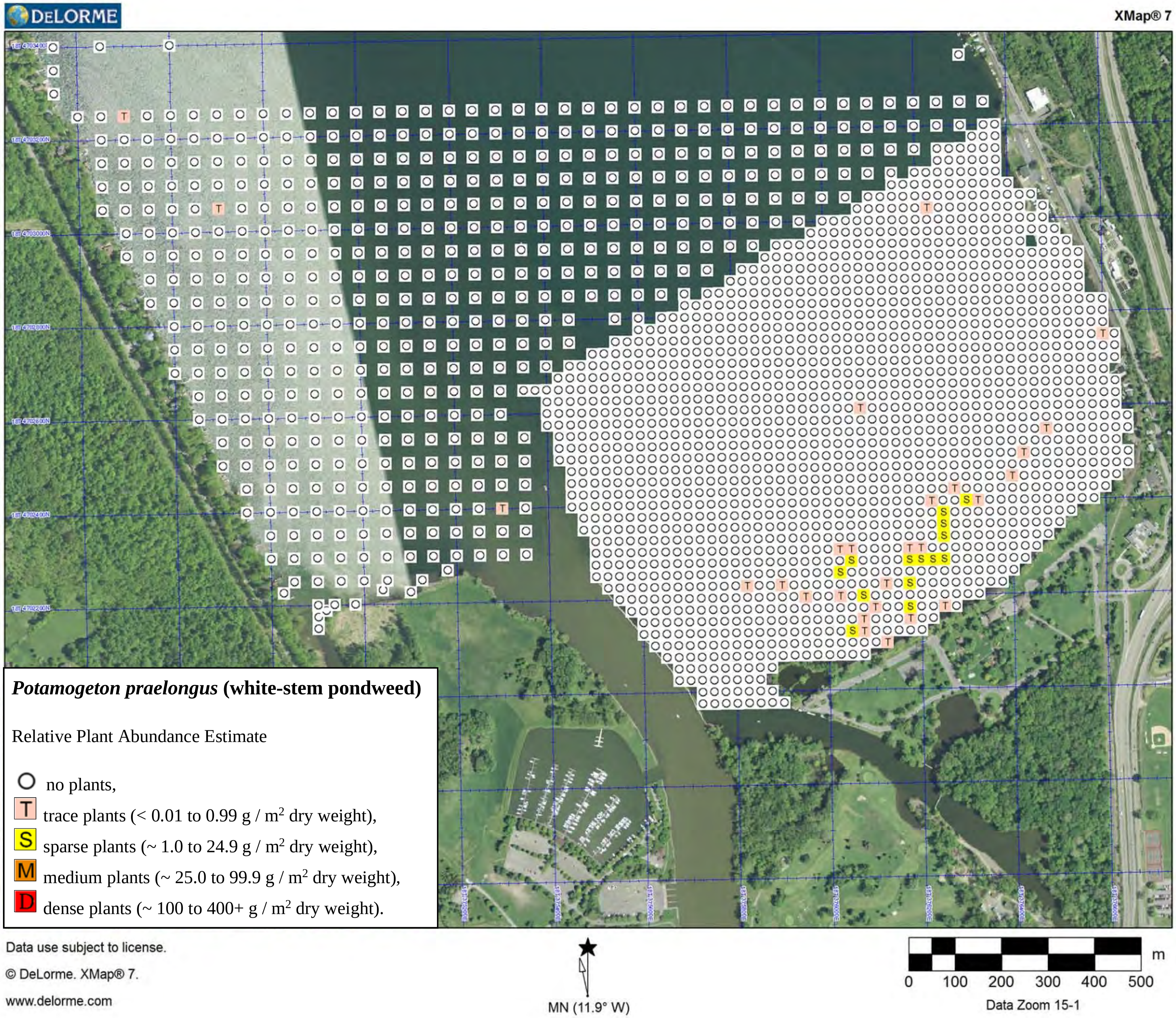
Map Lake-13. *Nitellopsis obtusa* (starry stonewort) as abundance by two rake tosses.



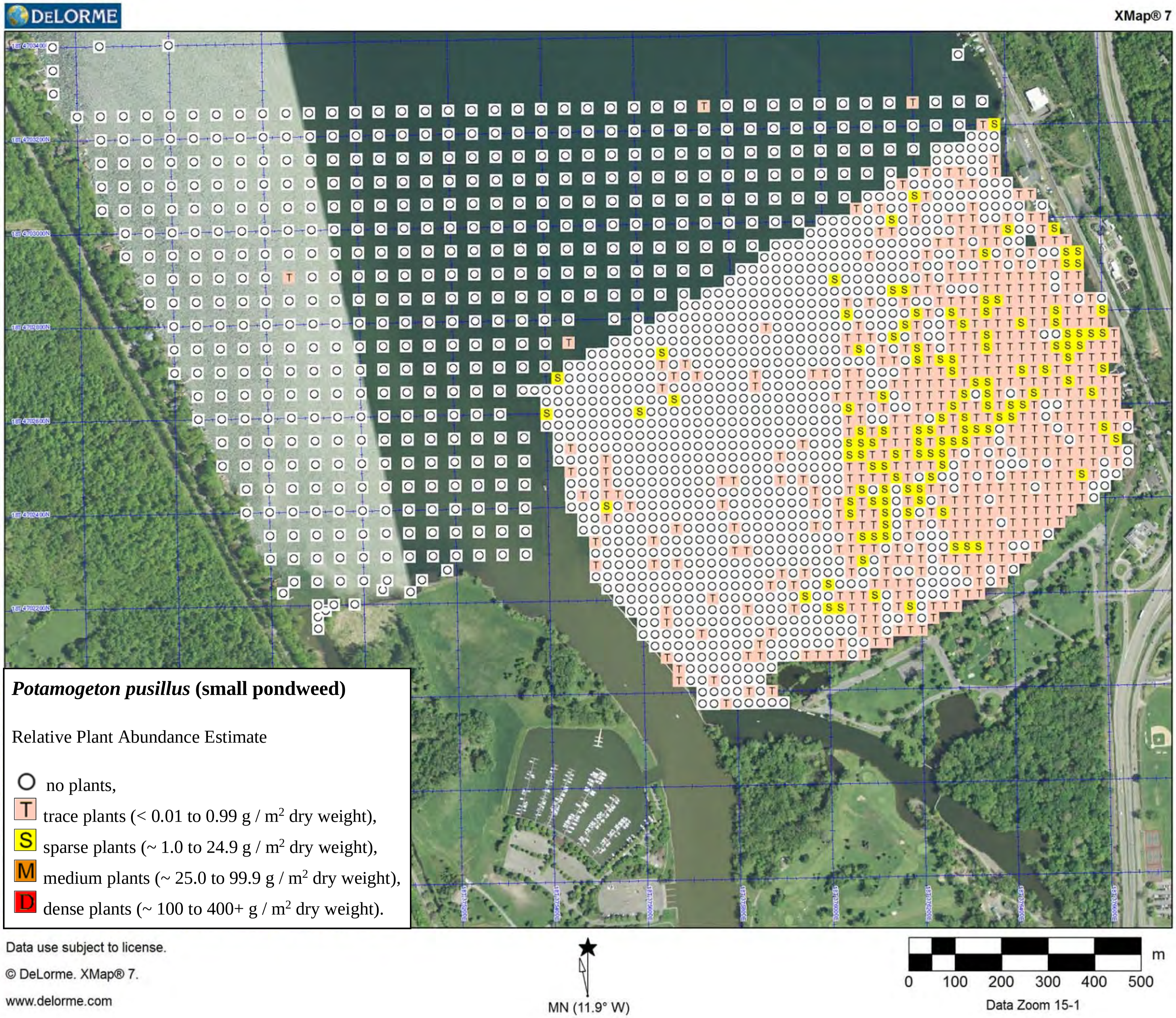
Map Lake-14. *Potamogeton crispus* (curly-leaf pondweed) as abundance by two rake tosses.



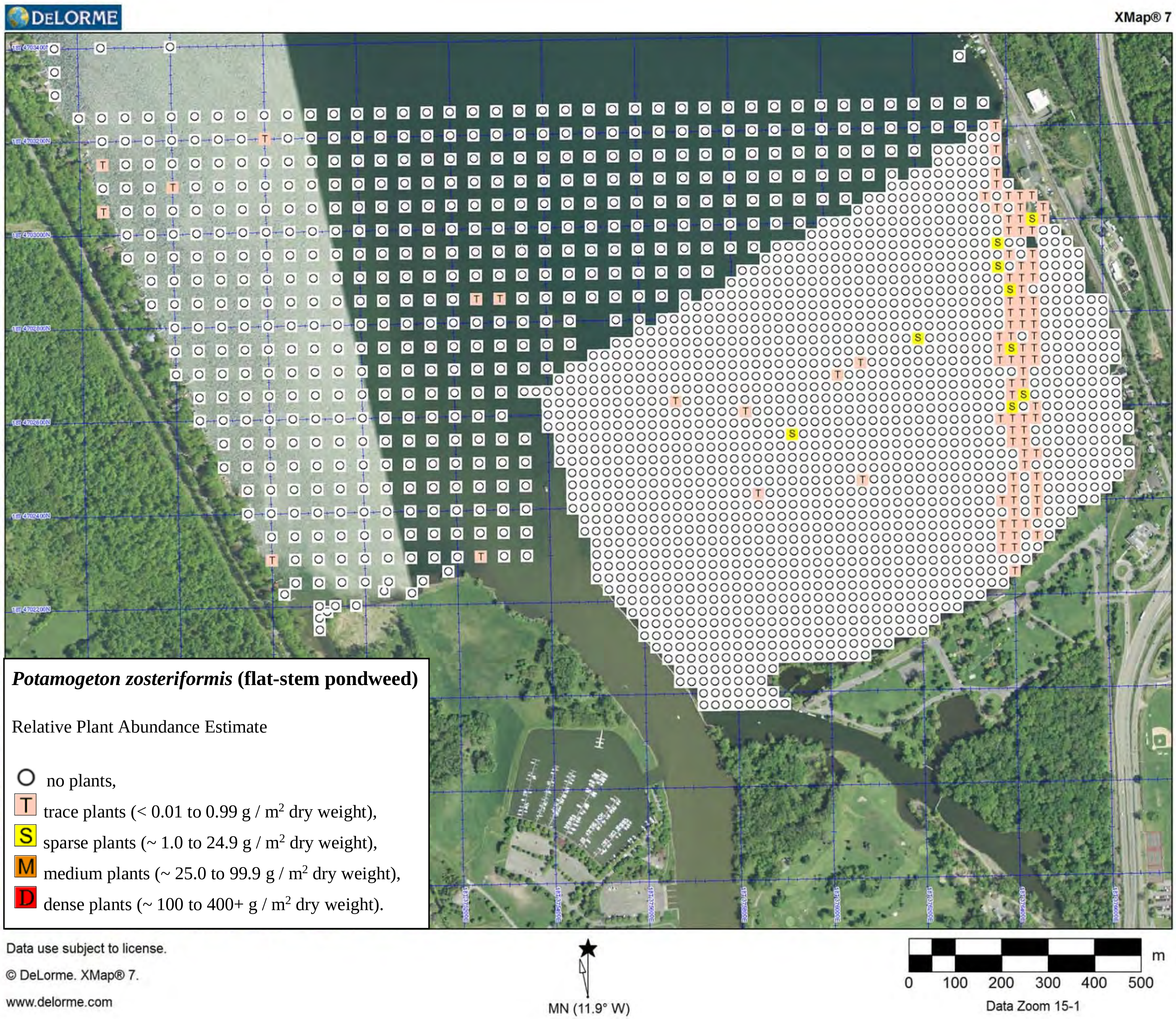
Map Lake-15. *Potamogeton foliosus* (leafy pondweed) as abundance by two rake tosses.



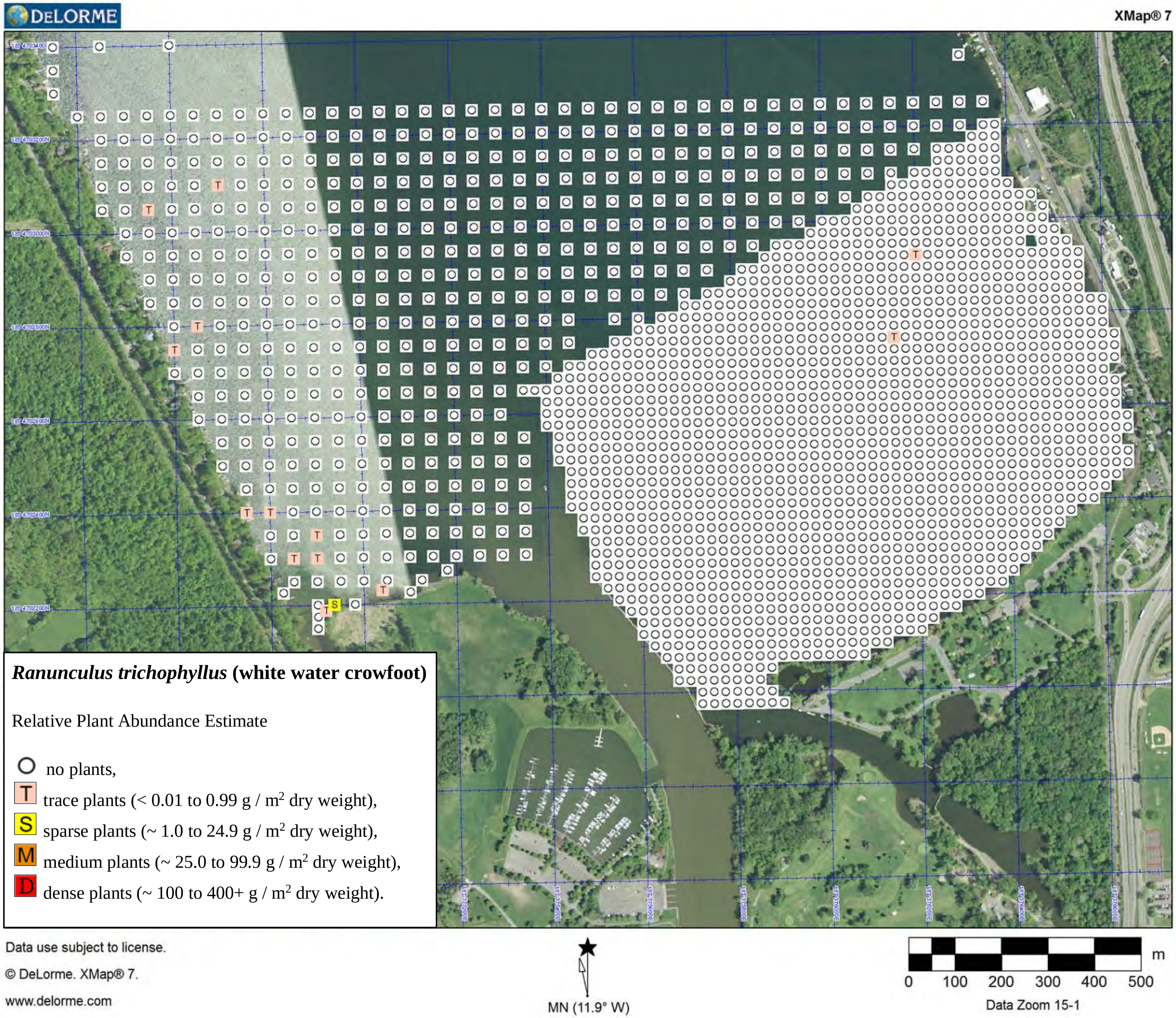
Map Lake-16. *Potamogeton praelongus* (white-stem pondweed) as abundance by two rake tosses.



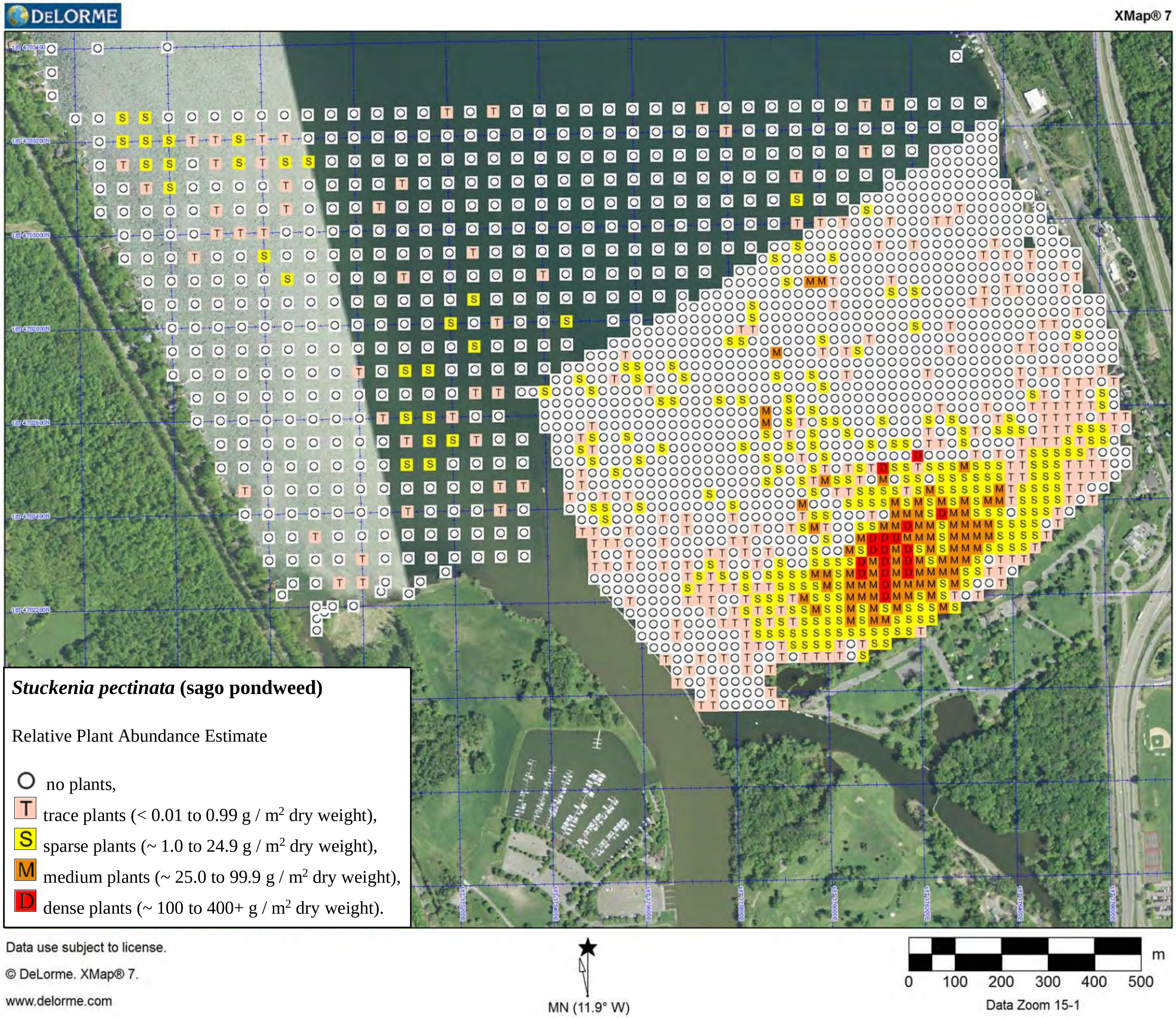
Map Lake-17. *Potamogeton pusillus* (small pondweed) as abundance by two rake tosses.



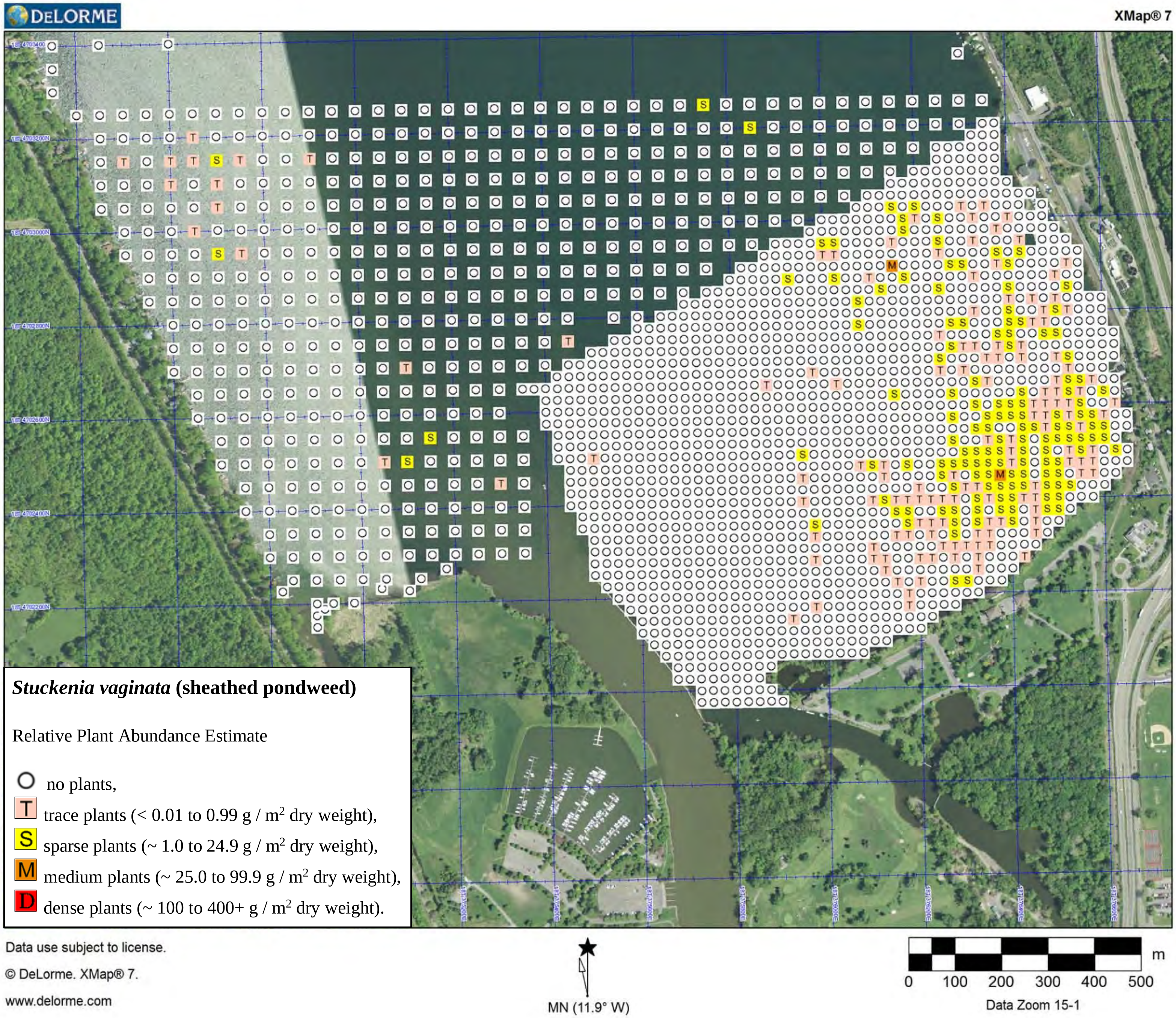
Map Lake-18. *Potamogeton zosteriformis* (flat-stem pondweed) as abundance by two rake tosses.



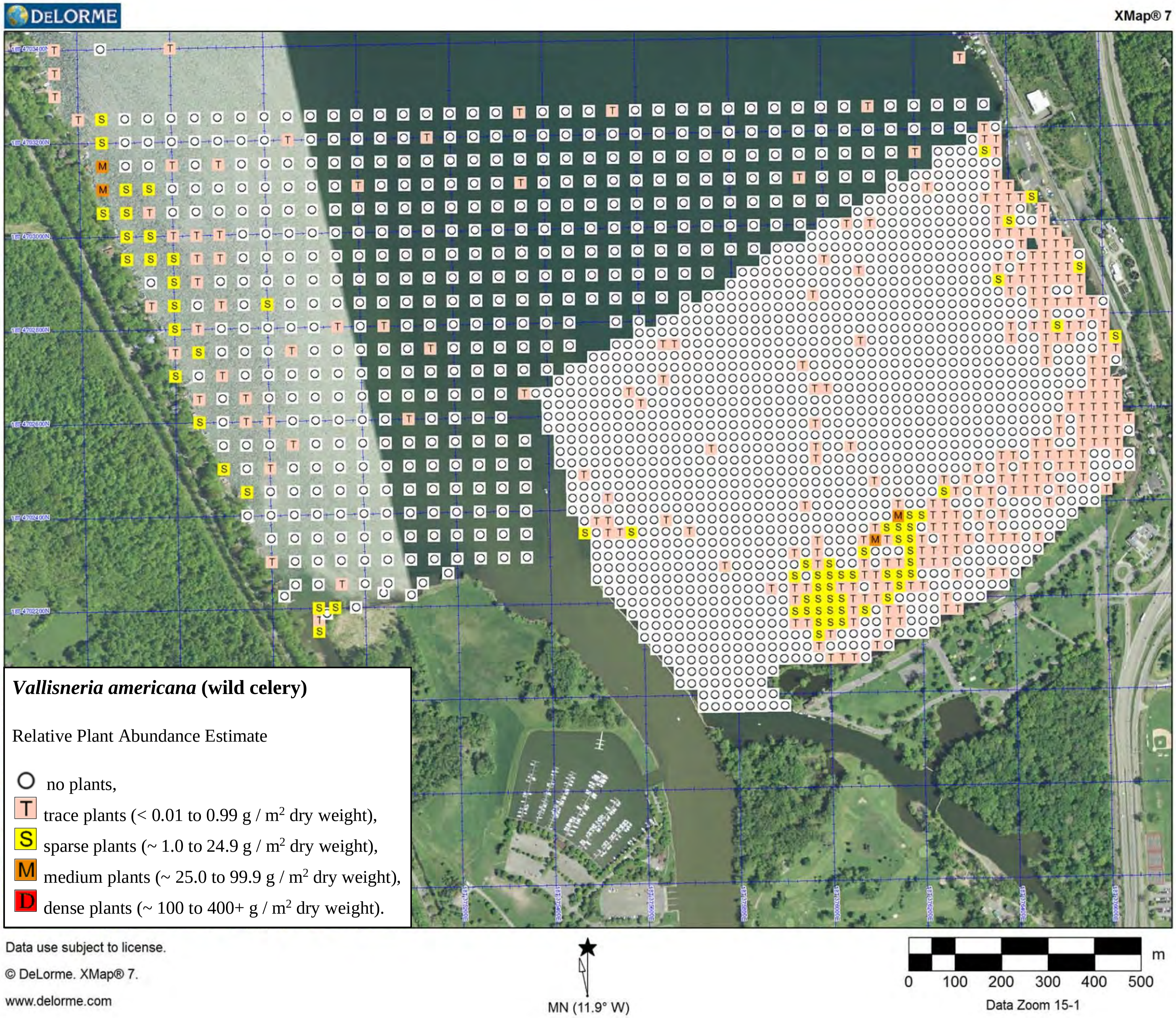
Map Lake-19. *Ranunculus trichophyllus* (white water crowfoot) as abundance by two rake tosses.



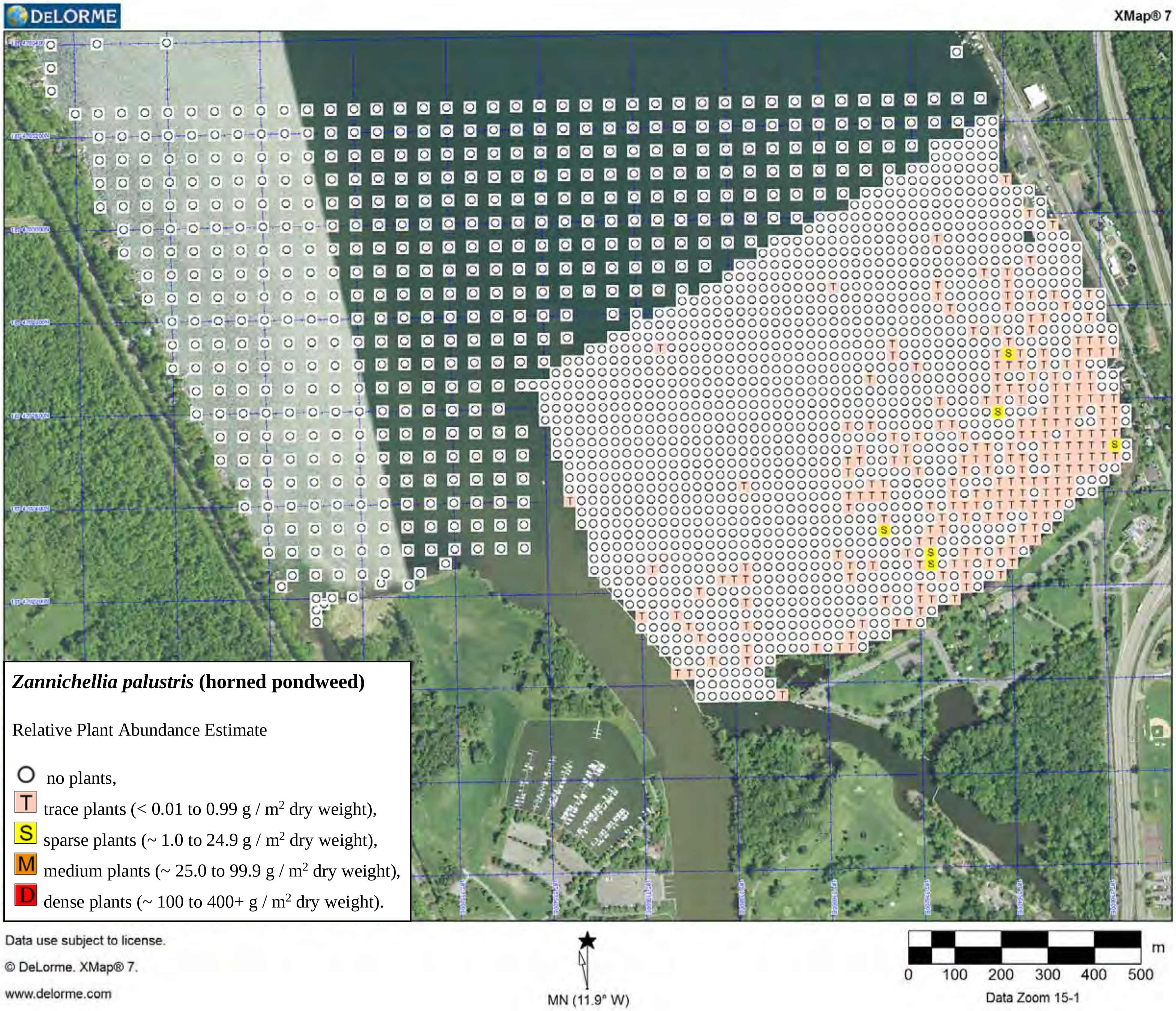
Map Lake-20. *Stuckenia pectinata* (sago pondweed) as abundance by two rake tosses.



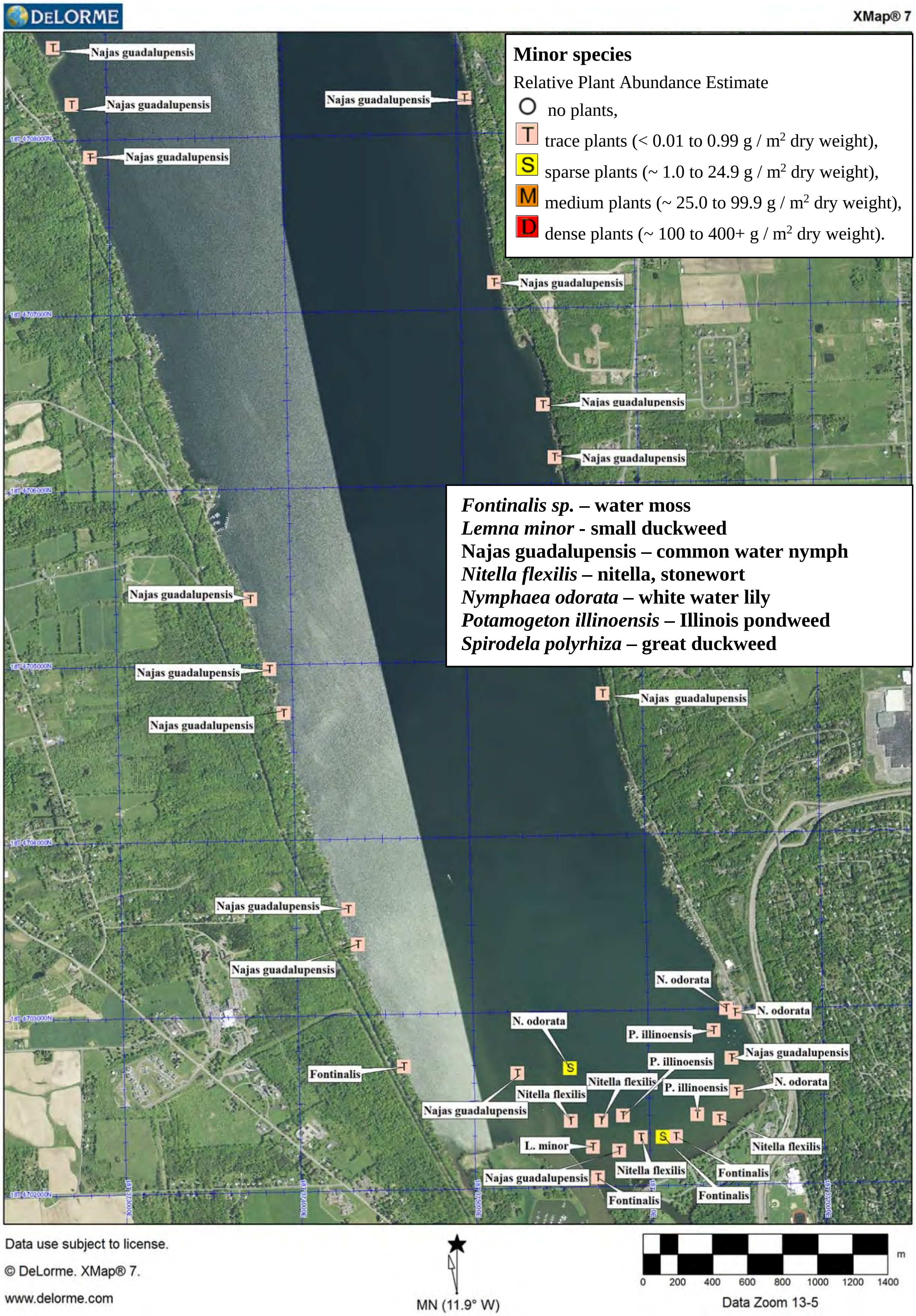
Map Lake-21. *Stuckenia vaginata* (sheathed pondweed) as abundance by two rake tosses.



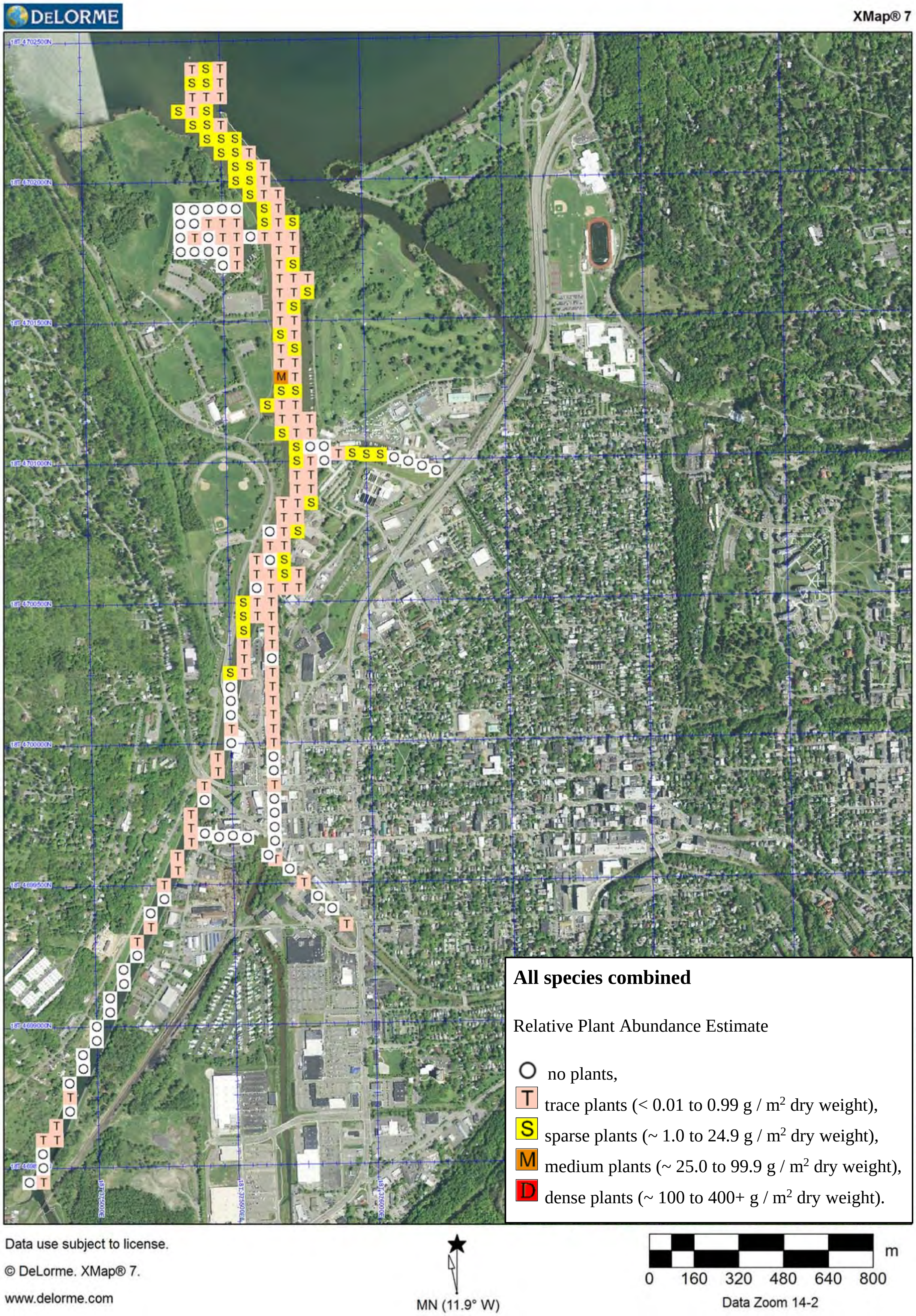
Map Lake-22. *Vallisneria americana* (wild celery) as abundance by two rake tosses.



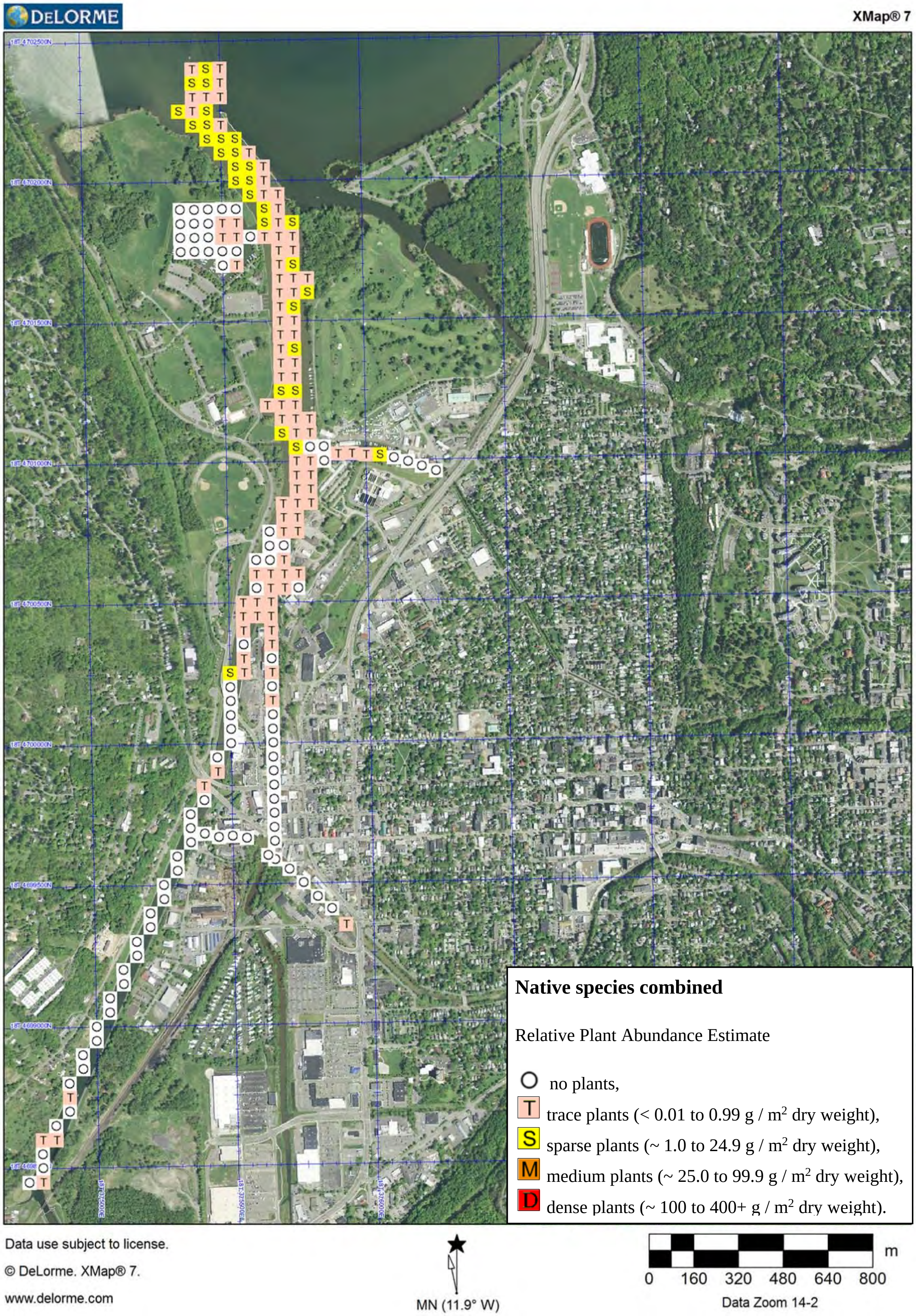
Map Lake-23. *Zannichellia palustris* (horned pondweed) as abundance by two rake tosses.



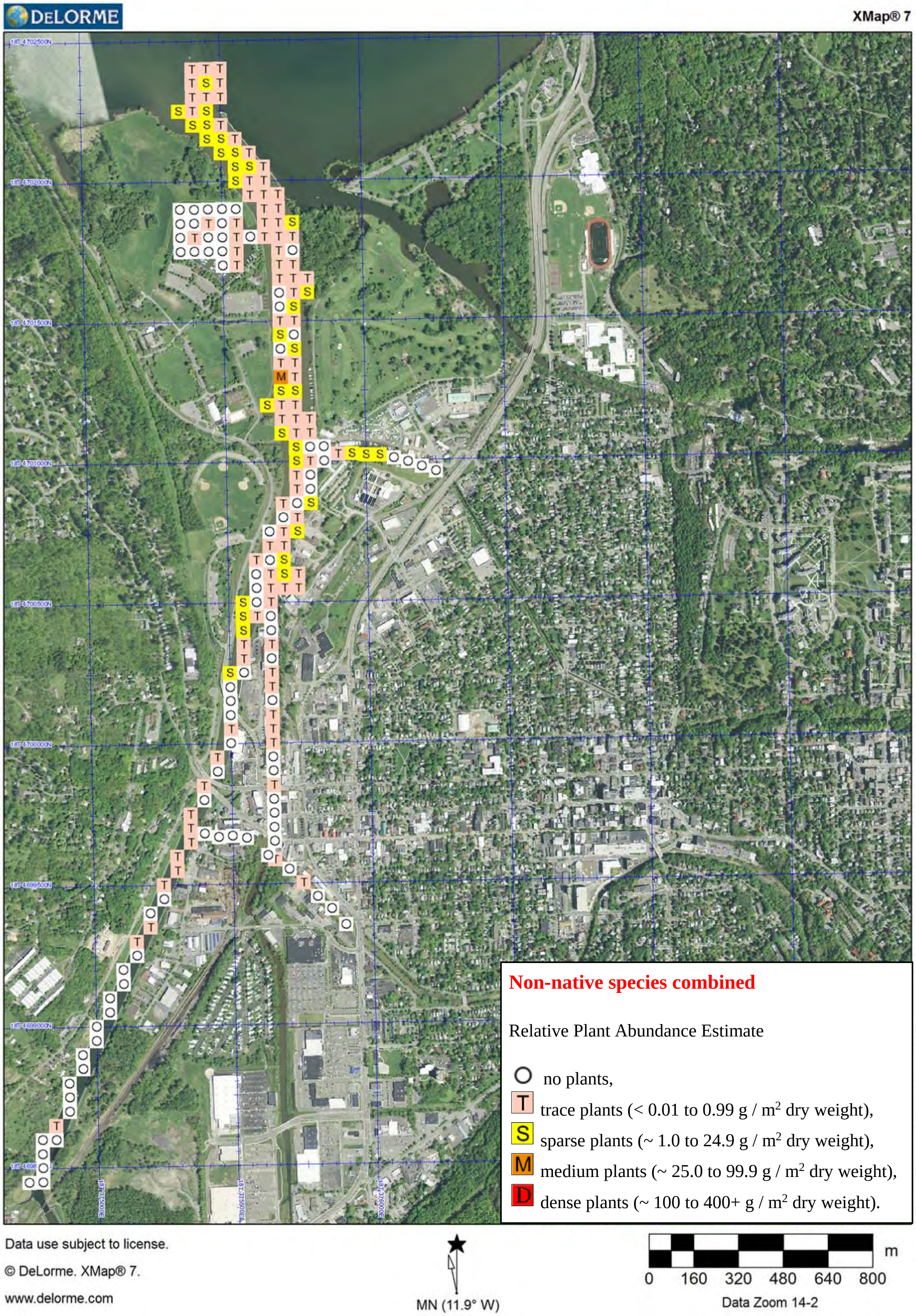
Map Lake-24. Minor species as abundance by two rake tosses.



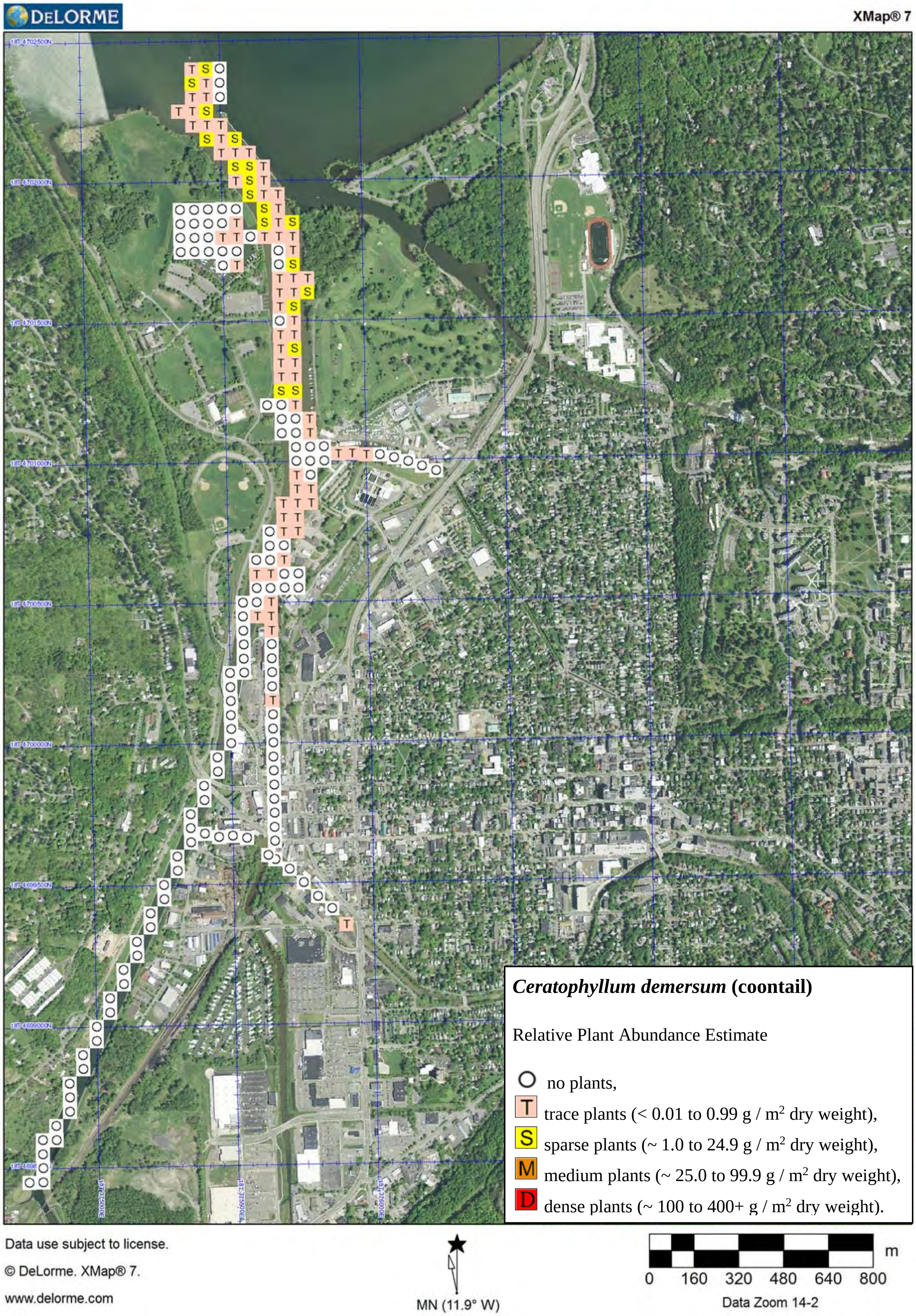
Map Inlet-1. All species combined pre-herbicide as abundance by two rake tosses.



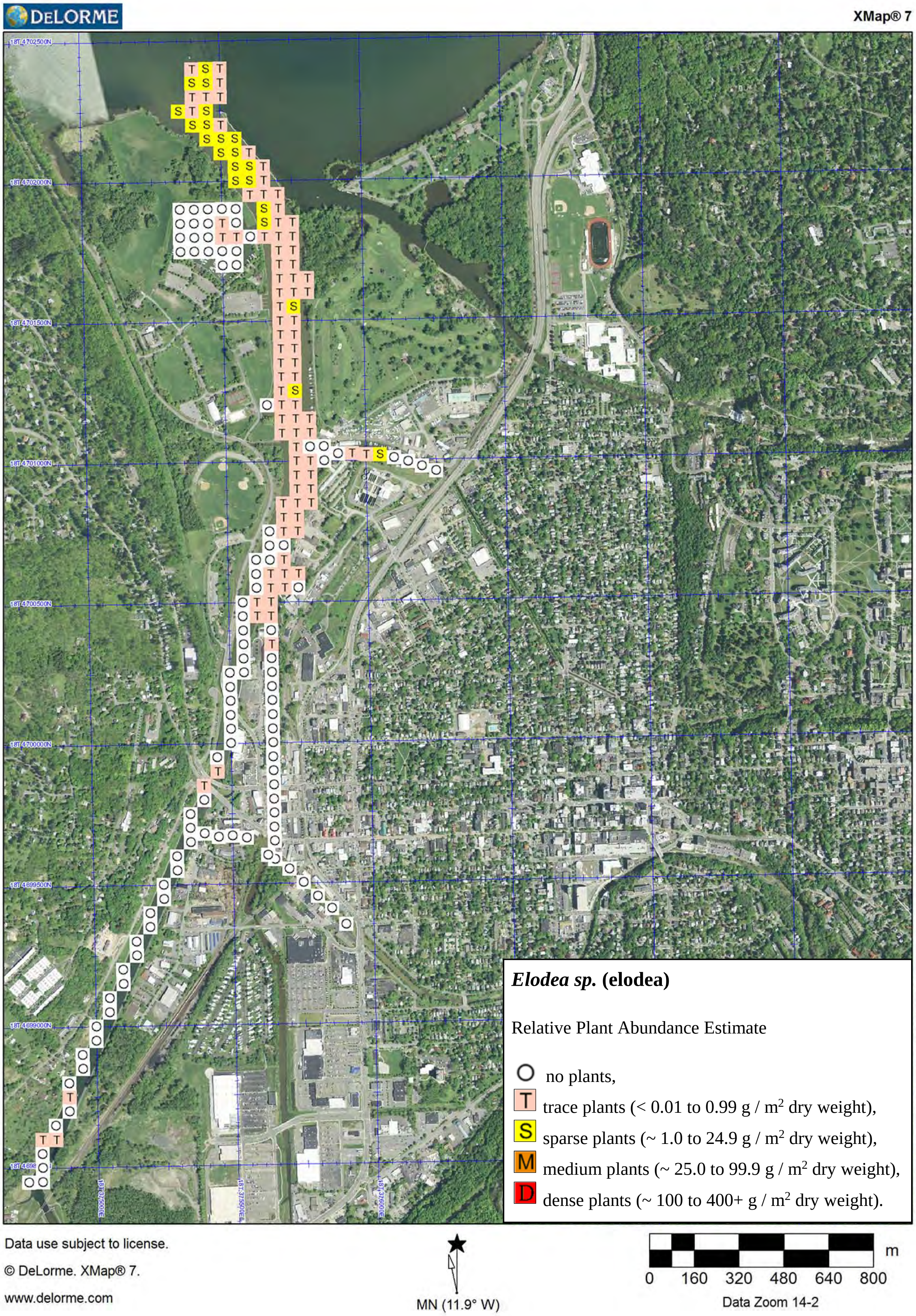
Map Inlet-2. Native species combined pre-herbicide as abundance by two rake tosses.



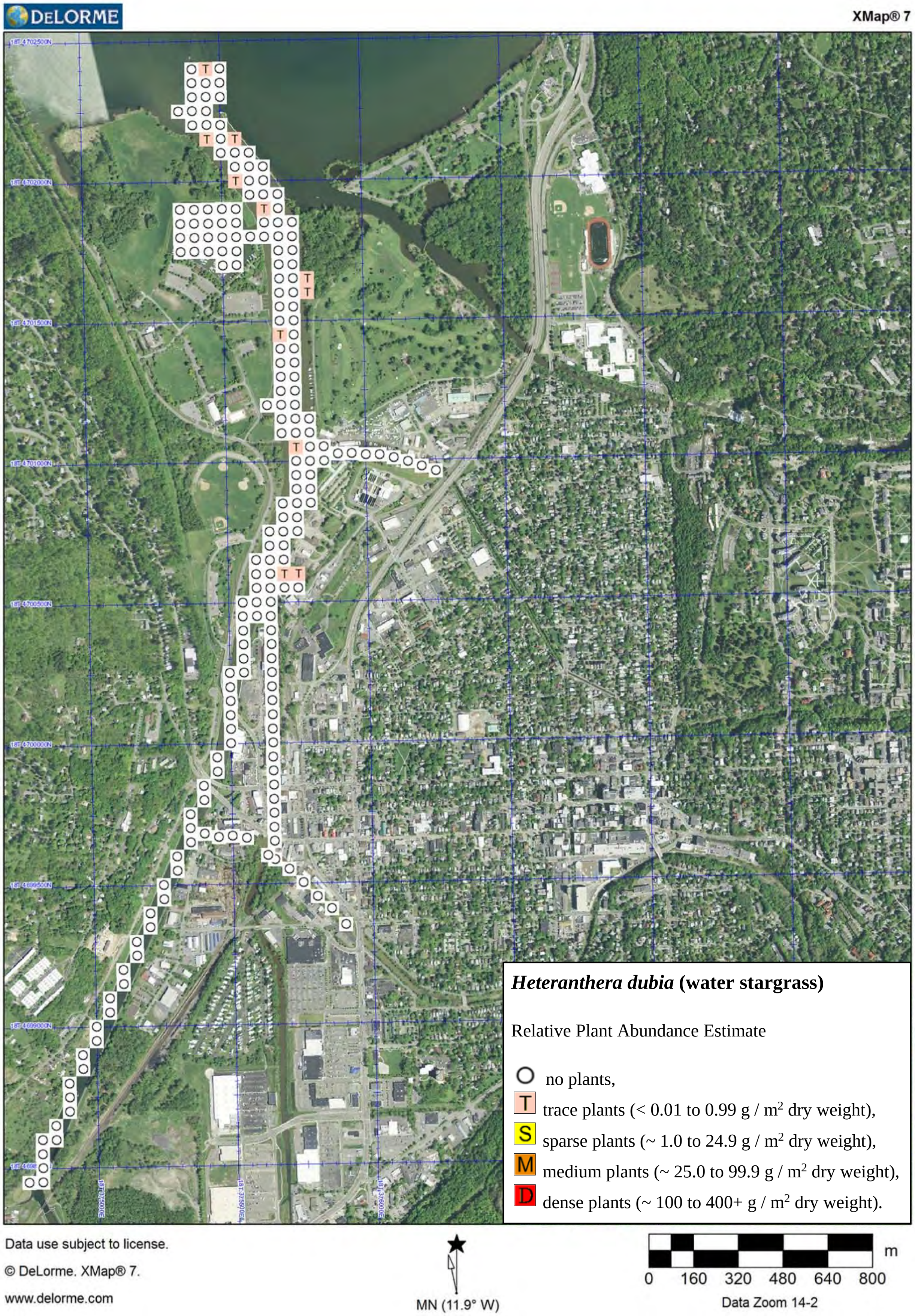
Map Inlet-3. Non-native species combined pre-herbicide as abundance by two rake tosses.



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

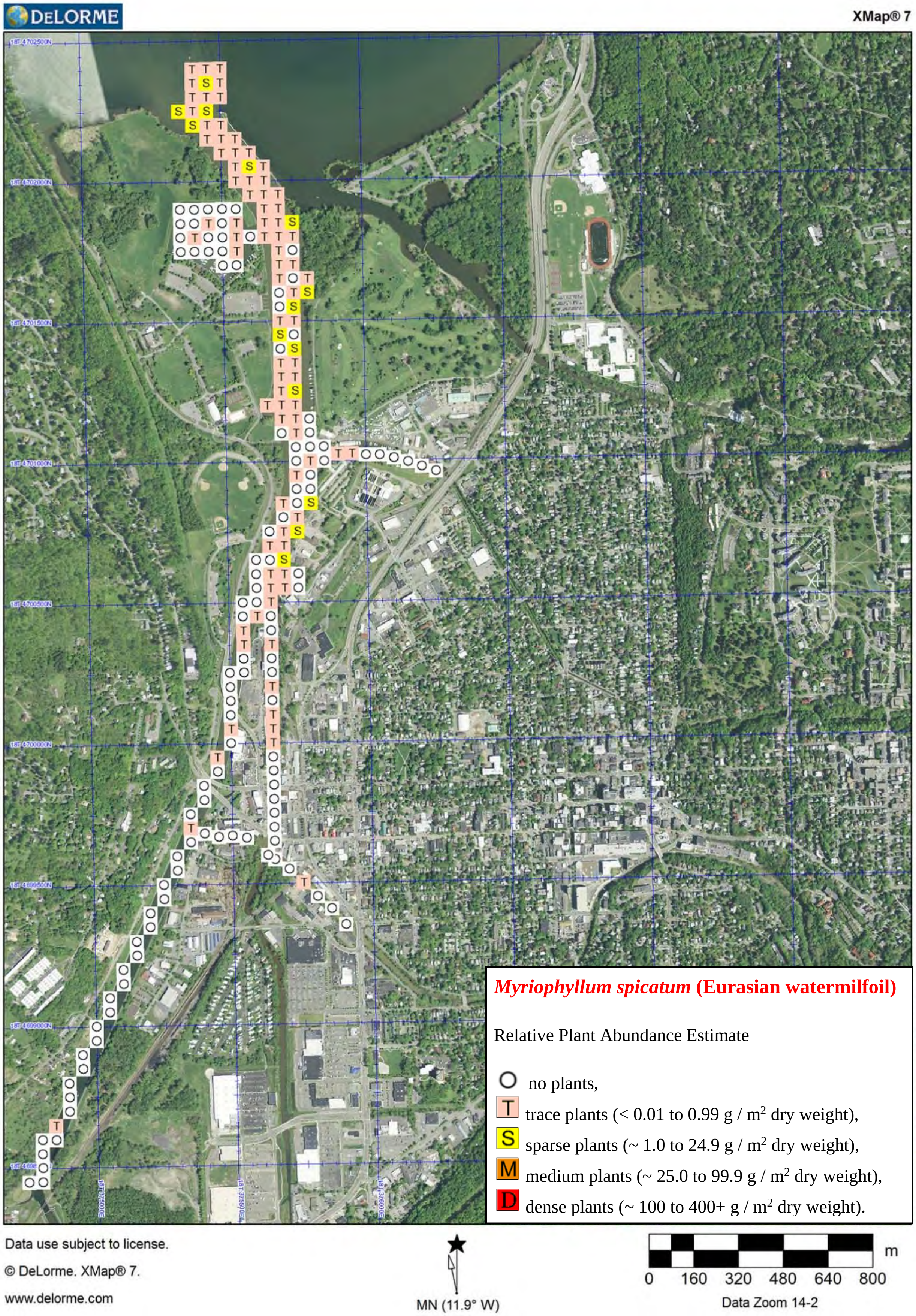


Map Inlet-5. *Elodea sp.* (elodea) pre-herbicide as abundance by two rake tosses.

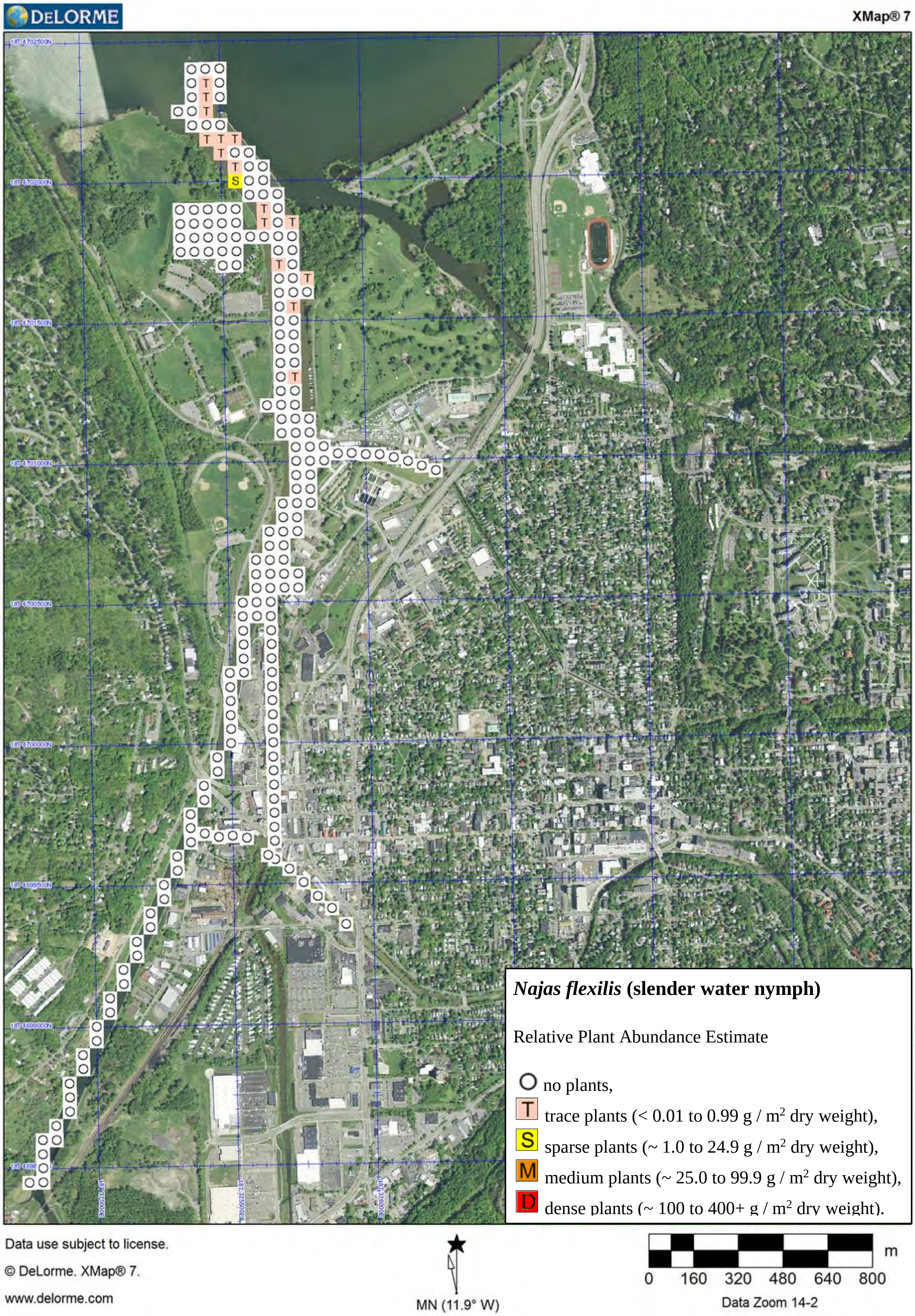


Map Inlet-6. *Heteranthera dubia* (water stargrass) pre-herbicide as abundance by two rake tosses.

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



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

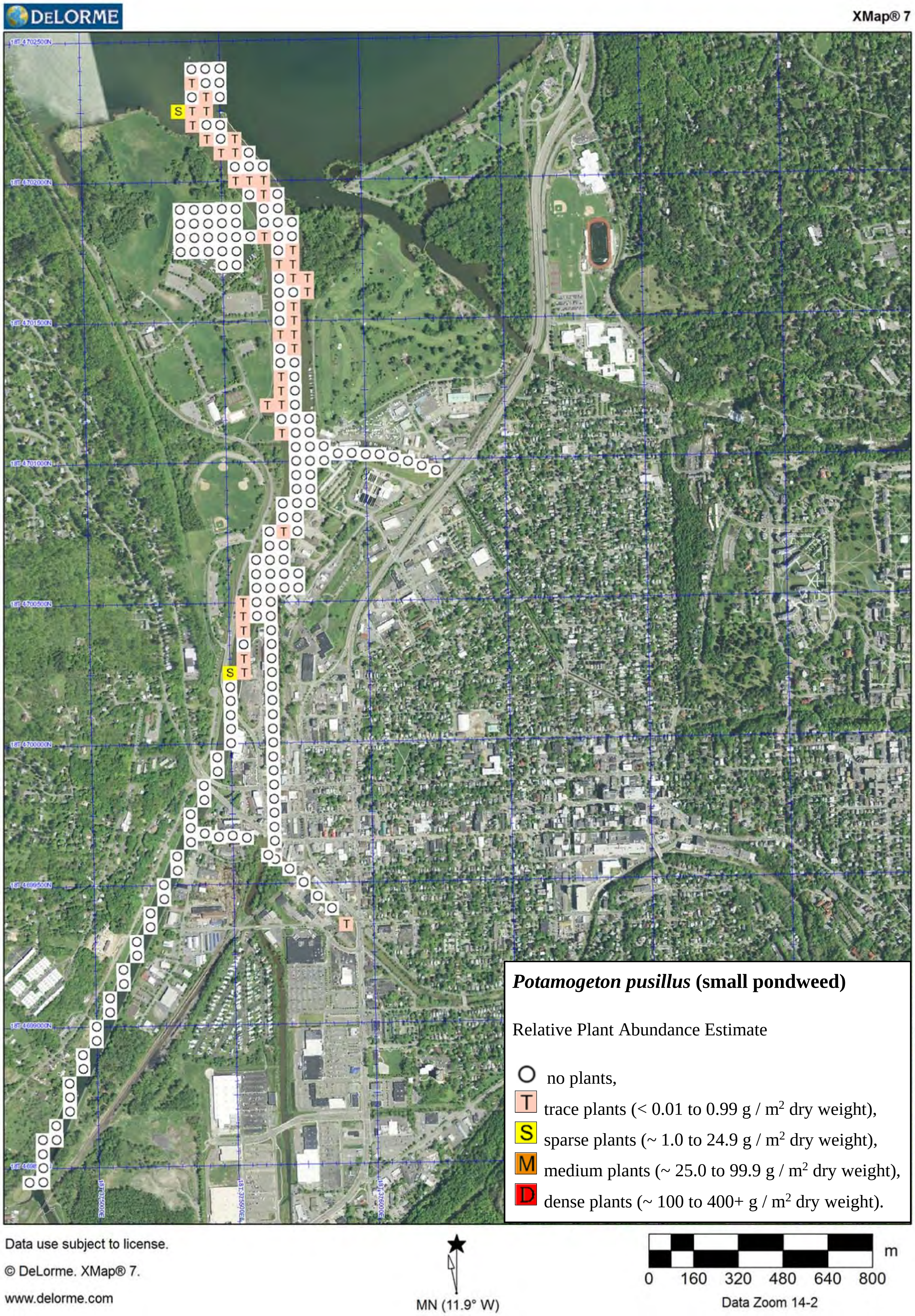


Map Inlet-9. *Najas flexilis* (slender water nymph) pre-herbicide as abundance by two rake tosses.

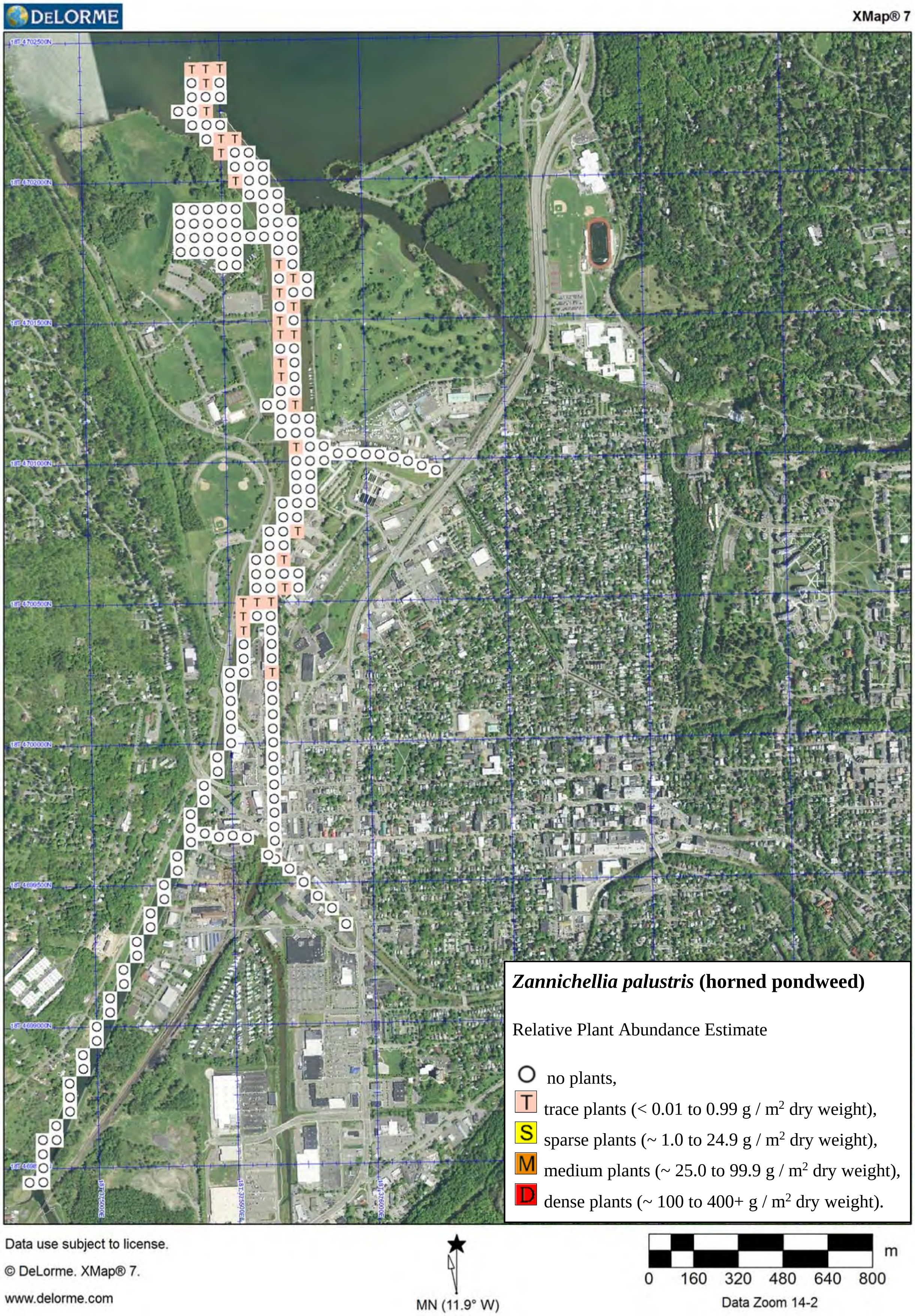
Map Inlet-10. *Najas minor* (minor naiad) pre-herbicide as abundance by two rake tosses.

Map Inlet-11. *Nitellopsis obtusa* (starry stonewort) pre-herbicide as abundance by two rake tosses.

Map Inlet-12. *Potamogeton crispus* (curly-leaved pondweed) pre-herbicide as abundance by two rake tosses.

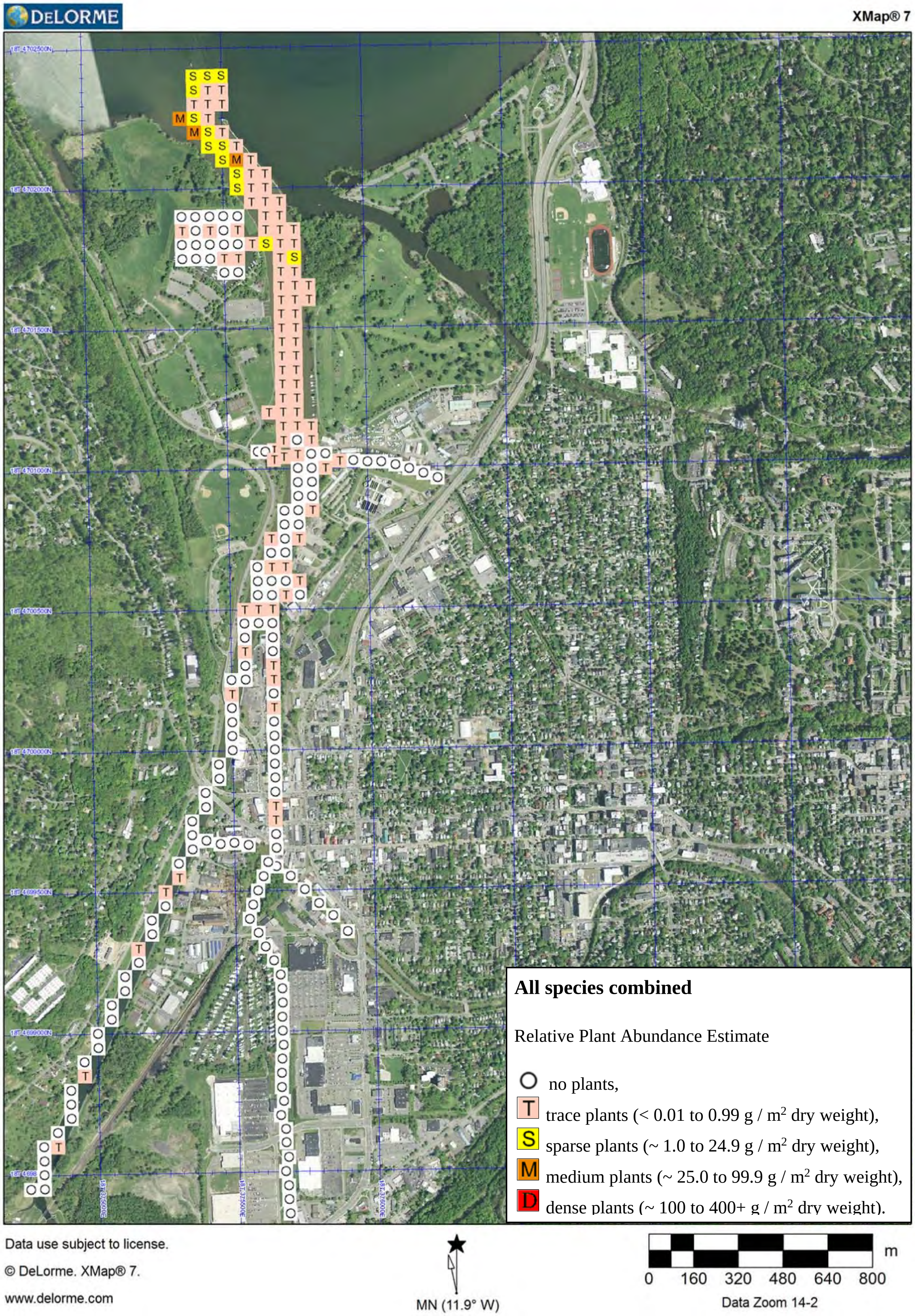


Map Inlet-13. *Potamogeton pusillus* (small pondweed) pre-herbicide as abundance by two rake tosses.

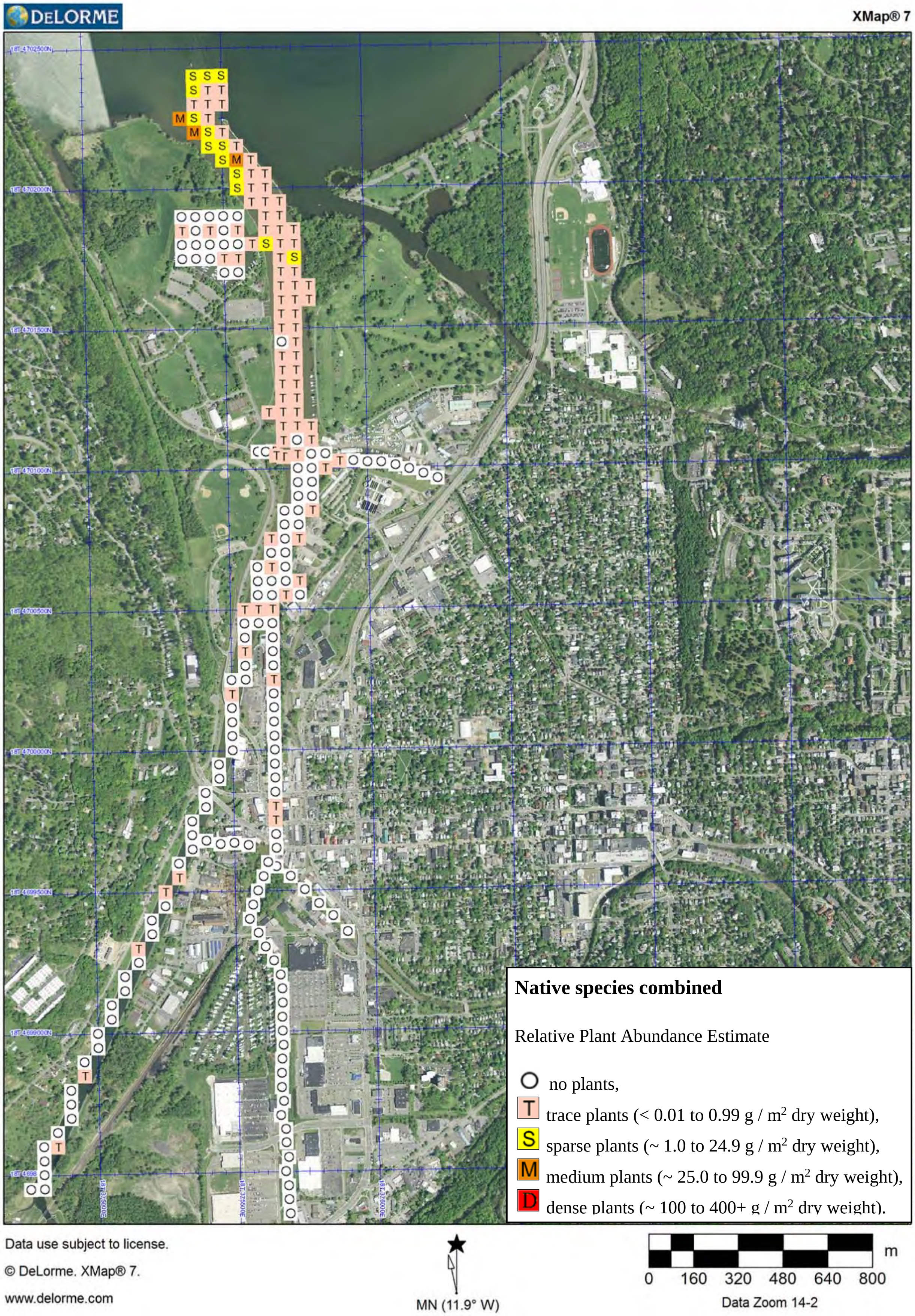


Map Inlet-14. *Zannichellia palustris* (horned pondweed) pre-herbicide as abundance by two rake tosses.

Map Inlet-15. Minor species pre-herbicide as abundance by two rake tosses.

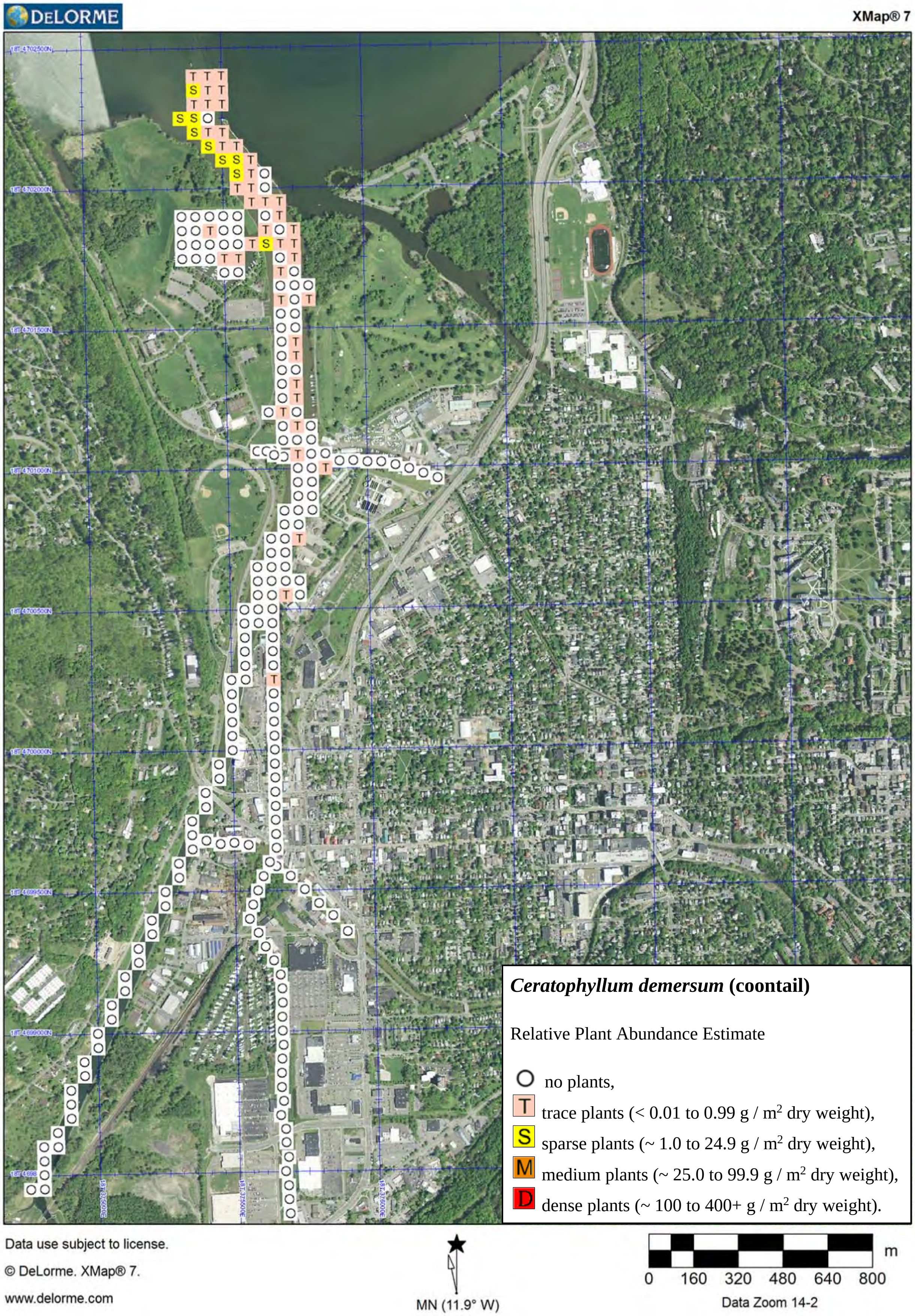


Map Inlet-16. All species combined post-herbicide as abundance by two rake tosses.

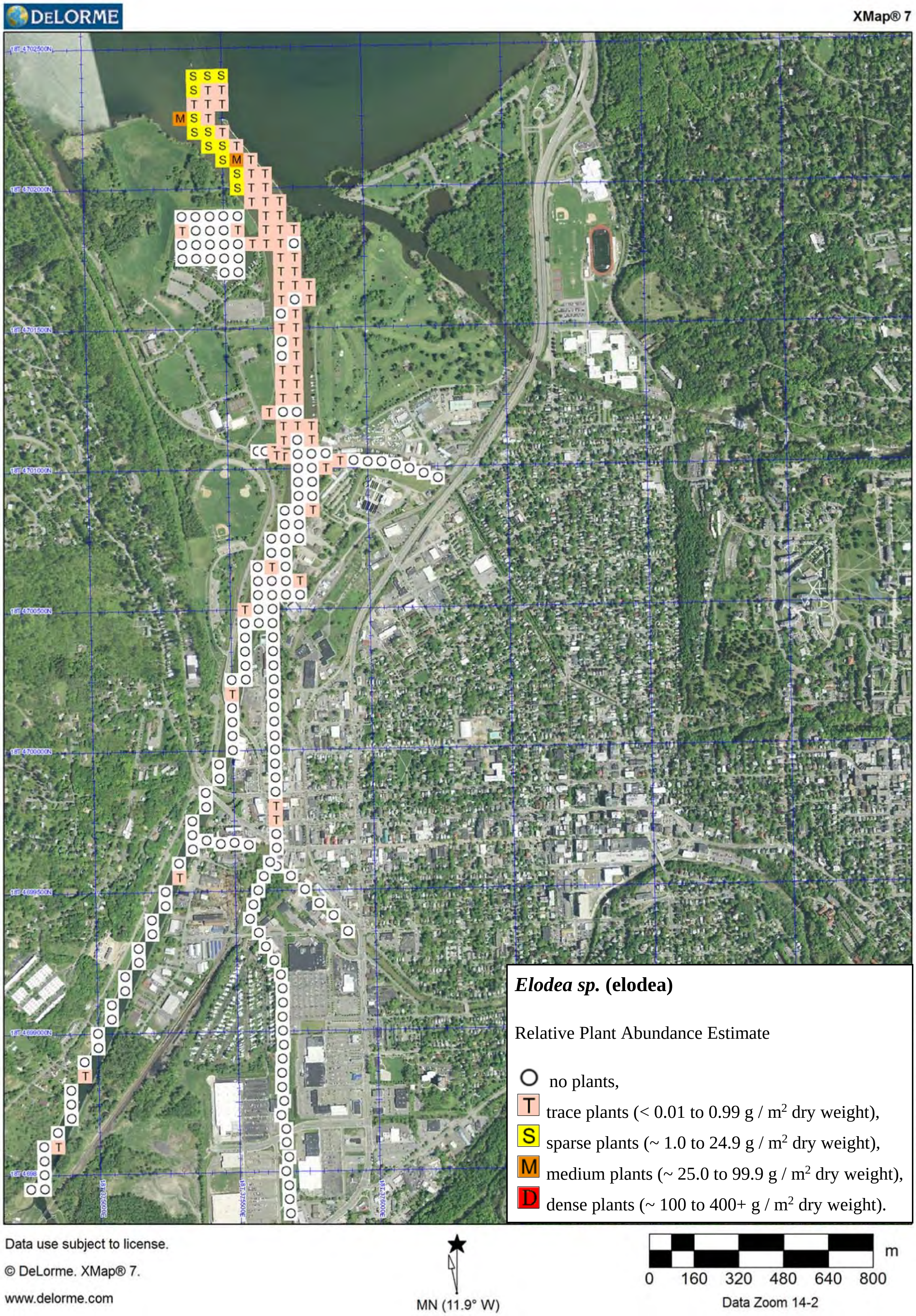


Map Inlet-17. Native species combined post-herbicide as abundance by two rake tosses.

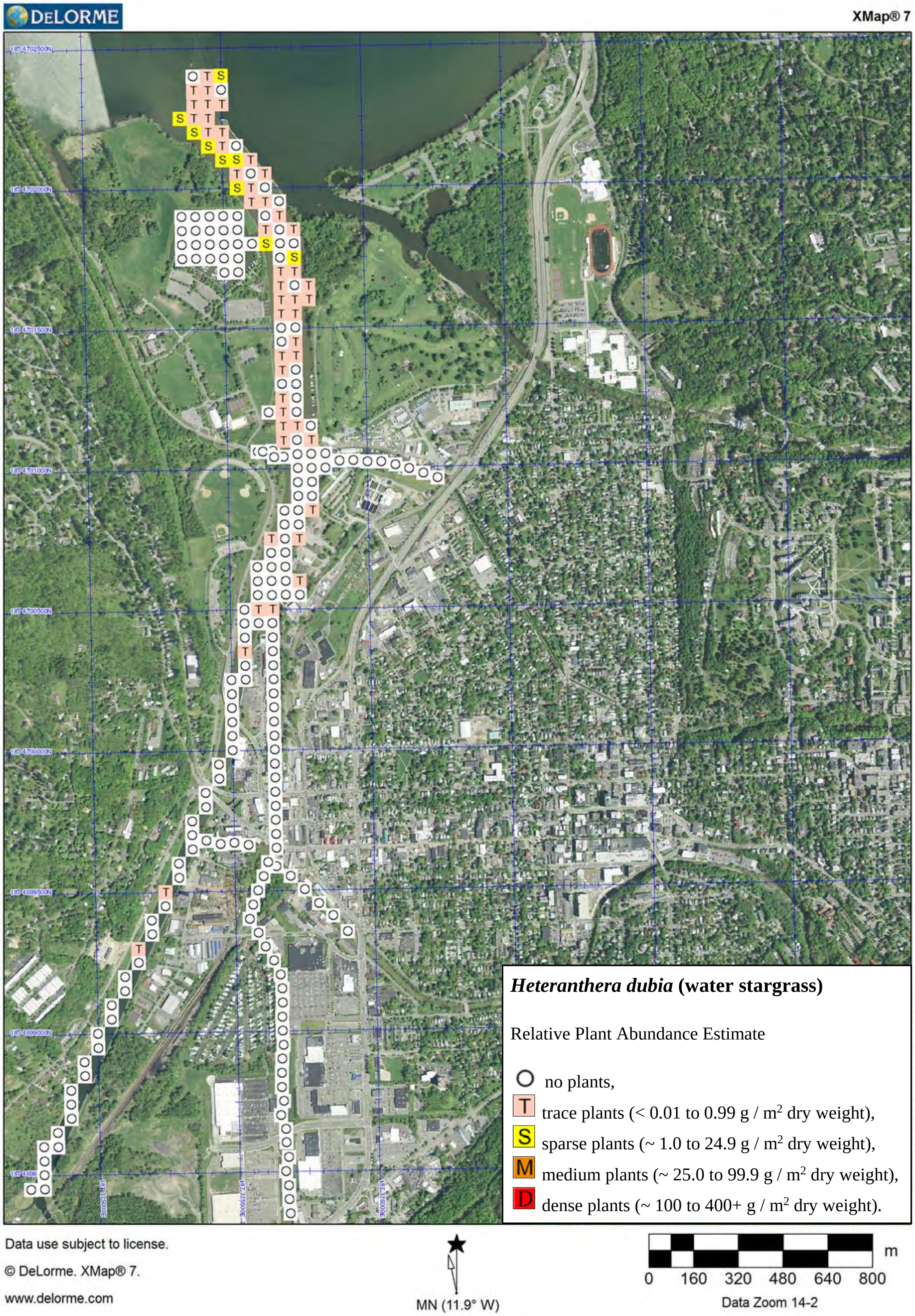
Map Inlet-18. Non-native species combined post-herbicide as abundance by two rake tosses.



Map Inlet-19. *Ceratophyllum demersum* (coontail) post-herbicide as abundance by two rake tosses.



Map Inlet-20. *Elodea sp.* (elodea) post-herbicide as abundance by two rake tosses.



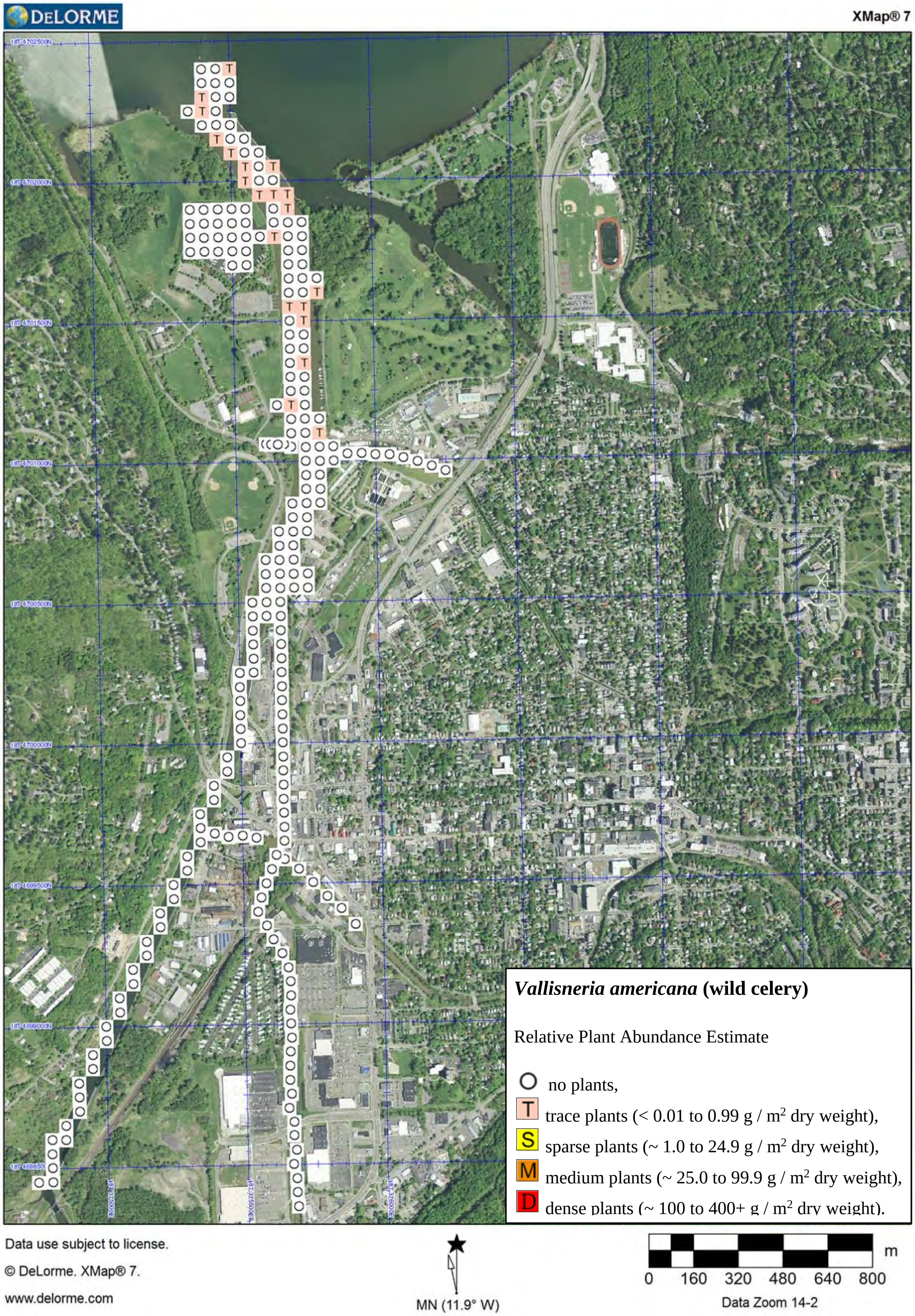
Map Inlet-21. *Heteranthera dubia* (water stargrass) post-herbicide as abundance by two rake tosses.

Map Inlet-22. *Hydrilla verticillata* (hydrilla) post-herbicide as abundance by two rake tosses.

Map Inlet-23. *Myriophyllum spicatum* (Eurasian watermilfoil) post-herbicide as abundance by two rake tosses.

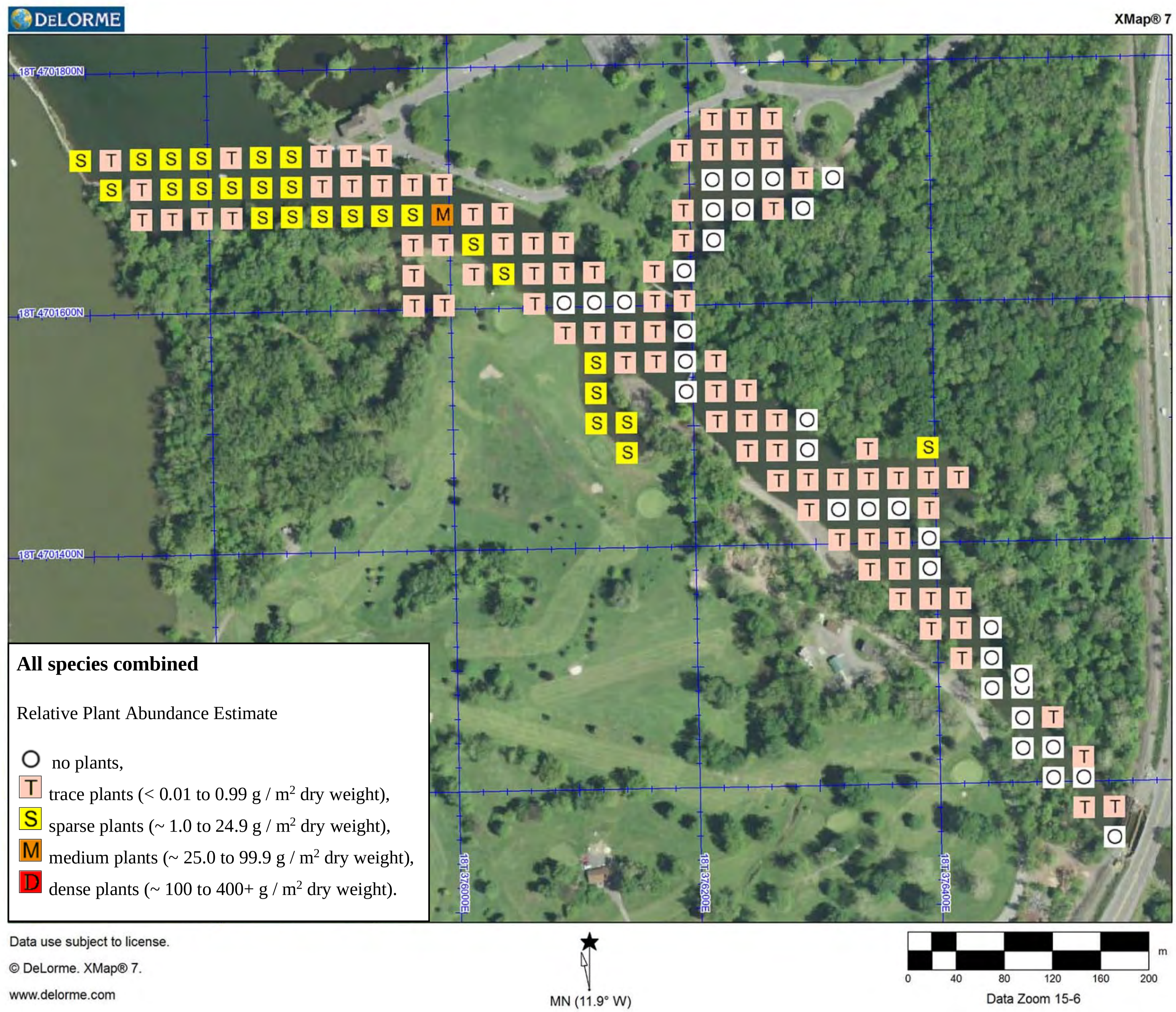
Map Inlet-24. *Nitellopsis obtusa* (starry stonewort) post-herbicide as abundance by two rake tosses.

Map Inlet-25. *Stuckenia pectinata* (sago pondweed) post-herbicide as abundance by two rake tosses.

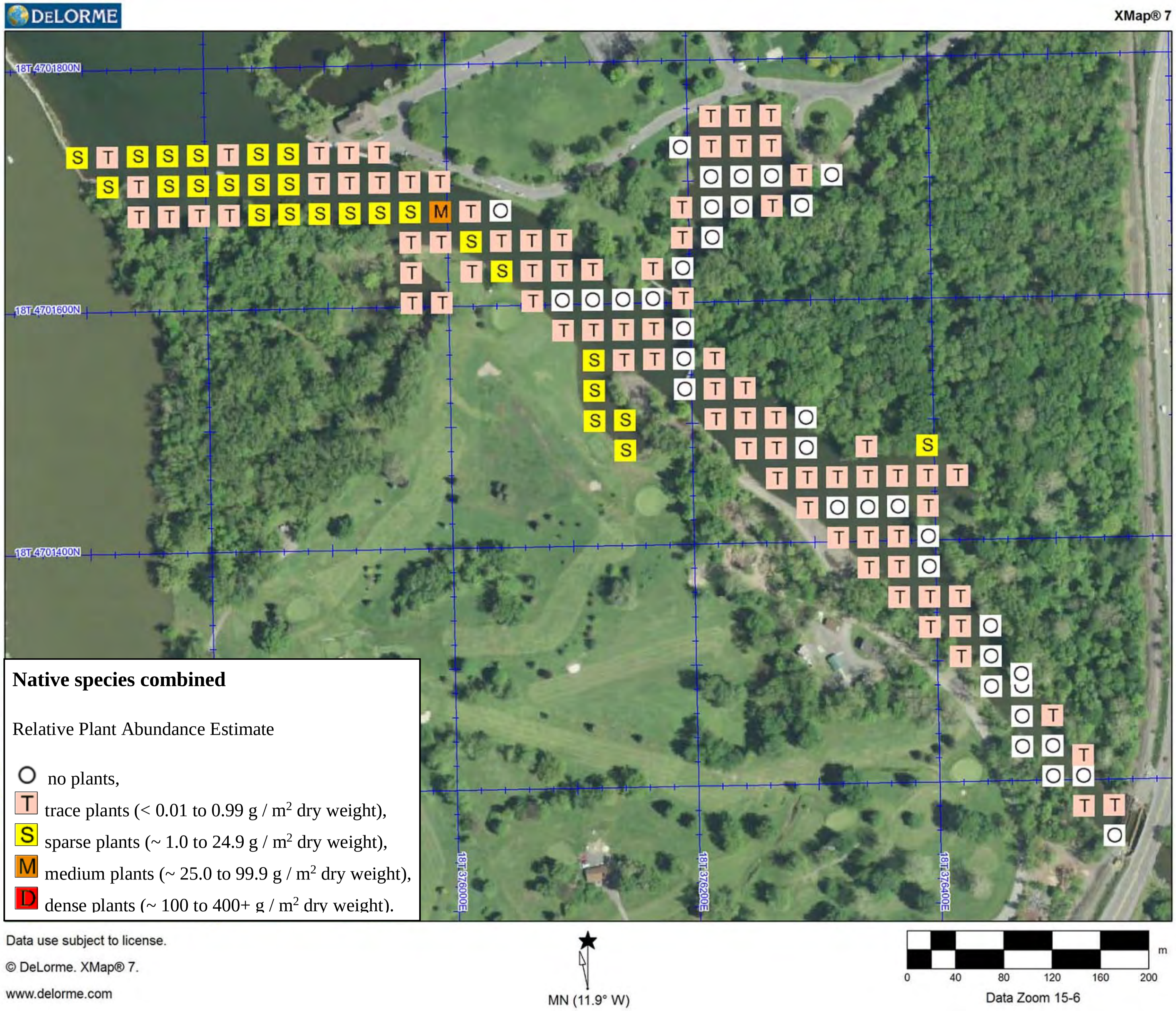


Map Inlet-26. *Vallisneria americana* (wild celery) post-herbicide as abundance by two rake tosses.

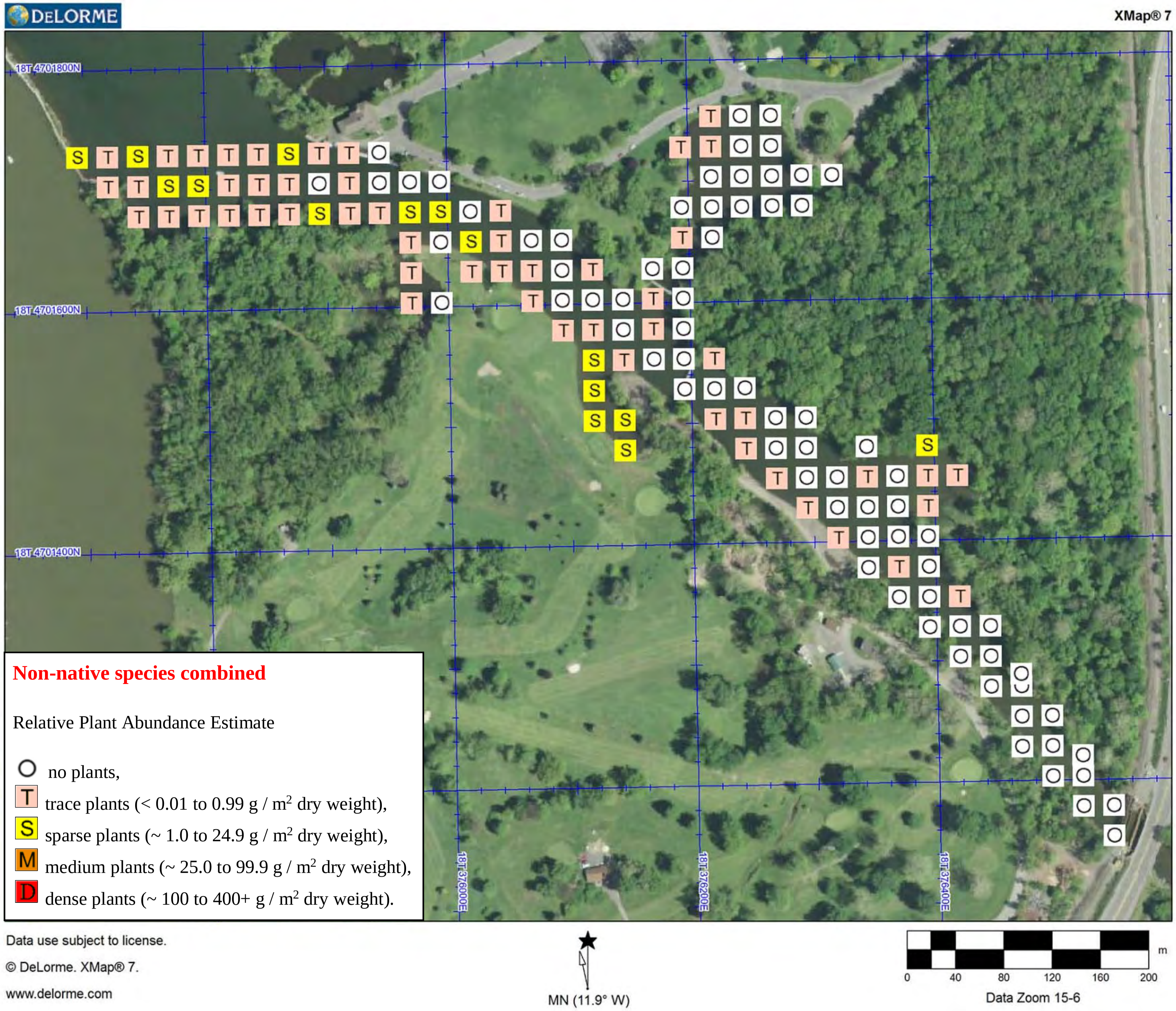
Map Inlet-27. Minor species post-herbicide as abundance by two rake tosses



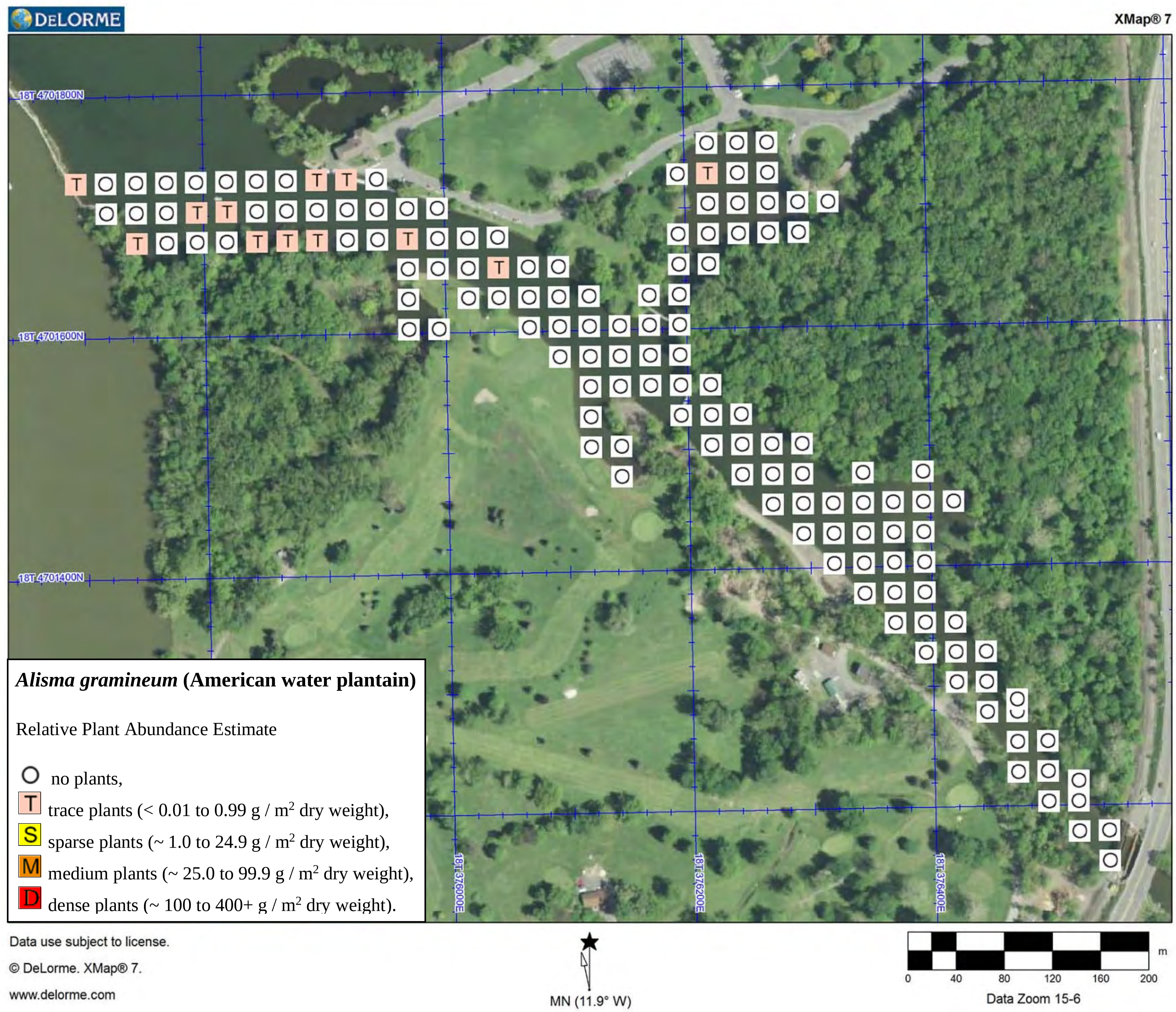
Map Fall Creek-1. All species combined pre-herbicide as abundance by two rake tosses.



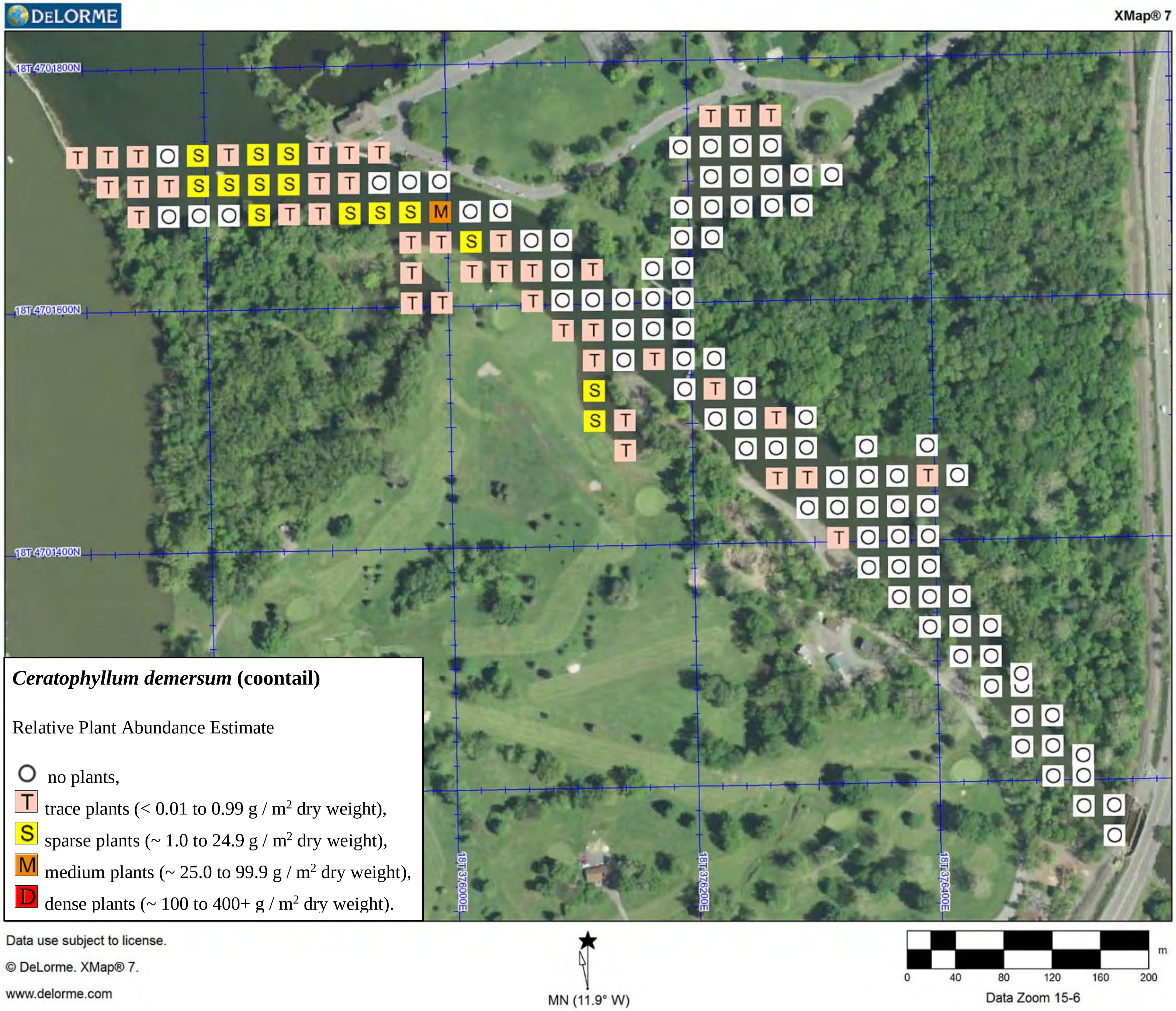
Map Fall Creek-2. Native species combined pre-herbicide as abundance by two rake tosses.



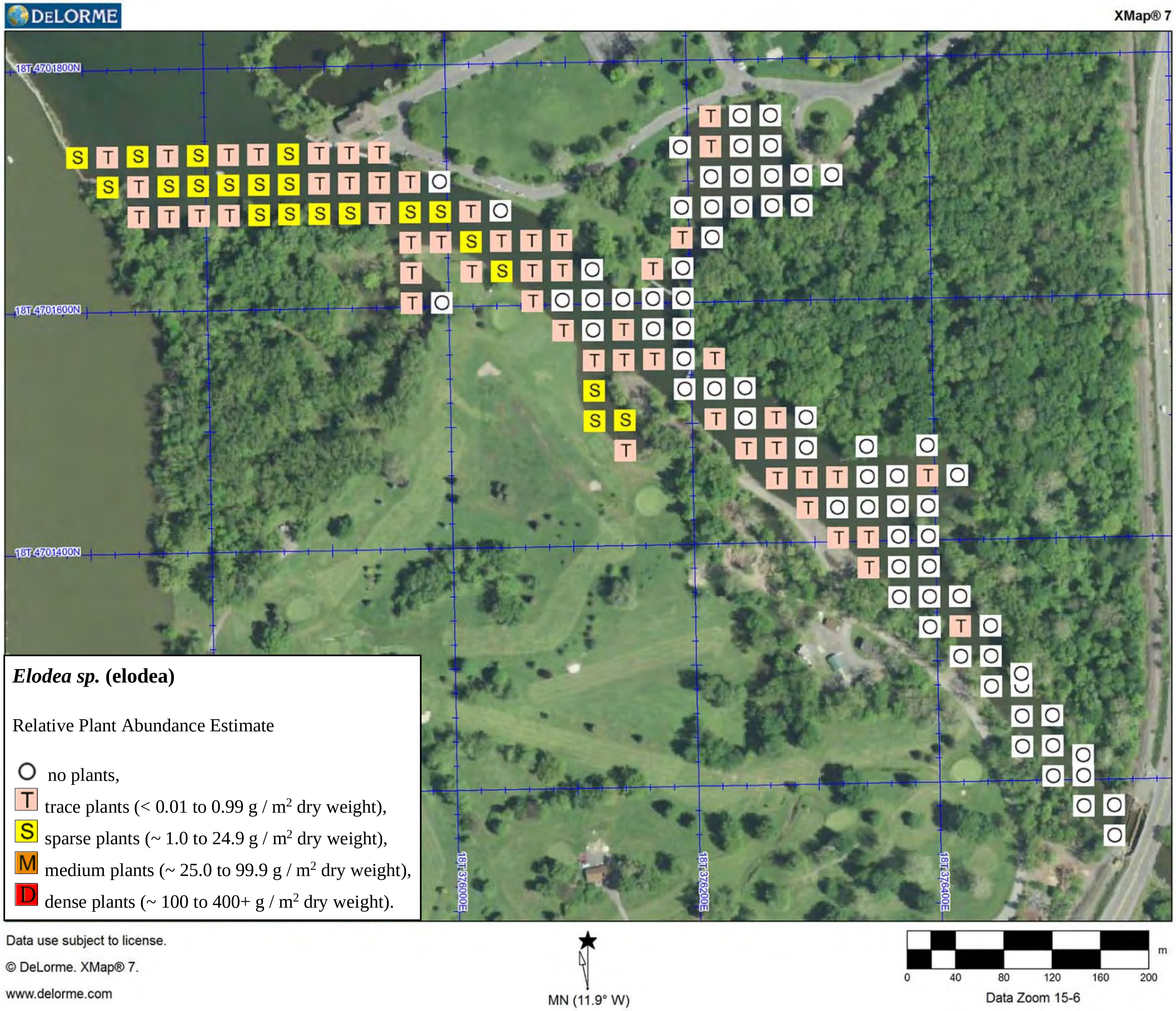
Map Fall Creek-3. Non-native species combined pre-herbicide as abundance by two rake tosses.



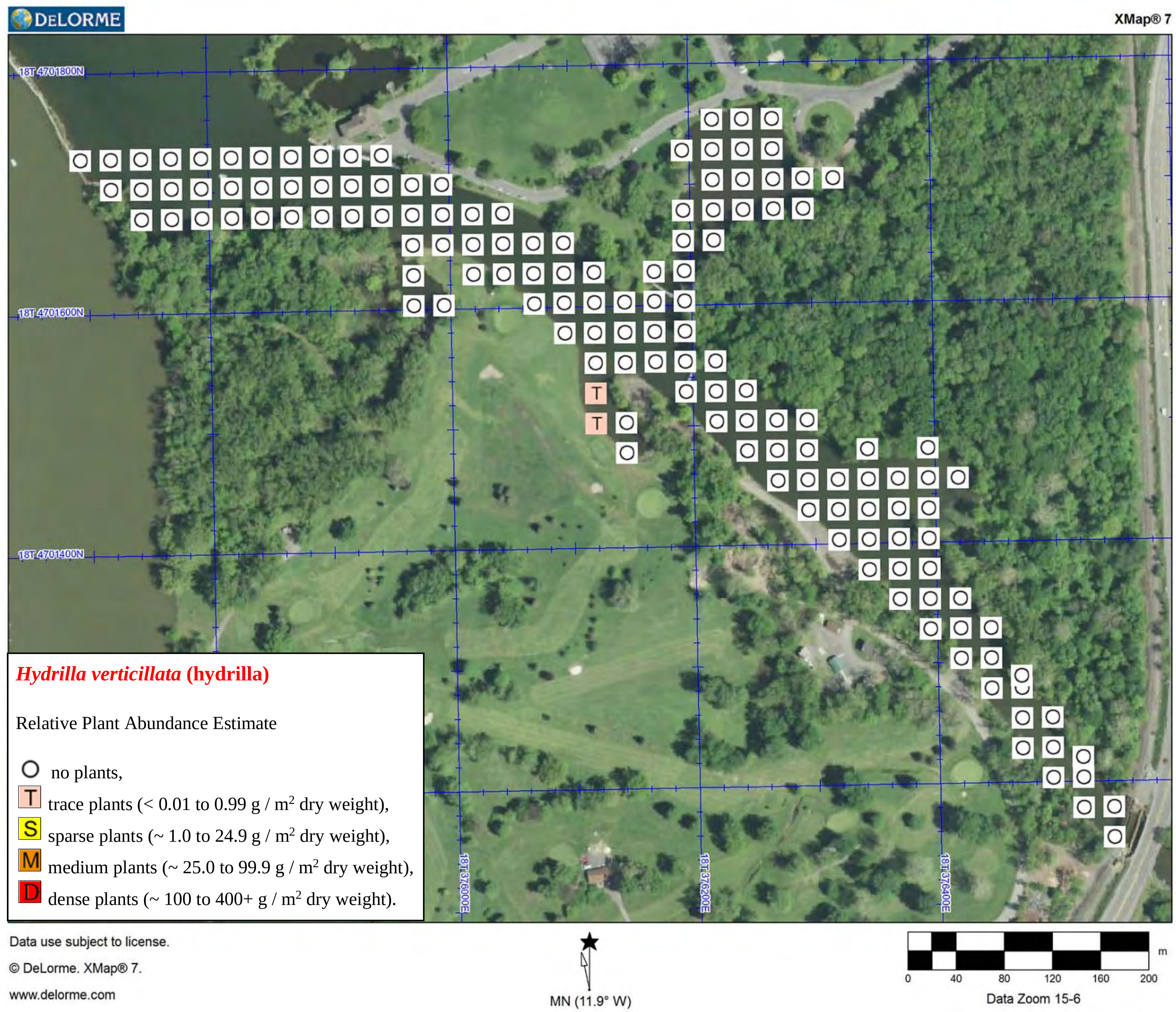
Map Fall Creek-4. *Alisma gramineum* (American water plantain) pre-herbicide as abundance by two rake tosses.



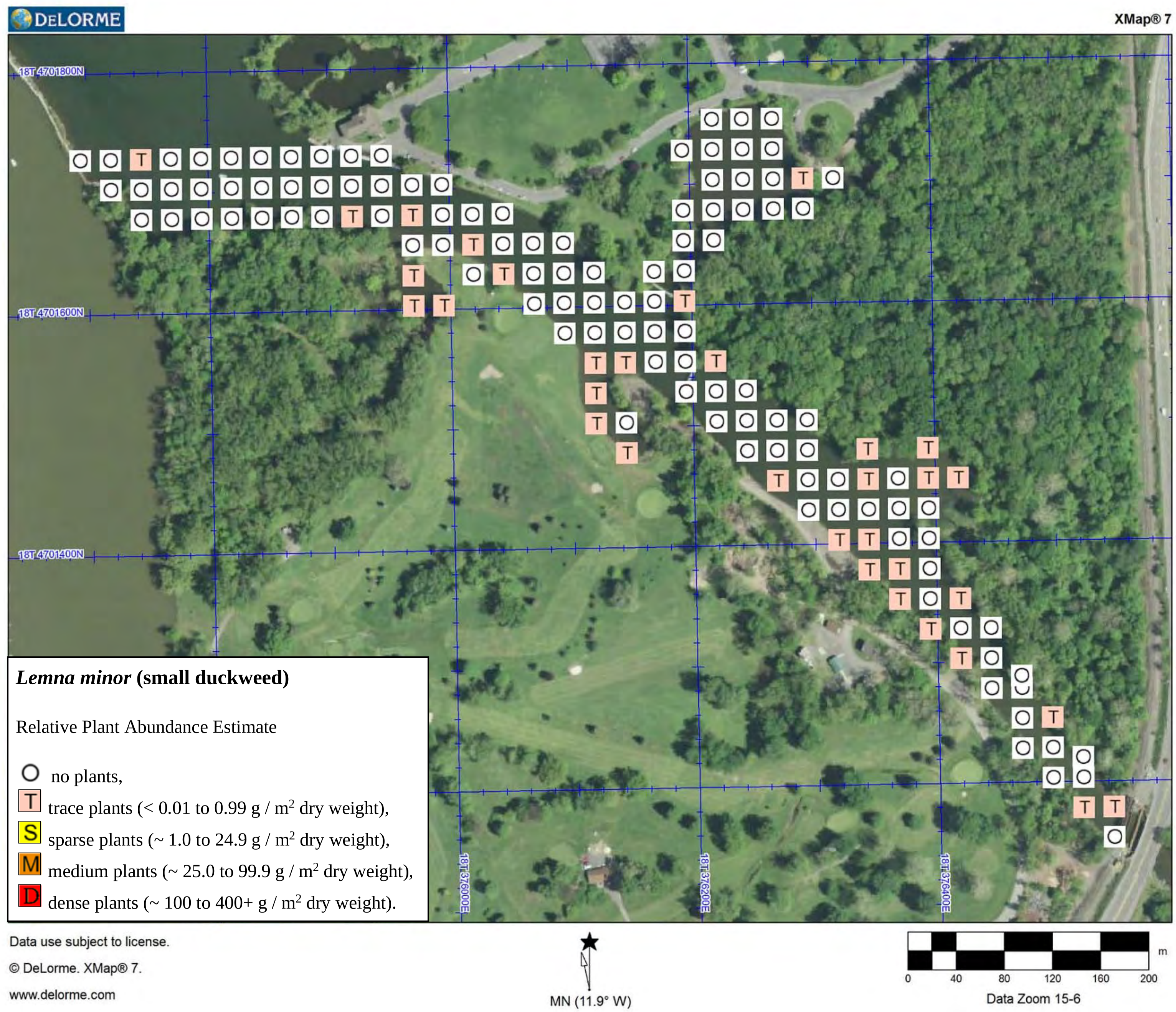
Map Fall Creek-5. *Ceratophyllum demersum* (coontail) pre-herbicide as abundance by two rake tosses.



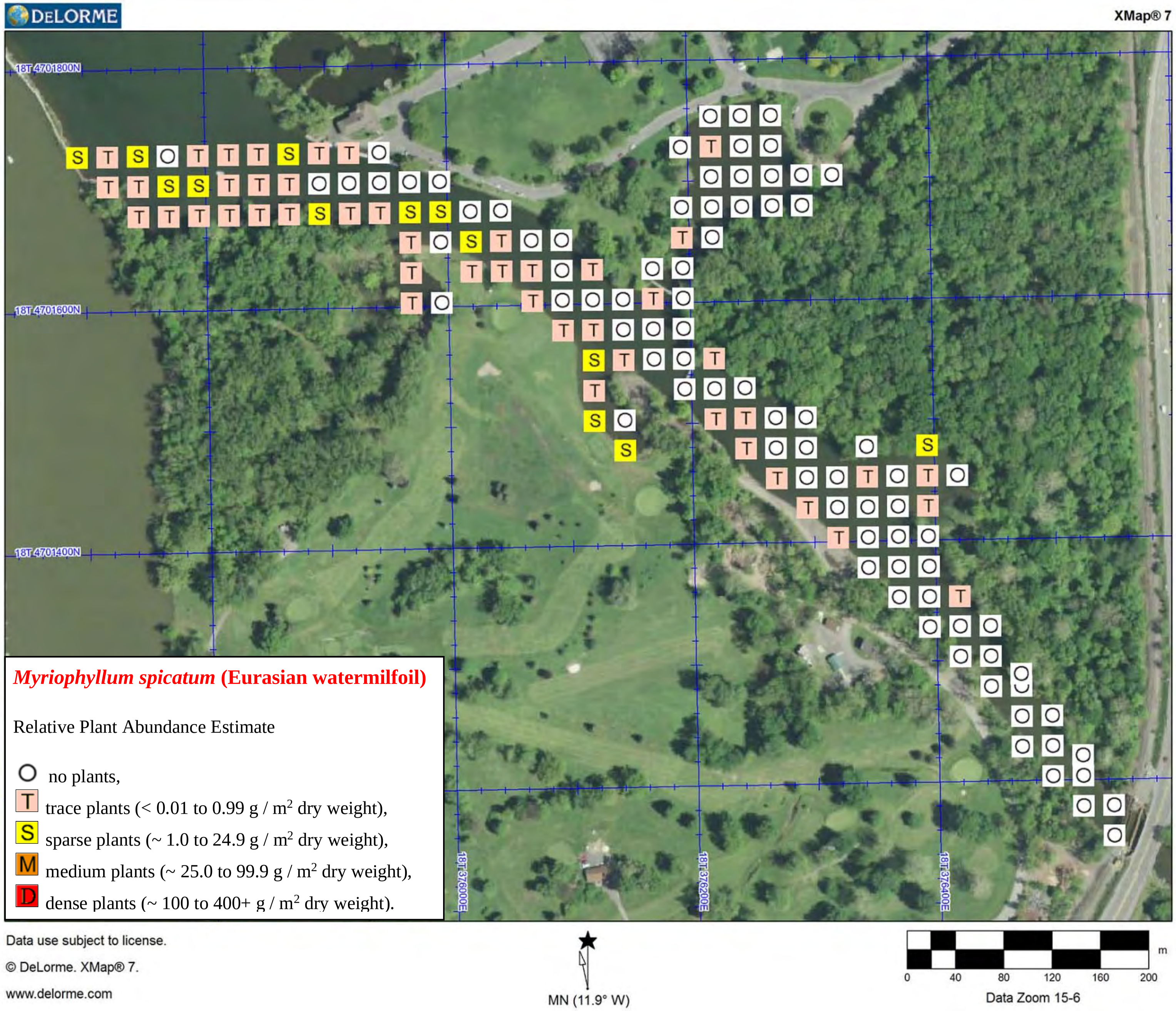
Map Fall Creek-6. *Elodea sp.* (elodea) pre-herbicide as abundance by two rake tosses.



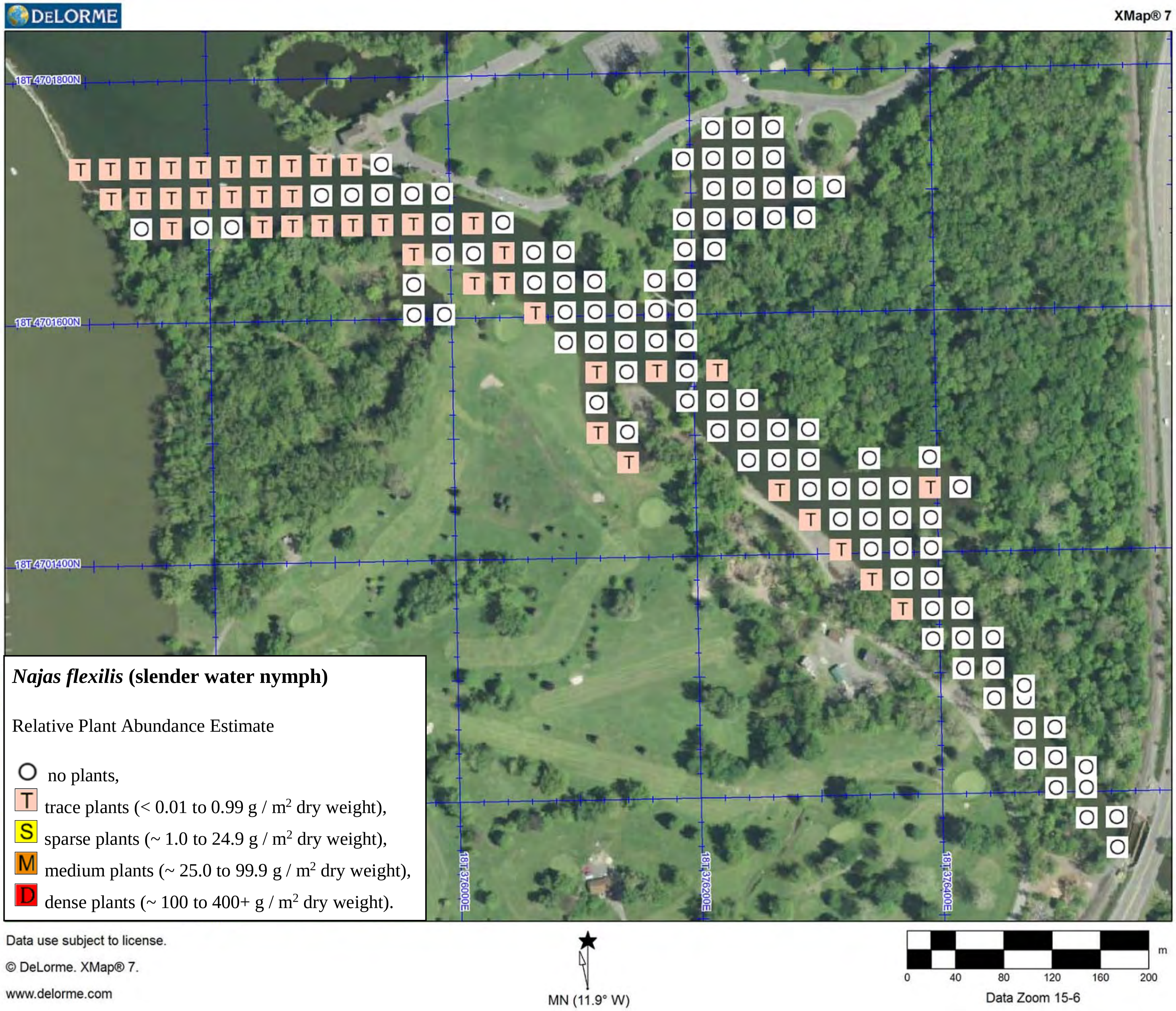
Map Fall Creek-7. *Hydrilla verticillata* (hydrilla) pre-herbicide as abundance by two rake tosses.



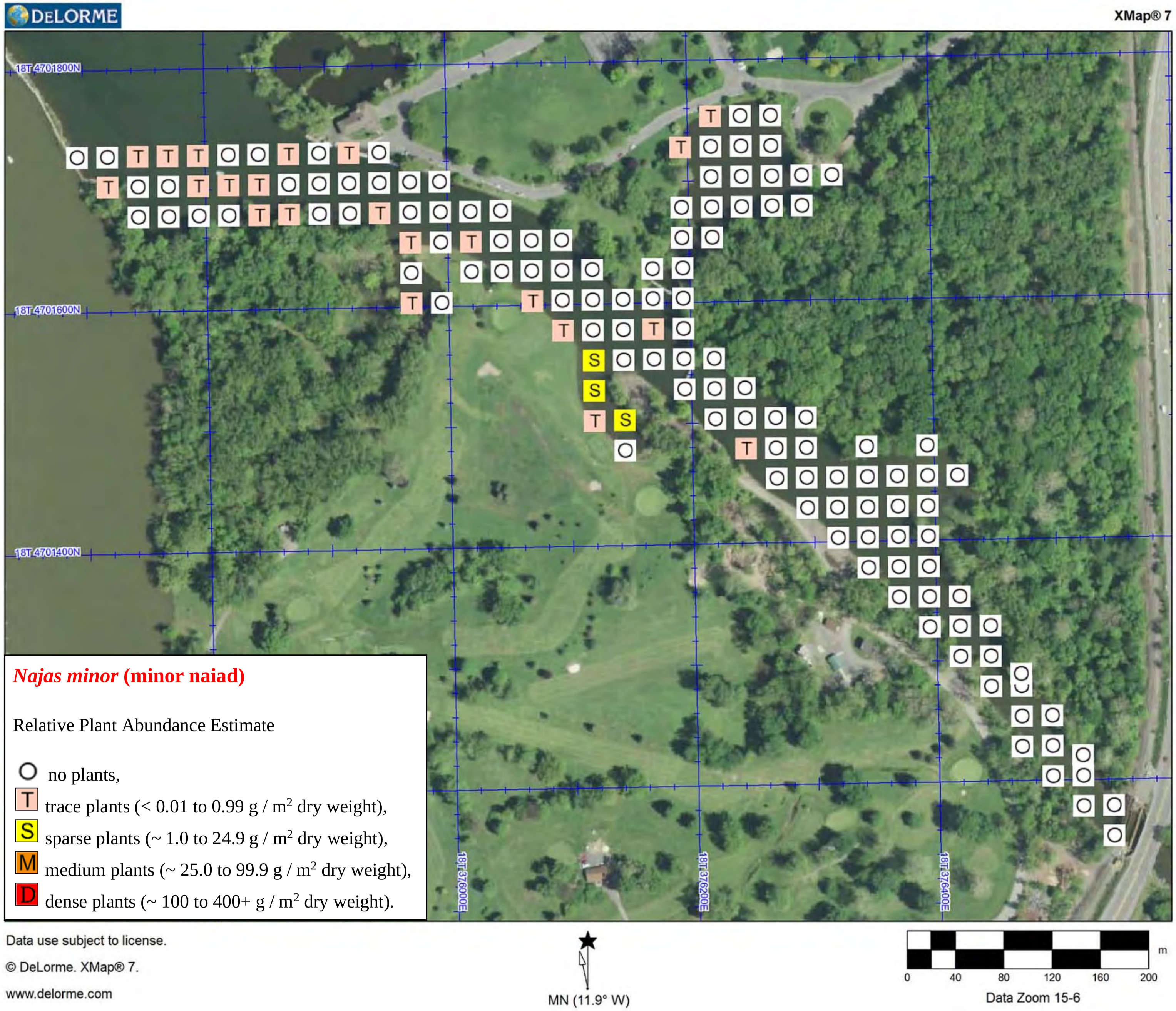
Map Fall Creek-8. *Lemna minor* (small duckweed) pre-herbicide as abundance by two rake tosses.



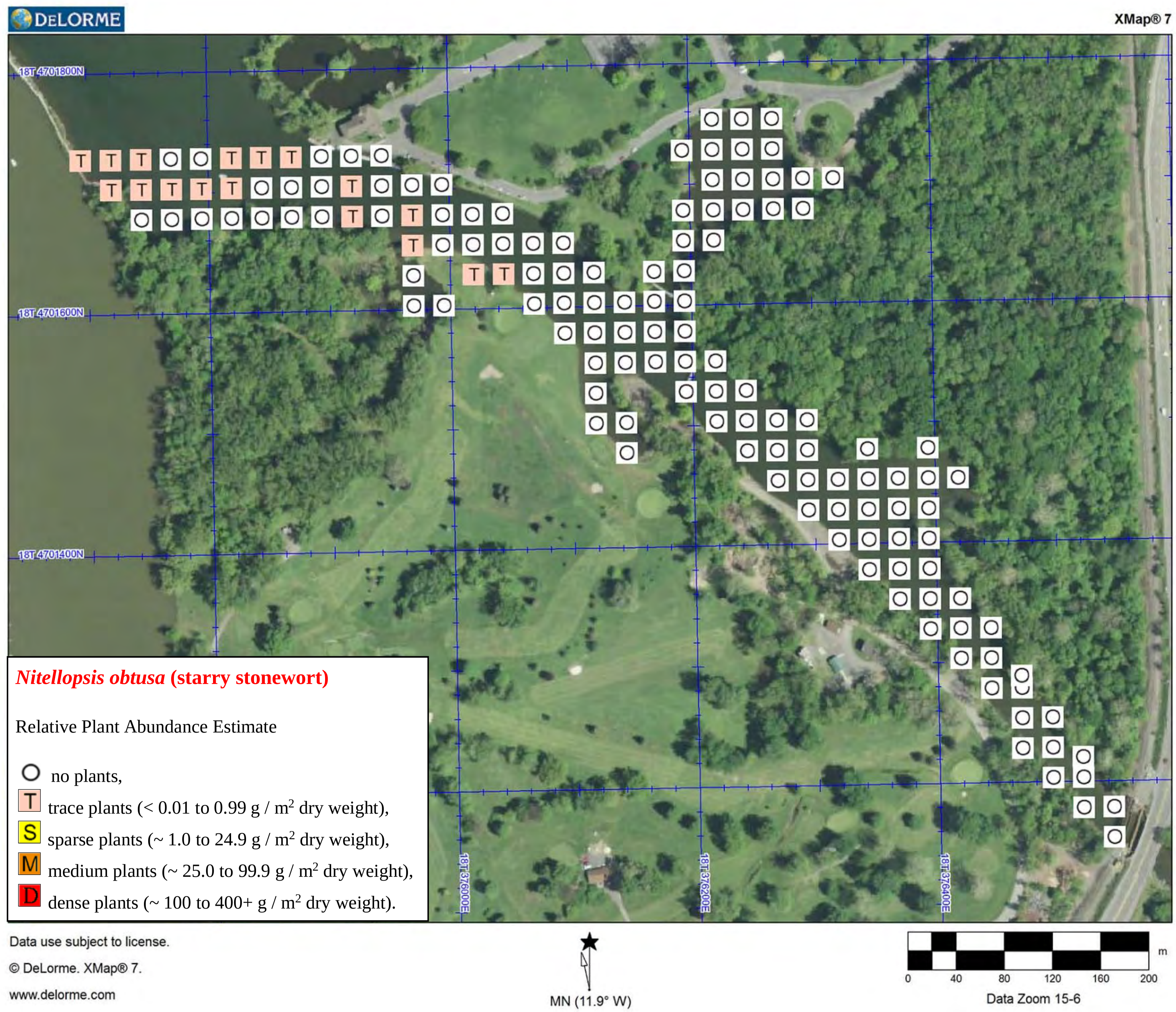
Map Fall Creek-9. *Myriophyllum spicatum* (Eurasian watermilfoil) pre-herbicide as abundance by two rake tosses.



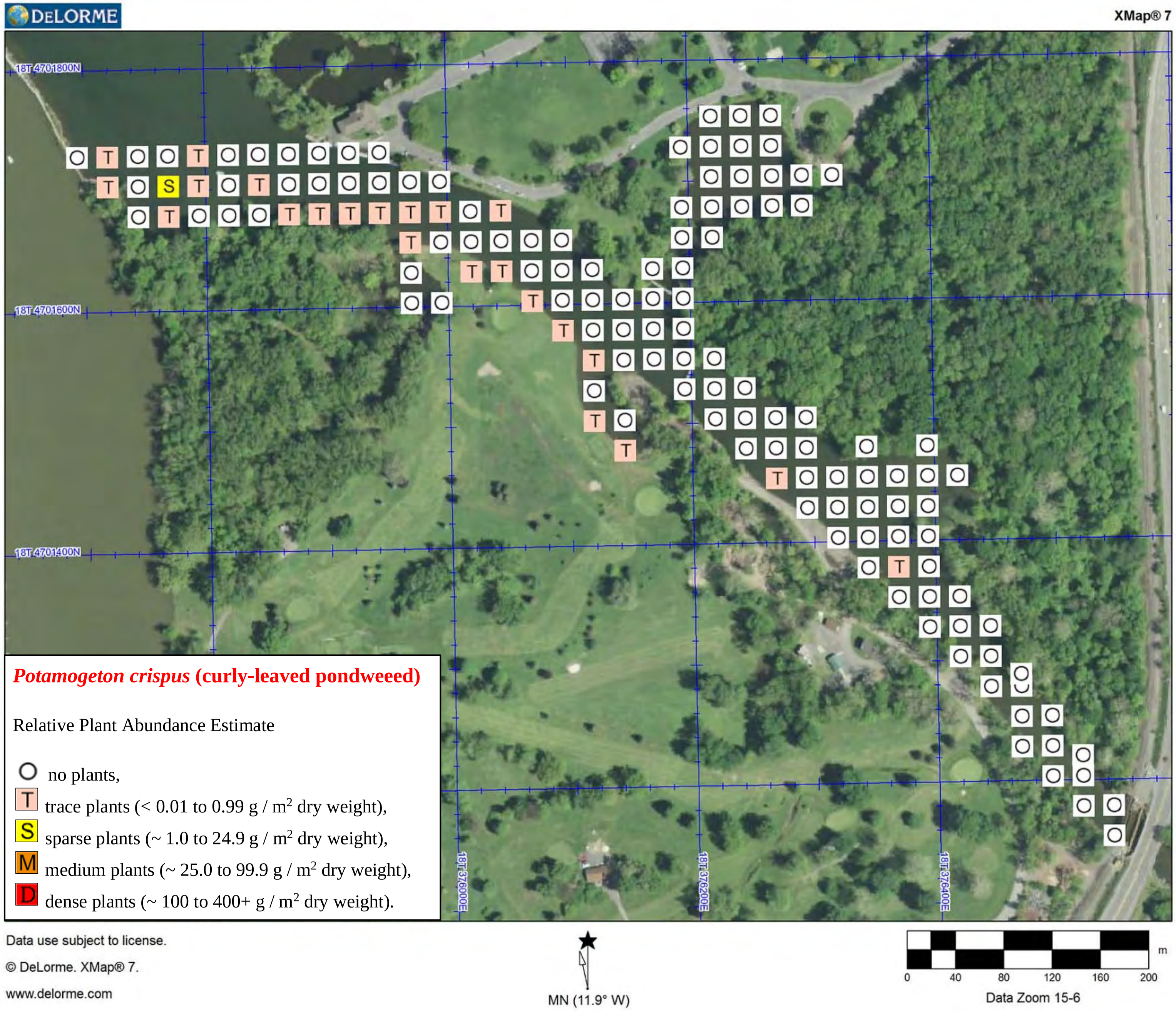
Map Fall Creek-10. *Najas flexilis* (slender water nymph) pre-herbicide as abundance by two rake tosses.



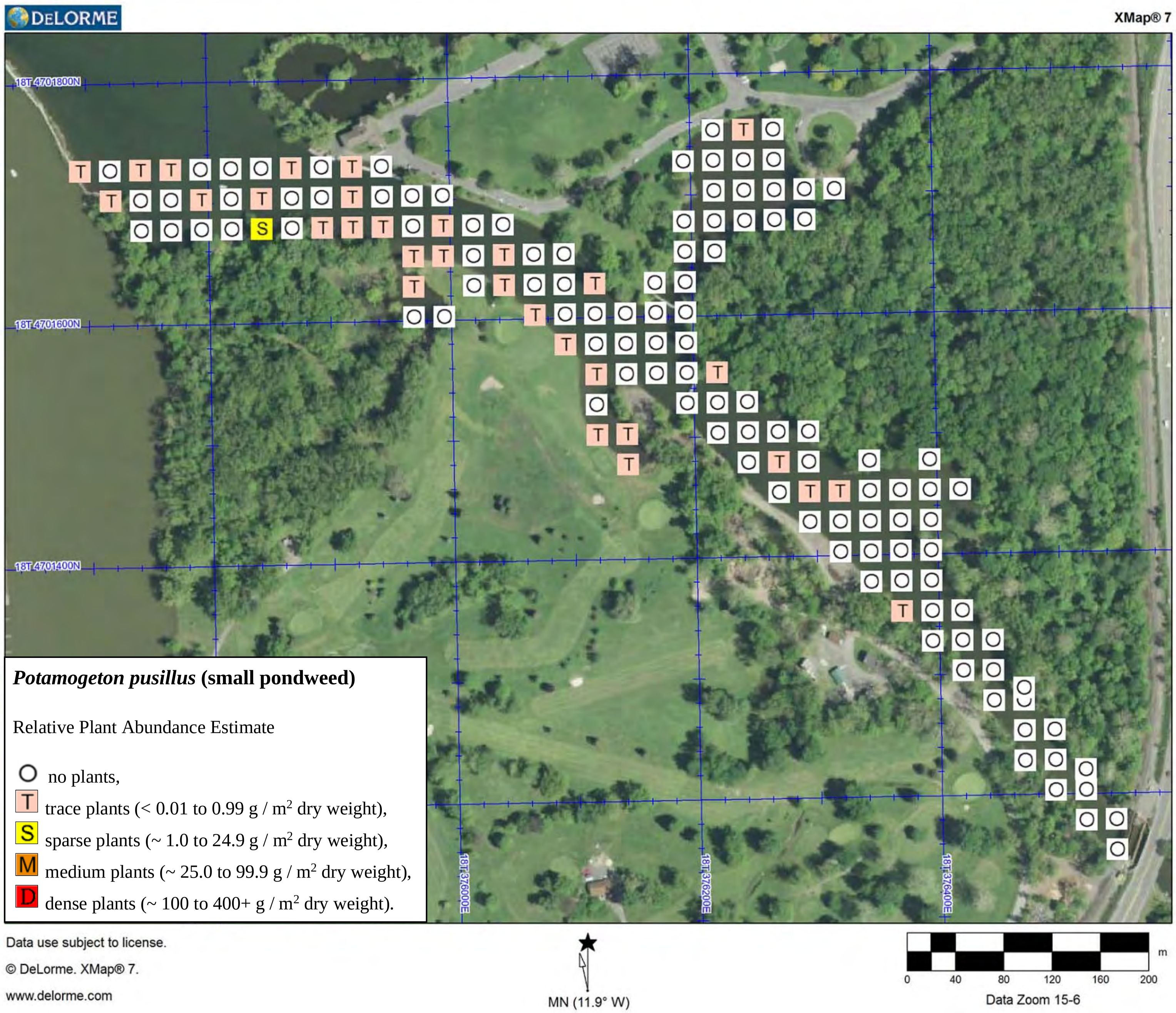
Map Fall Creek-11. *Najas minor* (minor naiad) pre-herbicide as abundance by two rake tosses.



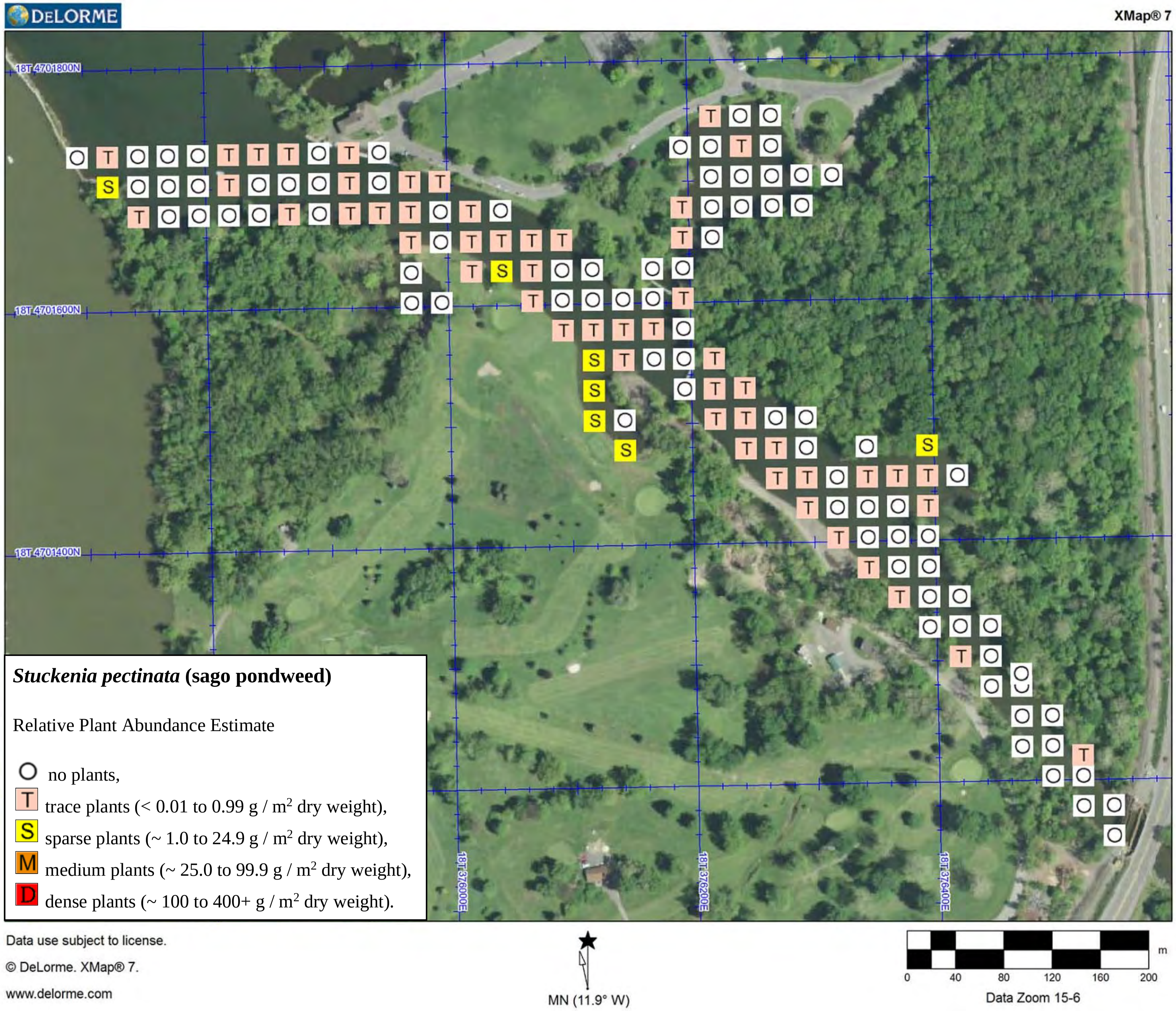
Map Fall Creek-12. *Nitellopsis obtusa* (starry stonewort) pre-herbicide as abundance by two rake tosses.



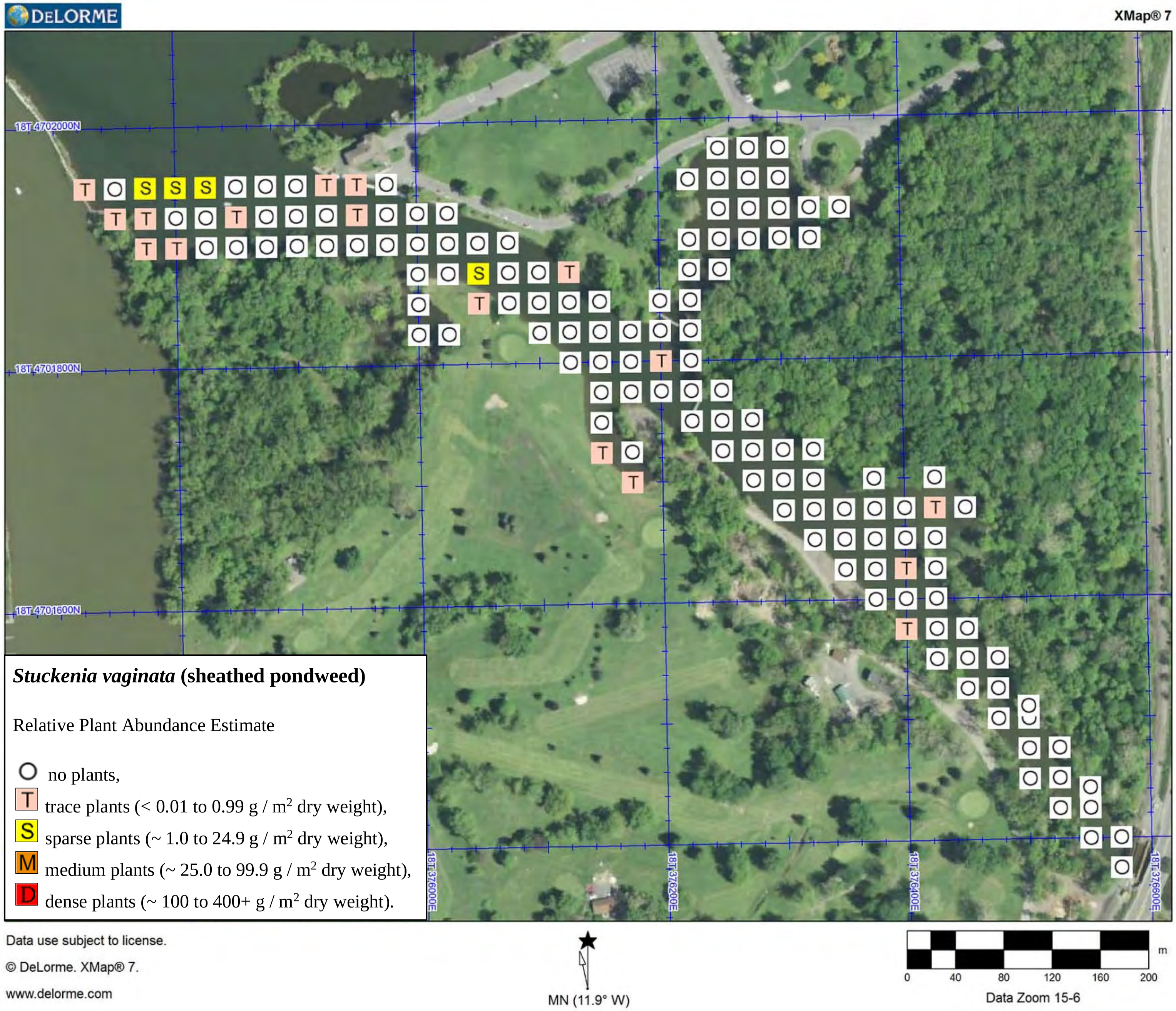
Map Fall Creek-13. *Potamogeton crispus* (curly-leaved pondweed) pre-herbicide as abundance by two rake tosses.



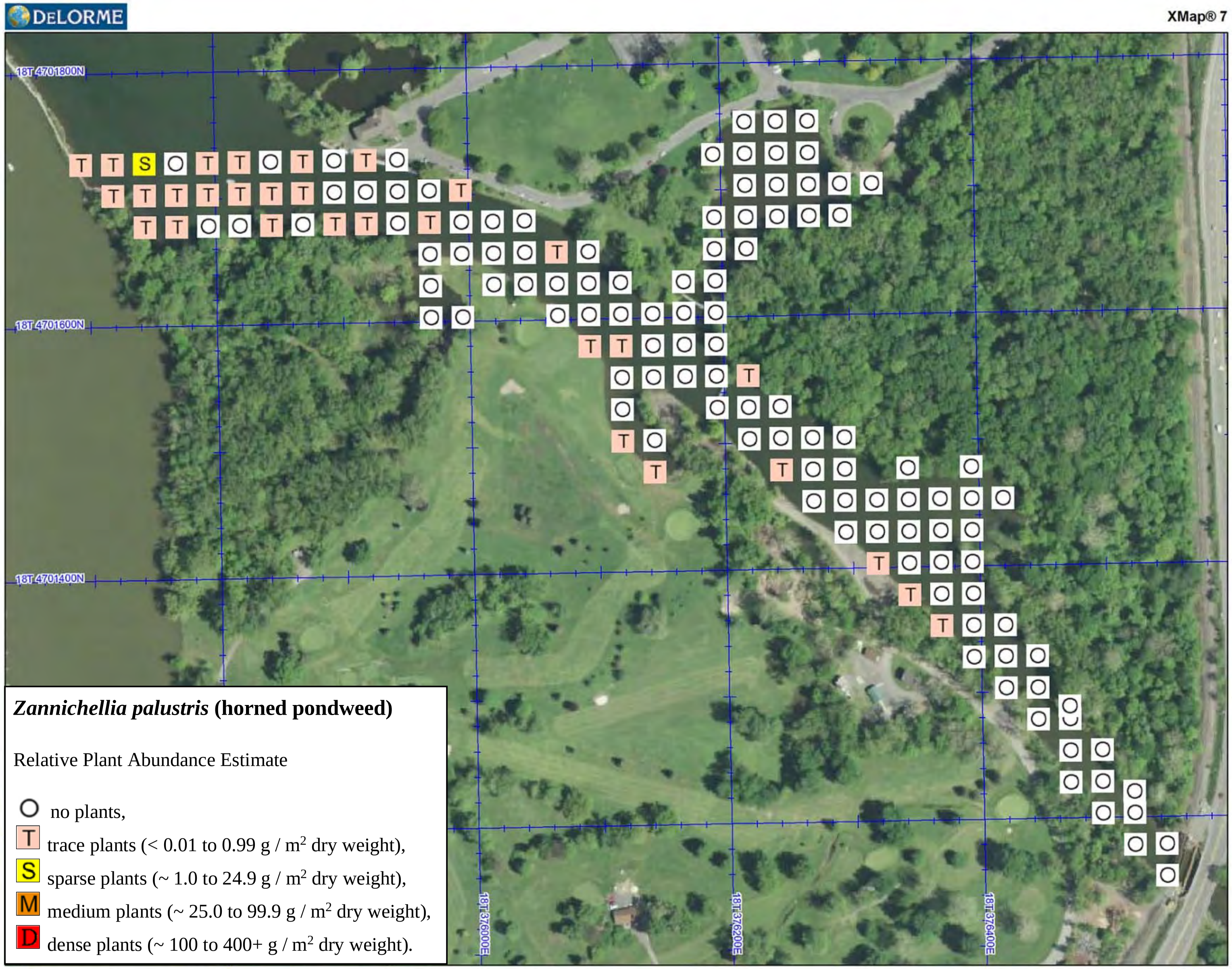
Map Fall Creek-14. *Potamogeton pusillus* (small pondweed) pre-herbicide as abundance by two rake tosses.



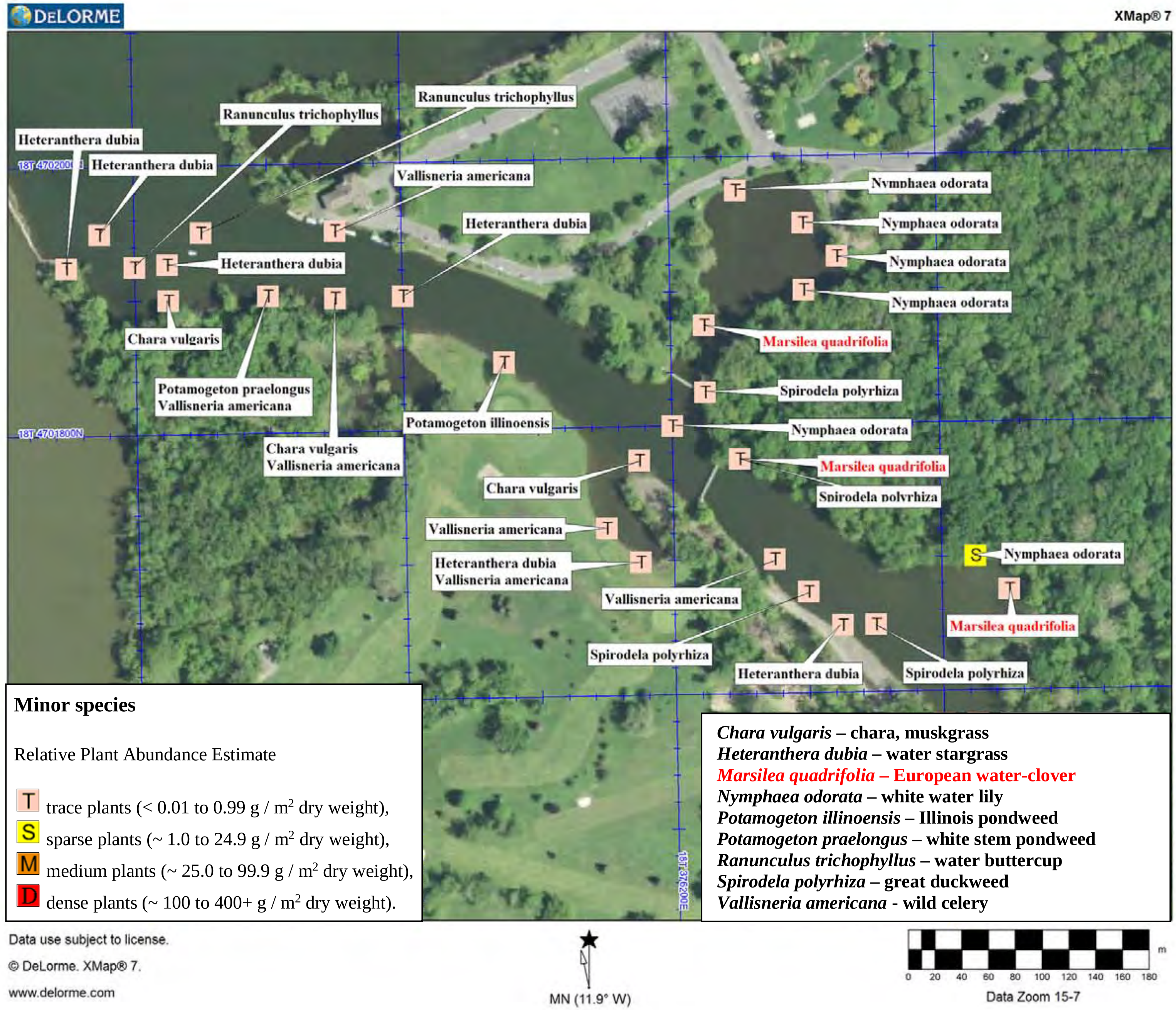
Map Fall Creek-15. *Stuckenia pectinata* (sago pondweed) pre-herbicide as abundance by two rake tosses.



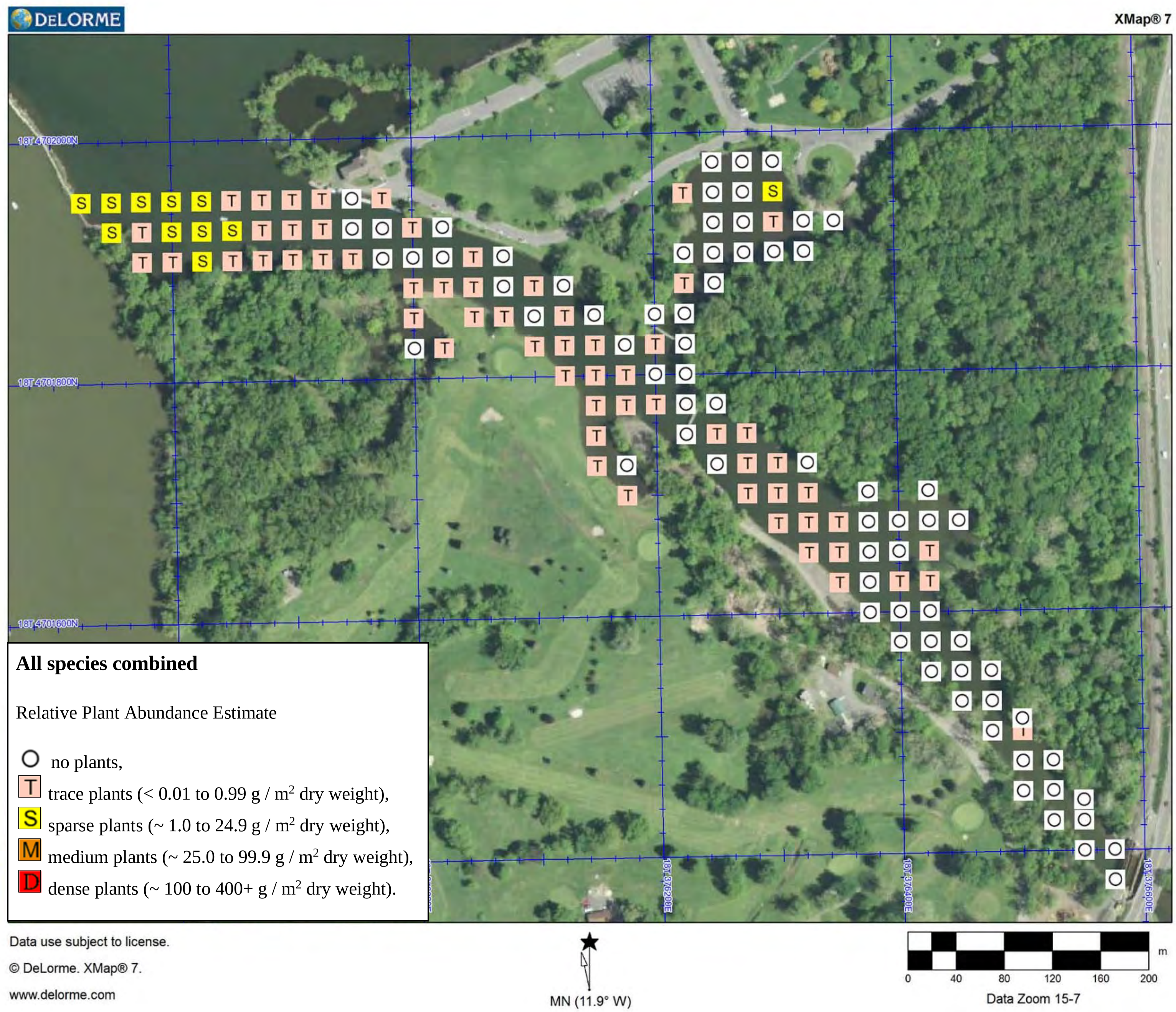
Map Fall Creek-16. *Stuckenia vaginata* (sheathed pondweed) pre-herbicide as abundance by two rake tosses.



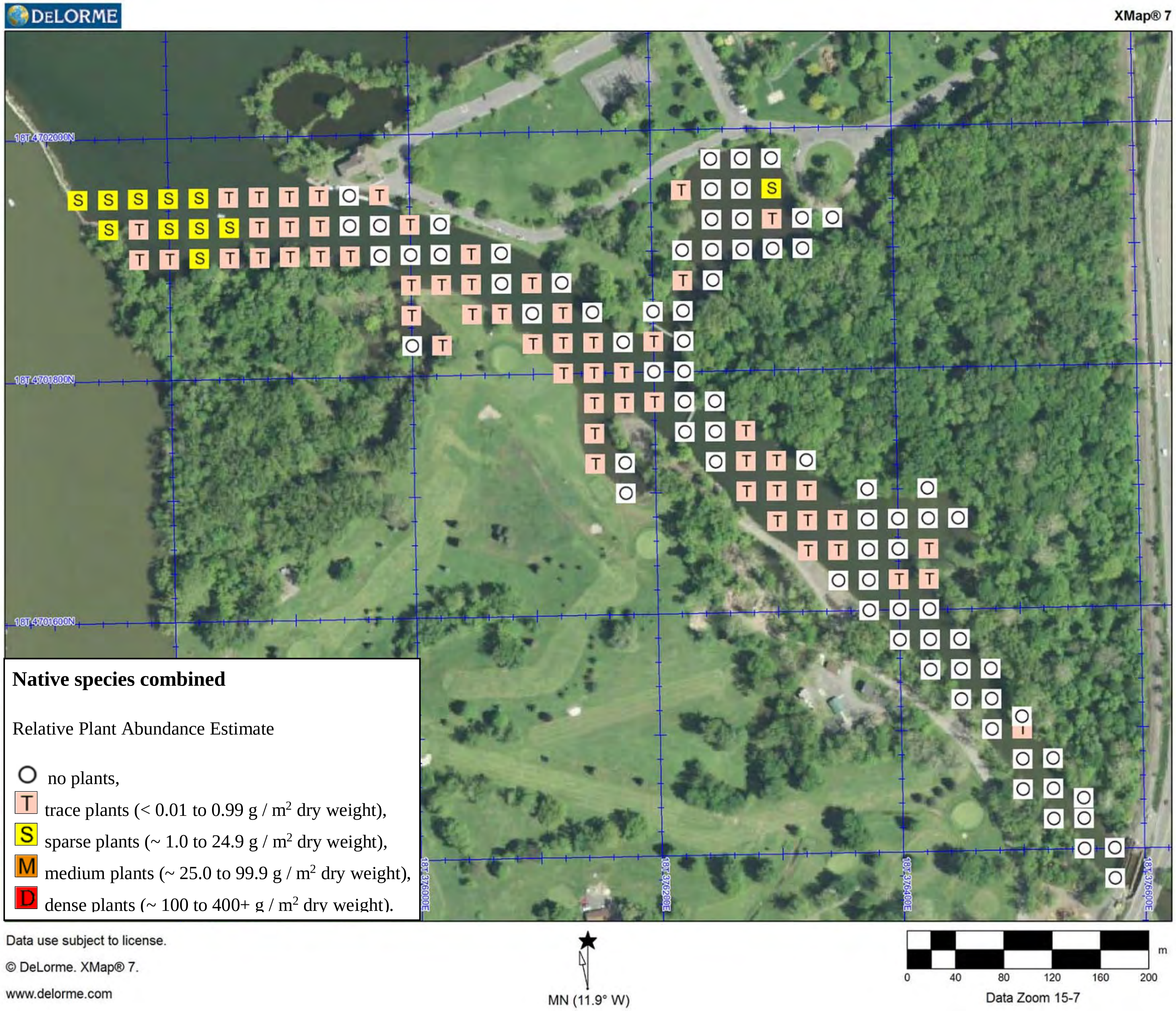
Map Fall Creek-17. *Zannichellia palustris* (horned pondweeed) pre-herbicide as abundance by two rake tosses.



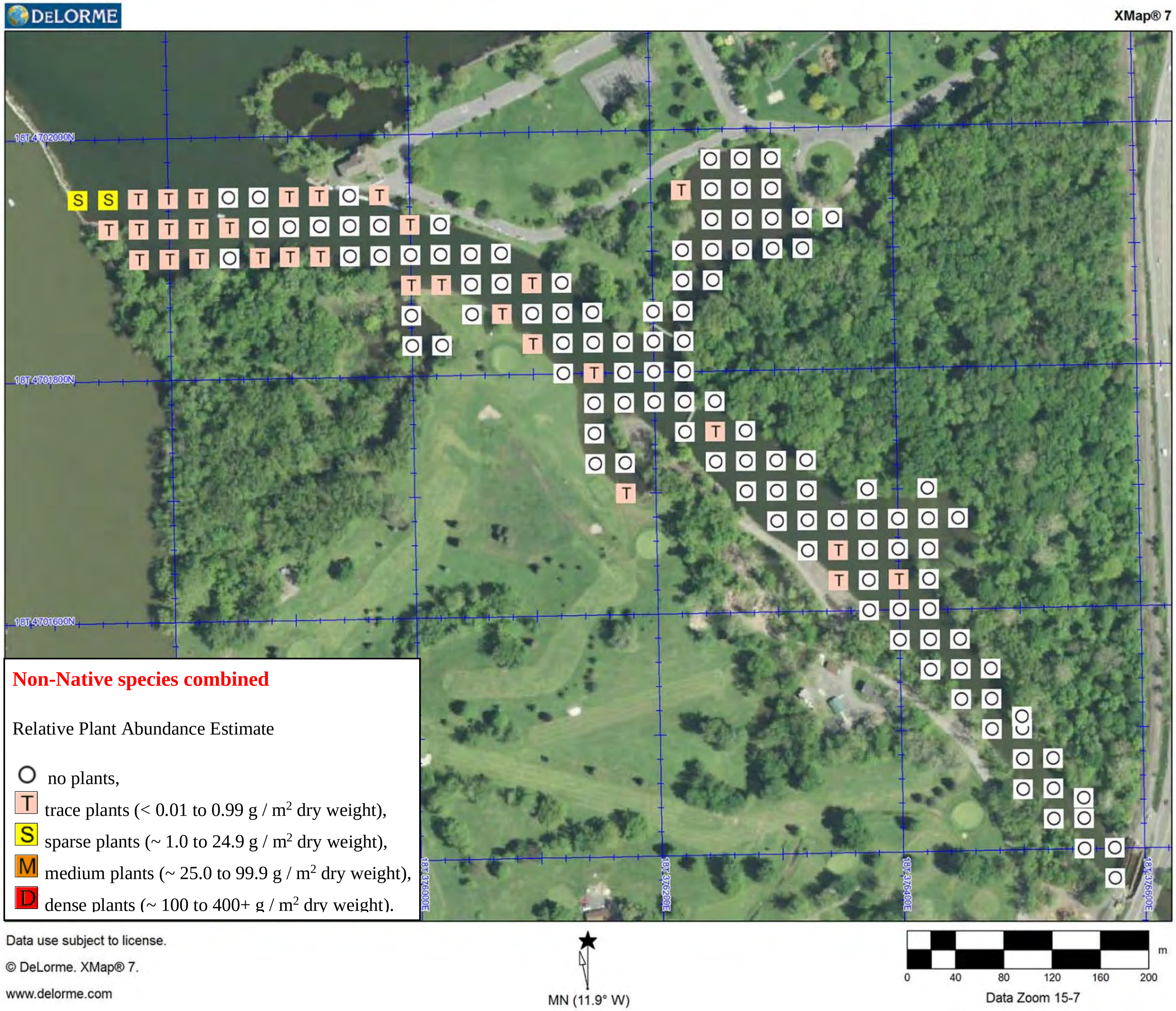
Map Fall Creek-18. Pre-herbicide minor species found in Fall Creek as abundance by two rake tosses.



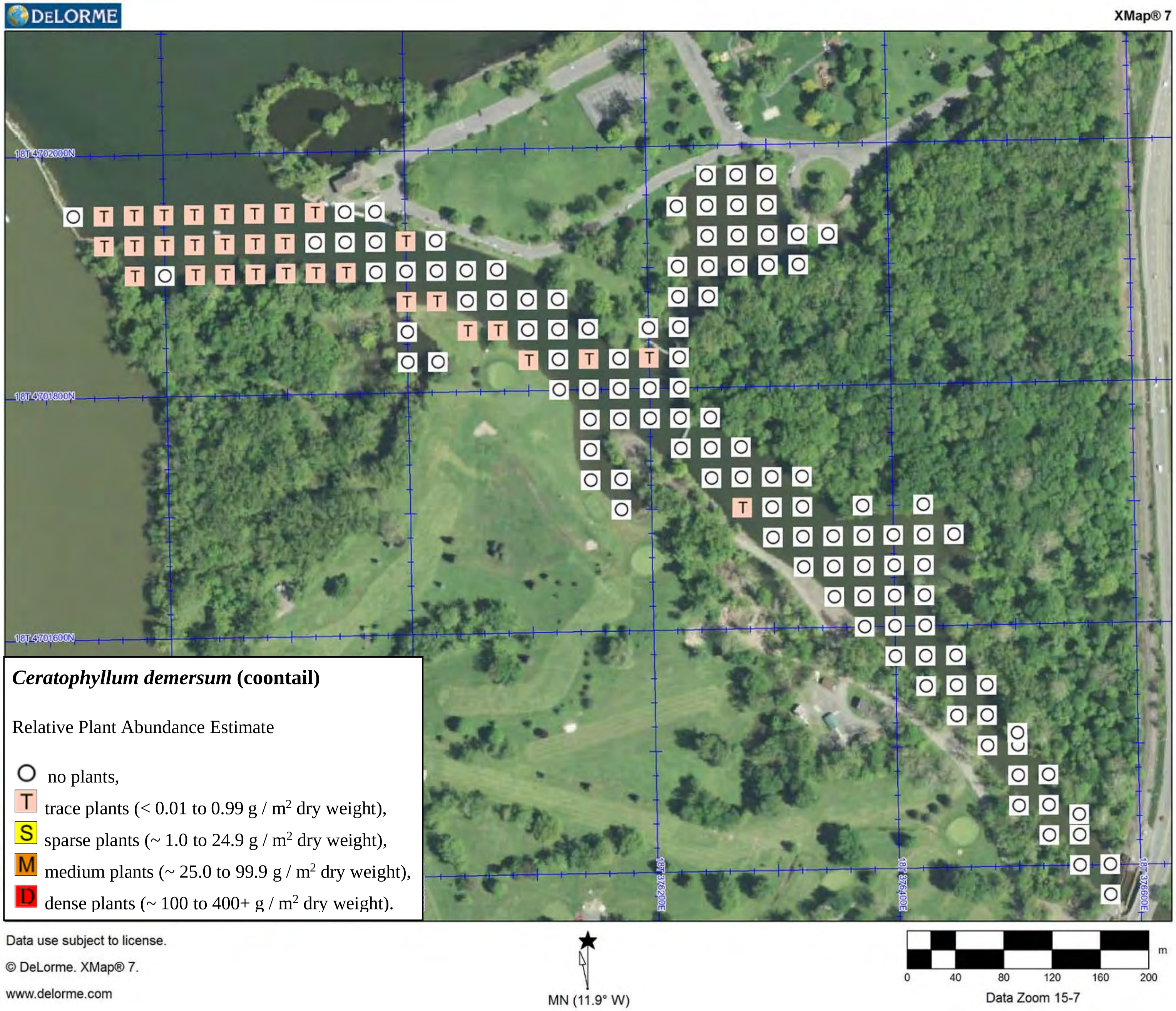
Map Fall Creek-19. All species combined post-herbicide as abundance by two rake tosses.



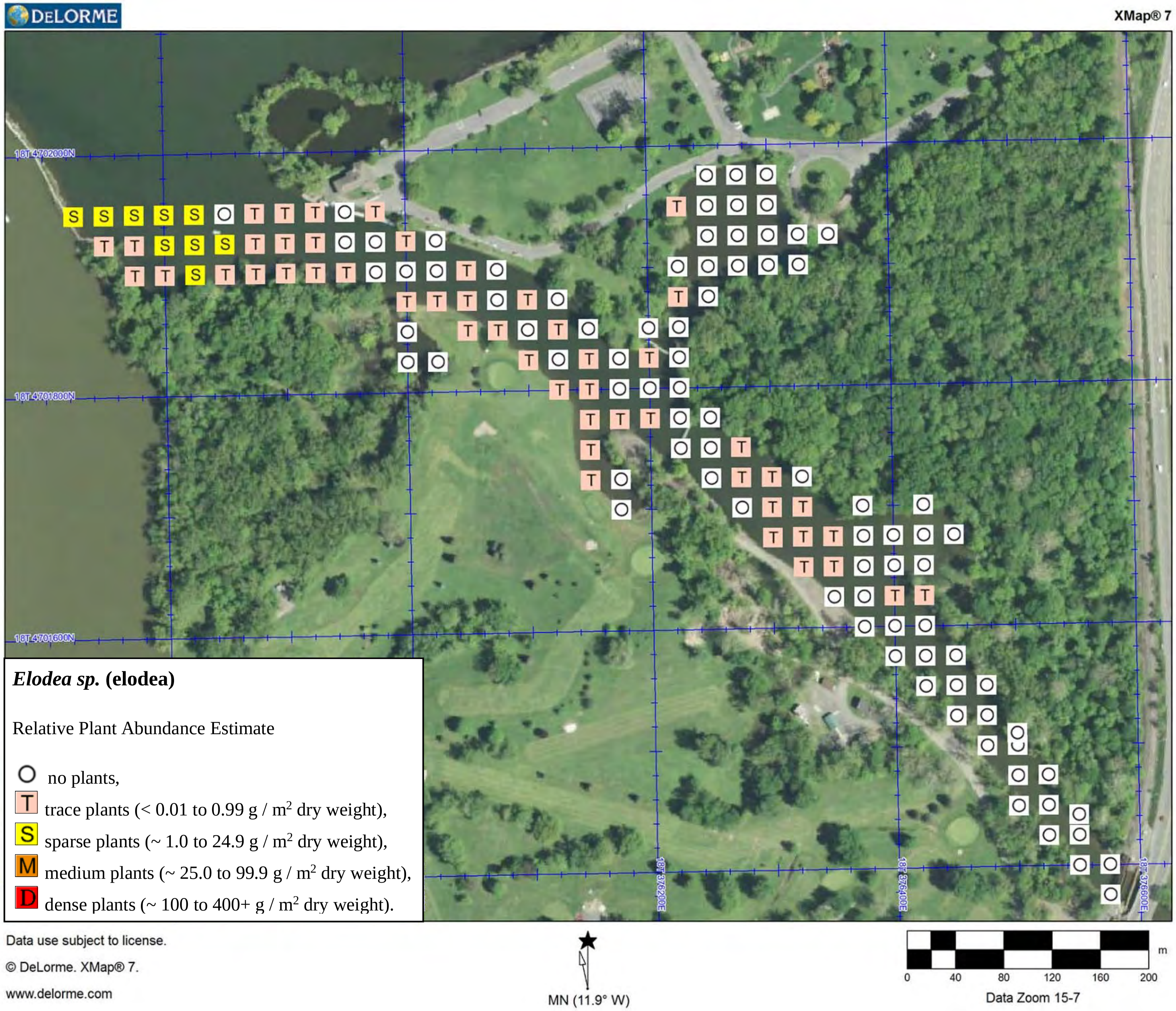
Map Fall Creek-20. Native species combined post-herbicide as abundance by two rake tosses.



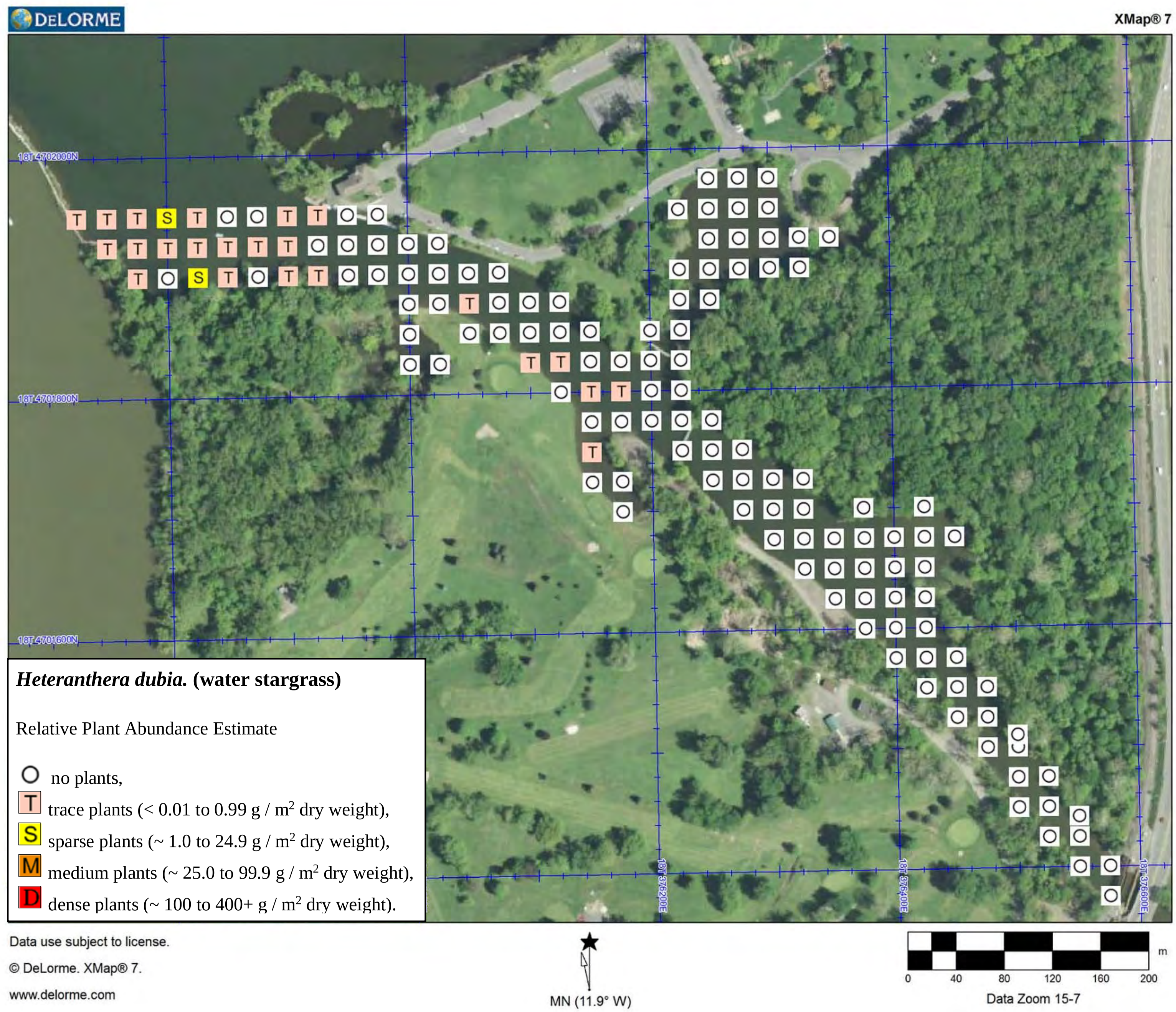
Map Fall Creek-21. Non-Native species combined post-herbicide as abundance by two rake tosses.



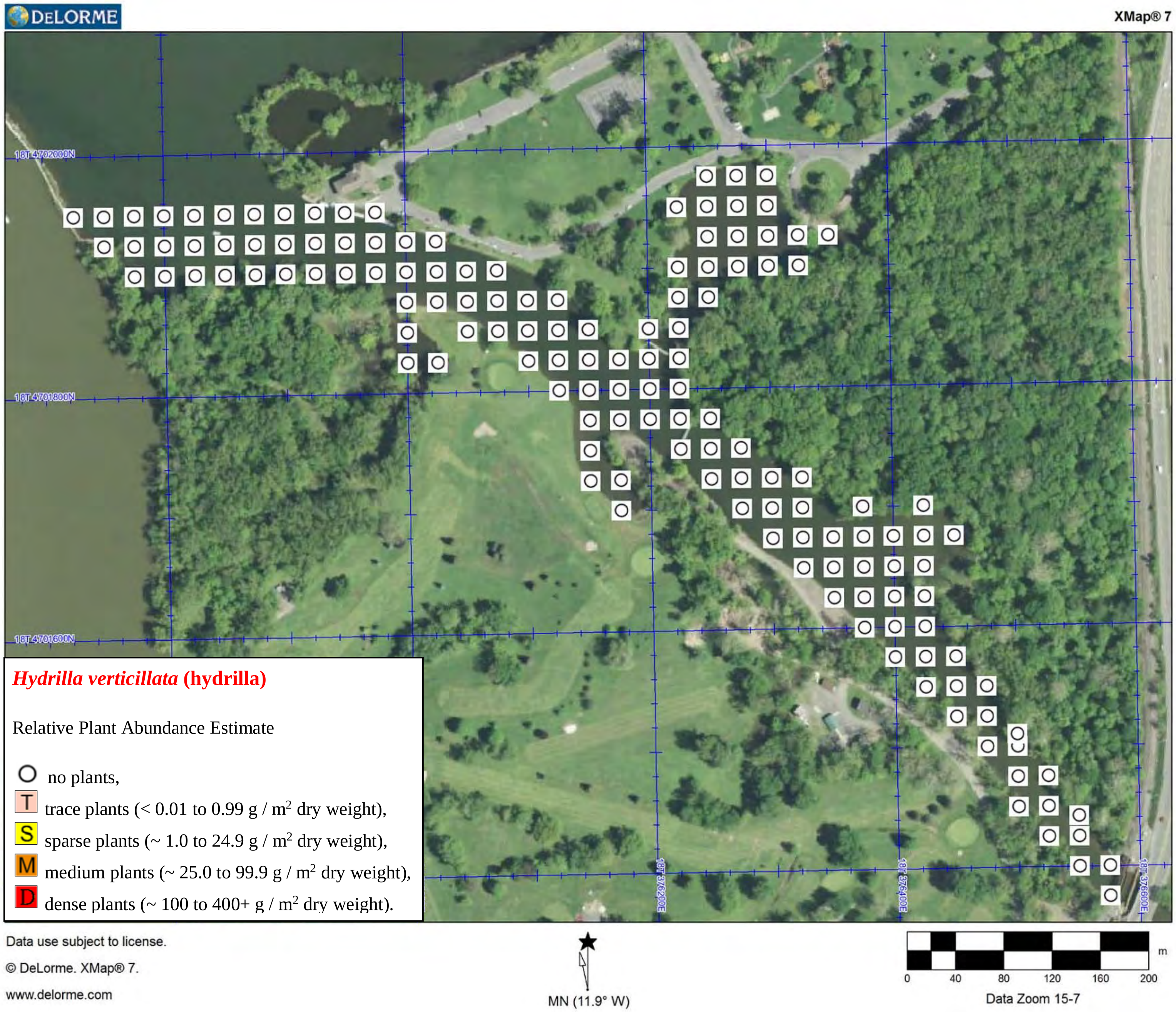
Map Fall Creek-22. *Ceratophyllum demersum* (coontail) post-herbicide as abundance by two rake tosses.



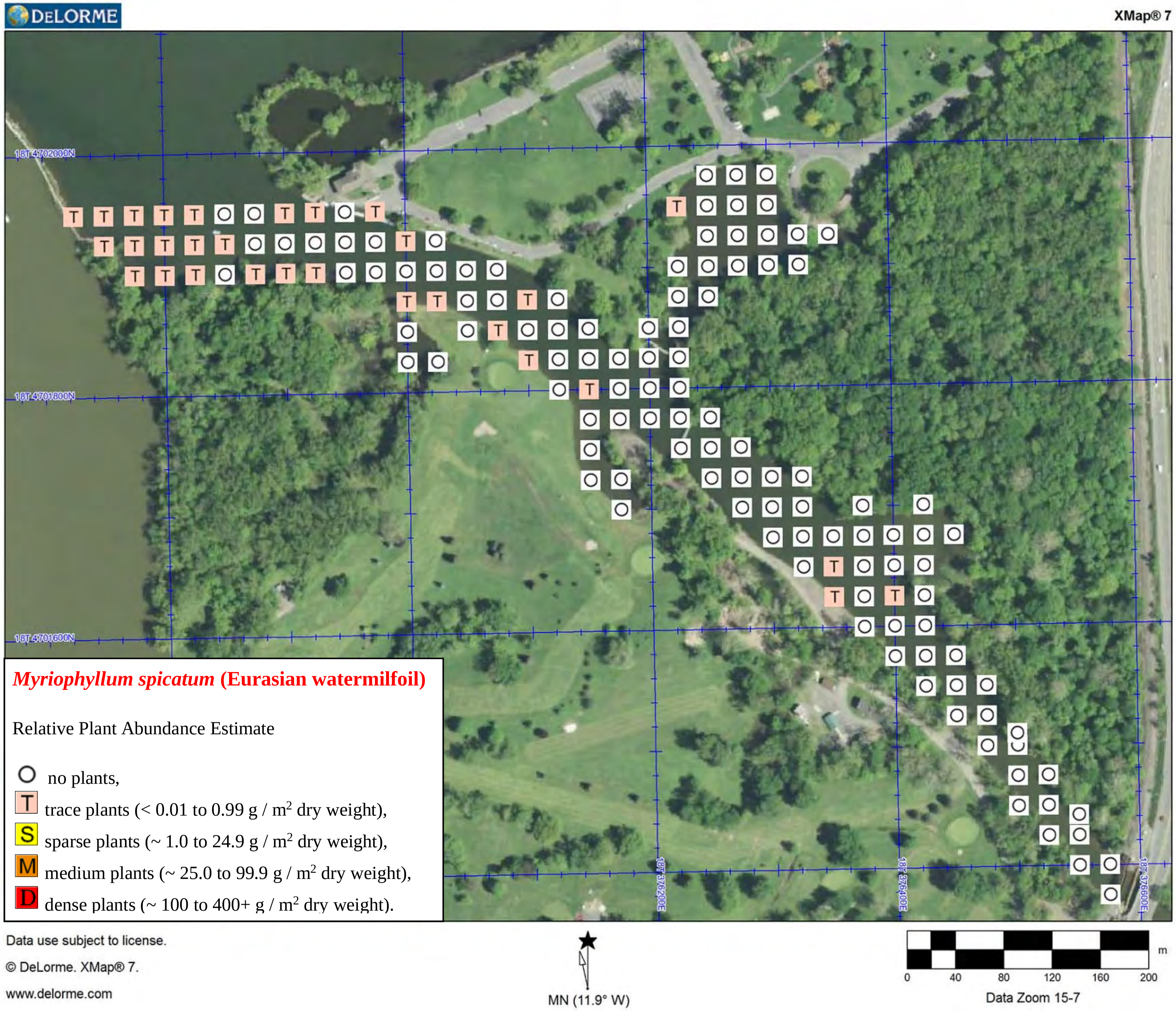
Map Fall Creek-23. *Elodea sp.* (elodea) post-herbicide as abundance by two rake tosses.



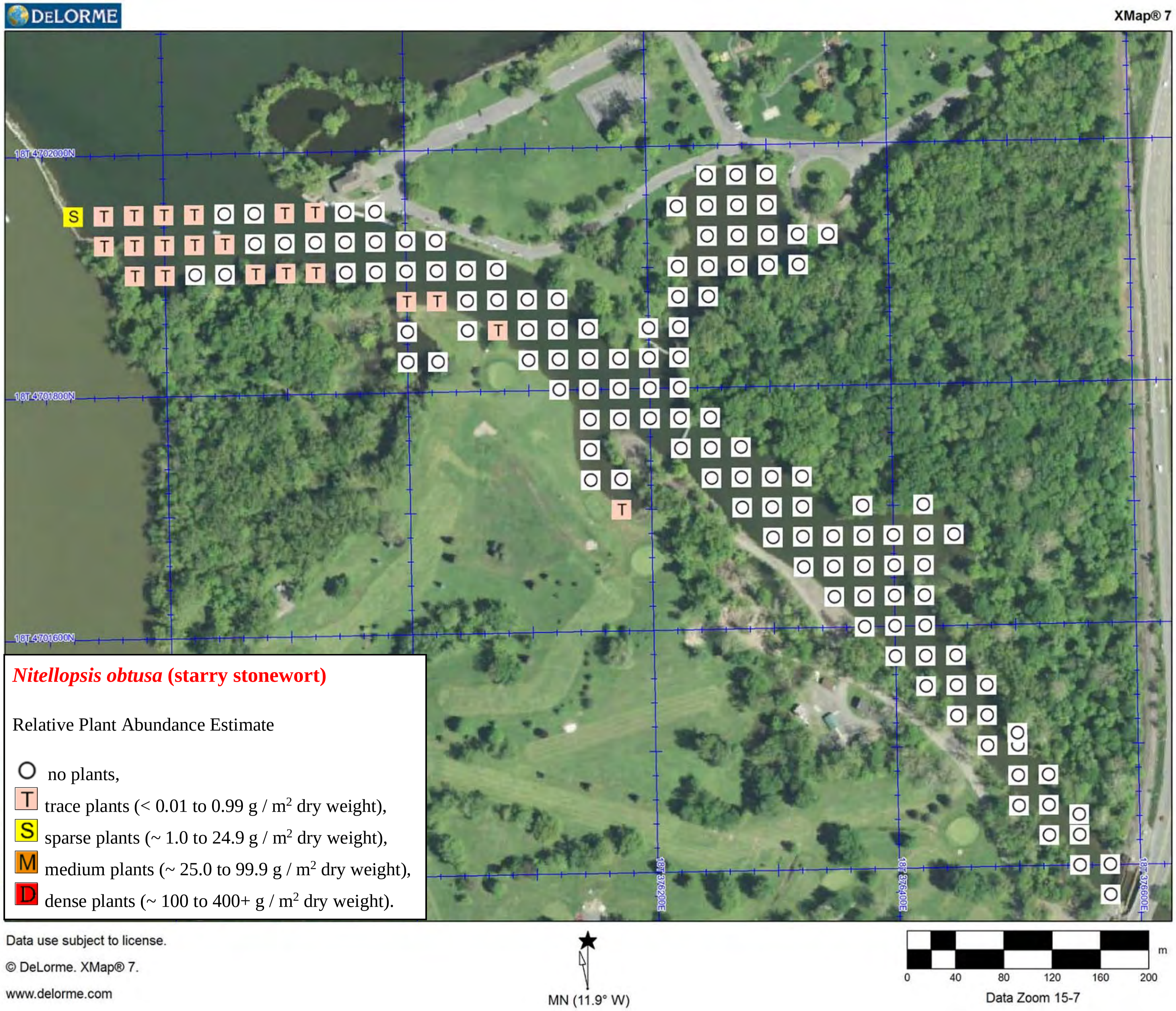
Map Fall Creek-24. *Heteranthera dubia.* (water stargrass) post-herbicide as abundance by two rake tosses.



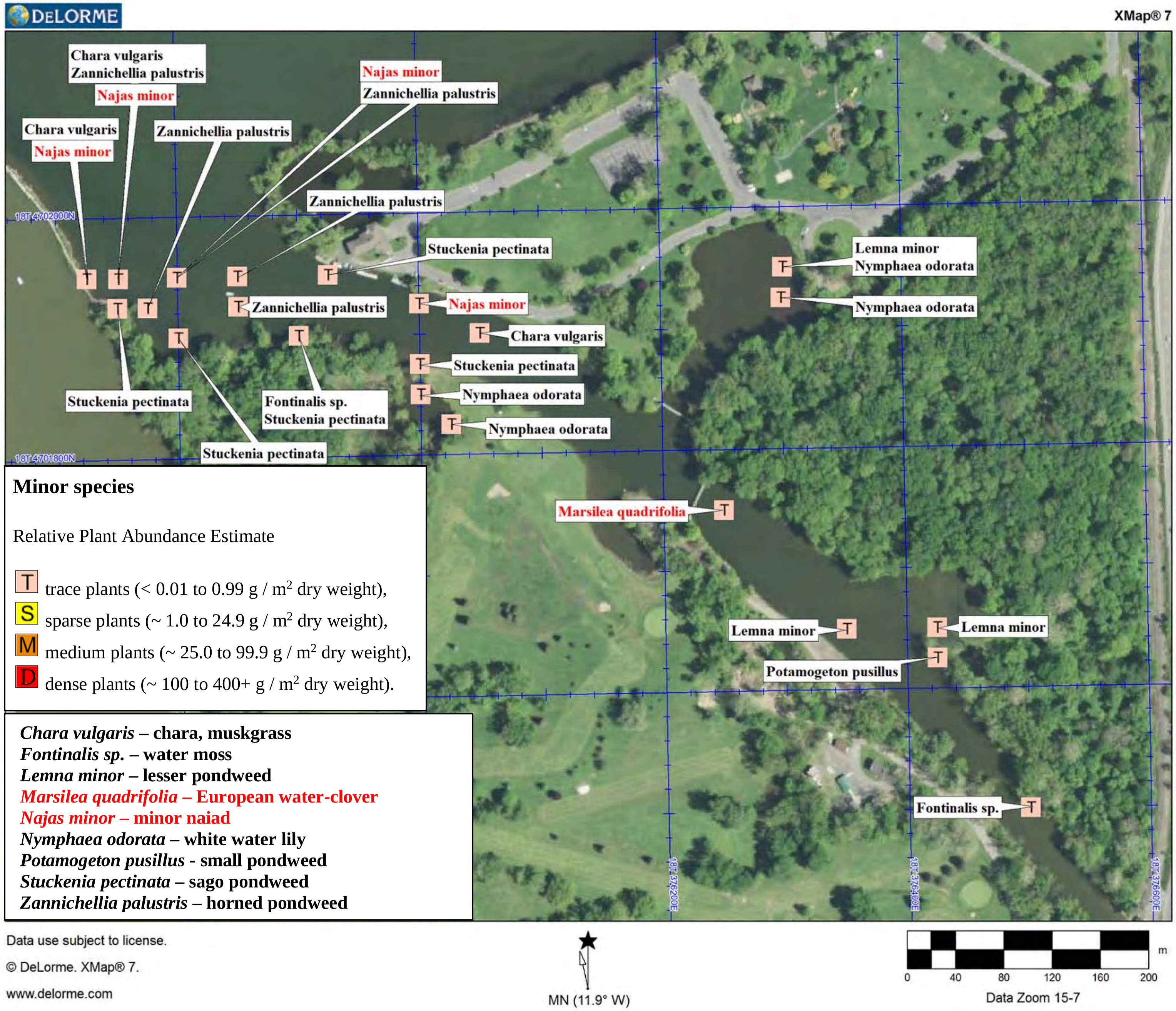
Map Fall Creek-25. *Hydrilla verticillata* (hydrilla) post-herbicide as abundance by two rake tosses.



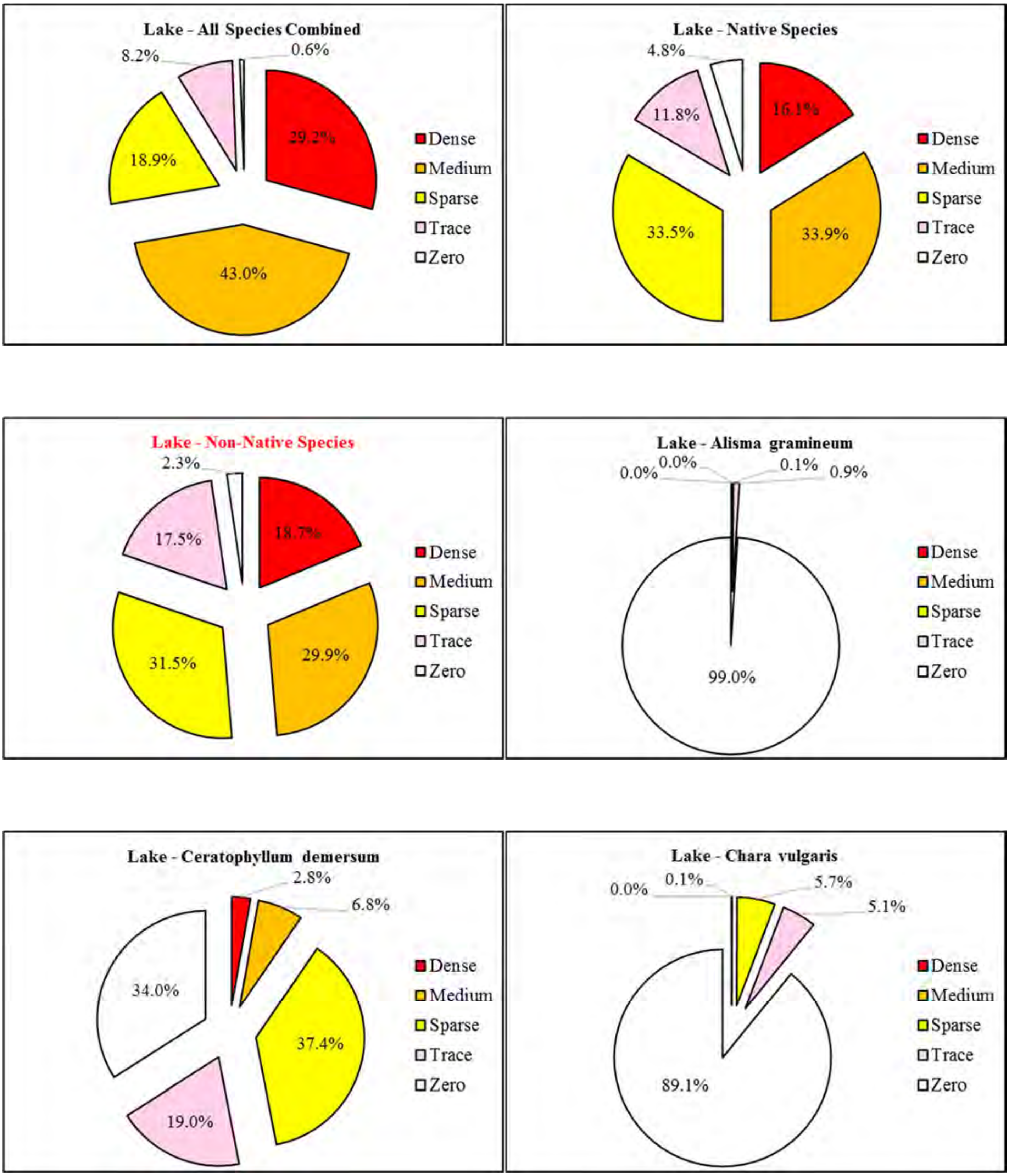
Map Fall Creek-26. *Myriophyllum spicatum* (Eurasian watermilfoil) post-herbicide as abundance by two rake tosses.



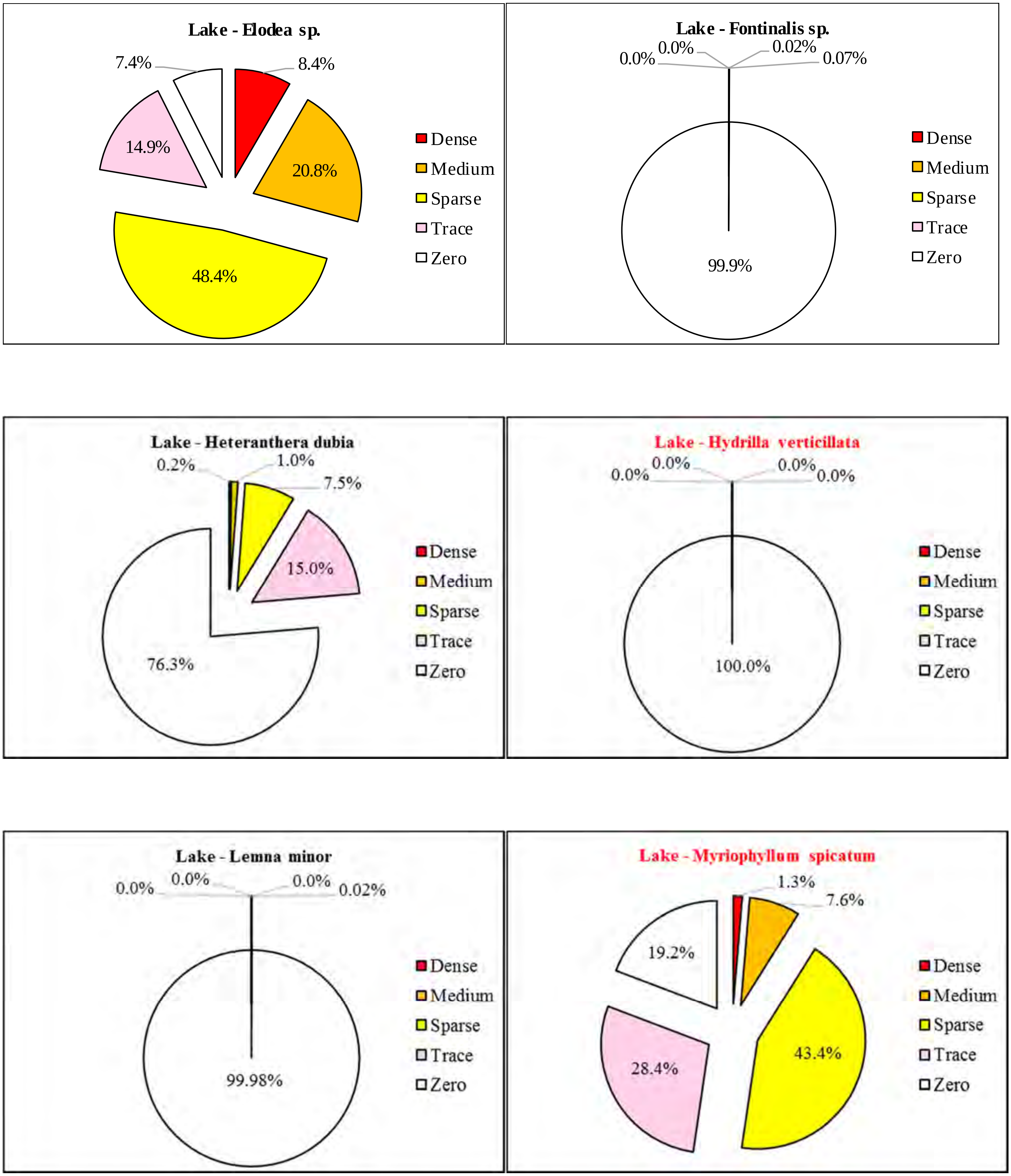
Map Fall Creek-27. *Nitellopsis obtusa* (starry stonewort) post-herbicide as abundance by two rake tosses.



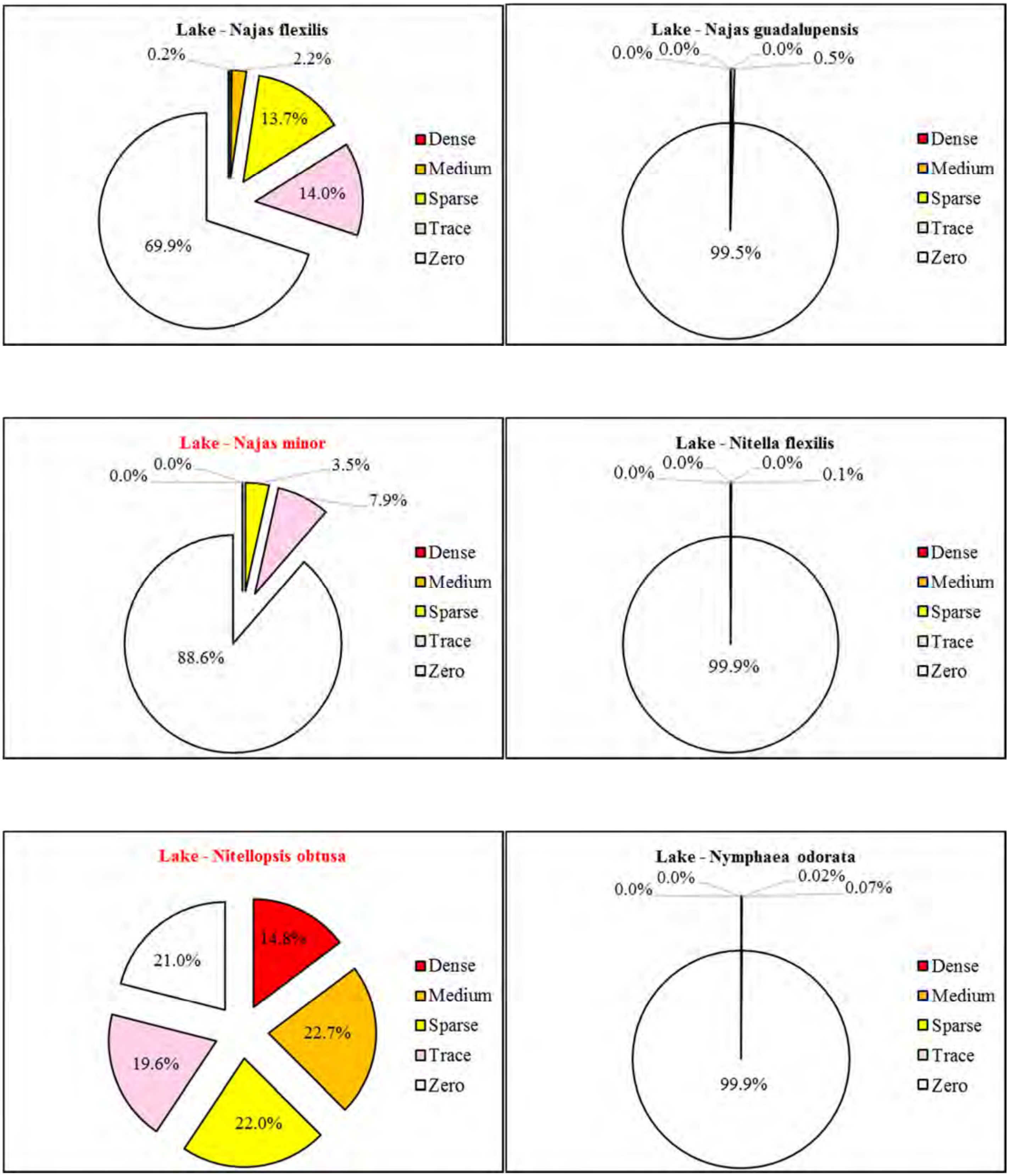
Map Fall Creek-28. Post-herbicide minor species found in Fall Creek as abundance by two rake tosses.



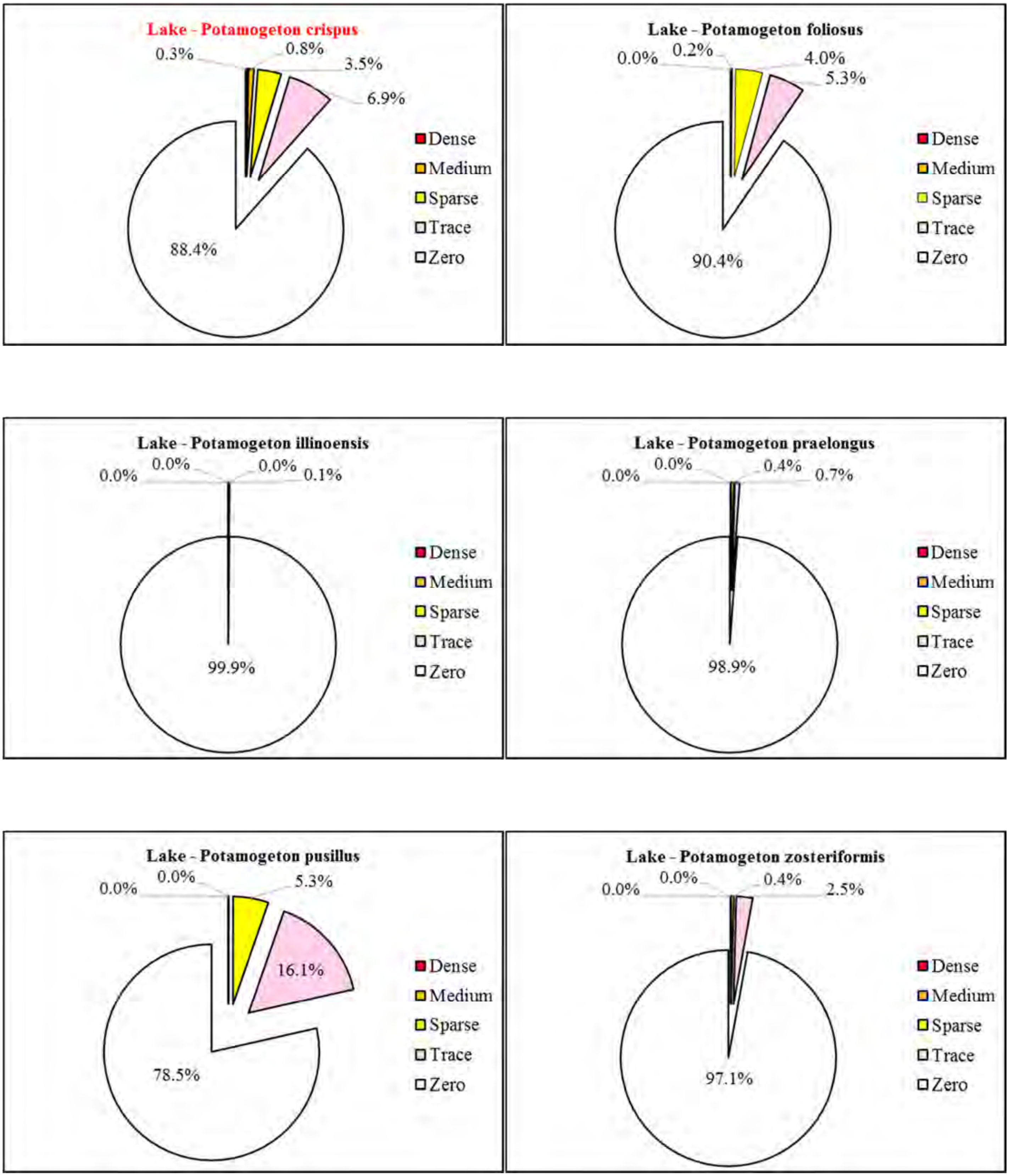
Lake-Pie 1. Percentages of each abundance category of the total 4230 rake-tosses made in Cayuga Lake in 2016 for all species combined, Native species, Non-Native species, *Alisma gramineum*, *Ceratophyllum demersum* and *Chara vulgaris.*



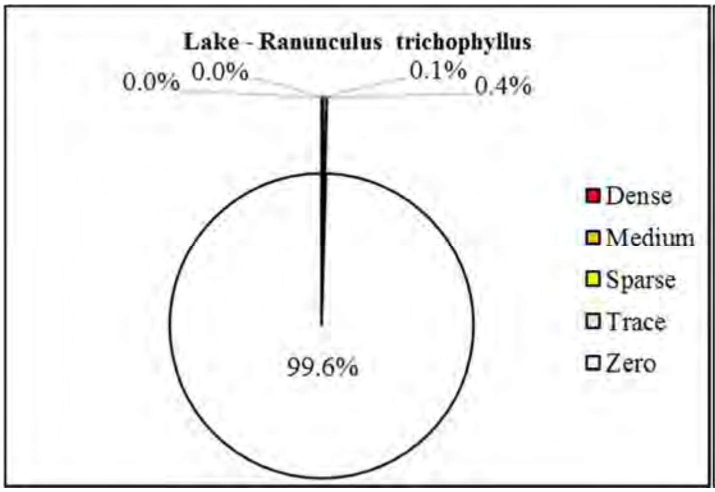
Lake-Pie 2. Percentages of each abundance category of the total 4230 rake-tosses made in Cayuga Lake in 2016 for *Elodea sp*., *Fontinalis sp*., *Heteranthera dubia*, *Hydrilla verticillata,* *Lemna minor* and *Myriophyllum spicatum*.

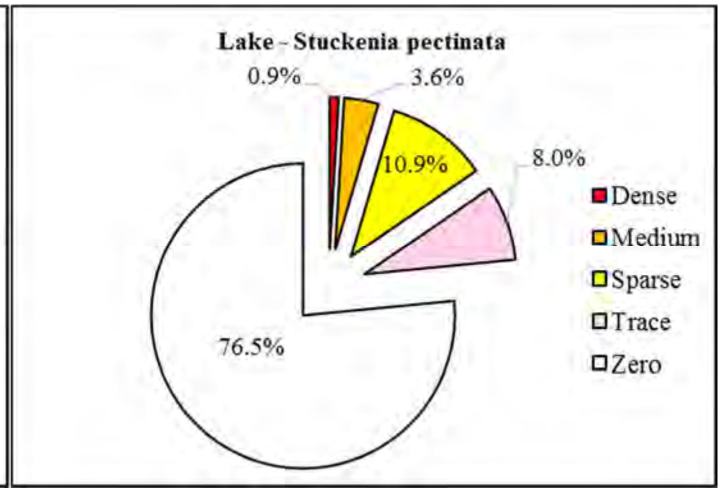


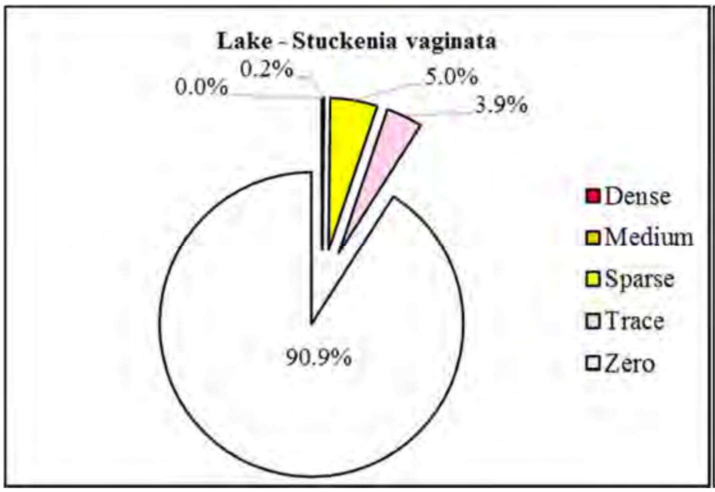
Lake-Pie 3. Percentages of each abundance category of the total 4230 rake-tosses made in Cayuga Lake in 2016 for *Najas flexilis, Najas guadalupensis, Najas minor, Nitella flexilis, Nitellopsis obtusa* and *Nymphaea odorata*.

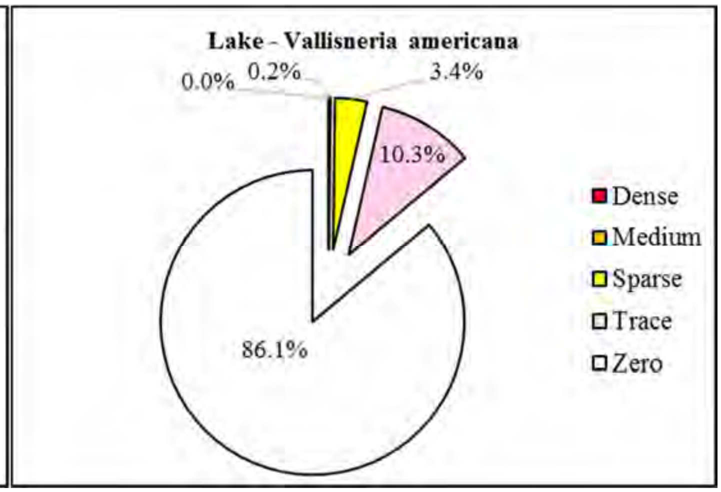


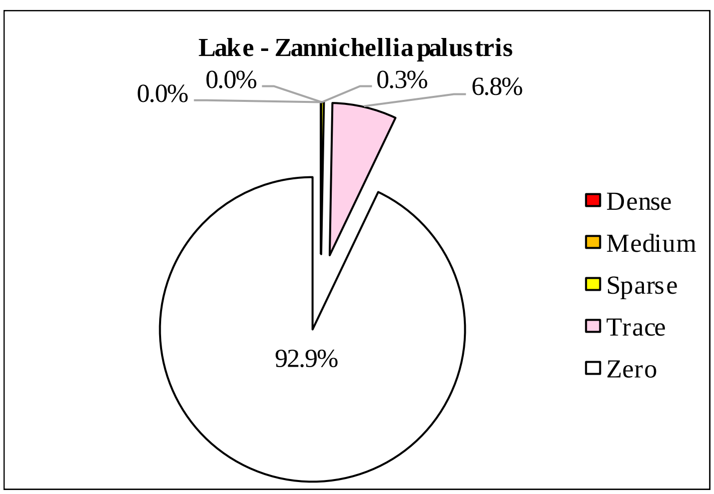
Lake-Pie 4. Percentages of each abundance category of the total 4230 rake-tosses made in Cayuga Lake in 2016 for *Potamogeton crispus, Potamogeton foliosus, Potamogeton illinoensis, Potamogeton praelongus, Potamogeton pusillus,* and *Potamogeton zosteriformis*.





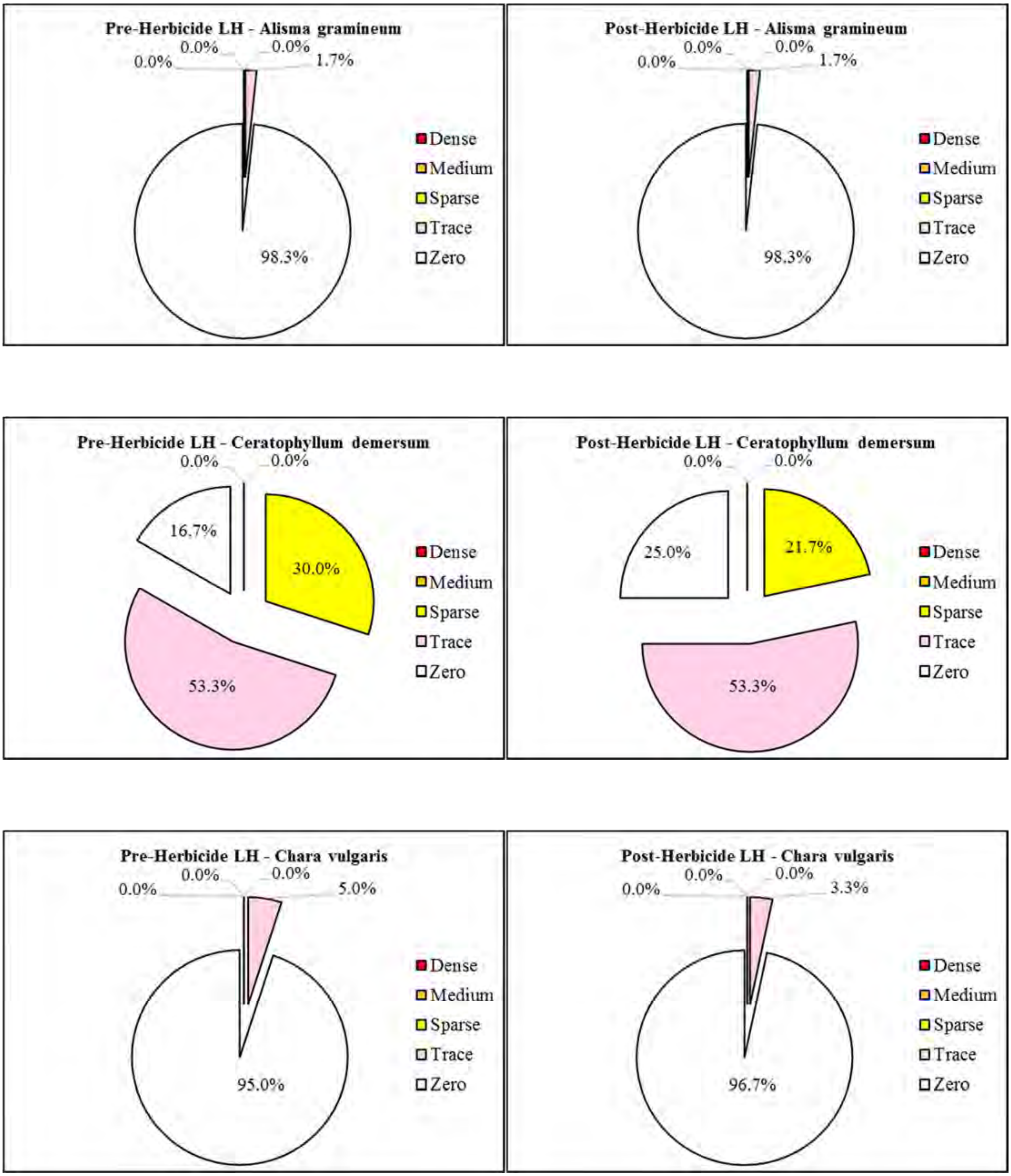






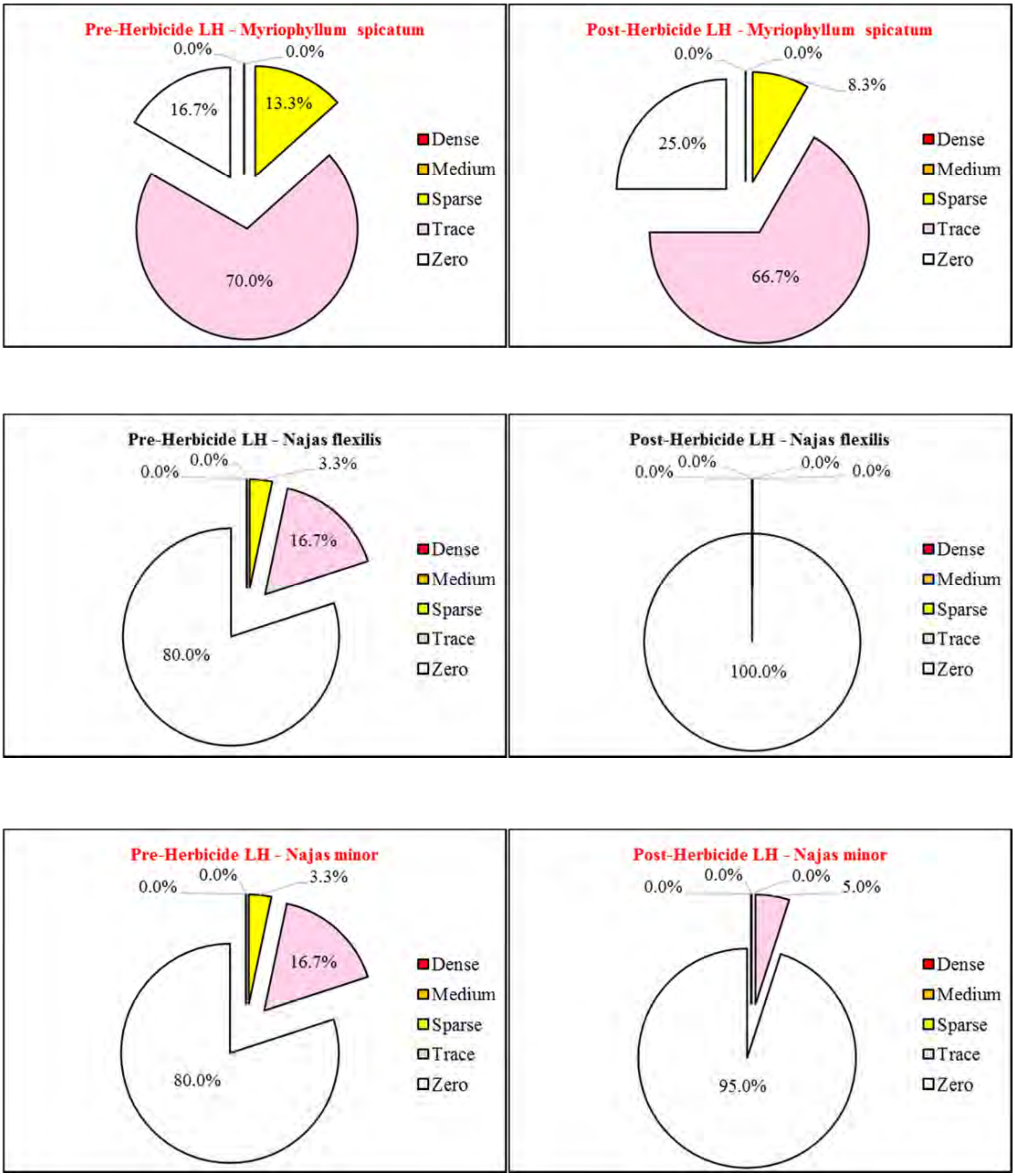
Lake-Pie 5. Percentages of each abundance category of the total 4230 rake-tosses made in Cayuga Lake in 2016 for *Ranunculus trichophyllus*, *Stuckenia pectinata*, *Stuckenia vaginata*, *Vallisneria americana* and *Zannichellia palustris*.

Lighthouse-Pie 1. Percentages of each abundance category of the total 60 rake-tosses (pre-herbicide and post-herbicide) made in the Lighthouse Area of the Inlet in 2016 to contrast the pre-herbicide with the post-herbicide values of each grouping of species.

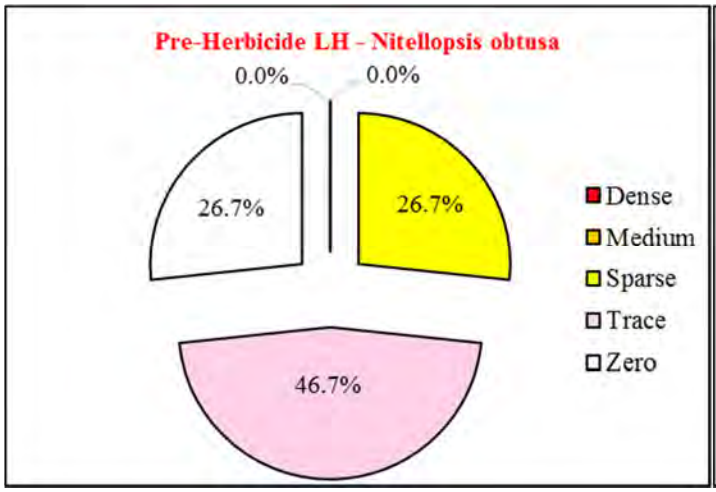


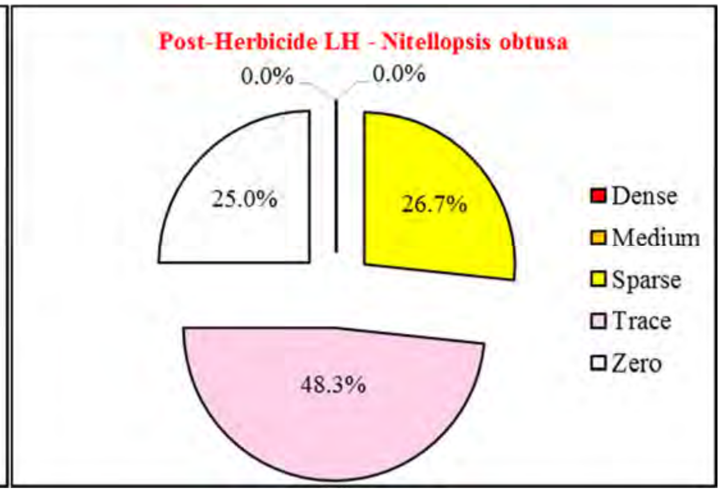
Lighthouse-Pie 2. Percentages of each abundance category of the total 60 rake-tosses (pre-herbicide and post-herbicide) made in the Lighthouse Area of the Inlet in 2016 to contrast the pre-herbicide with the post-herbicide values for *Alisma gramineum*, *Ceratophyllum demersum* and *Chara vulgaris.*

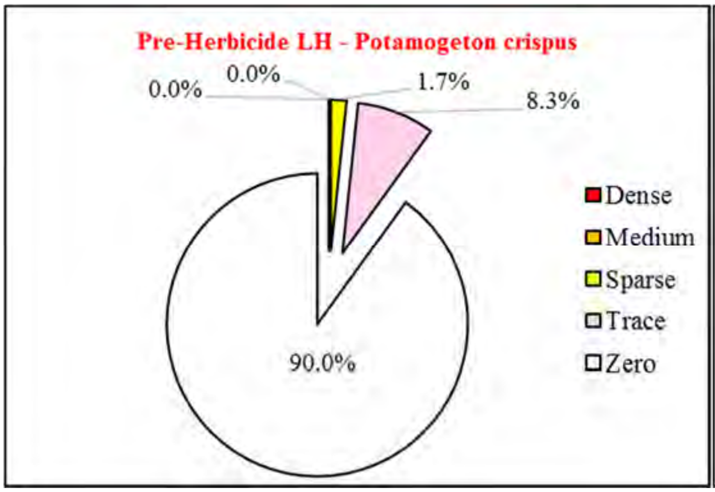
Lighthouse-Pie 3. Percentages of each abundance category of the total 60 rake-tosses (pre-herbicide and post-herbicide) made in the Lighthouse Area of the Inlet in 2016 to contrast the pre-herbicide with the post-herbicide values for *Elodea sp.*, *Fontinalis sp.* and *Heteranthera dubia*.

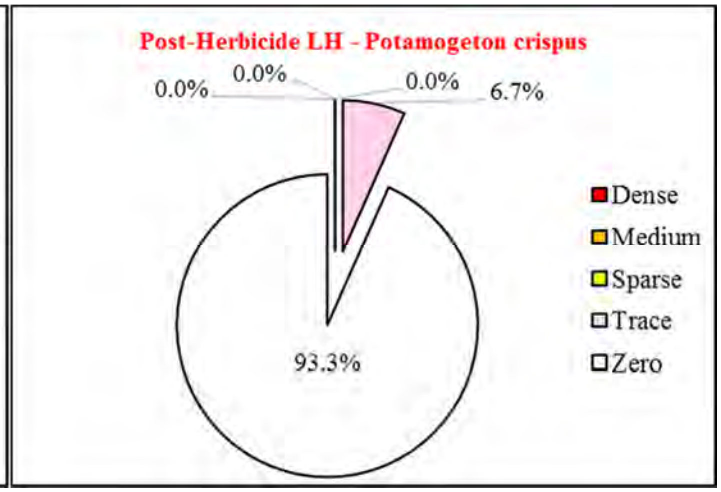


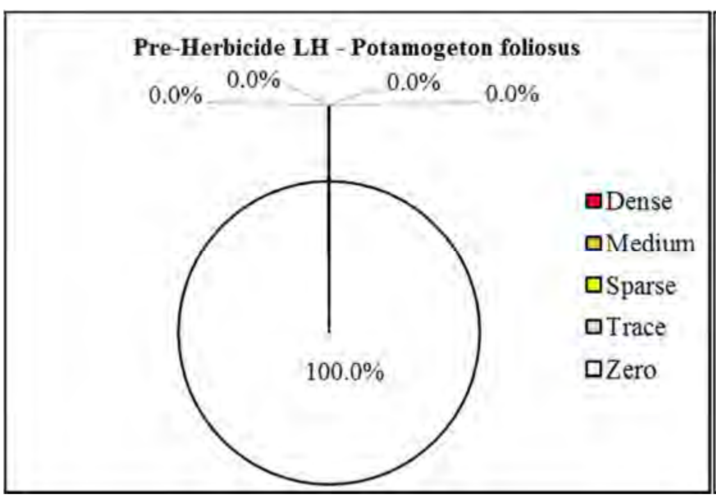
Lighthouse-Pie 4. Percentages of each abundance category of the total 60 rake-tosses (pre-herbicide and post-Herbicide) made in the Lighthouse Area of the Inlet in 2016 to contrast the pre-herbicide with the post-herbicide values for *Myriophyllum spicatum, Najas flexilis* and *Najas minor*.

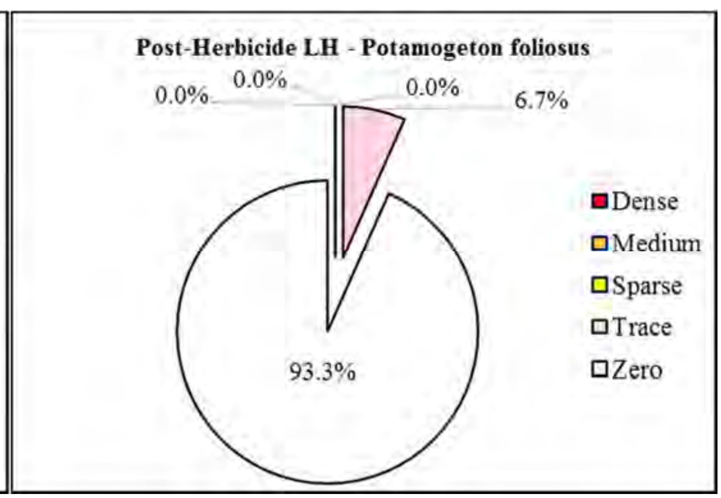




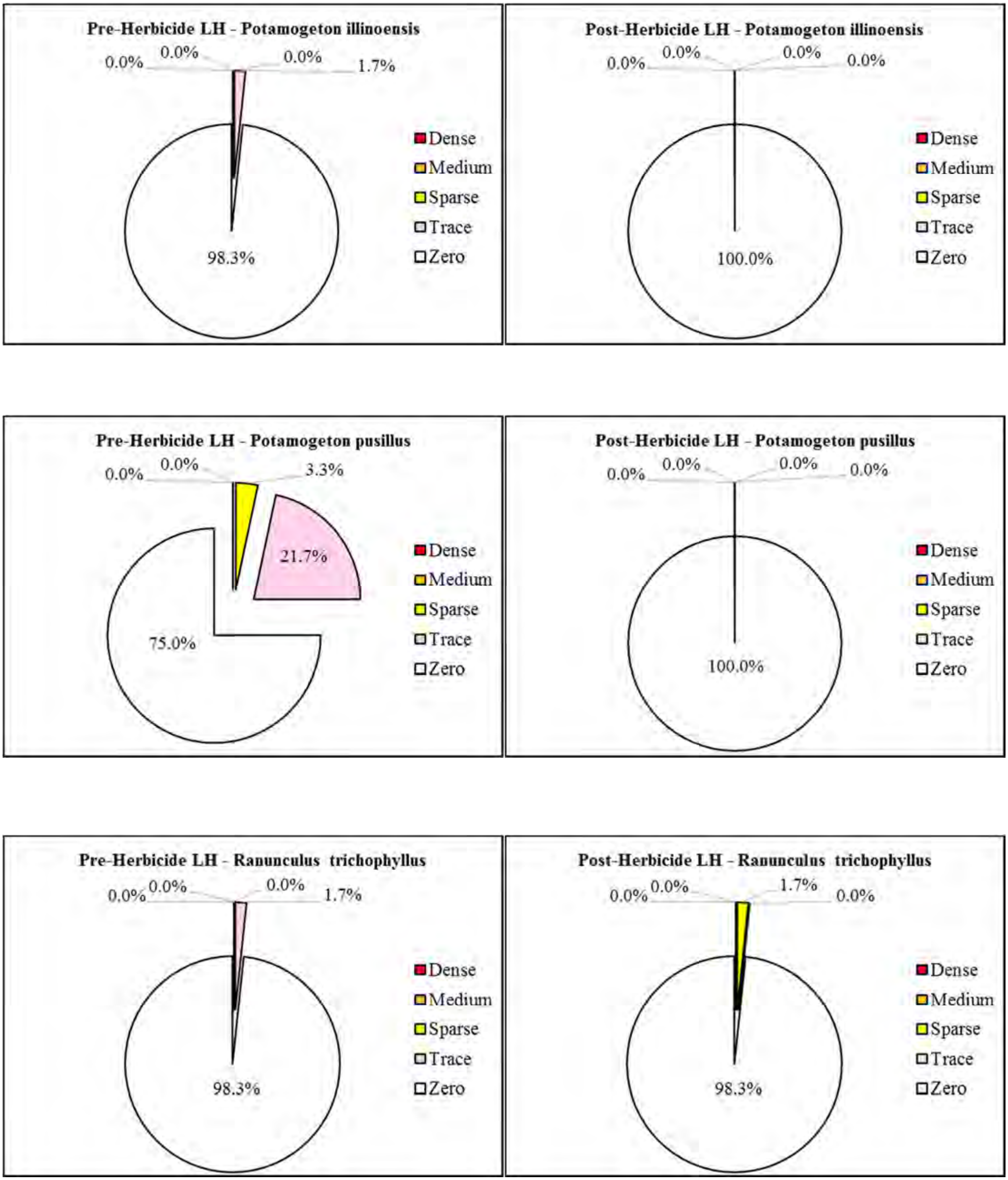




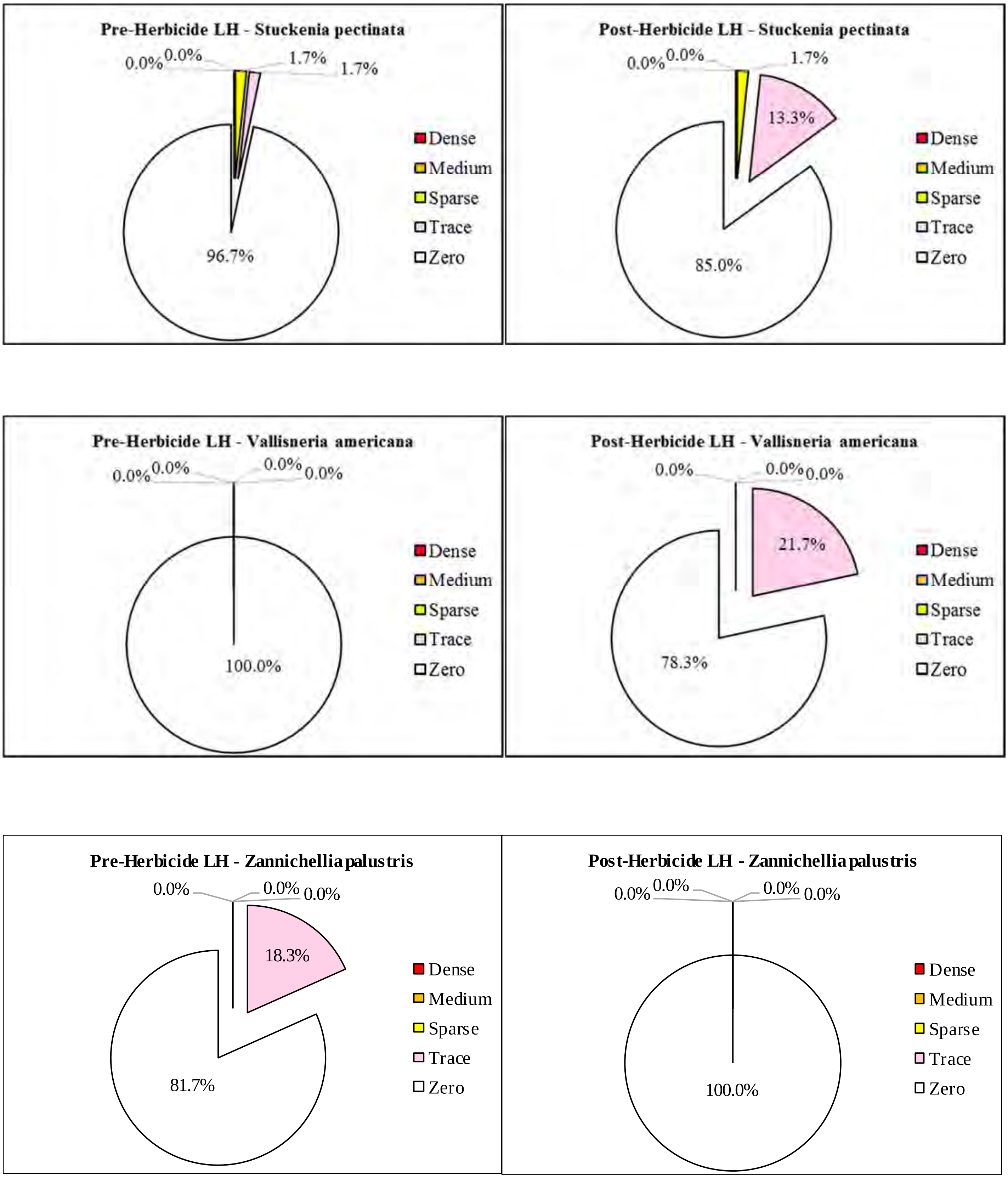




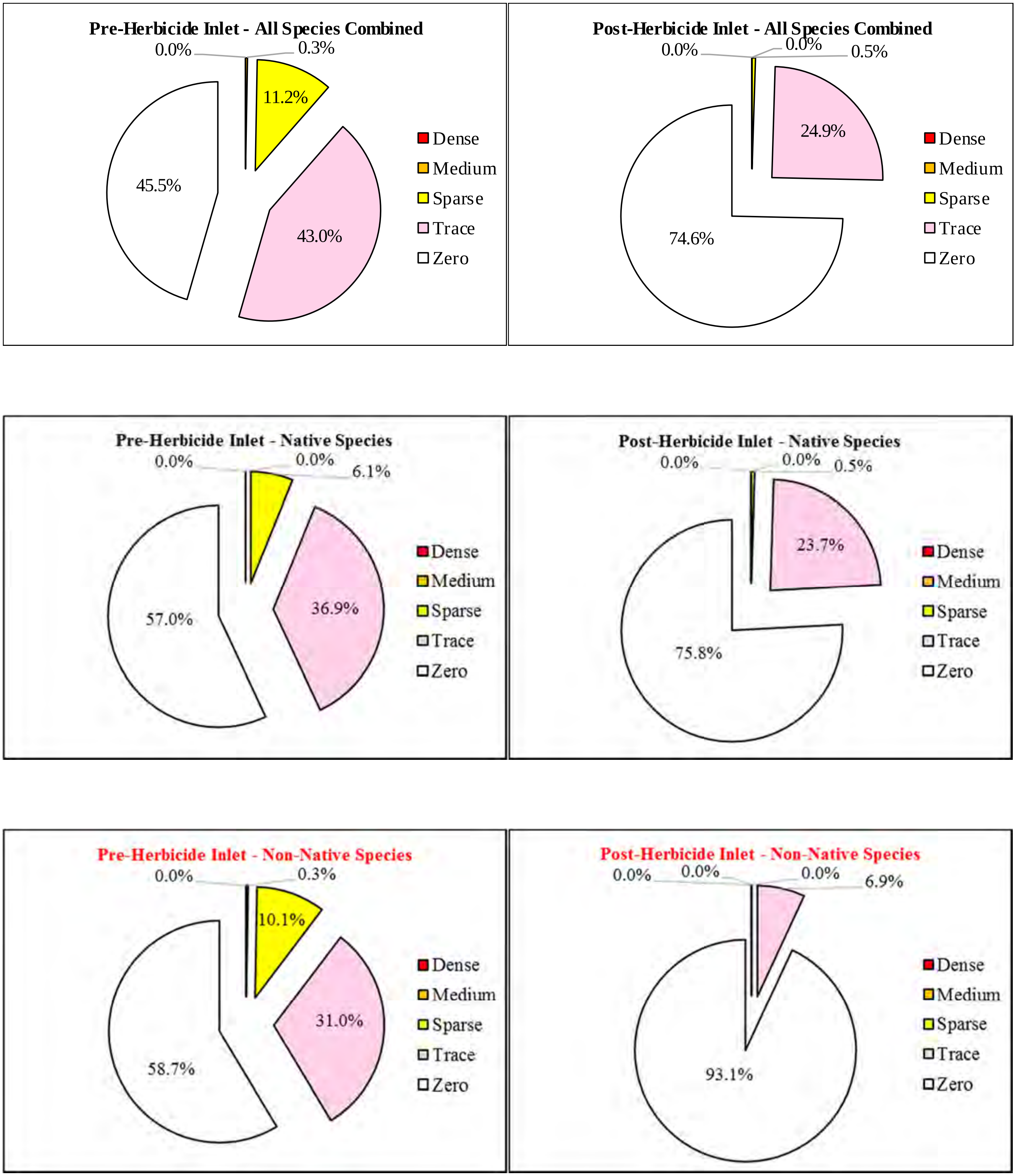
Lighthouse-Pie 5. Percentages of each abundance category of the total 60 rake-tosses (pre-herbicide and post-herbicide) made in the Lighthouse area of the Inlet in 2016 to contrast the pre-herbicide with the post-herbicide values for *Nitellopsis obtusa*, *Potamogeton crispus* and *Potamogeton foliosus.*



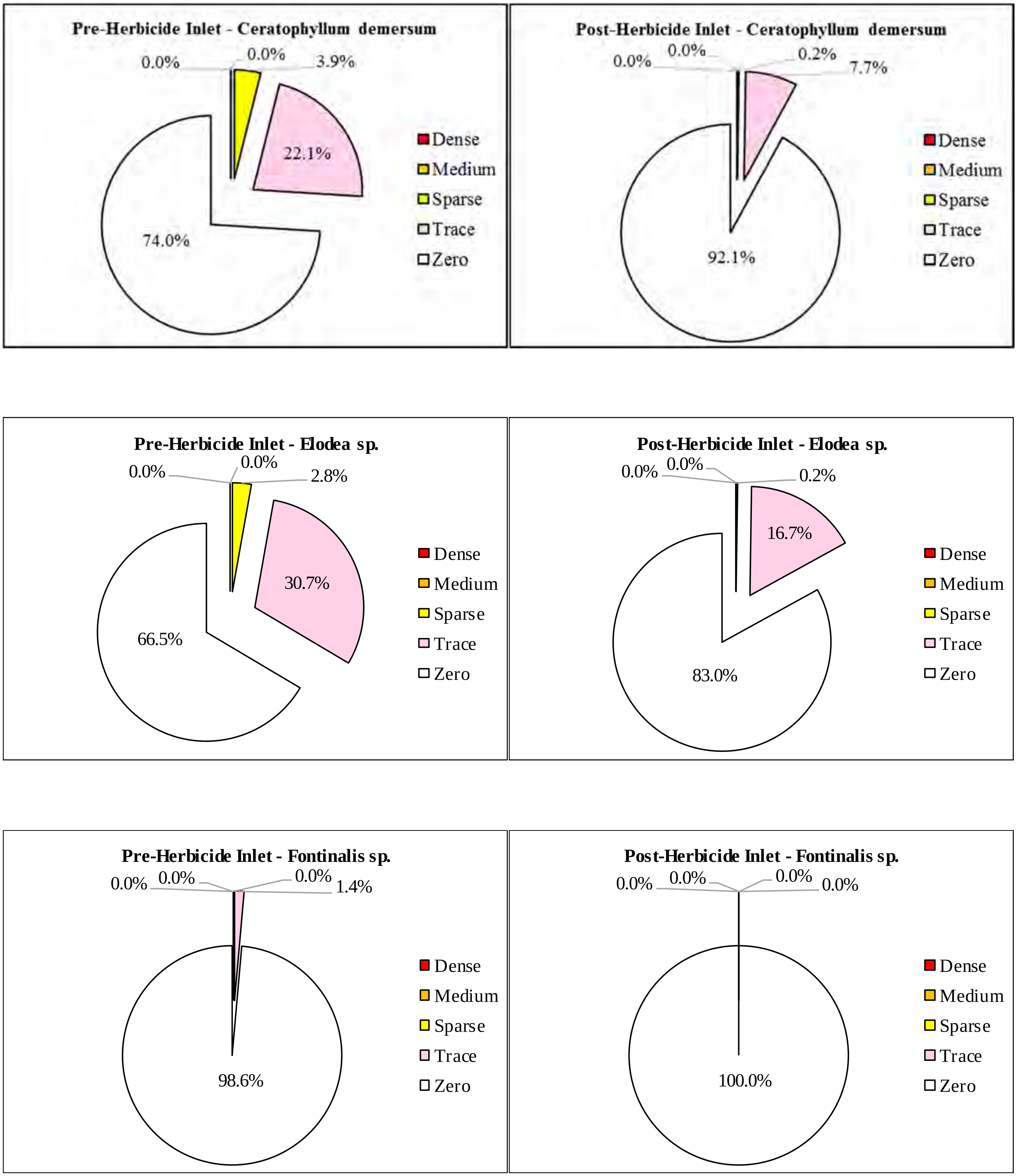
Lighthouse-Pie 6. Percentages of each abundance category of the total 60 rake-tosses (pre-herbicide and post-herbicide) made in the Lighthouse area of the Inlet in 2016 to contrast the pre-herbicide with the post-herbicide values for *Potamogeton illinoensis, Potamogeton pusillus* and *Ranunculus trichophyllus.*



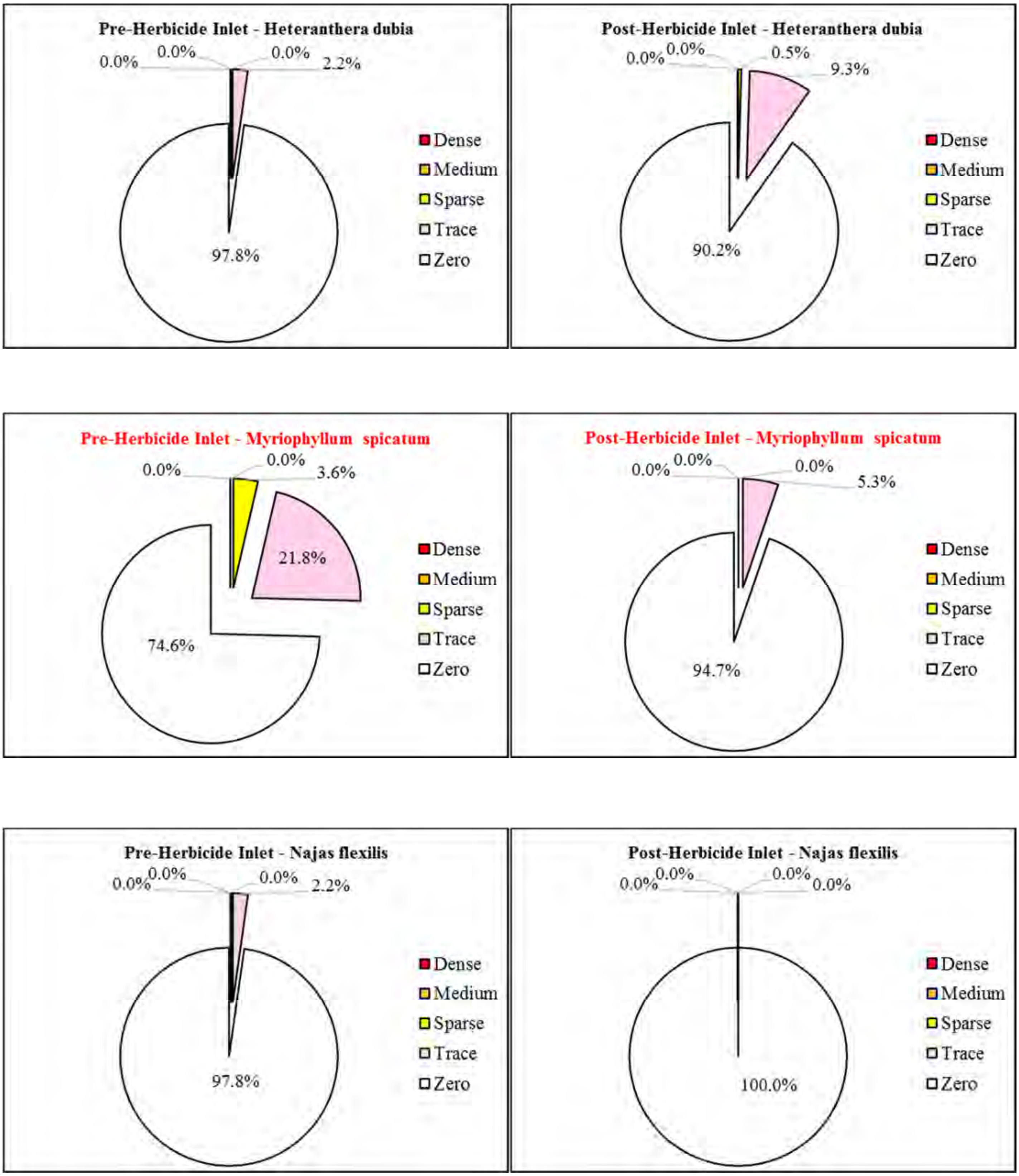
Lighthouse-Pie 7. Percentages of each abundance category of the total 60 rake-tosses (pre-herbicide and post-herbicide) made in the Lighthouse area of the Inlet in 2016 to contrast the pre-herbicide with the post-herbicide values for *Stuckenia pectinata*, *Vallisneria americana* and *Zannichellia palustris.*



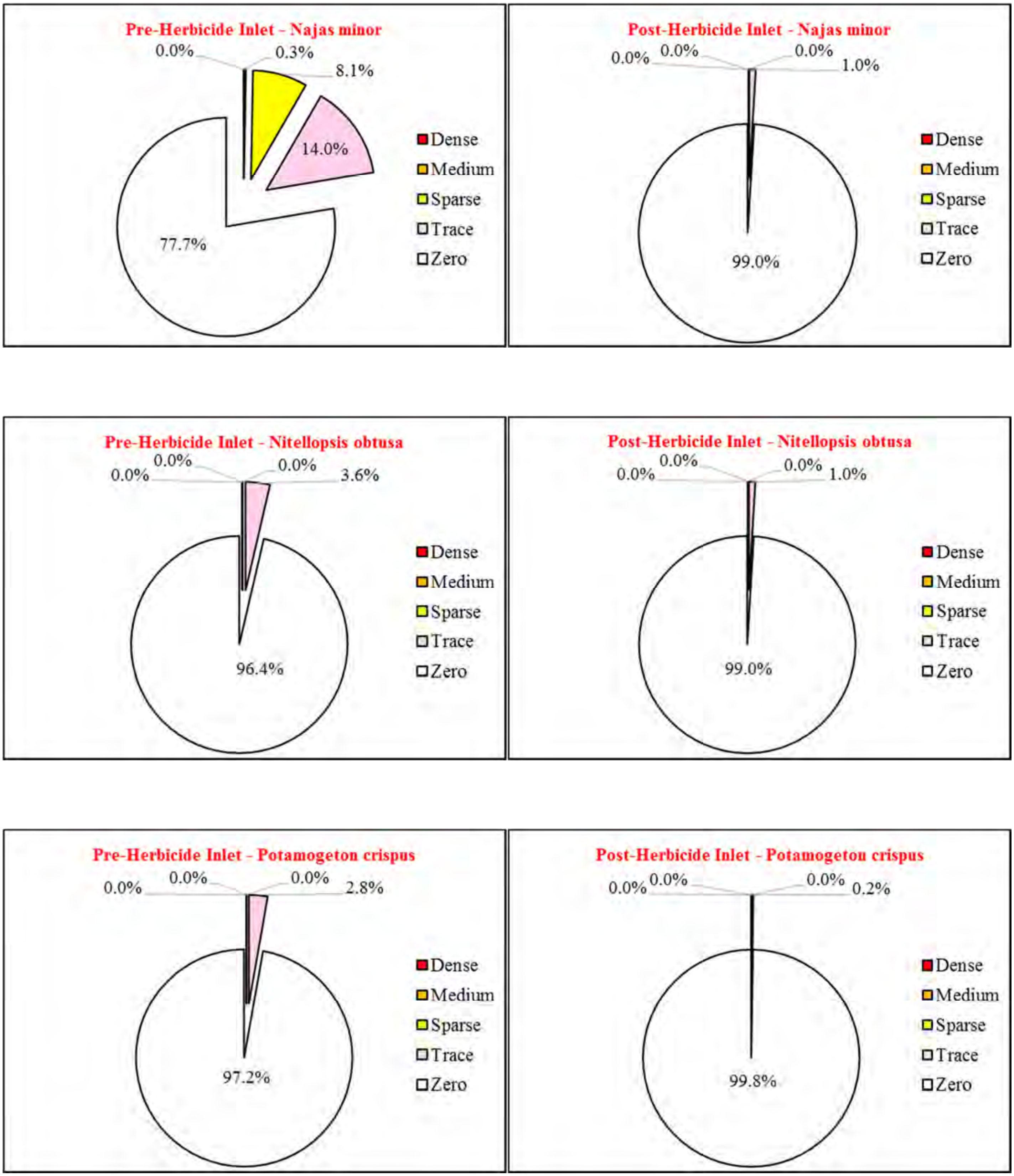
Inlet-Pie 1. Percentages of each abundance category of the total 358 rake-tosses (pre-herbicide) and 418 rake-tosses (post-herbicide) made in the Inlet proper in 2016 to contrast the pre-herbicide with the post-herbicide values of each species' grouping.



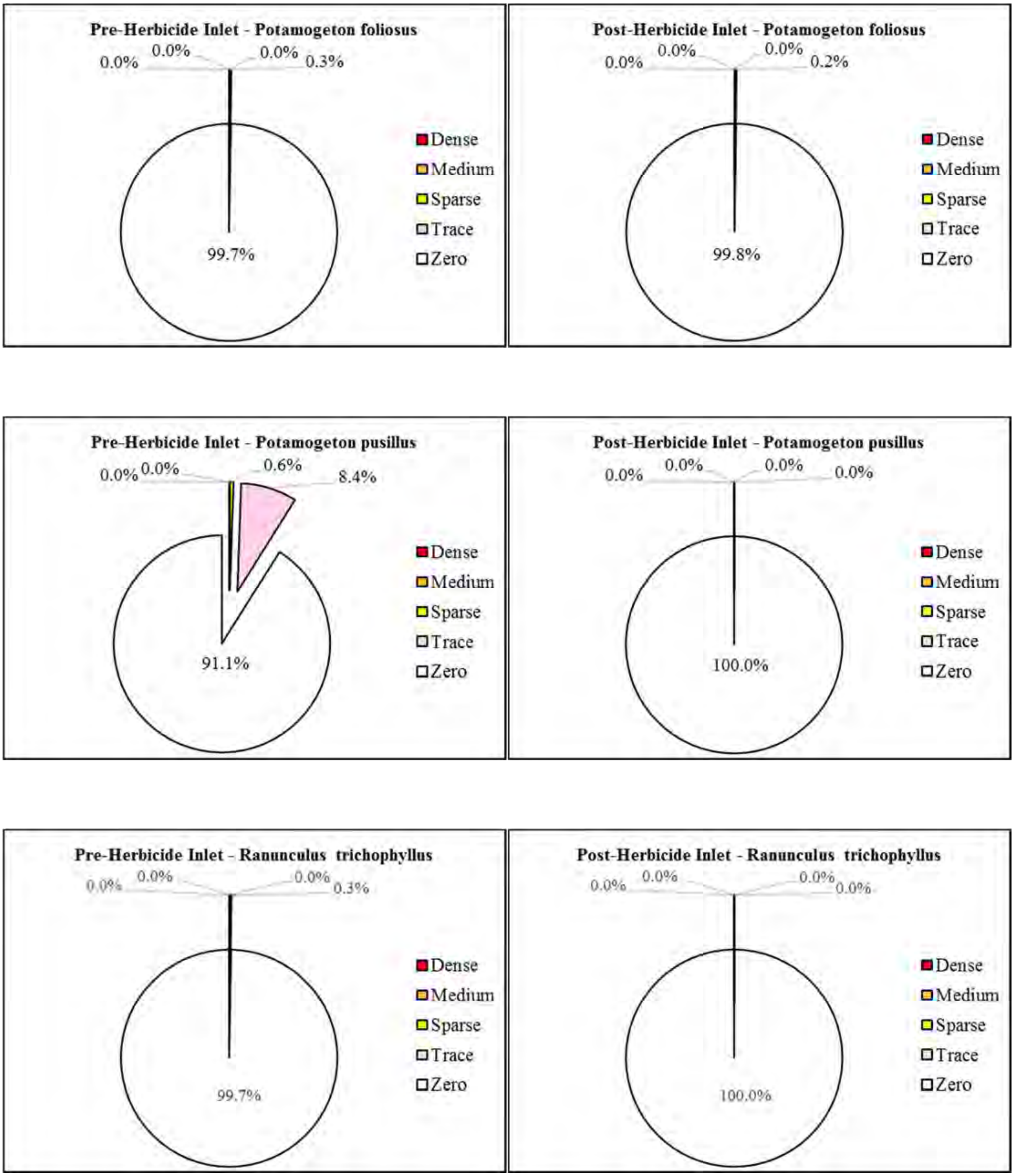
Inlet-Pie 2. Percentages of each abundance category of the total 358 rake-tosses (pre-herbicide) and 418 rake-tosses (post-herbicide) made in the Inlet proper in 2016 to contrast the pre-herbicide with the post-herbicide values for *Ceratophyllum demersum*, *Elodea sp*., and *Fontinalis sp*.



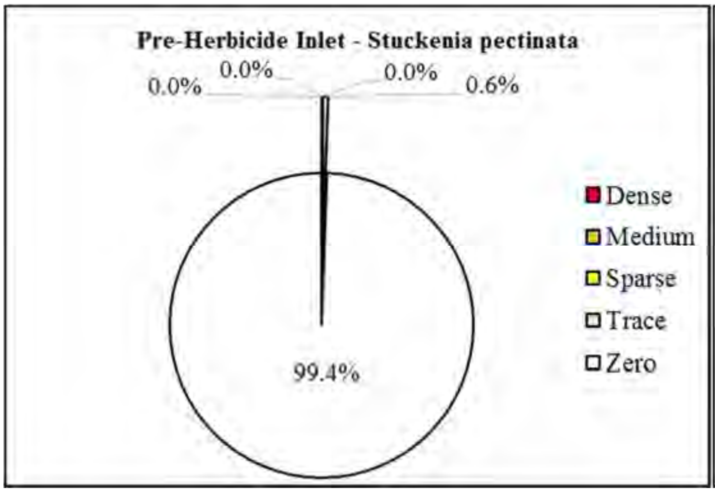
Inlet-Pie 3. Percentages of each abundance category of the total 358 rake-tosses (pre-herbicide) and 418 rake-tosses (post-herbicide) made in the Inlet proper in 2016 to contrast the pre-herbicide with the post-herbicide values for *Heteranthera dubia*, *Myriophyllum spicatum* and *Najas flexilis*.

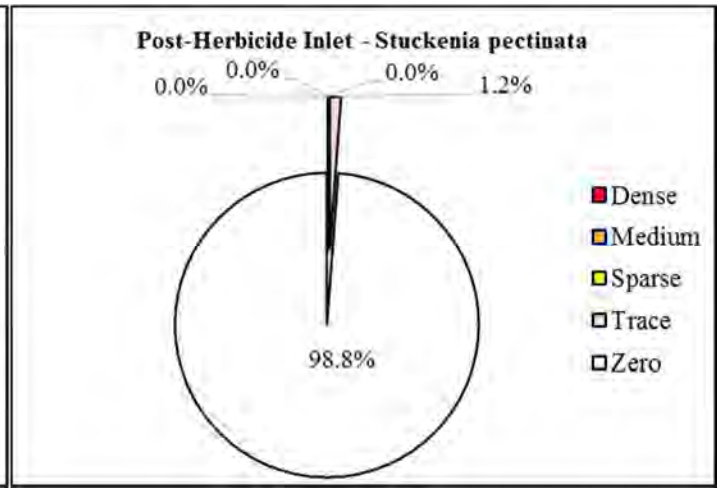


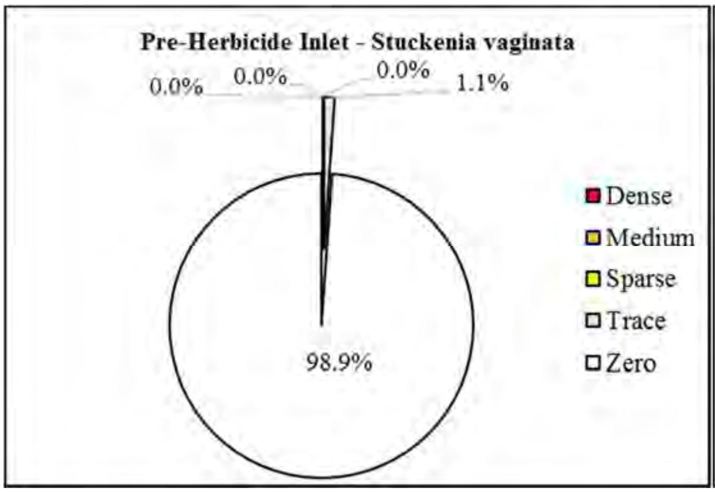
Inlet-Pie 4. Percentages of each abundance category of the total 358 rake-tosses (pre-herbicide) and 418 rake-tosses (post-herbicide) made in the Inlet proper in 2016 to contrast the pre-herbicide with the post-herbicide values for *Najas minor*, *Nitellopsis obtuse and Potamogeton crispus*.

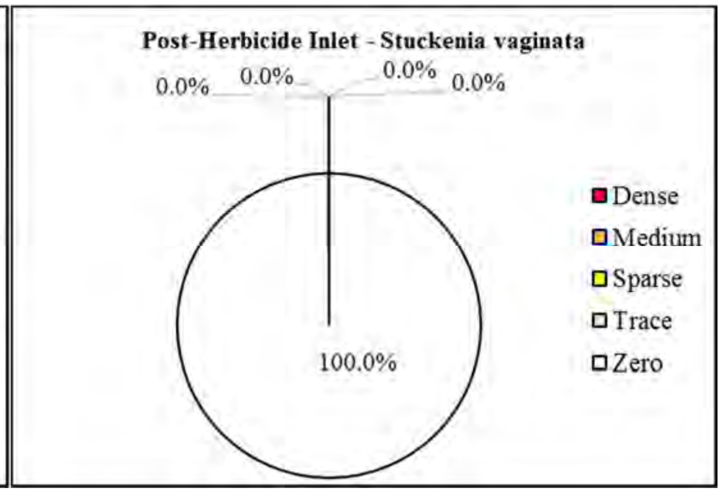


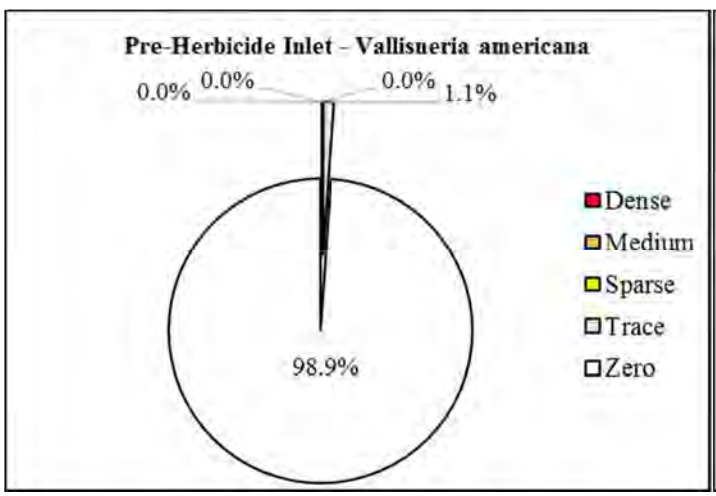
Inlet-Pie 5. Percentages of each abundance category of the total 358 rake-tosses (pre-herbicide) and 418 rake-tosses (post-herbicide) made in the Inlet proper in 2016 to contrast the pre-herbicide with the post-herbicide values for *Potamogeton foliosus*, *Potamogeton pusillus* and *Ranunculus trichophyllus*.

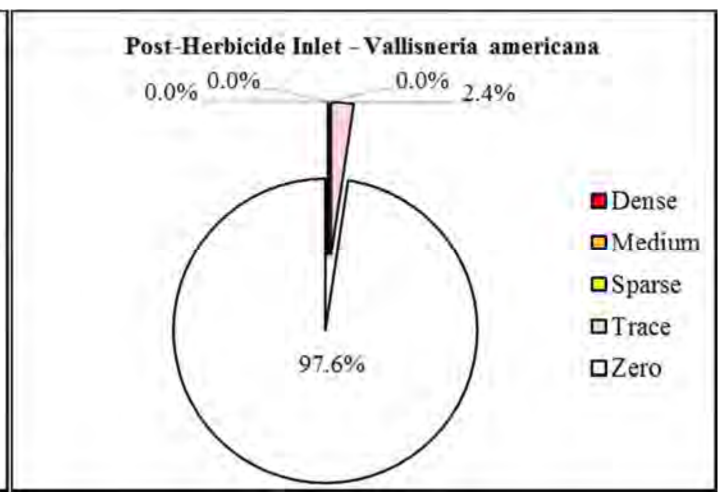




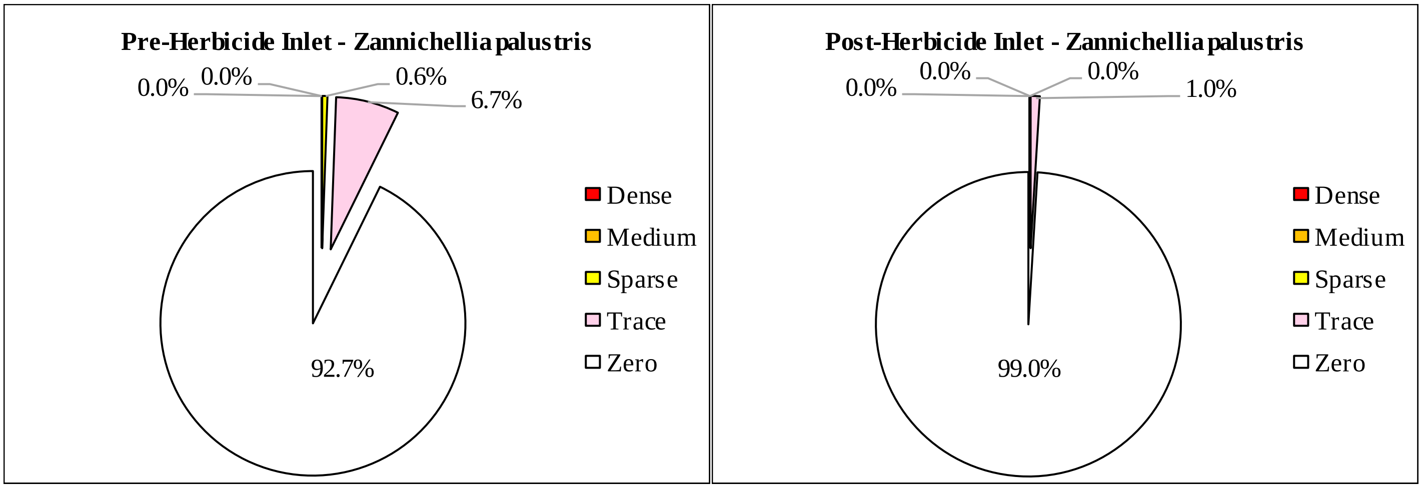




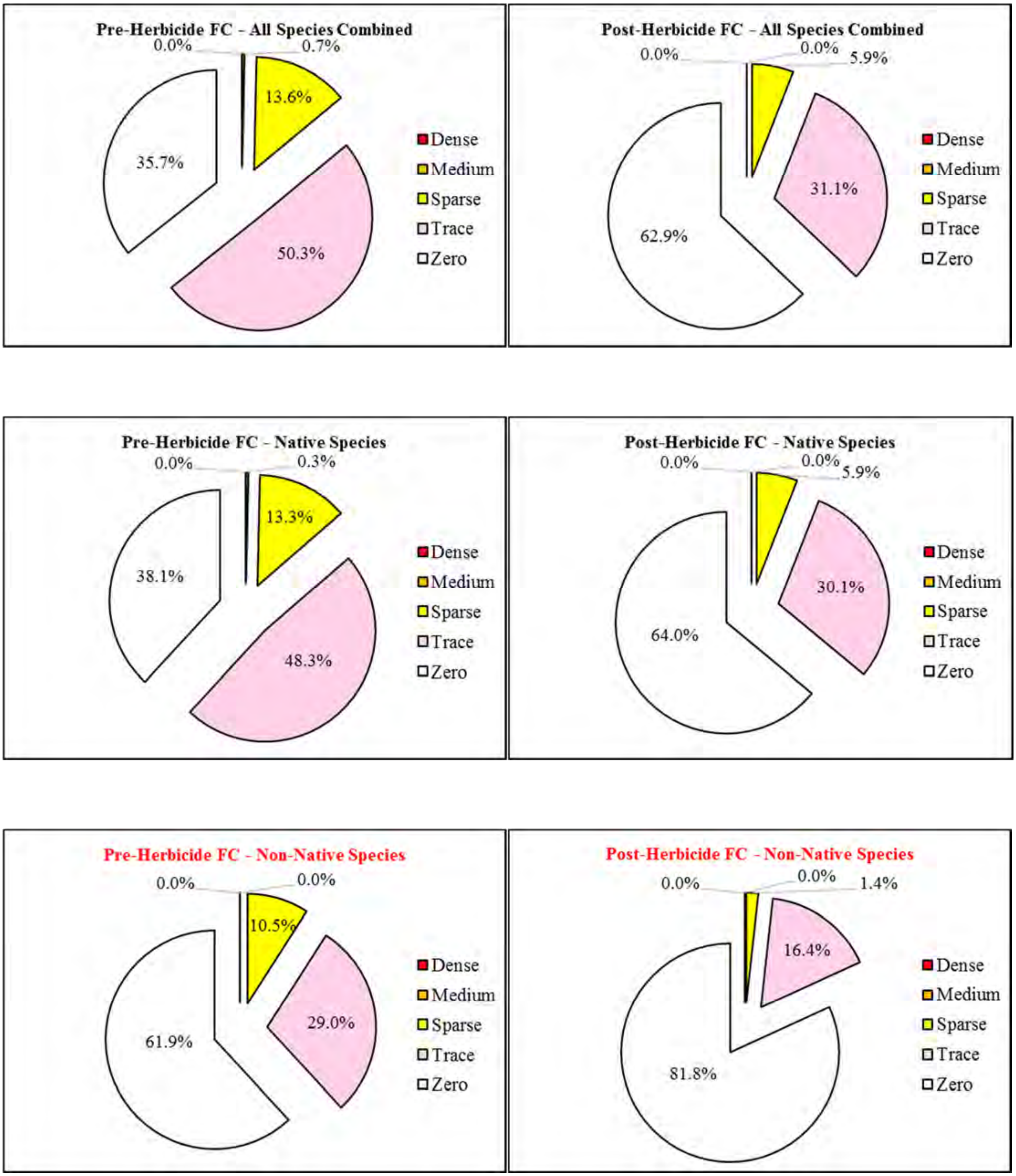




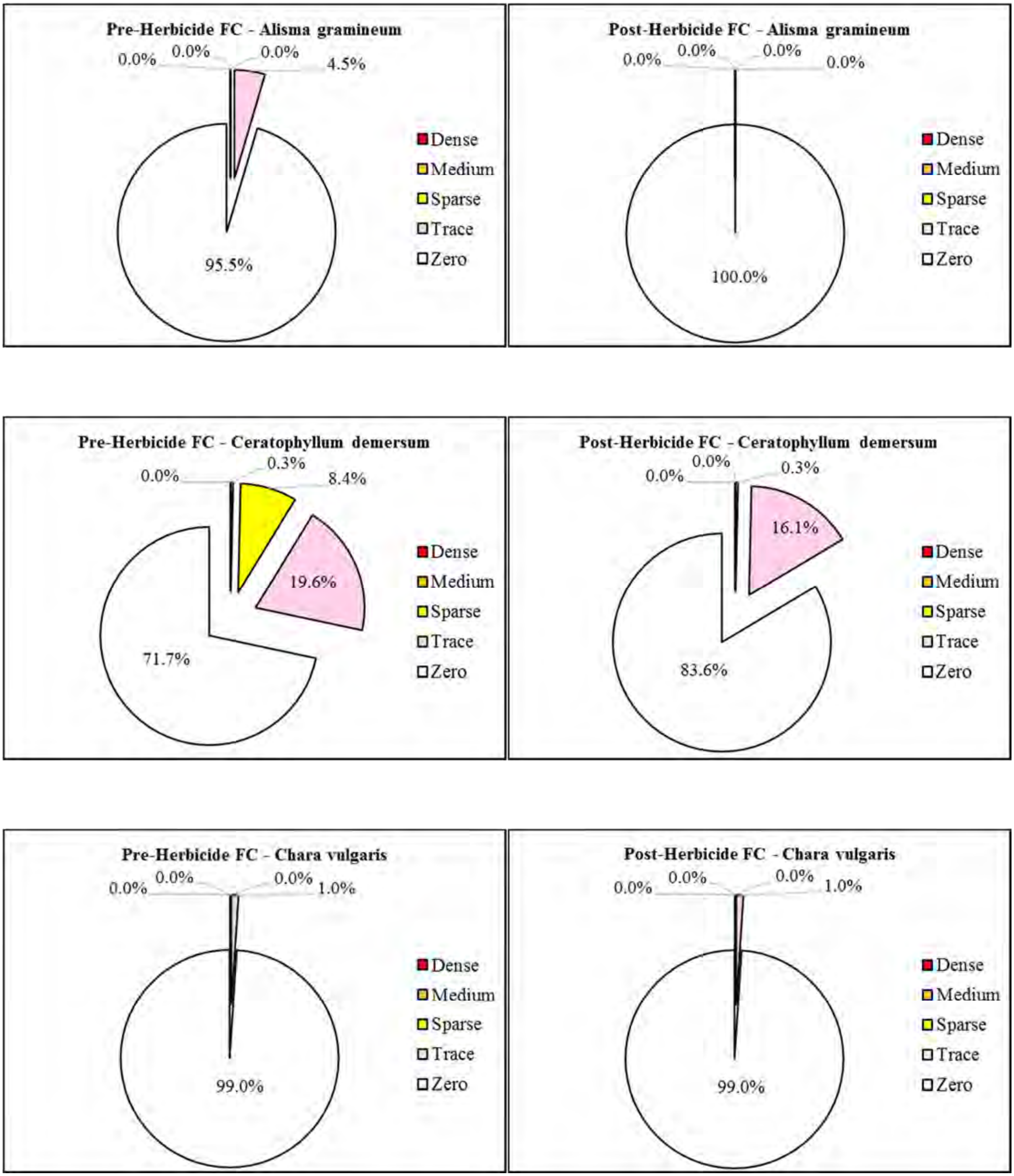
Inlet-Pie 6. Percentages of each abundance category of the total 358 rake tosses (pre-herbicide) and 418 rake-tosses (post-herbicide) made in the Inlet proper in 2016 to contrast the pre-herbicide with the post-herbicide values for *Stuckenia pectinata*, *Stuckenia vaginata* and *Vallisneria Americana*.



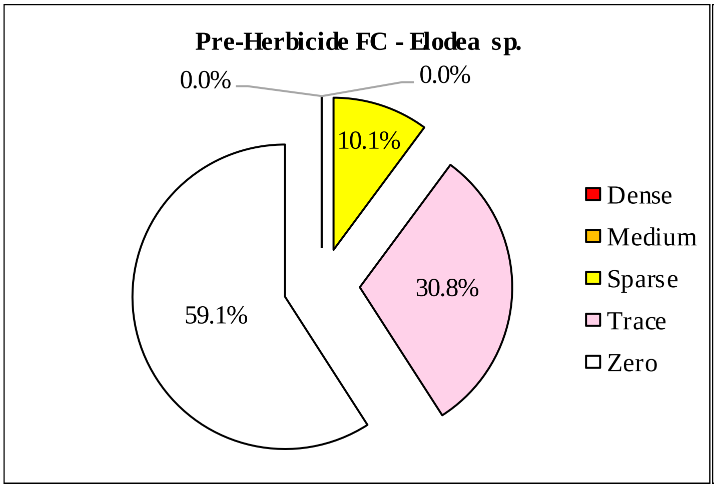
Inlet-Pie 7. Percentages of each abundance category of the total 358 rake-tosses (pre-herbicide) and 418 rake-tosses (post-herbicide) made in the Inlet proper in 2016 to contrast the pre-herbicide with the post-herbicide values for *Zannichellia palustris.*

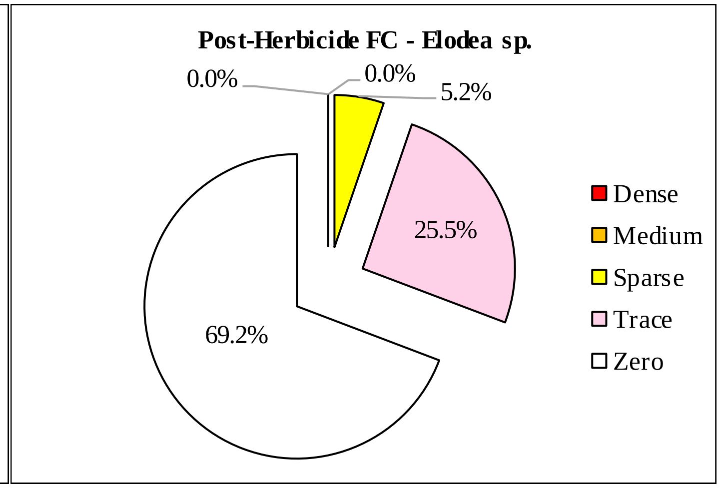


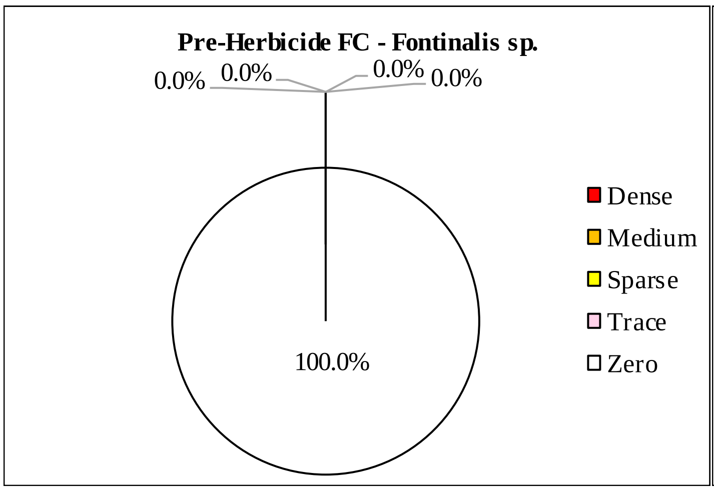
Fall Creek-Pie 1. Percentages of each abundance category of the total 286 rake-tosses (pre-herbicide and post-herbicide) made in the Fall Creek Area during 2016 to contrast the pre-herbicide and post-herbicide values for each species grouping.

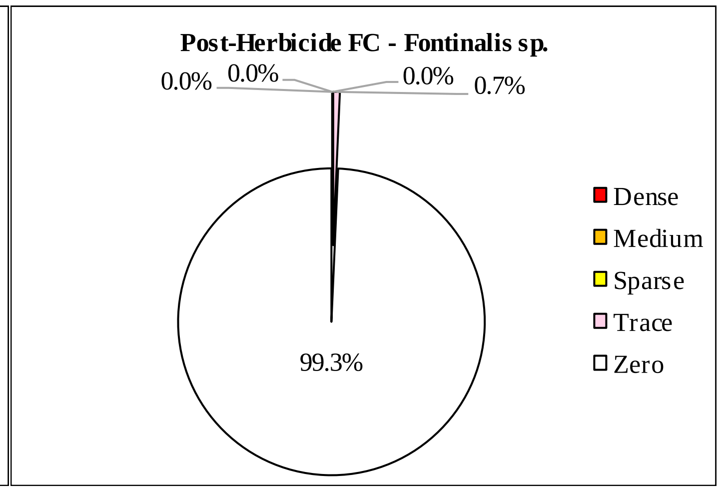


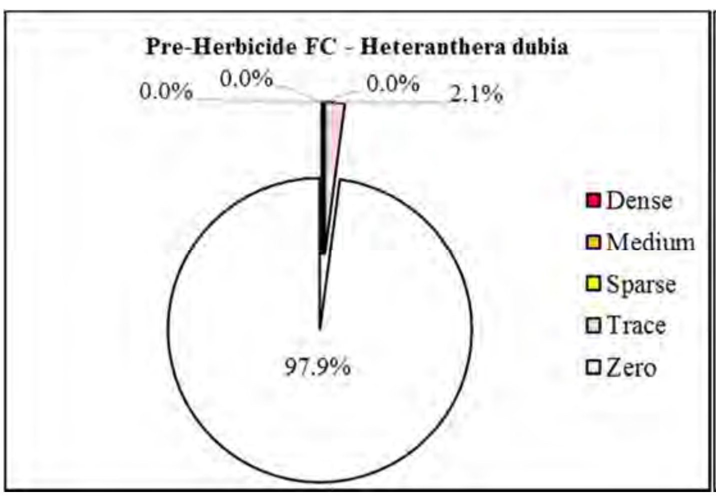
Fall Creek-Pie 2. Percentages of each abundance category of the total 286 rake-tosses (pre-herbicide and post-herbicide) made in the Fall Creek Area during 2016 to contrast the pre-herbicide and post-herbicide values for *Alisma gramineum, Ceratophyllum demersum* and *Chara vulgaris.*

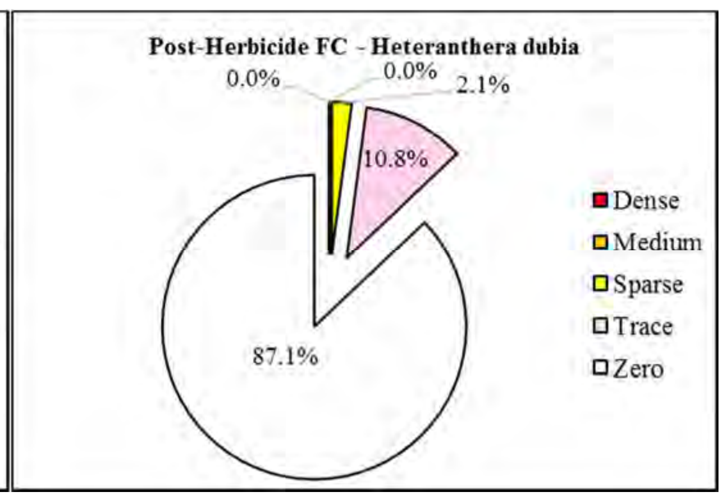




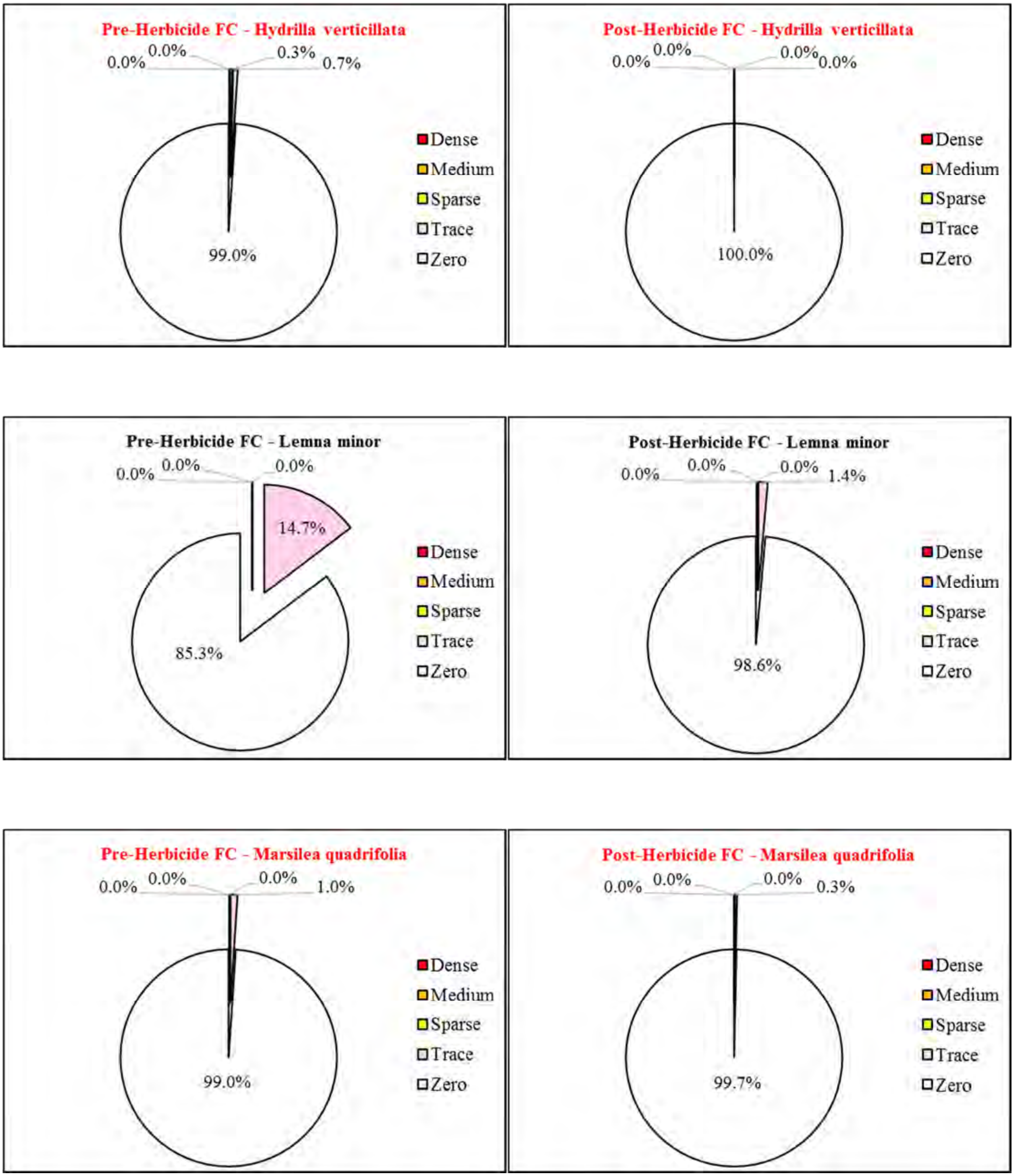




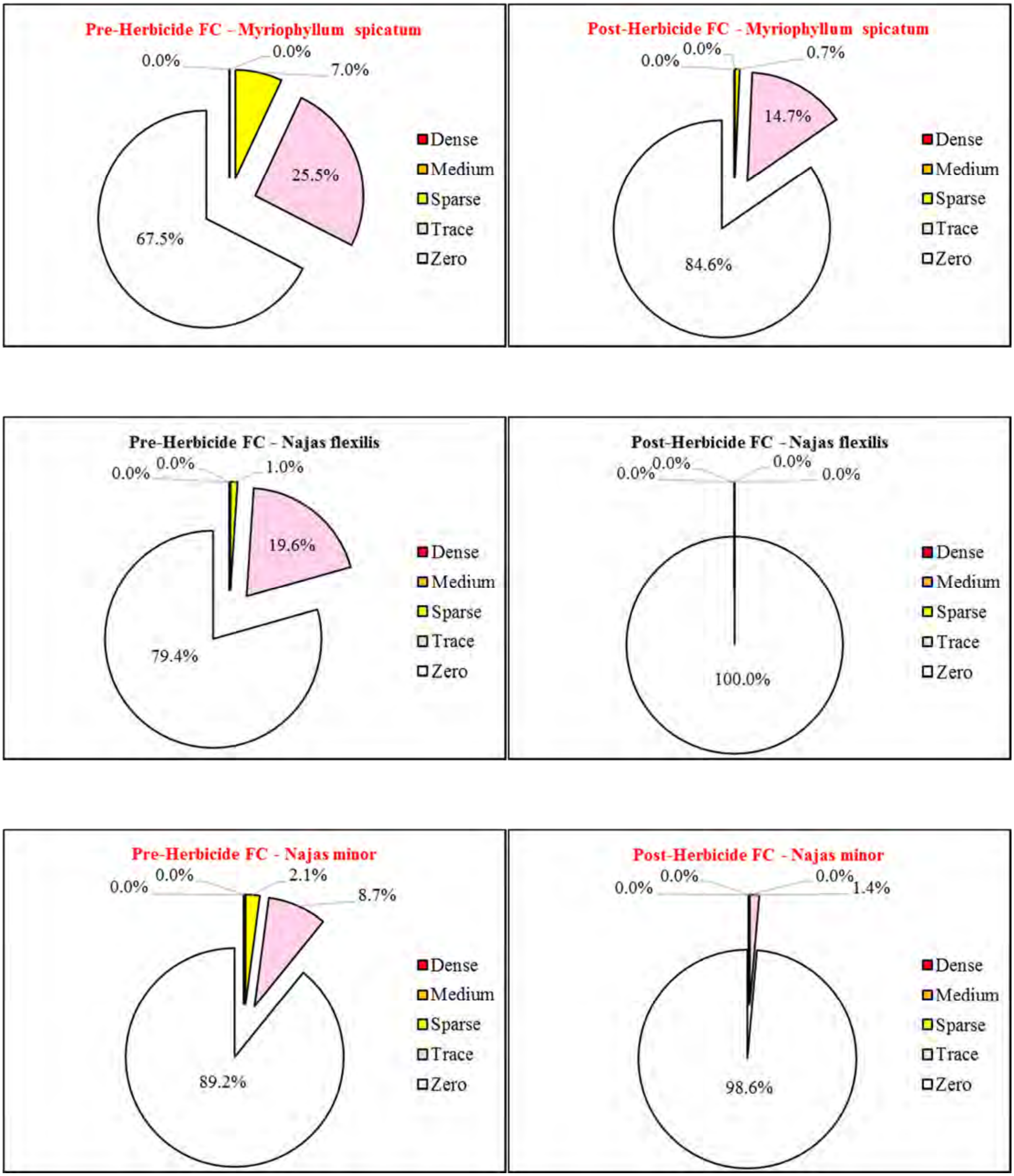




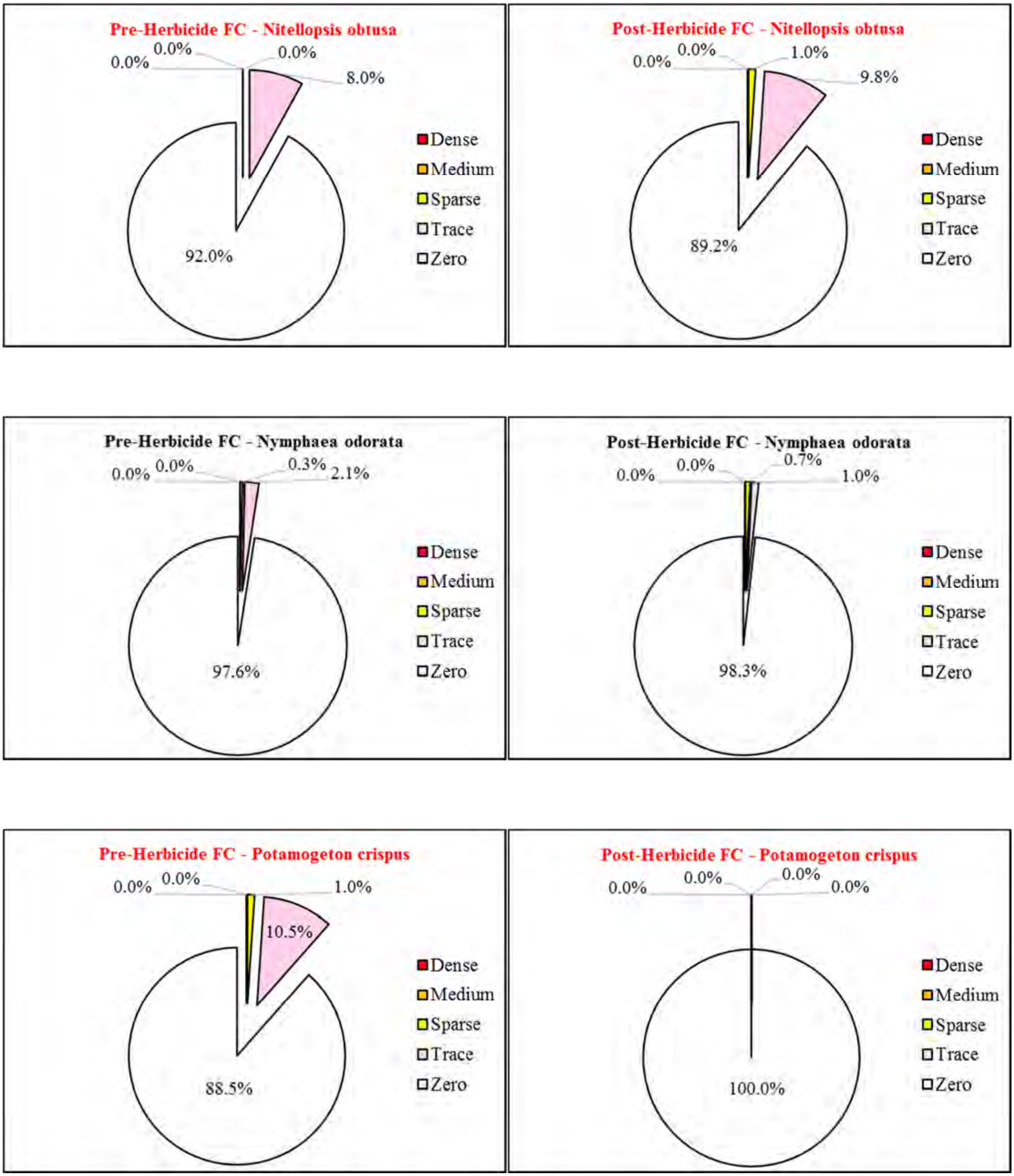
Fall Creek-Pie 3. Percentages of each abundance category of the total 286 rake-tosses (pre-herbicide and post-herbicide) made in the Fall Creek Area during 2016 to contrast the pre-herbicide and post-herbicide values for *Elodea sp.*, *Fontinalis sp.* and *Heteranthera dubia.*



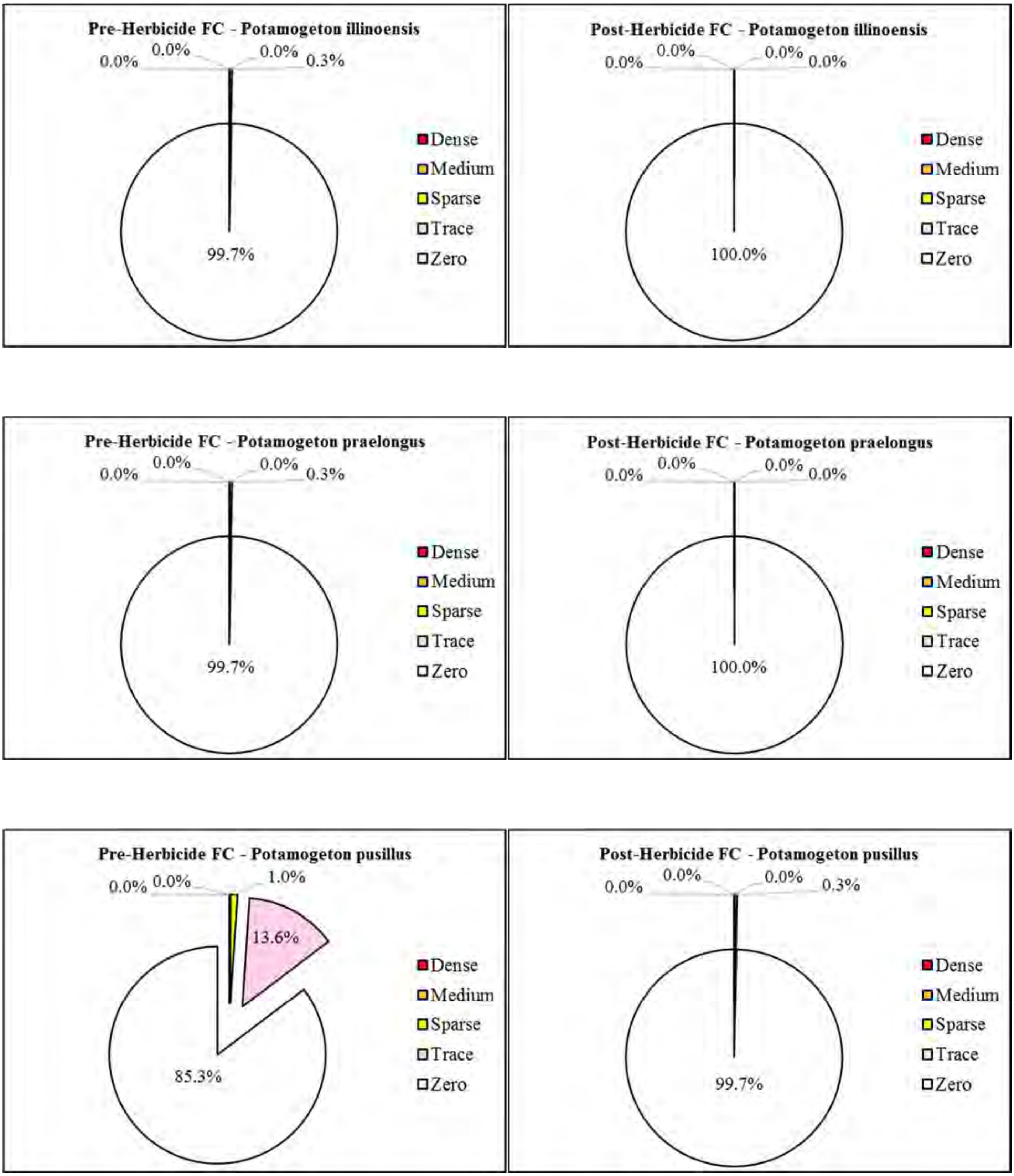
Fall Creek-Pie 4. Percentages of each abundance category of the total 286 rake-tosses (pre-herbicide and post-herbicide) made in the Fall Creek Area during 2016 to contrast the pre-herbicide and post-herbicide values for *Hydrilla verticillata, Lemna minor* and *Marsilea quadrifolia*.



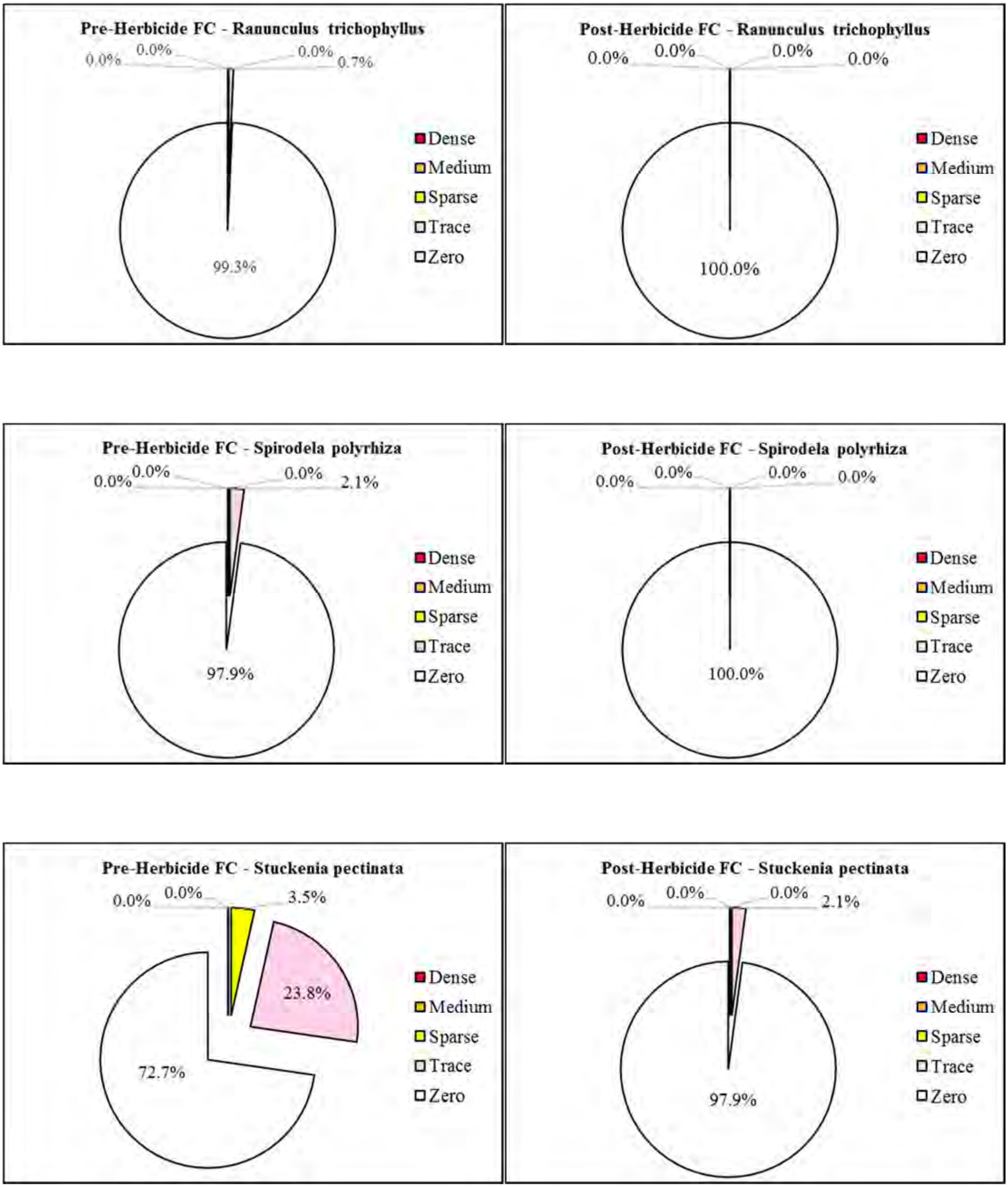
Fall Creek-Pie 5. Percentages of each abundance category of the total 286 rake-tosses (pre-herbicide and post-herbicide) made in the Fall Creek Area during 2016 to contrast the pre-herbicide and post-herbicide values for, *Myriophyllum spicatum, Najas flexilis* and *Najas minor*.



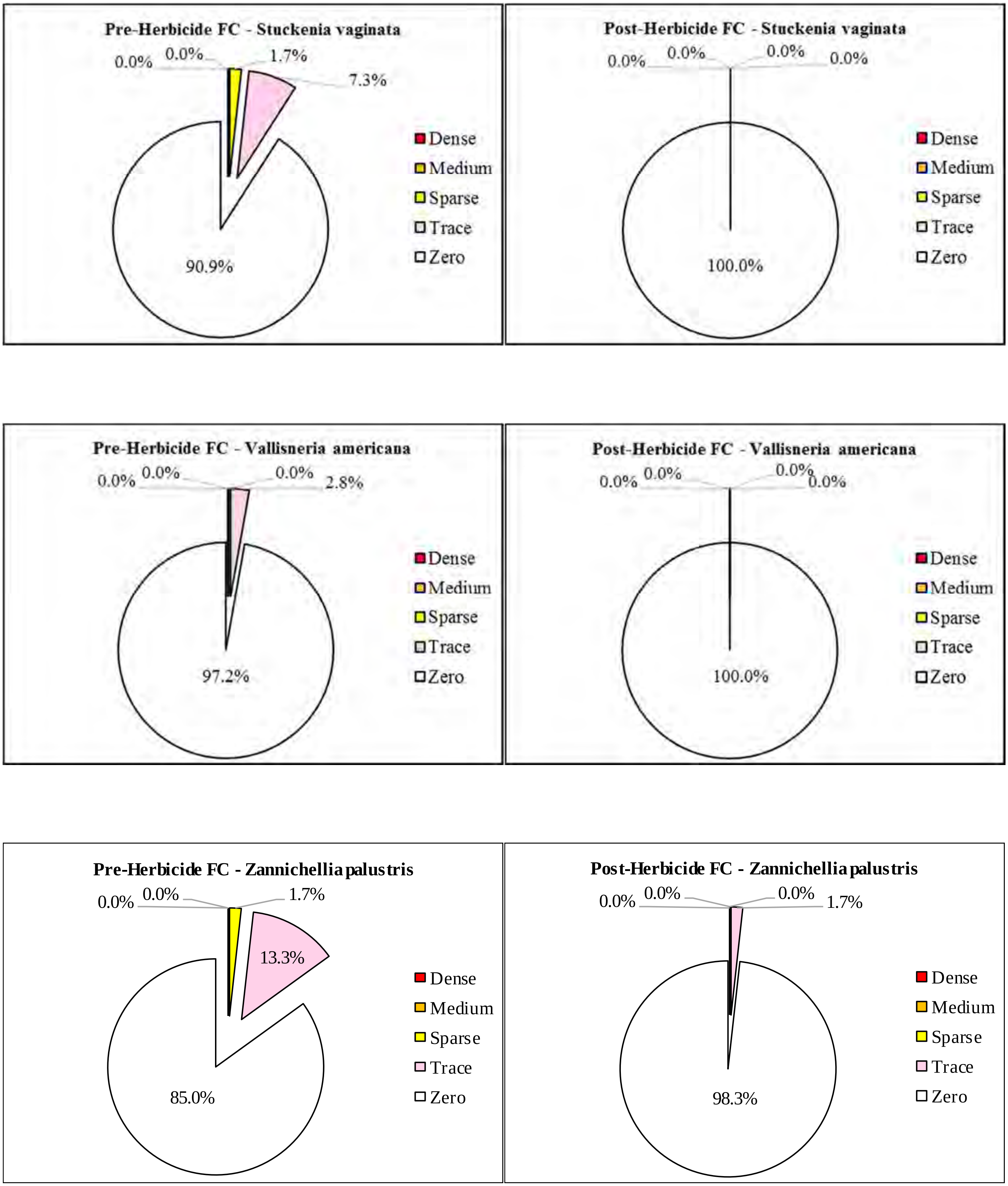
Fall Creek-Pie 6. Percentages of each abundance category of the total 286 rake-tosses (pre-herbicide and post-herbicide) made in the Fall Creek Area during 2016 to contrast the pre-herbicide and post-herbicide values for *Nitellopsis obtusa*, *Nymphaea odorata* and *Potamogeton crispus*.



Fall Creek-Pie 7. Percentages of each abundance category of the total 286 rake-tosses (pre-herbicide and post-herbicide) made in the Fall Creek Area during 2016 to contrast the pre-herbicide and post-herbicide values for *Potamogeton illinoensis, Potamogeton praelongus* and *Potamogeton pusillus.*



Fall Creek-Pie 8. Percentages of each abundance category of the total 286 rake-tosses (pre-herbicide and post-herbicide) made in the Fall Creek Area during 2016 to contrast the pre-herbicide and post-herbicide values for *Ranunculus trichophyllus*, *Spirodela polyrhiza* and *Stuckenia pectinata*.



Fall Creek-Pie 9. Percentages of each abundance category of the total 286 rake-tosses (pre-herbicide and post-herbicide) made in the Fall Creek Area during 2016 to contrast the pre-herbicide and post-herbicide values for *Stuckenia vaginata*, *Vallisneria americana* and *Zannichellia palustris*.

Appendix

Data 1. Cayuga Lake rake-toss measurements recorded in 2016. 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 in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/12	375900	4701975	1.20	1	S		50		50		0.01					**0.01**					**0.01**														0.01							6	**2**	4
9/12	375900	4701975	1.20	2	S		35		45		3					**3**	10				**2**														2					0.01		8	**2**	6
9/12	375875	4701975	2.20	1	O																																					0	**0**	0
9/12	375875	4701975	2.20	2	T				100																																	1	**0**	1
9/12	375850	4701975	2.10	1	S		30		10												**60**																					3	**1**	2
9/12	375850	4701975	2.10	2	S		85		12												**3**																					3	**1**	2
9/12	375825	4701975	2.00	1	M		95		5												**0.01**																					3	**1**	2
9/12	375825	4701975	2.00	2	M		85		15							**0.01**	0.01				**0.01**																					5	**2**	3
9/13	375800	4701975	1.70	1	T				99												**1**																					2	**1**	1
9/13	375800	4701975	1.70	2	S				100							**0.01**	0.01				**0.01**																					4	**2**	2
9/13	375775	4701975	1.50	1	S		1		98							**0.01**					**1**									0.01												5	**2**	3
9/13	375775	4701975	1.50	2	M				100							**0.01**	0.01																									3	**1**	2
9/16	375750	4701975	1.40	1	S		0.01		100							**0.01**			**0.01**		**0.01**														0.01							6	**3**	3
9/16	375750	4701975	1.40	2	S		0.01		90							**0.01**	0.01				**10**																					5	**2**	3
9/16	375725	4701975	1.00	1	S				80							**0.01**					**20**																					3	**2**	1
9/16	375725	4701975	1.00	2	M				90		0.01					**0.01**	0.01				**10**														0.01							6	**2**	4
9/12	375875	4702000	1.00	1	S		12		80		0.01					**5**	0.01				**0.01**						0.01								3							8	**2**	6
9/12	375875	4702000	1.00	2	S		5		75		1					**15**	0.01				**3**									0.01					1							8	**2**	6
9/12	375850	4702000	1.20	1	S		75		25																																	2	**0**	2
9/12	375850	4702000	1.20	2	S		50		50												**0.01**																					3	**1**	2
9/17	375825	4702000	1.60	1	T				80		5					**4**	10				**1**																					5	**2**	3
9/17	375825	4702000	1.60	2	S		30		65							**5**			**0.01**		**0.01**									0.01												6	**3**	3
9/13	375800	4702000	1.70	1	M		50		50		0.01						0.01				**0.01**																					5	**1**	4
9/13	375800	4702000	1.70	2	M		75		25		0.01					**0.01**	0.01																									5	**1**	4
9/13	375775	4702000	1.60	1	M		0.01		100							**0.01**	0.01				**0.01**																					5	**2**	3
9/13	375775	4702000	1.60	2	M		2		98							**0.01**																										3	**1**	2
9/16	375750	4702000	1.50	1	S				97							**2**	1				**0.01**														0.01							5	**2**	3
9/16	375750	4702000	1.50	2	S		5		90							**5**					**0.01**																					4	**2**	2
9/16	375725	4702000	1.00	1	S		1		60		39						0.01				**0.01**																					5	**1**	4
9/16	375725	4702000	1.00	2	M		5		80		0.01					**10**	3				**2**																					6	**2**	4
8/4	376100	4703025	4.00	1	M		20		50							**10**					**20**																					4	**2**	2
8/4	376100	4703025	4.00	2	M		40		20							**5**					**20**														15							5	**2**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/12	375850	4702025	1.20	1	S		10		90							0.01	0.01																									4	1	3
9/12	375850	4702025	1.20	2	S		15		80							3	2				0.01																					5	2	3
9/17	375825	4702025	1.60	1	M		59		40							1					0.01																					4	2	2
9/17	375825	4702025	1.60	2	M		70		30								0.01																									3	0	3
9/13	375800	4702025	1.30	1	M		0.01		100							0.01			0.01		0.01																					5	3	2
9/13	375800	4702025	1.30	2	M				100																																	1	0	1
9/13	375775	4702025	1.40	1	M		0.01		100																																	2	0	2
9/13	375775	4702025	1.40	2	M		2		98							0.01																										3	1	2
9/16	375750	4702025	1.50	1	S		7		90							2	0.01				1									0.01												6	2	4
9/16	375750	4702025	1.50	2	S		1		92		1					2	2		0.01		1														1							8	3	5
9/16	375725	4702025	1.90	1	S		19		80							0.01	1				0.01																					5	2	3
9/16	375725	4702025	1.90	2	S		25		75							0.01	0.01				0.01																					5	2	3
9/21	375700	4702025	1.70	1	S		4		93							2	0.01		0.01		1																			0.01		7	3	4
9/21	375700	4702025	1.70	2	S		10		80							5					5																					4	2	2
9/21	375675	4702025	1.10	1	T				90										1		4									2										3		5	2	3
9/21	375675	4702025	1.10	2	M		10		80		0.01					5	0.01				4									0.01					1							8	2	6
9/8	375875	4702050	1.00	1	S		7		90							2	1																									4	1	3
9/8	375875	4702050	1.00	2	S				90		5					0.01	0.01		0.01																5							6	2	4
9/12	375850	4702050	1.00	1	T				95								5																									2	0	2
9/12	375850	4702050	1.00	2	T				85							10	5																									3	1	2
9/17	375825	4702050	1.20	1	M		2		98		0.01										0.01																					4	1	3
9/17	375825	4702050	1.20	2	S		0.01		94							2	2		0.01																2					0.01		7	2	5
9/13	375800	4702050	1.10	1	S		1		99							0.01	0.01		0.01		0.01																					6	3	3
9/13	375800	4702050	1.10	2	S		1		99							0.01																										3	1	2
9/13	375775	4702050	1.40	1	S		0.01		100																																	2	0	2
9/13	375775	4702050	1.40	2	S				100							0.01	0.01																									3	1	2
9/16	375750	4702050	1.40	1	S		0.01		95							5					0.01																			0.01		5	2	3
9/16	375750	4702050	1.40	2	T				98												2																					2	1	1
9/16	375725	4702050	1.90	1	S		5		95							0.01																										3	1	2
9/16	375725	4702050	1.90	2	S				99							0.01	0.01				1																					4	2	2
9/21	375700	4702050	2.00	1	M				95							5	0.01																									3	1	2
9/21	375700	4702050	2.00	2	M		2		98	0.01						0.01	0.01																		0.01							6	1	5

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/21	375675	4702050	1.50	1	T		2		60		1					5	2				29									1												7	2	5
9/21	375675	4702050	1.50	2	S		25		65							5	0.01		0.01		5																					6	3	3
8/5	376075	4702075	0.50	1	T				28							10	35		2																25							5	2	3
8/5	376075	4702075	0.50	2	S		2		35							10	38				0.01									0.01					15							7	2	5
9/1	376050	4702075	0.50	1	T		5		30							20	2				1																			42		6	2	4
9/1	376050	4702075	0.50	2	T		5		65		5					10	8																					5		2		7	1	6
9/1	376025	4702075	0.50	1	T				60								33													2					5							4	0	4
9/1	376025	4702075	0.50	2	T		5		50							15	5		5		1					2									10			2		5		10	4	6
9/2	376000	4702075	0.80	1	S		3		70		2					8	3		0.01		2						0.01			0.01					10			2				11	3	8
9/2	376000	4702075	0.80	2	S		3		77		0.01					10	3		0.01		2					0.01				0.01					5			0.01				11	4	7
9/2	375975	4702075	0.80	1	S		6		80							10	0.01		0.01		0.01						0.01								4					0.01		9	3	6
9/2	375975	4702075	0.80	2	S		0.01		65							15	5				0.01					5				0.01					10							8	3	5
9/7	375950	4702075	0.60	1	S		12		85							1	1																		1							5	1	4
9/7	375950	4702075	0.60	2	S		7		70							15	0.01		0.01											3					5							7	2	5
9/7	375925	4702075	0.80	1	S		0.01		80		3					7	10																									5	1	4
9/7	375925	4702075	0.80	2	S				95		1					0.01	4		0.01		0.01						0.01															7	3	4
9/8	375900	4702075	1.00	1	T				88		3						5		1																3							5	1	4
9/8	375900	4702075	1.00	2	T				75		2					8	15																									4	1	3
9/8	375875	4702075	1.10	1	M		0.01		98							2	0.01																									4	1	3
9/8	375875	4702075	1.10	2	M		1		99																																	2	0	2
9/12	375850	4702075	1.00	1	S		9		90							1	0.01													0.01												5	1	4
9/12	375850	4702075	1.00	2	T				90							4	5													1												4	1	3
9/17	375825	4702075	1.20	1	S				99							1	0.01				0.01									0.01												5	2	3
9/17	375825	4702075	1.20	2	S		2		92							3	1				1														1					0.01		7	2	5
9/13	375800	4702075	1.10	1	S				100							0.01					0.01																					3	2	1
9/13	375800	4702075	1.10	2	S		1		99		0.01					0.01	0.01				0.01																					6	2	4
9/13	375775	4702075	1.10	1	S		5		95																																	2	0	2
9/13	375775	4702075	1.10	2	S				80							4					8														8							4	2	2
9/16	375750	4702075	1.30	1	M				100							0.01			0.01																							3	2	1
9/16	375750	4702075	1.30	2	M				100							0.01																										2	1	1
9/16	375725	4702075	1.40	1	M				98							2			0.01																0.01							4	2	2
9/16	375725	4702075	1.40	2	S				95							5																										2	1	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/21	375700	4702075	1.50	1	M		2		98																																	2	0	2
9/21	375700	4702075	1.50	2	M		5		93							2					0.01																					4	2	2
9/21	375675	4702075	2.00	1	S		8		85		0.01					5	0.01		0.01		2																					7	3	4
9/21	375675	4702075	2.00	2	S		40		50		0.01					3	2				5																					6	2	4
9/21	375650	4702075	2.00	1	S		39		55							3	1				1									0.01					1							7	2	5
9/21	375650	4702075	2.00	2	M		20		68							10	0.01		2		0.01						0.01															7	3	4
8/3	376125	4702100	0.50	1	S		0.01		30							2	32									0.01			0.01	0.01					36							8	2	6
8/3	376125	4702100	0.50	2	S		0.01		73		0.01					2	20									0.01	0.01		0.01	0.01					5							10	2	8
8/3	376100	4702100	0.80	1	T				30		1					5	14		2											3					45							7	2	5
8/3	376100	4702100	0.80	2	S		1		35							3	30		0.01							1									30			0.01				8	3	5
8/5	376075	4702100	0.80	1	T				65								12				3														20							4	1	3
8/5	376075	4702100	0.80	2	T		4		50							5	30		1																10							6	2	4
9/1	376050	4702100	1.00	1	T				50																															50		2	0	2
9/1	376050	4702100	1.00	2	T				60							10	25				5																					4	2	2
9/1	376025	4702100	0.70	1	T				80							18														2												3	1	2
9/1	376025	4702100	0.70	2	S				65		2					5	23				5														0.01							6	2	4
9/2	376000	4702100	1.00	1	M				52		3					5	25				0.01														15							6	2	4
9/2	376000	4702100	1.00	2	M		0.01	0.01	55		3					13	25				1														3							8	2	6
9/2	375975	4702100	1.00	1	S		1		40		0.01					15	2				2														40							7	2	5
9/2	375975	4702100	1.00	2	M		0.01		57							1	2		0.01																40			0.01				7	2	5
9/7	375950	4702100	0.90	1	S		0.01	0.01	65		0.01					0.01	20				0.01														15							8	2	6
9/7	375950	4702100	0.90	2	S		0.01		25		5					10	20		0.01		0.01														40							8	3	5
9/7	375925	4702100	0.90	1	S				80		0.01					2	8				0.01														10							6	2	4
9/7	375925	4702100	0.90	2	S				67		15					3	5		0.01		0.01														10							7	3	4
9/8	375900	4702100	1.10	1	S				95		1					2					2																					4	2	2
9/8	375900	4702100	1.10	2	T				80		1					10	5				2														2							6	2	4
9/8	375875	4702100	1.10	1	M			0.01	80		19						1				0.01						0.01															6	1	5
9/8	375875	4702100	1.10	2	M			0.01	95		0.01						4				1																					5	1	4
9/12	375850	4702100	1.00	1	S			0.01	85							0.01	15				0.01									0.01					0.01							7	2	5
9/12	375850	4702100	1.00	2	S		0.01		90							0.01	10		0.01		0.01									0.01												7	3	4
9/17	375825	4702100	1.20	1	S				97							2	1				0.01																					4	2	2
9/17	375825	4702100	1.20	2	S		8		90							2	0.01																		0.01							5	1	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/13	375800	4702100	1.10	1	M		1		99							**0.01**					**0.01**																					4	**2**	2
9/13	375800	4702100	1.10	2	S		0.01		99							**0.01**	1																									4	**1**	3
9/13	375775	4702100	1.10	1	S				99							**1**	0.01				**0.01**																					4	**2**	2
9/13	375775	4702100	1.10	2	S				100							**0.01**	0.01				**0.01**																					4	**2**	2
9/16	375750	4702100	1.20	1	S				100		0.01																															2	**0**	2
9/16	375750	4702100	1.20	2	S				100							**0.01**					**0.01**																					3	**2**	1
9/16	375725	4702100	1.20	1	M				99							**1**					**0.01**																					3	**2**	1
9/16	375725	4702100	1.20	2	M				100							**0.01**																								0.01		3	**1**	2
9/21	375700	4702100	1.40	1	M				99		1					**0.01**																										3	**1**	2
9/21	375700	4702100	1.40	2	M		1		90							**9**	0.01																									4	**1**	3
9/21	375675	4702100	1.90	1	M		2		90							**8**																										3	**1**	2
9/21	375675	4702100	1.90	2	M	0.01			85							**2**	13																									4	**1**	3
9/21	375650	4702100	1.80	1	M		25		55		4					**15**					**1**																					5	**2**	3
9/21	375650	4702100	1.80	2	M		38		50		2					**10**			**0.01**		**0.01**																					6	**3**	3
9/21	375625	4702100	2.00	1	O																																					0	**0**	0
9/21	375625	4702100	2.00	2	T		54		10		10					**5**	1				**20**																					6	**2**	4
7/28	376200	4702125	0.50	1	S				60							**9**	25		**1**		**0.01**						0.01			0.01					5							8	**3**	5
7/28	376200	4702125	0.50	2	S		5		70							**5**	13		**0.01**		**0.01**						2								5							8	**3**	5
7/28	376175	4702125	0.50	1	T		10		36							**5**	35				**1**						2			1					10							8	**2**	6
7/28	376175	4702125	0.50	2	S		0.01	0.01	30							**3**	25		**3**								0.01			0.01					39					0.01		10	**2**	8
8/2	376150	4702125	0.50	1	M		1		51							**3**	15		**0.01**																30					0.01		7	**2**	5
8/2	376150	4702125	0.50	2	M		0.01		65							**2**	25		**3**		**0.01**									0.01					5					0.01		9	**3**	6
8/3	376125	4702125	0.70	1	S		4		35							**6**	20		**2**								2								30			1				8	**2**	6
8/3	376125	4702125	0.70	2	S		0.01		33							**0.01**	34		**0.01**																33							6	**2**	4
8/3	376100	4702125	0.80	1	S		1	0.01	15							**3**	68		**10**		**0.01**														3							8	**3**	5
8/3	376100	4702125	0.80	2	S		1		29		0.01					**2**	29		**10**		**0.01**									0.01					29							9	**3**	6
8/5	376075	4702125	0.80	1	S		1	3	20		0.01					**5**	50				**1**						0.01			5					15							10	**2**	8
8/5	376075	4702125	0.80	2	S		7	2	15							**2**	50		**5**		**1**								3	0.01					15					0.01		11	**3**	8
9/1	376050	4702125	1.00	1	M				35							**5**	20				**0.01**								20						20							6	**2**	4
9/1	376050	4702125	1.00	2	M		2		15		4					**2**	20		**1**		**1**								30						25							9	**3**	6
9/1	376025	4702125	0.90	1	M				35							**10**	50				**3**														2							5	**2**	3
9/1	376025	4702125	0.90	2	M		8		40		10					**2**	30																		10							6	**1**	5

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/2	376000	4702125	1.00	1	M		3		50		2					**3**	12				**0.01**														30			0.01				8	**2**	6
9/2	376000	4702125	1.00	2	M		1		50							**4**	35		**0.01**		**0.01**														10							7	**3**	4
9/2	375975	4702125	1.00	1	M				65		0.01						10				**0.01**														10			15				6	**1**	5
9/2	375975	4702125	1.00	2	M	5	5		20		35					**0.01**	10				**0.01**														10			15				9	**2**	7
9/7	375950	4702125	0.90	1	S		3		30		7						40		**0.01**		**0.01**														20							7	**2**	5
9/7	375950	4702125	0.90	2	S		2		20							**2**	25				**16**														35							6	**2**	4
9/7	375925	4702125	0.90	1	S			0.01	35		35					**5**	20				**0.01**														5							7	**2**	5
9/7	375925	4702125	0.90	2	S			0.01	50		15					**2**	6		**0.01**		**2**														25							8	**3**	5
9/8	375900	4702125	1.10	1	S		10	2	30		10					**5**	40																		3							7	**1**	6
9/8	375900	4702125	1.10	2	S		1		50		25					**1**	3		**0.01**		**0.01**														20							8	**3**	5
9/8	375875	4702125	1.00	1	M			0.01	65		25						8				**0.01**														2							6	**1**	5
9/8	375875	4702125	1.00	2	M			0.01	60		3						20				**7**									0.01					10							7	**1**	6
9/12	375850	4702125	1.10	1	S		2		70							**0.01**	3				**0.01**														25							6	**2**	4
9/12	375850	4702125	1.10	2	S		5		60		0.01					**5**	5				**0.01**														25							7	**2**	5
9/17	375825	4702125	1.20	1	S				90		3					**2**	1				**1**														3							6	**2**	4
9/17	375825	4702125	1.20	2	S		1		90		0.01					**1**	5				**0.01**														3					0.01		8	**2**	6
9/13	375800	4702125	1.10	1	M		0.01		100												**0.01**																					3	**1**	2
9/13	375800	4702125	1.10	2	S			0.01	100							**0.01**					**0.01**																					4	**2**	2
9/13	375775	4702125	1.20	1	S				100																																	1	**0**	1
9/13	375775	4702125	1.20	2	S		2		98																																	2	**0**	2
9/16	375750	4702125	1.20	1	M		4		95							**1**																										3	**1**	2
9/16	375750	4702125	1.20	2	M				85							**15**			**0.01**		**0.01**																					4	**3**	1
9/16	375725	4702125	1.20	1	M				99							**0.01**	0.01				**1**									0.01												5	**2**	3
9/16	375725	4702125	1.20	2	M				98							**1**					**1**																					3	**2**	1
9/21	375700	4702125	1.20	1	M		10		85							**5**					**0.01**																			0.01		5	**2**	3
9/21	375700	4702125	1.20	2	M		0.01		97							**3**																										3	**1**	2
9/21	375675	4702125	1.40	1	D		2		90							**8**	0.01																		0.01							5	**1**	4
9/21	375675	4702125	1.40	2	D		2		96		0.01					**2**	0.01																									5	**1**	4
9/21	375650	4702125	1.60	1	S				85		3					**10**	2		**0.01**		**0.01**																					6	**3**	3
9/21	375650	4702125	1.60	2	M				82		0.01					**5**	5		**8**																							5	**2**	3
9/21	375625	4702125	2.00	1	S		40		47							**10**	0.01		**0.01**		**3**																					6	**3**	3
9/21	375625	4702125	2.00	2	M		60		20							**15**	0.01				**5**																					5	**2**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/22	375600	4702125	1.00	1	T				88							10	1		1																							4	2	2
9/22	375600	4702125	1.00	2	T		60		35		5																															3	0	3
7/28	376225	4702150	0.50	1	S		10		69							1	10		0.01		0.01									0.01					10							8	3	5
7/28	376225	4702150	0.50	2	S				60							6	20		0.01		0.01					2	2			0.01					10							9	4	5
7/28	376200	4702150	0.50	1	S				40							2	43				0.01						0.01								15							6	2	4
7/28	376200	4702150	0.50	2	S				42							10	30		2		1														15					0.01		7	3	4
7/28	376175	4702150	0.50	1	M		1		30							2	35		1		1						0.01			0.01					30							9	3	6
7/28	376175	4702150	0.50	2	M		5	0.01	33							2	38		3		0.01						0.01		0.01	0.01					19							11	3	8
8/2	376150	4702150	0.60	1	M		2		10		0.01					3	65		0.01		0.01														20			0.01				9	3	6
8/2	376150	4702150	0.60	2	S				5							0.01	50				0.01														45							5	2	3
8/3	376125	4702150	0.80	1	M		0.01		10								10				0.01														80			0.01				6	1	5
8/3	376125	4702150	0.80	2	M		0.01		5							0.01	46		2							0.01	0.01								47			0.01				9	3	6
8/3	376100	4702150	0.80	1	M		5		15								15		1											2					62							6	1	5
8/3	376100	4702150	0.80	2	M		2		15							0.01	15				0.01														68							6	2	4
8/5	376075	4702150	1.00	1	S				10								28				0.01						2								60							5	1	4
8/5	376075	4702150	1.00	2	S		0.01		15								25		0.01		0.01						0.01		1	0.01					59							9	2	7
8/5	376050	4702150	0.90	1	M			0.01	10		0.01					5	30		2		0.01														53							8	3	5
8/5	376050	4702150	0.90	2	M			0.01	3							3	30		0.01		0.01						2								60			2				9	3	6
9/1	376025	4702150	1.10	1	S				25							15	3		2																40			15				6	2	4
9/1	376025	4702150	1.10	2	M		2	0.01	15							10	45		6		5														15			2				9	3	6
9/2	376000	4702150	1.00	1	M				40		0.01					5	25		0.01		3						0.01								20			7				9	3	6
9/2	376000	4702150	1.00	2	M				50		5					5	25		0.01		0.01														10			5				8	3	5
9/2	375975	4702150	1.00	1	M		0.01	0.01	15		15					10	40		0.01		4														6			10				10	3	7
9/2	375975	4702150	1.00	2	M				15		14					3	40		3		15														5			5				8	3	5
9/7	375950	4702150	0.90	1	S		5		10							5	55		5		5														15							7	3	4
9/7	375950	4702150	0.90	2	S				45		5					4	30		1		5														10			0.01				8	3	5
9/7	375925	4702150	1.00	1	S				40		4					1	45				2						0.01								8							7	2	5
9/7	375925	4702150	1.00	2	S		10	0.01	60							2	15				11														2	0.01		0.01				9	2	7
9/8	375900	4702150	1.20	1	S		0.01		30		10					0.01	25				5														30							7	2	5
9/8	375900	4702150	1.20	2	S		10	0.01	30		0.01					3	30				2														25							8	2	6
9/8	375875	4702150	1.10	1	S			0.01	50		0.01					0.01	45				2														3							7	2	5
9/8	375875	4702150	1.10	2	S				65							3	30				0.01														2							5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/12	375850	4702150	1.10	1	S		0.01		65							0.01	10				0.01														25							6	2	4
9/12	375850	4702150	1.10	2	S		1		55		0.01					4	15																		25							6	1	5
9/17	375825	4702150	1.10	1	S				100							0.01	0.01				0.01																					4	2	2
9/17	375825	4702150	1.10	2	S		25		70							2					3														0.01							5	2	3
9/13	375800	4702150	1.10	1	M		0.01		98		0.01					0.01	0.01																		2							6	1	5
9/13	375800	4702150	1.10	2	M				99		0.01					1	0.01																									4	1	3
9/13	375775	4702150	1.10	1	S				99							1																			0.01							3	1	2
9/13	375775	4702150	1.10	2	S		15		60							10																			15							4	1	3
9/16	375750	4702150	1.10	1	S				95		0.01					0.01	0.01				5																					5	2	3
9/16	375750	4702150	1.10	2	S				90								10																									2	0	2
9/16	375725	4702150	1.20	1	M				100								0.01																									2	0	2
9/16	375725	4702150	1.20	2	M				97							1	2																									3	1	2
9/21	375700	4702150	1.10	1	S				98							2					0.01																					3	2	1
9/21	375700	4702150	1.10	2	M				100							0.01																										2	1	1
9/21	375675	4702150	1.90	1	M				75							24			1																0.01					0.01		5	2	3
9/21	375675	4702150	1.90	2	M		2		85							3	0.01		10																							5	2	3
9/21	375650	4702150	1.50	1	M		0.01		90							10	0.01																									4	1	3
9/21	375650	4702150	1.50	2	M				96							1			3								0.01			0.01												5	2	3
9/21	375625	4702150	1.70	1	M		5		65							22	5										3															5	1	4
9/21	375625	4702150	1.70	2	M				71							20	2		3		4					0.01																6	4	2
9/22	375600	4702150	1.60	1	M		60		33		0.01					5			2		0.01																			0.01		7	3	4
9/22	375600	4702150	1.60	2	M		50		20		20					5	0.01		4								1															7	2	5
9/6	374900	4702150		1	D		25		65		0.01					5	0.01				0.01																	5				7	2	5
9/6	374900	4702150		2	D		25		70		0.01					5																						0.01				5	1	4
7/20	376275	4702175	0.50	1	S		10	0.01	38		0.01					10	20									2				0.01					20			0.01		0.01		11	2	9
7/20	376275	4702175	0.50	2	S		2		77		0.01					1	15		0.01		0.01					0.01				0.01					5					0.01		11	4	7
7/27	376250	4702175	0.50	1	M		2		35		0.01					4	27				0.01					0.01			1	0.01					30			1				11	3	8
7/27	376250	4702175	0.50	2	M		0.01	0.01	10							10	25												0.01						53			2				8	1	7
7/28	376225	4702175	0.80	1	S		0.01		37							0.01	38		5								0.01			0.01					20					0.01		9	2	7
7/28	376225	4702175	0.80	2	S		2		33							0.01	40		0.01		0.01						0.01			0.01					25					0.01		10	3	7
7/28	376200	4702175	0.60	1	T				15							5	63				1														15					1		6	2	4
7/28	376200	4702175	0.60	2	S		2		20							3	55		0.01		0.01														20							7	3	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/2	376175	4702175	0.95	1	M		1		5		0.01					1	60		3		0.01														30	0.01						9	3	6
8/2	376175	4702175	0.95	2	M				2		0.01					0.01	30		0.01										10	58												7	2	5
8/2	376150	4702175	1.00	1	M				5							0.01	25		0.01																70			0.01				6	2	4
8/2	376150	4702175	1.00	2	M		0.01		5							0.01	25		0.01											0.01					70							7	2	5
8/3	376125	4702175	1.00	1	S				10							1	10																		79							4	1	3
8/3	376125	4702175	1.00	2	S		5		20		0.01					5	20		0.01		0.01					0.01									50			0.01		0.01		11	4	7
8/3	376100	4702175	0.80	1	M				5							0.01	45		1		0.01								1	3					45							8	3	5
8/3	376100	4702175	0.80	2	M			0.01	5		0.01						52		3										0.01						40							7	1	6
8/5	376075	4702175	1.00	1	M		0.01	0.01	10		0.01						40		0.01		0.01						10			0.01					40			0.01				11	2	9
8/5	376075	4702175	1.00	2	M			0.01	10		0.01					0.01	42		2		1									2					33			10				10	3	7
8/5	376050	4702175	1.00	1	M		0.01	5	22							0.01	10													0.01					60			3				8	1	7
8/5	376050	4702175	1.00	2	M		0.01	0.01	10								45		0.01		0.01						5								40			0.01				9	2	7
9/1	376025	4702175	1.10	1	M			10	25							8	35				2														10			10				7	2	5
9/1	376025	4702175	1.10	2	M				14		5					5	40				20									13					3			0.01				8	2	6
9/2	376000	4702175	1.00	1	M				15							5	45		5		5									2					20			3				8	3	5
9/2	376000	4702175	1.00	2	M		0.01	2	15		0.01					5	40		0.01		5									15					15			3				11	3	8
9/2	375975	4702175	1.00	1	M		0.01	0.01	35		6						10				2														45			2				8	1	7
9/2	375975	4702175	1.00	2	M		1		10							15	25				0.01														40	0.01		9				8	2	6
9/7	375950	4702175	1.00	1	M				25							15	25		0.01		25														2			8				7	3	4
9/7	375950	4702175	1.00	2	M		0.01		30		0.01					15	20				5														30							7	2	5
9/7	375925	4702175	1.10	1	M			2	60		3					0.01	0.01		2		20														4			9				9	3	6
9/7	375925	4702175	1.10	2	S		0.01	0.01	65		2					3	3				12									0.01					15							9	2	7
9/8	375900	4702175	1.10	1	T		5		30							20	30				10														5							6	2	4
9/8	375900	4702175	1.10	2	T				48							10	25				2														15							5	2	3
9/8	375875	4702175	1.20	1	S		1	0.01	60							9	10		0.01																20							7	2	5
9/8	375875	4702175	1.20	2	M		5		55		5					5	15				5														10							7	2	5
9/12	375850	4702175	1.20	1	M				98								0.01				0.01														2							4	1	3
9/12	375850	4702175	1.20	2	S		5		90							1	0.01																		4							5	1	4
9/17	375825	4702175	1.30	1	M		1		80							15	3				0.01									0.01					1					0.01		8	2	6
9/17	375825	4702175	1.30	2	M		4	0.01	88							5	0.01				0.01														3					0.01		8	2	6
9/13	375800	4702175	1.20	1	M		10		80		5					5																			0.01							5	1	4
9/13	375800	4702175	1.20	2	M		3		95		2						0.01																		0.01							5	0	5

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/13	375775	4702175	1.20	1	S		3		90							**3**	4																									4	**1**	3
9/13	375775	4702175	1.20	2	M				70							**15**	15																									3	**1**	2
9/16	375750	4702175	1.10	1	S				98							**1**	1																									3	**1**	2
9/16	375750	4702175	1.10	2	S		15		80							**0.01**					**0.01**														5							5	**2**	3
9/16	375725	4702175	1.10	1	M		0.01		100							**0.01**																										3	**1**	2
9/16	375725	4702175	1.10	2	M				100							**0.01**	0.01				**0.01**					**0.01**																5	**3**	2
9/21	375700	4702175	1.30	1	M		2		97												**1**																					3	**1**	2
9/21	375700	4702175	1.30	2	M				100							**0.01**					**0.01**																					3	**2**	1
9/21	375675	4702175	1.20	1	M				100		0.01																															2	**0**	2
9/21	375675	4702175	1.20	2	S	8			85							**2**	5				**0.01**																					5	**2**	3
9/21	375650	4702175	1.50	1	M		5		85							**10**			**0.01**											0.01												5	**2**	3
9/21	375650	4702175	1.50	2	M				97							**3**														0.01												3	**1**	2
9/21	375625	4702175	1.50	1	M		0.01		75		10					**5**	0.01		**5**								5															7	**2**	5
9/21	375625	4702175	1.50	2	M				90		0.01					**8**			**2**								0.01															5	**2**	3
9/22	375600	4702175	1.80	1	S		5		77		2					**15**					**1**																					5	**2**	3
9/22	375600	4702175	1.80	2	T		46		46							**5**					**3**																					4	**2**	2
9/22	375575	4702175	1.90	1	M		25		50							**10**	0.01		**0.01**		**0.01**						15															7	**3**	4
9/22	375575	4702175	1.90	2	M		20		40		15					**10**											15															5	**1**	4
9/6	374900	4702175		1	D		5		91		0.01					**4**			**0.01**																			0.01				6	**2**	4
9/6	374900	4702175		2	D		5		92							**3**			**0.01**																							4	**2**	2
9/6	374917	4702188		1	D		40		50		0.01					**10**	0.01				**0.01**																					6	**2**	4
9/6	374917	4702188		2	D		5		75		15					**5**	0.01				**0.01**												0.01									7	**2**	5
7/14	376325	4702200	0.50	1	T		1	1	44							**44**					**5**														5							6	**2**	4
7/14	376325	4702200	0.50	2	T		2		89							**3**	2									**2**				1					1							7	**2**	5
7/20	376300	4702200	0.50	1	T		5		50								40				**5**																					4	**1**	3
7/20	376300	4702200	0.50	2	S				15							**10**	70		**2**		**0.01**									3										0.01		7	**3**	4
7/20	376275	4702200	0.60	1	T				70							**5**	15		**5**											2					3							6	**2**	4
7/20	376275	4702200	0.60	2	T		5		30							**15**	30		**2**		**2**									1					15							8	**3**	5
7/27	376250	4702200	0.60	1	M		5		20							**0.01**	63		**2**		**0.01**														10			0.01				8	**3**	5
7/27	376250	4702200	0.60	2	M		0.01		10		0.01					**0.01**	60		**0.01**		**0.01**														30							8	**3**	5
7/28	376225	4702200	0.80	1	M		1		9							**1**	37		**15**																37							6	**2**	4
7/28	376225	4702200	0.80	2	M				5							**0.01**	40		**5**		**0.01**					**0.01**									50							7	**4**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/28	376200	4702200	0.80	1	M				10								50		15		0.01					0.01									25					0.01		7	3	4
7/28	376200	4702200	0.80	2	M		2		10							2	40		2							0.01									44							7	3	4
8/2	376175	4702200	1.00	1	M				10							0.01	10		0.01											0.01					80							6	2	4
8/2	376175	4702200	1.00	2	M		0.01		5							0.01	30		0.01																65	0.01						7	2	5
8/2	376150	4702200	1.00	1	M		3	0.01	5								40		2		0.01														50							7	2	5
8/2	376150	4702200	1.00	2	M				2								30		3		0.01					0.01				0.01					65							7	3	4
8/3	376125	4702200	1.00	1	D		0.01		5								10		0.01																80			5				6	1	5
8/3	376125	4702200	1.00	2	D		0.01		5							0.01	25		1																69			0.01				7	2	5
8/3	376100	4702200	1.00	1	M			0.01	8							0.01	15				0.01						3			2					72			0.01				9	2	7
8/3	376100	4702200	1.00	2	M				5							0.01	17		5		0.01					0.01				2					70			1				9	4	5
8/5	376075	4702200	1.00	1	M			1	8							1	10										5			0.01					72			3				8	1	7
8/5	376075	4702200	1.00	2	M		0.01	0.01	5		0.01					0.01	15				0.01					0.01	0.01		10	0.01					70			0.01				13	3	10
8/5	376050	4702200	1.00	1	M			10	0.01		0.01						53		1		1														35			0.01				8	2	6
8/5	376050	4702200	1.00	2	M			8	10							0.01	15													0.01					65			2				7	1	6
9/1	376025	4702200	1.10	1	M				25							14	5				0.01								0.01						55			1				7	2	5
9/1	376025	4702200	1.10	2	M			7	14		5						50				5									1					10			8				8	1	7
9/2	376000	4702200	1.00	1	M			1	65		10					15	3		2		1																	3				8	3	5
9/2	376000	4702200	1.00	2	S			0.01	10								20		5		0.01														25			40				7	2	5
9/2	375975	4702200	1.10	1	M				15							0.01	45				10														20			10				6	2	4
9/2	375975	4702200	1.10	2	S				25								25		0.01		10														25			15				6	2	4
9/7	375950	4702200	1.20	1	D		2		45							8	5				25					5									10			0.01				8	3	5
9/7	375950	4702200	1.20	2	D				30							5	17				20								0.01	5					20			3				8	2	6
9/7	375925	4702200	1.10	1	S				55							4	20				20														1			0.01				6	2	4
9/7	375925	4702200	1.10	2	S			0.01	45							10	20				20														4			1				7	2	5
9/8	375900	4702200	1.10	1	M			0.01	50							5	23				20														2							6	2	4
9/8	375900	4702200	1.10	2	M		5	0.01	45		0.01					10	10		0.01		25														5							9	3	6
9/8	375875	4702200	1.30	1	S				30		35						15				10														10							5	1	4
9/8	375875	4702200	1.30	2	S		10		50							0.01	20				10														10							6	2	4
9/12	375850	4702200	1.30	1	M				90							9																			1							3	1	2
9/12	375850	4702200	1.30	2	M		5		75							12	3																		5							5	1	4
9/17	375825	4702200	1.30	1	M				86							10	1				1														2							5	2	3
9/17	375825	4702200	1.30	2	M		0.01		94							2	0.01	2			2														0.01							7	2	5

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/13	375800	4702200	1.20	1	S				100												0.01																					2	1	1
9/13	375800	4702200	1.20	2	S		2		90		3					2	0.01		3		0.01																					7	3	4
9/13	375775	4702200	1.20	1	M				100							0.01					0.01																					3	2	1
9/13	375775	4702200	1.20	2	M				98							1	0.01				1																					4	2	2
9/16	375750	4702200	1.10	1	S		0.01		93							5	0.01				2																					5	2	3
9/16	375750	4702200	1.10	2	S		10		75		0.01					4					1					10				0.01					0.01							8	3	5
9/16	375725	4702200	1.20	1	M		20		80							0.01	0.01		0.01		0.01														0.01					0.01		8	3	5
9/16	375725	4702200	1.20	2	M				90							5	5				0.01																					4	2	2
9/21	375700	4702200	1.20	1	M				90		0.01					5	3				2														0.01							6	2	4
9/21	375700	4702200	1.20	2	M		3		92							5					0.01																					4	2	2
9/21	375675	4702200	1.30	1	M				80							15	0.01				5																					4	2	2
9/21	375675	4702200	1.30	2	M				85							10	4		1		0.01																					5	3	2
9/21	375650	4702200	1.60	1	M		2		90							1			1		1						5															6	3	3
9/21	375650	4702200	1.60	2	M				95										5																							2	1	1
9/21	375625	4702200	1.50	1	M				75							24	1		0.01																							4	2	2
9/21	375625	4702200	1.50	2	M		1		80							15			4																							4	2	2
9/22	375600	4702200	1.60	1	M				80		2					18																										3	1	2
9/22	375600	4702200	1.60	2	D		4		70		1					15					0.01						10															6	2	4
9/22	375575	4702200	1.90	1	M		3		60							37					0.01														0.01							5	2	3
9/22	375575	4702200	1.90	2	M		5		84							10	0.01				1																					5	2	3
9/23	375550	4702200	1.00	1	T				100																																	1	0	1
9/23	375550	4702200	1.00	2	T		5		94								1																									3	0	3
9/6	374980	4702200		1	O																																					0	0	0
9/6	374980	4702200		2	T				97		2						1																									3	0	3
9/28	374980	4702200	1.30	1	S				87		0.01					10	2				1																					5	2	3
9/28	374980	4702200	1.30	2	S				95							5																										2	1	1
9/6	374935	4702200		1	D		9		80		0.01					10	0.01				0.01												1									7	2	5
9/6	374935	4702200		2	D		5		85							8	0.01		0.01		2																					6	3	3
9/28	374935	4702200	1.40	1	M		3	0.01	55		10					7	3		0.01		2																	20				9	3	6
9/28	374935	4702200	1.40	2	M		5	5	41		40					2	2				2																	3				8	2	6
9/28	374900	4702200	1.50	1	D		3		90		0.01					4	0.01				0.01																	3				7	2	5
9/28	374900	4702200	1.50	2	M		0.01		40		10					10	0.01				20																	20				7	2	5

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/12	376375	4702225	0.50	1	T		10	10	50							10	10									10																6	2	4
7/12	376375	4702225	0.50	2	T		4		40							30	4									10				1					10					1		8	2	6
7/14	376350	4702225	0.50	1	T											90					10																					2	2	0
7/14	376350	4702225	0.50	2	T		50		35								10				5																					4	1	3
7/14	376325	4702225	0.70	1	T												100																									1	0	1
7/14	376325	4702225	0.70	2	T				10							2	65		3		5									15												6	3	3
7/20	376300	4702225	0.70	1	S				5							0.01	75		0.01																	20						5	2	3
7/20	376300	4702225	0.70	2	M		0.01	0.01	15							0.01	65		5								0.01								15					0.01		9	2	7
7/20	376275	4702225	0.80	1	M		2		5							2	38		1		0.01														47	5						8	3	5
7/20	376275	4702225	0.80	2	M		1		5		0.01					0.01	45		0.01		0.01														49							8	3	5
7/27	376250	4702225	0.80	1	M		1		5		1					2	61		5																25							7	2	5
7/27	376250	4702225	0.80	2	M		2		1		0.01					3	50		4																40					0.01		8	2	6
7/28	376225	4702225	0.80	1	M				4		0.01					0.01	25		1																70							6	2	4
7/28	376225	4702225	0.80	2	M				5							0.01	35		10		0.01														50							6	3	3
7/28	376200	4702225	0.90	1	M				5		0.01					1	45		4																45	0.01		0.01				8	2	6
7/28	376200	4702225	0.90	2	M		5		5							0.01	30		4							0.01	1								55							8	3	5
8/2	376175	4702225	0.95	1	M		0.01		5							0.01	25		5										25	0.01					40			0.01				9	2	7
8/2	376175	4702225	0.95	2	M				5							0.01	36		1																58			0.01				6	2	4
8/2	376150	4702225	1.00	1	M				5								20				0.01									0.01					65			10				6	1	5
8/2	376150	4702225	1.00	2	M	0.01			10							0.01	25		0.01		0.01					0.01									65	0.01		0.01				10	4	6
8/3	376125	4702225	1.00	1	D			0.01	3							0.01	7												0.01	0.01					90			0.01				8	1	7
8/3	376125	4702225	1.00	2	D		0.01	0.01			0.01					0.01	20		0.01											0.01					80			0.01				9	2	7
8/3	376100	4702225	1.10	1	M		0.01	2	15								39				0.01						1			1					40			2				9	1	8
8/3	376100	4702225	1.10	2	M				10		0.01					0.01	9													1					80			0.01				7	1	6
8/5	376075	4702225	1.00	1	M		0.01		5								25				0.01						0.01								70							6	1	5
8/5	376075	4702225	1.00	2	M			2	5							2	30				0.01														61							6	2	4
8/5	376050	4702225	1.00	1	M			13	10							2	15				0.01														60					0.01		7	2	5
8/5	376050	4702225	1.00	2	M		1	0.01	25							0.01	15				8														50			1				8	2	6
9/1	376025	4702225	1.00	1	M				55							3	15				5						6								15			1				7	2	5
9/1	376025	4702225	1.00	2	M		5	0.01	30		0.01					5	30				5						4								20			1				10	2	8
9/2	376000	4702225	1.30	1	D			2	65								2				10														20			1				6	1	5
9/2	376000	4702225	1.30	2	D			1	35							10	25				5									1					20			3				8	2	6

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/2	375975	4702225	1.20	1	M				34							**4**	34				**20**						0.01								4			4				7	**2**	5
9/2	375975	4702225	1.20	2	M			0.01	40							**5**	10				**23**														17			5				7	**2**	5
9/7	375950	4702225	1.20	1	S		5		10							**10**	10				**35**														30			0.01				7	**2**	5
9/7	375950	4702225	1.20	2	S		0.01	0.01	20							**5**	10				**0.01**														60			5				8	**2**	6
9/7	375925	4702225	1.40	1	S		0.01	0.01	30							**2**	8		**0.01**		**20**						0.01								40			0.01				10	**3**	7
9/7	375925	4702225	1.40	2	M		3	0.01	25							**5**	10				**25**									0.01					30			2				9	**2**	7
9/8	375900	4702225	1.40	1	S			0.01	35		0.01					**5**	20				**5**														35							7	**2**	5
9/8	375900	4702225	1.40	2	S		0.01	2	8		10					**0.01**	20				**30**								0.01						30							9	**2**	7
9/8	375875	4702225	1.40	1	S				15							**5**	15		**0.01**		**55**									0.01					10							7	**3**	4
9/8	375875	4702225	1.40	2	S				10							**20**	10				**50**														5			5				6	**2**	4
9/12	375850	4702225	1.30	1	M		4	0.01	60							**30**	1				**5**														0.01							7	**2**	5
9/12	375850	4702225	1.30	2	S				70							**22**	0.01				**5**														3							5	**2**	3
9/17	375825	4702225	1.40	1	S				93							**7**	0.01				**0.01**						0.01								0.01							6	**2**	4
9/17	375825	4702225	1.40	2	M			0.01	70							**20**	0.01				**0.01**						6		0.01						4					0.01		9	**2**	7
9/13	375800	4702225	1.30	1	M	0.01	1		89							**10**																			0.01					0.01		6	**1**	5
9/13	375800	4702225	1.30	2	M	1	5		83		0.01						5				**5**														1							7	**1**	6
9/13	375775	4702225	1.30	1	M		3		90							**7**					**0.01**														0.01					0.01		6	**2**	4
9/13	375775	4702225	1.30	2	M		0.01		99												**0.01**														1							4	**1**	3
9/16	375750	4702225	1.20	1	M				99							**1**																										2	**1**	1
9/16	375750	4702225	1.20	2	D		0.01		90							**9**	1																		0.01							5	**1**	4
9/16	375725	4702225	1.30	1	D	0.01			70							**25**	5																									4	**1**	3
9/16	375725	4702225	1.30	2	D		0.01		75		0.01					**25**	0.01				**0.01**						0.01								0.01							8	**2**	6
9/21	375700	4702225	1.20	1	M		10		90							**0.01**					**0.01**																					4	**2**	2
9/21	375700	4702225	1.20	2	M		5		85							**5**	0.01				**0.01**														5							6	**2**	4
9/21	375675	4702225	1.50	1	M	0.01			75		0.01		0.01			**20**	5																									6	**1**	5
9/21	375675	4702225	1.50	2	M		2		85		2					**10**	1		**0.01**																							6	**2**	4
9/21	375650	4702225	1.50	1	M				97		3					**0.01**																										3	**1**	2
9/21	375650	4702225	1.50	2	M				90		2					**3**	5		**0.01**																							5	**2**	3
9/21	375625	4702225	1.40	1	M				91		2					**5**					**2**						0.01															5	**2**	3
9/21	375625	4702225	1.40	2	M		3		57							**0.01**	40										0.01															5	**1**	4
9/22	375600	4702225	1.50	1	S				70							**30**																										2	**1**	1
9/22	375600	4702225	1.50	2	M				90							**10**											0.01															3	**1**	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/22	375575	4702225	1.60	1	S		10		85							4	1				0.01																					5	2	3
9/22	375575	4702225	1.60	2	S		10		80							10	0.01				0.01																					5	2	3
9/23	375550	4702225	1.70	1	S		10		85							5																										3	1	2
9/23	375550	4702225	1.70	2	S		3		90		0.01					5			2		0.01																					6	3	3
9/23	375525	4702225	1.20	1	T		50		49							1																										3	1	2
9/23	375525	4702225	1.20	2	S		5		85		10					0.01											0.01															5	1	4
9/6	375100	4702225		1	T		5		85							10																										3	1	2
9/6	375100	4702225		2	T				40							60																										2	1	1
9/28	374826	4702227	1.00	1	M		6		50							4					40																					4	2	2
9/28	374826	4702227	1.00	2	M		3		70							7					20																					4	2	2
9/28	375040	4702230		1	S		3		25		57					15	0.01				0.01												0.01									7	2	5
9/28	375040	4702230		2	S				8		90					2																										3	1	2
7/12	376400	4702250	0.50	1	T		10		85																															5		3	0	3
7/12	376400	4702250	0.50	2	T				68							18	10				2											2										5	2	3
7/12	376375	4702250	0.50	1	T				86							1	1													2					10							5	1	4
7/12	376375	4702250	0.50	2	T				80							7	5									2									5			1				6	2	4
7/14	376350	4702250	0.50	1	T												60																							40		2	0	2
7/14	376350	4702250	0.50	2	T		1	2	38							2	50				1														1			2		3		9	2	7
7/14	376325	4702250	0.60	1	S		10	0.01	10							0.01	30		1											5					44	0.01						9	2	7
7/14	376325	4702250	0.60	2	S				7		0.01					1	15		0.01											2					75							7	2	5
7/19	376300	4702250	0.80	1	S			0.01	5							1	74				0.01														20					0.01		7	2	5
7/19	376300	4702250	0.80	2	S			0.01	5		0.01					2	90		0.01											0.01					3					0.01		9	2	7
7/20	376275	4702250	0.70	1	M			0.01	5		0.01					1	40		4		0.01														50			0.01		0.01		10	3	7
7/20	376275	4702250	0.70	2	M			0.01	1								54		5		0.01														40							6	2	4
7/27	376250	4702250	0.90	1	M		0.01		15							1	15		2		0.01														67							7	3	4
7/27	376250	4702250	0.90	2	M		3		13							1	25		3																55							6	2	4
7/28	376225	4702250	0.90	1	M		1	0.01	5							0.01	40		5		1						1								47							9	3	6
7/28	376225	4702250	0.90	2	M			0.01	20		1					5	10		3		0.01						1								55					5		10	3	7
7/28	376200	4702250	0.90	1	M				4		0.01					0.01	30		1		0.01									0.01					65							8	3	5
7/28	376200	4702250	0.90	2	M			0.01	10							0.01	15		5		0.01						0.01								70					0.01		9	3	6
8/1	376175	4702250	1.05	1	D				10							0.01	30		2																58							5	2	3
8/1	376175	4702250	1.05	2	D		0.01	0.01	12							0.01	20		0.01		0.01														65			3				9	3	6

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/2	376150	4702250	1.05	1	M				8								8										0.01								77			7				5	**0**	5
8/2	376150	4702250	1.05	2	M				5							**0.01**	40		**0.01**		**0.01**														53			2				7	**3**	4
8/3	376125	4702250	1.10	1	D			0.01	2							**1**	35													0.01					62	0.01		0.01				8	**1**	7
8/3	376125	4702250	1.10	2	D			0.01	5								20				**0.01**														73			2				6	**1**	5
8/3	376100	4702250	1.10	1	M				20								25				**2**														53					0.01		5	**1**	4
8/3	376100	4702250	1.10	2	M			0.01	3								30										0.01								67			0.01				6	**0**	6
8/4	376075	4702250	1.10	1	D			3	5								18				**0.01**														74			0.01				6	**1**	5
8/4	376075	4702250	1.10	2	D			0.01	5							**1**	10				**0.01**														84			0.01				7	**2**	5
8/5	376050	4702250	1.10	1	M		0.01	0.01	10							**0.01**	15				**0.01**						15			0.01					60					0.01		10	**2**	8
8/5	376050	4702250	1.10	2	M			0.01	15								25				**2**						2			0.01					50			6				8	**1**	7
9/1	376025	4702250	1.50	1	M				5							**25**	25				**40**														5			0.01				6	**2**	4
9/1	376025	4702250	1.50	2	D				20							**10**	20		**0.01**		**30**								10						2			8				8	**3**	5
9/2	376000	4702250	1.40	1	D				20		20					**10**	4				**30**						1								15							7	**2**	5
9/2	376000	4702250	1.40	2	D		0.01		30		5					**0.01**	25				**15**														20			5				8	**2**	6
9/2	375975	4702250	1.40	1	D			0.01	35							**5**	10		**5**		**30**														15			0.01				8	**3**	5
9/2	375975	4702250	1.40	2	D		7		28							**10**	15				**27**														10			3				7	**2**	5
9/7	375950	4702250	1.30	1	S		8		10							**27**	5				**0.01**									0.01					50							7	**2**	5
9/7	375950	4702250	1.30	2	S		5		30							**40**	0.01				**0.01**														25							6	**2**	4
9/7	375925	4702250	1.50	1	M			0.01	50							**15**	5				**25**														5			0.01				7	**2**	5
9/7	375925	4702250	1.50	2	M				50							**15**	5				**15**														10			5				6	**2**	4
9/8	375900	4702250	1.50	1	S			0.01	10							**20**	15				**45**									0.01					10							7	**2**	5
9/8	375900	4702250	1.50	2	M		0.01	0.01	25		15					**25**	10				**20**														5							8	**2**	6
9/8	375875	4702250	1.40	1	S				5							**5**					**90**																					3	**2**	1
9/8	375875	4702250	1.40	2	M		0.01		50							**25**	5				**10**														10							6	**2**	4
9/12	375850	4702250	1.50	1	D		0.01		10		15					**45**	5		**0.01**		**25**																					7	**3**	4
9/12	375850	4702250	1.50	2	D				25		5					**30**	5				**35**																					5	**2**	3
9/13	375825	4702250	1.40	1	M				95		0.01					**2**	0.01				**2**														1					0.01		7	**2**	5
9/13	375825	4702250	1.40	2	M		2		60		0.01					**10**	8				**10**														10					0.01		8	**2**	6
9/13	375800	4702250	1.30	1	M				40							**10**	10				**40**																					4	**2**	2
9/13	375800	4702250	1.30	2	M				60		5					**10**	10				**15**																					5	**2**	3
9/15	375775	4702250	1.50	1	D		5		80		0.01					**13**	0.01																		2							6	**1**	5
9/15	375775	4702250	1.50	2	D		2		80		6					**10**			**0.01**																2							6	**2**	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/16	375750	4702250	1.30	1	M		0.01		80		0.01					20	0.01				0.01														0.01							7	2	5
9/16	375750	4702250	1.30	2	M				90		0.01					10					0.01														0.01							5	2	3
9/16	375725	4702250	1.40	1	D		2		60		5					25	8				0.01																					6	2	4
9/16	375725	4702250	1.40	2	D		2		70		0.01					25					0.01														3							6	2	4
9/21	375700	4702250	1.40	1	D		5		80							15	0.01				0.01																					5	2	3
9/21	375700	4702250	1.40	2	M				80		15					5	0.01		0.01		0.01														0.01							7	3	4
9/21	375675	4702250	1.50	1	M				90							5	5		0.01		0.01																					5	3	2
9/21	375675	4702250	1.50	2	M				90		2					8	0.01																									4	1	3
9/21	375650	4702250	1.50	1	M				95							1	4		0.01		0.01					0.01																6	4	2
9/21	375650	4702250	1.50	2	M				86							10	0.01									2	2															5	2	3
9/21	375625	4702250	1.40	1	M				94								1		0.01		0.01						5													0.01		6	2	4
9/21	375625	4702250	1.40	2	M		0.01		70		20					0.01	2		8		0.01																					7	3	4
9/22	375600	4702250	1.60	1	M				80							10	2		8																							4	2	2
9/22	375600	4702250	1.60	2	M		4		93		0.01					2					1																					5	2	3
9/22	375575	4702250	1.60	1	M				95		3					2																										3	1	2
9/22	375575	4702250	1.60	2	M				90		0.01					10																										3	1	2
9/23	375550	4702250	1.60	1	S		5		80							15	0.01																									4	1	3
9/23	375550	4702250	1.60	2	S		10		90		0.01					0.01			0.01							0.01	0.01															7	3	4
9/23	375525	4702250	1.60	1	T		1		96		1					1			1																							5	2	3
9/23	375525	4702250	1.60	2	T				65		30					4					1																					4	2	2
9/26	375500	4702250	1.90	1	T		49		50										1																							3	1	2
9/26	375500	4702250	1.90	2	T		40		50								3		3		4																					5	2	3
9/28	375125	4702250		1	O																																					0	0	0
9/28	375125	4702250		2	O																																					0	0	0
9/28	375050	4702250	0.60	1	T				44		55										1																					3	1	2
9/28	375050	4702250	0.60	2	S		1		14		40					45	0.01		0.01																							6	2	4
9/28	375000	4702250	1.00	1	M		10		65		5					20	0.01				0.01																					6	2	4
9/28	375000	4702250	1.00	2	M				55		25					20	0.01				0.01														0.01							6	2	4
9/28	374950	4702250	1.20	1	M		0.01	2	25		20					3	2		0.01		48																					8	3	5
9/28	374950	4702250	1.20	2	D		5	0.01	60		5					5	5		0.01		20														0.01			0.01				10	3	7
10/4	374900	4702250	1.50	1	M				45		0.01					1					54																					4	2	2
10/4	374900	4702250	1.50	2	M				32							3					65																					3	2	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/4	374850	4702250	1.30	1	M		1		50		10					**9**					**30**																					5	**2**	3
10/4	374850	4702250	1.30	2	M		0.01		40		10					**5**					**45**																					5	**2**	3
9/28	375180	4702270		1	S				92							**8**					**0.01**																					3	**2**	1
9/28	375180	4702270		2	S				97		0.01					**3**					**0.01**																					4	**2**	2
7/11	376425	4702275	0.50	1	T			1	77							**1**	1				**5**					**10**				1					4							8	**3**	5
7/11	376425	4702275	0.50	2	T		10	2	25		1					**15**	5									**2**									30	10						9	**2**	7
7/12	376400	4702275	0.50	1	T		31		50							**5**					**1**					**5**				2					5					1		8	**3**	5
7/12	376400	4702275	0.50	2	T			10	40												**10**									40												4	**1**	3
7/12	376375	4702275	0.80	1	T		5	1	71		1					**5**	5				**2**														5					5		9	**2**	7
7/12	376375	4702275	0.80	2	T		5		51							**15**	15				**1**									3					10							7	**2**	5
7/14	376350	4702275	0.70	1	T			5	20							**1**	59		**10**		**4**									1												7	**3**	4
7/14	376350	4702275	0.70	2	T			1	10							**3**	79		**3**		**1**					**3**																7	**4**	3
7/14	376325	4702275	0.75	1	S		0.01	3	10							**3**	40		**0.01**											5					39	0.01				0.01		10	**2**	8
7/14	376325	4702275	0.75	2	S				10		0.01					**4**	15		**3**							**12**				6					50					0.01		9	**3**	6
7/19	376300	4702275	0.90	1	M		1	0.01	3							**0.01**	6																		90					0.01		7	**1**	6
7/19	376300	4702275	0.90	2	M				2							**0.01**	10		**2**								5			0.01					81							7	**2**	5
7/20	376275	4702275	0.70	1	M				10								35		**5**											0.01					50							5	**1**	4
7/20	376275	4702275	0.70	2	M			0.01	10		0.01					**0.01**	40													0.01					50	0.01						8	**1**	7
7/27	376250	4702275	1.00	1	M		0.01	0.01	5		0.01					**1**	10										4		10						70			0.01				10	**1**	9
7/27	376250	4702275	1.00	2	M				10							**0.01**	30		**2**		**0.01**						2			0.01					54			2				9	**3**	6
7/28	376225	4702275	0.90	1	M		1	5	15							**0.01**	24		**5**		**0.01**						5		15						24	1		0.01		5		13	**3**	10
7/28	376225	4702275	0.90	2	M		5	3	10							**0.01**	27		**2**		**0.01**						15								37	1		0.01		0.01		12	**3**	9
7/28	376200	4702275	1.00	1	M			0.01	5		0.01					**0.01**	15		**0.01**		**0.01**						2		35						43	0.01		0.01				12	**3**	9
7/28	376200	4702275	1.00	2	M			0.01	7		0.01					**0.01**	30		**5**		**5**					**0.01**	3		0.01	1					48			1				13	**4**	9
8/1	376175	4702275	1.05	1	D			0.01	5		0.01					**3**	15				**0.01**						0.01		2	0.01					75			0.01		0.01		12	**2**	10
8/1	376175	4702275	1.05	2	D		0.01	2	5								15		**0.01**								0.01								73			5				8	**1**	7
8/2	376150	4702275	1.10	1	M		1		5	0.01						**0.01**	35		**0.01**		**0.01**									3					56			0.01				10	**3**	7
8/2	376150	4702275	1.10	2	M			0.01	5							**0.01**	20		**0.01**		**0.01**					**0.01**	0.01								75			0.01				10	**4**	6
8/3	376125	4702275	1.10	1	D			0.01	5							**0.01**	15		**0.01**		**0.01**						0.01			0.01					80	0.01		0.01				11	**3**	8
8/3	376125	4702275	1.10	2	D			5	10								20		**0.01**		**0.01**									0.01					65							7	**2**	5
8/3	376100	4702275	1.10	1	M			2	10								25		**1**		**0.01**														62	0.01						7	**2**	5
8/3	376100	4702275	1.10	2	M			2	5							**0.01**	38		**0.01**		**0.01**					**0.01**									55							8	**4**	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/4	376075	4702275	1.20	1	D		2		2	5						**0.01**	25				**2**						5			3					56							9	**2**	7
8/4	376075	4702275	1.20	2	D		0.01	2	10		0.01					**0.01**	35		**0.01**		**0.01**						3								50			0.01				11	**3**	8
8/5	376050	4702275	1.30	1	M		1	14	5								40				**0.01**														40							6	**1**	5
8/5	376050	4702275	1.30	2	M		0.01	15	2							**0.01**	38				**0.01**								8	0.01					37							9	**2**	7
9/1	376025	4702275	1.40	1	M		0.01	0.01	15		15					**15**	8				**15**						0.01								32					0.01		10	**2**	8
9/1	376025	4702275	1.40	2	M			3	75							**5**	5				**2**														10							6	**2**	4
9/2	376000	4702275	1.50	1	D				5		3					**15**	15				**52**					**0.01**									5			5				8	**3**	5
9/2	376000	4702275	1.50	2	D		0.01		15		15					**25**	5		**0.01**		**30**						0.01								10			0.01				10	**3**	7
9/2	375975	4702275	1.60	1	D				0.01		10					**20**	4				**60**														6			0.01				7	**2**	5
9/2	375975	4702275	1.60	2	D				4		45					**30**	2				**15**														4	0.01		0.01				8	**2**	6
9/7	375950	4702275	1.40	1	D				10		20					**30**	10			0.01	**30**																	0.01				7	**2**	5
9/7	375950	4702275	1.40	2	D				4		11					**40**	6				**35**																	4				6	**2**	4
9/7	375925	4702275	1.40	1	M				2		1					**30**	7				**60**																					5	**2**	3
9/7	375925	4702275	1.40	2	M				0.01		20					**25**	5				**50**																					5	**2**	3
9/8	375900	4702275	1.50	1	S			0.01	30							**1**	0.01				**45**														24							6	**2**	4
9/8	375900	4702275	1.50	2	S		0.01	0.01	17							**3**					**40**														40							6	**2**	4
9/8	375875	4702275	1.60	1	D				10		5					**65**	5				**15**																					5	**2**	3
9/8	375875	4702275	1.60	2	D		0.01		10		2					**40**	3				**45**						0.01															7	**2**	5
9/12	375850	4702275	1.50	1	D				30		40					**15**	0.01				**15**														0.01							6	**2**	4
9/12	375850	4702275	1.50	2	D		0.01		0.01		20					**40**	0.01				**40**														0.01							7	**2**	5
9/13	375825	4702275	1.60	1	M				40							**10**	0.01				**50**																					4	**2**	2
9/13	375825	4702275	1.60	2	M				10							**45**	0.01				**45**																					4	**2**	2
9/13	375800	4702275	1.20	1	M				90		0.01					**5**					**5**																					4	**2**	2
9/13	375800	4702275	1.20	2	M				25		25					**25**					**25**																					4	**2**	2
9/15	375775	4702275	1.50	1	M				50		3					**2**					**45**																	0.01				5	**2**	3
9/15	375775	4702275	1.50	2	M				75							**10**	2				**13**														0.01							5	**2**	3
9/16	375750	4702275	1.50	1	M		10		80							**0.01**	0.01																		10							5	**1**	4
9/16	375750	4702275	1.50	2	M		0.01		90							**10**	0.01		**0.01**		**0.01**					**0.01**																7	**4**	3
9/20	375725	4702275	1.70	1	M		0.01		40							**10**	0.01				**50**																					5	**2**	3
9/20	375725	4702275	1.70	2	D				30		50					**17**	2				**1**																					5	**2**	3
9/21	375700	4702275	1.50	1	D				90		5					**0.01**			**0.01**		**5**														0.01							6	**3**	3
9/21	375700	4702275	1.50	2	D		5		87							**5**			**0.01**		**3**														0.01							6	**3**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/21	375675	4702275	1.50	1	D				82		8					10	0.01		0.01		0.01						0.01															7	3	4
9/21	375675	4702275	1.50	2	D		1		74							15	10				0.01									0.01												6	2	4
9/21	375650	4702275	1.60	1	M				50							25	20		0.01		5														0.01							6	3	3
9/21	375650	4702275	1.60	2	M		0.01		83		5					10					0.01														2							6	2	4
9/22	375625	4702275	1.50	1	M				79		5					5	5				5									1												6	2	4
9/22	375625	4702275	1.50	2	M		1		50							49	0.01				0.01																					5	2	3
9/22	375600	4702275	1.70	1	M		8		90							0.01	2		0.01																							5	2	3
9/22	375600	4702275	1.70	2	M				75		2					10	3		10		0.01																					6	3	3
9/22	375575	4702275	1.50	1	S		20		80																																	2	0	2
9/22	375575	4702275	1.50	2	S		0.01		45		45					10	0.01																		0.01							6	1	5
9/23	375550	4702275	1.50	1	T				95		1					2					2																					4	2	2
9/23	375550	4702275	1.50	2	S				55		30					0.01			15		0.01																					5	3	2
9/23	375525	4702275	1.60	1	T																100																					1	1	0
9/23	375525	4702275	1.60	2	T				85							1	5				5														4							5	2	3
9/26	375500	4702275	1.90	1	S		15		60		5					8	1		5		0.01					0.01	5			0.01					1							11	4	7
9/26	375500	4702275	1.90	2	S		15		56		2					10	2		3		10						0.01			0.01					2							10	3	7
7/11	376450	4702300	0.50	1	T		10		37							21	5				5					11				4					5					2		9	3	6
7/11	376450	4702300	0.50	2	T		5		45							5	10									20														15		6	2	4
7/11	376425	4702300	0.80	1	T			5	30							20	15									10									20							6	2	4
7/11	376425	4702300	0.80	2	S		0.01		10		0.01					3	50		5							5									22					5		9	3	6
7/12	376400	4702300	0.70	1	S		0.01	5	10		0.01					0.01	50		1							2						5			27					0.01		11	3	8
7/12	376400	4702300	0.70	2	T			5	15							1	15		1																63							6	2	4
7/12	376375	4702300	0.80	1	T			2	10								62		5		1					10				10												7	3	4
7/12	376375	4702300	0.80	2	S		5	2	5							2	25		2		0.01											1			58							9	3	6
7/14	376350	4702300	0.80	1	S	3	1	0.01	10								20		0.01							0.01									66							8	2	6
7/14	376350	4702300	0.80	2	S			5	15								20		0.01											3					57	0.01						7	1	6
7/14	376325	4702300	0.80	1	M	0.01		5	5								15													10					65	0.01						7	0	7
7/14	376325	4702300	0.80	2	M			10	10							2	20													8					48	2						7	1	6
7/19	376300	4702300	0.90	1	M			1	10		0.01						10													0.01					78	1						7	0	7
7/19	376300	4702300	0.90	2	M		0.01	0.01	0.01								10										5			5					80							7	0	7
7/20	376275	4702300	0.90	1	M			0.01	5		0.01					1	25		0.01								5			5					59			0.01				10	2	8
7/20	376275	4702300	0.90	2	M		0.01	0.01	5		0.01					0.01	44				0.01						0.01			1					50	0.01		0.01				12	2	10

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/27	376250	4702300	1.00	1	M			5	10		0.01					0.01	30		0.01		0.01						15								40			0.01				10	3	7
7/27	376250	4702300	1.00	2	M		0.01	1	10		0.01						45		3								20								20	0.01		1				10	1	9
7/28	376225	4702300	1.00	1	M			5	10		0.01					0.01	20		0.01		0.01						10								55			0.01				10	3	7
7/28	376225	4702300	1.00	2	M		0.01	4	4							0.01	10		0.01								20								62					0.01		9	2	7
7/28	376200	4702300	1.10	1	M			5	5		0.01						70		0.01		0.01						0.01			0.01					20			0.01		0.01		11	2	9
7/28	376200	4702300	1.10	2	M		0.01	5	5		0.01						45		2		0.01					0.01	5		0.01	0.01					38			0.01		0.01		14	3	11
8/1	376175	4702300	1.30	1	D		2	8	10								20										4								55			1				7	0	7
8/1	376175	4702300	1.30	2	D			1	10								15				0.01						0.01		0.01						74			0.01				8	1	7
8/2	376150	4702300	1.10	1	M		1	15	5							0.01	25				2									0.01					52							8	2	6
8/2	376150	4702300	1.10	2	M			1	4							0.01	30				0.01														65							6	2	4
8/3	376125	4702300	1.30	1	D			15	2							0.01	35																		48							5	1	4
8/3	376125	4702300	1.30	2	D			5	10							0.01	35				0.01														50							6	2	4
8/3	376100	4702300	1.30	1	D		0.01	3	2								47				0.01						0.01			0.01					48	0.01						9	1	8
8/3	376100	4702300	1.30	2	D		0.01	5	15								35				0.01														45	0.01						7	1	6
8/4	376075	4702300	1.30	1	M			5	3							2	45				0.01					0.01	0.01			2					43							9	3	6
8/4	376075	4702300	1.30	2	M			5	2		10					0.01	28				27														18			10				8	2	6
8/5	376050	4702300	1.50	1	M			0.01	5		1					2	0.01				35						0.01		0.01	0.01					57							10	2	8
8/5	376050	4702300	1.50	2	M		5	5	10		5					10	5				30														30							8	2	6
9/1	376025	4702300	2.00	1	D	0.01			30							15	15				40					0.01			0.01	0.01												8	3	5
9/1	376025	4702300	2.00	2	D		1		10		1					10	39				39						0.01															7	2	5
9/2	376000	4702300	1.70	1	D				8		2					25	20				45																					5	2	3
9/2	376000	4702300	1.70	2	D				0.01		10					30	10				50																					5	2	3
9/2	375975	4702300	1.50	1	M			0.01	5							35	10				35														15							6	2	4
9/2	375975	4702300	1.50	2	M				3		15					32					33														15			2				6	2	4
9/7	375950	4702300	1.70	1	D		2	0.01	5		8					38	10				37																					7	2	5
9/7	375950	4702300	1.70	2	D		0.01		10		20					40	10				20																					6	2	4
9/7	375925	4702300	1.60	1	M		3		1		15					42	3				35																	1				7	2	5
9/7	375925	4702300	1.60	2	M			0.01	3		10					30	5				50																	2				7	2	5
9/8	375900	4702300	1.70	1	M				10		45					15					30																					4	2	2
9/8	375900	4702300	1.70	2	M				2		0.01					36	2				60																					5	2	3
9/8	375875	4702300	1.80	1	M				8		10					40	2				40																					5	2	3
9/8	375875	4702300	1.80	2	M				10		18					35	2				35														0.01							6	2	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/12	375850	4702300	1.70	1	D				18		0.01					55	2				25																					5	2	3
9/12	375850	4702300	1.70	2	D				10		10					50	0.01				30																					5	2	3
9/13	375825	4702300	1.70	1	D			0.01	5		35					35	5				20						0.01			0.01					0.01							9	2	7
9/13	375825	4702300	1.70	2	D		0.01		69		15					15	1										0.01			0.01					0.01							8	1	7
9/13	375800	4702300	1.70	1	M		5		75							15	2				2									1												6	2	4
9/13	375800	4702300	1.70	2	M				60							12	3				25																					4	2	2
9/15	375775	4702300	1.60	1	D		1		74		1					9					15														0.01							6	2	4
9/15	375775	4702300	1.60	2	D		5		20		15					58	1				1																					6	2	4
9/16	375750	4702300	1.50	1	M				95							3					1														1							4	2	2
9/16	375750	4702300	1.50	2	M		0.01		85							10					5														0.01							5	2	3
9/20	375725	4702300	1.70	1	S		0.01		20		40					40					0.01																					5	2	3
9/20	375725	4702300	1.70	2	S		10		20		30					30					10																					5	2	3
9/21	375700	4702300	1.60	1	D		5		70		0.01					10					15																					5	2	3
9/21	375700	4702300	1.60	2	D		5		65							5					25																					4	2	2
9/21	375675	4702300	1.70	1	M		10		62		15					10					3																					5	2	3
9/21	375675	4702300	1.70	2	M		10		65		5					13	5				2																					6	2	4
9/21	375650	4702300	1.80	1	M		3		75							22																										3	1	2
9/21	375650	4702300	1.80	2	D				55		25					20																										3	1	2
9/22	375625	4702300	1.50	1	M				95							5																										2	1	1
9/22	375625	4702300	1.50	2	M		5		58		35					2	0.01				0.01																					6	2	4
9/22	375600	4702300	1.70	1	M		4		50		10					10	0.01		15		1						10															8	3	5
9/22	375600	4702300	1.70	2	M		10		80		0.01						3		5		0.01						2															7	2	5
9/22	375575	4702300	1.60	1	M		2		64		2					5	5		10								10								2							8	2	6
9/22	375575	4702300	1.60	2	D		5		82		5					5	3		0.01																							6	2	4
9/23	375550	4702300	1.50	1	S		0.01	0.01	55		0.01					0.01	0.01										45															7	1	6
9/23	375550	4702300	1.50	2	S		0.01		60		0.01					0.01	10				0.01						30															7	2	5
9/23	375525	4702300	1.60	1	T		35		30												35																					3	1	2
9/23	375525	4702300	1.60	2	T		2		42		2					20	2		2		30																					7	3	4
9/26	375500	4702300	2.00	1	S		5		20		60					1			10		4						0.01															7	3	4
9/26	375500	4702300	2.00	2	T		10		67		1					5	1		3		5						5								3							9	3	6
10/4	375350	4702300	2.20	1	M		10		15							0.01					75																					4	2	2
10/4	375350	4702300	2.20	2	M				5							5					90																					3	2	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/4	375300	4702300	2.00	1	D		5		90							5					0.01																					4	2	2
10/4	375300	4702300	2.00	2	D		5		75							20					0.01																					4	2	2
10/4	375250	4702300	1.90	1	S				95								5				0.01																					3	1	2
10/4	375250	4702300	1.90	2	S				89							3	5															3										4	1	3
10/4	375200	4702300	1.90	1	M		0.01		95							5																										3	1	2
10/4	375200	4702300	1.90	2	M				93							5					2																					3	2	1
10/4	375150	4702300	1.90	1	M				60							30	10		0.01																							4	2	2
10/4	375150	4702300	1.90	2	M		3		85		0.01					12			0.01		0.01																					6	3	3
10/4	375100	4702300	2.00	1	M		5		70							23	0.01				2																					5	2	3
10/4	375100	4702300	2.00	2	M				60							35					5																					3	2	1
10/4	375050	4702300	2.00	1	D		10		50		10					30					0.01																					5	2	3
10/4	375050	4702300	2.00	2	D		15		50		5					30					0.01																					5	2	3
10/4	375000	4702300	2.00	1	D		0.01		70		10					15					5																					5	2	3
10/4	375000	4702300	2.00	2	D		1		55		4					30	0.01				10														0.01							7	2	5
10/4	374950	4702300	1.90	1	D		5		60		5					20					10																					5	2	3
10/4	374950	4702300	1.90	2	D		10		65		10					10					5																					5	2	3
10/4	374900	4702300	2.00	1	D		4		95		0.01					1					0.01												0.01									6	2	4
10/4	374900	4702300	2.00	2	D		1		90		1					8																										4	1	3
10/4	374850	4702300	1.80	1	M		0.01		70		0.01					5					25												0.01									6	2	4
10/4	374850	4702300	1.80	2	D		2		78		0.01					5					15																					5	2	3
10/4	374800	4702300	1.50	1	M		20		59							0.01					20											1						0.01				6	2	4
10/4	374800	4702300	1.50	2	D		14		55		1					5					25																					5	2	3
7/6	376475	4702325	0.50	1	T																														100							1	0	1
7/6	376475	4702325	0.50	2	T																100																					1	1	0
7/11	376450	4702325	0.70	1	T			1	59							1	5		1		1					1				5		5			20			1				11	4	7
7/11	376450	4702325	0.70	2	S		0.01	1	20		0.01					15	45									1				1					15	2				0.01		11	2	9
7/11	376425	4702325	0.80	1	S		3	3	10		0.01					10	35													0.01					39					0.01		9	1	8
7/11	376425	4702325	0.80	2	T			10	1							15	54																		20							5	1	4
7/12	376400	4702325	0.80	1	S			5	10								40		0.01											0.01		5			40							7	1	6
7/12	376400	4702325	0.80	2	S			2	20							1	20		0.01											0.01					57			0.01				8	2	6
7/12	376375	4702325	0.90	1	S			4	2		0.01					1	5															3			85			0.01				8	1	7
7/12	376375	4702325	0.90	2	S		3	20	10							2	25		2											1					37							8	2	6

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/14	376350	4702325	0.90	1	M			5	5							0.01	15		0.01								0.01			0.01					75	0.01						9	2	7
7/14	376350	4702325	0.90	2	M			10	2		0.01					2	15													2					67	2		0.01				9	1	8
7/14	376325	4702325	0.90	1	M		0.01	2	5							5	15		0.01											1					72	0.01						9	2	7
7/14	376325	4702325	0.90	2	M		1	5	3								14		0.01		0.01									1					75	1						9	2	7
7/19	376300	4702325	1.00	1	M		2	13	5		0.01					0.01	25		0.01							0.01				0.01					55			0.01				11	3	8
7/19	376300	4702325	1.00	2	M		0.01	15	10		0.01					0.01	20		0.01		0.01									0.01					55			0.01				11	3	8
7/20	376275	4702325	1.00	1	M		2	5			0.01					1	10										5			2					73	2		0.01				10	1	9
7/20	376275	4702325	1.00	2	M		0.01	3	3		0.01					0.01	25				0.01						3			0.01					63	3						11	2	9
7/27	376250	4702325	1.00	1	M			2	3							0.01	30		0.01								20								45			0.01				8	2	6
7/27	376250	4702325	1.00	2	M		0.01	2	13								35		0.01								15		5						30					0.01		9	1	8
7/28	376225	4702325	1.10	1	M			2	5								20				0.01						0.01								73							6	1	5
7/28	376225	4702325	1.10	2	M	0.01		3	4		0.01						55				0.01						3								35	0.01				0.01		10	1	9
7/28	376200	4702325	1.10	1	M		3	2	10							2	10		0.01		0.01					0.01	3								70			0.01				11	4	7
7/28	376200	4702325	1.10	2	M			1	7							0.01	7				2														83							6	2	4
8/1	376175	4702325	1.50	1	D			5	3							2	50		0.01								3								35	0.01		2				9	2	7
8/1	376175	4702325	1.50	2	D		5	10			0.01					0.01	42				0.01						0.01			0.01					43	0.01		0.01				11	2	9
8/2	376150	4702325	1.40	1	D			3	15							0.01	35		0.01		0.01					0.01	0.01								45	0.01		2				11	4	7
8/2	376150	4702325	1.40	2	D			5	5							1	25																		64	0.01						6	1	5
8/3	376125	4702325	1.30	1	D		1	3	8							10	20				3						0.01			3					52			0.01		0.01		11	2	9
8/3	376125	4702325	1.30	2	D		1	5	15		0.01					15	15		0.01		8						0.01								40			0.01		1		12	3	9
8/3	376100	4702325	1.40	1	D			0.01	15							0.01	15				5						5								45			15				8	2	6
8/3	376100	4702325	1.40	2	D			0.01	5							9	0.01				2									2					75			7				8	2	6
8/4	376075	4702325	1.60	1	M		2		20							20	10				3						5			5					32			3				9	2	7
8/4	376075	4702325	1.60	2	M		3	0.01	10							20											1			1					65							7	1	6
8/5	376050	4702325	1.70	1	M		2		5							15	15				60									3												6	2	4
8/5	376050	4702325	1.70	2	M		0.01	9	1							40	20				30					0.01	0.01															8	3	5
9/1	376025	4702325	2.00	1	D				10							10	40				40																					4	2	2
9/1	376025	4702325	2.00	2	D				5							10	42				43						0.01															5	2	3
9/2	376000	4702325	2.00	1	D				15							5	40				40																					4	2	2
9/2	376000	4702325	2.00	2	D		2		20		1					20	15				40					0.01									2							8	3	5
9/2	375975	4702325	1.90	1	D		0.01		10		5					25	10				50					0.01												0.01				8	3	5
9/2	375975	4702325	1.90	2	D		0.01		10							40	5				45															0.01						6	2	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/7	375950	4702325	1.90	1	D				5		4					43	6				42																					5	2	3
9/7	375950	4702325	1.90	2	D				5		10					30	10				45																					5	2	3
9/7	375925	4702325	1.70	1	D		1		30		1					35	3				30																					6	2	4
9/7	375925	4702325	1.70	2	D		0.01	0.01	25		15					30	5				25																					7	2	5
9/8	375900	4702325	2.00	1	M		5		15							20	10				50																					5	2	3
9/8	375900	4702325	2.00	2	M				10							15	15				60																					4	2	2
9/8	375875	4702325	2.00	1	M		0.01		35							15	10				40																					5	2	3
9/8	375875	4702325	2.00	2	M		3		30							12	5				50																					5	2	3
9/12	375850	4702325	2.00	1	M				35							35	0.01				30																					4	2	2
9/12	375850	4702325	2.00	2	M				30							15	5				50																					4	2	2
9/13	375825	4702325	2.00	1	M			0.01	15		0.01					4	1				80																					6	2	4
9/13	375825	4702325	2.00	2	M				20							0.01	7				73														0.01							5	2	3
9/13	375800	4702325	2.00	1	D		0.01		20		25					30	5				20														0.01							7	2	5
9/13	375800	4702325	2.00	2	D		2		20		30					20	8				20																					6	2	4
9/13	375775	4702325	2.10	1	M		2		25		10					10	3				50																					6	2	4
9/13	375775	4702325	2.10	2	M				55		0.01					4	1				40																					5	2	3
9/16	375750	4702325	1.80	1	M		10		70							20					0.01																					4	2	2
9/16	375750	4702325	1.80	2	M		10		50		15					15	0.01				10																					6	2	4
9/20	375725	4702325	2.00	1	D		2		8		30					30					30																					5	2	3
9/20	375725	4702325	2.00	2	M		0.01		0.01		40					20					40																					5	2	3
9/21	375700	4702325	1.70	1	D		10		60							10					20																					4	2	2
9/21	375700	4702325	1.70	2	M		13		35							20	2				30																					5	2	3
9/21	375675	4702325	2.00	1	M		0.01		15							14	1		0.01		70																					6	3	3
9/21	375675	4702325	2.00	2	M				75							15	5				5																					4	2	2
9/21	375650	4702325	2.00	1	D				80		0.01					5	10		0.01		5						0.01								0.01							8	3	5
9/21	375650	4702325	2.00	2	D				55		2					3	0.01				40																					5	2	3
9/22	375625	4702325	1.60	1	M		5		88							5			2																							4	2	2
9/22	375625	4702325	1.60	2	M		10		70							15					0.01						5			0.01												6	2	4
9/22	375600	4702325	1.80	1	M				68		10					20			0.01		2																					5	3	2
9/22	375600	4702325	1.80	2	M		10		60		20					10	0.01				0.01																					6	2	4
9/22	375575	4702325	1.80	1	S		5		70							5			15		5						0.01															6	3	3
9/22	375575	4702325	1.80	2	M		0.01		39		40					5			1							5	10															7	3	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/23	375550	4702325	1.60	1	S		5		30		30					**2**					**3**						30															6	**2**	4
9/23	375550	4702325	1.60	2	S		0.01		80		5					**5**			**0.01**		**5**														5							7	**3**	4
9/23	375525	4702325	1.70	1	S		2		85		5					**0.01**	0.01		**0.01**								5								3							8	**2**	6
9/23	375525	4702325	1.70	2	S		2		45		44					**3**	3		**0.01**		**0.01**						0.01								3							9	**3**	6
9/26	375500	4702325	1.50	1	S		8		55		20					**10**	0.01		**2**		**0.01**						0.01								5							9	**3**	6
9/26	375500	4702325	1.50	2	S		15		64		5					**10**	2		**1**		**2**									1					0.01							9	**3**	6
7/6	376500	4702350	0.40	1	T			90																						10												2	**0**	2
7/6	376500	4702350	0.40	2	T			5	40							**52**					**1**														2							5	**2**	3
7/6	376475	4702350	0.70	1	T																									100												1	**0**	1
7/6	376475	4702350	0.70	2	T		5	10	60							**5**	5				**5**					**5**														5		8	**3**	5
7/11	376450	4702350	0.70	1	S			7	1		0.01					**0.01**	30		**0.01**							**0.01**				5					52	5				0.01		11	**3**	8
7/11	376450	4702350	0.70	2	S			10	10							**2**	20													0.01					58	0.01				0.01		8	**1**	7
7/11	376425	4702350	0.90	1	S			10	10							**5**	15		**0.01**											2		0.01			58							8	**2**	6
7/11	376425	4702350	0.90	2	S			5	10		0.01					**25**														0.01					60							6	**1**	5
7/12	376400	4702350	1.00	1	S		0.01	5	5							**0.01**	10		**1**		**0.01**					**0.01**				0.01		2			10	67						12	**4**	8
7/12	376400	4702350	1.00	2	S		0.01	5	2		0.01						5		**0.01**											0.01					83	5						9	**1**	8
7/13	376375	4702350	0.90	1	S		0.01	5	3		0.01						3															0.01			89	0.01				0.01		9	**0**	9
7/13	376375	4702350	0.90	2	S			10	5							**2**	8																		70	4				1		7	**1**	6
7/14	376350	4702350	1.00	1	M			5	9							**0.01**	20		**0.01**								0.01			1					65	0.01		0.01				10	**2**	8
7/14	376350	4702350	1.00	2	M			15	5		0.01					**0.01**	10				**0.01**									2					67	1		0.01		0.01		11	**2**	9
7/14	376325	4702350	1.00	1	M			25	5							**1**	5													0.01					63	1						7	**1**	6
7/14	376325	4702350	1.00	2	M		0.01	15	2								3													0.01					70	10						7	**0**	7
7/19	376300	4702350	1.00	1	S			20	5		0.01					**2**	10										3			0.01					60							8	**1**	7
7/19	376300	4702350	1.00	2	M			10	15		0.01					**0.01**	5										2			0.01					68					0.01		9	**1**	8
7/20	376275	4702350	1.10	1	M		1	30	5							**1**	15		**0.01**								0.01			3					44	1		0.01				11	**2**	9
7/20	376275	4702350	1.10	2	M			20	5		0.01					**0.01**	15		**0.01**								0.01			0.01					55	5						10	**2**	8
7/27	376250	4702350	1.10	1	M		0.01	15	15							**0.01**	30		**0.01**								0.01								40			0.01		0.01		10	**2**	8
7/27	376250	4702350	1.10	2	M		0.01	10	10		0.01					**0.01**	38		**0.01**								2		20	0.01					20	0.01						12	**2**	10
7/28	376225	4702350	1.30	1	M		0.01	10	10							**0.01**	20										5								55			0.01				8	**1**	7
7/28	376225	4702350	1.30	2	M			15	10							**1**	35				**0.01**						5								34	0.01						8	**2**	6
7/28	376200	4702350	1.15	1	M			10	5							**0.01**	43				**0.01**														42							6	**2**	4
7/28	376200	4702350	1.15	2	D			10	10							**0.01**	20				**0.01**						0.01			0.01					60	0.01						9	**2**	7

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/1	376175	4702350	1.70	1	D		0.01		45							5	0.01																		50	0.01		0.01				7	1	6
8/1	376175	4702350	1.70	2	D		1		10		2					5	5				0.01									0.01					65	2		10				10	2	8
8/2	376150	4702350	1.20	1	D			3	15		0.01					0.01	62		0.01		0.01					2	2								15			1				11	4	7
8/2	376150	4702350	1.20	2	D			5	13							1	69		0.01		0.01						0.01								12			0.01				9	3	6
8/3	376125	4702350	1.60	1	D				41							15	8		5		15														15			1		0.01		8	3	5
8/3	376125	4702350	1.60	2	D		1		39							20	5				15						0.01			5					15					0.01		9	2	7
8/3	376100	4702350	1.50	1	M		0.01	0.01	47							10	10				0.01									3					30			0.01				9	2	7
8/3	376100	4702350	1.50	2	M		1	0.01	28		0.01					28	5				5						5								28							9	2	7
8/4	376075	4702350	1.90	1	M				3							5	5				79									3					5							6	2	4
8/4	376075	4702350	1.90	2	D		1		7							10	3				79									0.01												6	2	4
8/5	376050	4702350	1.70	1	M				3							1	15				80									1												5	2	3
8/5	376050	4702350	1.70	2	M				3							24	3				70																					4	2	2
9/1	376025	4702350	2.50	1	D				15							10	15				60									0.01												5	2	3
9/1	376025	4702350	2.50	2	D				20							10	35		0.01		35																					5	3	2
9/2	376000	4702350	2.10	1	D				20							5	35				40														0.01							5	2	3
9/2	376000	4702350	2.10	2	D				20							5	35				40														0.01							5	2	3
9/2	375975	4702350	2.20	1	D				15							15	27				26						2								15							6	2	4
9/2	375975	4702350	2.20	2	D				15							30	5				30						4			0.01					15	1						8	2	6
9/7	375950	4702350	2.20	1	D				10		10					30	20				25						5															6	2	4
9/7	375950	4702350	2.20	2	D		5		13		2					30	20				25														5							7	2	5
9/7	375925	4702350	2.00	1	D		0.01		20		2					38	20				20																					6	2	4
9/7	375925	4702350	2.00	2	D				20		0.01					25	25				30														0.01							6	2	4
9/8	375900	4702350	2.10	1	M				15		15					20	5				45																					5	2	3
9/8	375900	4702350	2.10	2	M				1		14					20	5				60																					5	2	3
9/8	375875	4702350	2.10	1	D				10		10					15	10				55																					5	2	3
9/8	375875	4702350	2.10	2	M			0.01	25							32	10				33																					5	2	3
9/12	375850	4702350	2.10	1	M				40		0.01					2	8				50																					5	2	3
9/12	375850	4702350	2.10	2	M				25							3	7				65														0.01							5	2	3
9/13	375825	4702350	2.40	1	M				3		0.01					8	5				84																					5	2	3
9/13	375825	4702350	2.40	2	M				5							30	3				62																					4	2	2
9/13	375800	4702350	2.30	1	M				5		5					10	10		5		65																					6	3	3
9/13	375800	4702350	2.30	2	M				20		5					10	10				55									0.01												6	2	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/13	375775	4702350	2.30	1	S				3		60					0.01	2				35																					5	2	3
9/13	375775	4702350	2.30	2	M		5		70		5					0.01					20																					5	2	3
9/16	375750	4702350	2.20	1	M				3		55					12					30																					4	2	2
9/16	375750	4702350	2.20	2	M				5		10					5	0.01				80																					5	2	3
9/20	375725	4702350	2.10	1	S				25		3					1	1				70																					5	2	3
9/20	375725	4702350	2.10	2	S		20		1		6					3					70																					5	2	3
9/21	375700	4702350	2.20	1	D				15		55					15	0.01				15														0.01							6	2	4
9/21	375700	4702350	2.20	2	D				4		50					20	1		0.01		25																	0.01				7	3	4
9/21	375675	4702350	2.30	1	M		0.01		15		1					15	4		0.01		65									0.01												8	3	5
9/21	375675	4702350	2.30	2	M		2		5		30					13	5				45					0.01																7	3	4
9/21	375650	4702350	2.10	1	D		5		33		2					33	10		2		15																					7	3	4
9/21	375650	4702350	2.10	2	D		10		35		20					20	10				5																					6	2	4
9/22	375625	4702350	1.60	1	D		5		80							15	0.01				0.01																					5	2	3
9/22	375625	4702350	1.60	2	M		3		57		10					25	0.01				3						2															7	2	5
9/22	375600	4702350	2.00	1	D		5		50		20					10	2		8		5						0.01															8	3	5
9/22	375600	4702350	2.00	2	D		3		52		20					15			2		2						6															7	3	4
9/22	375575	4702350	2.00	1	D		10		55		10					10	10		5		0.01						0.01								0.01							9	3	6
9/22	375575	4702350	2.00	2	D		20		65		1					10			0.01		1						0.01								0.01			3				9	3	6
9/23	375550	4702350	1.80	1	M		1		85							1			10		0.01						3											0.01				7	3	4
9/23	375550	4702350	1.80	2	M				65		2					2	3		20								8															6	2	4
9/23	375525	4702350	1.80	1	S		0.01		39		35					2	2		2		0.01						20											0.01				9	3	6
9/23	375525	4702350	1.80	2	S		0.01		43		30					25	0.01		0.01		0.01						2															8	3	5
9/26	375500	4702350	1.90	1	M				20		47					0.01	2		5		3					3	20															8	4	4
9/26	375500	4702350	1.90	2	M		5		40		20					2	5		20		0.01						5								3							9	3	6
9/26	375475	4702350	2.00	1	S		10		50							3	1		5		0.01						30											1				8	3	5
9/26	375475	4702350	2.00	2	S		10		40							10	0.01		7		3						10								0.01			20				9	3	6
10/4	375350	4702350	2.20	1	M		40		50							0.01					10																					4	2	2
10/4	375350	4702350	2.20	2	M		60		27							10					3																					4	2	2
10/4	375300	4702350	2.10	1	S		40		55							1	0.01		0.01		4																					6	3	3
10/4	375300	4702350	2.10	2	M		10		52		12					20			3		3																					6	3	3
10/4	375250	4702350	2.00	1	D				95							5																										2	1	1
10/4	375250	4702350	2.00	2	D				97							3																										2	1	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/4	375200	4702350	2.00	1	D		0.01		98							**0.01**					**2**																					4	**2**	2
10/4	375200	4702350	2.00	2	D				70							**0.01**					**30**																					3	**2**	1
10/4	375150	4702350	2.20	1	M		0.01		47							**5**					**48**																					4	**2**	2
10/4	375150	4702350	2.20	2	M				50							**5**					**45**																					3	**2**	1
10/4	375100	4702350	2.30	1	M				40							**5**					**55**																					3	**2**	1
10/4	375100	4702350	2.30	2	M				20							**0.01**					**80**																					3	**2**	1
10/4	375050	4702350	2.30	1	M		2		0.01							**8**					**90**																					4	**2**	2
10/4	375050	4702350	2.30	2	M		8		5							**2**					**85**																					4	**2**	2
10/4	375000	4702350	2.30	1	D		3		95							**0.01**					**2**																					4	**2**	2
10/4	375000	4702350	2.30	2	D		14		85							**1**					**0.01**																					4	**2**	2
10/4	374950	4702350	2.30	1	D		5		85		2					**5**					**3**																					5	**2**	3
10/4	374950	4702350	2.30	2	D		31		65							**2**					**2**																					4	**2**	2
10/4	374900	4702350	2.20	1	M		10		75							**3**					**10**												2									5	**2**	3
10/4	374900	4702350	2.20	2	D		2		95							**3**																	0.01		0.01							5	**1**	4
10/4	374850	4702350	2.10	1	D		5		90							**5**					**0.01**																					4	**2**	2
10/4	374850	4702350	2.10	2	D		5		75							**10**					**10**																					4	**2**	2
10/4	374800	4702350	1.80	1	M		7		80							**3**					**10**																					4	**2**	2
10/4	374800	4702350	1.80	2	D		3		50		5					**7**					**35**																					5	**2**	3
7/5	376525	4702375	0.50	1	T			100																																		1	**0**	1
7/5	376525	4702375	0.50	2	T											**97**														3												2	**1**	1
7/6	376500	4702375	0.80	1	T			6	10		1						48		**5**											5					20					5		8	**1**	7
7/6	376500	4702375	0.80	2	S			10	15		0.01					**2**	30		**0.01**		**0.01**									5					0.01	38						10	**3**	7
7/6	376475	4702375	0.80	1	S			29	4		0.01					**0.01**	10		**0.01**							**10**				2					35					10		10	**3**	7
7/6	376475	4702375	0.80	2	S			20	10							**5**	15																		15	35						6	**1**	5
7/11	376450	4702375	0.80	1	S			15	10		0.01					**0.01**	25													3		1			44	1				1		10	**1**	9
7/11	376450	4702375	0.80	2	S			15	1		0.01					**0.01**	15		**0.01**											0.01					69					0.01		9	**2**	7
7/11	376425	4702375	0.90	1	S		0.01	10	10		0.01					**0.01**	5													0.01					75					0.01		9	**1**	8
7/11	376425	4702375	0.90	2	S			20	2							**1**	15																		62							5	**1**	4
7/12	376400	4702375	1.00	1	S		5	20	10		0.01						10			0.01										0.01		5				50						9	**0**	9
7/12	376400	4702375	1.00	2	S			5	0.01							**0.01**	5		**0.01**											1						89				0.01		8	**2**	6
7/13	376375	4702375	1.00	1	S		0.01	10	5							**0.01**	10		**0.01**								0.01			5					65	5		0.01				11	**2**	9
7/13	376375	4702375	1.00	2	S			10	4							**0.01**	6										2			0.01					28	50		0.01		0.01		10	**1**	9

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/14	376350	4702375	0.90	1	S			57									40		0.01		1									0.01					2							6	2	4
7/14	376350	4702375	0.90	2	S	0.01		39	3							0.01	7				1														50							7	2	5
7/19	376325	4702375	1.20	1	M			15	15							2	10		0.01								0.01									58						7	2	5
7/19	376325	4702375	1.20	2	M		0.01	10	40		0.01					0.01	5		0.01								2			2					41	0.01		0.01		0.01		13	2	11
7/19	376300	4702375	1.00	1	S		0.01	0.01	5		0.01					2	20		0.01																73							8	2	6
7/19	376300	4702375	1.00	2	M				5		0.01					0.01	15									0.01				0.01					80					0.01		8	2	6
7/20	376275	4702375	1.10	1	M			15	5							0.01	15									0.01	0.01			0.01					60	5		0.01				10	2	8
7/20	376275	4702375	1.10	2	M		0.01	10	5							0.01	10																		75	0.01		0.01		0.01		9	1	8
7/27	376250	4702375	1.40	1	D		0.01	10	3								35		0.01								1			1					50			0.01				9	1	8
7/27	376250	4702375	1.40	2	D			7	1							1	20				0.01								10	0.01					60	1		0.01				10	2	8
7/28	376225	4702375	1.40	1	M			10	25							0.01	30				0.01						4			1					30			0.01				9	2	7
7/28	376225	4702375	1.40	2	M			15	15		0.01					5	25				10														30					0.01		8	2	6
7/28	376200	4702375	1.60	1	M		1	1	4		0.01					20	0.01				0.01														70			4				9	2	7
7/28	376200	4702375	1.60	2	M			1	10							15	2				1														67			4				7	2	5
8/1	376175	4702375	2.00	1	D		2		20		0.01					15	0.01				20														31	2		10				9	2	7
8/1	376175	4702375	2.00	2	D		5		38							10	5				25						1			1					10	0.01		5				10	2	8
8/2	376150	4702375	1.50	1	D		2	0.01	25							0.01	4				2														42			25				8	2	6
8/2	376150	4702375	1.50	2	M			2	7								30				3														46	7		5				7	1	6
8/3	376125	4702375	2.00	1	M		2		2							44	5				45									2												6	2	4
8/3	376125	4702375	2.00	2	M		2		2							20	5				66									5												6	2	4
8/3	376100	4702375	2.00	1	S		3		15							8	10				64									0.01												6	2	4
8/3	376100	4702375	2.00	2	S				5							10	1				83														1							5	2	3
8/4	376075	4702375	2.20	1	M				10							0.01	8				82									0.01												5	2	3
8/4	376075	4702375	2.20	2	M		8		8								10				69						5															5	1	4
8/5	376050	4702375	2.20	1	M				2							8	15				50									25										0.01		6	2	4
8/5	376050	4702375	2.20	2	M	0.01	5		10							2	15				68					0.01														0.01		8	3	5
9/1	376025	4702375	2.30	1	D				20							20	5				55									0.01												5	2	3
9/1	376025	4702375	2.30	2	D		5		10							30	13		2		40																					6	3	3
9/2	376000	4702375	2.40	1	D				30							5	25				25					10									5							6	3	3
9/2	376000	4702375	2.40	2	D		3		25		0.01					15	15				35					7																7	3	4
9/2	375975	4702375	2.50	1	D		2		15							30	13				40						0.01															6	2	4
9/2	375975	4702375	2.50	2	D				20							15	30				30														5							5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/6	375950	4702375	2.40	1	D		2		30		3					10	10				40						5								0.01							8	2	6
9/6	375950	4702375	2.40	2	D		0.01		20							10	30				40																					5	2	3
9/7	375925	4702375	2.40	1	D		0.01		20		4					6	20				50																					6	2	4
9/7	375925	4702375	2.40	2	D		0.01		35							0.01	40				25						0.01															6	2	4
9/8	375900	4702375	2.50	1	M				40		0.01					2	13				45																					5	2	3
9/8	375900	4702375	2.50	2	M				28		2					0.01	30				40																					5	2	3
9/8	375875	4702375	2.40	1	D				25							10	25				40																					4	2	2
9/8	375875	4702375	2.40	2	D		0.01		15							13	5		2		65																					6	3	3
9/12	375850	4702375	2.50	1	D		0.01		10		0.01					20	30				40																					6	2	4
9/12	375850	4702375	2.50	2	D				40		5					25	5				25																					5	2	3
9/13	375825	4702375	2.40	1	M				15		0.01					2	3				80																					5	2	3
9/13	375825	4702375	2.40	2	M				15		0.01					25	15		10		35						0.01															7	3	4
9/13	375800	4702375	2.50	1	M				55		15						1		4		25														0.01							6	2	4
9/13	375800	4702375	2.50	2	M		0.01		60								1		1		38																					5	2	3
9/13	375775	4702375	2.40	1	M		0.01		10							40	10				40																					5	2	3
9/13	375775	4702375	2.40	2	M		0.01		10		25					4	1				60																					6	2	4
9/16	375750	4702375	2.40	1	M				15							10	10				65																					4	2	2
9/16	375750	4702375	2.40	2	M				30							10	0.01				60																					4	2	2
9/20	375725	4702375	2.50	1	S				20								20				60																					3	1	2
9/20	375725	4702375	2.50	2	S				40							0.01				0.01	60																					4	2	2
9/21	375700	4702375	2.40	1	D		10		15		15					10	0.01				50														0.01							7	2	5
9/21	375700	4702375	2.40	2	M		5		10		10					15	2				58																					6	2	4
9/21	375675	4702375	2.50	1	M				20							2	3				75																					4	2	2
9/21	375675	4702375	2.50	2	M				3		17					0.01	0.01				80																					5	2	3
9/21	375650	4702375	2.30	1	D		10		20		1					20					49														0.01			0.01				7	2	5
9/21	375650	4702375	2.30	2	D		20		55							15			0.01		10																					5	3	2
9/22	375625	4702375	2.10	1	D		0.01	0.01	43		30					20			5		2																					7	3	4
9/22	375625	4702375	2.10	2	D		5		70							15	0.01		1		5					3	1															8	4	4
9/22	375600	4702375	2.30	1	D		5	0.01	75							10	1		9		0.01																					7	3	4
9/22	375600	4702375	2.30	2	D		2		88		5					3	0.01		0.01		2																					7	3	4
9/22	375575	4702375	2.30	1	M	0.01	10		63							15			2		10																					6	3	3
9/22	375575	4702375	2.30	2	D		15		40		20					15					5					5																6	3	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/23	375550	4702375	2.20	1	M		15		70							2			10		0.01						3															6	3	3
9/23	375550	4702375	2.20	2	M		30		65							3			0.01	0.01	2																					6	3	3
9/26	375525	4702375	2.30	1	M		20		58		2					15	0.01		0.01		0.01					0.01									5							9	4	5
9/26	375525	4702375	2.30	2	M		15		50							5			1		4						5			0.01					20			0.01				9	3	6
9/26	375500	4702375	2.00	1	M	0.01	20		20		0.01					1	5		35		4					0.01	15															10	4	6
9/26	375500	4702375	2.00	2	M		15		25		45					0.01	0.01		10		0.01					0.01	5											0.01				10	4	6
9/26	375475	4702375	2.00	1	S		3		62		30					3					0.01						2															6	2	4
9/26	375475	4702375	2.00	2	S		10		60							3	10		10		5						2															7	3	4
7/5	376575	4702400	0.50	1	O																																					0	0	0
7/5	376575	4702400	0.50	2	T				38							37					5					15									5							5	3	2
7/5	376550	4702400	0.60	1	T				100																																	1	0	1
7/5	376550	4702400	0.60	2	T																									100												1	0	1
7/5	376525	4702400	0.80	1	T		5	30								15	10													30					5					5		7	1	6
7/5	376525	4702400	0.80	2	T			40	15							10	10				5														10					10		7	2	5
7/6	376500	4702400	0.80	1	S			10	5		0.01					5	3													2					71	3				1		9	1	8
7/6	376500	4702400	0.80	2	S			5	10							5	5		0.01											0.01					5	60				10		9	2	7
7/6	376475	4702400	0.90	1	S		0.01	15	15		0.01					5	5													5					52					3		9	1	8
7/6	376475	4702400	0.90	2	S			15	5							5	3				0.01									5					25	40		0.01		2		10	2	8
7/11	376450	4702400	0.90	1	S			20	5							0.01	0.01													0.01		0.01			71	4						8	1	7
7/11	376450	4702400	0.90	2	S			2	10							0.01	0.01									0.01									78	10						7	2	5
7/11	376425	4702400	1.00	1	S			20	0.01								15													0.01					65					0.01		6	0	6
7/11	376425	4702400	1.00	2	S			43	3							1	0.01																		50	3						6	1	5
7/12	376400	4702400	1.00	1	S		1	20	1								5																		0.01	73						6	0	6
7/12	376400	4702400	1.00	2	S		5	25	5								10		0.01		0.01					5				0.01		0.01				50				0.01		11	3	8
7/13	376375	4702400	1.00	1	M			20	2		0.01					1	15		0.01								2			2					38	20						10	2	8
7/13	376375	4702400	1.00	2	M			15	1							0.01	10				0.01						2			0.01		1			50	20				1		11	2	9
7/14	376350	4702400	1.00	1	M		1	25	2							0.01	25																		47	0.01		0.01				8	1	7
7/14	376350	4702400	1.00	2	M		1	20	2							0.01	20																		57					0.01		7	1	6
7/19	376325	4702400	1.20	1	M		0.01	20	25		0.01					0.01	25									0.01			0.01	0.01					20	10				0.01		12	2	10
7/19	376325	4702400	1.20	2	M		0.01	30	2		0.01						33		0.01																35					0.01		8	1	7
7/19	376300	4702400	1.30	1	M		0.01	10	5							0.01	15												30	0.01					40							8	1	7
7/19	376300	4702400	1.30	2	M		0.01	15			0.01					0.01	20												0.01	0.01					65							8	1	7

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/20	376275	4702400	1.20	1	S			20	45							**5**	10				**5**					**0.01**		5		0.01					10					0.01		10	3	7
7/20	376275	4702400	1.20	2	S		1	25	15							**3**	15				**0.01**					**0.01**				0.01					40	1						10	3	7
7/27	376250	4702400	1.50	1	M		1	10	20							**20**	10				**1**									0.01					38	0.01		0.01				10	2	8
7/27	376250	4702400	1.50	2	M		1	2	20							**20**	5				**2**														49			1				8	2	6
7/28	376225	4702400	1.70	1	M		10	1	44							**20**	2				**7**								0.01						15			1				9	2	7
7/28	376225	4702400	1.70	2	M			0.01	30							**30**	0.01				**10**														30	0.01						7	2	5
7/28	376200	4702400	1.80	1	M				10							**10**	0.01				**30**									0.01					50	0.01						7	2	5
7/28	376200	4702400	1.80	2	D		3		10		0.01					**20**			**0.01**		**20**									2					45							8	3	5
8/1	376175	4702400	2.00	1	M		2		3		0.01					**5**					**46**						2			2					40							8	2	6
8/1	376175	4702400	2.00	2	M		0.01		3							**37**	0.01				**50**						0.01								10	0.01						8	2	6
8/2	376150	4702400	1.90	1	D				25							**8**	5				**31**														31	0.01		0.01				7	2	5
8/2	376150	4702400	1.90	2	D		0.01		60							**5**	0.01				**10**														25							6	2	4
8/3	376125	4702400	2.40	1	D		0.01		10							**10**	3				**64**									0.01					3	10				0.01		9	2	7
8/3	376125	4702400	2.40	2	D		1		10		1					**5**	10				**58**									5						10						8	2	6
8/3	376100	4702400	2.40	1	M				5							**5**	5				**80**														4	0.01				1		7	2	5
8/3	376100	4702400	2.40	2	M		5		5							**5**	0.01				**80**									5												6	2	4
8/4	376075	4702400	2.40	1	M		2		20							**2**	15				**61**																					5	2	3
8/4	376075	4702400	2.40	2	M		10		5							**0.01**	10				**59**					**10**				1					5					0.01		9	3	6
8/5	376050	4702400	2.40	1	M		4	0.01	15							**1**	10		**0.01**		**55**						0.01			5					10					0.01		11	3	8
8/5	376050	4702400	2.40	2	M		0.01		5							**10**	38				**45**						0.01			2					0.01							8	2	6
9/1	376025	4702400	2.00	1	M				10							**2**	8				**80**																					4	2	2
9/1	376025	4702400	2.00	2	M		0.01		20							**7**	20				**50**									3												6	2	4
9/2	376000	4702400	2.50	1	D		5		10							**15**	50		**0.01**		**20**																					6	3	3
9/2	376000	4702400	2.50	2	D		5		20							**20**	15		**5**		**35**																					6	3	3
9/2	375975	4702400	2.60	1	D		0.01		55							**20**	5				**20**									0.01												6	2	4
9/2	375975	4702400	2.60	2	D		2		20							**10**	10				**50**						8															6	2	4
9/6	375950	4702400	2.50	1	D		10		40							**15**	10				**15**						0.01								10	0.01						8	2	6
9/6	375950	4702400	2.50	2	D		2		20		8					**15**	10				**10**						0.01								35			0.01				9	2	7
9/7	375925	4702400	2.60	1	D		10		35							**5**	8		**2**		**40**						0.01															7	3	4
9/7	375925	4702400	2.60	2	D				30							**5**	30		**5**		**30**																					5	3	2
9/8	375900	4702400	2.70	1	D		2		25							**10**	8				**55**																					5	2	3
9/8	375900	4702400	2.70	2	D		3		30							**5**	30		**2**		**30**						0.01															7	3	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/8	375875	4702400	2.80	1	D				30		3						25				**40**					**2**																5	**2**	3
9/8	375875	4702400	2.80	2	D		0.01		40							**15**	5		**0.01**		**40**																					6	**3**	3
9/12	375850	4702400	2.60	1	D				20		25					**0.01**	15				**40**							0.01														6	**2**	4
9/12	375850	4702400	2.60	2	D				20							**35**	15				**30**																					4	**2**	2
9/13	375825	4702400	2.60	1	M				35							**15**	3		**1**		**46**																					5	**3**	2
9/13	375825	4702400	2.60	2	D				45		3					**0.01**	11		**1**		**40**																					6	**3**	3
9/13	375800	4702400	2.60	1	M				25		0.01					**20**	3				**47**														5							6	**2**	4
9/13	375800	4702400	2.60	2	M				25		23					**2**	5				**45**																					5	**2**	3
9/13	375775	4702400	2.50	1	M		0.01		40		0.01					**5**	1		**9**		**45**									0.01												8	**3**	5
9/13	375775	4702400	2.50	2	M				40		5					**10**	5				**40**																					5	**2**	3
9/16	375750	4702400	2.60	1	S				30								0.01				**70**																					3	**1**	2
9/16	375750	4702400	2.60	2	M				20							**10**	5				**65**																					4	**2**	2
9/20	375725	4702400	2.50	1	M		15				40					**5**	0.01				**40**																					5	**2**	3
9/20	375725	4702400	2.50	2	M				30							**0.01**	10		**0.01**		**60**																					5	**3**	2
9/21	375700	4702400	2.50	1	M				8		0.01					**2**	0.01		**0.01**		**90**																					6	**3**	3
9/21	375700	4702400	2.50	2	M				10		20					**0.01**	0.01				**70**																					5	**2**	3
9/21	375675	4702400	2.50	1	M				10								0.01				**90**																					3	**1**	2
9/21	375675	4702400	2.50	2	M		1		10		25					**4**					**60**																					5	**2**	3
9/21	375650	4702400	2.50	1	D				2												**98**																					2	**1**	1
9/21	375650	4702400	2.50	2	D		4		5		20					**1**					**70**																					5	**2**	3
9/22	375625	4702400	2.30	1	D		10		78							**2**			**0.01**		**10**																					5	**3**	2
9/22	375625	4702400	2.30	2	D		5		75							**5**	0.01		**5**		**10**																					6	**3**	3
9/22	375600	4702400	2.40	1	D		15		64							**20**	0.01		**0.01**		**0.01**														1							7	**3**	4
9/22	375600	4702400	2.40	2	D		10	0.01	71							**15**			**1**		**3**																					6	**3**	3
9/22	375575	4702400	2.40	1	D		10		75							**5**					**10**						0.01			0.01												6	**2**	4
9/22	375575	4702400	2.40	2	D				75							**10**			**5**		**10**																					4	**3**	1
9/23	375550	4702400	2.30	1	M		5		90		0.01					**5**			**0.01**		**0.01**																					6	**3**	3
9/23	375550	4702400	2.30	2	M		10		70							**5**	0.01		**5**		**5**					**5**																7	**4**	3
9/26	375525	4702400	2.30	1	M		15		55							**5**	0.01		**5**								1			4					15							8	**2**	6
9/26	375525	4702400	2.30	2	M		15		52		0.01					**5**	3		**1**		**4**						15			0.01					5							10	**3**	7
9/26	375500	4702400	2.10	1	M		5		70		1					**2**			**7**		**0.01**						10								5							8	**3**	5
9/26	375500	4702400	2.10	2	M		5	0.01	30		0.01					**5**	0.01		**30**		**0.01**						30								0.01							10	**3**	7

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/26	375475	4702400	2.10	1	T		10		80							4	1				5																					5	2	3
9/26	375475	4702400	2.10	2	S		10	0.01	75							5			3		5						2															7	3	4
9/28	375450	4702400	2.20	1	T				50												10																			40		3	1	2
9/28	375450	4702400	2.20	2	T		10		50							10			20		10																					5	3	2
10/4	375350	4702400	2.00	1	M				95							1					4																					3	2	1
10/4	375350	4702400	2.00	2	M				90												10																					2	1	1
10/4	375300	4702400	2.10	1	S		5		90							5			0.01		0.01														0.01							6	3	3
10/4	375300	4702400	2.10	2	S		10		80							5	0.01		0.01		0.01								5													7	3	4
10/4	375250	4702400	2.00	1	M				99							1																										2	1	1
10/4	375250	4702400	2.00	2	S				90							9					1																					3	2	1
10/4	375200	4702400	2.00	1	M				100							0.01																										2	1	1
10/4	375200	4702400	2.00	2	M		0.01		95							5																										3	1	2
10/4	375150	4702400	2.40	1	S				20							0.01					80																					3	2	1
10/4	375150	4702400	2.40	2	M				100							0.01																										2	1	1
10/4	375100	4702400	2.50	1	S				90							2					8																					3	2	1
10/4	375100	4702400	2.50	2	S				40		0.01					40					20														0.01							5	2	3
10/4	375050	4702400	2.50	1	S				55							5					40																					3	2	1
10/4	375050	4702400	2.50	2	M				10												90																					2	1	1
10/4	375000	4702400	2.50	1	M		20		70							2					8																					4	2	2
10/4	375000	4702400	2.50	2	M		20		60							10					10																					4	2	2
10/4	374950	4702400	2.50	1	S				70							25					5																					3	2	1
10/4	374950	4702400	2.50	2	M		10		80							0.01					10																					4	2	2
10/4	374900	4702400	2.50	1	M				100							0.01					0.01																					3	2	1
10/4	374900	4702400	2.50	2	M				80							5					15																					3	2	1
10/4	374850	4702400	2.40	1	M		3		90							2					5																					4	2	2
10/4	374850	4702400	2.40	2	M		10		40							5					45																					4	2	2
10/4	374800	4702400	2.00	1	S				75							5					20																					3	2	1
10/4	374800	4702400	2.00	2	M		5		65												30												0.01									4	1	3
10/4	374750	4702400	1.50	1	M		10		65		10					15					0.01												0.01									6	2	4
10/4	374750	4702400	1.50	2	D		0.01		80		15					5			0.01		0.01																					6	3	3
7/5	376600	4702425	0.40	1	T				40							60																										2	1	1
7/5	376600	4702425	0.40	2	S			3	30							15										50												2				5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/5	376575	4702425	0.70	1	T											100																										1	1	0
7/5	376575	4702425	0.70	2	T		100																																			1	0	1
7/5	376550	4702425	0.80	1	T																														100							1	0	1
7/5	376550	4702425	0.80	2	T				60																					40												2	0	2
7/5	376525	4702425	0.80	1	T			35	10							5	15													2					15	15				3		8	1	7
7/5	376525	4702425	0.80	2	S			41	25							2	5		2		0.01									5					0.01	20				0.01		10	3	7
7/6	376500	4702425	0.90	1	S		5	34	15							2	2													2					5	35						8	1	7
7/6	376500	4702425	0.90	2	S		0.01	20	10							5	5		0.01											0.01					40	20		0.01		0.01		11	2	9
7/6	376475	4702425	0.90	1	S			28	5							2	2		0.01											1					27	35				0.01		9	2	7
7/6	376475	4702425	0.90	2	S		5	25	5							10	0.01				0.01									2					25	28				0.01		10	2	8
7/11	376450	4702425	0.90	1	S			53	3		0.01					0.01	2				0.01											0.01			40	2		0.01		0.01		11	2	9
7/11	376450	4702425	0.90	2	S			40	10		0.01					0.01	10																		39			1				7	1	6
7/12	376425	4702425	1.00	1	S		1	30	10		0.01					2	10				0.01									0.01					0.01	47		0.01				11	2	9
7/12	376425	4702425	1.00	2	S		5	30	10							4	15													5					20	10		0.01		1		10	1	9
7/12	376400	4702425	1.00	1	S		0.01	35	15							1	5				0.01									0.01		0.01			4	40		0.01		0.01		12	2	10
7/12	376400	4702425	1.00	2	S			44	0.01							0.01	2									2				2						50				0.01		8	2	6
7/13	376375	4702425	1.00	1	M		1	20	1							0.01	10										0.01			0.01					58	10				0.01		10	1	9
7/13	376375	4702425	1.00	2	M			20	5							4	5													1					50	15				0.01		8	1	7
7/14	376350	4702425	1.20	1	M		0.01	25	1							0.01	15									0.01				0.01					29	30		0.01				10	2	8
7/14	376350	4702425	1.20	2	M		3	25	5							2	15				0.01									0.01					50	0.01		0.01				10	2	8
7/19	376325	4702425	1.20	1	S		1	59	3							15	15													3					3	1		0.01				9	1	8
7/19	376325	4702425	1.20	2	M		0.01	41	5							2	10				0.01									2					40	0.01						9	2	7
7/19	376300	4702425	1.50	1	S		5	15	5							4	1				5						0.01			0.01					65	0.01						10	2	8
7/19	376300	4702425	1.50	2	S		0.01	30	3		0.01					3	25				5									1					33	0.01						10	2	8
7/20	376275	4702425	1.50	1	M		0.01		25							25	0.01				20														25	5		0.01		0.01		9	2	7
7/20	376275	4702425	1.50	2	S		1		15							50	0.01				25								8									1				7	2	5
7/27	376250	4702425	1.50	1	M		2		6							25					2														45			20				6	2	4
7/27	376250	4702425	1.50	2	M				30							60					0.01									0.01								10				5	2	3
7/27	376225	4702425	2.00	1	D				10		0.01					40	5				40									0.01					5							7	2	5
7/27	376225	4702425	2.00	2	D		0.01		2							70					8														20							5	2	3
7/28	376200	4702425	1.90	1	M		1		5							10	2				50									5					27	0.01						8	2	6
7/28	376200	4702425	1.90	2	M		0.01		0.01							5					70						1			4					20	0.01						8	2	6

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/1	376175	4702425	2.20	1	M		5		10							**30**	5				**43**									5					2							7	**2**	5
8/1	376175	4702425	2.20	2	M				5							**15**	0.01				**78**									2												5	**2**	3
8/3	376125	4702425	2.40	1	D		5		10							**5**	5				**70**														5							6	**2**	4
8/3	376125	4702425	2.40	2	D		2		5							**5**	5				**78**									5										0.01		7	**2**	5
8/3	376100	4702425	2.50	1	M		3		5		3					**0.01**	6				**80**						3															7	**2**	5
8/3	376100	4702425	2.50	2	D		2		2								4				**82**														10					0.01		6	**1**	5
8/4	376075	4702425	2.60	1	M		2		5		0.01					**5**	5				**63**						10			10												8	**2**	6
8/4	376075	4702425	2.60	2	M				10							**5**	10				**60**									10					5							6	**2**	4
8/5	376050	4702425	2.50	1	M		4		10							**10**					**75**									0.01					1							6	**2**	4
8/5	376050	4702425	2.50	2	M		10		5							**5**	0.01				**80**																					5	**2**	3
9/1	376025	4702425	2.80	1	M		8		40							**5**	10				**35**						0.01								2							7	**2**	5
9/1	376025	4702425	2.80	2	M		3		25							**30**	2				**35**						5															6	**2**	4
9/1	376000	4702425	2.70	1	D		1		40							**12**	0.01				**45**						2															6	**2**	4
9/1	376000	4702425	2.70	2	D		5		25							**20**	0.01				**50**																					5	**2**	3
9/2	375975	4702425	2.70	1	D		5		20							**15**	10				**50**					**0.01**									0.01							7	**3**	4
9/2	375975	4702425	2.70	2	D		5		25							**13**	5		**3**		**40**					**0.01**	2			0.01					7							10	**4**	6
9/6	375950	4702425	2.70	1	D		10		40		0.01					**15**	10				**20**						5															7	**2**	5
9/6	375950	4702425	2.70	2	D		10		30							**15**	5				**40**																					5	**2**	3
9/7	375925	4702425	2.70	1	D		4		45		1					**15**	5				**30**																					6	**2**	4
9/7	375925	4702425	2.70	2	D		15		60							**1**	0.01				**20**						4															6	**2**	4
9/8	375900	4702425	2.80	1	M		10		32							**4**	4				**50**						0.01															6	**2**	4
9/8	375900	4702425	2.80	2	D		2		50							**5**	5				**38**						0.01															6	**2**	4
9/8	375875	4702425	3.00	1	M				45							**5**	0.01				**50**																					4	**2**	2
9/8	375875	4702425	3.00	2	M				40								0.01				**60**																					3	**1**	2
9/12	375850	4702425	2.80	1	M		0.01		48							**5**	0.01				**47**											0.01										6	**2**	4
9/12	375850	4702425	2.80	2	D				40							**10**	10				**40**																					4	**2**	2
9/13	375825	4702425	2.90	1	M				11		11					**7**	11		**0.01**		**60**																					6	**3**	3
9/13	375825	4702425	2.90	2	M				25		5					**70**	0.01																							0.01		5	**1**	4
9/13	375800	4702425	2.80	1	M				10		10					**25**	5				**50**					**0.01**																6	**3**	3
9/13	375800	4702425	2.80	2	M				20		9					**25**	1				**45**																					5	**2**	3
9/13	375775	4702425	2.70	1	M		4		25							**1**	0.01				**70**																					5	**2**	3
9/13	375775	4702425	2.70	2	D				40		2					**8**	10				**40**																					5	**2**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/16	375750	4702425	2.60	1	M		5		20		10						15				**50**																					5	**1**	4
9/16	375750	4702425	2.60	2	M		0.01		10								15				**70**														5							5	**1**	4
9/20	375725	4702425	2.70	1	S				50								0.01				**50**																					3	**1**	2
9/20	375725	4702425	2.70	2	M				25								5				**70**																					3	**1**	2
9/21	375700	4702425	2.60	1	M				15		5					**2**	8				**70**																					5	**2**	3
9/21	375700	4702425	2.60	2	M		1		9							**3**	2				**85**																					5	**2**	3
9/21	375675	4702425	2.60	1	M				15								0.01				**85**																					3	**1**	2
9/21	375675	4702425	2.60	2	M				10							**10**	0.01				**80**																					4	**2**	2
9/21	375650	4702425	2.50	1	M				50							**5**					**45**																					3	**2**	1
9/21	375650	4702425	2.50	2	M				25								0.01				**75**																					3	**1**	2
9/22	375625	4702425	2.40	1	M		1		24							**25**			**0.01**		**50**																					5	**3**	2
9/22	375625	4702425	2.40	2	D		10		34							**10**	1		**10**		**35**																					6	**3**	3
9/22	375600	4702425	2.50	1	M				10							**0.01**					**90**																					3	**2**	1
9/22	375600	4702425	2.50	2	D		0.01		5		15					**5**					**75**																					5	**2**	3
9/22	375575	4702425	2.40	1	M		10		30							**30**					**30**														0.01							5	**2**	3
9/22	375575	4702425	2.40	2	D		10		70							**10**			**0.01**		**10**																					5	**3**	2
9/23	375550	4702425	2.30	1	S		10		80							**5**					**5**																					4	**2**	2
9/23	375550	4702425	2.30	2	M		10		80							**9**					**1**									0.01												5	**2**	3
9/26	375525	4702425	2.40	1	M		13		80							**2**					**1**					**2**									2							6	**3**	3
9/26	375525	4702425	2.40	2	M		10		70		10					**10**														0.01					0.01			0.01				7	**1**	6
9/26	375500	4702425	2.10	1	M		15		73							**5**			**2**		**0.01**					**0.01**	5															7	**4**	3
9/26	375500	4702425	2.10	2	M		2	0.01	86							**1**			**5**		**1**					**0.01**	5															8	**4**	4
9/28	375475	4702425	2.30	1	T		5		75												**10**						10															4	**1**	3
9/28	375475	4702425	2.30	2	S		15		70							**14**	1		**0.01**		**0.01**						0.01			0.01												8	**3**	5
9/28	375450	4702425	2.30	1	S		10		60							**3**			**3**		**2**						20								2							7	**3**	4
9/28	375450	4702425	2.30	2	S		3		30		20					**3**			**20**		**1**						20								3							8	**3**	5
7/5	376625	4702450	0.70	1	T				70												**10**																	20				3	**1**	2
7/5	376625	4702450	0.70	2	T				100																																	1	**0**	1
7/5	376600	4702450	0.70	1	T			30								**40**					**30**																					3	**2**	1
7/5	376600	4702450	0.70	2	T				40							**35**					**5**														20							4	**2**	2
7/5	376575	4702450	0.60	1	T			1	5																					50										44		4	**0**	4
7/5	376575	4702450	0.60	2	T			5	15							**5**	15													1					44	5				10		8	**1**	7

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/5	376550	4702450	0.85	1	T		1	57	10							**10**	1													10					1	10						8	**1**	7
7/5	376550	4702450	0.85	2	S			48	5							**2**	2				**2**									35					2			2		2		9	**2**	7
7/5	376525	4702450	0.85	1	T		5	30	30							**5**	20													5					3					2		8	**1**	7
7/5	376525	4702450	0.85	2	S			45	15		0.01					**5**	5		**0.01**											5					15					10		9	**2**	7
7/6	376500	4702450	0.90	1	S			45	5		0.01					**0.01**	3													2					45					0.01		8	**1**	7
7/6	376500	4702450	0.90	2	S			46	5							**0.01**	2													5					20	20				2		8	**1**	7
7/6	376475	4702450	0.90	1	S			36	10							**2**	2				**0.01**									0.01					45	5		0.01				9	**2**	7
7/6	376475	4702450	0.90	2	S		0.01	40	10							**2**	0.01																		10	38						7	**1**	6
7/11	376450	4702450	1.00	1	S		0.01	30	2							**0.01**	3				**0.01**					**0.01**				0.01		0.01			65							10	**3**	7
7/11	376450	4702450	1.00	2	S			5	10							**0.01**											0.01			0.01		0.01			85			0.01				8	**1**	7
7/12	376425	4702450	1.10	1	S		0.01	73	10							**0.01**	2				**0.01**															15		0.01		0.01		9	**2**	7
7/12	376425	4702450	1.10	2	S			25	3							**0.01**	0.01													0.01					0.01	72		0.01				8	**1**	7
7/12	376400	4702450	1.10	1	S			50	1								10		**0.01**											0.01		0.01			0.01	39						8	**1**	7
7/12	376400	4702450	1.10	2	S			44	2							**0.01**	2												2						5	45		0.01				8	**1**	7
7/13	376375	4702450	1.20	1	M			40	1								5																		10	44		0.01				6	**0**	6
7/13	376375	4702450	1.20	2	M			15	4							**4**	6																		20	50		1				7	**1**	6
7/14	376350	4702450	1.40	1	S			40	5							**40**	2				**8**									0.01					5					0.01		8	**2**	6
7/14	376350	4702450	1.40	2	S		1	20	4							**40**	0.01				**0.01**									0.01					15	20				0.01		10	**2**	8
7/19	376325	4702450	1.60	1	S		0.01	25	10		0.01					**2**	10				**3**					**0.01**									25	25						10	**3**	7
7/19	376325	4702450	1.60	2	M		0.01	5	8							**30**	10				**2**														45	0.01						8	**2**	6
7/19	376300	4702450	1.50	1	M		5	1	3							**61**	0.01				**10**						0.01			0.01					20					0.01		10	**2**	8
7/19	376300	4702450	1.50	2	M		2		2							**47**	0.01				**0.01**					**2**									47			0.01				8	**3**	5
7/20	376275	4702450	1.70	1	M				4							**60**	1				**35**															0.01						5	**2**	3
7/20	376275	4702450	1.70	2	S				2							**48**					**20**														20	10						5	**2**	3
7/27	376250	4702450	2.00	1	M		0.01		10							**10**	2				**55**														2	20		1				8	**2**	6
7/27	376250	4702450	2.00	2	M		1		5							**38**	0.01				**30**														20	5		1				8	**2**	6
7/27	376225	4702450	2.00	1	M		5		10							**60**					**20**									5												5	**2**	3
7/27	376225	4702450	2.00	2	M		2		15							**35**	2				**46**									0.01												6	**2**	4
7/28	376200	4702450	2.30	1	M		7	0.01	9							**10**	0.01				**63**														10					1		8	**2**	6
7/28	376200	4702450	2.30	2	M		5		10							**3**	2				**60**														20							6	**2**	4
8/1	376175	4702450	2.60	1	D		10		10							**2**	10				**66**						0.01			0.01					2							8	**2**	6
8/1	376175	4702450	2.60	2	D		25		10							**5**	5				**50**						0.01			0.01					5							8	**2**	6

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/2	376150	4702450	2.10	1	M		10		10							**10**	5				**63**									2												6	**2**	4
8/2	376150	4702450	2.10	2	M		15		20							**15**	5				**40**									5												6	**2**	4
8/3	376125	4702450	2.50	1	D		2		5							**0.01**	0.01				**50**						0.01			0.01					43	0.01						9	**2**	7
8/3	376125	4702450	2.50	2	M		5		7							**0.01**	3				**85**									0.01												6	**2**	4
8/3	376100	4702450	2.50	1	M		5		5		0.01					**5**	2				**80**					**0.01**				3								0.01				9	**3**	6
8/3	376100	4702450	2.50	2	M		5		5								0.01				**90**																					4	**1**	3
8/4	376075	4702450	2.60	1	S		20		10							**5**	0.01				**65**																					5	**2**	3
8/4	376075	4702450	2.60	2	S		5		10								3				**78**									2		2			0.01							7	**1**	6
8/5	376050	4702450	2.50	1	M		5		5							**2**	3				**85**																			0.01		6	**2**	4
8/5	376050	4702450	2.50	2	M		10		10								1				**63**									1					15							6	**1**	5
9/1	376025	4702450	2.80	1	M		0.01		23							**2**	0.01				**75**																					5	**2**	3
9/1	376025	4702450	2.80	2	D		0.01		35							**10**					**45**						9								1							6	**2**	4
9/1	376000	4702450	2.80	1	D		10		35		5					**10**	0.01				**35**						5															7	**2**	5
9/1	376000	4702450	2.80	2	D		2		15							**13**	0.01				**35**						0.01								35							7	**2**	5
9/2	375975	4702450	2.90	1	D		3		33							**10**	5				**47**						2								0.01							7	**2**	5
9/2	375975	4702450	2.90	2	D		4		35							**10**					**50**						1															5	**2**	3
9/6	375950	4702450	2.80	1	D		9		40							**9**	1				**40**						0.01								1							7	**2**	5
9/6	375950	4702450	2.80	2	D		15		35		3					**10**	7		**3**		**25**									0.01					2	0.01						10	**3**	7
9/7	375925	4702450	2.80	1	M				15							**10**	0.01				**75**																					4	**2**	2
9/7	375925	4702450	2.80	2	D		10		20							**10**	5				**45**						10															6	**2**	4
9/8	375900	4702450	2.90	1	M		10		50							**10**	5		**0.01**		**25**																					6	**3**	3
9/8	375900	4702450	2.90	2	D		5		35		15					**7**	3				**35**						0.01			0.01												8	**2**	6
9/8	375875	4702450	3.00	1	M		10		15							**0.01**	5				**60**						2								8							7	**2**	5
9/8	375875	4702450	3.00	2	D		0.01		15		10					**10**	0.01				**65**																					6	**2**	4
9/12	375850	4702450	2.90	1	M				55		0.01					**0.01**	0.01				**45**																					5	**2**	3
9/12	375850	4702450	2.90	2	M				25							**2**	18				**55**																					4	**2**	2
9/13	375825	4702450	2.90	1	D		1		38		0.01					**7**	0.01				**54**																					6	**2**	4
9/13	375825	4702450	2.90	2	D		0.01		45							**5**	0.01				**48**					**2**	0.01															7	**3**	4
9/13	375800	4702450	2.90	1	M				40		11					**2**	2				**45**									0.01												6	**2**	4
9/13	375800	4702450	2.90	2	D				50							**5**	5				**40**																					4	**2**	2
9/13	375775	4702450	2.90	1	D		0.01		20		3					**10**	5		**5**		**57**																					7	**3**	4
9/13	375775	4702450	2.90	2	D				20		10					**10**	5				**55**									0.01												6	**2**	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/16	375750	4702450	2.70	1	M		0.01		10							25					65																					4	2	2
9/16	375750	4702450	2.70	2	M				10		10					20	0.01				60																					5	2	3
9/20	375725	4702450	2.80	1	M																100																					1	1	0
9/20	375725	4702450	2.80	2	M				0.01												100																					2	1	1
9/21	375700	4702450	2.80	1	M				11		2					0.01	2				85																					5	2	3
9/21	375700	4702450	2.80	2	D				7							3	0.01				90																					4	2	2
9/21	375675	4702450	2.80	1	D				2							0.01					98																					3	2	1
9/21	375675	4702450	2.80	2	D		2		8												90																					3	1	2
9/21	375650	4702450	2.60	1	D				28								2				70																					3	1	2
9/21	375650	4702450	2.60	2	D				2								0.01				98																					3	1	2
9/22	375625	4702450	2.50	1	D		0.01		1												99																					3	1	2
9/22	375625	4702450	2.50	2	D				50							5					45																					3	2	1
9/22	375600	4702450	2.50	1	M				0.01												100																					2	1	1
9/22	375600	4702450	2.50	2	M				10							0.01					90																					3	2	1
9/22	375575	4702450	2.50	1	D				5								0.01				95																					3	1	2
9/22	375575	4702450	2.50	2	D				0.01												100																					2	1	1
9/23	375550	4702450	2.40	1	T		2		75		3					20					0.01					0.01																6	3	3
9/23	375550	4702450	2.40	2	T		5		80							15					0.01						0.01															5	2	3
9/26	375525	4702450	2.40	1	M		5		88		0.01					5					0.01					0.01	2			0.01												8	3	5
9/26	375525	4702450	2.40	2	M		5		90												0.01					3	2															5	2	3
9/26	375500	4702450	2.30	1	M		5		82		10					0.01	0.01		0.01								3															7	2	5
9/26	375500	4702450	2.30	2	M		5		80							5					3						7															5	2	3
9/28	375475	4702450	2.30	1	S		2		83								0.01		0.01		0.01						15															6	2	4
9/28	375475	4702450	2.30	2	M		4		68		2					2	3		10		1					10	0.01								0.01							10	4	6
9/28	375450	4702450	2.50	1	T		5		80										5		5						5															5	2	3
9/28	375450	4702450	2.50	2	T		5		60							5	5		5		20																					6	3	3
10/4	375350	4702450	2.20	1	M		2		80							5					13																					4	2	2
10/4	375350	4702450	2.20	2	S				20		10					35			0.01		34														1							6	3	3
10/4	375300	4702450	2.10	1	S		7		60							20			2		1														10							6	3	3
10/4	375300	4702450	2.10	2	S				50		2					43			3		2															0.01						6	3	3
10/4	375250	4702450	1.30	1	M				92							3			5		0.01																					4	3	1
10/4	375250	4702450	1.30	2	M				60		37								3																							3	1	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/4	375200	4702450	2.30	1	D				99							1																										2	1	1
10/4	375200	4702450	2.30	2	D				100							0.01																										2	1	1
10/4	375150	4702450	2.50	1	M		1		98							1																										3	1	2
10/4	375150	4702450	2.50	2	M				90							10					0.01																					3	2	1
10/4	375100	4702450	2.50	1	T											1					99																					2	2	0
10/4	375100	4702450	2.50	2	S				50												50																					2	1	1
10/4	375050	4702450	2.60	1	M				3												97																					2	1	1
10/4	375050	4702450	2.60	2	M		25		30							25					20																					4	2	2
10/4	375000	4702450	2.50	1	M				1							0.01					99																					3	2	1
10/4	375000	4702450	2.50	2	M		15		30												55																					3	1	2
10/4	374950	4702450	2.50	1	S		10		85							3					2																					4	2	2
10/4	374950	4702450	2.50	2	M		20		40							0.01					40																					4	2	2
10/4	374900	4702450	2.50	1	M				20							70					10																					3	2	1
10/4	374900	4702450	2.50	2	S				30							60					10																					3	2	1
10/4	374850	4702450	2.50	1	M		5		60							10					25																					4	2	2
10/4	374850	4702450	2.50	2	S				85							10					5																					3	2	1
10/4	374800	4702450	2.30	1	M		1		84							10					5																					4	2	2
10/4	374800	4702450	2.30	2	M				100												0.01																					2	1	1
10/4	374750	4702450	1.90	1	M		15		60		10					15					0.01																					5	2	3
10/4	374750	4702450	1.90	2	M		5		75		5					5			0.01		0.01														0.01			10				8	3	5
7/5	376650	4702475	0.60	1	T											100																										1	1	0
7/5	376650	4702475	0.60	2	T			65	2								33																									3	0	3
7/5	376625	4702475	0.80	1	T			60								15					10						10													5		5	2	3
7/5	376625	4702475	0.80	2	T			5	60							20	5													1										6		6	1	5
7/5	376600	4702475	0.60	1	T		100																																			1	0	1
7/5	376600	4702475	0.60	2	T		1	5	39												5														25					25		6	1	5
7/5	376575	4702475	0.90	1	T			59	10							10	1													5						10				5		7	1	6
7/5	376575	4702475	0.90	2	S		2	35	34		0.01					15	2		0.01		0.01									5					2					5		11	3	8
7/5	376550	4702475	0.85	1	T			59	25										1		1									10										4		6	2	4
7/5	376550	4702475	0.85	2	S			51	15		2					2	5				0.01									5					5	15		0.01		0.01		11	2	9
7/5	376525	4702475	0.90	1	S		5	45	15							10														0.01					10			5		10		8	1	7
7/5	376525	4702475	0.90	2	S			61	20		0.01					2	0.01				0.01									5					2	10		0.01		0.01		11	2	9

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/6	376500	4702475	0.90	1	S		2	54	10							3	1													0.01					10	20		0.01		0.01		10	1	9
7/6	376500	4702475	0.90	2	S		0.01	63	10							0.01	2				1									3					8	12		1		0.01		11	2	9
7/6	376475	4702475	1.00	1	S		5	18	3							2			0.01		0.01														70	2						8	3	5
7/6	376475	4702475	1.00	2	S			35	10							5	0.01				0.01														15	35				0.01		8	2	6
7/11	376450	4702475	1.00	1	S			25	7		0.01					0.01	5				0.01									0.01					63			0.01				9	2	7
7/11	376450	4702475	1.00	2	S			15	10								5													0.01					70							5	0	5
7/12	376425	4702475	1.45	1	S		2	55	17		0.01					10	5				3					5						0.01				3		0.01		0.01		12	3	9
7/12	376425	4702475	1.45	2	S			15	3							1	1				1														1	78						7	2	5
7/12	376400	4702475	1.25	1	S			75	15		0.01					5	2				1														1	1				0.01		9	2	7
7/12	376400	4702475	1.25	2	T			90	6								2				2																					4	1	3
7/13	376375	4702475	1.40	1	M		3	52	5							1	1				3														15	20		0.01				9	2	7
7/13	376375	4702475	1.40	2	S		0.01	65	6							4	3				10														5	5		2				9	2	7
7/14	376350	4702475	1.50	1	M		0.01		2							58	0.01				20									0.01					15	5				0.01		9	2	7
7/14	376350	4702475	1.50	2	M		2									38					0.01														50	10						5	2	3
7/19	376325	4702475	1.40	1	M		0.01		8		0.01					67	0.01				10														5	10						8	2	6
7/19	376325	4702475	1.40	2	M		2		5							78	0.01				5									0.01					5	5		0.01		0.01		10	2	8
7/19	376300	4702475	1.80	1	D				1							55					20									0.01					20	4				0.01		7	2	5
7/19	376300	4702475	1.80	2	D				2		0.01					57	0.01				40														1							6	2	4
7/20	376275	4702475	2.10	1	M				20							47	0.01				20														10	3						6	2	4
7/20	376275	4702475	2.10	2	M				5							22					35														35	3						5	2	3
7/27	376250	4702475	2.20	1	M				20							10	2				63						0.01			5												6	2	4
7/27	376250	4702475	2.20	2	M		5		5							20	5				40														20	5						7	2	5
7/27	376225	4702475	2.40	1	M		15		4							1	0.01				20									0.01					60							7	2	5
7/27	376225	4702475	2.40	2	S		20		20												60									0.01												4	1	3
7/28	376200	4702475	2.50	1	M		20		20							10	3				44									1					2							7	2	5
7/28	376200	4702475	2.50	2	M		14		14							14	2				53						3															6	2	4
8/1	376175	4702475	2.60	1	D		25		15							10	3				30						1								15	1				0.01		9	2	7
8/1	376175	4702475	2.60	2	D		35		15							0.01	0.01				35						15			0.01												7	2	5
8/2	376150	4702475	2.40	1	M		5		10							5	5				75									0.01										0.01		7	2	5
8/2	376150	4702475	2.40	2	M		10		5								0.01				75									0.01					10							6	1	5
8/3	376125	4702475	2.60	1	D		18		5							0.01	0.01				25									2					50	0.01						8	2	6
8/3	376125	4702475	2.60	2	D		2		2							1	0.01				47														48	0.01						7	2	5

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/3	376100	4702475	2.90	1	M		10		5							**1**					**59**					**0.01**				10						15						7	**3**	4
8/3	376100	4702475	2.90	2	M		20		2							**3**					**75**														0.01							5	**2**	3
8/4	376075	4702475	2.80	1	M		17		5							**1**					**40**									2					35					0.01		7	**2**	5
8/4	376075	4702475	2.80	2	M		12		10							**1**	0.01				**50**														25	2						7	**2**	5
8/5	376050	4702475	2.90	1	M		12		10							**3**	2				**70**									2					1							7	**2**	5
8/5	376050	4702475	2.90	2	M		2		8							**3**	2				**85**									0.01										0.01		7	**2**	5
9/1	376025	4702475	3.00	1	M				30							**10**					**60**																					3	**2**	1
9/1	376025	4702475	3.00	2	M		10		29							**15**	0.01				**45**						1															6	**2**	4
9/1	376000	4702475	2.90	1	D		0.01		45							**10**					**45**						0.01								0.01							6	**2**	4
9/1	376000	4702475	2.90	2	D		5		45							**10**					**40**						0.01															5	**2**	3
9/2	375975	4702475	2.90	1	D		0.01		20							**8**	2				**70**																					5	**2**	3
9/2	375975	4702475	2.90	2	D		6		45												**45**														4							4	**1**	3
9/6	375950	4702475	2.90	1	D		10		60								5				**25**						0.01															5	**1**	4
9/6	375950	4702475	2.90	2	D		5		25							**20**	0.01				**50**																					5	**2**	3
9/7	375925	4702475	3.00	1	D				48								2				**50**																					3	**1**	2
9/7	375925	4702475	3.00	2	D		10		40							**10**					**40**																					4	**2**	2
9/8	375900	4702475	3.00	1	D				18		2					**0.01**					**80**														0.01							5	**2**	3
9/8	375900	4702475	3.00	2	D		5		24							**10**	0.01				**60**														1							6	**2**	4
9/8	375875	4702475	3.10	1	D		5		10		1					**3**	0.01				**71**						10															7	**2**	5
9/8	375875	4702475	3.10	2	D		6		15		0.01					**4**					**75**																					5	**2**	3
9/12	375850	4702475	3.00	1	M		9		15							**25**	1				**50**																					5	**2**	3
9/12	375850	4702475	3.00	2	D				50							**5**	0.01				**45**																					4	**2**	2
9/13	375825	4702475	3.00	1	D				45							**5**	3				**45**					**2**																5	**3**	2
9/13	375825	4702475	3.00	2	D		2		8		3					**3**	0.01		**3**		**81**																					7	**3**	4
9/13	375800	4702475	3.00	1	D		0.01		25		0.01					**25**	0.01				**25**					**25**																7	**3**	4
9/13	375800	4702475	3.00	2	D				50		0.01						0.01				**50**						0.01															5	**1**	4
9/13	375775	4702475	3.00	1	M				44		2					**3**	1				**50**																					5	**2**	3
9/13	375775	4702475	3.00	2	M				30							**15**	15				**40**						0.01															5	**2**	3
9/16	375750	4702475	2.80	1	S		0.01		30		10					**30**	0.01				**30**																					6	**2**	4
9/16	375750	4702475	2.80	2	M		0.01		50							**0.01**	0.01				**50**																					5	**2**	3
9/20	375725	4702475	2.90	1	M				40		3					**2**	2		**3**		**50**																					6	**3**	3
9/20	375725	4702475	2.90	2	M				10		10					**0.01**	10		**30**		**40**																					6	**3**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/21	375700	4702475	2.90	1	D		1		1												98																					3	1	2
9/21	375700	4702475	2.90	2	D				4		10					1					85																					4	2	2
9/21	375675	4702475	3.00	1	D				8							2			0.01		90																					4	3	1
9/21	375675	4702475	3.00	2	D				10							10	3				77																					4	2	2
9/21	375650	4702475	2.60	1	D		0.01		5								0.01				95																					4	1	3
9/21	375650	4702475	2.60	2	D				0.01							5					95																					3	2	1
9/22	375625	4702475	2.60	1	D		0.01		5							5					90																					4	2	2
9/22	375625	4702475	2.60	2	D				5							2					93																					3	2	1
9/23	375600	4702475	2.50	1	M				0.01												100																					2	1	1
9/23	375600	4702475	2.50	2	D				3							0.01					97																					3	2	1
9/22	375575	4702475	2.50	1	D				1												99																					2	1	1
9/22	375575	4702475	2.50	2	D		0.01		2							0.01					98																					4	2	2
9/23	375550	4702475	2.50	1	M				90												10																					2	1	1
9/23	375550	4702475	2.50	2	M		10		70							10			0.01		5														5							6	3	3
9/26	375525	4702475	2.60	1	D		3		90							5					0.01						2			0.01												6	2	4
9/26	375525	4702475	2.60	2	D		5		80							10					0.01						5															5	2	3
9/26	375500	4702475	2.30	1	M		3		62							0.01					5						30															5	2	3
9/26	375500	4702475	2.30	2	M		1		82		2					5			0.01							0.01	10															7	3	4
9/28	375475	4702475	2.30	1	M	4	4		78							3			10		0.01						0.01								1							8	3	5
9/28	375475	4702475	2.30	2	M		9		75							1	0.01		5		5					2	3											0.01				9	4	5
9/28	375450	4702475	2.50	1	S		0.01	3	90							1					6									0.01												6	2	4
9/28	375450	4702475	2.50	2	S		0.01	4	40							3			46		6									1												7	3	4
7/5	376650	4702500	0.60	1	T											60					40																					2	2	0
7/5	376650	4702500	0.60	2	T											70	29				1																					3	2	1
7/5	376625	4702500	0.80	1	S			10	12		0.01					5	3				10						10									20		0.01		30		10	2	8
7/5	376625	4702500	0.80	2	S		5	10	10							10	10				5									15						15				20		9	2	7
7/5	376600	4702500	0.80	1	T			10								80					5																			5		4	2	2
7/5	376600	4702500	0.80	2	T			5	5							43	1				1									45												6	2	4
7/5	376575	4702500	0.80	1	T			30	30							9	5				1									5					10	5				5		9	2	7
7/5	376575	4702500	0.80	2	S		2	29	25		0.01					25	0.01		0.01		0.01									10					2	5				2		12	3	9
7/5	376550	4702500	0.90	1	S			40	0.01							2	2																		30	23		2		1		8	1	7
7/5	376550	4702500	0.90	2	S			57	2		0.01					2	0.01									2				2					15	15		0.01		5		11	2	9

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/5	376525	4702500	0.95	1	T			24	10							5	5				1					5				10					40							8	3	5
7/5	376525	4702500	0.95	2	S		0.01	36	15							15	2		0.01		2									0.01					15	15		0.01		0.01		12	3	9
7/6	376500	4702500	1.00	1	S			65	15							5	0.01				0.01									0.01					15					0.01		8	2	6
7/6	376500	4702500	1.00	2	S			80	10							5	0.01				1									2					1			0.01		1		9	2	7
7/6	376475	4702500	1.00	1	S			58	10							5					2					0.01									5	20				0.01		8	3	5
7/6	376475	4702500	1.00	2	S			40	6							1	0.01				2									2					49			0.01		0.01		9	2	7
7/11	376450	4702500	1.20	1	S		2	63	15							0.01	0.01				0.01									0.01		0.01			20							9	2	7
7/11	376450	4702500	1.20	2	S		10	58	15								2				0.01									0.01		0.01			15			0.01				9	1	8
7/12	376425	4702500	1.35	1	S			81	2							2	10				0.01								5			0.01			0.01	0.01						9	2	7
7/12	376425	4702500	1.35	2	S			45	10							5											0.01			5					15	20						7	1	6
7/12	376400	4702500	1.50	1	S		10	15	10		0.01					44	1				10															10				0.01		9	2	7
7/12	376400	4702500	1.50	2	S		3	15	10							65	2				5																	0.01				7	2	5
7/13	376375	4702500	1.30	1	S			0.01	0.01							69	0.01				10									1					5	15		0.01				9	2	7
7/13	376375	4702500	1.30	2	M		1		4							55	0.01				15															25						6	2	4
7/14	376350	4702500	1.90	1	D		0.01		2							60					38																					4	2	2
7/14	376350	4702500	1.90	2	D		3		10							60					20					0.01										7				0.01		7	3	4
7/19	376325	4702500	2.00	1	M				5							80					10									0.01						5						5	2	3
7/19	376325	4702500	2.00	2	M		0.01		5							55					30														0.01	10				0.01		7	2	5
7/19	376300	4702500	2.00	1	M				5		0.01					54					40					1																5	3	2
7/19	376300	4702500	2.00	2	M		2		2							15					76															5						5	2	3
7/20	376275	4702500	2.10	1	M				20							10	0.01				70									0.01												5	2	3
7/20	376275	4702500	2.10	2	M		3		20		0.01					30	3				41									3												7	2	5
7/27	376250	4702500	2.40	1	M		20		25							5	1				48						1			0.01												7	2	5
7/27	376250	4702500	2.40	2	M		5		45		5										25									20												5	1	4
7/27	376225	4702500	2.50	1	S		8		20							8	0.01				60									4												6	2	4
7/27	376225	4702500	2.50	2	M	0.01	21		30							4					40									5												6	2	4
7/28	376200	4702500	2.75	1	D	0.01	20		10		0.01					5					35														30							7	2	5
7/28	376200	4702500	2.75	2	D		10		6							2					20									2					60							6	2	4
8/1	376175	4702500	2.70	1	M		25		20		0.01					3	0.01				37						15			0.01										0.01		9	2	7
8/1	376175	4702500	2.70	2	M		25		30							5	2				37									1												6	2	4
8/2	376150	4702500	3.00	1	M		23		10							0.01					65									2												5	2	3
8/2	376150	4702500	3.00	2	M		30		5							3					60									2												5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/3	376125	4702500	2.70	1	M		14		2							**2**					**80**									2												5	**2**	3
8/3	376125	4702500	2.70	2	S		8		5							**1**	1				**83**						1			1												7	**2**	5
8/3	376100	4702500	3.50	1	M		15		5							**5**	0.01				**75**																					5	**2**	3
8/3	376100	4702500	3.50	2	M		4		5							**1**	0.01				**90**									0.01												6	**2**	4
8/4	376075	4702500	2.90	1	M		3		2							**3**	1				**91**																			0.01		6	**2**	4
8/4	376075	4702500	2.90	2	M		20		5							**2**	0.01				**68**									5												6	**2**	4
8/5	376050	4702500	3.00	1	T		30		15							**10**	4				**40**									1												6	**2**	4
8/5	376050	4702500	3.00	2	M		5		10							**5**			**1**		**71**									8												6	**3**	3
9/1	376025	4702500	3.00	1	D		15		15							**5**					**65**																					4	**2**	2
9/1	376025	4702500	3.00	2	D		10		40							**10**					**40**						0.01															5	**2**	3
9/1	376000	4702500	3.00	1	D				40							**10**	1		**2**		**40**						7															6	**3**	3
9/1	376000	4702500	3.00	2	D		5		30							**15**	3		**5**		**35**														7							7	**3**	4
9/2	375975	4702500	3.10	1	D		15		30							**5**					**50**																	0.01				5	**2**	3
9/2	375975	4702500	3.10	2	D		5		20							**10**					**60**						5															5	**2**	3
9/6	375950	4702500	3.00	1	D		2		35							**10**					**50**														0.01	3						6	**2**	4
9/6	375950	4702500	3.00	2	D		6		30							**10**	2				**50**						2															6	**2**	4
9/7	375925	4702500	3.00	1	D		15		25												**60**																					3	**1**	2
9/7	375925	4702500	3.00	2	D		7		40								3				**50**																					4	**1**	3
9/8	375900	4702500	3.10	1	D				30								0.01				**70**									0.01												4	**1**	3
9/8	375900	4702500	3.10	2	M		5		10							**10**					**72**						3															5	**2**	3
9/8	375875	4702500	3.10	1	D		5		33		15					**5**	5				**32**						5															7	**2**	5
9/8	375875	4702500	3.10	2	D		2		35							**5**	5				**50**						0.01								3							7	**2**	5
9/12	375850	4702500	3.00	1	D				10							**20**	2				**68**																					4	**2**	2
9/12	375850	4702500	3.00	2	D				30							**0.01**					**70**																					3	**2**	1
9/13	375825	4702500	3.00	1	D		1		29												**70**																					3	**1**	2
9/13	375825	4702500	3.00	2	D				15							**0.01**			**3**		**82**																					4	**3**	1
9/13	375800	4702500	3.00	1	D				50										**5**		**45**																					3	**2**	1
9/13	375800	4702500	3.00	2	D				15							**10**					**75**																					3	**2**	1
9/13	375775	4702500	3.00	1	M				10		10						0.01				**80**																					4	**1**	3
9/13	375775	4702500	3.00	2	M		0.01		45		5					**5**	0.01				**45**																					6	**2**	4
9/16	375750	4702500	2.90	1	M				40		10					**5**	5		**0.01**		**40**																					6	**3**	3
9/16	375750	4702500	2.90	2	S		10		40							**20**	0.01				**30**																					5	**2**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/20	375725	4702500	2.90	1	M				30												60					10																3	2	1
9/20	375725	4702500	2.90	2	M		10		10		10					10	20				40																					6	2	4
9/21	375700	4702500	3.00	1	D		5		5										0.01		90																					4	2	2
9/21	375700	4702500	3.00	2	D				14							1					85																					3	2	1
9/21	375675	4702500	3.00	1	D				5							0.01					95																					3	2	1
9/21	375675	4702500	3.00	2	D				5												95																					2	1	1
9/21	375650	4702500	2.70	1	D		0.01		5												95																					3	1	2
9/21	375650	4702500	2.70	2	D				2							3					95																					3	2	1
9/22	375625	4702500	2.70	1	D				1							4					95																					3	2	1
9/22	375625	4702500	2.70	2	D				1												99																					2	1	1
9/23	375600	4702500	2.60	1	M		0.01		30							0.01					60														10							5	2	3
9/23	375600	4702500	2.60	2	M				20							0.01					80																					3	2	1
9/22	375575	4702500	2.70	1	D				0.01												100																					2	1	1
9/22	375575	4702500	2.70	2	D				3												97																					2	1	1
9/23	375550	4702500	2.60	1	M		0.01		0.01												100																					3	1	2
9/23	375550	4702500	2.60	2	S		0.01		20							0.01					80																					4	2	2
9/26	375525	4702500	2.60	1	D		0.01		93							2					5					0.01	0.01															6	3	3
9/26	375525	4702500	2.60	2	D		3		97							0.01					0.01									0.01												5	2	3
9/26	375500	4702500	2.50	1	D	0.01	1		98												0.01														1	0.01						6	1	5
9/26	375500	4702500	2.50	2	D		0.01		99							1					0.01						0.01															5	2	3
9/28	375475	4702500	2.40	1	M			0.01	60							2	3		0.01		1						34															7	3	4
9/28	375475	4702500	2.40	2	M		3	2	69							5	1		0.01		10						10															8	3	5
9/28	375450	4702500	2.50	1	S		5		85		0.01								0.01		10						0.01															6	2	4
9/28	375450	4702500	2.50	2	S				60										5		5						30															4	2	2
9/28	375425	4702500	2.60	1	S			0.01	60							3			7		30																					5	3	2
9/28	375425	4702500	2.60	2	S		0.01	5	60							2			0.01		30						3															7	3	4
10/14	375350	4702500	2.10	1	S		10		70		10					10																										4	1	3
10/14	375350	4702500	2.10	2	S				50		25					25	0.01		0.01		0.01																					6	3	3
10/14	375300	4702500	2.10	1	S		0.01		70							30			0.01		0.01																					5	3	2
10/14	375300	4702500	2.10	2	S		0.01		60		0.01					40	0.01		0.01		0.01																					7	3	4
10/14	375250	4702500	2.10	1	M				90							9			1																							3	2	1
10/14	375250	4702500	2.10	2	M				65		30					5			0.01		0.01																					5	3	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/14	375200	4702500	2.20	1	M				95							5																										2	1	1
10/14	375200	4702500	2.20	2	M				100							0.01					0.01																					3	2	1
10/14	375150	4702500	2.50	1	M				100												0.01																					2	1	1
10/14	375150	4702500	2.50	2	M		5		85							5					0.01														5							5	2	3
10/14	375100	4702500	2.60	1	M		5		30							2					0.01														55	8						6	2	4
10/14	375100	4702500	2.60	2	M		0.01		65												30															5						4	1	3
10/14	375050	4702500	2.70	1	M		5		50							1					44															0.01						5	2	3
10/14	375050	4702500	2.70	2	S				10												90															0.01						3	1	2
10/14	375000	4702500	2.70	1	M				0.01												100																					2	1	1
10/14	375000	4702500	2.70	2	S		2														98																					2	1	1
10/14	374950	4702500	2.70	1	T																100																					1	1	0
10/14	374950	4702500	2.70	2	T				3												97																					2	1	1
10/14	374900	4702500	2.60	1	M											55					45																					2	2	0
10/14	374900	4702500	2.60	2	M											35					65																					2	2	0
10/14	374850	4702500	2.50	1	M				15							55					30																					3	2	1
10/14	374850	4702500	2.50	2	M		2		8							45					45																					4	2	2
10/14	374800	4702500	2.30	1	M		2		80							10					8																	0.01				5	2	3
10/14	374800	4702500	2.30	2	M		5		35							25					35																					4	2	2
10/14	374750	4702500	2.10	1	M				80							17					3																					3	2	1
10/14	374750	4702500	2.10	2	M		0.01		80		3					12					5																					5	2	3
10/14	374700	4702500	1.90	1	M		10		70		10					6					2																	2				6	2	4
10/14	374700	4702500	1.90	2	M		40		15		25					5					0.01																	15				6	2	4
7/5	376625	4702525	0.80	1	T		2	60	10							5	2				1					3				10								5		2		10	3	7
7/5	376625	4702525	0.80	2	S		5	20	20							15	5		0.01		5									25										5		9	3	6
7/5	376600	4702525	0.80	1	S			60	5							10	3													10					10			1		1		8	1	7
7/5	376600	4702525	0.80	2	S		0.01	30	15							10	5													5					10	20		0.01		5		10	1	9
7/5	376575	4702525	0.90	1	S			40	10							15	3										0.01			1						30		0.01		1		9	1	8
7/5	376575	4702525	0.90	2	S			25	5		0.01					15	0.01													10					20	25						8	1	7
7/5	376550	4702525	1.00	1	S		1	35	15		0.01					10	3				0.01									1						35						9	2	7
7/5	376550	4702525	1.00	2	S		0.01	40	5							10	0.01													0.01					10	35		0.01		0.01		10	1	9
7/5	376525	4702525	1.00	1	S			60	15							15					1														8					1		6	2	4
7/5	376525	4702525	1.00	2	S			62	5							0.01					0.01														10	20				3		7	2	5

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/6	376500	4702525	1.10	1	S			75	3		0.01					2					0.01		0.01							0.01					5	15						9	2	7
7/6	376500	4702525	1.10	2	S			45	5		0.01					5	0.01				0.01									1					9	35						9	2	7
7/6	376475	4702525	1.20	1	S		0.01	25	1							3	0.01				0.01					2				0.01					4	65		0.01		0.01		12	3	9
7/6	376475	4702525	1.20	2	M		2	30	12							4																			2	50		0.01				7	1	6
7/11	376450	4702525	1.50	1	S		1	66	15		0.01					5	5				5					0.01				0.01					1			2		0.01		12	3	9
7/11	376450	4702525	1.50	2	S		0.01	50	30		0.01					10	0.01				9									0.01								0.01		1		10	2	8
7/12	376425	4702525	1.60	1	S		0.01	5	15							20					10									0.01		0.01				50				0.01		9	2	7
7/12	376425	4702525	1.60	2	S			25	10							42	3				10					0.01									5	5				0.01		9	3	6
7/12	376400	4702525	1.70	1	M		5	0.01	5		0.01					65	0.01				15					10						0.01				0.01						10	3	7
7/12	376400	4702525	1.70	2	M		5		8							82	0.01				4									0.01						1						7	2	5
7/13	376375	4702525	2.00	1	M				2							78					15															5						4	2	2
7/13	376375	4702525	2.00	2	M				2							65					25															8						4	2	2
7/14	376350	4702525	2.10	1	M				10							80					10									0.01						0.01						5	2	3
7/14	376350	4702525	2.10	2	M				0.01							60					40					0.01				0.01						0.01						6	3	3
7/19	376325	4702525	1.70	1	S		3		0.01							2					95																					4	2	2
7/19	376325	4702525	1.70	2	S		1		4							20					70									5												5	2	3
7/19	376300	4702525	2.50	1	M		5		5							35					45									2					8							6	2	4
7/19	376300	4702525	2.50	2	M		2		2							15					79									2										0.01		6	2	4
7/20	376275	4702525	2.50	1	M		0.01		5							10					80									0.01						5						6	2	4
7/20	376275	4702525	2.50	2	M		10		20							10					45									15												5	2	3
7/27	376250	4702525	2.50	1	M		10		30							24	1				25									10												6	2	4
7/27	376250	4702525	2.50	2	M		10		30							10					48									1					1							6	2	4
7/27	376225	4702525	2.50	1	M		40		20							5	0.01				35																					5	2	3
7/27	376225	4702525	2.50	2	M		5		55							30					10									0.01					0.01							6	2	4
7/28	376200	4702525	2.80	1	M		30		10							0.01					60																			0.01		5	2	3
7/28	376200	4702525	2.80	2	M		50		10							10					25									5												5	2	3
8/1	376175	4702525	3.00	1	D		48		5							0.01					47						0.01			0.01												6	2	4
8/1	376175	4702525	3.00	2	D		30		5							3	0.01				60									0.01					2							7	2	5
8/2	376150	4702525	3.00	1	M		15		5							2	2				69									2					5					0.01		8	2	6
8/2	376150	4702525	3.00	2	M		25		3							2					70																					4	2	2
8/3	376125	4702525	2.90	1	M		15		2							5					78									0.01												5	2	3
8/3	376125	4702525	2.90	2	M		4		5							3					88									0.01												5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/3	376100	4702525	3.00	1	M	0.01	4		10							**10**					**65**									10					1							7	**2**	5
8/3	376100	4702525	3.00	2	M		2		3							**5**					**60**														30							5	**2**	3
8/4	376075	4702525	3.00	1	M		0.01		10		0.01					**5**					**85**																					5	**2**	3
8/4	376075	4702525	3.00	2	M		5		15							**8**	2				**65**									5												6	**2**	4
8/5	376050	4702525	3.10	1	M		5		10							**5**					**75**									5												5	**2**	3
8/5	376050	4702525	3.10	2	M		5		10							**15**	0.01				**59**					**1**				10								0.01				8	**3**	5
9/1	376025	4702525	3.30	1	D		5		30							**10**	5				**50**																					5	**2**	3
9/1	376025	4702525	3.30	2	D		5		10							**20**					**65**																					4	**2**	2
9/1	376000	4702525	3.00	1	D		3		45							**5**	2				**45**						0.01															6	**2**	4
9/1	376000	4702525	3.00	2	D		5		10							**0.01**					**85**																					4	**2**	2
9/2	375975	4702525	3.10	1	D				30							**15**	0.01		**5**		**50**						0.01								0.01							7	**3**	4
9/2	375975	4702525	3.10	2	D		2		15							**5**	0.01		**0.01**		**70**						5								3			0.01				9	**3**	6
9/6	375950	4702525	3.00	1	D		1		20							**5**	4		**0.01**		**65**						5			0.01												8	**3**	5
9/6	375950	4702525	3.00	2	D		15		15							**15**	5				**40**						10			0.01												7	**2**	5
9/7	375925	4702525	3.10	1	D		10		15		10					**10**					**50**						5								0.01							7	**2**	5
9/7	375925	4702525	3.10	2	D		7		20							**5**	0.01				**65**						0.01								3							7	**2**	5
9/8	375900	4702525	3.10	1	D		5		15							**5**					**75**																					4	**2**	2
9/8	375900	4702525	3.10	2	D		8		35							**10**	2				**45**						0.01															6	**2**	4
9/8	375875	4702525	3.10	1	D				12							**5**	0.01				**80**						3															5	**2**	3
9/8	375875	4702525	3.10	2	D		5		10							**5**					**75**						5															5	**2**	3
9/12	375850	4702525	3.20	1	M		8		2												**90**																					3	**1**	2
9/12	375850	4702525	3.20	2	M		0.01		10							**0.01**	0.01				**90**																					5	**2**	3
9/13	375825	4702525	3.20	1	D		5		3							**1**					**91**																					4	**2**	2
9/13	375825	4702525	3.20	2	D		0.01									**5**					**88**														7							4	**2**	2
9/13	375800	4702525	3.00	1	D		5		30							**5**	5				**55**																					5	**2**	3
9/13	375800	4702525	3.00	2	D		5		15		15					**5**					**60**																					5	**2**	3
9/13	375775	4702525	3.00	1	D				5							**1**	4		**0.01**		**90**																					5	**3**	2
9/13	375775	4702525	3.00	2	D				8		5					**2**	0.01				**85**																					5	**2**	3
9/16	375750	4702525	3.00	1	M				50		1						1				**48**																	0.01				5	**1**	4
9/16	375750	4702525	3.00	2	D				25							**0.01**	5				**70**																					4	**2**	2
9/20	375725	4702525	3.00	1	D				30		25										**45**																					3	**1**	2
9/20	375725	4702525	3.00	2	D				10		0.01					**10**	10				**70**																					5	**2**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/21	375700	4702525	3.00	1	D		1		10		10					8			1		70																					6	3	3
9/21	375700	4702525	3.00	2	D		3		15		10					2	0.01		5		65																					7	3	4
9/21	375675	4702525	3.00	1	D				10							0.01					90																					3	2	1
9/21	375675	4702525	3.00	2	D		8		2												90																					3	1	2
9/21	375650	4702525	3.00	1	D				3							0.01					94														3							4	2	2
9/21	375650	4702525	3.00	2	M		0.01		2		36					2					60																					5	2	3
9/22	375625	4702525	3.00	1	D				0.01							0.01					100																					3	2	1
9/22	375625	4702525	3.00	2	D				1												99																					2	1	1
9/23	375600	4702525	2.60	1	M		0.01		0.01							0.01					100																					4	2	2
9/23	375600	4702525	2.60	2	D				0.01							0.01					100																					3	2	1
9/22	375575	4702525	2.70	1	D				5							0.01					95																					3	2	1
9/22	375575	4702525	2.70	2	D				15							3					82						0.01															4	2	2
9/23	375550	4702525	2.60	1	M				5							0.01					95																					3	2	1
9/23	375550	4702525	2.60	2	M		0.01		0.01												100																					3	1	2
9/26	375525	4702525	2.60	1	D		0.01		98		0.01										2					0.01																5	2	3
9/26	375525	4702525	2.60	2	D		1		95							4			0.01		0.01																					5	3	2
9/26	375500	4702525	2.40	1	D				90							1					4						5															4	2	2
9/26	375500	4702525	2.40	2	D		2		93							2					2					1	0.01								0.01							7	3	4
9/28	375475	4702525	2.40	1	D		0.01		98							1											1															4	1	3
9/28	375475	4702525	2.40	2	D				90							9																			1							3	1	2
9/28	375450	4702525	2.50	1	D		8		65		0.01					0.01			2		0.01						25			0.01												8	3	5
9/28	375450	4702525	2.50	2	M		15		65		0.01					0.01			0.01		10					0.01	10															8	4	4
9/28	375425	4702525	2.60	1	S				50		5					0.01			5		40																					5	3	2
9/28	375425	4702525	2.60	2	M		0.01		52							3					45																					4	2	2
7/5	376650	4702550	0.70	1	O																																					0	0	0
7/5	376650	4702550	0.70	2	O																																					0	0	0
7/5	376625	4702550	0.80	1	T			25	25							11	10		4		3						10			4										8		9	3	6
7/5	376625	4702550	0.80	2	T			33	15		1					5	5		1											33					1			1		5		10	2	8
7/5	376600	4702550	0.85	1	S		1	35	20							15	0.01		0.01											8					10	10				1		10	2	8
7/5	376600	4702550	0.85	2	S			15	10							15	5				0.01					0.01				10					15	25		5		0.01		11	3	8
7/5	376575	4702550	1.00	1	S			35	10							10	0.01				0.01					0.01				5					5	35		0.01				10	3	7
7/5	376575	4702550	1.00	2	S		2	45	3							21					0.01														25	3		1				8	2	6

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/5	376550	4702550	1.10	1	T			60	15		1					15	2																		5			2				7	1	6
7/5	376550	4702550	1.10	2	S			48	5							10	2				0.01									0.01					30	5		0.01				9	2	7
7/5	376525	4702550	1.00	1	S			55	5							10					0.01									0.01						30						6	2	4
7/5	376525	4702550	1.00	2	S			74	5							5	5		0.01											2					5	2				2		9	2	7
7/6	376500	4702550	1.30	1	S			70	5							5	0.01				5					5									5	5		0.01				9	3	6
7/6	376500	4702550	1.30	2	S			35	5												1					0.01									0.01	58		0.01		1		8	2	6
7/6	376475	4702550	1.40	1	S		1	44	10		0.01					20	3				10					0.01			10	0.01					0.01					2		12	3	9
7/6	376475	4702550	1.40	2	S		2	66	7							10	0.01				5					0.01									5	3				2		10	3	7
7/11	376450	4702550	1.50	1	M				10		0.01					75	0.01				15									0.01						0.01				0.01		8	2	6
7/11	376450	4702550	1.50	2	M				5							80	0.01				5															10						5	2	3
7/12	376425	4702550	1.85	1	M				3		0.01					75	0.01				2									0.01		0.01			20	0.01				0.01		10	2	8
7/12	376425	4702550	1.85	2	M				3							89	0.01				3														0.01	5						6	2	4
7/12	376400	4702550	2.00	1	M				5		0.01					65	0.01				30											0.01										6	2	4
7/12	376400	4702550	2.00	2	M		3		5		2					60	0.01				15									0.01					15							8	2	6
7/13	376375	4702550	2.00	1	M		0.01		0.01							85					15																					4	2	2
7/13	376375	4702550	2.00	2	M				2							80					8														10							4	2	2
7/14	376350	4702550	2.20	1	M		2		1							30					39									3						25						6	2	4
7/14	376350	4702550	2.20	2	M		10		1							30					38									1						20						6	2	4
7/19	376325	4702550	2.40	1	M		10		2							5					65									3						15						6	2	4
7/19	376325	4702550	2.40	2	M		3		3							15					52									2					0.01	25						7	2	5
7/19	376300	4702550	2.50	1	D		5		20							45					21									4					5							6	2	4
7/19	376300	4702550	2.50	2	D		5		15		0.01					5					75									0.01												6	2	4
7/20	376275	4702550	2.60	1	S		10		5							25					54									3										3		6	2	4
7/20	376275	4702550	2.60	2	S		30		25							0.01					45																					4	2	2
7/27	376250	4702550	2.60	1	M		40		8							2					50									0.01												5	2	3
7/27	376250	4702550	2.60	2	M		30		10							5					55																			0.01		5	2	3
7/27	376225	4702550	2.70	1	M		25		10							5					50									10					0.01							6	2	4
7/27	376225	4702550	2.70	2	M		30		10							15					40					0.01				5												6	3	3
7/28	376200	4702550	2.90	1	M		25		15							0.01	0.01				50						0.01			10												7	2	5
7/28	376200	4702550	2.90	2	M		30		30							1					34						5			0.01												6	2	4
8/1	376175	4702550	3.00	1	M		45		2							0.01	0.01				53									0.01												6	2	4
8/1	376175	4702550	3.00	2	M		15		5												80																					3	1	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/2	376150	4702550	3.10	1	M		10		5							2					81						0.01			2												6	2	4
8/2	376150	4702550	3.10	2	M		5		10							5					80																					4	2	2
8/3	376125	4702550	3.00	1	M		10		10							10					65									5												5	2	3
8/3	376125	4702550	3.00	2	M		20		5		0.01					5	0.01				70																					6	2	4
8/3	376100	4702550	3.00	1	M		31		3							0.01	0.01				63									3										0.01		7	2	5
8/3	376100	4702550	3.00	2	M		3		0.01												97																					3	1	2
8/4	376075	4702550	3.00	1	M	1	5		5							1	1				85									2												7	2	5
8/4	376075	4702550	3.00	2	M		5		7							10					75									3												5	2	3
8/5	376050	4702550	3.10	1	S				15							5					50									0.01					30					0.01		6	2	4
8/5	376050	4702550	3.10	2	M		15		4							1					30									0.01					50							6	2	4
9/1	376025	4702550	3.20	1	M		3		20							10	0.01				60						7															6	2	4
9/1	376025	4702550	3.20	2	M		10		15							10	4				60						1															6	2	4
9/1	376000	4702550	3.20	1	D		15		15							10	1		0.01		55						4															7	3	4
9/1	376000	4702550	3.20	2	D		15		15		7					2					60						1															6	2	4
9/2	375975	4702550	3.20	1	D				39							3	1				50					2									5							6	3	3
9/2	375975	4702550	3.20	2	D		3		35							10	7		0.01		35						10								0.01							8	3	5
9/6	375950	4702550	3.00	1	D		0.01		18								5				75						2															5	1	4
9/6	375950	4702550	3.00	2	D		25		15							5	5				50																					5	2	3
9/7	375925	4702550	3.20	1	M		6		5							2	2				85														0.01							6	2	4
9/7	375925	4702550	3.20	2	M		3		10							7					75					0.01						5										6	3	3
9/8	375900	4702550	3.40	1	D		10		35							5	5				45																					5	2	3
9/8	375900	4702550	3.40	2	D		3		12							5	0.01				55					20	5															7	3	4
9/8	375875	4702550	3.40	1	D		0.01		3							5	0.01				92																					5	2	3
9/8	375875	4702550	3.40	2	D		2									3					80														15							4	2	2
9/12	375850	4702550	3.30	1	D		15		3							2					80																					4	2	2
9/12	375850	4702550	3.30	2	D		5		5												90																					3	1	2
9/13	375825	4702550	3.20	1	D		2		42										2		54																					4	2	2
9/13	375825	4702550	3.20	2	D				38										2		60																					3	2	1
9/13	375800	4702550	3.10	1	D				0.01							0.01					100																					3	2	1
9/13	375800	4702550	3.10	2	D		1		4												95																					3	1	2
9/13	375775	4702550	3.20	1	D				1							1	1				97																					4	2	2
9/13	375775	4702550	3.20	2	D				2							0.01	2				96																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/16	375750	4702550	3.00	1	D				1							1					98																					3	2	1
9/16	375750	4702550	3.00	2	D		2				5					3	0.01				90																					5	2	3
9/20	375725	4702550	3.00	1	M				5												95																					2	1	1
9/20	375725	4702550	3.00	2	D				0.01												100																					2	1	1
9/21	375700	4702550	3.00	1	D		1		13		0.01					1	0.01				85																					6	2	4
9/21	375700	4702550	3.00	2	D		7		10							3	10				70																					5	2	3
9/21	375675	4702550	3.10	1	D				0.01							0.01					100																					3	2	1
9/21	375675	4702550	3.10	2	D				10												90																					2	1	1
9/21	375650	4702550	3.00	1	D				10												90																					2	1	1
9/21	375650	4702550	3.00	2	D		0.01		10												90																					3	1	2
9/22	375625	4702550	3.00	1	D				15							0.01					85																					3	2	1
9/22	375625	4702550	3.00	2	D		1		4							2					93																					4	2	2
9/23	375600	4702550	2.80	1	M		0.01		1												99																					3	1	2
9/23	375600	4702550	2.80	2	M				0.01												100																					2	1	1
9/22	375575	4702550	2.80	1	D		5		45												50																					3	1	2
9/22	375575	4702550	2.80	2	D		0.01		28							0.01					70														2							5	2	3
9/23	375550	4702550	2.70	1	M				5												95																					2	1	1
9/23	375550	4702550	2.70	2	S				90												10																					2	1	1
9/26	375525	4702550	2.60	1	D		0.01		10							0.01					90																					4	2	2
9/26	375525	4702550	2.60	2	D		0.01		15							0.01					85																					4	2	2
9/26	375500	4702550	2.50	1	M		5		95							0.01	0.01				0.01						0.01								0.01							7	2	5
9/26	375500	4702550	2.50	2	M		2		90							3											0.01								5							5	1	4
9/28	375475	4702550	2.40	1	D				97							0.01			3		0.01					0.01																5	4	1
9/28	375475	4702550	2.40	2	M		4		90							2					4						0.01								0.01							6	2	4
9/28	375450	4702550	2.50	1	M		0.01		60							5					5						30															5	2	3
9/28	375450	4702550	2.50	2	M		0.01		55							5					5						35															5	2	3
9/28	375425	4702550	2.60	1	M			5	60							0.01			10		25																					5	3	2
9/28	375425	4702550	2.60	2	M		2	5	82		0.01					0.01	1		0.01		10					0.01	0.01															10	4	6
10/14	375350	4702550	2.40	1	S		10		75							15					0.01																					4	2	2
10/14	375350	4702550	2.40	2	S		5		85							10					0.01																					4	2	2
10/14	375300	4702550	2.10	1	T				0.01							100																										2	1	1
10/14	375300	4702550	2.10	2	S				34							65					1																					3	2	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/14	375250	4702550	2.40	1	M				90							9			0.01		0.01														1							5	3	2
10/14	375250	4702550	2.40	2	M				70		5					15			5		0.01					5																6	4	2
10/14	375200	4702550	2.50	1	D		0.01		95							1			1																3							5	2	3
10/14	375200	4702550	2.50	2	D				95							5																										2	1	1
10/14	375150	4702550	2.50	1	D				94												0.01					5									1							4	2	2
10/14	375150	4702550	2.50	2	D				80							10																			8	2						4	1	3
10/14	375100	4702550	2.50	1	M		45		45							2					8																					4	2	2
10/14	375100	4702550	2.50	2	M		2		85							3					7														3							5	2	3
10/14	375050	4702550	2.70	1	S				40												60																					2	1	1
10/14	375050	4702550	2.70	2	S				10												90																					2	1	1
10/14	375000	4702550	2.90	1	S																100																					1	1	0
10/14	375000	4702550	2.90	2	S																100																					1	1	0
10/14	374950	4702550	2.80	1	S				10							2					88																					3	2	1
10/14	374950	4702550	2.80	2	M		0.01		5		0.01					45					50																					5	2	3
10/14	374900	4702550	2.60	1	M		2		28							30					40																					4	2	2
10/14	374900	4702550	2.60	2	M				5							35					60																					3	2	1
10/14	374850	4702550	2.70	1	M		2		5							63					30																	0.01				5	2	3
10/14	374850	4702550	2.70	2	M				10		0.01					40					50																					4	2	2
10/14	374800	4702550	2.60	1	M		5		95							0.01					0.01																					4	2	2
10/14	374800	4702550	2.60	2	S				100							0.01																										2	1	1
10/14	374750	4702550	2.40	1	M		14		80		2					3					1																					5	2	3
10/14	374750	4702550	2.40	2	M		5		80							2					13																					4	2	2
10/14	374700	4702550	2.10	1	M		0.01		90												10																					3	1	2
10/14	374700	4702550	2.10	2	M		7		80		3					0.01					10																					5	2	3
7/5	376650	4702575	0.90	1	T		15	5	30							30														10					5			5				7	1	6
7/5	376650	4702575	0.90	2	T		1	1	30							39	5				1						12			3					8							9	2	7
7/5	376625	4702575	0.90	1	T			20	10							10	5									4				41								5		5		8	2	6
7/5	376625	4702575	0.90	2	S		5	5	35							34	0.01				0.01									5					15			1				9	2	7
7/5	376600	4702575	0.90	1	T		1	14	14							15	3		1		1									3					22	22		1		3		12	3	9
7/5	376600	4702575	0.90	2	T			2	10							30	20													33						5						6	1	5
7/5	376575	4702575	0.90	1	S		2	40	5		0.01					12			0.01		0.01															40		1				9	3	6
7/5	376575	4702575	0.90	2	S			38	5							15	2				5					0.01				0.01						35		0.01				9	3	6

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/5	376550	4702575	1.15	1	S			60	8		0.01					5					0.01														8	18		1				8	2	6
7/5	376550	4702575	1.15	2	S		5	54	2							5	2				5									2					5	20		0.01		0.01		11	2	9
7/5	376525	4702575	1.35	1	S		0.01	60	5							20	2				3					5									5					0.01		9	3	6
7/5	376525	4702575	1.35	2	S		2	59	10							15	0.01				2					0.01				0.01						10				2		10	3	7
7/6	376500	4702575	1.40	1	S		1	68	8							1	0.01				0.01									0.01					0.01	20		0.01		2		11	2	9
7/6	376500	4702575	1.40	2	S			80	3							3	0.01				6					3				1					4					0.01		9	3	6
7/6	376475	4702575	1.70	1	S		0.01	15	3							80	0.01				2														0.01							7	2	5
7/6	376475	4702575	1.70	2	S			8	5		0.01					75	0.01				10														0.01	2				0.01		9	2	7
7/11	376450	4702575	1.80	1	S				3							85	0.01				10									2												5	2	3
7/11	376450	4702575	1.80	2	S				1							75					10									0.01		0.01				14						6	2	4
7/12	376425	4702575	2.00	1	M				1		0.01					84					10									0.01		2				3						7	2	5
7/12	376425	4702575	2.00	2	M				2							75	5													3						15						5	1	4
7/12	376400	4702575	2.10	1	M		1		5							57					15									0.01		2				20						7	2	5
7/12	376400	4702575	2.10	2	M		4		5							35					45									6					5							6	2	4
7/13	376375	4702575	2.40	1	M		3		0.01							15					64											3			0.01	15				0.01		8	2	6
7/13	376375	4702575	2.40	2	M		5		15		0.01					13					47									10		0.01				5				5		9	2	7
7/14	376350	4702575	2.30	1	M		7		20							8					35															30						5	2	3
7/14	376350	4702575	2.30	2	M		7		10							20					60									1						2						6	2	4
7/19	376325	4702575	2.60	1	S		4		45							1					50									0.01												5	2	3
7/19	376325	4702575	2.60	2	S		5		5							0.01					85									5												5	2	3
7/20	376300	4702575	2.70	1	M		5		3							12					75									5												5	2	3
7/20	376300	4702575	2.70	2	M		5		5							5					85																					4	2	2
7/20	376275	4702575	2.50	1	M		10		0.01												70									0.01					10	10						6	1	5
7/20	376275	4702575	2.50	2	M		5		10												60														20	5						5	1	4
7/27	376250	4702575	2.80	1	M		30		9							1					60																					4	2	2
7/27	376250	4702575	2.80	2	M		35		10							10					40									5												5	2	3
7/27	376225	4702575	2.90	1	M		38		14		0.01					4					38														6							6	2	4
7/27	376225	4702575	2.90	2	S		5		3							2	0.01				90																					5	2	3
7/28	376200	4702575	3.10	1	M		14		10							6					70									0.01												5	2	3
7/28	376200	4702575	3.10	2	M		15		10							5					70									0.01												5	2	3
8/1	376175	4702575	3.00	1	M		7		7							7					79																					4	2	2
8/1	376175	4702575	3.00	2	M		47		5		0.01					0.01					48									0.01												6	2	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/2	376150	4702575	3.20	1	M		10		5							0.01					85									0.01												5	2	3
8/2	376150	4702575	3.20	2	M		20		10							2					65									3												5	2	3
8/3	376125	4702575	3.10	1	M		25		10							2					60														3							5	2	3
8/3	376125	4702575	3.10	2	M		40		10							3					45					0.01									2							6	3	3
8/4	376100	4702575	3.00	1	M		8		15												77																					3	1	2
8/4	376100	4702575	3.00	2	M		15		10							5					70																					4	2	2
8/4	376075	4702575	3.20	1	M	5	10		5							10					70									0.01												6	2	4
8/4	376075	4702575	3.20	2	M		10		10							5	0.01				75																					5	2	3
8/5	376050	4702575	3.10	1	M		2		10							3	0.01				85									0.01												6	2	4
8/5	376050	4702575	3.10	2	M		15		15							0.01					70									0.01												5	2	3
9/1	376025	4702575	3.20	1	D		5		15							10	7				55						5								3							7	2	5
9/1	376025	4702575	3.20	2	D		3		25							14	0.01		3		45					0.01	10															8	4	4
9/1	376000	4702575	3.30	1	D		10		25							10	2				25						25								3							7	2	5
9/1	376000	4702575	3.30	2	D		0.01		10							5	0.01				85						0.01															6	2	4
9/2	375975	4702575	3.40	1	D		6		4							10					80																	0.01				5	2	3
9/2	375975	4702575	3.40	2	D		5		13							2	0.01				80																					5	2	3
9/6	375950	4702575	3.30	1	D		8		12							15	0.01				65																					5	2	3
9/6	375950	4702575	3.30	2	D		20		2							8					70														0.01							5	2	3
9/7	375925	4702575	3.40	1	D		20		2							8					55														15							5	2	3
9/7	375925	4702575	3.40	2	D		5		5							5					85																					4	2	2
9/8	375900	4702575	3.40	1	D		13		2							5					80						0.01															5	2	3
9/8	375900	4702575	3.40	2	D		5		5							0.01					90																					4	2	2
9/8	375875	4702575	3.50	1	D		5		14							10					55						1								15							6	2	4
9/8	375875	4702575	3.50	2	D		10		5							5					40														40							5	2	3
9/12	375850	4702575	3.30	1	D				0.01												100																					2	1	1
9/12	375850	4702575	3.30	2	D																100					0.01																2	2	0
9/13	375825	4702575	3.30	1	D				3							0.01					97																					3	2	1
9/13	375825	4702575	3.30	2	D		8		3							2					87																					4	2	2
9/13	375800	4702575	3.30	1	D				20							0.01					80																					3	2	1
9/13	375800	4702575	3.30	2	D				20							0.01					80																					3	2	1
9/13	375775	4702575	3.20	1	D		0.01		12							8					80																					4	2	2
9/13	375775	4702575	3.20	2	D				12		1					0.01	2				85																					5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/16	375750	4702575	3.40	1	D				0.01							0.01					100						0.01															4	2	2
9/16	375750	4702575	3.40	2	D		8		0.01							2					90																						4	2	2
9/20	375725	4702575	3.20	1	D		0.01		0.01							0.01					100																						4	2	2
9/20	375725	4702575	3.20	2	D		0.01		0.01							0.01					100																						4	2	2
9/20	375700	4702575	3.00	1	D		10		8							2					80																						4	2	2
9/20	375700	4702575	3.00	2	D		1										9					90																						3	2	1
9/21	375675	4702575	3.10	1	D				0.01							0.01					100																						3	2	1
9/21	375675	4702575	3.10	2	D				10							5					85																						3	2	1
9/21	375650	4702575	3.20	1	D				3														97																						2	1	1
9/21	375650	4702575	3.20	2	D				2							0.01					98																						3	2	1
9/22	375625	4702575	3.00	1	D		0.01		0.01							0.01					100																						4	2	2
9/22	375625	4702575	3.00	2	D				1							0.01					99																						3	2	1
9/23	375600	4702575	2.80	1	M				0.01							0.01					100																						3	2	1
9/23	375600	4702575	2.80	2	M				0.01							0.01					100																						3	2	1
9/22	375575	4702575	2.90	1	M		15		55							0.01			0.01		30																						5	3	2
9/22	375575	4702575	2.90	2	D		40		50							3					0.01						7															5	2	3
9/23	375550	4702575	2.70	1	M		0.01		10							0.01					90																						4	2	2
9/23	375550	4702575	2.70	2	M		0.01		5														95																						3	1	2
9/26	375525	4702575	2.60	1	D		1		39														60																						3	1	2
9/26	375525	4702575	2.60	2	D		0.01		10							0.01					90																						4	2	2
9/26	375500	4702575	2.50	1	D		0.01		90							5					5																						4	2	2
9/26	375500	4702575	2.50	2	D		0.01		90							0.01					10														0.01							5	2	3
9/28	375475	4702575	2.50	1	D		0.01		90							10					0.01																						4	2	2
9/28	375475	4702575	2.50	2	D		3		97							0.01					0.01																						4	2	2
9/28	375450	4702575	2.50	1	D				95							2			3		0.01						0.01															5	3	2
9/28	375450	4702575	2.50	2	D		0.01		94							2			0.01		1						3															6	3	3
9/28	375425	4702575	2.60	1	M		0.01	1	84							0.01			5		10																						6	3	3
9/28	375425	4702575	2.60	2	M		0.01	2	82							5	0.01		1		10																						7	3	4
9/28	375400	4702575	2.60	1	D		0.01		90							2			0.01		8																						5	3	2
9/28	375400	4702575	2.60	2	M				70		7					3					20																						4	2	2
7/5	376625	4702600	0.90	1	S		10	3	45							15					2										5						10		10				8	2	6
7/5	376625	4702600	0.90	2	T		1	5	37		5					30	1				5										5								10		1		10	2	8

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/5	376600	4702600	1.30	1	T			23	30							30														5					7			5				6	1	5
7/5	376600	4702600	1.30	2	S		0.01	10	29							20	0.01				10					0.01				0.01					29			2		0.01		11	3	8
7/5	376575	4702600	1.10	1	T			100																																		1	0	1
7/5	376575	4702600	1.10	2	S			54	10							20	5		0.01		5									5					0.01			1		0.01		10	3	7
7/5	376550	4702600	1.30	1	S		1	50	10							15	1				10									2						10		0.01		1		10	2	8
7/5	376550	4702600	1.30	2	S		5	43	5		0.01					5	0.01				15									2					5	15		5		0.01		12	2	10
7/5	376525	4702600	1.35	1	T		2	60	15								1				10									2					10							7	1	6
7/5	376525	4702600	1.35	2	S			58	5		0.01					20	0.01				5									0.01					2	10		0.01		0.01		11	2	9
7/6	376500	4702600	1.60	1	S		5	0.01	1							83	1				10																			0.01		7	2	5
7/6	376500	4702600	1.60	2	S			0.01	0.01							88	0.01				10					0.01									2	0.01						8	3	5
7/6	376475	4702600	1.80	1	S				3							82					10					0.01										5						5	3	2
7/6	376475	4702600	1.80	2	S		0.01		0.01							90					8														2	0.01						6	2	4
7/11	376450	4702600	2.00	1	S				15							70					15																					3	2	1
7/11	376450	4702600	2.00	2	S				2							40	2				50									2		0.01			2	2						8	2	6
7/12	376425	4702600	2.25	1	S				2							5	0.01				78									15										0.01		6	2	4
7/12	376425	4702600	2.25	2	S				2							2	0.01				61									10						25				0.01		7	2	5
7/12	376400	4702600	2.35	1	M		5		4							6					30											10				45						6	2	4
7/12	376400	4702600	2.35	2	M		5		5							40					35									10						5						6	2	4
7/13	376375	4702600	2.50	1	M		10		2							5					81									2										0.01		6	2	4
7/13	376375	4702600	2.50	2	M		7		10							3					70															10						5	2	3
7/14	376350	4702600	2.50	1	M		5		30							10					38									15					2							6	2	4
7/14	376350	4702600	2.50	2	M	0.01	10		40							10					39									0.01										1		7	2	5
7/19	376325	4702600	2.50	1	M		12		3							0.01					65															20						5	2	3
7/19	376325	4702600	2.50	2	M		25		25							0.01					48									2												5	2	3
7/20	376300	4702600	2.80	1	M		5		7							2					85									1												5	2	3
7/20	376300	4702600	2.80	2	M		5		5							5					85																					4	2	2
7/20	376275	4702600	2.80	1	M		25		10							8					52									5												5	2	3
7/20	376275	4702600	2.80	2	M		15		15							0.01	0.01				68									2												6	2	4
7/27	376250	4702600	2.90	1	M		15		10							2					70									0.01					3							6	2	4
7/27	376250	4702600	2.90	2	M		20		5							5	0.01				70																			0.01		6	2	4
7/27	376225	4702600	3.05	1	M		7		3							2					87									1												5	2	3
7/27	376225	4702600	3.05	2	M		10		3							2					85																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/28	376200	4702600	3.00	1	M		27		5							**5**					**60**									3												5	**2**	3
7/28	376200	4702600	3.00	2	M		30		10							**5**					**55**																					4	**2**	2
8/1	376175	4702600	3.10	1	M		20		10							**5**					**65**																					4	**2**	2
8/1	376175	4702600	3.10	2	M		10		5												**85**																					3	**1**	2
8/2	376150	4702600	3.20	1	M		42		15							**3**	0.01				**40**																					5	**2**	3
8/2	376150	4702600	3.20	2	M		46		5							**3**					**46**																					4	**2**	2
8/3	376125	4702600	3.10	1	S		5		10							**5**					**80**																					4	**2**	2
8/3	376125	4702600	3.10	2	S		10		5							**0.01**					**80**									5												5	**2**	3
8/4	376100	4702600	3.10	1	M		10		4							**1**	0.01				**85**																					5	**2**	3
8/4	376100	4702600	3.10	2	M		20		15								0.01				**65**																					4	**1**	3
8/4	376075	4702600	3.20	1	S		15		10							**10**					**65**								0.01													5	**2**	3
8/4	376075	4702600	3.20	2	M		10		15							**5**					**68**									2												5	**2**	3
8/5	376050	4702600	3.30	1	M		15		10							**7**					**63**									5												5	**2**	3
8/5	376050	4702600	3.30	2	M		6		5							**2**	0.01				**85**									2												6	**2**	4
9/1	376025	4702600	3.50	1	M		8		2							**10**					**80**																					4	**2**	2
9/1	376025	4702600	3.50	2	M		5		5		0.01					**10**	5				**75**					**0.01**	0.01															8	**3**	5
9/1	376000	4702600	3.20	1	D		3		5							**2**	3				**87**						0.01															6	**2**	4
9/1	376000	4702600	3.20	2	D		35		6							**9**					**50**																					4	**2**	2
9/2	375975	4702600	3.50	1	D		15		6							**10**					**65**						0.01								4							6	**2**	4
9/2	375975	4702600	3.50	2	D		2		3							**3**					**80**														12							5	**2**	3
9/6	375950	4702600	3.30	1	D		9		1							**0.01**					**90**																					4	**2**	2
9/6	375950	4702600	3.30	2	D		7		20							**2**					**70**					**1**																5	**3**	2
9/7	375925	4702600	3.50	1	D		10		10							**15**					**65**														0.01							5	**2**	3
9/7	375925	4702600	3.50	2	D		6		10		0.01					**15**					**65**														4							6	**2**	4
9/8	375900	4702600	3.50	1	D		18		11							**11**					**60**																					4	**2**	2
9/8	375900	4702600	3.50	2	D		10		40							**5**					**45**																					4	**2**	2
9/8	375875	4702600	3.50	1	D		15		5		0.01					**15**					**55**														10							6	**2**	4
9/8	375875	4702600	3.50	2	D		10		25							**25**					**25**														15							5	**2**	3
9/12	375850	4702600	3.40	1	D		5		5							**0.01**					**90**						0.01															5	**2**	3
9/12	375850	4702600	3.40	2	D		2		3												**95**																					3	**1**	2
9/13	375825	4702600	3.40	1	D		0.01									**0.01**					**100**											0.01										4	**2**	2
9/13	375825	4702600	3.40	2	D				1							**0.01**					**99**																					3	**2**	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/15	375800	4702600	3.40	1	D		0.01		3							0.01					97																					4	2	2
9/15	375800	4702600	3.40	2	D				2							3					95																					3	2	1
9/13	375775	4702600	3.40	1	D		0.01		2							5					93																					4	2	2
9/13	375775	4702600	3.40	2	D		8		20							2					70																					4	2	2
9/16	375750	4702600	3.40	1	D		4		1							0.01					95																					4	2	2
9/16	375750	4702600	3.40	2	D				1							0.01					99																					3	2	1
9/20	375725	4702600	3.30	1	D		2		0.01							0.01					98																					4	2	2
9/20	375725	4702600	3.30	2	D		2		1												97																					3	1	2
9/20	375700	4702600	3.40	1	D				1							9					90																					3	2	1
9/20	375700	4702600	3.40	2	D		5		0.01							10					85																					4	2	2
9/21	375675	4702600	3.20	1	D				0.01							1					99																					3	2	1
9/21	375675	4702600	3.20	2	D				0.01							10					90																					3	2	1
9/21	375650	4702600	3.30	1	D		0.01		4		3					0.01					93																					5	2	3
9/21	375650	4702600	3.30	2	D		3		1		0.01					4					92																					5	2	3
9/22	375625	4702600	3.00	1	D		2		4							0.01					94																					4	2	2
9/22	375625	4702600	3.00	2	D		2		8							0.01					90																					4	2	2
9/23	375600	4702600	3.20	1	D		50		20							20					0.01						0.01			10												6	2	4
9/23	375600	4702600	3.20	2	D		20		70							10					0.01									0.01												5	2	3
9/22	375575	4702600	3.10	1	M		15		70							15					0.01																					4	2	2
9/22	375575	4702600	3.10	2	M		15		75							10			0.01																							4	2	2
9/23	375550	4702600	2.70	1	M		0.01		45							0.01					55																					4	2	2
9/23	375550	4702600	2.70	2	M		2		53							0.01					45																					4	2	2
9/26	375525	4702600	2.80	1	D		0.01		2												98																					3	1	2
9/26	375525	4702600	2.80	2	D		5		10												85																					3	1	2
9/26	375500	4702600	2.60	1	M				0.01												100																					2	1	1
9/26	375500	4702600	2.60	2	M		2		25		8										65																					4	1	3
9/28	375475	4702600	2.50	1	D				100												0.01																					2	1	1
9/28	375475	4702600	2.50	2	D				100							0.01																										2	1	1
9/28	375450	4702600	2.50	1	M				100							0.01					0.01																					3	2	1
9/28	375450	4702600	2.50	2	M		5		90							0.01					5																					4	2	2
9/28	375425	4702600	2.60	1	D		2		80							3	0.01				0.01						15															6	2	4
9/28	375425	4702600	2.60	2	D	0.01			85		0.01					5			0.01		2						8															7	3	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/28	375400	4702600	2.60	1	D				87							**3**			**4**		**6**																					4	**3**	1
9/28	375400	4702600	2.60	2	D		0.01		70							**2**					**23**									5												5	**2**	3
10/14	375300	4702600	2.40	1	S		0.01		90							**10**					**0.01**																					4	**2**	2
10/14	375300	4702600	2.40	2	S				40							**60**					**0.01**																					3	**2**	1
10/14	375250	4702600	2.50	1	S				95							**5**	0.01				**0.01**																					4	**2**	2
10/14	375250	4702600	2.50	2	S			2	85		8					**5**					**0.01**																					5	**2**	3
10/14	375200	4702600	2.50	1	D				99							**1**					**0.01**																					3	**2**	1
10/14	375200	4702600	2.50	2	D				100							**0.01**			**0.01**																0.01							4	**2**	2
10/14	375150	4702600	2.70	1	D				98							**2**					**0.01**																					3	**2**	1
10/14	375150	4702600	2.70	2	D				96		0.01					**3**					**0.01**														1							5	**2**	3
10/14	375100	4702600	2.60	1	M				70												**25**														5			0.01				4	**1**	3
10/14	375100	4702600	2.60	2	M				80							**0.01**					**20**														0.01							4	**2**	2
10/14	375050	4702600	2.80	1	M				0.01							**0.01**					**100**																					3	**2**	1
10/14	375050	4702600	2.80	2	D		5		15							**5**					**75**														0.01							5	**2**	3
10/14	375000	4702600	2.70	1	S				2												**98**																					2	**1**	1
10/14	375000	4702600	2.70	2	M											**0.01**					**100**																					2	**2**	0
10/14	374950	4702600	3.00	1	S											**0.01**					**100**																					2	**2**	0
10/14	374950	4702600	3.00	2	M				3							**0.01**					**97**																					3	**2**	1
10/14	374900	4702600	2.90	1	M				5		3					**62**					**30**																					4	**2**	2
10/14	374900	4702600	2.90	2	M		0.01		30							**45**					**25**																					4	**2**	2
10/14	374850	4702600	2.80	1	D		0.01		10							**85**					**5**																					4	**2**	2
10/14	374850	4702600	2.80	2	D		3		30							**57**					**10**																					4	**2**	2
10/14	374800	4702600	2.80	1	D		1		25		4					**70**					**0.01**																	0.01				6	**2**	4
10/14	374800	4702600	2.80	2	D		1		39							**60**																						0.01				4	**1**	3
10/14	374750	4702600	2.50	1	M		3		92							**5**					**0.01**																					4	**2**	2
10/14	374750	4702600	2.50	2	M		5		70		5					**20**					**0.01**																	0.01				6	**2**	4
10/14	374700	4702600	2.40	1	T		5		40		1					**40**					**14**																					5	**2**	3
10/14	374700	4702600	2.40	2	M		3		10		3					**4**					**80**																					5	**2**	3
10/14	374650	4702600	1.90	1	D		0.01		50		40					**5**																						5				5	**1**	4
10/14	374650	4702600	1.90	2	D		5		44		44					**2**																						5				5	**1**	4
7/5	376625	4702625	1.00	1	T		15		60							**20**	4									**1**																5	**2**	3
7/5	376625	4702625	1.00	2	S		5	4	55							**25**	1				**0.01**									10								0.01				8	**2**	6

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/5	376600	4702625	1.00	1	S		0.01	10	34							15	0.01				10														30			1				8	2	6
7/5	376600	4702625	1.00	2	S		2	0.01	20							6	0.01													0.01					20	50		2				9	1	8
7/5	376575	4702625	1.20	1	S		8	25	20							5	1				12									25								4		0.01		9	2	7
7/5	376575	4702625	1.20	2	S			25	15							5	5				25									15								5		5		8	2	6
7/5	376550	4702625	1.40	1	S			43	5							10	5				20					0.01				1					15			0.01		1		10	3	7
7/5	376550	4702625	1.40	2	S		5	30	10							17	5				13					2				5						13		0.01		0.01		11	3	8
7/5	376525	4702625	1.90	1	S			43	10		0.01					20					2									5					0.01	20						8	2	6
7/5	376525	4702625	1.90	2	S			53	10							15	0.01				5					2				0.01					5	10		0.01		0.01		11	3	8
7/6	376500	4702625	1.90	1	S				3							60	0.01				36									1										0.01		6	2	4
7/6	376500	4702625	1.90	2	S		2		5							40	0.01				38															15						6	2	4
7/6	376475	4702625	2.10	1	S				2							50					38									5					5							5	2	3
7/6	376475	4702625	2.10	2	S		15		15							5					63															2						5	2	3
7/11	376450	4702625	2.10	1	S		1		9							15					55									10					10							6	2	4
7/11	376450	4702625	2.10	2	S				10		0.01					25					25									10					30							6	2	4
7/12	376425	4702625	2.45	1	M				30							5					55									0.01		5				5				0.01		7	2	5
7/12	376425	4702625	2.45	2	M				25							15	0.01				30									0.01						30						6	2	4
7/12	376400	4702625	2.50	1	S		5		30							3	0.01				60											2								0.01		7	2	5
7/12	376400	4702625	2.50	2	S		5		10							15					65											5								0.01		6	2	4
7/13	376375	4702625	2.50	1	S		5		3							0.01					92									0.01												5	2	3
7/13	376375	4702625	2.50	2	S		8		15							10					65									2										0.01		6	2	4
7/14	376350	4702625	2.60	1	M		20		11							5					60									4												5	2	3
7/14	376350	4702625	2.60	2	M		15		35							8					37									5												5	2	3
7/19	376325	4702625	2.70	1	M		5		5							1					89																					4	2	2
7/19	376325	4702625	2.70	2	M		10		10												80																					3	1	2
7/20	376300	4702625	2.95	1	M		5		10							0.01					80									5												5	2	3
7/20	376300	4702625	2.95	2	M		8		9							2					80									1												5	2	3
7/20	376275	4702625	2.80	1	M		15		10							5					70																					4	2	2
7/20	376275	4702625	2.80	2	M		10		5							5					70									0.01						10						6	2	4
7/27	376250	4702625	3.00	1	M		16		15							2					65						0.01			2												6	2	4
7/27	376250	4702625	3.00	2	M		40		5							5					50									0.01												5	2	3
7/27	376225	4702625	3.00	1	S		30		0.01							10					60									0.01												5	2	3
7/27	376225	4702625	3.00	2	S		75		5												20									0.01												4	1	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/28	376200	4702625	3.10	1	M		5		2							2					90					1																5	3	2
7/28	376200	4702625	3.10	2	M		15		10							3					70					2				0.01												6	3	3
8/1	376175	4702625	3.10	1	M		10		5							0.01	0.01				84									1												6	2	4
8/1	376175	4702625	3.10	2	M		30		3							2					65									0.01												5	2	3
8/2	376150	4702625	3.20	1	M		30		8							2					60																					4	2	2
8/2	376150	4702625	3.20	2	M		10		10							5					63					2										10						6	3	3
8/3	376125	4702625	3.10	1	M		16		9							33	5				32									5												6	2	4
8/3	376125	4702625	3.10	2	M		47		3							2					48									0.01												5	2	3
8/4	376100	4702625	3.20	1	M		27		10							3					60																					4	2	2
8/4	376100	4702625	3.20	2	M		2		10							15					71									2												5	2	3
8/4	376075	4702625	3.40	1	M		40		10							10					40									0.01												5	2	3
8/4	376075	4702625	3.40	2	M		36		15							3					45						0.01			1												6	2	4
8/5	376050	4702625	3.50	1	M		13		10							2					75					0.01				0.01												6	3	3
8/5	376050	4702625	3.50	2	S				2							0.01					98																					3	2	1
9/1	376025	4702625	3.50	1	M		10		5							10	5				70																					5	2	3
9/1	376025	4702625	3.50	2	M				5							5	5				85									0.01												5	2	3
9/1	376000	4702625	3.30	1	D		2		15							8					75																					4	2	2
9/1	376000	4702625	3.30	2	D		5		35							4	1				55						0.01															6	2	4
9/2	375975	4702625	3.40	1	D		3		4							5					85						3															5	2	3
9/2	375975	4702625	3.40	2	D		8		2							10					80																					4	2	2
9/6	375950	4702625	3.50	1	D				20							9					70						1															4	2	2
9/6	375950	4702625	3.50	2	D		19		35							1					45																					4	2	2
9/7	375925	4702625	3.50	1	D		19		20							1					60																					4	2	2
9/7	375925	4702625	3.50	2	D		8		10							15					65						0.01								2							6	2	4
9/8	375900	4702625	3.50	1	D		10		35							3					50						2															5	2	3
9/8	375900	4702625	3.50	2	D		8		60							2	0.01				30																					5	2	3
9/8	375875	4702625	3.50	1	D		5		10							15					55						15															5	2	3
9/8	375875	4702625	3.50	2	D		10		10							30					50						0.01															5	2	3
9/12	375850	4702625	3.50	1	M				40												60																					2	1	1
9/12	375850	4702625	3.50	2	D		10		0.01							5					85																					4	2	2
9/13	375825	4702625	3.50	1	D				30							3					66														1							4	2	2
9/13	375825	4702625	3.50	2	D		5		8							0.01					87																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/15	375800	4702625	3.50	1	D		3		12							5					80						0.01															5	2	3
9/15	375800	4702625	3.50	2	D		0.01		40							0.01					60																					4	2	2
9/13	375775	4702625	3.50	1	D		4		20							20					55														1							5	2	3
9/13	375775	4702625	3.50	2	D		10		20							10					60																					4	2	2
9/16	375750	4702625	3.50	1	D				2							13					85																					3	2	1
9/16	375750	4702625	3.50	2	D		5		2							5					88																					4	2	2
9/20	375725	4702625	3.50	1	D		1		0.01							1					98																					4	2	2
9/20	375725	4702625	3.50	2	D		0.01		0.01		3					2					90						5															6	2	4
9/20	375700	4702625	3.50	1	D		10		15							5					70																					4	2	2
9/20	375700	4702625	3.50	2	D		2		15							13					70																					4	2	2
9/21	375675	4702625	3.50	1	D		5		44							10					35									3		0.01			3							7	2	5
9/21	375675	4702625	3.50	2	D		10		70							8					10					2																5	3	2
9/21	375650	4702625	3.30	1	D		2		55							25					8														10							5	2	3
9/21	375650	4702625	3.30	2	D		5		75		0.01					5			0.01		15																					6	3	3
9/22	375625	4702625	3.10	1	D		15		70							5					10																					4	2	2
9/22	375625	4702625	3.10	2	D		14		65							10			1		10						0.01															6	3	3
9/23	375600	4702625	3.40	1	D		60		15							25																						0.01				4	1	3
9/23	375600	4702625	3.40	2	D		64		1		0.01					35										0.01																5	2	3
9/22	375575	4702625	3.30	1	M		10		10							80			0.01		0.01						0.01															6	3	3
9/22	375575	4702625	3.30	2	M		2		8							80					0.01						10															5	2	3
9/23	375550	4702625	2.80	1	D		20		65		0.01					5	0.01				10						0.01															7	2	5
9/23	375550	4702625	2.80	2	D		15		75							5					5																					4	2	2
9/26	375525	4702625	2.80	1	D				1												99																					2	1	1
9/26	375525	4702625	2.80	2	D		2		1							0.01					97																					4	2	2
9/26	375500	4702625	2.60	1	M		5									5					90																					3	2	1
9/26	375500	4702625	2.60	2	M				3							2					95																					3	2	1
9/28	375475	4702625	2.60	1	M		0.01		3							0.01					97																					4	2	2
9/28	375475	4702625	2.60	2	M				15							10					75																					3	2	1
9/28	375450	4702625	2.50	1	D		7		90							2					1						0.01															5	2	3
9/28	375450	4702625	2.50	2	D				85							2					0.01						13															4	2	2
9/28	375425	4702625	2.60	1	D				100							0.01					0.01																					3	2	1
9/28	375425	4702625	2.60	2	D				70												0.01						30															3	1	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/28	375400	4702625	2.70	1	M		0.01		50							1					49																					4	2	2
9/28	375400	4702625	2.70	2	M		3		82							0.01					15																					4	2	2
7/5	376625	4702650	1.00	1	S				50							45					0.01					5				0.01												5	3	2
7/5	376625	4702650	1.00	2	T		5		40							39	1				5														5			5				7	2	5
7/5	376600	4702650	1.20	1	T		10		40							25					20									5												5	2	3
7/5	376600	4702650	1.20	2	T		4	1	43							30	1				10									1								10				8	2	6
7/5	376575	4702650	1.70	1	T				35							22					35									3								5				5	2	3
7/5	376575	4702650	1.70	2	S			0.01	50							5					40					0.01									5	0.01		0.01		0.01		9	3	6
7/5	376550	4702650	1.70	1	S		1		1		0.01					50					18					5									10	15						8	3	5
7/5	376550	4702650	1.70	2	S		1		10							65					20									0.01					0.01	4				0.01		8	2	6
7/5	376525	4702650	2.00	1	M		2		15		0.01					68					10									2					0.01	3						8	2	6
7/5	376525	4702650	2.00	2	M		0.01		15		0.01					66					15									2					0.01	2						8	2	6
7/6	376500	4702650	2.00	1	S		1		26		0.01					30	0.01				30									3						10						8	2	6
7/6	376500	4702650	2.00	2	S		5		25		0.01					35					25					0.01				5										5		8	3	5
7/6	376475	4702650	2.20	1	S		2		10							45					40									3												5	2	3
7/6	376475	4702650	2.20	2	S		0.01		30							33					34									3												5	2	3
7/11	376450	4702650	2.30	1	S		1		10							10	0.01				79									0.01										0.01		7	2	5
7/11	376450	4702650	2.30	2	S		2		20							20					58									0.01										0.01		6	2	4
7/12	376425	4702650	2.50	1	S		5		5							5					81									1					3							6	2	4
7/12	376425	4702650	2.50	2	S		10		25							5					55									0.01		5			0.01							7	2	5
7/12	376400	4702650	2.50	1	S		5		25							2					65											3										5	2	3
7/12	376400	4702650	2.50	2	S		10		15												60									15												4	1	3
7/13	376375	4702650	2.60	1	T		25		54							1					10									10												5	2	3
7/13	376375	4702650	2.60	2	S		3		15							7					75									0.01										0.01		6	2	4
7/14	376350	4702650	2.70	1	M		13		30							5					50									2												5	2	3
7/14	376350	4702650	2.70	2	M		13		20							2					60									5						0.01						6	2	4
7/19	376325	4702650	2.80	1	M		1		5							9					55									5						25						6	2	4
7/19	376325	4702650	2.80	2	M		3		2							0.01					80									0.01						15						6	2	4
7/20	376300	4702650	3.00	1	M		3		5							3	0.01				86									3												6	2	4
7/20	376300	4702650	3.00	2	M		4		8							3					85																					4	2	2
7/20	376275	4702650	2.90	1	M		35		5							3					57																					4	2	2
7/20	376275	4702650	2.90	2	M		10		5							10					75									0.01												5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/27	376250	4702650	3.00	1	M		20		15							10	0.01				55																					5	2	3
7/27	376250	4702650	3.00	2	M		35		12							1					50									2												5	2	3
7/27	376225	4702650	3.00	1	M		15		2							3					80																					4	2	2
7/27	376225	4702650	3.00	2	M		30		5							1					64									0.01												5	2	3
7/28	376200	4702650	3.20	1	M		15		3												82									0.01												4	1	3
7/28	376200	4702650	3.20	2	M		15		10												75									0.01												4	1	3
8/1	376175	4702650	3.10	1	M		5		2							2					91																					4	2	2
8/1	376175	4702650	3.10	2	M		25		25												50									0.01												4	1	3
8/2	376150	4702650	3.30	1	M		40		5							2					53									0.01												5	2	3
8/2	376150	4702650	3.30	2	M		15		15							2					68									0.01												5	2	3
8/3	376125	4702650	3.20	1	D		49		15							1					35																					4	2	2
8/3	376125	4702650	3.20	2	D		85		5							1					9																					4	2	2
8/4	376100	4702650	3.30	1	M		25		10							5					60																			0.01		5	2	3
8/4	376100	4702650	3.30	2	M		65		15							5					15					0.01																5	3	2
8/4	376075	4702650	3.40	1	M		35		10							2					52									1												5	2	3
8/4	376075	4702650	3.40	2	M		45		12							3					40					0.01																5	3	2
8/5	376050	4702650	3.50	1	D		30		25							5	0.01				40									0.01												6	2	4
8/5	376050	4702650	3.50	2	D		8		5							2					85									0.01												5	2	3
9/1	376025	4702650	3.50	1	M		8		20							1					70															1						5	2	3
9/1	376025	4702650	3.50	2	M		7		20							5					65						3															5	2	3
9/1	376000	4702650	3.40	1	D				10							5	0.01				75														10							5	2	3
9/1	376000	4702650	3.40	2	M				2							26					70																	2				4	2	2
9/2	375975	4702650	3.50	1	D		7		2							1					90																	0.01				5	2	3
9/2	375975	4702650	3.50	2	D		5		20												75						0.01															4	1	3
9/6	375950	4702650	3.50	1	D		5		5												85						5															4	1	3
9/6	375950	4702650	3.50	2	D		5		5							5					85																					4	2	2
9/7	375925	4702650	3.50	1	D		2		3							5					90																					4	2	2
9/7	375925	4702650	3.50	2	D				2							3					95						0.01															4	2	2
9/8	375900	4702650	3.60	1	D		10		15							10					60						5															5	2	3
9/8	375900	4702650	3.60	2	D		5		32							3					60																					4	2	2
9/8	375875	4702650	3.60	1	D		0.01		15							5					80															0.01						5	2	3
9/8	375875	4702650	3.60	2	D		5		45							0.01					50																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/12	375850	4702650	3.70	1	D		5		40							**5**					**50**									0.01												5	**2**	3
9/12	375850	4702650	3.70	2	D		0.01		5							**5**					**90**																					4	**2**	2
9/13	375825	4702650	3.60	1	D		2		0.01							**2**					**96**					**0.01**																5	**3**	2
9/13	375825	4702650	3.60	2	D		6		5								0.01				**89**																					4	**1**	3
9/15	375800	4702650	3.50	1	D		5		25							**10**					**60**																					4	**2**	2
9/15	375800	4702650	3.50	2	D		10		38							**2**					**50**																					4	**2**	2
9/15	375775	4702650	3.50	1	D		1									**0.01**					**99**																					3	**2**	1
9/15	375775	4702650	3.50	2	D		10		20							**5**					**65**																					4	**2**	2
9/16	375750	4702650	3.50	1	D		15		2							**3**					**80**																					4	**2**	2
9/16	375750	4702650	3.50	2	D		10									**10**					**80**																					3	**2**	1
9/20	375725	4702650	3.50	1	M		15		20							**15**					**50**																					4	**2**	2
9/20	375725	4702650	3.50	2	M				20							**10**					**70**																					3	**2**	1
9/20	375700	4702650	3.60	1	D		3		75							**15**					**5**						2															5	**2**	3
9/20	375700	4702650	3.60	2	D		15		65		0.01					**10**					**10**																					5	**2**	3
9/21	375675	4702650	3.60	1	D		20		50							**15**					**12**					**3**																5	**3**	2
9/21	375675	4702650	3.60	2	D		13		45		2					**20**					**20**																					5	**2**	3
9/21	375650	4702650	3.40	1	M		5		85							**5**					**5**																					4	**2**	2
9/21	375650	4702650	3.40	2	D		15		75		0.01					**3**					**7**									0.01												6	**2**	4
9/22	375625	4702650	3.40	1	M		25		60							**0.01**			**3**		**7**						5															6	**3**	3
9/22	375625	4702650	3.40	2	M		30		50							**8**					**10**														2							5	**2**	3
9/23	375600	4702650	3.40	1	D		5		80							**15**																										3	**1**	2
9/23	375600	4702650	3.40	2	D		5		75							**20**			**0.01**		**0.01**																					5	**3**	2
9/22	375575	4702650	3.40	1	M		20		20							**59**																						1				4	**1**	3
9/22	375575	4702650	3.40	2	M		40		20		3					**37**	0.01																									5	**1**	4
9/23	375550	4702650	3.00	1	M		5		75							**20**			**0.01**		**0.01**																					5	**3**	2
9/23	375550	4702650	3.00	2	M		30		68							**2**					**0.01**																					4	**2**	2
9/26	375525	4702650	3.00	1	M				3												**97**																					2	**1**	1
9/26	375525	4702650	3.00	2	M				5												**95**																					2	**1**	1
9/26	375500	4702650	2.90	1	D				8							**2**					**90**																					3	**2**	1
9/26	375500	4702650	2.90	2	M				5												**90**														5							3	**1**	2
9/28	375475	4702650	2.60	1	M				30												**70**																					2	**1**	1
9/28	375475	4702650	2.60	2	M		2		30							**3**					**65**																					4	**2**	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/28	375450	4702650	2.60	1	D				98							2					0.01						0.01															4	2	2
9/28	375450	4702650	2.60	2	D	2	1		94							0.01					1						2															6	2	4
9/28	375425	4702650	2.60	1	D				88		6					2			3		1																					5	3	2
9/28	375425	4702650	2.60	2	M				85							0.01			0.01		10						5															5	3	2
9/28	375400	4702650	2.70	1	M		0.01		70							5					15														10							5	2	3
9/28	375400	4702650	2.70	2	M				70		0.01					23			0.01		5						0.01											2				7	3	4
10/14	375400	4702650	2.60	1	M		0.01		65							0.01					35																					4	2	2
10/14	375400	4702650	2.60	2	M				90		0.01					1	0.01				5														4							6	2	4
9/28	375375	4702650	2.70	1	M		3		45		0.01					2					50																					5	2	3
9/28	375375	4702650	2.70	2	M		20		10							5					65																					4	2	2
10/14	375350	4702650	2.60	1	S		0.01		60							0.01					40																					4	2	2
10/14	375350	4702650	2.60	2	S				50		0.01					5					45																	0.01				5	2	3
10/14	375300	4702650	2.60	1	M				93							2					5																					3	2	1
10/14	375300	4702650	2.60	2	M				87		5					5																			3							4	1	3
10/14	375250	4702650	2.60	1	M		3		92							5					0.01						0.01								0.01							6	2	4
10/14	375250	4702650	2.60	2	M				85							5	8	0.01			2																					5	2	3
10/14	375200	4702650	2.60	1	M		2		95		0.01					0.01					3																					5	2	3
10/14	375200	4702650	2.60	2	M				85							12			0.01		3																					4	3	1
10/14	375150	4702650	2.80	1	M				96							2					2																					3	2	1
10/14	375150	4702650	2.80	2	M				95							4					1																					3	2	1
10/14	375100	4702650	2.90	1	T				45												55																					2	1	1
10/14	375100	4702650	2.90	2	S				60												40																					2	1	1
10/14	375050	4702650	3.00	1	M				0.01												100																					2	1	1
10/14	375050	4702650	3.00	2	M																100																					1	1	0
10/14	375000	4702650	3.00	1	M																100																					1	1	0
10/14	375000	4702650	3.00	2	M																100																					1	1	0
10/14	374950	4702650	3.00	1	M																100																					1	1	0
10/14	374950	4702650	3.00	2	M																100																					1	1	0
10/14	374900	4702650	3.00	1	M											0.01					100																					2	2	0
10/14	374900	4702650	3.00	2	M		0.01									40					60																					3	2	1
10/14	374850	4702650	3.00	1	M				5							50					45																					3	2	1
10/14	374850	4702650	3.00	2	D		5		60							35					0.01																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/14	374800	4702650	3.00	1	M		2		3		0.01					65					30																					5	2	3
10/14	374800	4702650	3.00	2	S				10		1					55					34																					4	2	2
10/14	374750	4702650	2.80	1	S		0.01		9		1					50					40																					5	2	3
10/14	374750	4702650	2.80	2	M		5		15		0.01					70					10																	0.01				6	2	4
10/14	374700	4702650	2.50	1	M		5		10		10					35					40																					5	2	3
10/14	374700	4702650	2.50	2	M		20		30		20					20					10																					5	2	3
10/14	374650	4702650	2.10	1	S				0.01												100																	0.01				3	1	2
10/14	374650	4702650	2.10	2	S						0.01										100																	0.01				3	1	2
7/5	376600	4702675	1.30	1	T		2	1	35							19					35									3								5				7	2	5
7/5	376600	4702675	1.30	2	S		5		20							20					20									20					5			10				7	2	5
7/5	376575	4702675	1.60	1	T		8		10							10					65									5								2				6	2	4
7/5	376575	4702675	1.60	2	S		1		15							10					70																	4				5	2	3
7/5	376550	4702675	1.80	1	S				30							38					30									2										0.01		5	2	3
7/5	376550	4702675	1.80	2	S		0.01		30		0.01					35					35									0.01										0.01		7	2	5
7/5	376525	4702675	1.90	1	S		2		33							30					34									0.01						1				0.01		7	2	5
7/5	376525	4702675	1.90	2	M		5		15		0.01					65					15					0.01				0.01												7	3	4
7/6	376500	4702675	2.20	1	M		5		70		0.01					15					10					0.01				0.01												7	3	4
7/6	376500	4702675	2.20	2	M		0.01		65							0.01					35									0.01					0.01							6	2	4
7/6	376475	4702675	2.30	1	S		8		15							5					65					0.01				7					0.01					0.01		8	3	5
7/6	376475	4702675	2.30	2	S		5		60		0.01					5					20									10												6	2	4
7/11	376450	4702675	2.40	1	S				50							2					46									2												4	2	2
7/11	376450	4702675	2.40	2	S		3		47							10					40									0.01												5	2	3
7/12	376425	4702675	2.60	1	M		15		20							2					60											3			0.01					0.01		7	2	5
7/12	376425	4702675	2.60	2	M		5		5							5					73					5				5										2		7	3	4
7/12	376400	4702675	2.65	1	T		40		40							10					10																					4	2	2
7/12	376400	4702675	2.65	2	S		1		46							3					50									0.01										0.01		6	2	4
7/13	376375	4702675	2.80	1	S		3		10							5					79									3										0.01		6	2	4
7/13	376375	4702675	2.80	2	S		10		15							4					70									1												5	2	3
7/14	376350	4702675	2.70	1	M		15		35							0.01					50					0.01				0.01												6	3	3
7/14	376350	4702675	2.70	2	M		20		30							0.01					50									0.01												5	2	3
7/19	376325	4702675	2.90	1	M		5		5							3					85									2												5	2	3
7/19	376325	4702675	2.90	2	M		5		15							0.01					80									0.01												5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/20	376300	4702675	3.00	1	M		20		5							**10**					**65**									0.01												5	**2**	3
7/20	376300	4702675	3.00	2	M		25		5		0.01					**0.01**					**68**															2						6	**2**	4
7/20	376275	4702675	3.00	1	M		20		3							**2**					**75**																					4	**2**	2
7/20	376275	4702675	3.00	2	M		5		10							**0.01**					**80**									5												5	**2**	3
7/27	376250	4702675	3.00	1	M		10		10							**0.01**					**80**									0.01												5	**2**	3
7/27	376250	4702675	3.00	2	M		20		12							**0.01**					**65**					**0.01**				1						2						7	**3**	4
7/27	376225	4702675	3.10	1	M		20		12							**3**					**65**									0.01												5	**2**	3
7/27	376225	4702675	3.10	2	M		50		12							**3**					**35**														0.01							5	**2**	3
7/28	376200	4702675	3.30	1	M		15		8							**2**					**75**									0.01												5	**2**	3
7/28	376200	4702675	3.30	2	M		10		3		0.01					**2**					**84**																			1		6	**2**	4
8/1	376175	4702675	3.20	1	M		47		5							**0.01**					**47**									1												5	**2**	3
8/1	376175	4702675	3.20	2	M		10		4							**1**					**85**																					4	**2**	2
8/2	376150	4702675	3.40	1	D		43		5							**2**					**50**																					4	**2**	2
8/2	376150	4702675	3.40	2	D		73		5							**2**					**20**																					4	**2**	2
8/3	376125	4702675	3.40	1	D		2		2							**2**					**94**																					4	**2**	2
8/3	376125	4702675	3.40	2	D		20		5							**2**					**73**																					4	**2**	2
8/4	376100	4702675	3.40	1	M		20		2							**10**					**68**																					4	**2**	2
8/4	376100	4702675	3.40	2	M		40		3							**10**	0.01				**47**																					5	**2**	3
8/4	376075	4702675	3.50	1	M		50		5							**0.01**					**45**									0.01												5	**2**	3
8/4	376075	4702675	3.50	2	M		40		5							**2**					**53**																					4	**2**	2
8/5	376050	4702675	3.50	1	M		5		5							**3**	0.01				**87**									0.01												6	**2**	4
8/5	376050	4702675	3.50	2	M		20		5							**2**					**73**									0.01					0.01							6	**2**	4
9/1	376025	4702675	3.50	1	M				30												**70**																					2	**1**	1
9/1	376025	4702675	3.50	2	M		5		30												**65**											0.01										4	**1**	3
9/1	376000	4702675	3.70	1	D		10		20							**5**					**65**									0.01												5	**2**	3
9/1	376000	4702675	3.70	2	D		2		10							**8**					**80**																					4	**2**	2
9/2	375975	4702675	3.50	1	D		0.01		10												**85**						0.01			0.01					5	0.01						7	**1**	6
9/2	375975	4702675	3.50	2	D		8		30		2										**60**																					4	**1**	3
9/6	375950	4702675	3.50	1	D		10		5							**7**					**78**																					4	**2**	2
9/6	375950	4702675	3.50	2	D		10		10							**5**					**75**																					4	**2**	2
9/7	375925	4702675	3.70	1	D		10		5							**5**					**80**																					4	**2**	2
9/7	375925	4702675	3.70	2	D		5		15							**10**					**70**																					4	**2**	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/8	375900	4702675	3.70	1	D		18		20							5					55														2							5	2	3
9/8	375900	4702675	3.70	2	D		5		15							5					75																					4	2	2
9/8	375875	4702675	3.60	1	D		45		15							5					35																					4	2	2
9/8	375875	4702675	3.60	2	D		9		25							1					65																					4	2	2
9/12	375850	4702675	3.80	1	M		0.01		23							0.01	0.01		0.01		75									2												7	3	4
9/12	375850	4702675	3.80	2	M		15		25												60																					3	1	2
9/13	375825	4702675	3.70	1	D		0.01		2							5	0.01				93																					5	2	3
9/13	375825	4702675	3.70	2	D		1		0.01							14					85																					4	2	2
9/15	375800	4702675	3.60	1	D				10							10					80																					3	2	1
9/15	375800	4702675	3.60	2	D		10		15							15					60																					4	2	2
9/15	375775	4702675	3.70	1	D				0.01							0.01					100																					3	2	1
9/15	375775	4702675	3.70	2	D		1		5							1					93																					4	2	2
9/16	375750	4702675	3.60	1	D		3		4							3					90																					4	2	2
9/16	375750	4702675	3.60	2	D		0.01		10							10					80																					4	2	2
9/20	375725	4702675	3.60	1	D		8		30							2					60																					4	2	2
9/20	375725	4702675	3.60	2	D		5		30							10					50					5				0.01												6	3	3
9/20	375700	4702675	3.70	1	D		5		20		15					3	0.01				55														2							7	2	5
9/20	375700	4702675	3.70	2	M		5		25							0.01					70																					4	2	2
9/21	375675	4702675	3.60	1	M		3		66							10	0.01				20									1												6	2	4
9/21	375675	4702675	3.60	2	M		20		45							25					10					0.01																5	3	2
9/21	375650	4702675	3.50	1	D		15		70		0.01					10					5																					5	2	3
9/21	375650	4702675	3.50	2	D		22		60							5			3		10																	0.01				6	3	3
9/22	375625	4702675	3.40	1	D		15		75							7					3																					4	2	2
9/22	375625	4702675	3.40	2	D		30		40		5					20					5																					5	2	3
9/22	375600	4702675	3.40	1	D		10		76							5			4		0.01						2								3							7	3	4
9/22	375600	4702675	3.40	2	D		15		65							15					5																					4	2	2
9/22	375575	4702675	3.40	1	M		10		68							10			2		10																					5	3	2
9/22	375575	4702675	3.40	2	M		0.01		54							15					30						1															5	2	3
9/23	375550	4702675	3.10	1	M		30		40							10			10		10																					5	3	2
9/23	375550	4702675	3.10	2	D		30		50							0.01					10		10												0.01							6	2	4
9/26	375525	4702675	3.10	1	M		1		9							0.01					90																					4	2	2
9/26	375525	4702675	3.10	2	M				10												90																					2	1	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/26	375500	4702675	2.90	1	M		0.01		10							0.01					90																					4	2	2
9/26	375500	4702675	2.90	2	M				3							2					95																					3	2	1
9/28	375475	4702675	2.80	1	D				28		0.01					0.01					70														2							5	2	3
9/28	375475	4702675	2.80	2	D		10		20												70																					3	1	2
9/28	375450	4702675	2.60	1	D		2		88							5					5						0.01															5	2	3
9/28	375450	4702675	2.60	2	D		0.01		80										5		5						10															5	2	3
9/28	375425	4702675	2.70	1	D				85							0.01					5									10												4	2	2
9/28	375425	4702675	2.70	2	D		3		90							0.01			0.01		4					2				1												7	4	3
7/5	376625	4702700	1.10	1	S		3		85							12																										3	1	2
7/5	376625	4702700	1.10	2	S		10		60		0.01					30	0.01				0.01					0.01				0.01										0.01		9	3	6
7/5	376600	4702700	1.30	1	T				35							15					15					1				34												5	3	2
7/5	376600	4702700	1.30	2	T		13		15		1					15					20									20								15		1		8	2	6
7/5	376575	4702700	1.60	1	S				10							32	0.01				55																	2		1		6	2	4
7/5	376575	4702700	1.60	2	S		9	0.01	20		0.01					55					15									1								0.01				8	2	6
7/5	376550	4702700	2.00	1	S		0.01		54		0.01					30					15									1												6	2	4
7/5	376550	4702700	2.00	2	S		10		35							15	0.01				25					10				5										0.01		8	3	5
7/5	376525	4702700	2.20	1	S		15		55							13					15									2												5	2	3
7/5	376525	4702700	2.20	2	M		5		50		0.01					15					15									10						5						7	2	5
7/6	376500	4702700	2.40	1	M		3		89		0.01					2					5									1												6	2	4
7/6	376500	4702700	2.40	2	M		10		80		0.01					2					4									1						3						7	2	5
7/6	376475	4702700	2.40	1	S		10		60		0.01					5		0.01			20									5										0.01		8	2	6
7/6	376475	4702700	2.40	2	S		17		50		0.01					16					17									0.01								0.01				7	2	5
7/11	376450	4702700	2.50	1	S		2		53							2					40									2		1										6	2	4
7/11	376450	4702700	2.50	2	S		20		50							0.01					25									5		0.01										6	2	4
7/12	376425	4702700	2.60	1	M		10		35							4					50											1								0.01		6	2	4
7/12	376425	4702700	2.60	2	M		20		20							1					55									3						1						6	2	4
7/12	376400	4702700	2.80	1	M		20		20							0.01					60											0.01										5	2	3
7/12	376400	4702700	2.80	2	M		10		10		0.01					0.01					75					0.01				0.01										5		8	3	5
7/13	376375	4702700	2.90	1	S		10		63							0.01					20											2				5						6	2	4
7/13	376375	4702700	2.90	2	S		19		15		0.01					1					45									8						10				2		8	2	6
7/14	376350	4702700	2.80	1	M		15		49												35									0.01						1						5	1	4
7/14	376350	4702700	2.80	2	M		20		35							0.01					44									1												5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/19	376325	4702700	3.00	1	M		30		15							**5**					**50**					**0.01**																5	**3**	2
7/19	376325	4702700	3.00	2	M		25		25							**0.01**	0.01				**50**									0.01												6	**2**	4
7/20	376300	4702700	3.10	1	S		30		20							**5**					**45**																					4	**2**	2
7/20	376300	4702700	3.10	2	S		20		10							**3**					**65**									2												5	**2**	3
7/20	376275	4702700	3.00	1	D	0.01	15		15							**0.01**					**70**									0.01												6	**2**	4
7/20	376275	4702700	3.00	2	D		40		10							**1**					**45**									4												5	**2**	3
7/27	376250	4702700	3.10	1	M		35		3							**1**	0.01				**60**									1												6	**2**	4
7/27	376250	4702700	3.10	2	M		28		11							**4**					**35**									5						17						6	**2**	4
7/27	376225	4702700	3.10	1	M		8		2							**10**					**80**																					4	**2**	2
7/27	376225	4702700	3.10	2	M		30		10		0.01					**8**					**52**									0.01												6	**2**	4
7/28	376200	4702700	3.20	1	M		15		7							**5**					**73**																					4	**2**	2
7/28	376200	4702700	3.20	2	M		45		5												**45**									5												4	**1**	3
8/1	376175	4702700	3.50	1	D		45		5							**0.01**					**50**																					4	**2**	2
8/1	376175	4702700	3.50	2	M		15		3							**2**					**80**																					4	**2**	2
8/2	376150	4702700	3.40	1	M	0.01	56		2							**2**					**40**									0.01										0.01		7	**2**	5
8/2	376150	4702700	3.40	2	M		10		5												**85**																					3	**1**	2
8/3	376125	4702700	3.40	1	D		20		2							**5**					**73**									0.01												5	**2**	3
8/3	376125	4702700	3.40	2	D		40		5							**0.01**					**55**									0.01												5	**2**	3
8/4	376100	4702700	3.40	1	M		60		5							**2**					**33**																					4	**2**	2
8/4	376100	4702700	3.40	2	S		15		5							**15**					**65**																					4	**2**	2
8/4	376075	4702700	3.50	1	M		30		10												**60**																					3	**1**	2
8/4	376075	4702700	3.50	2	M		50		20							**5**					**25**											0.01										5	**2**	3
8/5	376050	4702700	3.50	1	M		15		3							**3**					**79**																					4	**2**	2
8/5	376050	4702700	3.50	2	M		15		10							**0.01**	0.01				**75**																					5	**2**	3
9/1	376025	4702700	3.70	1	D		5		3							**7**					**85**																					4	**2**	2
9/1	376025	4702700	3.70	2	D		15		38							**5**					**42**																					4	**2**	2
9/1	376000	4702700	3.70	1	D		0.01		23							**2**					**75**																					4	**2**	2
9/1	376000	4702700	3.70	2	D		2		8							**0.01**					**90**																					4	**2**	2
9/2	375975	4702700	3.60	1	D		9		10							**1**					**80**																					4	**2**	2
9/2	375975	4702700	3.60	2	D		0.01		12							**3**					**85**																					4	**2**	2
9/6	375950	4702700	3.60	1	D				10							**0.01**					**90**																					3	**2**	1
9/6	375950	4702700	3.60	2	D		5		3							**2**					**90**															0.01						5	**2**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/7	375925	4702700	3.90	1	D				3												97																					2	1	1
9/7	375925	4702700	3.90	2	D		3		45							0.01					52																					4	2	2
9/8	375900	4702700	3.70	1	T				2							60					38																					3	2	1
9/8	375900	4702700	3.70	2	M		5		15								0.01				80						0.01															5	1	4
9/8	375875	4702700	3.80	1	D		10		20							15					55																					4	2	2
9/8	375875	4702700	3.80	2	D				20							10					70																					3	2	1
9/12	375850	4702700	3.80	1	D		5		0.01							0.01					95																					4	2	2
9/12	375850	4702700	3.80	2	M		75		1							7					17																					4	2	2
9/13	375825	4702700	3.80	1	D		1		1							0.01					98																					4	2	2
9/13	375825	4702700	3.80	2	D		5		5							5					85																					4	2	2
9/15	375800	4702700	3.80	1	D		5		10												85																					3	1	2
9/15	375800	4702700	3.80	2	D				5												95																					2	1	1
9/15	375775	4702700	3.90	1	D		0.01		1							1					98																					4	2	2
9/15	375775	4702700	3.90	2	D		0.01		4							1					95																					4	2	2
9/15	375750	4702700	3.60	1	D				20							10					70																					3	2	1
9/15	375750	4702700	3.60	2	D		5		15							10					70																					4	2	2
9/20	375725	4702700	3.70	1	D		10		10							20					60																					4	2	2
9/20	375725	4702700	3.70	2	D		0.01		20							20					60																					4	2	2
9/20	375700	4702700	3.70	1	D		5		45							0.01					45					5				0.01												6	3	3
9/20	375700	4702700	3.70	2	D		10		45							0.01	0.01				45						0.01															6	2	4
9/21	375675	4702700	3.70	1	D				50							5					45																					3	2	1
9/21	375675	4702700	3.70	2	M		5		40							0.01			2		45														8							6	3	3
9/21	375650	4702700	3.70	1	M		15		55							5			5		20									0.01												6	3	3
9/21	375650	4702700	3.70	2	M		23		70							5	0.01				2																					5	2	3
9/22	375625	4702700	3.50	1	D		25		37		3					20					10						5															6	2	4
9/22	375625	4702700	3.50	2	D		50		30							10			0.01		10																					5	3	2
9/22	375600	4702700	3.40	1	D		15		65							12					5					0.01									3							6	3	3
9/22	375600	4702700	3.40	2	D		10		50		10					20					5						5															6	2	4
9/22	375575	4702700	3.40	1	M		1		45							9					45																					4	2	2
9/22	375575	4702700	3.40	2	D				30							5	0.01				60														5							5	2	3
9/23	375550	4702700	3.10	1	M		0.01		5							0.01					95																					4	2	2
9/23	375550	4702700	3.10	2	M				30							0.01			0.01		70																					4	3	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/26	375525	4702700	3.20	1	M		2														**98**																					2	**1**	1
9/26	375525	4702700	3.20	2	M		10		10							**0.01**					**80**																					4	**2**	2
9/26	375500	4702700	2.90	1	D				10												**90**					**0.01**																3	**2**	1
9/26	375500	4702700	2.90	2	M		5		5							**0.01**					**90**																					4	**2**	2
9/28	375475	4702700	2.90	1	M				3												**97**																					2	**1**	1
9/28	375475	4702700	2.90	2	M		5		5												**90**																					3	**1**	2
10/14	375450	4702700	2.40	1	D		0.01		92							**5**					**3**																					4	**2**	2
10/14	375450	4702700	2.40	2	D				100							**0.01**					**0.01**																					3	**2**	1
10/14	375400	4702700	2.60	1	M		5		13							**2**					**80**																					4	**2**	2
10/14	375400	4702700	2.60	2	S				30							**0.01**					**70**																					3	**2**	1
10/14	375350	4702700	2.80	1	M		5		45		0.01					**5**					**45**																					5	**2**	3
10/14	375350	4702700	2.80	2	M				13							**2**					**85**																					3	**2**	1
10/14	375300	4702700	2.70	1	M		5		90							**0.01**					**5**																					4	**2**	2
10/14	375300	4702700	2.70	2	M				90							**9**			**1**		**0.01**																					4	**3**	1
10/14	375250	4702700	2.80	1	M		5		80							**5**					**10**																					4	**2**	2
10/14	375250	4702700	2.80	2	S		2		85							**8**			**0.01**		**5**																					5	**3**	2
10/14	375200	4702700	2.80	1	D				90							**5**					**5**																					3	**2**	1
10/14	375200	4702700	2.80	2	D		1		90							**1**					**0.01**					**8**																5	**3**	2
10/14	375150	4702700	2.80	1	M				90							**0.01**					**5**														5							4	**2**	2
10/14	375150	4702700	2.80	2	M				99							**1**					**0.01**					**0.01**																4	**3**	1
10/14	375100	4702700	3.10	1	M		0.01		70							**0.01**					**25**														5							5	**2**	3
10/14	375100	4702700	3.10	2	S				70												**5**														10	15						4	**1**	3
10/14	375050	4702700	3.20	1	M				13							**2**					**85**																					3	**2**	1
10/14	375050	4702700	3.20	2	S				10												**90**																					2	**1**	1
10/14	375000	4702700	3.20	1	M																**98**														2							2	**1**	1
10/14	375000	4702700	3.20	2	M		0.01														**100**																					2	**1**	1
10/14	374950	4702700	3.20	1	M											**5**					**95**																					2	**2**	0
10/14	374950	4702700	3.20	2	M				0.01							**0.01**					**100**																					3	**2**	1
10/14	374900	4702700	3.10	1	M				0.01							**50**					**50**																					3	**2**	1
10/14	374900	4702700	3.10	2	M											**0.01**					**100**																					2	**2**	0
10/14	374850	4702700	3.00	1	M				0.01							**0.01**					**100**																					3	**2**	1
10/14	374850	4702700	3.00	2	M				10							**90**					**0.01**																					3	**2**	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/14	374800	4702700	3.00	1	M		0.01		15							**85**					**0.01**																					4	**2**	2
10/14	374800	4702700	3.00	2	M		0.01		15							**80**					**5**																					4	**2**	2
10/14	374750	4702700	2.90	1	D		5		80							**10**					**5**																					4	**2**	2
10/14	374750	4702700	2.90	2	D		5		80							**10**					**5**																					4	**2**	2
10/14	374700	4702700	2.60	1	M		2		3		3					**50**					**42**																					5	**2**	3
10/14	374700	4702700	2.60	2	M		10		0.01		30					**50**					**10**																	0.01				6	**2**	4
10/14	374650	4702700	2.50	1	M		5		80							**13**					**2**																					4	**2**	2
10/14	374650	4702700	2.50	2	M		10		35							**20**					**35**																					4	**2**	2
10/14	374600	4702700	1.50	1	M		0.01		20	0.01	60					**5**					**3**																	12				7	**2**	5
10/14	374600	4702700	1.50	2	D		2		60		25																											13				4	**0**	4
7/5	376625	4702725	1.40	1	S		30		54		0.01					**5**					**5**									5								1				7	**2**	5
7/5	376625	4702725	1.40	2	S		5		60							**6**	4				**12**					**0.01**				5								8				8	**3**	5
7/5	376600	4702725	1.40	1	T				35		1					**10**					**38**									10								5		1		7	**2**	5
7/5	376600	4702725	1.40	2	S		5	0.01	25							**10**					**35**					**0.01**				10								10		5		9	**3**	6
7/5	376575	4702725	2.00	1	S		0.01		30		0.01					**44**	1				**15**									10												7	**2**	5
7/5	376575	4702725	2.00	2	S		0.01		43							**30**					**25**									2										0.01		6	**2**	4
7/5	376550	4702725	2.00	1	M		2		38		0.01					**30**					**30**					**0.01**																6	**3**	3
7/5	376550	4702725	2.00	2	M		1		40		0.01					**38**					**10**									10										1		7	**2**	5
7/6	376525	4702725	2.20	1	M		0.01		80		0.01					**15**					**3**									2												6	**2**	4
7/6	376525	4702725	2.20	2	M		3		58							**30**					**5**									2					2							6	**2**	4
7/6	376500	4702725	2.40	1	D		3		75		0.01					**20**					**1**									1												6	**2**	4
7/6	376500	4702725	2.40	2	D		5		80							**3**					**10**					**0.01**				2												6	**3**	3
7/6	376475	4702725	2.50	1	M		5		80		0.01					**10**					**5**									0.01												6	**2**	4
7/6	376475	4702725	2.50	2	M		3		76		0.01					**15**					**4**									2								0.01				7	**2**	5
7/11	376450	4702725	2.50	1	M		3		56		0.01					**1**					**40**									0.01		0.01										7	**2**	5
7/11	376450	4702725	2.50	2	M		0.01		59							**10**					**30**									0.01					1							6	**2**	4
7/12	376425	4702725	2.85	1	M		1		47							**3**					**45**					**0.01**						2			2	0.01						8	**3**	5
7/12	376425	4702725	2.85	2	M		10		40							**10**					**40**									0.01		0.01										6	**2**	4
7/12	376400	4702725	2.95	1	M		3		20							**2**					**53**									0.01		2				20				0.01		8	**2**	6
7/12	376400	4702725	2.95	2	S		30		30							**5**					**25**									0.01		10										6	**2**	4
7/13	376375	4702725	3.00	1	S		40		5							**0.01**					**50**											5				0.01						6	**2**	4
7/13	376375	4702725	3.00	2	S		10		15							**4**					**70**									1												5	**2**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/14	376350	4702725	2.90	1	M		10		40							2					45									3												5	2	3
7/14	376350	4702725	2.90	2	M		35		25							2					35									3												5	2	3
7/19	376325	4702725	3.00	1	M		20		30		0.01					0.01	0.01				47									1						2						8	2	6
7/19	376325	4702725	3.00	2	M		43		20		0.01					0.01	0.01				35									2												7	2	5
7/20	376300	4702725	3.10	1	M		8		7							3					80									2												5	2	3
7/20	376300	4702725	3.10	2	M		4		10							1					84															1						5	2	3
7/20	376275	4702725	3.10	1	M		25		20							1					46									3					0.01	5						7	2	5
7/20	376275	4702725	3.10	2	M		30		25							0.01					30									0.01					0.01	15						7	2	5
7/27	376250	4702725	3.20	1	M		40		5		0.01					1					54																					5	2	3
7/27	376250	4702725	3.20	2	M		15		20							5					60																					4	2	2
7/27	376225	4702725	3.50	1	D		60		4							1					35																					4	2	2
7/27	376225	4702725	3.50	2	D		45		10							5					40									0.01												5	2	3
7/28	376200	4702725	3.40	1	D		50		5							0.01					45																					4	2	2
7/28	376200	4702725	3.40	2	D		30		10							0.01					55									5												5	2	3
8/1	376175	4702725	3.50	1	D		45		5							0.01					50									0.01												5	2	3
8/1	376175	4702725	3.50	2	D		25		25							0.01					50																					4	2	2
8/2	376150	4702725	3.50	1	M		25		5							0.01					70																			0.01		5	2	3
8/2	376150	4702725	3.50	2	M		30		2							3					64					1														0.01		6	3	3
8/2	376150	4702425	2.10	1	M				8							5					85														2							4	2	2
8/2	376150	4702425	2.10	2	D		15		15		0.01					2	3				60														5							7	2	5
8/3	376125	4702725	3.50	1	D		33		5							2					60									0.01												5	2	3
8/3	376125	4702725	3.50	2	D		20		0.01							1					79																					4	2	2
8/4	376100	4702725	3.50	1	M		28		2												70																					3	1	2
8/4	376100	4702725	3.50	2	M		40		5							0.01					55																					4	2	2
8/4	376075	4702725	3.50	1	D		60		5							4					30									1												5	2	3
8/4	376075	4702725	3.50	2	D		50									3					45									0.01					2							5	2	3
8/5	376050	4702725	3.60	1	D		70		10							5					15									0.01					0.01							6	2	4
8/5	376050	4702725	3.60	2	M		15		15												70									0.01												4	1	3
9/1	376025	4702725	3.70	1	D		2		10							3					85																					4	2	2
9/1	376025	4702725	3.70	2	D		2									3					95						0.01															4	2	2
9/1	376000	4702725	3.80	1	D		11		4							0.01					85						0.01															5	2	3
9/1	376000	4702725	3.80	2	D		5		15							5					75														0.01							5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/2	375975	4702725	3.70	1	D		2		0.01							2					96																					4	2	2
9/2	375975	4702725	3.70	2	D		2		0.01							8					90																					4	2	2
9/6	375950	4702725	3.70	1	D		1		4												95																					3	1	2
9/6	375950	4702725	3.70	2	D		2		10							3					85																					4	2	2
9/7	375925	4702725	3.90	1	D		5		5												90																					3	1	2
9/7	375925	4702725	3.90	2	D		3		22												75																					3	1	2
9/8	375900	4702725	4.00	1	M		5		0.01							10	0.01				85																					5	2	3
9/8	375900	4702725	4.00	2	D		5		10							10					35						0.01								40							6	2	4
9/8	375875	4702725	4.00	1	D				25							10					65																					3	2	1
9/8	375875	4702725	4.00	2	D		0.01		10							0.01					90																					4	2	2
9/12	375850	4702725	3.90	1	D				0.01							0.01					100																					3	2	1
9/12	375850	4702725	3.90	2	D		1		0.01												99																					3	1	2
9/13	375825	4702725	3.90	1	D											0.01					100																					2	2	0
9/13	375825	4702725	3.90	2	D											2					98																					2	2	0
9/15	375800	4702725	3.80	1	D				2							0.01					98																					3	2	1
9/15	375800	4702725	3.80	2	D		0.01		3							0.01					97																					4	2	2
9/15	375775	4702725	3.80	1	D																100																					1	1	0
9/15	375775	4702725	3.80	2	D		2									3					95																					3	2	1
9/15	375750	4702725	3.90	1	D				0.01							0.01					100																					3	2	1
9/15	375750	4702725	3.90	2	D		1		9												90																					3	1	2
9/20	375725	4702725	3.90	1	M																100																					1	1	0
9/20	375725	4702725	3.90	2	M		5		15												80																					3	1	2
9/20	375700	4702725	3.80	1	D				0.01							1					99																					3	2	1
9/20	375700	4702725	3.80	2	D				15							0.01					85																					3	2	1
9/21	375675	4702725	3.80	1	D		10		15							5					70																					4	2	2
9/21	375675	4702725	3.80	2	D		5		0.01							2					93																					4	2	2
9/21	375650	4702725	3.70	1	D				47							5					45						1			2										0.01		6	2	4
9/21	375650	4702725	3.70	2	M		2		45							8					45																					4	2	2
9/22	375625	4702725	3.70	1	D		2		40		8					10					40																					5	2	3
9/22	375625	4702725	3.70	2	D		2		30							13					55																					4	2	2
9/22	375600	4702725	3.50	1	M		1		65		0.01					0.01	0.01				34						0.01															7	2	5
9/22	375600	4702725	3.50	2	M		10		25							10					50						5															5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/22	375575	4702725	3.50	1	D				3												97														0.01							3	1	2
9/22	375575	4702725	3.50	2	D				10							0.01					90																					3	2	1
9/23	375550	4702725	3.40	1	D		20		20							0.01					60																					4	2	2
9/23	375550	4702725	3.40	2	D		40		40							0.01	0.01				20						0.01															6	2	4
9/26	375525	4702725	3.30	1	D				0.01							0.01					100																					3	2	1
9/26	375525	4702725	3.30	2	M				1							3					96																					3	2	1
9/26	375500	4702725	3.00	1	S				20							0.01					80																					3	2	1
9/26	375500	4702725	3.00	2	M		2		10							8					80																					4	2	2
7/5	376625	4702750	1.60	1	S		10		60							15										0.01				0.01								15				6	2	4
7/5	376625	4702750	1.60	2	S		5		60		1					28					0.01					0.01				5								1				8	3	5
7/5	376600	4702750	1.60	1	S		10		45		5					10					10									10								10				7	2	5
7/5	376600	4702750	1.60	2	S		5		55		0.01					15	0.01				5								5	10								5				9	2	7
7/5	376575	4702750	2.00	1	M		6		51		0.01					20					20					0.01				3												7	3	4
7/5	376575	4702750	2.00	2	M		10		63		0.01					20					2									5												6	2	4
7/5	376550	4702750	2.30	1	M		2		65		0.01					10					13									5					5							7	2	5
7/5	376550	4702750	2.30	2	M		2		47		2					30					15									2					2							7	2	5
7/6	376525	4702750	2.30	1	M		1		80							16					2					0.01				0.01								1				7	3	4
7/6	376525	4702750	2.30	2	M		10		45		5					25					10									5												6	2	4
7/6	376500	4702750	2.50	1	D		1		60		0.01					35					0.01															4		0.01				7	2	5
7/6	376500	4702750	2.50	2	D		2		67							30					0.01															1						5	2	3
7/6	376475	4702750	2.60	1	M		1		70							21					8					0.01												0.01				6	3	3
7/6	376475	4702750	2.60	2	M		5		57							30					3															5		0.01				6	2	4
7/11	376450	4702750	2.60	1	M	0.01	10		40		0.01					15					35									0.01		0.01										8	2	6
7/11	376450	4702750	2.60	2	M		10		60		0.01					10					20									0.01					0.01					0.01		8	2	6
7/12	376425	4702750	2.80	1	M		5		50							25					20																					4	2	2
7/12	376425	4702750	2.80	2	S		5		30							10					55									0.01												5	2	3
7/12	376400	4702750	3.00	1	M		15		35		0.01					2					33									0.01		0.01				15		0.01				9	2	7
7/12	376400	4702750	3.00	2	M		20		20							1					57					1												1				6	3	3
7/13	376375	4702750	3.00	1	S		34		30							0.01					6											10				20						6	2	4
7/13	376375	4702750	3.00	2	S		15		10							2					55									5						13				0.01		7	2	5
7/14	376350	4702750	3.00	1	M		40		27							0.01					30									3												5	2	3
7/14	376350	4702750	3.00	2	M		30		20							5					35									10												5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/19	376325	4702750	3.20	1	M		55		5							**2**					**35**									3												5	**2**	3
7/19	376325	4702750	3.20	2	M		42		10							**5**					**43**									0.01										0.01		6	**2**	4
7/20	376300	4702750	3.20	1	M		45		5							**2**					**48**																					4	**2**	2
7/20	376300	4702750	3.20	2	M		45		7							**3**					**45**									0.01												5	**2**	3
7/20	376275	4702750	3.00	1	M		40		5												**55**									0.01												4	**1**	3
7/20	376275	4702750	3.00	2	M		40		20							**2**					**38**									0.01												5	**2**	3
7/27	376250	4702750	3.50	1	M		50		7							**3**					**40**																					4	**2**	2
7/27	376250	4702750	3.50	2	M		45		2							**2**					**50**															1						5	**2**	3
7/27	376225	4702750	3.50	1	D		35		4							**1**					**60**																					4	**2**	2
7/27	376225	4702750	3.50	2	D		45		5							**10**					**40**																					4	**2**	2
7/28	376200	4702750	3.40	1	D		45		3							**2**					**50**																					4	**2**	2
7/28	376200	4702750	3.40	2	D		50		10							**3**					**35**									0.01		2										6	**2**	4
8/1	376175	4702750	3.10	1	D		73		5							**2**					**20**																					4	**2**	2
8/1	376175	4702750	3.10	2	D		45		5							**5**	0.01				**45**																					5	**2**	3
8/2	376150	4702750	3.50	1	D		55		9												**35**									1												4	**1**	3
8/2	376150	4702750	3.50	2	D		15		5												**80**												0.01									4	**1**	3
8/3	376125	4702750	3.50	1	D		48		2							**2**					**48**																					4	**2**	2
8/3	376125	4702750	3.50	2	D		83		2							**10**					**5**																					4	**2**	2
8/4	376100	4702750	3.50	1	M		47		8							**10**					**35**																					4	**2**	2
8/4	376100	4702750	3.50	2	M		51		5							**3**					**40**									0.01					1							6	**2**	4
8/4	376075	4702750	3.70	1	D		53		5							**2**					**40**																					4	**2**	2
8/4	376075	4702750	3.70	2	D		73		5							**2**					**20**									0.01								0.01				6	**2**	4
8/5	376050	4702750	3.70	1	D		8		5							**2**					**85**																					4	**2**	2
8/5	376050	4702750	3.70	2	M		12		3												**85**									0.01												4	**1**	3
9/1	376025	4702750	3.80	1	D		0.01		0.01												**100**																					3	**1**	2
9/1	376025	4702750	3.80	2	D		10									**2**					**88**																					3	**2**	1
9/1	376000	4702750	3.90	1	D		10		10												**75**														5							4	**1**	3
9/1	376000	4702750	3.90	2	D		25		10							**5**					**60**																					4	**2**	2
9/2	375975	4702750	3.90	1	D				2							**13**					**85**																					3	**2**	1
9/2	375975	4702750	3.90	2	D		0.01		5							**4**					**91**																					4	**2**	2
9/6	375950	4702750	3.80	1	D		8		10							**2**					**80**																					4	**2**	2
9/6	375950	4702750	3.80	2	D		10		5							**0.01**					**85**																					4	**2**	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/7	375925	4702750	3.90	1	D		0.01		40												**60**																					3	**1**	2
9/7	375925	4702750	3.90	2	D		35		15							**15**					**35**																					4	**2**	2
9/8	375900	4702750	4.00	1	T		25		50							**15**					**10**																					4	**2**	2
9/8	375900	4702750	4.00	2	S		20		10							**20**					**50**																					4	**2**	2
9/8	375875	4702750	4.00	1	D		5		5							**10**					**80**																					4	**2**	2
9/8	375875	4702750	4.00	2	D											**0.01**					**100**																					2	**2**	0
9/12	375850	4702750	3.90	1	M		15		30												**55**																					3	**1**	2
9/12	375850	4702750	3.90	2	M				17							**0.01**					**83**																					3	**2**	1
9/13	375825	4702750	4.00	1	D		5		1							**4**					**90**																					4	**2**	2
9/13	375825	4702750	4.00	2	D		1		0.01							**1**					**93**						0.01								5							6	**2**	4
9/15	375800	4702750	3.90	1	D											**5**					**95**																					2	**2**	0
9/15	375800	4702750	3.90	2	D		15		0.01							**3**					**67**														15							5	**2**	3
9/15	375775	4702750	3.90	1	D				5												**95**																					2	**1**	1
9/15	375775	4702750	3.90	2	D				10												**90**																					2	**1**	1
9/15	375750	4702750	3.90	1	D				0.01							**0.01**					**100**																					3	**2**	1
9/15	375750	4702750	3.90	2	D		1		4							**0.01**					**95**																					4	**2**	2
9/20	375725	4702750	4.00	1	M		0.01		0.01												**100**																					3	**1**	2
9/20	375725	4702750	4.00	2	D				0.01												**100**																					2	**1**	1
9/20	375700	4702750	3.90	1	D				1							**0.01**					**99**																					3	**2**	1
9/20	375700	4702750	3.90	2	D											**2**					**98**																					2	**2**	0
9/21	375675	4702750	3.80	1	D		5		10							**5**					**80**																	0.01				5	**2**	3
9/21	375675	4702750	3.80	2	D		5		5							**0.01**					**90**																					4	**2**	2
9/21	375650	4702750	3.90	1	D		5		5												**90**																	0.01				4	**1**	3
9/21	375650	4702750	3.90	2	D		1									**3**					**96**																					3	**2**	1
9/22	375625	4702750	3.80	1	S		5		5							**5**					**85**																					4	**2**	2
9/22	375625	4702750	3.80	2	D		2		10							**8**					**80**																					4	**2**	2
9/22	375600	4702750	3.80	1	D		5		15												**80**																					3	**1**	2
9/22	375600	4702750	3.80	2	D				2							**0.01**					**98**																					3	**2**	1
9/22	375575	4702750	3.60	1	D				3												**97**																					2	**1**	1
9/22	375575	4702750	3.60	2	D											**0.01**					**100**																					2	**2**	0
9/23	375550	4702750	3.40	1	M				3							**0.01**					**97**																					3	**2**	1
9/23	375550	4702750	3.40	2	M				0.01							**0.01**					**100**																					3	**2**	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/14	375450	4702750	3.00	1	D		1		97							2					0.01															0.01						5	2	3
10/14	375450	4702750	3.00	2	D				95		5																			0.01												3	0	3
10/14	375400	4702750	3.00	1	M		1		45							0.01					54																					4	2	2
10/14	375400	4702750	3.00	2	M		10		20							15					55																					4	2	2
10/14	375350	4702750	3.00	1	M		4		15							1					80																					4	2	2
10/14	375350	4702750	3.00	2	M		0.01		5							1					94																					4	2	2
10/14	375300	4702750	3.00	1	D				92							5					3																					3	2	1
10/14	375300	4702750	3.00	2	M				85							0.01					15																					3	2	1
10/14	375250	4702750	3.00	1	M			0.01	85							0.01	2				5														8							6	2	4
10/14	375250	4702750	3.00	2	M				97							3					0.01														0.01							4	2	2
10/14	375200	4702750	3.00	1	M				90		0.01					0.01					10																					4	2	2
10/14	375200	4702750	3.00	2	M				80							0.01					20																					3	2	1
10/14	375150	4702750	3.10	1	T				30												70																					2	1	1
10/14	375150	4702750	3.10	2	S		5		45												50																	0.01				4	1	3
10/14	375100	4702750	3.20	1	S				40							0.01					60																					3	2	1
10/14	375100	4702750	3.20	2	S				15							0.01					85																					3	2	1
10/14	375050	4702750	3.20	1	M				1							4					95																					3	2	1
10/14	375050	4702750	3.20	2	M				9							1					90																					3	2	1
10/14	375000	4702750	3.30	1	M																100																					1	1	0
10/14	375000	4702750	3.30	2	M																100																					1	1	0
10/14	374950	4702750	3.40	1	M																100																					1	1	0
10/14	374950	4702750	3.40	2	M																100																					1	1	0
10/14	374900	4702750	3.40	1	S											0.01					100																					2	2	0
10/14	374900	4702750	3.40	2	S																100																					1	1	0
10/17	374850	4702750	3.40	1	S											1					99																					2	2	0
10/17	374850	4702750	3.40	2	D		0.01		5							90					5																	0.01				5	2	3
10/17	374800	4702750	3.10	1	D		2		2							56					40																					4	2	2
10/17	374800	4702750	3.10	2	D		5		3							62					30																					4	2	2
10/17	374750	4702750	3.00	1	M				65							30					5																					3	2	1
10/17	374750	4702750	3.00	2	M		0.01		50							47					3																					4	2	2
10/17	374700	4702750	2.90	1	M		3		75							20					2																					4	2	2
10/17	374700	4702750	2.90	2	M		0.01		25							50					25																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/17	374650	4702750	2.50	1	M		10		10		5					65					10																	0.01				6	2	4
10/17	374650	4702750	2.50	2	M		10		5		15					50					15																	5				6	2	4
10/17	374600	4702750	2.30	1	M		30		30							3					35												2					0.01				6	2	4
10/17	374600	4702750	2.30	2	M		9		50		10					1					30												0.01									6	2	4
7/5	376600	4702775	1.50	1	T		1		67		1					5					1									20								5				7	2	5
7/5	376600	4702775	1.50	2	S				85		0.01					15																						0.01				4	1	3
7/5	376575	4702775	1.90	1	M		0.01		80		2					18														0.01										0.01		6	1	5
7/5	376575	4702775	1.90	2	M		5		50		3					40														2												5	1	4
7/5	376550	4702775	2.30	1	M		2		45		1					45					7									0.01												6	2	4
7/5	376550	4702775	2.30	2	M		3		50		2					45					0.01									0.01								0.01				7	2	5
7/6	376525	4702775	2.30	1	M		3		70		0.01					20					7									0.01								0.01				7	2	5
7/6	376525	4702775	2.30	2	M		7		63		1					20					5									3								1				7	2	5
7/6	376500	4702775	2.50	1	D		2		72		0.01					25					0.01									1								0.01				7	2	5
7/6	376500	4702775	2.50	2	D		2		70		0.01					15					7									5					0.01			1				8	2	6
7/6	376475	4702775	2.80	1	M		2		74							15					5									1						3		0.01		0.01		8	2	6
7/6	376475	4702775	2.80	2	M		10		54							25					10					1				0.01					0.01	0.01						8	3	5
7/11	376450	4702775	2.60	1	D		1		64		0.01					20					15					0.01				0.01		0.01				0.01		0.01				10	3	7
7/11	376450	4702775	2.60	2	D		1		69		0.01					20					10											0.01						0.01		0.01		8	2	6
7/12	376425	4702775	3.00	1	M		5		55		0.01					20					20									0.01		0.01										7	2	5
7/12	376425	4702775	3.00	2	M		19		28		0.01					19					19									5						10						7	2	5
7/12	376400	4702775	3.00	1	M		5		37							10					10									0.01		0.01				37		1				8	2	6
7/12	376400	4702775	3.00	2	M		20		40							0.01					30									0.01						10						6	2	4
7/13	376375	4702775	3.00	1	S		10		20							1					69									0.01												5	2	3
7/13	376375	4702775	3.00	2	S		15		15							12					55									3												5	2	3
7/14	376350	4702775	3.00	1	M	0.01	15		30							0.01					50					4				1												7	3	4
7/14	376350	4702775	3.00	2	M		10		30							0.01					60									0.01												5	2	3
7/19	376325	4702775	3.10	1	M		40		8							2	0.01				50																					5	2	3
7/19	376325	4702775	3.10	2	M		30		29							1					40									0.01												5	2	3
7/20	376300	4702775	3.50	1	M		55		15							5					25									0.01												5	2	3
7/20	376300	4702775	3.50	2	M		50		5												35									5						5						5	1	4
7/20	376275	4702775	3.10	1	D		58		5							2					35																					4	2	2
7/20	376275	4702775	3.10	2	D		50		10							0.01					30									0.01					0.01	10						7	2	5

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/27	376250	4702775	3.30	1	M		40		6							4					50																					4	2	2
7/27	376250	4702775	3.30	2	M		46		5							3					46																					4	2	2
7/27	376225	4702775	3.60	1	M		40		13							2					45																					4	2	2
7/27	376225	4702775	3.60	2	M		15		15							1					69																					4	2	2
7/28	376200	4702775	3.40	1	D		45		4							1					50									0.01												5	2	3
7/28	376200	4702775	3.40	2	D		55		3							0.01					40														2							5	2	3
8/1	376175	4702775	3.50	1	D		58		20							2					20																					4	2	2
8/1	376175	4702775	3.50	2	D	0.01	69		5							5					20									1												6	2	4
8/2	376150	4702775	3.60	1	M		49		3							0.01					48																					4	2	2
8/2	376150	4702775	3.60	2	M		50		0.01							2					48																					4	2	2
8/3	376125	4702775	3.50	1	M		55		3							2					40																					4	2	2
8/3	376125	4702775	3.50	2	M		43		2							0.01					55																					4	2	2
8/4	376100	4702775	3.60	1	M		48		2												50																					3	1	2
8/4	376100	4702775	3.60	2	M		55		5							5					35																					4	2	2
8/4	376075	4702775	3.70	1	D		49		5							1					35									0.01						10						6	2	4
8/4	376075	4702775	3.70	2	D		45		5							5					45																					4	2	2
8/5	376050	4702775	3.60	1	D		65		8							2					25																					4	2	2
8/5	376050	4702775	3.60	2	M		30		2							3					65																					4	2	2
8/5	376025	4702775	3.90	1	D		45		10							5					40																					4	2	2
8/5	376025	4702775	3.90	2	D		45		8							2					45																					4	2	2
9/1	376000	4702775	3.90	1	D		2		2							1					95																					4	2	2
9/1	376000	4702775	3.90	2	D		2		2							1					95																					4	2	2
9/2	375975	4702775	4.00	1	D		10		35							5					50																					4	2	2
9/2	375975	4702775	4.00	2	D		1		10							4					85						0.01															5	2	3
9/6	375950	4702775	3.80	1	D		5		45												50																					3	1	2
9/6	375950	4702775	3.80	2	D		7		3							0.01					90																					4	2	2
9/7	375925	4702775	3.90	1	D		3		2												95																					3	1	2
9/7	375925	4702775	3.90	2	D		15		30												55																					3	1	2
9/8	375900	4702775	4.00	1	D		5		10							5					80																					4	2	2
9/8	375900	4702775	4.00	2	D		10		25							10					55																					4	2	2
9/8	375875	4702775	4.00	1	D		3		12							0.01					85									0.01												5	2	3
9/8	375875	4702775	4.00	2	D		0.01		5							30					65																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/12	375850	4702775	4.00	1	M				3							0.01					97																					3	2	1
9/12	375850	4702775	4.00	2	M				0.01							4					96														0.01							4	2	2
9/13	375825	4702775	4.10	1	D																100																					1	1	0
9/13	375825	4702775	4.10	2	D		0.01		1							2					97														0.01							5	2	3
9/15	375800	4702775	4.00	1	D																100																					1	1	0
9/15	375800	4702775	4.00	2	D		5		20												75																					3	1	2
9/15	375775	4702775	4.00	1	D		0.01		0.01							3					97																					4	2	2
9/15	375775	4702775	4.00	2	D				1												99																					2	1	1
9/15	375750	4702775	4.00	1	D		1		2							0.01					97																					4	2	2
9/15	375750	4702775	4.00	2	D		1		0.01							1					98																					4	2	2
9/20	375725	4702775	4.00	1	M		0.01		0.01												100																					3	1	2
9/20	375725	4702775	4.00	2	M											0.01					100																					2	2	0
9/20	375700	4702775	4.00	1	D		0.01		0.01							0.01					100																					4	2	2
9/20	375700	4702775	4.00	2	D				0.01												100																					2	1	1
9/21	375675	4702775	3.90	1	D		1		0.01							4					95																					4	2	2
9/21	375675	4702775	3.90	2	D		0.01		0.01							0.01					100																					4	2	2
9/21	375650	4702775	3.90	1	D		0.01		0.01							0.01					100																					4	2	2
9/21	375650	4702775	3.90	2	D		1		0.01							0.01					99																					4	2	2
9/22	375625	4702775	3.90	1	M		13		0.01							2					85																					4	2	2
9/22	375625	4702775	3.90	2	M		0.01		37							3					60																					4	2	2
9/22	375600	4702775	3.90	1	M											0.01					100																					2	2	0
9/22	375600	4702775	3.90	2	M				5												95																					2	1	1
7/5	376600	4702800	1.30	1	S				25							25														50												3	1	2
7/5	376600	4702800	1.30	2	S		5		30							35														30								0.01				5	1	4
7/5	376575	4702800	1.90	1	M		14		20		0.01					65										0.01				1												6	2	4
7/5	376575	4702800	1.90	2	M		5		58		5					30														2								0.01				6	1	5
7/5	376550	4702800	2.30	1	D		1		55		0.01					44																										4	1	3
7/5	376550	4702800	2.30	2	D		0.01		60		0.01					40										0.01				0.01					0.01							7	2	5
7/6	376525	4702800	2.30	1	M		8		35		0.01					47					10					0.01				0.01						0.01				0.01		9	3	6
7/6	376525	4702800	2.30	2	M		0.01		50		0.01					48					2									0.01												6	2	4
7/6	376500	4702800	2.60	1	D		3		80		0.01					10					2					0.01				2						3						8	3	5
7/6	376500	4702800	2.60	2	D		3		80							15					2									0.01												5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/6	376475	4702800	2.80	1	M		2		61		0.01					30					3					0.01				2						2		0.01				9	3	6
7/6	376475	4702800	2.80	2	M		2		50		0.01					40					8									0.01												6	2	4
7/11	376450	4702800	2.60	1	M		2		47		0.01					1					50									0.01		0.01										7	2	5
7/11	376450	4702800	2.60	2	M		0.01		60		0.01					10					30											0.01										6	2	4
7/12	376425	4702800	3.00	1	M		15		59		0.01					5					20					1						0.01										7	3	4
7/12	376425	4702800	3.00	2	S				55		0.01					5					40									0.01												5	2	3
7/12	376400	4702800	3.10	1	M		5		30		0.01					13					50									0.01		2										7	2	5
7/12	376400	4702800	3.10	2	M		10		55							3					25									0.01						7				0.01		7	2	5
7/13	376375	4702800	3.10	1	S		7		10		0.01					3					80									0.01												6	2	4
7/13	376375	4702800	3.10	2	S		5		30							0.01					65									0.01												5	2	3
7/14	376350	4702800	3.00	1	M		46		5							0.01					45									4												5	2	3
7/14	376350	4702800	3.00	2	M		35		15							0.01					47					0.01				3												6	3	3
7/19	376325	4702800	3.10	1	M		25		8							0.01					65									2												5	2	3
7/19	376325	4702800	3.10	2	M		15		30		0.01					1			0.01		54					0.01										0.01						8	4	4
7/20	376300	4702800	3.45	1	M		55		20							0.01					25									0.01												5	2	3
7/20	376300	4702800	3.45	2	M		30		10							1					56					2				1												6	3	3
7/20	376275	4702800	3.50	1	D		70		9							1					20																					4	2	2
7/20	376275	4702800	3.50	2	D		25		5							0.01					68									2										0.01		6	2	4
7/27	376250	4702800	3.40	1	M		20		8							2					70																					4	2	2
7/27	376250	4702800	3.40	2	D		45		10							5					40																					4	2	2
7/28	376225	4702800	3.50	1	S		19		1												80																					3	1	2
7/28	376225	4702800	3.50	2	S		45		5							10					40									0.01												5	2	3
7/28	376200	4702800	3.50	1	D		50		5							0.01					45																					4	2	2
7/28	376200	4702800	3.50	2	D		60		10		0.01					2					20					5				3												7	3	4
8/1	376175	4702800	3.50	1	D		15		3							2					80																					4	2	2
8/1	376175	4702800	3.50	2	D		10		0.01							2					88																					4	2	2
8/2	376150	4702800	3.60	1	M		53		2												45																					3	1	2
8/2	376150	4702800	3.60	2	M		40		0.01												60																					3	1	2
8/3	376125	4702800	3.60	1	M		48		2							2					48																					4	2	2
8/3	376125	4702800	3.60	2	M		40		10							0.01					50																					4	2	2
8/4	376100	4702800	3.70	1	M		45		1							14					40																					4	2	2
8/4	376100	4702800	3.70	2	M		45		10							5					40																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/4	376075	4702800	3.90	1	D		40		3							**0.01**					**57**																					4	**2**	2
8/4	376075	4702800	3.90	2	M		40		10												**50**																					3	**1**	2
8/5	376050	4702800	3.90	1	D		30		7							**5**					**55**									3												5	**2**	3
8/5	376050	4702800	3.90	2	D		45		2							**3**					**50**									0.01												5	**2**	3
8/5	376025	4702800	3.50	1	D		55		3							**2**					**40**																					4	**2**	2
8/5	376025	4702800	3.50	2	D		43		5							**2**					**50**																					4	**2**	2
9/1	376000	4702800	4.00	1	D		2		20							**18**					**60**																					4	**2**	2
9/1	376000	4702800	4.00	2	D		15		25							**5**					**55**																					4	**2**	2
9/2	375975	4702800	4.10	1	D		13		1							**1**					**85**																					4	**2**	2
9/2	375975	4702800	4.10	2	D		5		10							**5**					**80**																					4	**2**	2
9/6	375950	4702800	3.90	1	D		4		25							**1**					**70**																					4	**2**	2
9/6	375950	4702800	3.90	2	D		10		10							**0.01**					**80**																					4	**2**	2
9/7	375925	4702800	4.00	1	D				15							**0.01**					**85**																					3	**2**	1
9/7	375925	4702800	4.00	2	D		30		5												**65**																					3	**1**	2
9/7	375900	4702800	3.90	1	D		0.01		5												**95**																					3	**1**	2
9/7	375900	4702800	3.90	2	D		25		30							**10**					**35**																					4	**2**	2
9/8	375875	4702800	4.00	1	D		10		10							**5**					**75**																					4	**2**	2
9/8	375875	4702800	4.00	2	D				5												**95**																					2	**1**	1
9/12	375850	4702800	4.00	1	M		5		5												**90**																					3	**1**	2
9/12	375850	4702800	4.00	2	D				6												**85**														9							3	**1**	2
9/13	375825	4702800	4.10	1	D		1		0.01							**1**					**98**																					4	**2**	2
9/13	375825	4702800	4.10	2	D		2		2							**1**					**95**																					4	**2**	2
9/15	375800	4702800	4.00	1	S											**2**					**98**																					2	**2**	0
9/15	375800	4702800	4.00	2	D				3							**7**					**90**																					3	**2**	1
9/15	375775	4702800	4.00	1	D				3							**0.01**					**97**																					3	**2**	1
9/15	375775	4702800	4.00	2	D		2														**98**																					2	**1**	1
9/15	375750	4702800	4.00	1	D				10												**90**																					2	**1**	1
9/15	375750	4702800	4.00	2	D		1		0.01		0.01					**0.01**					**99**																					5	**2**	3
9/20	375725	4702800	4.00	1	S				3							**0.01**					**97**																					3	**2**	1
9/20	375725	4702800	4.00	2	S				0.01							**0.01**					**100**																					3	**2**	1
9/20	375700	4702800	4.00	1	D																**100**																					1	**1**	0
9/20	375700	4702800	4.00	2	D		1		4												**95**																					3	**1**	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/21	375675	4702800	4.00	1	D		5									0.01					95																					3	2	1
9/21	375675	4702800	4.00	2	D				0.01												100																					2	1	1
9/21	375650	4702800	4.00	1	D				5							3					92																					3	2	1
9/21	375650	4702800	4.00	2	D				5							2					93																					3	2	1
10/4	375600	4702800	3.60	1	M		2		0.01							0.01					98																					4	2	2
10/4	375600	4702800	3.60	2	D		1		5							1					93																					4	2	2
10/4	375550	4702800	3.50	1	M				0.01							0.01					100																					3	2	1
10/4	375550	4702800	3.50	2	D				0.01							0.01					100																					3	2	1
10/17	375450	4702800	3.20	1	S				20												60														20							3	1	2
10/17	375450	4702800	3.20	2	M				10		10					5					75																					4	2	2
10/17	375400	4702800	3.10	1	S				5												95																					2	1	1
10/17	375400	4702800	3.10	2	S																100																					1	1	0
10/17	375350	4702800	3.10	1	M				5							0.01					95																					3	2	1
10/17	375350	4702800	3.10	2	M				43							2					55																					3	2	1
10/17	375300	4702800	3.00	1	D		0.01		100							0.01					0.01																					4	2	2
10/17	375300	4702800	3.00	2	D		0.01		100							0.01					0.01														0.01							5	2	3
10/17	375250	4702800	3.20	1	S		5		90												5																					3	1	2
10/17	375250	4702800	3.20	2	M				95							4					1																					3	2	1
10/17	375200	4702800	3.20	1	M		30		30							0.01					30														10							5	2	3
10/17	375200	4702800	3.20	2	S		2		8							10					80																					4	2	2
10/17	375150	4702800	3.20	1	T		4		50							1					45																					4	2	2
10/17	375150	4702800	3.20	2	S		0.01		50												50																					3	1	2
10/17	375100	4702800	3.40	1	T				10												90																					2	1	1
10/17	375100	4702800	3.40	2	T		0.01									1					99																					3	2	1
10/17	375050	4702800	3.40	1	T																100																					1	1	0
10/17	375050	4702800	3.40	2	S																100																	0.01				2	1	1
10/17	375000	4702800	3.40	1	T																100																					1	1	0
10/17	375000	4702800	3.40	2	T				5												95																					2	1	1
10/17	374950	4702800	3.40	1	S																100																					1	1	0
10/17	374950	4702800	3.40	2	S				0.01												100																	0.01				3	1	2
10/17	374900	4702800	3.30	1	S																100																					1	1	0
10/17	374900	4702800	3.30	2	S				1												99																					2	1	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/17	374850	4702800	3.40	1	S											0.01					100																					2	2	0
10/17	374850	4702800	3.40	2	S				3							2					95																					3	2	1
10/17	374800	4702800	3.20	1	M				25							75					0.01																					3	2	1
10/17	374800	4702800	3.20	2	M		0.01		50							50					0.01																					4	2	2
10/17	374750	4702800	3.10	1	M				0.01							90					10																					3	2	1
10/17	374750	4702800	3.10	2	D		0.01		50							50					0.01																					4	2	2
10/17	374700	4702800	3.00	1	M		0.01		5							0.01					95																					4	2	2
10/17	374700	4702800	3.00	2	M		2		15							3					80																					4	2	2
10/17	374650	4702800	2.70	1	S		5		50		2					37					1																	5				6	2	4
10/17	374650	4702800	2.70	2	M		10		74							15					0.01												0.01					1				6	2	4
10/17	374600	4702800	2.40	1	M		30		50		5					15																										4	1	3
10/17	374600	4702800	2.40	2	M		30		5		50					0.01					5																	10				6	2	4
7/5	376600	4702825	0.70	1	T											100																										1	1	0
7/5	376600	4702825	0.70	2	T				20							75										5																3	2	1
7/5	376575	4702825	1.30	1	T				70							2														15								10		3		5	1	4
7/5	376575	4702825	1.30	2	S				79							10														10								1				4	1	3
7/5	376550	4702825	2.00	1	M				90		1					9																										3	1	2
7/5	376550	4702825	2.00	2	D				70		0.01					20										10												0.01				5	2	3
7/6	376525	4702825	2.40	1	D		1		49		0.01					49										1																5	2	3
7/6	376525	4702825	2.40	2	D		5		60							35										0.01				0.01								0.01				6	2	4
7/6	376500	4702825	2.60	1	D		10		45							45					0.01					0.01										0.01				0.01		7	3	4
7/6	376500	4702825	2.60	2	D		5		48		0.01					47										0.01				0.01								0.01				7	2	5
7/11	376475	4702825	2.70	1	M		1		49		0.01					50					0.01									0.01												6	2	4
7/11	376475	4702825	2.70	2	M		2		50							44					1									0.01								3				6	2	4
7/11	376450	4702825	2.30	1	D		15		35		0.01					30					20					0.01				0.01		0.01										8	3	5
7/11	376450	4702825	2.30	2	D		0.01		50		0.01					40					10									0.01						0.01		0.01		0.01		9	2	7
7/12	376425	4702825	3.00	1	M		29		35							1					35											0.01										5	2	3
7/12	376425	4702825	3.00	2	S		25		34							1					35					5				0.01												6	3	3
7/12	376400	4702825	3.15	1	M		10		40		0.01										50											0.01								0.01		6	1	5
7/12	376400	4702825	3.15	2	M		25		30							3					40									2		0.01				0.01						7	2	5
7/14	376375	4702825	3.00	1	M	0.01			45		0.01					1	0.01				53									1												7	2	5
7/14	376375	4702825	3.00	2	M		15		40		0.01					5					35									5												6	2	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/14	376350	4702825	3.05	1	M		30		30		0.01					**10**					**25**									5												6	**2**	4
7/14	376350	4702825	3.05	2	M		30		35		0.01					**0.01**					**35**									0.01					0.01							7	**2**	5
7/19	376325	4702825	3.40	1	M		20		39		0.01					**1**					**40**																					5	**2**	3
7/19	376325	4702825	3.40	2	M		58		35		0.01					**2**					**5**									0.01					0.01							7	**2**	5
7/20	376300	4702825	3.40	1	M		63		15							**1**					**20**					**1**																5	**3**	2
7/20	376300	4702825	3.40	2	M		20		15							**0.01**					**65**									0.01												5	**2**	3
7/20	376275	4702825	3.50	1	D		30		6		0.01					**4**					**60**									0.01												6	**2**	4
7/20	376275	4702825	3.50	2	D		35		16							**4**					**45**																					4	**2**	2
7/27	376250	4702825	3.50	1	M		30		8		0.01					**2**					**60**									0.01										0.01		7	**2**	5
7/27	376250	4702825	3.50	2	M		60		17							**3**					**20**																					4	**2**	2
7/28	376225	4702825	3.50	1	M		30		10								0.01				**60**																					4	**1**	3
7/28	376225	4702825	3.50	2	M		50		15							**1**					**34**																					4	**2**	2
7/28	376200	4702825	3.50	1	D		5		0.01												**95**																					3	**1**	2
7/28	376200	4702825	3.50	2	D		20		25												**55**																					3	**1**	2
8/1	376175	4702825	3.80	1	D		70		5							**0.01**					**25**																					4	**2**	2
8/1	376175	4702825	3.80	2	D		90		5		0.01					**0.01**					**5**									0.01												6	**2**	4
8/2	376150	4702825	3.60	1	D		68		5							**2**					**25**																					4	**2**	2
8/2	376150	4702825	3.60	2	D		73		5							**2**					**20**																					4	**2**	2
8/3	376125	4702825	3.60	1	D		49		2												**49**																					3	**1**	2
8/3	376125	4702825	3.60	2	D		73		1							**1**					**25**																					4	**2**	2
8/4	376100	4702825	3.80	1	M		40		1								0.01				**59**									0.01												5	**1**	4
8/4	376100	4702825	3.80	2	M		30		2							**2**					**65**									1												5	**2**	3
8/4	376075	4702825	3.60	1	D		50		10							**0.01**					**30**															10						5	**2**	3
8/4	376075	4702825	3.60	2	D		45		10							**5**					**40**																					4	**2**	2
8/5	376050	4702825	4.00	1	D		50		2							**2**					**46**																					4	**2**	2
8/5	376050	4702825	4.00	2	M		30		3							**0.01**					**65**									2												5	**2**	3
8/5	376025	4702825	3.50	1	M		47		3							**3**					**46**														1							5	**2**	3
8/5	376025	4702825	3.50	2	M		47		1							**5**					**47**																					4	**2**	2
9/1	376000	4702825	4.00	1	D		9		0.01							**1**					**90**																					4	**2**	2
9/1	376000	4702825	4.00	2	D		40		4							**6**					**50**																					4	**2**	2
9/6	375975	4702825	4.00	1	D		35		5							**10**					**50**																					4	**2**	2
9/6	375975	4702825	4.00	2	D		20		2							**8**					**70**																					4	**2**	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/6	375950	4702825	3.90	1	D		0.01		0.01												100																					3	1	2
9/6	375950	4702825	3.90	2	D				1							4					95																					3	2	1
9/7	375925	4702825	4.00	1	D		10		40							0.01					50																					4	2	2
9/7	375925	4702825	4.00	2	D		20		18							2					60						0.01															5	2	3
9/7	375900	4702825	4.00	1	D		8		2							10					80																					4	2	2
9/7	375900	4702825	4.00	2	D		4		20							1					75																					4	2	2
9/8	375875	4702825	4.00	1	D		5		10							5					80																					4	2	2
9/8	375875	4702825	4.00	2	D		8		45							2					45																					4	2	2
9/12	375850	4702825	4.00	1	M				6							0.01					94																					3	2	1
9/12	375850	4702825	4.00	2	M		2		4												90														4							4	1	3
9/13	375825	4702825	4.00	1	D		10		35							5					50																					4	2	2
9/13	375825	4702825	4.00	2	D		3		35							2					60																					4	2	2
9/15	375800	4702825	4.10	1	S											5					95																					2	2	0
9/15	375800	4702825	4.10	2	M				0.01							10					90																					3	2	1
9/15	375775	4702825	4.10	1	D		2		8												90																					3	1	2
9/15	375775	4702825	4.10	2	D		0.01		3												97																					3	1	2
9/15	375750	4702825	4.00	1	D				0.01												100																					2	1	1
9/15	375750	4702825	4.00	2	D		0.01		3												97																					3	1	2
9/20	375725	4702825	4.00	1	M				0.01												100																					2	1	1
9/20	375725	4702825	4.00	2	D		0.01									0.01					100																					3	2	1
9/20	375700	4702825	4.00	1	M											0.01					100																					2	2	0
9/20	375700	4702825	4.00	2	D																100																					1	1	0
7/5	376550	4702850	1.90	1	D		1		49		0.01					50										0.01				0.01												6	2	4
7/5	376550	4702850	1.90	2	D		3		50							45										2				0.01								0.01				6	2	4
7/6	376525	4702850	2.30	1	D		3		50							45										2				0.01												5	2	3
7/6	376525	4702850	2.30	2	D		1		61							35										1									0.01	2						6	2	4
7/6	376500	4702850	2.60	1	D		1		49							49										1																4	2	2
7/6	376500	4702850	2.60	2	D		10		55							30										5																4	2	2
7/11	376475	4702850	2.90	1	D		1		68		0.01					30					1																					5	2	3
7/11	376475	4702850	2.90	2	D		10		78							10	0.01				2									0.01								0.01				7	2	5
7/11	376450	4702850	2.90	1	M				45		0.01					10					44									1								0.01				6	2	4
7/11	376450	4702850	2.90	2	M		2		30		0.01					37					30									1								0.01				7	2	5

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/11	376425	4702850	3.00	1	M		20		58		0.01					2					20										0.01		0.01			0.01								8	2	6
7/11	376425	4702850	3.00	2	M		5		60		0.01					20					15					0.01				0.01												7	3	4
7/12	376400	4702850	3.20	1	M		25		45		0.01										25					0.01				0.01		5			0.01						0.01		9	2	7
7/12	376400	4702850	3.20	2	M		20		40						15					15										0.01							10		0.01				7	2	5
7/14	376375	4702850	3.00	1	M		30		40		0.01					0.01					30										0.01												6	2	4
7/14	376375	4702850	3.00	2	M	0.01	25		35		0.01					0.01					37										3												7	2	5
7/14	376350	4702850	3.10	1	M		30		40		0.01					0.01					30										0.01												6	2	4
7/14	376350	4702850	3.10	2	M		25		36		0.01					0.01					35										2						2								7	2	5
7/19	376325	4702850	3.50	1	M		40		30		0.01					0.01					30																							5	2	3
7/19	376325	4702850	3.50	2	M		30		30		0.01					5					35																							5	2	3
7/20	376300	4702850	3.50	1	M		50		15						0.01					35																							4	2	2
7/20	376300	4702850	3.50	2	M		45		5						5					45																							4	2	2
7/20	376275	4702850	3.50	1	M		50		2						2					46																							4	2	2
7/20	376275	4702850	3.50	2	M		35		5						3					57																							4	2	2
7/27	376250	4702850	3.50	1	D		38		8						5					39										0.01							10				0.01		7	2	5
7/27	376250	4702850	3.50	2	D		40		8		0.01					2					50																							5	2	3
7/28	376225	4702850	3.55	1	M		45		14						1					40										0.01												5	2	3
7/28	376225	4702850	3.55	2	M		55		10						0.01					35																							4	2	2
7/28	376200	4702850	3.50	1	D		80		5						5					10																							4	2	2
7/28	376200	4702850	3.50	2	D		35		3						0.01					60										0.01						2								6	2	4
8/1	376175	4702850	4.00	1	D		64		2						2					30										2												5	2	3
8/1	376175	4702850	4.00	2	D		65		5						0.01					30																							4	2	2
8/2	376150	4702850	3.70	1	D		66		2						0.01					30										2												5	2	3
8/2	376150	4702850	3.70	2	D		62		3						0.01					20										0.01						15								6	2	4
8/3	376125	4702850	3.70	1	M		50		0.01						2					40																8							5	2	3
8/3	376125	4702850	3.70	2	D		47		2											48																3							4	1	3
8/4	376100	4702850	3.90	1	M		20		5											75																							3	1	2
8/4	376100	4702850	3.90	2	M		60		0.01						2					38																							4	2	2
8/4	376075	4702850	4.00	1	D	0.01	65		10						5					20																							5	2	3
8/4	376075	4702850	4.00	2	D		48		5						2					45																							4	2	2
8/5	376050	4702850	4.00	1	D		45		2						3					50																							4	2	2
8/5	376050	4702850	4.00	2	D		50		2						2					46																							4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/5	376025	4702850	4.00	1	M		40		5							**0.01**					**55**																					4	**2**	2
8/5	376025	4702850	4.00	2	M		45		3							**1**					**51**																			0.01		5	**2**	3
9/1	376000	4702850	4.00	1	D		5		5							**5**					**85**																					4	**2**	2
9/1	376000	4702850	4.00	2	D		20		7							**3**					**70**																					4	**2**	2
9/6	375975	4702850	4.00	1	D		0.01		5							**5**					**90**																	0.01				5	**2**	3
9/6	375975	4702850	4.00	2	D		30		8							**2**					**60**																					4	**2**	2
9/6	375950	4702850	3.90	1	D		25		25							**0.01**					**50**																					4	**2**	2
9/6	375950	4702850	3.90	2	D		30		20							**10**					**40**																					4	**2**	2
9/7	375925	4702850	4.10	1	D		5		10												**85**																					3	**1**	2
9/7	375925	4702850	4.10	2	D		10		0.01												**90**						0.01															4	**1**	3
9/7	375900	4702850	4.00	1	D		5		15												**80**																					3	**1**	2
9/7	375900	4702850	4.00	2	D		5		30							**0.01**					**65**																					4	**2**	2
9/8	375875	4702850	4.10	1	D		5		40							**10**					**45**																					4	**2**	2
9/8	375875	4702850	4.10	2	D		5		45							**5**					**45**																					4	**2**	2
9/12	375850	4702850	4.00	1	M		10		10												**80**					**0.01**																4	**2**	2
9/12	375850	4702850	4.00	2	D		3		15							**2**					**80**						0.01															5	**2**	3
9/13	375825	4702850	4.10	1	D				5												**95**																					2	**1**	1
9/13	375825	4702850	4.10	2	D																**100**																					1	**1**	0
9/15	375800	4702850	4.20	1	M				0.01												**100**																					2	**1**	1
9/15	375800	4702850	4.20	2	M				20												**80**																					2	**1**	1
9/15	375775	4702850	4.20	1	D				10												**90**																					2	**1**	1
9/15	375775	4702850	4.20	2	D		5		10							**0.01**					**85**																					4	**2**	2
9/15	375750	4702850	4.10	1	S		3		2							**15**					**80**																					4	**2**	2
9/15	375750	4702850	4.10	2	S		5		0.01							**2**					**93**																					4	**2**	2
10/3	375700	4702850	4.10	1	M		20														**80**																					2	**1**	1
10/3	375700	4702850	4.10	2	M		0.01		15												**85**																					3	**1**	2
10/3	375650	4702850	4.00	1	M																**100**																					1	**1**	0
10/3	375650	4702850	4.00	2	M		0.01		0.01												**100**																					3	**1**	2
10/4	375600	4702850	4.00	1	M				3							**0.01**					**97**																					3	**2**	1
10/4	375600	4702850	4.00	2	M				2							**0.01**					**98**																					3	**2**	1
10/4	375550	4702850	3.80	1	D				0.01							**0.01**					**100**																					3	**2**	1
10/4	375550	4702850	3.80	2	M				0.01												**100**																					2	**1**	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/17	375500	4702850	3.50	1	S				0.01							3					97																					3	2	1
10/17	375500	4702850	3.50	2	S				0.01							15					85																					3	2	1
10/17	375450	4702850	3.30	1	T				3												97																					2	1	1
10/17	375450	4702850	3.30	2	S				15												85																					2	1	1
10/17	375400	4702850	3.10	1	T				5												95																					2	1	1
10/17	375400	4702850	3.10	2	S				1												99																					2	1	1
10/17	375350	4702850	3.10	1	T				5							5					90																					3	2	1
10/17	375350	4702850	3.10	2	T				5												95																					2	1	1
10/17	375300	4702850	3.20	1	T				13							2					85																					3	2	1
10/17	375300	4702850	3.20	2	S		0.01		50							0.01					50											0.01										5	2	3
10/17	375250	4702850	3.20	1	M				50							0.01					40											0.01			10							5	2	3
10/17	375250	4702850	3.20	2	S				60							2					38																					3	2	1
10/17	375200	4702850	3.30	1	T		5		45												50																					3	1	2
10/17	375200	4702850	3.30	2	T				50												50																					2	1	1
10/17	375150	4702850	3.40	1	S				10							5					85																					3	2	1
10/17	375150	4702850	3.40	2	T				5							5					90																					3	2	1
10/17	375100	4702850	3.50	1	T																100																					1	1	0
10/17	375100	4702850	3.50	2	S				3							2					95																					3	2	1
10/17	375050	4702850	3.50	1	T				10												90																					2	1	1
10/17	375050	4702850	3.50	2	T				5												95																					2	1	1
10/17	375000	4702850	3.60	1	T																100																					1	1	0
10/17	375000	4702850	3.60	2	T		1														99																					2	1	1
10/17	374950	4702850	3.50	1	T		1														99																					2	1	1
10/17	374950	4702850	3.50	2	T				4							1					95																					3	2	1
10/17	374900	4702850	3.50	1	S											0.01					100																					2	2	0
10/17	374900	4702850	3.50	2	S											0.01					100																					2	2	0
10/17	374850	4702850	3.50	1	S		10		80												10																					3	1	2
10/17	374850	4702850	3.50	2	S		2		95							2					1																					4	2	2
10/17	374800	4702850	3.40	1	D				3							95																						2				3	1	2
10/17	374800	4702850	3.40	2	D		1		2							95					1																	1				5	2	3
10/17	374750	4702850	3.40	1	M				40							60																										2	1	1
10/17	374750	4702850	3.40	2	M		5		50							45																										3	1	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/17	374700	4702850	3.10	1	M		0.01		25							75					0.01																	0.01				5	2	3
10/17	374700	4702850	3.10	2	M		0.01		50		2					48																										4	1	3
10/17	374650	4702850	2.90	1	S		3		25							70					2																					4	2	2
10/17	374650	4702850	2.90	2	M		5		50							45																										3	1	2
10/17	374600	4702850	2.60	1	M		5		40		0.01					50					3																	2				6	2	4
10/17	374600	4702850	2.60	2	M		0.01		68							30					0.01																	2				5	2	3
10/17	374550	4702850	2.60	1	M		5		10		10					65					10																	0.01				6	2	4
10/17	374550	4702850	2.60	2	M		10		40		5					40					5																					5	2	3
7/5	376550	4702875	1.70	1	D		2		49		0.01					49														0.01												5	1	4
7/5	376550	4702875	1.70	2	D		5		50		0.01					45										0.01				0.01					0.01			0.01				8	2	6
7/6	376525	4702875	2.30	1	D		2		48		0.01					48										2				0.01								0.01				7	2	5
7/6	376525	4702875	2.30	2	D		1		49							50										0.01												0.01				5	2	3
7/6	376500	4702875	2.50	1	D		1		59							40										0.01										0.01						5	2	3
7/6	376500	4702875	2.50	2	D		5		55		0.01					40					0.01																	0.01				6	2	4
7/11	376475	4702875	2.95	1	D		0.01		65		0.01					35														0.01												5	1	4
7/11	376475	4702875	2.95	2	D		1		69		0.01					30					0.01									0.01								0.01				7	2	5
7/11	376450	4702875	3.00	1	M		5		80		0.01					5					10									0.01		0.01						0.01				8	2	6
7/11	376450	4702875	3.00	2	M		10		65		0.01					15					10									0.01		0.01										7	2	5
7/11	376425	4702875	3.10	1	M		1		40							10					49					0.01				0.01		0.01										7	3	4
7/11	376425	4702875	3.10	2	M		4		83							3					10					0.01				0.01								0.01				7	3	4
7/12	376400	4702875	3.30	1	M		5		30		0.01					10					55									0.01		0.01						0.01				8	2	6
7/12	376400	4702875	3.30	2	M		10		40		0.01					0.01					50														0.01			0.01		0.01		8	2	6
7/14	376375	4702875	3.20	1	D		15		40		0.01					0.01					45					0.01				0.01												7	3	4
7/14	376375	4702875	3.20	2	D		14		10							5					70					0.01		0.01		0.01								1				8	3	5
7/14	376350	4702875	3.25	1	S		35		25		0.01					5					35									0.01										0.01		7	2	5
7/14	376350	4702875	3.25	2	M		35		35		0.01					0.01					30									0.01												6	2	4
7/19	376325	4702875	3.50	1	M		25		15							0.01	0.01				60									0.01						0.01						7	2	5
7/19	376325	4702875	3.50	2	M		40		15		0.01					3					40									2												6	2	4
7/20	376300	4702875	3.50	1	M		30		35		0.01					0.01					35																					5	2	3
7/20	376300	4702875	3.50	2	M		15		35							3					47									0.01												5	2	3
7/20	376275	4702875	3.70	1	M		45		10												45					0.01				0.01												5	2	3
7/20	376275	4702875	3.70	2	M		50		5							3					41									1												5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/27	376250	4702875	3.50	1	M		22		5							**3**					**70**																					4	**2**	2
7/27	376250	4702875	3.50	2	M		35		14							**1**					**50**																					4	**2**	2
7/28	376225	4702875	3.70	1	M		45		4							**1**	0.01				**50**					**0.01**				0.01												7	**3**	4
7/28	376225	4702875	3.70	2	M		45		5							**5**	0.01				**45**									0.01												6	**2**	4
7/28	376200	4702875	3.90	1	D		50		3												**47**																					3	**1**	2
7/28	376200	4702875	3.90	2	D		47		3							**2**					**48**																					4	**2**	2
8/1	376175	4702875	3.60	1	D		40		5												**50**															5						4	**1**	3
8/1	376175	4702875	3.60	2	D		70		3							**2**					**25**																					4	**2**	2
8/2	376150	4702875	3.80	1	D		40		4							**1**					**55**					**0.01**																5	**3**	2
8/2	376150	4702875	3.80	2	D		85		5							**0.01**					**10**														0.01							5	**2**	3
8/3	376125	4702875	3.90	1	D		66		2							**2**					**30**																					4	**2**	2
8/3	376125	4702875	3.90	2	D		90		5							**0.01**					**5**																					4	**2**	2
8/4	376100	4702875	3.90	1	M		60		5							**5**					**30**																					4	**2**	2
8/4	376100	4702875	3.90	2	M		55		10							**10**					**25**															0.01						5	**2**	3
8/4	376075	4702875	4.00	1	D		78		2							**10**					**10**																					4	**2**	2
8/4	376075	4702875	4.00	2	D		45		5							**10**					**40**																					4	**2**	2
8/5	376050	4702875	4.00	1	D		25		2							**5**	0.01				**68**																					5	**2**	3
8/5	376050	4702875	4.00	2	D		7		2							**1**					**90**																					4	**2**	2
8/5	376025	4702875	4.00	1	D		55		2												**41**									2												4	**1**	3
8/5	376025	4702875	4.00	2	D		43		3							**2**					**50**														0.01	2						6	**2**	4
9/1	376000	4702875	4.00	1	D		3		0.01							**0.01**					**90**														7							5	**2**	3
9/1	376000	4702875	4.00	2	D		2		0.01							**0.01**					**75**														23							5	**2**	3
9/6	375975	4702875	4.00	1	D		10		2							**8**					**80**																					4	**2**	2
9/6	375975	4702875	4.00	2	D				5												**45**														50							3	**1**	2
9/6	375950	4702875	4.00	1	D		8		2												**90**																					3	**1**	2
9/6	375950	4702875	4.00	2	D		8		15		0.01					**2**					**75**																					5	**2**	3
9/7	375925	4702875	4.10	1	D		15		10							**0.01**					**50**														20	5						6	**2**	4
9/7	375925	4702875	4.10	2	D		15		1							**2**					**82**						0.01															5	**2**	3
9/7	375900	4702875	3.90	1	D		10		5							**15**					**70**																					4	**2**	2
9/7	375900	4702875	3.90	2	D		10		15												**75**																					3	**1**	2
9/8	375875	4702875	4.20	1	D		15		15							**5**					**65**																					4	**2**	2
9/8	375875	4702875	4.20	2	D		10		25							**10**					**55**																					4	**2**	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/12	375850	4702875	4.20	1	M		1									**1**					**98**																					3	**2**	1
9/12	375850	4702875	4.20	2	M				2												**98**																					2	**1**	1
9/13	375825	4702875	4.10	1	D		1		1												**98**																					3	**1**	2
9/13	375825	4702875	4.10	2	D		1		24												**75**																					3	**1**	2
9/15	375800	4702875	4.20	1	M		6		9												**85**																					3	**1**	2
9/15	375800	4702875	4.20	2	M		5		5												**90**																					3	**1**	2
7/5	376550	4702900	1.70	1	M				40							**40**										**10**				10								0.01				5	**2**	3
7/5	376550	4702900	1.70	2	D		10		66		2					**20**																						2				5	**1**	4
7/6	376525	4702900	1.90	1	D		4		35		0.01					**60**														1								0.01				6	**1**	5
7/6	376525	4702900	1.90	2	D				50		0.01					**49**										**1**				0.01					0.01	0.01		0.01				8	**2**	6
7/6	376500	4702900	2.40	1	D		1		49		0.01					**49**										**1**				0.01								0.01				7	**2**	5
7/6	376500	4702900	2.40	2	D		1		49		0.01					**50**										**0.01**												0.01				6	**2**	4
7/11	376475	4702900	2.75	1	D		1		86		0.01					**10**					**3**									0.01								0.01				7	**2**	5
7/11	376475	4702900	2.75	2	D	0.01	5		70		0.01					**20**										**5**				0.01								0.01				8	**2**	6
7/11	376450	4702900	2.90	1	M		3		49		0.01					**25**					**20**					**3**						0.01			0.01			0.01		0.01		10	**3**	7
7/11	376450	4702900	2.90	2	M		1		82		0.01					**15**										**2**						0.01						0.01				7	**2**	5
7/12	376425	4702900	3.15	1	D		20		60		0.01										**20**					**0.01**				0.01		0.01										7	**2**	5
7/12	376425	4702900	3.15	2	D	0.01	38		60							**2**					**0.01**					**0.01**												0.01				7	**3**	4
7/13	376400	4702900	3.50	1	D		15		58		0.01					**15**					**2**															10						6	**2**	4
7/13	376400	4702900	3.50	2	D		25		66		0.01					**5**					**2**					**2**																6	**3**	3
7/13	376375	4702900	3.40	1	D		47		40		0.01					**3**					**10**									0.01												6	**2**	4
7/13	376375	4702900	3.40	2	D	0.01	48		40		0.01					**1**					**10**											1				0.01		0.01				9	**2**	7
7/14	376350	4702900	3.30	1	M		40		45		0.01					**2**					**13**									0.01												6	**2**	4
7/14	376350	4702900	3.30	2	M		40		20		0.01					**20**					**20**									0.01												6	**2**	4
7/19	376325	4702900	3.50	1	D		33		40		0.01					**2**					**25**																					5	**2**	3
7/19	376325	4702900	3.50	2	D		15		65		1					**4**					**15**																					5	**2**	3
7/20	376300	4702900	3.50	1	M		35		15							**2**					**40**															8						5	**2**	3
7/20	376300	4702900	3.50	2	M		50		5		0.01										**40**															5						5	**1**	4
7/20	376275	4702900	3.50	1	M		50		15		0.01					**0.01**					**35**																					5	**2**	3
7/20	376275	4702900	3.50	2	M		15		15		0.01					**1**					**49**									0.01						20						7	**2**	5
7/27	376250	4702900	3.50	1	M		3		10							**3**					**84**																					4	**2**	2
7/27	376250	4702900	3.50	2	M		30		5							**5**					**60**																					4	**2**	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/28	376225	4702900	3.60	1	M		24		5		1					10					60																					5	2	3
7/28	376225	4702900	3.60	2	S		20		25							0.01					55																					4	2	2
7/28	376200	4702900	3.90	1	D		50		5							0.01					45																					4	2	2
7/28	376200	4702900	3.90	2	D		43		5							2					50									0.01												5	2	3
8/1	376175	4702900	3.85	1	D		50		25							0.01					25																					4	2	2
8/1	376175	4702900	3.85	2	D		47		5							0.01					48																					4	2	2
8/2	376150	4702900	3.90	1	D		35		8							2					28															27						5	2	3
8/2	376150	4702900	3.90	2	D		50		5		0.01					5					40															0.01						6	2	4
8/3	376125	4702900	4.00	1	D		80		15							3					2					0.01																5	3	2
8/3	376125	4702900	4.00	2	D		83		5							2					10																					4	2	2
8/4	376100	4702900	3.90	1	M		75		4								1				20																					4	1	3
8/4	376100	4702900	3.90	2	M		75		15												10					0.01																4	2	2
8/4	376075	4702900	3.80	1	M		83		10							0.01					7																					4	2	2
8/4	376075	4702900	3.80	2	M		55		3							2					40																	0.01				5	2	3
8/5	376050	4702900	4.00	1	D		45		3		0.01					2					50																					5	2	3
8/5	376050	4702900	4.00	2	M		48		1							1	0.01				50																					5	2	3
8/5	376025	4702900	4.00	1	D		80		5							5					10																					4	2	2
8/5	376025	4702900	4.00	2	D		30		2							3					65																					4	2	2
9/1	376000	4702900	3.90	1	D		26		2							2					70																					4	2	2
9/1	376000	4702900	3.90	2	D		19		0.01							1					80																					4	2	2
9/6	375975	4702900	4.00	1	D		5		10												85																					3	1	2
9/6	375975	4702900	4.00	2	D		15		10												75																					3	1	2
9/6	375950	4702900	4.10	1	D		3		3							3					91																					4	2	2
9/6	375950	4702900	4.10	2	D		5		25												70																					3	1	2
9/7	375925	4702900	4.00	1	D		5		5							0.01					90																					4	2	2
9/7	375925	4702900	4.00	2	D		2		8							0.01					90																					4	2	2
9/7	375900	4702900	4.00	1	D											0.01					100																					2	2	0
9/7	375900	4702900	4.00	2	D																100																					1	1	0
9/8	375875	4702900	4.20	1	D		10		10												80																					3	1	2
9/8	375875	4702900	4.20	2	D		5		4							1					90																					4	2	2
9/12	375850	4702900	4.20	1	D		3									0.01					97																					3	2	1
9/12	375850	4702900	4.20	2	D		0.01		5							3					92																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/13	375825	4702900	4.20	1	D		3		8							5					84																					4	2	2
9/13	375825	4702900	4.20	2	M		7		40							3					50																					4	2	2
10/3	375750	4702900	4.40	1	M		5														95																					2	1	1
10/3	375750	4702900	4.40	2	M		1		5												94																					3	1	2
10/3	375700	4702900	4.20	1	M																100																					1	1	0
10/3	375700	4702900	4.20	2	M				1												99																					2	1	1
10/3	375650	4702900	4.00	1	M																100																					1	1	0
10/3	375650	4702900	4.00	2	M		0.01		0.01												100																					3	1	2
10/4	375600	4702900	4.00	1	M				0.01							0.01					100																					3	2	1
10/4	375600	4702900	4.00	2	M		0.01		2							1					97																					4	2	2
10/4	375550	4702900	4.00	1	D				3							0.01					97																					3	2	1
10/4	375550	4702900	4.00	2	M				10							5					85																					3	2	1
10/17	375500	4702900	3.60	1	S											0.01					100																					2	2	0
10/17	375500	4702900	3.60	2	S																100																					1	1	0
10/17	375450	4702900	3.50	1	M				35							0.01					65																					3	2	1
10/17	375450	4702900	3.50	2	S				30												70																					2	1	1
10/17	375400	4702900	3.40	1	S				0.01												100																					2	1	1
10/17	375400	4702900	3.40	2	M				5							0.01					93														2							4	2	2
10/17	375350	4702900	3.20	1	S		5		3												92																					3	1	2
10/17	375350	4702900	3.20	2	S		1		45							9					45																					4	2	2
10/17	375300	4702900	3.40	1	T				1												99																					2	1	1
10/17	375300	4702900	3.40	2	T				1												99																					2	1	1
10/17	375250	4702900	3.40	1	T											1					99																					2	2	0
10/17	375250	4702900	3.40	2	T				1												99																					2	1	1
10/17	375200	4702900	3.50	1	S				0.01												100																					2	1	1
10/17	375200	4702900	3.50	2	S				0.01												100																					2	1	1
10/17	375150	4702900	3.50	1	S				0.01												100																					2	1	1
10/17	375150	4702900	3.50	2	S				0.01												100																					2	1	1
10/17	375100	4702900	3.60	1	T																100																					1	1	0
10/17	375100	4702900	3.60	2	S				3												97														0.01							3	1	2
10/17	375050	4702900	3.60	1	T				10												90																					2	1	1
10/17	375050	4702900	3.60	2	M																100																					1	1	0

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/17	375000	4702900	3.60	1	S				5							0.01					95																					3	2	1
10/17	375000	4702900	3.60	2	T				10												90																					2	1	1
10/17	374950	4702900	3.60	1	T											2					98																					2	2	0
10/17	374950	4702900	3.60	2	S				15												85																					2	1	1
10/17	374900	4702900	3.50	1	S																100																					1	1	0
10/17	374900	4702900	3.50	2	S				0.01												100																					2	1	1
10/17	374850	4702900	3.60	1	S		50		40							10																										3	1	2
10/17	374850	4702900	3.60	2	M		25		50							5														0.01					20							5	1	4
10/17	374800	4702900	3.50	1	M				60							40																										2	1	1
10/17	374800	4702900	3.50	2	M		5		47							48					0.01																					4	2	2
10/17	374750	4702900	3.50	1	M				35							65					0.01																					3	2	1
10/17	374750	4702900	3.50	2	S				40							60																										2	1	1
10/17	374700	4702900	3.20	1	M				50							50																										2	1	1
10/17	374700	4702900	3.20	2	M		10		45							45					0.01																					4	2	2
10/17	374650	4702900	3.10	1	S		0.01		60							40					0.01																	0.01				5	2	3
10/17	374650	4702900	3.10	2	M		0.01		50							50																						0.01				4	1	3
10/17	374600	4702900	2.90	1	M		3		20		10					65																						2				5	1	4
10/17	374600	4702900	2.90	2	M		2		40							50					0.01																	8				5	2	3
10/17	374550	4702900	2.50	1	M		22		3							0.01					75																					4	2	2
10/17	374550	4702900	2.50	2	S		19		30							1					50																					4	2	2
7/5	376550	4702925	1.20	1	S				70																					30												2	0	2
7/5	376550	4702925	1.20	2	S		12		60		7					20														1												5	1	4
7/6	376525	4702925	1.80	1	D		2		50		0.01					43										3				2												6	2	4
7/6	376525	4702925	1.80	2	D		3		50		0.01					45														2								0.01				6	1	5
7/6	376500	4702925	2.10	1	D		2		50		0.01					48																										4	1	3
7/6	376500	4702925	2.10	2	D		1		79		0.01					20																						0.01				5	1	4
7/11	376475	4702925	2.50	1	D		1		79		0.01					20																										4	1	3
7/11	376475	4702925	2.50	2	D		0.01		55							45																						0.01				4	1	3
7/11	376450	4702925	2.90	1	M		3		75		0.01					20										2				0.01					0.01			0.01				8	2	6
7/11	376450	4702925	2.90	2	M		2		73							15					0.01					10						0.01						0.01				7	3	4
7/12	376425	4702925	3.15	1	D		15		55							15										15																4	2	2
7/12	376425	4702925	3.15	2	D		5		55							10										15										15						5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/13	376400	4702925	3.30	1	D		15		80		0.01					4					0.01					1				0.01		0.01			0.01			0.01				10	3	7
7/13	376400	4702925	3.30	2	D		15		75		0.01					5					5					0.01				0.01												7	3	4
7/13	376375	4702925	3.50	1	M		25		20		0.01					10					10					15										20						7	3	4
7/13	376375	4702925	3.50	2	M		15		70		0.01					13					0.01															2						6	2	4
7/14	376350	4702925	3.40	1	M		35		25												35					0.01				5												5	2	3
7/14	376350	4702925	3.40	2	M		30		9		0.01					5					55														1							6	2	4
7/19	376325	4702925	3.50	1	D		15		30		0.01					15					40					0.01				0.01												7	3	4
7/19	376325	4702925	3.50	2	D		45		25		2					2					25					1				0.01												7	3	4
7/20	376300	4702925	3.50	1	M		40		30		0.01					0.01					30									0.01												6	2	4
7/20	376300	4702925	3.50	2	M		47		25							3					25									0.01												5	2	3
7/26	376275	4702925	3.60	1	D		45		5												50					0.01																4	2	2
7/26	376275	4702925	3.60	2	D		65		10		0.01					0.01					25																					5	2	3
7/26	376250	4702925	3.75	1	M		30		28		0.01					2					40																					5	2	3
7/26	376250	4702925	3.75	2	D		49		15		0.01					1					35															0.01						6	2	4
7/28	376225	4702925	3.90	1	D		45		40		0.01					10					3					2																6	3	3
7/28	376225	4702925	3.90	2	D		40		40							5					5					10				0.01												6	3	3
7/28	376200	4702925	3.90	1	D		55		15		0.01					0.01					30																					5	2	3
7/28	376200	4702925	3.90	2	D		40		3							0.01					57												0.01									5	2	3
8/1	376175	4702925	3.85	1	D		60		15							0.01					25																					4	2	2
8/1	376175	4702925	3.85	2	D		38		30							1					30					1																5	3	2
8/2	376150	4702925	3.90	1	D		93		5							2																										3	1	2
8/2	376150	4702925	3.90	2	D		75		5							0.01					20																					4	2	2
8/2	376125	4702925	4.00	1	D		70		5		0.01					0.01					25																					5	2	3
8/2	376125	4702925	4.00	2	D		50		1							0.01					49																					4	2	2
8/4	376100	4702925	4.00	1	M		63		2							0.01					35									0.01												5	2	3
8/4	376100	4702925	4.00	2	M		88		2							5					5									0.01												5	2	3
8/4	376075	4702925	3.90	1	M		75		5							0.01										20																4	2	2
8/4	376075	4702925	3.90	2	M		90	0.01	5		0.01					5					0.01																					6	2	4
8/5	376050	4702925	4.00	1	D		90		3							2					5																					4	2	2
8/5	376050	4702925	4.00	2	D		96		2		0.01					2																										4	1	3
8/5	376025	4702925	4.50	1	M		65		7							1					20					2									5	0.01						7	3	4
8/5	376025	4702925	4.50	2	S		35		5							30					30																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/1	376000	4702925	4.00	1	D	0.01	15		0.01							10					75															0.01		0.01				7	2	5
9/1	376000	4702925	4.00	2	D		20									0.01					80															0.01						4	2	2
9/6	375975	4702925	4.10	1	D		3		0.01												97																					3	1	2
9/6	375975	4702925	4.10	2	D		7		3							5					85																					4	2	2
9/6	375950	4702925	4.10	1	D		9		1							0.01					90																					4	2	2
9/6	375950	4702925	4.10	2	D		5		2							3					90																					4	2	2
9/7	375925	4702925	4.10	1	D		20		10							5					65																					4	2	2
9/7	375925	4702925	4.10	2	D		15		10												75																					3	1	2
9/7	375900	4702925	4.00	1	D		15		0.01							10					75																					4	2	2
9/7	375900	4702925	4.00	2	D		25		5							0.01					60														10							5	2	3
9/8	375875	4702925	4.30	1	D		55		20							5					20						0.01															5	2	3
9/8	375875	4702925	4.30	2	D		75		5												20																					3	1	2
7/6	376525	4702950	1.50	1	S				70							25														0.01								5				4	1	3
7/6	376525	4702950	1.50	2	S				45							50														5								0.01				4	1	3
7/6	376500	4702950	1.50	1	M		5		53		0.01					40										2				0.01								0.01				7	2	5
7/6	376500	4702950	1.50	2	M		3		46		0.01					50														0.01								1				6	1	5
7/11	376475	4702950	2.50	1	M		10		70		0.01					15										5												0.01				6	2	4
7/11	376475	4702950	2.50	2	M		5		85		0.01					10														0.01								0.01				6	1	5
7/12	376425	4702950	3.10	1	D		10		80		0.01					8										2										0.01		0.01				7	2	5
7/12	376425	4702950	3.10	2	D		15		75							10																										3	1	2
7/12	376400	4702950	3.50	1	D		15		85		0.01					0.01																										4	1	3
7/12	376400	4702950	3.50	2	D		15		73							10										2																4	2	2
7/13	376375	4702950	3.50	1	D		30		65		2					2														0.01		1										6	1	5
7/13	376375	4702950	3.50	2	D		49		49		0.01					2					0.01									0.01					0.01							7	2	5
7/14	376350	4702950	3.50	1	M		20		35							10					5					30				0.01												6	3	3
7/14	376350	4702950	3.50	2	M		15		20							10					10					45																5	3	2
7/19	376325	4702950	3.50	1	M		45		20		0.01					9					25					1										0.01						7	3	4
7/19	376325	4702950	3.50	2	M		41		42							3					10					4																5	3	2
7/20	376300	4702950	3.60	1	M		10		60							2					25					3				0.01												6	3	3
7/20	376300	4702950	3.60	2	M		30		35							5					15					15																5	3	2
7/26	376275	4702950	3.50	1	M		35		5							2					55									3												5	2	3
7/26	376275	4702950	3.50	2	M		43		5							2					35					15																5	3	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/26	376250	4702950	3.80	1	M		35		40		0.01					5					5					5										10						7	3	4
7/26	376250	4702950	3.80	2	M		20		25		0.01					10					35					8				0.01						2				0.01		9	3	6
7/28	376225	4702950	3.90	1	M		23		35		0.01					2					40					0.01																6	3	3
7/28	376225	4702950	3.90	2	D		15		67		0.01					3					0.01					15																6	3	3
8/1	376200	4702950	3.80	1	D		50		10							3					37														0.01							5	2	3
8/1	376200	4702950	3.80	2	M		45		5							0.01					50																					4	2	2
8/1	376175	4702950	4.00	1	D		50		10							0.01					40																					4	2	2
8/1	376175	4702950	4.00	2	D		45		5							5					45																					4	2	2
8/2	376150	4702950	4.00	1	D		81		2							2					15																					4	2	2
8/2	376150	4702950	4.00	2	D		85		5							0.01	0.01		0.01		10															0.01						7	3	4
8/2	376125	4702950	4.00	1	M		49		2							1					48														0.01							5	2	3
8/2	376125	4702950	4.00	2	M		96		2							2					0.01																					4	2	2
8/4	376100	4702950	4.00	1	S		90		5							5																										3	1	2
8/4	376100	4702950	4.00	2	S		93		5								2																									3	0	3
8/4	376075	4702950	4.00	1	S		90		10																																	2	0	2
8/4	376075	4702950	4.00	2	T		70		30																																	2	0	2
8/5	376050	4702950	4.10	1	M		93		2							5																										3	1	2
8/5	376050	4702950	4.10	2	M		95		5																																	2	0	2
8/5	376025	4702950	4.00	1	M		47		2							5					46																					4	2	2
8/5	376025	4702950	4.00	2	M		72		10							3					10															5						5	2	3
9/1	376000	4702950	4.00	1	D		20		1												70															9						4	1	3
9/1	376000	4702950	4.00	2	D		10		1							0.01					84															5						5	2	3
9/6	375975	4702950	4.00	1	D		8		2												90																					3	1	2
9/6	375975	4702950	4.00	2	D		12		8												80					0.01																4	2	2
9/6	375950	4702950	4.10	1	D		5		5												90																					3	1	2
9/6	375950	4702950	4.10	2	D		14		0.01							0.01					85														1							5	2	3
9/7	375925	4702950	4.40	1	D		30		5							5					60																					4	2	2
9/7	375925	4702950	4.40	2	D		15		15							0.01					70																					4	2	2
10/3	375900	4702950	4.30	1	M		5									0.01					95																					3	2	1
10/3	375900	4702950	4.30	2	M		3														97																					2	1	1
10/3	375850	4702950	4.40	1	M		10		10												80																					3	1	2
10/3	375850	4702950	4.40	2	M		20		10												70																					3	1	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/3	375800	4702950	4.50	1	M																100																					1	1	0
10/3	375800	4702950	4.50	2	D		1		14							0.01					85																					4	2	2
10/3	375750	4702950	4.50	1	M		0.01														100																					2	1	1
10/3	375750	4702950	4.50	2	M				0.01												100																					2	1	1
10/3	375700	4702950	4.40	1	M																100																					1	1	0
10/3	375700	4702950	4.40	2	M		0.01		2												98																					3	1	2
10/3	375650	4702950	4.00	1	D		10		4							1					85																					4	2	2
10/3	375650	4702950	4.00	2	M		20														80																					2	1	1
10/4	375600	4702950	4.40	1	M																100																					1	1	0
10/4	375600	4702950	4.40	2	M		0.01														100																					2	1	1
10/4	375550	4702950	4.20	1	M				0.01							0.01			0.01		100																					4	3	1
10/4	375550	4702950	4.20	2	M				0.01							0.01					100																					3	2	1
10/17	375500	4702950	3.70	1	S				0.01												100																					2	1	1
10/17	375500	4702950	3.70	2	S																100																					1	1	0
10/17	375450	4702950	3.60	1	T				1												99																					2	1	1
10/17	375450	4702950	3.60	2	S																100																					1	1	0
10/17	375400	4702950	3.60	1	S				0.01							0.01					100																					3	2	1
10/17	375400	4702950	3.60	2	S				2							0.01					98																					3	2	1
10/17	375350	4702950	3.10	1	S																100																					1	1	0
10/17	375350	4702950	3.10	2	S																100																					1	1	0
10/17	375300	4702950	3.50	1	S				0.01												100																					2	1	1
10/17	375300	4702950	3.50	2	S				5												95																					2	1	1
10/17	375250	4702950	3.50	1	M																100														0.01							2	1	1
10/17	375250	4702950	3.50	2	M											0.01					100																					2	2	0
10/17	375200	4702950	3.60	1	S		0.01		2							5					93																					4	2	2
10/17	375200	4702950	3.60	2	S		0.01														100																					2	1	1
10/17	375150	4702950	3.70	1	T																100																					1	1	0
10/17	375150	4702950	3.70	2	S				3												97																					2	1	1
10/17	375100	4702950	3.70	1	S				0.01							2					98																					3	2	1
10/17	375100	4702950	3.70	2	T				1												99																					2	1	1
10/17	375050	4702950	3.70	1	S																100																					1	1	0
10/17	375050	4702950	3.70	2	T											1					99																					2	2	0

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/17	375000	4702950	3.70	1	S				1												99																					2	1	1
10/17	375000	4702950	3.70	2	S				3												97					0.01																3	2	1
10/17	374950	4702950	3.70	1	T																100																					1	1	0
10/17	374950	4702950	3.70	2	T																100																					1	1	0
10/17	374900	4702950	3.70	1	T				10							5					85																					3	2	1
10/17	374900	4702950	3.70	2	S				0.01												100																					2	1	1
10/17	374850	4702950	3.80	1	T																100																					1	1	0
10/17	374850	4702950	3.80	2	T				1							9					90																					3	2	1
10/17	374800	4702950	3.60	1	M		5		20							65																			10							4	1	3
10/17	374800	4702950	3.60	2	M		8		55							35																			2							4	1	3
10/17	374750	4702950	3.60	1	M		0.01		49							49																				2						4	1	3
10/17	374750	4702950	3.60	2	M		2		49							49																										3	1	2
10/17	374700	4702950	3.40	1	D		10		30							50					10																					4	2	2
10/17	374700	4702950	3.40	2	D		10		10							40					38															2		0.01				6	2	4
10/17	374650	4702950	3.40	1	D		10		30							60					0.01														0.01			0.01				6	2	4
10/17	374650	4702950	3.40	2	D		0.01		20							80																			0.01			0.01				5	1	4
10/17	374600	4702950	3.00	1	M		2		50							45																						3				4	1	3
10/17	374600	4702950	3.00	2	M		0.01		20							75																						5				4	1	3
10/17	374550	4702950	2.60	1	S		10		5		5					70																						10				5	1	4
10/17	374550	4702950	2.60	2	M		5		2							50																						43				4	1	3
10/17	374500	4702950	1.90	1	M		20		20		30					0.01																						30				5	1	4
10/17	374500	4702950	1.90	2	M		20		30		30					10																						10				5	1	4
7/6	376500	4702975	1.50	1	M		5		65		0.01					20							0.01			5				5								0.01				8	2	6
7/6	376500	4702975	1.50	2	M		2		92		1					3														2										0.01		6	1	5
7/11	376475	4702975	2.00	1	D		0.01		95							5																						0.01				4	1	3
7/11	376475	4702975	2.00	2	D		5		75							10										10				0.01								0.01				6	2	4
7/11	376450	4702975	2.00	1	M		0.01		80							20																0.01						0.01				5	1	4
7/11	376450	4702975	2.00	2	M		0.01		60							40																						0.01				4	1	3
7/12	376425	4702975	3.05	1	D		2		93							5																0.01						0.01				5	1	4
7/12	376425	4702975	3.05	2	D		1		97							2																										3	1	2
7/12	376400	4702975	3.50	1	S		2		15							3					75											5										5	2	3
7/12	376400	4702975	3.50	2	S				50							5					25									20								0.01				5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/13	376375	4702975	3.50	1	S		10		20							25					45																					4	2	2
7/13	376375	4702975	3.50	2	M		0.01		10		0.01					5					80									2						0.01		3				8	2	6
7/14	376350	4702975	3.50	1	M		5		45		0.01					3					2					45				0.01												7	3	4
7/14	376350	4702975	3.50	2	M		10		32		0.01					5					3					50				0.01												7	3	4
7/19	376325	4702975	3.60	1	M		5		60							20					5					10				0.01												6	3	3
7/19	376325	4702975	3.60	2	M		25		40							5					25					5																5	3	2
7/20	376300	4702975	3.50	1	D		5		40							10					0.01					45				0.01												6	3	3
7/20	376300	4702975	3.50	2	D		5		35							3					2					55																5	3	2
7/26	376275	4702975	3.60	1	S		20		70							5					0.01					5																5	3	2
7/26	376275	4702975	3.60	2	M		10		45							8					7					30																5	3	2
7/20	376250	4702975	3.70	1	M		30		15		0.01					15					15					25																6	3	3
7/20	376250	4702975	3.70	2	M		25		24		0.01					25					1					25																6	3	3
7/27	376225	4702975	3.90	1	M		15		30		0.01					5					5					45																6	3	3
7/27	376225	4702975	3.90	2	M		20		40							10					0.01					30																5	3	2
8/1	376200	4702975	3.80	1	D		48		25		0.01					2	0.01				25																					6	2	4
8/1	376200	4702975	3.80	2	D		40		42		0.01					3					15																					5	2	3
8/1	376175	4702975	4.00	1	D		40		5							2					40					0.01										13						6	3	3
8/1	376175	4702975	4.00	2	D		35		15		0.01					3					47																					5	2	3
8/2	376150	4702975	4.00	1	D		65		10							2					20					3																5	3	2
8/2	376150	4702975	4.00	2	D		68		15							2					15					0.01				0.01												6	3	3
8/2	376125	4702975	4.05	1	S		45		5		2					46					2																					5	2	3
8/2	376125	4702975	4.05	2	S		37		20							38					5									0.01												5	2	3
8/4	376100	4702975	4.00	1	M		54		5		1					40																										4	1	3
8/4	376100	4702975	4.00	2	M		94		5							1	0.01																									4	1	3
8/4	376075	4702975	4.00	1	M		95		3							2																										3	1	2
8/4	376075	4702975	4.00	2	M		60		5							35																										3	1	2
8/5	376050	4702975	4.00	1	S		97		1							2																										3	1	2
8/5	376050	4702975	4.00	2	T		90		1							9																										3	1	2
8/5	376025	4702975	4.00	1	S		30		15							50					5																					4	2	2
8/5	376025	4702975	4.00	2	S		84		5		0.01					10					1																					5	2	3
9/1	376000	4702975	4.50	1	M		40		10		2					3					45																					5	2	3
9/1	376000	4702975	4.50	2	M		50		3							7					40																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
9/6	375975	4702975	4.10	1	D		70		5											25																					3	1	2
9/6	375975	4702975	4.10	2	D		10		10							15				65																					4	2	2
7/11	376475	4703000	1.30	1	M		0.01		100		0.01					0.01																	0.01		0.01						0.01				7	1	6
7/11	376475	4703000	1.30	2	M		1		99		0.01					0.01																			0.01						0.01				6	1	5
7/11	376450	4703000	1.25	1	M		0.01		100							0.01																			0.01											4	1	3
7/11	376450	4703000	1.25	2	M	0.01	3		89		0.01					1							0.01			0.01				2		5									0.01		10	2	8
7/12	376425	4703000	2.85	1	D		5		93							2																			0.01											4	1	3
7/12	376425	4703000	2.85	2	D		1		93		0.01					5										1																	5	2	3
7/12	376400	4703000	3.40	1	D		5		89							5																	0.01		0.01				0.01		1				7	1	6
7/12	376400	4703000	3.40	2	D		2		83							15																			0.01						0.01				5	1	4
7/13	376375	4703000	3.60	1	M		10		75		0.01					15				0.01																					5	2	3
7/13	376375	4703000	3.60	2	M		10		80		0.01					10																									0.01				5	1	4
7/13	376350	4703000	3.60	1	D		4		70							1										25																	4	2	2
7/13	376350	4703000	3.60	2	D		10		60							5										25																	4	2	2
7/19	376325	4703000	3.70	1	M		10		35							10				20						25																	5	3	2
7/19	376325	4703000	3.70	2	M	0.01	5		39		0.01					5				10						39				0.01						2						9	3	6
7/20	376300	4703000	3.60	1	D		10		44		0.01					5				1						40				0.01													7	3	4
7/20	376300	4703000	3.60	2	D		20		44		0.01					1				0.01						35																	6	3	3
7/26	376275	4703000	3.70	1	M		5		50							1										44																	4	2	2
7/26	376275	4703000	3.70	2	M		5		44							5				0.01						44				0.01					2							7	3	4
7/20	376250	4703000	3.80	1	M		10		50							15				15						5									0.01	5						7	3	4
7/20	376250	4703000	3.80	2	M		20		20							5				15						40																	5	3	2
7/27	376225	4703000	3.90	1	M		15		70							0.01				0.01						15																	5	3	2
7/27	376225	4703000	3.90	2	M		15		40							10				0.01						35																	5	3	2
8/1	376200	4703000	3.80	1	M		10		10							10				70										0.01													5	2	3
8/1	376200	4703000	3.80	2	M		40		3		0.01					2				55						0.01											0.01						7	3	4
8/1	376175	4703000	4.00	1	D		46		5							0.01				47						0.01											2						6	3	3
8/1	376175	4703000	4.00	2	M		45		5							0.01				50																					4	2	2
8/2	376150	4703000	4.00	1	D		20		75																		5									0.01							4	1	3
8/2	376150	4703000	4.00	2	D		60		35							4				0.01						0.01				1													6	3	3
8/2	376125	4703000	4.00	1	S		45		35							15				5																					4	2	2
8/2	376125	4703000	4.00	2	S		50		45												5						0.01																	4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/4	376100	4703000	4.00	1	M		85		2		0.01					13					0.01																	0.01				6	2	4
8/4	376100	4703000	4.00	2	M		35		15							35	0.01				0.01					12												3				7	3	4
8/4	376075	4703000	4.10	1	T		82		10							8																										3	1	2
8/4	376075	4703000	4.10	2	S		45		5							50																										3	1	2
8/5	376050	4703000	4.00	1	S		93		5							1																			1							4	1	3
8/5	376050	4703000	4.00	2	S		89		5		0.01					5										1												0.01				6	2	4
8/5	376025	4703000	4.00	1	S		65		10							20					5																					4	2	2
8/5	376025	4703000	4.00	2	M		80		5		0.01					15					0.01																					5	2	3
10/3	376000	4703000	4.40	1	M				50							5					43						0.01								2							5	2	3
10/3	376000	4703000	4.40	2	M		10		15		53					2					20																					5	2	3
10/3	375950	4703000	4.40	1	M											0.01					100														0.01							3	2	1
10/3	375950	4703000	4.40	2	M		22		0.01							3					75																					4	2	2
10/3	375900	4703000	4.30	1	M				0.01												100																					2	1	1
10/3	375900	4703000	4.30	2	M		10		10												80																					3	1	2
10/3	375850	4703000	4.50	1	M		20														80																					2	1	1
10/3	375850	4703000	4.50	2	M		25									15					60																					3	2	1
10/3	375800	4703000	4.50	1	M		0.01														100																					2	1	1
10/3	375800	4703000	4.50	2	M		9		1												90																					3	1	2
10/3	375750	4703000	4.50	1	M		0.01														100																					2	1	1
10/3	375750	4703000	4.50	2	M																100																					1	1	0
10/3	375700	4703000	4.40	1	S		0.01														100																					2	1	1
10/3	375700	4703000	4.40	2	M		4		0.01							1					95																					4	2	2
10/3	375650	4703000	4.50	1	M		15														85																					2	1	1
10/3	375650	4703000	4.50	2	M		5		5							5					85																					4	2	2
10/3	375600	4703000	4.40	1	M																100																					1	1	0
10/3	375600	4703000	4.40	2	M																100																					1	1	0
10/4	375550	4703000	4.30	1	S											0.01					100																					2	2	0
10/4	375550	4703000	4.30	2	S																100																					1	1	0
10/17	375500	4703000	4.00	1	T																100																					1	1	0
10/17	375500	4703000	4.00	2	T				5												95																					2	1	1
10/17	375450	4703000	3.80	1	T																100																					1	1	0
10/17	375450	4703000	3.80	2	M				0.01							0.01					100																					3	2	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/18	375400	4703000	3.90	1	M				1												99																					2	1	1
10/18	375400	4703000	3.90	2	S				0.01												100																					2	1	1
10/18	375350	4703000	3.60	1	M				0.01												100																					2	1	1
10/18	375350	4703000	3.60	2	M				3												97																					2	1	1
10/18	375300	4703000	3.60	1	S				2												98																					2	1	1
10/18	375300	4703000	3.60	2	M				3							0.01					97																					3	2	1
10/18	375250	4703000	3.70	1	M				1												99																					2	1	1
10/18	375250	4703000	3.70	2	M				0.01							0.01					100																					3	2	1
10/18	375200	4703000	3.80	1	M				0.01												100																					2	1	1
10/18	375200	4703000	3.80	2	M				0.01												100																					2	1	1
10/18	375150	4703000	3.80	1	S																100																					1	1	0
10/18	375150	4703000	3.80	2	M				0.01												100																					2	1	1
10/18	375100	4703000	3.80	1	T				2												98																					2	1	1
10/18	375100	4703000	3.80	2	T																100																					1	1	0
10/18	375050	4703000	3.90	1	M																100																					1	1	0
10/18	375050	4703000	3.90	2	S				5												95																					2	1	1
10/18	375000	4703000	4.00	1	T																100																					1	1	0
10/18	375000	4703000	4.00	2	T		10														90																					2	1	1
10/18	374950	4703000	4.00	1	M				2							3					95																					3	2	1
10/18	374950	4703000	4.00	2	M		0.01		0.01												100																					3	1	2
10/18	374900	4703000	4.00	1	M		0.01		0.01												100																					3	1	2
10/18	374900	4703000	4.00	2	M				2												98																					2	1	1
10/18	374850	4703000	4.00	1	M		10		15							0.01					75																					4	2	2
10/18	374850	4703000	4.00	2	M		10		20												70																					3	1	2
10/18	374800	4703000	4.00	1	D		20		60							20																										3	1	2
10/18	374800	4703000	4.00	2	D		10		70		0.01					20																			0.01							5	1	4
10/18	374750	4703000	3.70	1	M		10		60							30																										3	1	2
10/18	374750	4703000	3.70	2	M		10		50							38																			2							4	1	3
10/18	374700	4703000	3.60	1	D		0.01		70							30					0.01																	0.01				5	2	3
10/18	374700	4703000	3.60	2	D		10		30							60																			0.01							4	1	3
10/18	374650	4703000	3.60	1	D		5		50							45																										3	1	2
10/18	374650	4703000	3.60	2	D		20		10							70																				0.01		0.01				5	1	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/18	374600	4703000	3.20	1	M		5		35							**60**					**0.01**																					4	**2**	2
10/18	374600	4703000	3.20	2	M		0.01		20							**80**																						0.01				4	**1**	3
10/18	374550	4703000	2.90	1	M		0.01		0.01		0.01					**70**																						30				5	**1**	4
10/18	374550	4703000	2.90	2	M		0.01		0.01		5					**80**																						15				5	**1**	4
10/18	374500	4703000	2.50	1	M		45		45		10					**0.01**					**0.01**																	0.01				6	**2**	4
10/18	374500	4703000	2.50	2	M		25		50							**0.01**					**0.01**																	25				5	**2**	3
7/11	376475	4703025	1.00	1	M	0.01	1		99		0.01					**0.01**																0.01						0.01				7	**1**	6
7/11	376475	4703025	1.00	2	M		1		97		0.01					**1**																0.01						1				6	**1**	5
7/12	376425	4703025	2.00	1	D		1		94							**5**										**0.01**						0.01										5	**2**	3
7/12	376425	4703025	2.00	2	D		3		95							**2**										**0.01**																4	**2**	2
7/12	376400	4703025	3.00	1	D		2		96							**2**																						0.01				4	**1**	3
7/12	376400	4703025	3.00	2	D		5		85							**10**																						0.01				4	**1**	3
7/13	376375	4703025	3.50	1	D		15		80		0.01					**5**										**0.01**						0.01						0.01				7	**2**	5
7/13	376375	4703025	3.50	2	D		10		87		0.01					**3**										**0.01**												0.01				6	**2**	4
7/13	376350	4703025	3.60	1	M		4		65							**1**										**30**																4	**2**	2
7/13	376350	4703025	3.60	2	D		3		84							**3**										**10**										0.01						5	**2**	3
7/19	376325	4703025	3.70	1	D		10		60		0.01					**5**					**0.01**					**25**																6	**3**	3
7/19	376325	4703025	3.70	2	D		20		65							**5**										**10**				0.01												5	**2**	3
7/20	376300	4703025	3.70	1	D		4		48		0.01					**1**					**0.01**					**47**									0.01							7	**3**	4
7/20	376300	4703025	3.70	2	D		2		47							**3**					**0.01**					**48**										0.01						6	**3**	3
7/26	376275	4703025	3.70	1	D		10		40							**1**										**49**																4	**2**	2
7/26	376275	4703025	3.70	2	D		10		25							**2**										**63**																4	**2**	2
7/20	376250	4703025	3.70	1	M		5		50							**0.01**										**45**																4	**2**	2
7/20	376250	4703025	3.70	2	M		10		8												**2**					**80**																4	**2**	2
7/27	376225	4703025	4.00	1	M		5		15							**5**					**15**					**60**			0.01													6	**3**	3
7/27	376225	4703025	4.00	2	M		15		35							**5**					**5**					**40**																5	**3**	2
8/1	376200	4703025	3.90	1	D		37		25							**25**					**10**					**3**				0.01												6	**3**	3
8/1	376200	4703025	3.90	2	M		20		58		0.01					**0.01**					**2**					**10**				0.01						10						8	**3**	5
8/1	376175	4703025	4.00	1	M		47		3							**2**					**46**					**2**																5	**3**	2
8/1	376175	4703025	4.00	2	D		10		4							**0.01**					**85**					**1**																5	**3**	2
8/2	376150	4703025	4.00	1	D		52		3							**0.01**					**45**																					4	**2**	2
8/2	376150	4703025	4.00	2	D		43		5							**0.01**					**42**															10						5	**2**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/2	376125	4703025	4.10	1	M		62		10							**5**					**20**					**2**				1												6	**3**	3
8/2	376125	4703025	4.10	2	M		53		15							**2**					**20**					**10**																5	**3**	2
8/4	376075	4703025	4.20	1	S		57		20		2					**15**					**1**									5												6	**2**	4
8/4	376075	4703025	4.20	2	S		60		5							**35**					**0.01**																					4	**2**	2
7/11	376450	4703050	1.00	1	S		0.01		55							**45**										**0.01**				0.01												5	**2**	3
7/11	376450	4703050	1.00	2	M		5		85							**5**										**0.01**						0.01						5				6	**2**	4
7/12	376425	4703050	1.45	1	M				55							**45**														0.01		0.01						0.01				5	**1**	4
7/12	376425	4703050	1.45	2	M		0.01		30		0.01					**70**																										4	**1**	3
7/12	376400	4703050	2.80	1	D		5		55							**40**																0.01										4	**1**	3
7/12	376400	4703050	2.80	2	D		2		65							**33**																						0.01				4	**1**	3
7/13	376375	4703050	3.30	1	D		3		94		0.01					**2**										**1**												0.01				6	**2**	4
7/13	376375	4703050	3.30	2	D		5		90							**5**																						0.01				4	**1**	3
7/13	376350	4703050	3.60	1	D		10		78							**2**										**10**												0.01				5	**2**	3
7/13	376350	4703050	3.60	2	D		10		80							**10**																0.01										4	**1**	3
7/19	376325	4703050	3.70	1	D		5		70							**10**										**15**																4	**2**	2
7/19	376325	4703050	3.70	2	D		10		65							**10**										**15**																4	**2**	2
7/20	376300	4703050	3.70	1	D		10		49							**1**					**0.01**					**40**																5	**3**	2
7/20	376300	4703050	3.70	2	D		15		20							**2**					**0.01**					**63**																5	**3**	2
7/26	376275	4703050	3.90	1	D		15		35												**0.01**					**50**																4	**2**	2
7/26	376275	4703050	3.90	2	D		5		45							**5**										**45**																4	**2**	2
7/20	376250	4703050	3.80	1	M		20		25							**5**										**50**																4	**2**	2
7/20	376250	4703050	3.80	2	M		10		15							**15**										**60**																4	**2**	2
7/27	376225	4703050	3.80	1	M		20		20							**5**					**15**					**40**				0.01												6	**3**	3
7/27	376225	4703050	3.80	2	M		20		50												**20**					**10**																4	**2**	2
8/1	376200	4703050	3.90	1	D		10		74							**10**					**0.01**					**5**				1												6	**3**	3
8/1	376200	4703050	3.90	2	D		45		50		0.01					**4**					**0.01**					**1**				0.01												7	**3**	4
8/1	376175	4703050	4.00	1	M		45		3							**2**					**49**					**1**																5	**3**	2
8/1	376175	4703050	4.00	2	M		20		15							**1**					**64**					**0.01**																5	**3**	2
8/2	376150	4703050	4.05	1	D		25		2							**0.01**					**73**																					4	**2**	2
8/2	376150	4703050	4.05	2	D		47		5												**48**																					3	**1**	2
8/2	376125	4703050	4.10	1	M		45		8							**2**					**45**					**0.01**																5	**3**	2
8/2	376125	4703050	4.10	2	M		30		1												**69**																					3	**1**	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
8/4	376100	4703050	4.10	1	M		40		5												55																					3	1	2
8/4	376100	4703050	4.10	2	M		50		5												45																					3	1	2
10/3	376050	4703050	4.30	1	M		10		25							45					20																					4	2	2
10/3	376050	4703050	4.30	2	M		30		30		10					10					20																					5	2	3
10/3	376000	4703050	4.40	1	M		5		35		3					5					52																					5	2	3
10/3	376000	4703050	4.40	2	M		25		40		20					0.01					13					2	0.01															7	3	4
10/3	375950	4703050	4.40	1	M		5		35												60																					3	1	2
10/3	375950	4703050	4.40	2	M		13		30							2					50						0.01								5							6	2	4
10/3	375900	4703050	4.50	1	M		0.01									0.01					100																					3	2	1
10/3	375900	4703050	4.50	2	M		0.01		0.01							0.01					100																					4	2	2
10/3	375850	4703050	4.50	1	M											0.01					100																					2	2	0
10/3	375850	4703050	4.50	2	M		2									0.01					98																					3	2	1
10/3	375800	4703050	4.60	1	M																100																					1	1	0
10/3	375800	4703050	4.60	2	D		0.01														100																					2	1	1
10/3	375750	4703050	4.60	1	M		20		0.01												80																					3	1	2
10/3	375750	4703050	4.60	2	M		20														80																					2	1	1
10/3	375700	4703050	4.50	1	M																100																					1	1	0
10/3	375700	4703050	4.50	2	M		50														50																					2	1	1
10/3	375650	4703050	4.60	1	M		0.01									0.01					100																					3	2	1
10/3	375650	4703050	4.60	2	M		0.01		3												97																					3	1	2
10/3	375600	4703050	4.40	1	M																100																					1	1	0
10/3	375600	4703050	4.40	2	M																100																					1	1	0
10/4	375550	4703050	4.40	1	M				5												95																					2	1	1
10/4	375550	4703050	4.40	2	M				0.01												100																					2	1	1
10/18	375500	4703050	3.80	1	M																100																					1	1	0
10/18	375500	4703050	3.80	2	M																100																					1	1	0
10/18	375450	4703050	3.80	1	M																100																					1	1	0
10/18	375450	4703050	3.80	2	M		0.01														100																					2	1	1
10/18	375400	4703050	3.80	1	S																100																					1	1	0
10/18	375400	4703050	3.80	2	S																100																					1	1	0
10/18	375350	4703050	3.80	1	S		10		0.01												90																					3	1	2
10/18	375350	4703050	3.80	2	M				0.01												100																					2	1	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/18	375300	4703050	3.70	1	S		2		5												93																					3	1	2
10/18	375300	4703050	3.70	2	T																100																					1	1	0
10/18	375250	4703050	3.70	1	S		5														95																					2	1	1
10/18	375250	4703050	3.70	2	M				1												99																					2	1	1
10/18	375200	4703050	3.80	1	T																100																					1	1	0
10/18	375200	4703050	3.80	2	T																100																					1	1	0
10/18	375150	4703050	4.10	1	M		0.01														100																					2	1	1
10/18	375150	4703050	4.10	2	M																100																					1	1	0
10/18	375100	4703050	4.10	1	T																100																					1	1	0
10/18	375100	4703050	4.10	2	T																100																					1	1	0
10/18	375050	4703050	4.20	1	T																95														5							2	1	1
10/18	375050	4703050	4.20	2	T																100																					1	1	0
10/18	375000	4703050	4.20	1	T		8		2												90																					3	1	2
10/18	375000	4703050	4.20	2	M				10												90																					2	1	1
10/18	374950	4703050	4.20	1	M				5												95																					2	1	1
10/18	374950	4703050	4.20	2	T				5							5					90																					3	2	1
10/18	374900	4703050	4.10	1	M		40		0.01												60																					3	1	2
10/18	374900	4703050	4.10	2	M		10		5							5					80																					4	2	2
10/18	374850	4703050	4.10	1	S		45		10												45														0.01							4	1	3
10/18	374850	4703050	4.10	2	S		40		30							0.01					29														1							5	2	3
10/18	374800	4703050	4.00	1	M		60		40												0.01																					3	1	2
10/18	374800	4703050	4.00	2	D		40		30												30																					3	1	2
10/18	374750	4703050	3.80	1	S		5		45							50																										3	1	2
10/18	374750	4703050	3.80	2	S		0.01		35							65																										3	1	2
10/18	374700	4703050	3.70	1	M				50							50													0.01													3	1	2
10/18	374700	4703050	3.70	2	M		0.01		60							40																			0.01	0.01						5	1	4
10/18	374650	4703050	3.60	1	S		10		60							30																										3	1	2
10/18	374650	4703050	3.60	2	M		10		60							30																										3	1	2
10/18	374600	4703050	3.40	1	M		0.01		60							40																										3	1	2
10/18	374600	4703050	3.40	2	M		0.01		50							50					0.01																					4	2	2
10/18	374550	4703050	3.10	1	M		0.01		5							95																	0.01					0.01				5	1	4
10/18	374550	4703050	3.10	2	M		0.01		30							70																						0.01				4	1	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/18	374500	4703050	2.70	1	M		10		40		0.01					40																						10				5	1	4
10/18	374500	4703050	2.70	2	M		10		40		0.01					40					0.01																	10				6	2	4
10/18	374450	4703050	2.30	1	M		10		50		10					5																0.01						25				6	1	5
10/18	374450	4703050	2.30	2	M		40		40		5					5																						10				5	1	4
7/12	376400	4703075	2.40	1	D		2		35		0.01					62										1												0.01		0.01		7	2	5
7/12	376400	4703075	2.40	2	D		5		65		0.01					30																										4	1	3
7/13	376375	4703075	3.10	1	D		5		70		0.01					25																0.01						0.01				6	1	5
7/13	376375	4703075	3.10	2	D		3		72		0.01					25																						0.01				5	1	4
7/13	376350	4703075	3.60	1	D		10		80		0.01					10																										4	1	3
7/13	376350	4703075	3.60	2	D		10		85		0.01					5																										4	1	3
7/19	376325	4703075	3.60	1	D		5		85							0.01										10																4	2	2
7/19	376325	4703075	3.60	2	D		0.01		73		0.01					2										25				0.01												6	2	4
7/20	376300	4703075	3.80	1	D		5		59							1					0.01					35				0.01												6	3	3
7/20	376300	4703075	3.80	2	D		7		55							3					0.01					35																5	3	2
7/26	376275	4703075	3.80	1	D		7		40							3										50																4	2	2
7/26	376275	4703075	3.80	2	D		5		52		0.01					3										40																5	2	3
7/20	376250	4703075	3.90	1	M		10		25							2					0.01					63																5	3	2
7/20	376250	4703075	3.90	2	M		10		20		0.01					10					0.01					60																6	3	3
7/27	376225	4703075	3.90	1	M		7		25							2					1					65																5	3	2
7/27	376225	4703075	3.90	2	M		10		35							3					2					50												0.01				6	3	3
8/1	376200	4703075	4.00	1	D		25		72							1					2																					4	2	2
8/1	376200	4703075	4.00	2	M		20		10												70																					3	1	2
8/1	376175	4703075	4.00	1	M		50		3							2					45									0.01												5	2	3
8/1	376175	4703075	4.00	2	M		15		5												80					0.01																4	2	2
8/2	376150	4703075	4.10	1	D		25		15												60																					3	1	2
8/2	376150	4703075	4.10	2	M		25		5							0.01					70																					4	2	2
7/13	376375	4703100	2.80	1	D		5		35		0.01					60																0.01						0.01				6	1	5
7/13	376375	4703100	2.80	2	D		0.01		30							70														0.01												4	1	3
7/13	376350	4703100	3.50	1	D		15		70							15																										3	1	2
7/13	376350	4703100	3.50	2	D		10		87		0.01					3																										4	1	3
7/19	376325	4703100	3.60	1	M		10		80							10										0.01																4	2	2
7/19	376325	4703100	3.60	2	M		2		47							3										48																4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/20	376300	4703100	3.70	1	M		2		47		0.01					**3**										**48**				0.01												6	**2**	4
7/20	376300	4703100	3.70	2	M		5		88							**2**										**5**																4	**2**	2
7/20	376275	4703100	3.90	1	D		7		35		0.01					**3**										**55**				0.01												6	**2**	4
7/20	376275	4703100	3.90	2	D		10		30		0.01					**5**										**55**																5	**2**	3
7/20	376250	4703100	3.90	1	M		20		40							**5**										**35**																4	**2**	2
7/20	376250	4703100	3.90	2	M		5		59							**1**										**35**																4	**2**	2
7/27	376225	4703100	4.00	1	M		30		45							**5**										**20**				0.01												5	**2**	3
7/27	376225	4703100	4.00	2	M		23		50							**2**										**25**																4	**2**	2
8/1	376200	4703100	4.05	1	M		30		3							**1**					**64**					**2**																5	**3**	2
8/1	376200	4703100	4.05	2	M		15		5							**0.01**					**80**																					4	**2**	2
10/3	376150	4703100	4.30	1	T																**100**																					1	**1**	0
10/3	376150	4703100	4.30	2	T				15							**30**					**55**																					3	**2**	1
10/3	376100	4703100	4.30	1	T				40							**10**					**50**																					3	**2**	1
10/3	376100	4703100	4.30	2	T		5		5							**10**					**80**																					4	**2**	2
10/3	376050	4703100	4.30	1	M				0.01							**0.01**					**100**																					3	**2**	1
10/3	376050	4703100	4.30	2	M		15		10							**3**					**72**																					4	**2**	2
10/3	376000	4703100	4.40	1	D		0.01		15												**85**																					3	**1**	2
10/3	376000	4703100	4.40	2	D				27		3										**70**																					3	**1**	2
10/3	375950	4703100	4.50	1	M		2		20							**8**					**70**														0.01			0.01				6	**2**	4
10/3	375950	4703100	4.50	2	M		5		20							**2**					**73**																					4	**2**	2
10/3	375900	4703100	4.50	1	D		0.01		0.01							**3**					**97**																					4	**2**	2
10/3	375900	4703100	4.50	2	M				1							**4**					**95**																					3	**2**	1
10/3	375850	4703100	4.50	1	M		89		3							**5**					**3**																					4	**2**	2
10/3	375850	4703100	4.50	2	D		60		7							**3**					**30**																					4	**2**	2
10/3	375800	4703100	4.60	1	M		5														**95**																					2	**1**	1
10/3	375800	4703100	4.60	2	M		5									**0.01**					**95**																					3	**2**	1
10/3	375750	4703100	4.80	1	M		0.01														**100**																					2	**1**	1
10/3	375750	4703100	4.80	2	M																**100**																					1	**1**	0
10/3	375700	4703100	4.60	1	M		0.01														**100**																					2	**1**	1
10/3	375700	4703100	4.60	2	M											**0.01**					**100**																					2	**2**	0
10/3	375650	4703100	4.60	1	M											**0.01**					**100**																					2	**2**	0
10/3	375650	4703100	4.60	2	M																**100**																					1	**1**	0

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/3	375600	4703100	4.50	1	D											1					99																					2	2	0
10/3	375600	4703100	4.50	2	M				1							4					95																					3	2	1
10/4	375550	4703100	4.50	1	M				0.01												100																					2	1	1
10/4	375550	4703100	4.50	2	M																100																					1	1	0
10/18	375500	4703100	3.90	1	T				1												99																					2	1	1
10/18	375500	4703100	3.90	2	T																100																					1	1	0
10/18	375450	4703100	4.10	1	T																100																					1	1	0
10/18	375450	4703100	4.10	2	S																100																					1	1	0
10/18	375400	4703100	4.10	1	S																100																					1	1	0
10/18	375400	4703100	4.10	2	M				0.01							0.01					100																					3	2	1
10/18	375350	4703100	4.00	1	M																100																	0.01				2	1	1
10/18	375350	4703100	4.00	2	M				0.01												100																					2	1	1
10/18	375300	4703100	3.90	1	M				5												95																					2	1	1
10/18	375300	4703100	3.90	2	M				0.01							0.01					100																					3	2	1
10/18	375250	4703100	4.00	1	S																100																					1	1	0
10/18	375250	4703100	4.00	2	S				10												90																					2	1	1
10/18	375200	4703100	4.00	1	S																100																					1	1	0
10/18	375200	4703100	4.00	2	S																100																					1	1	0
11/7	375150	4703100	3.80	1	T																100																					1	1	0
11/7	375150	4703100	3.80	2	T				30												70																					2	1	1
11/7	375100	4703100	3.80	1	S				5												95																					2	1	1
11/7	375100	4703100	3.80	2	T				5												45														50							3	1	2
11/7	375050	4703100	3.80	1	M				0.01												100																					2	1	1
11/7	375050	4703100	3.80	2	S				0.01												100																					2	1	1
11/7	375000	4703100	3.80	1	S				5												95																					2	1	1
11/7	375000	4703100	3.80	2	S				3												97																	0.01				3	1	2
11/7	374950	4703100	3.90	1	S		2		1												97																					3	1	2
11/7	374950	4703100	3.90	2	M		9		1												90																					3	1	2
11/7	374900	4703100	3.90	1	S		10		0.01							0.01					90																					4	2	2
11/7	374900	4703100	3.90	2	S		5		20												75																					3	1	2
11/7	374850	4703100	4.00	1	M		65		33							2										0.01									0.01							5	2	3
11/7	374850	4703100	4.00	2	M		23		40												35														2							4	1	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/7	374800	4703100	3.80	1	M		3		12												85																					3	1	2
11/7	374800	4703100	3.80	2	M		10		15							5					70																					4	2	2
11/7	374750	4703100	3.70	1	M		10		70							10					10																					4	2	2
11/7	374750	4703100	3.70	2	M		40		2							18					40																					4	2	2
11/7	374700	4703100	3.60	1	M		0.01		45		0.01					50					4												0.01			1						7	2	5
11/7	374700	4703100	3.60	2	M				45							55					0.01																					3	2	1
10/18	374650	4703100	3.70	1	M		2		49							49																										3	1	2
10/18	374650	4703100	3.70	2	M		4		48							47					1																					4	2	2
10/18	374600	4703100	3.60	1	D		5		80							5																0.01			10	0.01						6	1	5
10/18	374600	4703100	3.60	2	M		15		80							5																			0.01							4	1	3
10/18	374550	4703100	3.40	1	M		5		45							50																			0.01			0.01				5	1	4
10/18	374550	4703100	3.40	2	D		12		35							50																						3				4	1	3
10/18	374500	4703100	2.90	1	M		5		0.01							85																						10				4	1	3
10/18	374500	4703100	2.90	2	M		0.01		5							90					0.01																	5				5	2	3
10/18	374450	4703100	2.40	1	D		35		30		10					15																						10				5	1	4
10/18	374450	4703100	2.40	2	D		5		10		55					15																						15				5	1	4
7/13	376375	4703125	2.75	1	D		0.01		30							68										2																4	2	2
7/13	376375	4703125	2.75	2	D		1		29		0.01					70														0.01												5	1	4
7/13	376350	4703125	3.10	1	D		5		85							10																										3	1	2
7/13	376350	4703125	3.10	2	D		2		95							3																										3	1	2
7/19	376325	4703125	3.60	1	D		1		97							2																										3	1	2
7/19	376325	4703125	3.60	2	D		4		95							1																										3	1	2
7/20	376300	4703125	3.70	1	D		6		90							4										0.01																4	2	2
7/20	376300	4703125	3.70	2	D		10		85							3										2																4	2	2
7/20	376275	4703125	4.00	1	D		40		55		0.01					1										4																5	2	3
7/20	376275	4703125	4.00	2	D		15		83							0.01										2																4	2	2
7/20	376250	4703125	4.00	1	M		15		65							0.01										20																4	2	2
7/20	376250	4703125	4.00	2	M		33		33												0.01					34																4	2	2
7/13	376375	4703150	1.50	1	D				60		0.01					40																0.01										4	1	3
7/13	376375	4703150	1.50	2	D		0.01		55							45																						0.01				4	1	3
7/13	376350	4703150	3.00	1	D		5		80							13																						2				4	1	3
7/13	376350	4703150	3.00	2	D		2		90							6																						2				4	1	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/19	376325	4703150	3.50	1	D		3		95							2																										3	1	2
7/19	376325	4703150	3.50	2	D		1		98							1																										3	1	2
7/20	376300	4703150	3.70	1	D		1		98							1																										3	1	2
7/20	376300	4703150	3.70	2	D		0.01		98							2										0.01																4	2	2
7/20	376275	4703150	4.00	1	D		2		86							2										10																4	2	2
7/20	376275	4703150	4.00	2	D		5		70		0.01					5										20																5	2	3
10/3	376250	4703150	4.00	1	T		100																																			1	0	1
10/3	376250	4703150	4.00	2	T		10		65		25																															3	0	3
10/3	376200	4703150	4.10	1	M		15		80							5					0.01																	0.01				5	2	3
10/3	376200	4703150	4.10	2	M		9		85		0.01					3					3																					5	2	3
10/3	376150	4703150	4.10	1	T																100																					1	1	0
10/3	376150	4703150	4.10	2	S		0.01														100																					2	1	1
10/3	376100	4703150	4.30	1	M		0.01		40							0.01					60																					4	2	2
10/3	376100	4703150	4.30	2	T				60		4										30														6							4	1	3
10/3	376050	4703150	4.30	1	S		0.01														100																					2	1	1
10/3	376050	4703150	4.30	2	M		5		35												60																					3	1	2
10/3	376000	4703150	4.50	1	S		10														90																					2	1	1
10/3	376000	4703150	4.50	2	M		10		15												75																					3	1	2
10/3	375950	4703150	4.50	1	M																100																					1	1	0
10/3	375950	4703150	4.50	2	M		0.01									0.01					100																					3	2	1
10/3	375900	4703150	4.50	1	M		5		2							5					88																					4	2	2
10/3	375900	4703150	4.50	2	M		2		13							0.01					85																					4	2	2
10/3	375850	4703150	4.80	1	M																100																					1	1	0
10/3	375850	4703150	4.80	2	M																100																					1	1	0
10/3	375800	4703150	4.70	1	M		10		15							5					70																					4	2	2
10/3	375800	4703150	4.70	2	M		40		10												50					0.01																4	2	2
10/3	375750	4703150	4.90	1	M		5		3							10					82																					4	2	2
10/3	375750	4703150	4.90	2	M		10		5							10					75																					4	2	2
10/3	375700	4703150	4.80	1	M		5		5												90																					3	1	2
10/3	375700	4703150	4.80	2	M																100																					1	1	0
10/3	375650	4703150	4.60	1	S				0.01							1					99																					3	2	1
10/3	375650	4703150	4.60	2	S				1												99																					2	1	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/3	375600	4703150	4.70	1	M		15														85																					2	1	1
10/3	375600	4703150	4.70	2	M				2												98																					2	1	1
10/4	375550	4703150	4.70	1	M		0.01														100																					2	1	1
10/4	375550	4703150	4.70	2	M				0.01												100																					2	1	1
11/7	375500	4703150	4.00	1	S																100																					1	1	0
11/7	375500	4703150	4.00	2	T																100																					1	1	0
11/7	375450	4703150	4.00	1	T																100																					1	1	0
11/7	375450	4703150	4.00	2	S		5														95																					2	1	1
11/7	375400	4703150	3.90	1	T																100																					1	1	0
11/7	375400	4703150	3.90	2	S																100																					1	1	0
11/7	375350	4703150	3.70	1	T				2												98																					2	1	1
11/7	375350	4703150	3.70	2	S				1												99																					2	1	1
11/7	375300	4703150	3.70	1	S				0.01												100																					2	1	1
11/7	375300	4703150	3.70	2	M				0.01							2					98																					3	2	1
11/7	375250	4703150	3.80	1	T																100																					1	1	0
11/7	375250	4703150	3.80	2	T																100																					1	1	0
11/7	375200	4703150	4.00	1	T																100																					1	1	0
11/7	375200	4703150	4.00	2	T																100																					1	1	0
11/7	375150	4703150	4.00	1	T				1												99																					2	1	1
11/7	375150	4703150	4.00	2	T		2		8												90																					3	1	2
11/7	375100	4703150	4.10	1	S																100																					1	1	0
11/7	375100	4703150	4.10	2	S																100																					1	1	0
11/7	375050	4703150	4.10	1	T				25												75																					2	1	1
11/7	375050	4703150	4.10	2	T				20							3					77																					3	2	1
11/7	375000	4703150	4.10	1	S				0.01							0.01					100																					3	2	1
11/7	375000	4703150	4.10	2	S				5												95																					2	1	1
11/7	374950	4703150	4.10	1	S		5		0.01												95																					3	1	2
11/7	374950	4703150	4.10	2	S		2		0.01												98																					3	1	2
11/7	374900	4703150	4.10	1	S		5		50							1					39														5	0.01						6	2	4
11/7	374900	4703150	4.10	2	M		40		40							3					10														7	0.01						6	2	4
11/7	374850	4703150	4.00	1	M		15		30							0.01					45														10							5	2	3
11/7	374850	4703150	4.00	2	M		25		65							5																			5							4	1	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/7	374800	4703150	4.00	1	S		3		17												80																					3	1	2
11/7	374800	4703150	4.00	2	M		5		90							3					2					0.01									0.01							6	3	3
11/7	374750	4703150	3.80	1	M		2		65							23					5														5	0.01						6	2	4
11/7	374750	4703150	3.80	2	M		35		25							5					35																					4	2	2
11/7	374700	4703150	3.80	1	M		5		60							34										0.01									1			0.01				6	2	4
11/7	374700	4703150	3.80	2	M		3		60							30																				7						4	1	3
11/7	374650	4703150	3.60	1	M		5		45							50																				0.01						4	1	3
11/7	374650	4703150	3.60	2	M		5		48							47										0.01																4	2	2
10/18	374600	4703150	3.80	1	D		9		80							10																			1			0.01				5	1	4
10/18	374600	4703150	3.80	2	D		15		60							20																			5	0.01						5	1	4
10/18	374550	4703150	3.50	1	D		20		70							5										0.01									5							5	2	3
10/18	374550	4703150	3.50	2	D		10		75							10																			5							4	1	3
10/18	374500	4703150	3.50	1	M		30		60							10																										3	1	2
10/18	374500	4703150	3.50	2	M		30		50							15					0.01														3	2						6	2	4
10/18	374450	4703150	2.60	1	D		20		3		54					3																						20				5	1	4
10/18	374450	4703150	2.60	2	D		30		1		54					5																0.01						10				6	1	5
7/13	376375	4703175	1.10	1	M		5		75							20																						0.01				4	1	3
7/13	376375	4703175	1.10	2	D		0.01		90							10																						0.01				4	1	3
7/13	376350	4703175	2.90	1	M				99		0.01					1																						0.01				4	1	3
7/13	376350	4703175	2.90	2	M		1		89		0.01					10																										4	1	3
7/19	376325	4703175	3.70	1	D		1		97							2																										3	1	2
7/19	376325	4703175	3.70	2	D		2		96							2																										3	1	2
7/13	376375	4703200	2.50	1	D		1		94		0.01					5																0.01										5	1	4
7/13	376375	4703200	2.50	2	D		1		94							2										1	0.01			2		0.01										7	2	5
7/13	376350	4703200	2.80	1	D		15		70							15																						0.01				4	1	3
7/13	376350	4703200	2.80	2	D		2		96							2														0.01												4	1	3
10/3	376300	4703200	4.00	1	M		25		70							5																										3	1	2
10/3	376300	4703200	4.00	2	M		50		45							5																										3	1	2
10/3	376250	4703200	4.00	1	O																																					0	0	0
10/3	376250	4703200	4.00	2	T				1							70					29																					3	2	1
10/3	376200	4703200	4.40	1	M		20		60		10					5					0.01					4	1															7	3	4
10/3	376200	4703200	4.40	2	M		20		60		5					15										0.01																5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/3	376150	4703200	4.20	1	M		7		85		3					2					3																					5	2	3
10/3	376150	4703200	4.20	2	S		5		90							2					3					0.01																5	3	2
10/3	376100	4703200	4.40	1	S				45							0.01					55						0.01															4	2	2
10/3	376100	4703200	4.40	2	S																100																					1	1	0
10/3	376050	4703200	4.30	1	S																100																					1	1	0
10/3	376050	4703200	4.30	2	T				5												95																					2	1	1
10/3	376000	4703200	4.50	1	T																100																					1	1	0
10/3	376000	4703200	4.50	2	S		5														95																					2	1	1
10/3	375950	4703200	4.70	1	M				0.01												100																					2	1	1
10/3	375950	4703200	4.70	2	M																100																					1	1	0
10/3	375900	4703200	4.90	1	M																100																					1	1	0
10/3	375900	4703200	4.90	2	M		5														95																					2	1	1
10/3	375850	4703200	4.90	1	S				35		0.01										30															35						4	1	3
10/3	375850	4703200	4.90	2	S		10		10							3					5						0.01									72						6	2	4
10/3	375800	4703200	4.90	1	M		20		60							4					15					1	0.01								0.01							7	3	4
10/3	375800	4703200	4.90	2	S		5		80							10					5						0.01															5	2	3
10/3	375750	4703200	4.90	1	S		10		75							3					10					2	0.01															6	3	3
10/3	375750	4703200	4.90	2	S		5		80							10					4					1																5	3	2
10/3	375700	4703200	4.90	1	M				0.01												100																					2	1	1
10/3	375700	4703200	4.90	2	M																100																					1	1	0
10/3	375650	4703200	4.80	1	M																100																					1	1	0
10/3	375650	4703200	4.80	2	M		5														95																					2	1	1
10/3	375600	4703200	4.70	1	S				0.01												100																					2	1	1
10/3	375600	4703200	4.70	2	M				5							0.01					95																					3	2	1
10/4	375550	4703200	4.80	1	D				0.01												100																					2	1	1
10/4	375550	4703200	4.80	2	D		1		0.01							0.01					99																					4	2	2
11/7	375500	4703200	4.20	1	T																100																					1	1	0
11/7	375500	4703200	4.20	2	S				1												99																					2	1	1
11/7	375450	4703200	4.00	1	T																100																					1	1	0
11/7	375450	4703200	4.00	2	S																100																					1	1	0
11/7	375400	4703200	4.00	1	T																100																					1	1	0
11/7	375400	4703200	4.00	2	T				1												99																					2	1	1

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/7	375350	4703200	4.00	1	T		25		15												**60**																					3	**1**	2
11/7	375350	4703200	4.00	2	S				0.01												**100**																					2	**1**	1
11/7	375300	4703200	4.00	1	T				10												**90**																					2	**1**	1
11/7	375300	4703200	4.00	2	S																**100**																					1	**1**	0
11/7	375250	4703200	4.00	1	T				30												**70**																					2	**1**	1
11/7	375250	4703200	4.00	2	S		1														**99**																					2	**1**	1
11/7	375200	4703200	4.10	1	T				1												**99**																					2	**1**	1
11/7	375200	4703200	4.10	2	S																**100**																					1	**1**	0
11/7	375150	4703200	4.20	1	T																**95**																	5				2	**1**	1
11/7	375150	4703200	4.20	2	S				0.01												**100**																					2	**1**	1
11/7	375100	4703200	4.20	1	T				5							**20**					**75**																					3	**2**	1
11/7	375100	4703200	4.20	2	T				5							**30**					**65**																					3	**2**	1
11/7	375050	4703200	4.30	1	T				5												**95**																					2	**1**	1
11/7	375050	4703200	4.30	2	T																**100**																					1	**1**	0
11/7	375000	4703200	4.30	1	T				50												**50**																					2	**1**	1
11/7	375000	4703200	4.30	2	T				30												**70**																					2	**1**	1
11/7	374950	4703200	4.30	1	T		10														**90**																					2	**1**	1
11/7	374950	4703200	4.30	2	S		10		5												**85**																					3	**1**	2
11/7	374900	4703200	4.30	1	M		0.01		100												**0.01**																					3	**1**	2
11/7	374900	4703200	4.30	2	M		10		55							**0.01**					**35**					**0.01**																5	**3**	2
11/7	374850	4703200	4.30	1	M		12		85							**1**																			2			0.01				5	**1**	4
11/7	374850	4703200	4.30	2	M		20		55							**3**					**22**																					4	**2**	2
11/7	374800	4703200	4.30	1	M		27		70							**0.01**					**0.01**														3							5	**2**	3
11/7	374800	4703200	4.30	2	M		33		65							**2**					**0.01**											0.01			0.01							6	**2**	4
11/7	374750	4703200	4.10	1	M		25		60							**0.01**					**5**														10							5	**2**	3
11/7	374750	4703200	4.10	2	D		5		88							**3**					**3**					**0.01**									1							6	**3**	3
10/28	374700	4703200	4.30	1	M		20		75							**5**					**0.01**														0.01							5	**2**	3
10/28	374700	4703200	4.30	2	M		5		80							**5**					**10**																					4	**2**	2
10/28	374650	4703200	4.10	1	M		10		75							**15**																				0.01						4	**1**	3
10/28	374650	4703200	4.10	2	M		20		67							**10**					**3**														0.01							5	**2**	3
10/28	374600	4703200	4.00	1	M		2		83							**5**										**0.01**									10							5	**2**	3
10/28	374600	4703200	4.00	2	M		5		87							**5**										**0.01**									3							5	**2**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/28	374550	4703200	4.00	1	M		3		93							**3**																			1							4	**1**	3
10/28	374550	4703200	4.00	2	M		15		75							**0.01**										**0.01**									10							5	**2**	3
10/28	374500	4703200	3.60	1	D		3		91							**3**										**0.01**									3							5	**2**	3
10/28	374500	4703200	3.60	2	M		13		85		0.01					**2**																			0.01							5	**1**	4
10/28	374450	4703200	2.20	1	S		10		60		10					**15**																						5				5	**1**	4
10/28	374450	4703200	2.20	2	M		0.01		60		15					**20**																						5				5	**1**	4
7/13	376350	4703250	2.60	1	D		3		55		0.01					**42**																										4	**1**	3
7/13	376350	4703250	2.60	2	D		0.01		75							**25**																										3	**1**	2
10/3	376300	4703250	3.40	1	M		0.01		80		0.01					**20**																										4	**1**	3
10/3	376300	4703250	3.40	2	M		7		55		3					**35**																										4	**1**	3
10/3	376250	4703250	4.00	1	T		1		37		25					**37**																										4	**1**	3
10/3	376250	4703250	4.00	2	S		30		30		15					**15**			**0.01**							**10**																6	**3**	3
10/3	376200	4703250	4.20	1	M		10		48		30					**10**										**2**	0.01															6	**2**	4
10/3	376200	4703250	4.20	2	T		35				0.01					**35**														30												4	**1**	3
10/3	376150	4703250	4.40	1	M		1		85		11					**3**					**0.01**					**0.01**	0.01								0.01							8	**3**	5
10/3	376150	4703250	4.40	2	M		5		88		5					**2**					**0.01**					**0.01**									0.01							7	**3**	4
10/3	376100	4703250	4.40	1	M		10		90							**0.01**					**0.01**														0.01							5	**2**	3
10/3	376100	4703250	4.40	2	M		5		93							**2**	0.01									**0.01**												0.01				6	**2**	4
10/3	376050	4703250	4.50	1	M				5							**2**					**93**																					3	**2**	1
10/3	376050	4703250	4.50	2	M		3		2												**95**																					3	**1**	2
10/3	376000	4703250	4.60	1	M																**100**																					1	**1**	0
10/3	376000	4703250	4.60	2	M		2		5							**0.01**					**93**																					4	**2**	2
10/3	375950	4703250	4.80	1	M																**100**																					1	**1**	0
10/3	375950	4703250	4.80	2	M				0.01												**100**																					2	**1**	1
10/3	375900	4703250	5.00	1	M				0.01												**100**																					2	**1**	1
10/3	375900	4703250	5.00	2	M		3		12							**0.01**					**85**																					4	**2**	2
10/3	375850	4703250	4.90	1	M		8		30												**60**					**2**																4	**2**	2
10/3	375850	4703250	4.90	2	M		10		35							**0.01**					**55**						0.01															5	**2**	3
10/3	375800	4703250	5.00	1	S		1		40												**44**					**15**	0.01															5	**2**	3
10/3	375800	4703250	5.00	2	M		15		50							**0.01**					**30**					**5**																5	**3**	2
10/3	375750	4703250	5.00	1	M		10		40							**9**			**0.01**		**0.01**					**1**									0.01	40						8	**4**	4
10/3	375750	4703250	5.00	2	S		3		85												**2**									10												4	**1**	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/3	375700	4703250	5.00	1	D																100																					1	1	0
10/3	375700	4703250	5.00	2	D																100																					1	1	0
10/3	375650	4703250	4.90	1	M		15		5							0.01					80																					4	2	2
10/3	375650	4703250	4.90	2	M		0.01														100																					2	1	1
10/3	375600	4703250	4.90	1	M																100																					1	1	0
10/3	375600	4703250	4.90	2	M		20														80																					2	1	1
10/4	375550	4703250	4.80	1	D				0.01												100																	0.01				3	1	2
10/4	375550	4703250	4.80	2	M				0.01												100																					2	1	1
11/10	375500	4703250	4.50	1	T																100																					1	1	0
11/10	375500	4703250	4.50	2	T																100																					1	1	0
11/10	375450	4703250	4.10	1	M		0.01														100																					2	1	1
11/10	375450	4703250	4.10	2	S																100																					1	1	0
11/10	375400	4703250	4.00	1	T																100																					1	1	0
11/10	375400	4703250	4.00	2	T				15												85																					2	1	1
11/10	375350	4703250	4.10	1	T				5												85																	10				3	1	2
11/10	375350	4703250	4.10	2	T																100																					1	1	0
11/10	375300	4703250	4.10	1	T																99														1							2	1	1
11/10	375300	4703250	4.10	2	S																100																					1	1	0
11/10	375250	4703250	4.10	1	T																100																					1	1	0
11/10	375250	4703250	4.10	2	T																100																					1	1	0
11/10	375200	4703250	4.20	1	S		4		2							2					92																					4	2	2
11/10	375200	4703250	4.20	2	T																80														20							2	1	1
11/10	375150	4703250	4.20	1	S				1												99																					2	1	1
11/10	375150	4703250	4.20	2	S																100																					1	1	0
11/10	375100	4703250	4.20	1	S																100																					1	1	0
11/10	375100	4703250	4.20	2	S				1												99																					2	1	1
11/10	375050	4703250	4.20	1	S		20		35							20					25																					4	2	2
11/10	375050	4703250	4.20	2	S		17		25							3					55																					4	2	2
11/10	375000	4703250	4.30	1	M		5		10							10					75																					4	2	2
11/10	375000	4703250	4.30	2	S		23		35							2					40																					4	2	2
11/10	374950	4703250	4.40	1	S		5		10												85																					3	1	2
11/10	374950	4703250	4.40	2	M		10		15							0.01					75																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/10	374900	4703250	4.40	1	M		30		30							0.01					40																					4	2	2
11/10	374900	4703250	4.40	2	M		5		80							2					13																					4	2	2
11/10	374850	4703250	4.40	1	M		23		75							2										0.01																4	2	2
11/10	374850	4703250	4.40	2	M		5		90							5																										3	1	2
11/10	374800	4703250	4.40	1	M		14		85							1					0.01																					4	2	2
11/10	374800	4703250	4.40	2	M		20		70							10																										3	1	2
11/10	374750	4703250	4.20	1	M		12		85							3																										3	1	2
11/10	374750	4703250	4.20	2	M		2		95							3																										3	1	2
10/28	374700	4703250	4.50	1	M		45		45							10																										3	1	2
10/28	374700	4703250	4.50	2	M		30		70							0.01																										3	1	2
10/28	374650	4703250	4.50	1	M		15		85							0.01																										3	1	2
10/28	374650	4703250	4.50	2	D		20		75							5																										3	1	2
10/28	374600	4703250	4.20	1	D		5		93							2																										3	1	2
10/28	374600	4703250	4.20	2	M		0.01		98							2																										3	1	2
10/28	374550	4703250	4.00	1	M				92							5																			3							3	1	2
10/28	374550	4703250	4.00	2	D		1		94							2																			3							4	1	3
10/28	374500	4703250	3.60	1	D		3		90							6																			1							4	1	3
10/28	374500	4703250	3.60	2	D		10		85							5													0.01													4	1	3
10/28	374450	4703250	3.10	1	M		3		5							90																						2				4	1	3
10/28	374450	4703250	3.10	2	M		2		5							91																						2				4	1	3
10/28	374400	4703250	2.60	1	M		10		85							5																						0.01				4	1	3
10/28	374400	4703250	2.60	2	M		5		60							35																										3	1	2
10/28	374350	4703300	2.50	1	S		10		55							35																										3	1	2
10/28	374350	4703300	2.50	2	S		15		60		10					10																						5				5	1	4
11/7	376300	4703350	2.10	1	M		0.01		25		0.01					75																						0.01				5	1	4
11/7	376300	4703350	2.10	2	M		2		45							50																						3				4	1	3
10/28	374350	4703350	2.80	1	S				70							15																						15				3	1	2
10/28	374350	4703350	2.80	2	S		10		65		5					20																										4	1	3
10/28	374600	4703400	4.70	1	T		5		94																													1				3	0	3
10/28	374600	4703400	4.70	2	S		3		95							2																										3	1	2
10/28	374450	4703400	4.10	1	M		5		35												60																					3	1	2
10/28	374450	4703400	4.10	2	S		45		50							5					0.01																					4	2	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/28	374350	4703400	3.40	1	T						5					95																										2	1	1
10/28	374350	4703400	3.40	2	S				30							60		0.01																				10				4	1	3
10/28	374375	4703450	3.80	1	S		5		65							30																			0.01							4	1	3
10/28	374375	4703450	3.80	2	M		5		78							15					0.01														2							5	2	3
11/7	376150	4703500	3.40	1	S				85							15																										2	1	1
11/7	376150	4703500	3.40	2	S		0.01		99							1																						0.01				4	1	3
10/28	374300	4703500	3.00	1	S		1		69							28										0.01							2					0.01				6	2	4
10/28	374300	4703500	3.00	2	S		5		30							65																						0.01				4	1	3
10/28	374300	4703600	4.30	1	T		10		20							20										45												5				5	2	3
10/28	374300	4703600	4.30	2	S		3		40		0.01					40		0.01								12												5				7	2	5
10/28	374381	4703622	5.60	1	T		1		75							4										20																4	2	2
10/28	374381	4703622	5.60	2	T				50							15										35																3	2	1
11/7	376100	4703650	3.90	1	M				90							10																										2	1	1
11/7	376100	4703650	3.90	2	M		10		80							10																						0.01				4	1	3
10/28	374250	4703700	3.50	1	M		4		65							6										25												0.01				5	2	3
10/28	374250	4703700	3.50	2	M		0.01		70							5										25												0.01				5	2	3
11/7	376050	4703800	4.10	1	T				98							2																										2	1	1
11/7	376050	4703800	4.10	2	M		0.01		98							2										0.01																4	2	2
10/28	374250	4703800	8.00	1	O																																					0	0	0
10/28	374250	4703800	8.00	2	O																																					0	0	0
10/28	374200	4703900	2.60	1	T				60		2					38																										3	1	2
10/28	374200	4703900	2.60	2	T		2		60		13					20										5																5	2	3
11/7	376000	4703950	3.10	1	M				20		2					65										0.01									5			8				6	2	4
11/7	376000	4703950	3.10	2	M				31		1					65														0.01					0.01			3				6	1	5
10/28	374142	4704072	4.50	1	T		10		30		30															30																4	1	3
10/28	374142	4704072	4.50	2	S		5		60																	35				0.01												4	1	3
11/7	375900	4704100	4.00	1	T				98							2																										2	1	1
11/7	375900	4704100	4.00	2	S		3		80		3					12										0.01												2				6	2	4
11/7	375892	4704200	1.70	1	T				55		5					15														1								24				5	1	4
11/7	375892	4704200	1.70	2	T				55		5					15																						25				4	1	3
10/28	374093	4704222	4.80	1	O																																					0	0	0
10/28	374093	4704222	4.80	2	T				50		5					45																										3	1	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
10/28	374090	4704272	7.80	1	O																																					0	**0**	0
10/28	374090	4704272	7.80	2	O																																					0	**0**	0
11/7	375877	4704350	1.50	1	M		0.01		85		0.01					**13**										**2**																5	**2**	3
11/7	375877	4704350	1.50	2	M		0.01		65							**32**										**3**																4	**2**	2
10/28	374021	4704422	3.00	1	T				8							**90**										**2**																3	**2**	1
10/28	374021	4704422	3.00	2	T				5							**95**																										2	**1**	1
11/7	375840	4704500	2.50	1	S				40							**50**										**0.01**												10				4	**2**	2
11/7	375840	4704500	2.50	2	M				3		0.01					**97**																						0.01				4	**1**	3
10/28	373978	4704572	2.90	1	M		8		60		0.01					**30**																						2				5	**1**	4
10/28	373978	4704572	2.90	2	S		5		80							**15**																						0.01				4	**1**	3
11/7	375808	4704650	4.50	1	S				90		7					**3**																										3	**1**	2
11/7	375808	4704650	4.50	2	S		3		85							**5**										**7**																4	**2**	2
10/28	373951	4704722	4.50	1	S		15		58		2					**10**		0.01								**15**																6	**2**	4
10/28	373951	4704722	4.50	2	T				50							**10**		5								**30**												5				5	**2**	3
11/7	375775	4704800	2.60	1	S		1		4		10					**55**		0.01								**0.01**												30				7	**2**	5
11/7	375775	4704800	2.60	2	M		3		2		10					**20**		0.01																				65				6	**1**	5
10/28	373923	4704877	3.00	1	S		40		30		10					**10**										**10**						0.01										6	**2**	4
10/28	373923	4704877	3.00	2	S		10		34		1					**50**										**5**						0.01										6	**2**	4
11/7	375746	4704950	3.00	1	T											**70**																						30				2	**1**	1
11/7	375746	4704950	3.00	2	T				15		5					**80**																										3	**1**	2
10/28	373874	4704972	3.30	1	T	20	3		60		10					**5**		1								**1**																7	**2**	5
10/28	373874	4704972	3.30	2	T		5		35							**3**										**2**						1						54				6	**2**	4
10/28	373837	4705072	3.60	1	S		10		55		20					**5**										**10**																5	**2**	3
10/28	373837	4705072	3.60	2	S		5		70		5					**20**										**0.01**																5	**2**	3
11/7	375715	4705100	3.50	1	T				70							**30**																										2	**1**	1
11/7	375715	4705100	3.50	2	T				70		5					**25**																										3	**1**	2
11/8	373806	4705222	3.50	1	S				60							**35**										**5**																3	**2**	1
11/8	373806	4705222	3.50	2	T				50		3					**12**										**35**																4	**2**	2
11/7	375683	4705250	3.00	1	T				40							**30**										**30**																3	**2**	1
11/7	375683	4705250	3.00	2	O																																					0	**0**	0
11/8	373771	4705372	3.00	1	S		15		20		9					**50**		1								**5**																6	**2**	4
11/8	373771	4705372	3.00	2	S		0.01		1		50					**45**		4																								5	**1**	4

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/7	375669	4705400	2.70	1	T				70		15					15																										3	1	2
11/7	375669	4705400	2.70	2	S		2		40		15					40										0.01												3				6	2	4
11/8	373731	4705471	3.00	1	T		5		73							20										2																4	2	2
11/8	373731	4705471	3.00	2	T		33		55		2					5										5																5	2	3
11/7	375636	4705550	4.00	1	M				70		0.01					30										0.01												0.01				5	2	3
11/7	375636	4705550	4.00	2	S				65		15					20																										3	1	2
11/8	373690	4705571	3.00	1	T				2							98																										2	1	1
11/8	373690	4705571	3.00	2	T				2							98																										2	1	1
11/7	375610	4705700	3.50	1	M		5		25		5					65																										4	1	3
11/7	375610	4705700	3.50	2	M				45		5					50																										3	1	2
11/8	373623	4705721	2.50	1	T		2		98																																	2	0	2
11/8	373623	4705721	2.50	2	S		15		50							35																										3	1	2
11/7	375572	4705850	4.00	1	S				40		5					55																										3	1	2
11/7	375572	4705850	4.00	2	T				15		9					75																						1				4	1	3
11/8	373586	4705872	5.00	1	O																																					0	0	0
11/8	373586	4705872	5.00	2	T				95																		5															2	0	2
11/7	375543	4706000	5.00	1	T				100																																	1	0	1
11/7	375543	4706000	5.00	2	S				90							5																						5				3	1	2
11/8	373511	4706071	2.50	1	T		2		40							58																										3	1	2
11/8	373511	4706071	2.50	2	T		15		25							55										5																4	2	2
11/7	375524	4706150	3.00	1	T		7		85							5		2																				1				5	1	4
11/7	375524	4706150	3.00	2	S		1		60		5					30		0.01								0.01												4				7	2	5
11/8	373431	4706222	2.50	1	M				13		2					85																						0.01				4	1	3
11/8	373431	4706222	2.50	2	M		3		47							50																										3	1	2
11/7	375492	4706300	2.70	1	M		5		55							40																										3	1	2
11/7	375492	4706300	2.70	2	M		0.01		23		2					75											0.01											0.01				6	1	5
11/8	373402	4706322	2.00	1	S				10							85																						5				3	1	2
11/8	373402	4706322	2.00	2	M		0.01		10							80																						10				4	1	3
11/7	375463	4706450	2.50	1	M		0.01		35		15					50																										4	1	3
11/7	375463	4706450	2.50	2	M				40		10					50		0.01																				0.01				5	1	4
11/8	373348	4706472	2.50	1	T				35							65										0.01																3	2	1
11/8	373348	4706472	2.50	2	S		10		30		5					50										5																5	2	3

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/8	373306	4706622	2.00	1	S		30		10							60										0.01																4	2	2
11/8	373306	4706622	2.00	2	S		15		75		0.01					3										7																5	2	3
11/8	373296	4706722	1.50	1	M		5		0.01		0.01					90																						5				5	1	4
11/8	373296	4706722	1.50	2	M				49		0.01					49																						2				4	1	3
11/7	375385	4706750	1.50	1	M		0.01		10							60																						30				4	1	3
11/7	375385	4706750	1.50	2	M		0.01		20		10					50																						20				5	1	4
11/7	375299	4706850	1.50	1	T						49					49																						2				3	1	2
11/7	375299	4706850	1.50	2	T				10							30										60																3	2	1
11/8	373269	4706872	5.50	1	O																																					0	0	0
11/8	373269	4706872	5.50	2	O																																					0	0	0
11/7	375231	4707000	3.10	1	S				35							65																										2	1	1
11/7	375231	4707000	3.10	2	M				25		0.01					75																						0.01				4	1	3
11/8	373162	4707022	2.00	1	T		10		35		5					50																										4	1	3
11/8	373162	4707022	2.00	2	M		30		13		20					35													0.01									2				6	1	5
11/8	373131	4707122	2.50	1	T											100																										1	1	0
11/8	373131	4707122	2.50	2	T						60					30																						10				3	1	2
11/7	375197	4707150	4.50	1	T				45							35		5								15																4	2	2
11/7	375197	4707150	4.50	2	S		2		50							45										3	0.01															5	2	3
11/7	375167	4707300	3.10	1	T				70							30																										2	1	1
11/7	375167	4707300	3.10	2	S		10		30							60																										3	1	2
11/8	373039	4707372	6.00	1	O																																					0	0	0
11/8	373039	4707372	6.00	2	O																																					0	0	0
11/7	375145	4707450	2.50	1	T				40		10					50																										3	1	2
11/7	375145	4707450	2.50	2	S				60		5					33										2																4	2	2
11/8	373050	4707450	11.0	1	O																																					0	0	0
11/8	373050	4707450	11.0	2	O																																					0	0	0
11/8	373000	4707550	9.50	1	O																																					0	0	0
11/8	373000	4707550	9.50	2	O																																					0	0	0
11/7	375133	4707600	3.00	1	T																																	100				1	0	1
11/7	375133	4707600	3.00	2	T											100																										1	1	0
11/8	373000	4707650	5.00	1	T		75		15							10																										3	1	2
11/8	373000	4707650	5.00	2	T				50		45															5																3	1	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/7	375113	4707750	4.00	1	T				10							70										15												5				4	2	2
11/7	375113	4707750	4.00	2	T				30							20																						50				3	1	2
11/8	372925	4707800	2.90	1	M				0.01		65					35																										3	1	2
11/8	372925	4707800	2.90	2	S		10		10		20					60																										4	1	3
11/7	375090	4707900	2.50	1	T				10							90																										2	1	1
11/7	375090	4707900	2.50	2	O																																					0	0	0
11/8	372900	4707900	4.00	1	T				95							5																										2	1	1
11/8	372900	4707900	4.00	2	S		20		55		0.01					20		0.01								5																6	2	4
11/7	375064	4708050	3.00	1	T				10							80																						10				3	1	2
11/7	375064	4708050	3.00	2	T						5					50																						45				3	1	2
11/8	372800	4708100	2.50	1	M		15		35		0.01					45										5												0.01				6	2	4
11/8	372800	4708100	2.50	2	M		30		45		5					15										5																5	2	3
11/7	375047	4708200	4.00	1	T				85							10		1																				4				4	1	3
11/7	375047	4708200	4.00	2	T				35							30										35																3	2	1
11/8	372800	4708200	4.50	1	T		30		60									10																								3	0	3
11/8	372800	4708200	4.50	2	T		45		50																	5																3	1	2
11/8	372750	4708250	2.80	1	M		30		10		30					30																						0.01				5	1	4
11/8	372750	4708250	2.80	2	M		2		30		20					48																										4	1	3
11/7	375020	4708350	2.70	1	S		5		10							75																						10				4	1	3
11/7	375020	4708350	2.70	2	S		3		15							75																						7				4	1	3
11/8	372750	4708350	3.50	1	T				30		60																											10				3	0	3
11/8	372750	4708350	3.50	2	T				40		60																															2	0	2
11/8	372700	4708350	2.00	1	S		2		10		5					80																						3				5	1	4
11/8	372700	4708350	2.00	2	M		1		4		15					80																						0.01				5	1	4
11/7	374984	4708500	2.80	1	T				40																	60																2	1	1
11/7	374984	4708500	2.80	2	S		5		75							10											0.01											10				5	1	4
11/8	372700	4708525	3.50	1	S				60		0.01					30		0.01								10												0.01				6	2	4
11/8	372700	4708525	3.50	2	S		3		50							30		0.01								12												5				6	2	4
11/8	372600	4708600	3.00	1	M		3		5		37					50																	0.01					5				6	1	5
11/8	372600	4708600	3.00	2	M		5		2		39					40																	1					13				6	1	5
11/7	374900	4708650	2.25	1	T				15							80																						5				3	1	2
11/7	374900	4708650	2.25	2	T				10							85																						5				3	1	2

Date in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/8	372550	4708700	2.70	1	S		19		30		10					**40**																						1				5	**1**	4
11/8	372550	4708700	2.70	2	M		65		25		0.01					**10**																						0.01				5	**1**	4
11/8	372450	4708850	2.10	1	M		10				10					**40**																						40				4	**1**	3
11/8	372450	4708850	2.10	2	M		7		3		0.01					**40**										**0.01**												50				6	**2**	4
11/8	372300	4708950	2.50	1	S		5		10		25					**60**																										4	**1**	3
11/8	372300	4708950	2.50	2	M		10		5		25					**60**																										4	**1**	3
	Rake Toss	4230				42	2791	460	3917	4	1002	0	1	0	0	3416	1273	21	481	4	3340	0	4	0	0	490	404	3	48	908	0	121	19	0	993	384	0	589	0	300	0			
	"O"	25																																										
	"T"	348																																										
	"S"	799																																										
	"M"	1821																																										
	"D"	1237																																										

Data 2. Lighthouse rake-toss pre-herbicide measurements recorded in 2016. 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 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/14	375700	4701950		1	T		5									95																										2	1	1
7/14	375700	4701950		2	T		30		10							60																										3	1	2
7/14	375650	4701950		1	T		5		93												2																					3	1	2
7/14	375650	4701950		2	T		15		80							3					1									1												5	2	3
7/14	375600	4701950		1	T		79		15							5					1																					4	2	2
7/14	375600	4701950		2	S		80		10							7					3																					4	2	2
7/14	375650	4702000		1	T		93		7																																	2	0	2
7/14	375650	4702000		2	T		85		5							5														5												4	1	3
7/14	375600	4702000		1	S		80		15							2			1		2									0.01												6	3	3
7/14	375600	4702000		2	T		15		70							10					5																					4	2	2
7/14	375550	4702000		1	S		5	1	30							2	2		30		30																					7	3	4
7/14	375550	4702000		2	S		10		15		0.01					5	15		38		15									2										0.01		9	3	6
7/14	375650	4702050		1	T		83		15	2																																3	0	3
7/14	375650	4702050		2	T		25		50							25																										3	1	2
7/14	375600	4702050		1	S		45		40							10					5																					4	2	2
7/14	375600	4702050		2	S		55		25							15			0.01		5					0.01																6	4	2
7/14	375550	4702050		1	S		15	1	40							2			3		39																					6	3	3
7/14	375550	4702050		2	S		10		25								10		5		50																					5	2	3
7/14	375600	4702100		1	T		35		65																																	2	0	2
7/14	375600	4702100		2	T		85		10							5																										3	1	2
7/14	375550	4702100		1	S		0.01		95							3					2																					4	2	2
7/14	375550	4702100		2	S		5		15							3			2		75									0.01												6	3	3
7/14	375500	4702100		1	S		2		30								2		2		54									10												6	2	4
7/14	375500	4702100		2	S		5	1	40							5	2		2		40																			5		8	3	5
7/14	375550	4702150		1	S		27		65		0.01					7	0.01		1		0.01									0.01												8	3	5
7/14	375550	4702150		2	S		40		58							1			1		0.01					0.01														0.01		7	4	3
7/14	375500	4702150		1	S		7		30							1	1				61																			0.01		6	2	4
7/14	375500	4702150		2	S		0.01		44							1					55																					4	2	2
7/14	375450	4702150		1	S		10		69							5	0.01		1		15									0.01												7	3	4
7/14	375450	4702150		2	S		20		40		0.01					5	5				30					0.01																7	3	4
7/14	375500	4702200		1	T		10		80							10																										3	1	2
7/14	375500	4702200		2	T		38		55							5																	2									4	1	3

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/14	375450	4702200		1	T		20		59							1					20																					4	2	2
7/14	375450	4702200		2	S		2		48							5					20														25							5	2	3
7/14	375400	4702200		1	S				7							3					89									1												4	2	2
7/14	375400	4702200		2	S		10		25							20					40									5												5	2	3
7/14	375450	4702250		1	S		10		65							25	0.01				0.01									0.01										0.01		7	2	5
7/14	375450	4702250		2	S		30		60							10					0.01																					4	2	2
7/14	375400	4702250		1	T				35												65																					2	1	1
7/14	375400	4702250		2	T		10		70							4					15									1												5	2	3
7/14	375350	4702250		1	S				25							25					35					15																4	3	1
7/14	375350	4702250		2	S		5		25							10					40									20												5	2	3
7/14	375500	4702300		1	T				10							10					80																					3	2	1
7/14	375500	4702300		2	O																																					0	0	0
7/14	375450	4702300		1	T				60							10					5									25												4	2	2
7/14	375450	4702300		2	T		60		30							8	1				1																					5	2	3
7/14	375400	4702300		1	T		75		20							5																										3	1	2
7/14	375400	4702300		2	T		40		56							3					1																					4	2	2
7/14	375500	4702350		1	T				90							5					5																					3	2	1
7/14	375500	4702350		2	T				100																																	1	0	1
7/14	375450	4702350		1	S		5		84							3	0.01				0.01														5					3		7	2	5
7/14	375450	4702350		2	S	0.01	10		43							42					0.01																			5		6	2	4
7/14	375400	4702350		1	S		81		15							2					0.01							2		0.01												6	2	4
7/14	375400	4702350		2	S		78		20							2																										3	1	2
7/14	375500	4702400		1	T				80																															20		2	0	2
7/14	375500	4702400		2	T				80							7					3																			10		4	2	2
7/14	375450	4702400		1	T		10		62							25					3																					4	2	2
7/14	375450	4702400		2	S		20		73		0.01					5					2					0.01														0.01		7	3	4
7/14	375400	4702400		1	T		20		55							25																										3	1	2
7/14	375400	4702400		2	T		32		50							5					7					5														1		6	3	3
	Rake Toss	60				1	50	3	58	1	4	0	0	0	0	50	12	0	12	0	44	0	0	0	0	6	0	1	0	15	0	0	1	0	2	0	0	0	0	11	0			
	"O"	1																																										
	"T"	29																																										
	"S"	30																																										
	"M"	0																																										
	"D"	0																																										

Data 3. Lighthouse rake-toss post-herbicide measurements recorded in 2016. 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 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous Algae (+)	Total Species	Non-Native Species	Native Species
10/31	375700	4701950	3.10	1	T				100																																	1	**0**	1
10/31	375700	4701950	3.10	2	T		3		85																		1											11				4	**0**	4
10/31	375650	4701950	2.50	1	T				99							**1**																										2	**1**	1
10/31	375650	4701950	2.50	2	T		45		45		2								**1**																			7				5	**1**	4
10/31	375600	4701950	1.00	1	T				80		4					**10**					**5**																	1				5	**2**	3
10/31	375600	4701950	1.00	2	T		5		74		10					**5**					**5**																	1				6	**2**	4
10/31	375650	4702000	3.10	1	T				90							**8**										**2**																3	**2**	1
10/31	375650	4702000	3.10	2	T				50							**15**																			35							3	**1**	2
10/31	375600	4702000	2.40	1	T				90		10																															2	**0**	2
10/31	375600	4702000	2.40	2	T		10		60		5					**5**					**20**																					5	**2**	3
10/31	375550	4702000	0.80	1	S		5		50		10					**3**					**22**												10									6	**2**	4
10/31	375550	4702000	0.80	2	S				30		35					**4**					**30**																	1				5	**2**	3
10/31	375650	4702050	3.30	1	T				93							**5**					**2**																					3	**2**	1
10/31	375650	4702050	3.30	2	T				60		15					**10**																						15				4	**1**	3
10/31	375600	4702050	2.10	1	T		50		50																																	2	**0**	2
10/31	375600	4702050	2.10	2	T				95							**4**					**1**																					3	**2**	1
10/31	375550	4702050	1.00	1	S		15		70		3					**2**					**10**																					5	**2**	3
10/31	375550	4702050	1.00	2	S		30		60		0.01					**0.01**					**8**																	2				6	**2**	4
10/31	375600	4702100	3.40	1	T		40		60																																	2	**0**	2
10/31	375600	4702100	3.40	2	T		50		35		10					**5**																										4	**1**	3
10/31	375550	4702100	1.10	1	M		3		75		16					**1**					**5**																					5	**2**	3
10/31	375550	4702100	1.10	2	S		10		75		10										**5**																					4	**1**	3
10/31	375500	4702100	1.10	1	S		30		50		10					**2**					**8**																					5	**2**	3
10/31	375500	4702100	1.10	2	S		50		30		6					**1**					**10**														0.01			3				7	**2**	5
10/31	375550	4702150	3.20	1	T		50		50																																	2	**0**	2
10/31	375550	4702150	3.20	2	T		10		85							**5**																										3	**1**	2
10/31	375500	4702150	1.40	1	T				50		10					**1**					**39**																					4	**2**	2
10/31	375500	4702150	1.40	2	S		0.01		40		15					**5**					**40**																					5	**2**	3
10/31	375450	4702150	1.10	1	S		5		30		50					**10**					**1**																	4				6	**2**	4
10/31	375450	4702150	1.10	2	S		30		30		30					**5**					**5**																					5	**2**	3
10/31	375500	4702200	3.00	1	T		1		85		4										**10**																					4	**1**	3
10/31	375500	4702200	3.00	2	T		14		75		2										**8**														1							5	**1**	4

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous Algae (+)	Total Species	Non-Native Species	Native Species
10/31	375450	4702200	2.10	1	T		5		55		20					10					10																					5	2	3
10/31	375450	4702200	2.10	2	S		2		80		5					3					10														0.01							6	2	4
10/31	375400	4702200	1.40	1	S		8		80							10					2																					4	2	2
10/31	375400	4702200	1.40	2	M		10		50		35					5					0.01																					5	2	3
10/31	375450	4702250	1.90	1	T						100																															1	0	1
10/31	375450	4702250	1.90	2	T				50		1					45					4																					4	2	2
10/31	375400	4702250	2.30	1	T		10		75							2					10														1			2				6	2	4
10/31	375400	4702250	2.30	2	S		20		55		5					10					10						0.01											0.01				7	2	5
10/31	375350	4702250	1.90	1	M		5		80		5					1					9																					5	2	3
10/31	375350	4702250	1.90	2	M		0.01		80							5					13														2							5	2	3
10/31	375500	4702300	2.00	1	O																																					0	0	0
10/31	375500	4702300	2.00	2	T		5		42		40					5			1		5														2							7	3	4
10/31	375450	4702300	2.40	1	T		5		65		25					2					3																					5	2	3
10/31	375450	4702300	2.40	2	T	2	65		30												3																					4	1	3
10/31	375400	4702300	2.60	1	T		5		77		2					5					10						1															6	2	4
10/31	375400	4702300	2.60	2	T		15		72							8					4																	1				5	2	3
10/31	375500	4702350	2.20	1	T		5	5	55							10					10						15															6	2	4
10/31	375500	4702350	2.20	2	T		2		85							3					10																					4	2	2
10/31	375450	4702350	2.50	1	T		1		50		24										10					15																5	2	3
10/31	375450	4702350	2.50	2	T				50		25										10					15																4	2	2
10/31	375400	4702350	2.60	1	S		1		30							4					65																					4	2	2
10/31	375400	4702350	2.60	2	S		30		30		7					3			0.01		30																					6	3	3
10/31	375500	4702400	2.30	1	T		10	2	75							2					10														1							6	2	4
10/31	375500	4702400	2.30	2	S		10		60		25					2					3																	0.01				6	2	4
10/31	375450	4702400	2.60	1	T		10		79							5					5														1							5	2	3
10/31	375450	4702400	2.60	2	S		5		60		2					3					30																					5	2	3
10/31	375400	4702400	2.80	1	S		5		50							2					43					0.01																5	3	2
10/31	375400	4702400	2.80	2	T		10		50							5					35																					4	2	2
	Rake Toss	60				1	45	2	58	0	36	0	0	0	0	45	0	0	3	0	45	0	0	0	0	4	4	0	0	0	0	0	1	0	9	0	0	13	0	0	0			
	"O"	1																																										
	"T"	37																																										
	"S"	18																																										
	"M"	4																																										
	"D"	0																																										

Data 4. Inlet proper rake-toss pre-herbicide measurements recorded in 2016. 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 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/18	374800	4698450		1	T				100																																	1	0	1
7/18	374800	4698450		2	O																																					0	0	0
7/18	374750	4698450		1	O																																					0	0	0
7/18	374750	4698450		2	O																																					0	0	0
7/18	374800	4698500		1	O																																					0	0	0
7/18	374800	4698500		2	O																																					0	0	0
7/18	374800	4698550		1	O																																					0	0	0
7/18	374800	4698550		2	O																																					0	0	0
7/18	374850	4698600		1	O																																					0	0	0
7/18	374850	4698600		2	T				100																																	1	0	1
7/18	374800	4698600		1	O																																					0	0	0
7/18	374800	4698600		2	T				100																																	1	0	1
7/18	374850	4698650		1	O																																					0	0	0
7/18	374850	4698650		2	T											100																										1	1	0
7/18	374900	4698700		1	O																																					0	0	0
7/18	374900	4698700		2	O																																					0	0	0
7/18	374900	4698750		1	T				100																																	1	0	1
7/18	374900	4698750		2	O																																					0	0	0
7/18	374900	4698800		1	O																																					0	0	0
7/18	374900	4698800		2	O																																					0	0	0
7/18	374950	4698850		1	O																																					0	0	0
7/18	374950	4698850		2	O																																					0	0	0
7/18	374950	4698900		1	O																																					0	0	0
7/18	374950	4698900		2	O																																					0	0	0
7/18	375000	4698950		1	O																																					0	0	0
7/18	375000	4698950		2	O																																					0	0	0
7/18	375000	4699000		1	O																																					0	0	0
7/18	375000	4699000		2	O																																					0	0	0
7/18	375050	4699050		1	O																																					0	0	0
7/18	375050	4699050		2	O																																					0	0	0
7/18	375050	4699100		1	O																																					0	0	0
7/18	375050	4699100		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/18	375100	4699150		1	O																																					0	0	0
7/18	375100	4699150		2	O																																					0	0	0
7/18	375100	4699200		1	O																																					0	0	0
7/18	375100	4699200		2	O																																					0	0	0
7/18	375150	4699250		1	O																																					0	0	0
7/18	375150	4699250		2	O																																					0	0	0
7/18	375150	4699300		1	O																																					0	0	0
7/18	375150	4699300		2	T														100																							1	1	0
7/18	375900	4699350		1	O																																					0	0	0
7/18	375900	4699350		2	T		70																							30												2	0	2
7/18	375200	4699350		1	O																																					0	0	0
7/18	375200	4699350		2	T														100																							1	1	0
7/18	375200	4699400		1	O																																					0	0	0
7/18	375200	4699400		2	O																																					0	0	0
7/18	375850	4699408		1	O																																					0	0	0
7/18	375850	4699408		2	O																																					0	0	0
7/18	375250	4699450		1	O																																					0	0	0
7/18	375250	4699450		2	O																																					0	0	0
7/18	375800	4699451		1	O																																					0	0	0
7/18	375800	4699451		2	O																																					0	0	0
7/18	375250	4699500		1	T														100																							1	1	0
7/18	375250	4699500		2	O																																					0	0	0
7/18	375750	4699501		1	T											100																										1	1	0
7/18	375750	4699501		2	O																																					0	0	0
7/18	375700	4699550		1	O																																					0	0	0
7/18	375700	4699550		2	O																																					0	0	0
7/18	375300	4699550		1	O																																					0	0	0
7/18	375300	4699550		2	T														100																							1	1	0
7/18	375650	4699585		1	T														100																							1	1	0
7/18	375650	4699585		2	O																																					0	0	0
7/18	375625	4699600		1	O																																					0	0	0
7/18	375625	4699600		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/18	375300	4699600		1	O																																					0	0	0
7/18	375300	4699600		2	T														100																							1	1	0
7/18	375650	4699650		1	O																																					0	0	0
7/18	375650	4699650		2	O																																					0	0	0
7/18	375350	4699650		1	O																																					0	0	0
7/18	375350	4699650		2	T														100																							1	1	0
7/18	375550	4699663		1	O																																					0	0	0
7/18	375550	4699663		2	O																																					0	0	0
7/18	375450	4699667		1	O																																					0	0	0
7/18	375450	4699667		2	O																																					0	0	0
7/18	375500	4699671		1	O																																					0	0	0
7/18	375500	4699671		2	O																																					0	0	0
7/18	375400	4699681		1	O																																					0	0	0
7/18	375400	4699681		2	O																																					0	0	0
7/18	375650	4699700		1	O																																					0	0	0
7/18	375650	4699700		2	O																																					0	0	0
7/18	375350	4699700		1	O																																					0	0	0
7/18	375350	4699700		2	T											100																										1	1	0
7/18	375650	4699750		1	O																																					0	0	0
7/18	375650	4699750		2	O																																					0	0	0
7/18	375350	4699750		1	T														100																							1	1	0
7/18	375350	4699750		2	T														100																							1	1	0
7/18	375400	4699800		1	O																																					0	0	0
7/18	375400	4699800		2	O																																					0	0	0
7/18	375650	4699850		1	O																																					0	0	0
7/18	375650	4699850		2	T														100																							1	1	0
7/18	375400	4699850		1	T				10										90																							2	1	1
7/18	375400	4699850		2	T														100																							1	1	0
7/18	375650	4699900		1	O																																					0	0	0
7/18	375650	4699900		2	O																																					0	0	0
7/18	375450	4699900		1	O																																					0	0	0
7/18	375450	4699900		2	T				100																																	1	0	1

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/18	375650	4699950		1	O																																					0	0	0
7/18	375650	4699950		2	O																																					0	0	0
7/18	375450	4699950		1	O																																					0	0	0
7/18	375450	4699950		2	T											30			70																							2	2	0
7/18	375650	4700000		1	O																																					0	0	0
7/18	375650	4700000		2	T											100																										1	1	0
7/18	375500	4700000		1	O																																					0	0	0
7/18	375500	4700000		2	O																																					0	0	0
7/18	375650	4700050		1	T											100																										1	1	0
7/18	375650	4700050		2	O																																					0	0	0
7/18	375500	4700050		1	T											100																										1	1	0
7/18	375500	4700050		2	T											100																										1	1	0
7/18	375650	4700100		1	T											100																										1	1	0
7/18	375650	4700100		2	O																																					0	0	0
7/18	375500	4700100		1	O																																					0	0	0
7/18	375500	4700100		2	O																																					0	0	0
7/18	375650	4700150		1	O																																					0	0	0
7/18	375650	4700150		2	T		100																																			1	0	1
7/18	375500	4700150		1	O																																					0	0	0
7/18	375500	4700150		2	O																																					0	0	0
7/18	375650	4700200		1	T											100																										1	1	0
7/18	375650	4700200		2	T														100																							1	1	0
7/18	375500	4700200		1	O																																					0	0	0
7/18	375500	4700200		2	O																																					0	0	0
7/18	375650	4700250		1	T														100																							1	1	0
7/18	375650	4700250		2	T																																			100		1	0	1
7/18	375550	4700250		1	O																																					0	0	0
7/18	375550	4700250		2	T																									100												1	0	1
7/18	375500	4700250		1	S														75											25												2	1	1
7/18	375500	4700250		2	O																																					0	0	0
7/18	375650	4700300		1	O																																					0	0	0
7/18	375650	4700300		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/18	375550	4700300		1	T																									100												1	0	1
7/18	375550	4700300		2	T														100																							1	1	0
7/18	375650	4700350		1	T				20										80																							2	1	1
7/18	375650	4700350		2	T				5							85			10																							3	2	1
7/18	375550	4700350		1	O																																					0	0	0
7/18	375550	4700350		2	T											100																										1	1	0
7/18	375650	4700400		1	T		100																																			1	0	1
7/18	375650	4700400		2	T		100																																			1	0	1
7/18	375550	4700400		1	S											0.01			100																					0.01		3	2	1
7/18	375550	4700400		2	S														90											5										5		3	1	2
7/18	375650	4700450		1	O																																					0	0	0
7/18	375650	4700450		2	T		95		5																																	2	0	2
7/18	375600	4700450		1	T		100																																			1	0	1
7/18	375600	4700450		2	T		60		5							5			30																							4	2	2
7/18	375550	4700450		1	S														95											5												2	1	1
7/18	375550	4700450		2	S														95											5										0.01		3	1	2
7/18	375650	4700500		1	T		85		15																																	2	0	2
7/18	375650	4700500		2	T		45									50																								5		3	1	2
7/18	375600	4700500		1	T																																			100		1	0	1
7/18	375600	4700500		2	T				100																																	1	0	1
7/18	375550	4700500		1	S														98											2												2	1	1
7/18	375550	4700500		2	S														100																					0.01		2	1	1
7/18	375750	4700550		1	T														100																							1	1	0
7/18	375750	4700550		2	T														100																							1	1	0
7/18	375700	4700550		1	T				5										95																							2	1	1
7/18	375700	4700550		2	T				3							3			93																					1		4	2	2
7/18	375650	4700550		1	T											1			99																							2	2	0
7/18	375650	4700550		2	T				55							45																										2	1	1
7/18	375600	4700550		1	O																																					0	0	0
7/18	375600	4700550		2	O																																					0	0	0
7/18	375750	4700600		1	T				5										95																							2	1	1
7/18	375750	4700600		2	T						2								98																							2	1	1

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/18	375700	4700600		1	T						1								99																							2	1	1
7/18	375700	4700600		2	S				3							3			94																							3	2	1
7/18	375650	4700600		1	T				50							50																										2	1	1
7/18	375650	4700600		2	T		3		95							2																										3	1	2
7/18	375600	4700600		1	O																																					0	0	0
7/18	375600	4700600		2	T		100																																			1	0	1
7/18	375700	4700650		1	S		5		5							90										0.01														0.01		5	2	3
7/18	375700	4700650		2	T		5		6							86			3																							4	2	2
7/18	375650	4700650		1	O																																					0	0	0
7/18	375650	4700650		2	O																																					0	0	0
7/18	375600	4700650		1	O																																					0	0	0
7/18	375600	4700650		2	T														100																							1	1	0
7/18	375700	4700700		1	O																																					0	0	0
7/18	375700	4700700		2	T											100																										1	1	0
7/18	375650	4700700		1	O																																					0	0	0
7/18	375650	4700700		2	T											100																										1	1	0
7/18	375750	4700750		1	S				2										96																			2		0.01		4	1	3
7/18	375750	4700750		2	S		0.01		5							48			47																					0.01		5	2	3
7/18	375700	4700750		1	T		49		50																					1												3	0	3
7/18	375700	4700750		2	T		45		25							25														5												4	1	3
7/18	375650	4700750		1	O																																					0	0	0
7/18	375650	4700750		2	O																																					0	0	0
7/18	375750	4700800		1	T		25		50							25																										3	1	2
7/18	375750	4700800		2	T		40		30							30																										3	1	2
7/18	375700	4700800		1	O																																					0	0	0
7/18	375700	4700800		2	T		45		55																																	2	0	2
7/18	375800	4700850		1	T											5										95																2	2	0
7/18	375800	4700850		2	S		2		3							95																										3	1	2
7/18	375750	4700850		1	O																																					0	0	0
7/18	375750	4700850		2	T		90		10																																	2	0	2
7/18	375700	4700850		1	T		1									99																										2	1	1
7/18	375700	4700850		2	T				10							60			30																							3	2	1

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/18	375800	4700900		1	T				100																																	1	0	1
7/18	375800	4700900		2	T		5		95																																	2	0	2
7/18	375750	4700900		1	T		95		5																																	2	0	2
7/18	375750	4700900		2	T				5												95																					2	1	1
7/18	375800	4700950		1	O																																					0	0	0
7/18	375800	4700950		2	T				100																																	1	0	1
7/18	375750	4700950		1	T				50							50																										2	1	1
7/18	375750	4700950		2	T		97														3																					2	1	1
7/18	376250	4700959		1	O																																					0	0	0
7/18	376250	4700959		2	O																																					0	0	0
7/18	376200	4700976		1	O																																					0	0	0
7/18	376200	4700976		2	O																																					0	0	0
7/18	376150	4700993		1	O																																					0	0	0
7/18	376150	4700993		2	O																																					0	0	0
7/18	375850	4701000		1	O																																					0	0	0
7/18	375850	4701000		2	O																																					0	0	0
7/18	375800	4701000		1	T				50							50																										2	1	1
7/18	375800	4701000		2	T				20							79			1																							3	2	1
7/18	375750	4701000		1	S				5										95		0.01																					3	2	1
7/18	375750	4701000		2	T				20										80																							2	1	1
7/18	376100	4701007		1	O																																					0	0	0
7/18	376100	4701007		2	O																																					0	0	0
7/18	376050	4701018		1	S				30										70																							2	1	1
7/18	376050	4701018		2	S														95																	5						2	1	1
7/18	376000	4701020		1	S		0.01		0.01										100																							3	1	2
7/18	376000	4701020		2	T														100																							1	1	0
7/18	375950	4701025		1	S		10		0.01										90																							3	1	2
7/18	375950	4701025		2	T											5			95																							2	2	0
7/18	375900	4701025		1	T		3									2			95																							3	2	1
7/18	375900	4701025		2	T														100																							1	1	0
7/18	375850	4701050		1	O																																					0	0	0
7/18	375850	4701050		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/18	375800	4701050		1	O																																					0	0	0
7/18	375800	4701050		2	O																																					0	0	0
7/18	375750	4701050		1	T				3										96																					1		3	1	2
7/18	375750	4701050		2	S				10		5								75																			0.01		10		5	1	4
7/18	375800	4701100		1	T		90		9												1																					3	1	2
7/18	375800	4701100		2	T				80										20																							2	1	1
7/18	375750	4701100		1	T											100																										1	1	0
7/18	375750	4701100		2	T				50										50																							2	1	1
7/18	375700	4701100		1	S				3										92											0.01						5						4	1	3
7/18	375700	4701100		2	S				2										85											13												3	1	2
7/18	375800	4701150		1	T		50		50																																	2	0	2
7/18	375800	4701150		2	T		60		25												15																					3	1	2
7/18	375750	4701150		1	O																																					0	0	0
7/18	375750	4701150		2	T				65							35																										2	1	1
7/18	375700	4701150		1	T				20							5			65																	10						4	2	2
7/18	375700	4701150		2	T														100																							1	1	0
7/18	375750	4701200		1	T		5		85							8																								2		4	1	3
7/18	375750	4701200		2	T		5		90							5																										3	1	2
7/18	375700	4701200		1	T				60										40																							2	1	1
7/18	375700	4701200		2	T				75							5														20												3	1	2
7/18	375650	4701200		1	S											1			98											1												3	2	1
7/18	375650	4701200		2	S											5			95																							2	2	0
7/18	375750	4701250		1	S		35		35							20			5							5																5	3	2
7/18	375750	4701250		2	S		65		15							20																										3	1	2
7/18	375700	4701250		1	T				40							60																										2	1	1
7/18	375700	4701250		2	S		45		3										52											0.01												4	1	3
7/18	375750	4701300		1	T		100																																			1	0	1
7/18	375750	4701300		2	T		62		30							3	5																									4	1	3
7/18	375700	4701300		1	S				0.01							3			96							1																4	3	1
7/18	375700	4701300		2	M		0.01		1										99											0.01										0.01		5	1	4
7/18	375750	4701350		1	T		65		35																																	2	0	2
7/18	375750	4701350		2	T		85		5							10																										3	1	2

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/18	375700	4701350		1	T		27		70							2																								1		4	1	3
7/18	375700	4701350		2	T		30		30							30																								10		4	1	3
7/18	375750	4701400		1	S		3									35			62											0.01												4	2	2
7/18	375750	4701400		2	S		93		5							2														0.01												4	1	3
7/18	375700	4701400		1	T		99		1																																	2	0	2
7/18	375700	4701400		2	T		1		99																																	2	0	2
7/18	375750	4701450		1	T		94		5																					1												3	0	3
7/18	375750	4701450		2	T		50		49																															1		3	0	3
7/18	375700	4701450		1	S		0.01									5			95																							3	2	1
7/18	375700	4701450		2	S		3		2		0.01					38			57											0.01										0.01		7	2	5
7/18	375750	4701500		1	T		40		55							4														1												4	1	3
7/18	375750	4701500		2	T		75		25																																	2	0	2
7/18	375700	4701500		1	T				49							40			10																					1		4	2	2
7/18	375700	4701500		2	T				50							49																								1		3	1	2
7/14	375750	4701550		1	S		40		5							20	1		30											1										3		7	2	5
7/14	375750	4701550		2	S		5		25	5						10	5		40																					10		7	2	5
7/14	375700	4701550		1	T		10		90																																	2	0	2
7/14	375700	4701550		2	O																																					0	0	0
7/14	375800	4701600		1	S		13		7		0.01					35			40		0.01									2								3				8	3	5
7/14	375800	4701600		2	S		25		1							30			44											0.01					0.01							6	2	4
7/14	375750	4701600		1	T		65									35																										2	1	1
7/14	375750	4701600		2	T		97		3																																	2	0	2
7/14	375700	4701600		1	T		10		90																																	2	0	2
7/14	375700	4701600		2	T		59		40																															1		3	0	3
7/14	375800	4701650		1	T		30		43	1	2					15	3		2							2				2												9	3	6
7/14	375800	4701650		2	T		15		59		5								15							5				1												6	2	4
7/14	375750	4701650		1	T		75		20																															5		3	0	3
7/14	375750	4701650		2	T		45		45																	5				5												4	1	3
7/14	375700	4701650		1	T		90		10																																	2	0	2
7/14	375700	4701650		2	T				75							15																	10									3	1	2
7/14	375750	4701700		1	S		85		10							5																										3	1	2
7/14	375750	4701700		2	T		64		10							20			5											1												5	2	3

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/14	375700	4701700		1	T				70								20														10													3	1	2
7/14	375700	4701700		2	T				80	1						10	2													5											2		6	1	5
7/14	375550	4701700		1	T		100																																					1	0	1
7/14	375550	4701700		2	T		99																1																					2	1	1
7/14	375500	4701700		1	O																																							0	0	0
7/14	375500	4701700		2	O																																							0	0	0
7/14	375750	4701750		1	T		100																																					1	0	1
7/14	375750	4701750		2	T		15		45																									20								20				4	0	4
7/14	375700	4701750		1	T				90						10																														2	1	1
7/14	375700	4701750		2	T				95						4											1																			3	2	1
7/14	375550	4701750		1	O																																							0	0	0
7/14	375550	4701750		2	T										100																														1	1	0
7/14	375500	4701750		1	O																																							0	0	0
7/14	375500	4701750		2	O																																							0	0	0
7/14	375450	4701750		1	O																																							0	0	0
7/14	375450	4701750		2	O																																							0	0	0
7/14	375400	4701750		1	O																																							0	0	0
7/14	375400	4701750		2	O																																							0	0	0
7/11	375350	4701750		1	O																																							0	0	0
7/11	375350	4701750		2	O																																							0	0	0
7/14	375750	4701800		1	T		65		5										30																									3	1	2
7/14	375750	4701800		2	T		75		15						6			4																									4	2	2
7/14	375700	4701800		1	T		30		35	35																																		3	0	3
7/14	375700	4701800		2	T		6		90						2						2																					4	2	2
7/14	375650	4701800		1	T		80		15						4																1													4	1	3
7/14	375650	4701800		2	T		48		40	2					10																														4	1	3
7/11	375600	4701800		1	O																																							0	0	0
7/11	375600	4701800		2	O																																							0	0	0
7/14	375550	4701800		1	T		80		20																																				2	0	2
7/14	375550	4701800		2	T		50		45						4						1																					4	2	2
7/14	375500	4701800		1	T		70		30																																				2	0	2
7/14	375500	4701800		2	O																																							0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/14	375450	4701800		1	O																																					0	0	0
7/14	375450	4701800		2	O																																					0	0	0
7/14	375400	4701800		1	O																																					0	0	0
7/14	375400	4701800		2	T											100																										1	1	0
7/11	375350	4701800		1	O																																					0	0	0
7/11	375350	4701800		2	O																																					0	0	0
7/14	375750	4701850		1	S		85		10							5																										3	1	2
7/14	375750	4701850		2	S		20		1							74	3		2																	0.01						6	2	4
7/14	375700	4701850		1	T		70		30																																	2	0	2
7/14	375700	4701850		2	T		25		70							5																										3	1	2
7/14	375650	4701850		1	S		50		42							7	0.01				1						0.01															6	2	4
7/14	375650	4701850		2	S		70		30												0.01					0.01									0.01							5	2	3
7/14	375550	4701850		1	O																																					0	0	0
7/14	375550	4701850		2	T		85									15																										2	1	1
7/14	375500	4701850		1	T				100																																	1	0	1
7/14	375500	4701850		2	O																																					0	0	0
7/14	375450	4701850		1	T											100																										1	1	0
7/14	375450	4701850		2	O																																					0	0	0
7/14	375400	4701850		1	O																																					0	0	0
7/14	375400	4701850		2	O																																					0	0	0
7/11	375350	4701850		1	O																																					0	0	0
7/11	375350	4701850		2	O																																					0	0	0
7/14	375700	4701900		1	T		98									2																										2	1	1
7/14	375700	4701900		2	T		50		47							3																										3	1	2
7/14	375650	4701900		1	T		20		72							5					3																					4	2	2
7/14	375650	4701900		2	S		40		50		1					8	0.01				0.01					1																7	3	4
7/11	375550	4701900		1	O																																					0	0	0
7/11	375550	4701900		2	O																																					0	0	0
7/11	375500	4701900		1	O																																					0	0	0
7/11	375500	4701900		2	O																																					0	0	0
7/14	375450	4701900		1	O																																					0	0	0
7/14	375450	4701900		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/14	375400	4701900		1	O																																					0	**0**	0
7/14	375400	4701900		2	O																																					0	**0**	0
7/11	375350	4701900		1	O																																					0	**0**	0
7/11	375350	4701900		2	O																																					0	**0**	0
7/18	375650	4699800		1	O																																					0	**0**	0
7/18	375650	4699800		2	O																																					0	**0**	0
	Rake Toss	358				0	93	0	120	5	8	**0**	0	0	**0**	**91**	8	0	**80**	0	**13**	0	0	0	0	**10**	1	0	0	32	0	0	1	0	2	4	0	4	0	26	0			
	"O"	163																																										
	"T"	154																																										
	"S"	40																																										
	"M"	1																																										
	"D"	0																																										

Data 5. Inlet proper rake-toss post-herbicide measurements recorded in 2016. 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 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
11/19	375678	4698350		1	O																																					0	0	0
11/19	375678	4698350		2	O																																					0	0	0
11/19	375675	4698400		1	O																																					0	0	0
11/19	375675	4698400		2	O																																					0	0	0
11/19	375674	4698450		1	O																																					0	0	0
11/19	375674	4698450		2	O																																					0	0	0
10/31	374800	4698450	1.00	1	O																																					0	0	0
10/31	374800	4698450	1.00	2	O																																					0	0	0
10/31	374750	4698450	0.50	1	O																																					0	0	0
10/31	374750	4698450	0.50	2	O																																					0	0	0
11/19	375664	4698500		1	O																																					0	0	0
11/19	375664	4698500		2	O																																					0	0	0
10/31	374800	4698500	0.90	1	O																																					0	0	0
10/31	374800	4698500	0.90	2	O																																					0	0	0
11/19	375675	4698550		1	O																																					0	0	0
11/19	375675	4698550		2	O																																					0	0	0
10/31	374800	4698550	1.50	1	O																																					0	0	0
10/31	374800	4698550	1.50	2	O																																					0	0	0
10/31	374850	4698600	1.50	1	T				100																																	1	0	1
10/31	374850	4698600	1.50	2	O																																					0	0	0
10/31	374800	4698600	1.50	1	O																																					0	0	0
10/31	374800	4698600	1.50	2	O																																					0	0	0
11/19	375667	4698602		1	O																																					0	0	0
11/19	375667	4698602		2	O																																					0	0	0
11/19	375667	4698650		1	O																																					0	0	0
11/19	375667	4698650		2	O																																					0	0	0
10/31	374850	4698650	1.50	1	O																																					0	0	0
10/31	374850	4698650	1.50	2	O																																					0	0	0
11/19	375650	4698700		1	O																																					0	0	0
11/19	375650	4698700		2	O																																					0	0	0
10/31	374900	4698700	1.50	1	O																																					0	0	0
10/31	374900	4698700	1.50	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
11/19	375661	4698750		1	0																																					0	0	0
11/19	375661	4698750		2	0																																					0	0	0
10/31	374900	4698750	1.60	1	0																																					0	0	0
10/31	374900	4698750	1.60	2	0																																					0	0	0
11/19	375655	4698800		1	0																																					0	0	0
11/19	375655	4698800		2	0																																					0	0	0
10/31	374900	4698800	1.50	1	0																																					0	0	0
10/31	374900	4698800	1.50	2	0																																					0	0	0
11/19	375656	4698850		1	0																																					0	0	0
11/19	375656	4698850		2	0																																					0	0	0
10/31	374950	4698850	1.50	1	T				100																																	1	0	1
10/31	374950	4698850	1.50	2	0																																					0	0	0
11/19	375658	4698900		1	0																																					0	0	0
11/19	375658	4698900		2	0																																					0	0	0
10/31	374950	4698900	1.50	1	0																																					0	0	0
10/31	374950	4698900	1.50	2	0																																					0	0	0
11/19	375664	4698950		1	0																																					0	0	0
11/19	375664	4698950		2	0																																					0	0	0
10/31	375000	4698950	1.70	1	0																																					0	0	0
10/31	375000	4698950	1.70	2	0																																					0	0	0
11/19	375662	4699000		1	0																																					0	0	0
11/19	375662	4699000		2	0																																					0	0	0
10/31	375000	4699000	1.50	1	0																																					0	0	0
10/31	375000	4699000	1.50	2	0																																					0	0	0
11/19	375660	4699050		1	0																																					0	0	0
11/19	375660	4699050		2	0																																					0	0	0
10/31	375050	4699050	1.80	1	0																																					0	0	0
10/31	375050	4699050	1.80	2	0																																					0	0	0
11/19	375663	4699100		1	0																																					0	0	0
11/19	375663	4699100		2	0																																					0	0	0
10/31	375050	4699100	1.50	1	0																																					0	0	0
10/31	375050	4699100	1.50	2	0																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
11/19	375663	4699150		1	O																																					0	0	0
11/19	375663	4699150		2	O																																					0	0	0
10/31	375100	4699150	2.00	1	O																																					0	0	0
10/31	375100	4699150	2.00	2	O																																					0	0	0
11/19	375657	4699200		1	O																																					0	0	0
11/19	375657	4699200		2	O																																					0	0	0
10/31	375100	4699200	1.50	1	O																																					0	0	0
10/31	375100	4699200	1.50	2	O																																					0	0	0
11/19	375635	4699250		1	O																																					0	0	0
11/19	375635	4699250		2	O																																					0	0	0
10/31	375150	4699250	2.00	1	O																																					0	0	0
10/31	375150	4699250	2.00	2	O																																					0	0	0
11/19	375605	4699300		1	O																																					0	0	0
11/19	375605	4699300		2	O																																					0	0	0
10/31	375150	4699300	1.50	1	T						100																															1	0	1
10/31	375150	4699300	1.50	2	O																																					0	0	0
11/10	375900	4699350	0.70	1	O																																					0	0	0
11/10	375900	4699350	0.70	2	O																																					0	0	0
11/19	375581	4699350		1	O																																					0	0	0
11/19	375581	4699350		2	O																																					0	0	0
10/31	375200	4699350	1.00	1	O																																					0	0	0
10/31	375200	4699350	1.00	2	O																																					0	0	0
11/19	375551	4699400		1	O																																					0	0	0
11/19	375551	4699400		2	O																																					0	0	0
10/31	375200	4699400	1.00	1	O																																					0	0	0
10/31	375200	4699400	1.00	2	O																																					0	0	0
11/10	375850	4699408	1.00	1	O																																					0	0	0
11/10	375850	4699408	1.00	2	O																																					0	0	0
11/19	375564	4699450		1	O																																					0	0	0
11/19	375564	4699450		2	O																																					0	0	0
10/31	375250	4699450	1.50	1	O																																					0	0	0
10/31	375250	4699450	1.50	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
11/10	375800	4699451	2.00	1	O																																					0	**0**	0
11/10	375800	4699451	2.00	2	O																																					0	**0**	0
11/19	375582	4699500		1	O																																					0	**0**	0
11/19	375582	4699500		2	O																																					0	**0**	0
10/31	375250	4699500	1.50	1	O																																					0	**0**	0
10/31	375250	4699500	1.50	2	T						100																															1	**0**	1
11/10	375750	4699501	1.00	1	O																																					0	**0**	0
11/10	375750	4699501	1.00	2	O																																					0	**0**	0
11/10	375700	4699550	1.70	1	O																																					0	**0**	0
11/10	375700	4699550	1.70	2	O																																					0	**0**	0
11/19	375603	4699550		1	O																																					0	**0**	0
11/19	375603	4699550		2	O																																					0	**0**	0
10/31	375300	4699550	1.00	1	O																																					0	**0**	0
10/31	375300	4699550	1.00	2	T				100																																	1	**0**	1
11/10	375650	4699585	1.70	1	O																																					0	**0**	0
11/10	375650	4699585	1.70	2	O																																					0	**0**	0
11/10	375650	4699600	1.70	1	O																																					0	**0**	0
11/10	375620	4699600	1.70	2	O																																					0	**0**	0
10/31	375300	4699600	1.50	1	O																																					0	**0**	0
10/31	375300	4699600	1.50	2	O																																					0	**0**	0
11/10	375650	4699650	2.50	1	O																																					0	**0**	0
11/10	375650	4699650	2.50	2	O																																					0	**0**	0
10/31	375350	4699650	1.50	1	O																																					0	**0**	0
10/31	375350	4699650	1.50	2	O																																					0	**0**	0
11/10	375550	4699663	2.00	1	O																																					0	**0**	0
11/10	375550	4699663	2.00	2	O																																					0	**0**	0
11/10	375450	4699667	1.60	1	O																																					0	**0**	0
11/10	375450	4699667	1.60	2	O																																					0	**0**	0
11/10	375500	4699671	2.50	1	O																																					0	**0**	0
11/10	375500	4699671	2.50	2	O																																					0	**0**	0
11/10	375400	4699681	2.10	1	O																																					0	**0**	0
11/10	375400	4699681	2.10	2	O																																					0	**0**	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
11/10	375650	4699700	0.80	1	O																																					0	0	0
11/10	375650	4699700	0.80	2	O																																					0	0	0
10/31	375350	4699700	2.40	1	O																																					0	0	0
10/31	375350	4699700	2.40	2	O																																					0	0	0
11/10	375650	4699750	0.90	1	T				100																																	1	0	1
11/10	375650	4699750	0.90	2	O																																					0	0	0
10/31	375350	4699750	1.00	1	O																																					0	0	0
10/31	375350	4699750	1.00	2	O																																					0	0	0
11/10	375650	4699800	1.50	1	O																																					0	0	0
11/10	375650	4699800	1.50	2	T				100																																	1	0	1
10/31	375400	4699800	3.40	1	O																																					0	0	0
10/31	375400	4699800	3.40	2	O																																					0	0	0
11/10	375650	4699850	1.30	1	O																																					0	0	0
11/10	375650	4699850	1.30	2	O																																					0	0	0
10/31	375400	4699850	2.50	1	O																																					0	0	0
10/31	375400	4699850	2.50	2	O																																					0	0	0
11/10	375650	4699900	2.00	1	O																																					0	0	0
11/10	375650	4699900	2.00	2	O																																					0	0	0
10/31	375450	4699900	3.50	1	O																																					0	0	0
10/31	375450	4699900	3.50	2	O																																					0	0	0
11/10	375650	4699950	1.80	1	O																																					0	0	0
11/10	375650	4699950	1.80	2	O																																					0	0	0
10/31	375450	4699950	2.50	1	O																																					0	0	0
10/31	375450	4699950	2.50	2	O																																					0	0	0
11/10	375650	4700000	2.00	1	O																																					0	0	0
11/10	375650	4700000	2.00	2	O																																					0	0	0
10/31	375500	4700000	3.00	1	O																																					0	0	0
10/31	375500	4700000	3.00	2	O																																					0	0	0
11/10	375650	4700050	1.90	1	O																																					0	0	0
11/10	375650	4700050	1.90	2	O																																					0	0	0
10/31	375500	4700050	3.00	1	O																																					0	0	0
10/31	375500	4700050	3.00	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
11/10	375650	4700100	1.80	1	O																																					0	0	0
11/10	375650	4700100	1.80	2	O																																					0	0	0
10/31	375500	4700100	2.60	1	O																																					0	0	0
10/31	375500	4700100	2.60	2	O																																					0	0	0
11/10	375650	4700150	1.50	1	T											**100**																										1	**1**	0
11/10	375650	4700150	1.50	2	O																																					0	0	0
10/31	375500	4700150	2.70	1	O																																					0	0	0
10/31	375500	4700150	2.70	2	O																																					0	0	0
11/10	375650	4700200	1.50	1	O																																					0	0	0
11/10	375650	4700200	1.50	2	O																																					0	0	0
10/31	375500	4700200	2.00	1	T				100																																	1	0	1
10/31	375500	4700200	2.00	2	O																																					0	0	0
11/10	375650	4700250	0.70	1	O																																					0	0	0
11/10	375650	4700250	0.70	2	T		100																																			1	0	1
10/31	375550	4700250	1.50	1	O																																					0	0	0
10/31	375550	4700250	1.50	2	O																																					0	0	0
10/31	375500	4700250	2.60	1	O																																					0	0	0
10/31	375500	4700250	2.60	2	O																																					0	0	0
11/10	375650	4700300	0.40	1	O																																					0	0	0
11/10	375650	4700300	0.40	2	T											**100**																										1	**1**	0
10/31	375550	4700300	1.80	1	O																																					0	0	0
10/31	375550	4700300	1.80	2	O																																					0	0	0
11/10	375650	4700350	0.80	1	O																																					0	0	0
11/10	375650	4700350	0.80	2	O																																					0	0	0
10/31	375550	4700350	2.50	1	O																																					0	0	0
10/31	375550	4700350	2.50	2	T						100																															1	0	1
11/10	375650	4700400	1.90	1	O																																					0	0	0
11/10	375650	4700400	1.90	2	O																																					0	0	0
10/31	375550	4700400	2.00	1	O																																					0	0	0
10/31	375550	4700400	2.00	2	O																																					0	0	0
11/10	375650	4700450	1.50	1	O																																					0	0	0
11/10	375650	4700450	1.50	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
10/31	375600	4700450	1.70	1	O																																					0	0	0
10/31	375600	4700450	1.70	2	O																																					0	0	0
10/31	375550	4700450	2.30	1	O																																					0	0	0
10/31	375550	4700450	2.30	2	O																																					0	0	0
10/31	375650	4700500	1.70	1	T						100																															1	0	1
10/31	375650	4700500	1.70	2	O																																					0	0	0
10/31	375600	4700500	0.70	1	O																																					0	0	0
10/31	375600	4700500	0.70	2	T						100																															1	0	1
10/31	375550	4700500	2.50	1	T				100																																	1	0	1
10/31	375550	4700500	2.50	2	O																																					0	0	0
10/31	375750	4700550	1.20	1	O																																					0	0	0
10/31	375750	4700550	1.20	2	O																																					0	0	0
10/31	375700	4700550	0.90	1	T		100																																			1	0	1
10/31	375700	4700550	0.90	2	O																																					0	0	0
10/31	375650	4700550	1.20	1	O																																					0	0	0
10/31	375650	4700550	1.20	2	O																																					0	0	0
10/31	375600	4700550	2.30	1	O																																					0	0	0
10/31	375600	4700550	2.30	2	O																																					0	0	0
10/31	375750	4700600	1.10	1	T				100																																	1	0	1
10/31	375750	4700600	1.10	2	T						100																															1	0	1
10/31	375700	4700600	0.60	1	O																																					0	0	0
10/31	375700	4700600	0.60	2	O																																					0	0	0
10/31	375650	4700600	1.60	1	O																																					0	0	0
10/31	375650	4700600	1.60	2	O																																					0	0	0
10/31	375600	4700600	2.30	1	O																																					0	0	0
10/31	375600	4700600	2.30	2	O																																					0	0	0
10/31	375700	4700650	1.80	1	T											100																										1	1	0
10/31	375700	4700650	1.80	2	O																																					0	0	0
10/31	375650	4700650	2.10	1	T				100																																	1	0	1
10/31	375650	4700650	2.10	2	T				100																																	1	0	1
10/31	375600	4700650	2.50	1	O																																					0	0	0
10/31	375600	4700650	2.50	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
10/31	375700	4700700	1.70	1	O																																					0	0	0
10/31	375700	4700700	1.70	2	O																																					0	0	0
10/31	375650	4700700	2.60	1	O																																					0	0	0
10/31	375650	4700700	2.60	2	O																																					0	0	0
10/31	375750	4700750	1.40	1	O																																					0	0	0
10/31	375750	4700750	1.40	2	T		50				50																															2	0	2
10/31	375700	4700750	1.90	1	O																																					0	0	0
10/31	375700	4700750	1.90	2	O																																					0	0	0
10/31	375650	4700750	2.70	1	O																																					0	0	0
10/31	375650	4700750	2.70	2	T						100																															1	0	1
10/31	375750	4700800	1.40	1	O																																					0	0	0
10/31	375750	4700800	1.40	2	O																																					0	0	0
10/31	375700	4700800	3.00	1	O																																					0	0	0
10/31	375700	4700800	3.00	2	O																																					0	0	0
10/31	375800	4700850	1.50	1	T				50		50																															2	0	2
10/31	375800	4700850	1.50	2	T						100																															1	0	1
10/31	375750	4700850	1.60	1	O																																					0	0	0
10/31	375750	4700850	1.60	2	O																																					0	0	0
10/31	375700	4700850	3.00	1	O																																					0	0	0
10/31	375700	4700850	3.00	2	O																																					0	0	0
10/31	375800	4700900	1.70	1	O																																					0	0	0
10/31	375800	4700900	1.70	2	O																																					0	0	0
10/31	375750	4700900	2.80	1	O																																					0	0	0
10/31	375750	4700900	2.80	2	O																																					0	0	0
10/31	375800	4700950	1.60	1	O																																					0	0	0
10/31	375800	4700950	1.60	2	O																																					0	0	0
10/31	375750	4700950	2.70	1	O																																					0	0	0
10/31	375750	4700950	2.70	2	O																																					0	0	0
11/10	376250	4700959	0.40	1	O																																					0	0	0
11/10	376250	4700959	0.40	2	O																																					0	0	0
11/10	376200	4700976	0.50	1	O																																					0	0	0
11/10	376200	4700976	0.50	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
11/10	376150	4700993	0.50	1	O																																					0	0	0
11/10	376150	4700993	0.50	2	O																																					0	0	0
11/10	375850	4701000	0.60	1	T				100																																	1	0	1
11/10	375850	4701000	0.60	2	T		60		40																																	2	0	2
10/31	375800	4701000	2.00	1	O																																					0	0	0
10/31	375800	4701000	2.00	2	O																																					0	0	0
10/31	375750	4701000	1.70	1	O																																					0	0	0
10/31	375750	4701000	1.70	2	O																																					0	0	0
11/10	376100	4701007	0.30	1	O																																					0	0	0
11/10	376100	4701007	0.30	2	O																																					0	0	0
11/10	376050	4701018	0.30	1	O																																					0	0	0
11/10	376050	4701018	0.30	2	O																																					0	0	0
11/10	376000	4701020	0.40	1	O																																					0	0	0
11/10	376000	4701020	0.40	2	O																																					0	0	0
11/10	375950	4701025	0.30	1	O																																					0	0	0
11/10	375950	4701025	0.30	2	O																																					0	0	0
11/10	375900	4701025	0.50	1	O																																					0	0	0
11/10	375900	4701025	0.50	2	T				100																																	1	0	1
9/14	375700	4701041		1	T				100																																	1	0	1
9/14	375700	4701041		2	O																																					0	0	0
11/10	375850	4701050	0.90	1	O																																					0	0	0
11/10	375850	4701050	0.90	2	O																																					0	0	0
10/31	375800	4701050	1.50	1	O																																					0	0	0
10/31	375800	4701050	1.50	2	O																																					0	0	0
10/31	375750	4701050	1.50	1	T		85																																	15		2	0	2
10/31	375750	4701050	1.50	2	O																																					0	0	0
9/14	375608	4701061		1	O																																					0	0	0
9/14	375608	4701061		2	O																																					0	0	0
9/14	375662	4701063		1	O																																					0	0	0
9/14	375662	4701063		2	T				30							70																										2	1	1
9/14	375607	4701063		1	O																																					0	0	0
9/14	375607	4701063		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
9/14	375666	4701064		1	O																																					0	**0**	0
9/14	375666	4701064		2	T				50							**50**																										2	**1**	1
10/31	375800	4701100	2.30	1	T						100																															1	**0**	1
10/31	375800	4701100	2.30	2	T				85																													15				2	**0**	2
10/31	375750	4701100	2.20	1	O																																					0	**0**	0
10/31	375750	4701100	2.20	2	O																																					0	**0**	0
10/31	375700	4701100	0.40	1	T				45		50																													5		3	**0**	3
10/31	375700	4701100	0.40	2	T				40		10																													50		3	**0**	3
10/31	375800	4701150	2.20	1	T				100																																	1	**0**	1
10/31	375800	4701150	2.20	2	T				100																																	1	**0**	1
10/31	375750	4701150	2.20	1	T				100																																	1	**0**	1
10/31	375750	4701150	2.20	2	T		20				80																															2	**0**	2
10/31	375700	4701150	0.60	1	T																																			100		1	**0**	1
10/31	375700	4701150	0.60	2	T				45		10					**45**																										3	**1**	2
10/31	375750	4701200	2.80	1	T											**100**																										1	**1**	0
10/31	375750	4701200	2.80	2	T																														100							1	**0**	1
10/31	375700	4701200	1.00	1	T		40				60																															2	**0**	2
10/31	375700	4701200	1.00	2	T		15				75																											10				3	**0**	3
10/31	375650	4701200	1.10	1	O																																					0	**0**	0
10/31	375650	4701200	1.10	2	T				100																																	1	**0**	1
10/31	375750	4701250	2.00	1	T				100																																	1	**0**	1
10/31	375750	4701250	2.00	2	T		15		75							**10**																										3	**1**	2
10/31	375700	4701250	2.30	1	O																																					0	**0**	0
10/31	375700	4701250	2.30	2	T				95		5																															2	**0**	2
10/31	375750	4701300	2.30	1	T		85		15																																	2	**0**	2
10/31	375750	4701300	2.30	2	T		45		55																																	2	**0**	2
10/31	375700	4701300	2.00	1	O																																					0	**0**	0
10/31	375700	4701300	2.00	2	T				100																																	1	**0**	1
10/31	375750	4701350	1.50	1	T																																	100				1	**0**	1
10/31	375750	4701350	1.50	2	T				100																																	1	**0**	1
10/31	375700	4701350	2.40	1	T						100																															1	**0**	1
10/31	375700	4701350	2.40	2	T				95																	5																2	**0**	2

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
10/31	375750	4701400	1.70	1	T						90					**10**																										2	**1**	1
10/31	375750	4701400	1.70	2	T		35		60							**5**																										3	**1**	2
10/31	375700	4701400	1.40	1	T						100																															1	**0**	1
10/31	375700	4701400	1.40	2	T						100																															1	**0**	1
10/31	375750	4701450	1.70	1	T		2		95		3																															3	**0**	3
10/31	375750	4701450	1.70	2	T		10		65							**25**																										3	**1**	2
10/31	375700	4701450	2.40	1	T											**100**																										1	**1**	0
10/31	375700	4701450	2.40	2	O																																					0	**0**	0
10/31	375750	4701500	1.50	1	O																																					0	**0**	0
10/31	375750	4701500	1.50	2	T				90																													10				2	**0**	2
10/31	375700	4701500	2.30	1	T				70							**30**																										2	**1**	1
10/31	375700	4701500	2.30	2	O																																					0	**0**	0
10/31	375750	4701550	1.50	1	T						100																															1	**0**	1
10/31	375750	4701550	1.50	2	T				1		90					**4**																						5				4	**1**	3
10/31	375700	4701550	2.30	1	T						90																											10				2	**0**	2
10/31	375700	4701550	2.30	2	O																																					0	**0**	0
10/31	375800	4701600	1.60	1	T		25		10		50					**5**																						10				5	**1**	4
10/31	375800	4701600	1.60	2	T				13		85																											2				3	**0**	3
10/31	375750	4701600	2.20	1	O																																					0	**0**	0
10/31	375750	4701600	2.20	2	T						100																															1	**0**	1
10/31	375700	4701600	1.70	1	T				100																																	1	**0**	1
10/31	375700	4701600	1.70	2	T		10		5		85																															3	**0**	3
10/31	375800	4701650	1.60	1	T				15		85																															2	**0**	2
10/31	375800	4701650	1.60	2	O																																					0	**0**	0
10/31	375750	4701650	2.10	1	T				100																																	1	**0**	1
10/31	375750	4701650	2.10	2	T				80																	**20**																2	**1**	1
10/31	375700	4701650	2.30	1	O																																					0	**0**	0
10/31	375700	4701650	2.30	2	T				98		2																															2	**0**	2
10/31	375750	4701700	2.20	1	T				100																																	1	**0**	1
10/31	375750	4701700	2.20	2	T				25		75																															2	**0**	2
10/31	375700	4701700	2.00	1	T		10		15		40					**35**																										4	**1**	3
10/31	375700	4701700	2.00	2	O																																					0	**0**	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
9/14	375550	4701700		1	O																																					0	0	0
9/14	375550	4701700		2	O																																					0	0	0
9/14	375500	4701700		1	O																																					0	0	0
9/14	375500	4701700		2	O																																					0	0	0
10/31	375750	4701750	1.50	1	S		1		2		97																															3	0	3
10/31	375750	4701750	1.50	2	T		40		40							20																										3	1	2
10/31	375700	4701750	2.20	1	O																																					0	0	0
10/31	375700	4701750	2.20	2	T				95							4																			1							3	1	2
9/14	375550	4701750		1	O																																					0	0	0
9/14	375550	4701750		2	T		100																																			1	0	1
9/14	375500	4701750		1	O																																					0	0	0
9/14	375500	4701750		2	T		100																																			1	0	1
9/14	375450	4701750		1	O																																					0	0	0
9/14	375450	4701750		2	O																																					0	0	0
9/6	375400	4701750		1	O																																					0	0	0
9/6	375400	4701750		2	O																																					0	0	0
9/6	375350	4701750		1	O																																					0	0	0
9/6	375350	4701750		2	O																																					0	0	0
10/31	375750	4701800	2.20	1	T		40									60																										2	1	1
10/31	375750	4701800	2.20	2	O																																					0	0	0
10/31	375700	4701800	2.40	1	T		1		99																																	2	0	2
10/31	375700	4701800	2.40	2	T		40		60																																	2	0	2
10/31	375650	4701800	1.10	1	T		35		40		23								1		1																					5	2	3
10/31	375650	4701800	1.10	2	S		20		10		70										0.01														0.01			0.01				6	1	5
9/14	375600	4701800		1	T		1		90										8		1																					4	2	2
9/14	375600	4701800		2	T				100																																	1	0	1
9/14	375550	4701800		1	O																																					0	0	0
9/14	375550	4701800		2	O																																					0	0	0
9/14	375500	4701800		1	O																																					0	0	0
9/14	375500	4701800		2	O																																					0	0	0
9/14	375450	4701800		1	O																																					0	0	0
9/14	375450	4701800		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-Native Species	Native Species
9/6	375400	4701800		1	O																																					0	0	0
9/6	375400	4701800		2	O																																					0	0	0
9/6	375350	4701800		1	O																																					0	0	0
9/6	375350	4701800		2	O																																					0	0	0
10/31	375750	4701850	1.50	1	T		1		39		60																															3	0	3
10/31	375750	4701850	1.50	2	T		23		75		1								1																							4	1	3
10/31	375700	4701850	2.50	1	T				100																																	1	0	1
10/31	375700	4701850	2.50	2	T				99										1																							2	1	1
10/31	375650	4701850	1.70	1	T		85		5																										10							3	0	3
10/31	375650	4701850	1.70	2	T		5		35		60																															3	0	3
9/14	375550	4701850		1	O																																					0	0	0
9/14	375550	4701850		2	T				100																																	1	0	1
9/14	375500	4701850		1	O																																					0	0	0
9/14	375500	4701850		2	O																																					0	0	0
9/6	375450	4701850		1	T		95														5																					2	1	1
9/6	375450	4701850		2	O																																					0	0	0
9/6	375400	4701850		1	O																																					0	0	0
9/6	375400	4701850		2	O																																					0	0	0
9/6	375350	4701850		1	O																																					0	0	0
9/6	375350	4701850		2	T				100																																	1	0	1
10/31	375700	4701900	3.10	1	T		15		70							10																						5				4	1	3
10/31	375700	4701900	3.10	2	T				60		20					20																										3	1	2
10/31	375650	4701900	2.50	1	T				70																										30							2	0	2
10/31	375650	4701900	2.50	2	T				99							1																										2	1	1
9/6	375550	4701900		1	O																																					0	0	0
9/6	375550	4701900		2	O																																					0	0	0
9/6	375500	4701900		1	O																																					0	0	0
9/6	375500	4701900		2	O																																					0	0	0
9/6	375450	4701900		1	O																																					0	0	0
9/6	375450	4701900		2	O																																					0	0	0
9/6	375400	4701900		1	O																																					0	0	0
9/6	375400	4701900		2	O																																					0	0	0

Date Sampled in 2016	9/6	9/6							
NAD83 X cord EAST 18T	375350	375350		Rake Toss	"O"	"T"	"S"	"M"	"D"
NAD83 Y cord NORTH	4701900	4701900		418	312	104	2	0	0
Depth (m) 2016									
Rake toss #	1	2							
Rake Abundance Rating	O	O							
Alisma gramineum				0					
Ceratophyllum demersum				33					
Chara vulgaris				0					
Elodea sp.				71					
Fontinalis sp.				0					
Heteranthera dubia				41					
Hydrilla verticillata				0					
Lemna minor				0					
Lemna trisulca				0					
Marsilea quadrifolia				0					
Myriophyllum spicatum				22					
Najas flexilis				0					
Najas guadalupensis				0					
Najas minor				4					
Nitella flexilis				0					
Nitellopsis obtusa				4					
Nuphar advena				0					
Nymphea odorata				0					
Polygonum amphibium				0					
Pontederia cordata				0					
Potamogeton crispus				1					
Potamogeton foliosus				1					
Potamogeton illinoensis				0					
Potamogeton praelongus				0					
Potamogeton pusillus				0					
Potamogeton richardsonii				0					
Potamogeton zosteriformis				0					
Ranunculus trichophyllus				0					
Spirodela polyrhiza				0					
Stuckenia pectinata				5					
Stuckenia vaginata				0					
Utricularia sp.				0					
Vallisneria americana				10					
Wolffia columbiana				0					
Zannichellia palustris				4					
Filamentous algae +				0					
Total Species	0	0							
Non-Native Species	0	0							
Native Species	0	0							

Data 6. Fall Creek rake-toss pre-herbicide measurements recorded in 2016. 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 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/25	376575	4701375		1	O																																					0	0	0
7/25	376575	4701375		2	O																																					0	0	0
7/25	376575	4701400		1	O																																					0	0	0
7/25	376575	4701400		2	T								100																													1	0	1
7/25	376550	4701400		1	T								100																													1	0	1
7/25	376550	4701400		2	T								100																													1	0	1
7/25	376550	4701425		1	O																																					0	0	0
7/25	376550	4701425		2	O																																					0	0	0
7/25	376525	4701425		1	O																																					0	0	0
7/25	376525	4701425		2	O																																					0	0	0
7/25	376550	4701442		1	O																																					0	0	0
7/25	376550	4701442		2	T																														100							1	0	1
7/25	376525	4701450		1	O																																					0	0	0
7/25	376525	4701450		2	O																																					0	0	0
7/25	376500	4701450		1	O																																					0	0	0
7/25	376500	4701450		2	O																																					0	0	0
7/25	376525	4701475		1	O																																					0	0	0
7/25	376525	4701475		2	T								100																													1	0	1
7/25	376500	4701475		1	O																																					0	0	0
7/25	376500	4701475		2	O																																					0	0	0
7/25	376500	4701500		1	O																																					0	0	0
7/25	376500	4701500		2	O																																					0	0	0
7/28	376475	4701500	0.80	1	O																																					0	0	0
7/28	376475	4701500	0.80	2	O																																					0	0	0
7/25	376500	4701510		1	O																																					0	0	0
7/25	376500	4701510		2	O																																					0	0	0
7/25	376475	4701525		1	O																																					0	0	0
7/25	376475	4701525		2	O																																					0	0	0
7/25	376450	4701525		1	O																																					0	0	0
7/25	376450	4701525		2	T								8																					7	85							3	0	3
7/25	376475	4701550		1	O																																					0	0	0
7/25	376475	4701550		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/25	376450	4701550		1	T				100																																	1	0	1
7/25	376450	4701550		2	O																																					0	0	0
7/25	376425	4701550		1	T																																	100				1	0	1
7/25	376425	4701550		2	T								100																													1	0	1
7/25	376450	4701575		1	T								5			95																										2	1	1
7/25	376450	4701575		2	O																																					0	0	0
7/25	376425	4701575		1	T																																	100				1	0	1
7/25	376425	4701575		2	O																																					0	0	0
7/25	376400	4701575		1	T								4				5													85				1	5							5	0	5
7/25	376400	4701575		2	T																									30						40				30		3	0	3
7/25	376425	4701600		1	O																																					0	0	0
7/25	376425	4701600		2	O																																					0	0	0
7/25	376400	4701600		1	T								2													98																2	1	1
7/25	376400	4701600		2	O																																					0	0	0
7/25	376375	4701600		1	T				60				1				30																							9		4	0	4
7/25	376375	4701600		2	T																														100							1	0	1
7/25	376425	4701625		1	O																																					0	0	0
7/25	376425	4701625		2	O																																					0	0	0
7/25	376400	4701625		1	O																																					0	0	0
7/25	376400	4701625		2	T																															100						1	0	1
7/25	376375	4701625		1	T				90				10																													2	0	2
7/25	376375	4701625		2	O																																					0	0	0
7/25	376350	4701625		1	T				7				1			10	10																	2	65					5		7	1	6
7/25	376350	4701625		2	T		14						1			3																			82							4	1	3
7/25	376425	4701650		1	T											60																			40							2	1	1
7/25	376425	4701650		2	T																														100							1	0	1
7/25	376400	4701650		1	O																																					0	0	0
7/25	376400	4701650		2	O																																					0	0	0
7/25	376375	4701650		1	O																																					0	0	0
7/25	376375	4701650		2	O																																					0	0	0
7/25	376350	4701650		1	O																																					0	0	0
7/25	376350	4701650		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/25	376325	4701650		1	T				20		2						8																		70							4	0	4
7/25	376325	4701650		2	T											100																										1	1	0
7/25	376450	4701675		1	O																																					0	0	0
7/25	376450	4701675		2	T								1		99																											2	1	1
7/28	376425	4701675	0.40	1	T								2				98																									2	0	2
7/28	376425	4701675	0.40	2	T		20		25							25																			15	15						5	1	4
7/28	376400	4701675	0.60	1	T																														100							1	0	1
7/28	376400	4701675	0.60	2	O																																					0	0	0
7/26	376375	4701675	0.80	1	T											100																										1	1	0
7/26	376375	4701675	0.80	2	T								1			98																			1							3	1	2
7/26	376350	4701675	0.70	1	T				65																					35												2	0	2
7/26	376350	4701675	0.70	2	T																									100												1	0	1
7/26	376325	4701675	1.00	1	O																																					0	0	0
7/26	376325	4701675	1.00	2	T		5		10																					1					84							4	0	4
7/25	376300	4701675		1	T		10		50							20										10									10							5	2	3
7/25	376300	4701675		2	T								3			80	15																	2								4	1	3
7/25	376425	4701700		1	S								5			20							60												15							4	1	3
7/25	376425	4701700		2	T								1			14																			85							3	1	2
7/25	376375	4701700		1	T								100																													1	0	1
7/25	376375	4701700		2	T								100																													1	0	1
7/26	376325	4701700	1.50	1	O																																					0	0	0
7/26	376325	4701700	1.50	2	O																																					0	0	0
7/26	376300	4701700		1	T				80																					20												2	0	2
7/26	376300	4701700		2	T																									80					20							2	0	2
7/26	376275	4701700		1	T											5			94																			1				3	2	1
7/26	376275	4701700		2	T				8							30																			60					2		4	1	3
7/25	376175	4701700		1	S		1		5		0.01		0.01			10	0.01									1				0.01					83			0.01		0.01		11	2	9
7/25	376175	4701700		2	S		10		2				1			20	0.01									10				0.01					54	3				0.01		10	2	8
7/25	376325	4701725		1	O																																					0	0	0
7/25	376325	4701725		2	O																																					0	0	0
7/26	376300	4701725	1.30	1	T		80		20																																	2	0	2
7/26	376300	4701725	1.30	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/26	376275	4701725		1	T																														100							1	0	1
7/26	376275	4701725		2	T											100																										1	1	0
7/26	376250	4701725	1.60	1	T				10							90																										2	1	1
7/26	376250	4701725	1.60	2	T																														100							1	0	1
7/25	376175	4701725		1	S		10		30										60											0.01												4	1	3
7/25	376175	4701725		2	T				10										45											45												3	1	2
7/25	376150	4701725		1	S		1		15			5	0.01			10	1		0.01							1				0.01					66	1		0.01		0.01		13	4	9
7/25	376150	4701725		2	S		15		10							15	14									1				0.01					45	0.01				0.01		9	2	7
7/26	376275	4701750	1.20	1	T																														100							1	0	1
7/26	376275	4701750	1.20	2	O																																					0	0	0
7/26	376250	4701750	1.60	1	O																																					0	0	0
7/26	376250	4701750	1.60	2	T		99																												1							2	0	2
7/25	376225	4701750		1	O																																					0	0	0
7/25	376225	4701750		2	O																																					0	0	0
8/8	376150	4701750		1	S		6		10			5	0.01						34																45							6	2	4
8/8	376150	4701750		2	S		10		15			10	0.01			5			55																5							7	3	4
7/25	376250	4701775		1	T				100																																	1	0	1
7/25	376250	4701775		2	T				4				2		2	25	6													3				1	55					2		9	2	7
7/25	376225	4701775		1	O																																					0	0	0
7/25	376225	4701775		2	O																																					0	0	0
7/26	376200	4701775	2.75	1	O																																					0	0	0
7/26	376200	4701775	2.75	2	T		20		50								30																									3	0	3
7/26	376175	4701775	3.00	1	T			1	40							5																			54							4	1	3
7/26	376175	4701775	3.00	2	T								100																													1	0	1
7/26	376150	4701775	0.60	1	S		3		0.01							15	0.01		80							0.01									2							7	3	4
7/26	376150	4701775	0.60	2	S		0.01		3				0.01			6			40							1				0.01					50							8	3	5
7/25	376225	4701800		1	O																																					0	0	0
7/25	376225	4701800		2	O																																					0	0	0
7/26	376200	4701800	1.10	1	T														20				70													10						3	1	2
7/26	376200	4701800	1.10	2	T																		90												10							2	0	2
7/26	376175	4701800	3.30	1	T				99																										1							2	0	2
7/26	376175	4701800	3.30	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/26	376150	4701800	3.10	1	T																																			100		1	0	1
7/26	376150	4701800	3.10	2	T		5									89																			5					1		4	1	3
7/26	376125	4701800	0.50	1	T		20		5							20			41							10				1					2					1		8	3	5
7/26	376125	4701800	0.50	2	T		10		1							48			25											1					15							6	2	4
7/25	376225	4701825		1	T								2																					3	95							3	0	3
7/25	376225	4701825		2	T																														100							1	0	1
7/25	376200	4701825		1	O																																					0	0	0
7/25	376200	4701825		2	T											100																										1	1	0
7/26	376175	4701825	1.80	1	O																																					0	0	0
7/26	376175	4701825	1.80	2	O																																					0	0	0
7/26	376150	4701825	1.75	1	O																																					0	0	0
7/26	376150	4701825	1.75	2	O																																					0	0	0
7/26	376125	4701825	2.90	1	O																																					0	0	0
7/26	376125	4701825	2.90	2	O																																					0	0	0
7/26	376100	4701825	0.50	1	T		10		5							35	10		5							5									30							7	3	4
7/26	376100	4701825	0.50	2	T		1		6							20	10									1				2					60							7	2	5
8/8	376025	4701825		1	T								100																													1	0	1
8/8	376025	4701825		2	T		80						20																													2	0	2
8/8	376000	4701825		1	T		70		10				2						18																							4	1	3
8/8	376000	4701825		2	T		10		30				5			40			15																							5	2	3
7/26	376225	4701850	1.10	1	O																																					0	0	0
7/26	376225	4701850	1.10	2	O																																					0	0	0
7/25	376200	4701850		1	T				100																																	1	0	1
7/25	376200	4701850		2	O																																					0	0	0
7/26	376150	4701850	1.75	1	T		85									10														5												3	1	2
7/26	376150	4701850	1.75	2	O																																					0	0	0
7/26	376125	4701850	2.50	1	T				100																																	1	0	1
7/26	376125	4701850	2.50	2	O																																					0	0	0
7/26	376100	4701850	2.50	1	O																																					0	0	0
7/26	376100	4701850	2.50	2	T		30		30							10																			30							4	1	3
7/26	376075	4701850	0.50	1	S		3		30				0.01			3	5				0.01					5		2		0.01					52							10	3	7
7/26	376075	4701850	0.50	2	T		42		25							10	5				1					1				1					15							8	3	5

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/26	376050	4701850	0.50	1	T		35		25							15					5					5										15						6	3	3
7/26	376050	4701850	0.50	2	T		34		35							5	5				10					10									1							7	3	4
8/8	376000	4701850		1	T				69				1			30																										3	1	2
8/8	376000	4701850		2	T		94		5				0.01																	1												4	0	4
7/26	376250	4701875	1.00	1	O																																					0	0	0
7/26	376250	4701875	1.00	2	O																																					0	0	0
7/25	376225	4701875		1	T				45							10																			45							3	1	2
7/25	376225	4701875		2	T				10						90																											2	1	1
7/26	376125	4701875	1.50	1	T				80																											20						2	0	2
7/26	376125	4701875	1.50	2	T				80																										20							2	0	2
7/26	376100	4701875	2.90	1	T				79																										1					20		3	0	3
7/26	376100	4701875	2.90	2	T				100																																	1	0	1
7/26	376075	4701875	2.50	1	T		90																												10							2	0	2
7/26	376075	4701875	2.50	2	T	1	58		15							5	15													1					5							7	1	6
7/26	376050	4701875	0.90	1	S		40		5				0.01			15			0.01																0.01	40						7	2	5
7/26	376050	4701875	0.90	2	S		50		20							20																			0.01	10						5	1	4
7/26	376025	4701875	1.20	1	T																									100												1	0	1
7/26	376025	4701875	1.20	2	T		90		10																																	2	0	2
7/26	376000	4701875	0.70	1	T				42							10					41					1				1					5							6	3	3
7/26	376000	4701875	0.70	2	T		33		20							5	20		20							1				1												7	3	4
7/26	376325	4701900	0.50	1	O																																					0	0	0
7/26	376325	4701900	0.50	2	O																																					0	0	0
7/26	376300	4701900	0.50	1	O																																					0	0	0
7/26	376300	4701900	0.50	2	T																		100																			1	0	1
7/26	376275	4701900	0.90	1	O																																					0	0	0
7/26	376275	4701900	0.90	2	O																																					0	0	0
7/26	376250	4701900	0.90	1	O																																					0	0	0
7/26	376250	4701900	0.90	2	O																																					0	0	0
7/25	376225	4701900		1	T																														100							1	0	1
7/25	376225	4701900		2	O																																					0	0	0
7/26	376075	4701900	1.50	1	O																																					0	0	0
7/26	376075	4701900	1.50	2	T																					100																1	1	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/26	376050	4701900	2.80	1	T												20																		80							2	0	2
7/26	376050	4701900	2.80	2	T				70								20																		10							3	0	3
7/26	376025	4701900	2.80	1	S		45		50							3										2				0.01												5	2	3
7/26	376025	4701900	2.80	2	M		85		10							5																										3	1	2
7/26	376000	4701900	1.40	1	S		90		5							5					0.01																					4	2	2
7/26	376000	4701900	1.40	2	S	0.01	65		15		0.01		0.01			15	1				0.01					1									3					0.01		11	3	8
7/26	375975	4701900	2.10	1	S		90		5							5	0.01		0.01											0.01					0.01							7	2	5
7/26	375975	4701900	2.10	2	T		80		10							5										3									2							5	2	3
7/26	375950	4701900	0.60	1	S		30	1	64				0.01			4	0.01				0.01					0.01				0.01					1			0.01				11	3	8
7/26	375950	4701900	0.60	2	S		40		50							3	4									2				0.01					1					0.01		8	2	6
7/26	375925	4701900	1.00	1	T	10	20		39							10	20																							1		6	1	5
7/26	375925	4701900	1.00	2	S		3		60							35	1									0.01				1												6	2	4
7/26	375900	4701900	1.05	1	S	0.01	10		72							1	0.01									1			1						15			0.01				9	2	7
7/26	375900	4701900	1.05	2	T				1							89			5																5							4	2	2
7/26	375875	4701900		1	T				20							76	1		1																					2		5	2	3
7/26	375875	4701900		2	S	2	28		28							2	5		5											30												7	2	5
7/26	375850	4701900	1.10	1	T				100																																	1	0	1
7/26	375850	4701900	1.10	2	T				40							60																										2	1	1
7/26	375825	4701900	0.90	1	O																																					0	0	0
7/26	375825	4701900	0.90	2	T			30	50							20																										3	1	2
7/26	375800	4701900	1.10	1	T				74							5	10									10														1		5	2	3
7/26	375800	4701900	1.10	2	T																															100						1	0	1
7/26	375775	4701900	1.60	1	T		5		10							15																			60					10		5	1	4
7/26	375775	4701900	1.60	2	T	1			3							65																				30				1		5	1	4
7/26	376350	4701925	0.60	1	O																																					0	0	0
7/26	376350	4701925	0.60	2	O																																					0	0	0
7/26	376325	4701925	0.50	1	T								100																													1	0	1
7/26	376325	4701925	0.50	2	T																		100																			1	0	1
7/26	376300	4701925	0.50	1	O																																					0	0	0
7/26	376300	4701925	0.50	2	O																																					0	0	0
7/26	376275	4701925	0.60	1	O																																					0	0	0
7/26	376275	4701925	0.60	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/26	376250	4701925	0.70	1	O																																					0	0	0
7/26	376250	4701925	0.70	2	O																																					0	0	0
7/26	376025	4701925	2.00	1	T																														95					5		2	0	2
7/26	376025	4701925	2.00	2	O																																					0	0	0
7/26	376000	4701925	1.00	1	T				100																																	1	0	1
7/26	376000	4701925	1.00	2	T																														100							1	0	1
7/26	375975	4701925	3.15	1	O																																					0	0	0
7/26	375975	4701925	3.15	2	T				100																																	1	0	1
7/26	375950	4701925	2.50	1	T		40		20																											40						3	0	3
7/26	375950	4701925	2.50	2	T		40		52												2									2					2	2						6	1	5
7/26	375925	4701925	2.20	1	O																																					0	0	0
7/26	375925	4701925	2.20	2	T		30		70																																	2	0	2
7/26	375900	4701925	2.00	1	T		20		58							20	1																							1		5	1	4
7/26	375900	4701925	2.00	2	S		40		55							3	2																							0.01		5	1	4
7/26	375875	4701925	2.00	1	T				68							20	10													1										1		5	1	4
7/26	375875	4701925	2.00	2	S		60		35							5	0.01		0.01							0.01																6	3	3
7/26	375850	4701925	1.30	1	T		10		20								10				1															59						5	1	4
7/26	375850	4701925	1.30	2	S	0.01	25		60							15	0.01		0.01																0.01					0.01		8	2	6
7/26	375825	4701925	1.40	1	S	0.01	20		30							10	5		5		0.01					0.01				15										15		10	4	6
7/26	375825	4701925	1.40	2	S		48		30		0.01					20	2																							0.01		6	1	5
7/26	375800	4701925	1.10	1	S		0.01		55							15	0.01									20														10		6	2	4
7/26	375800	4701925	1.10	2	T				50							30	2				1												2							15		6	2	4
7/26	375775	4701925	1.10	1	T		25		17							55																								3		4	1	3
7/26	375775	4701925	1.10	2	T				57							5	2				1															30				5		6	2	4
7/26	375750	4701925	1.10	1	S		2		75		0.01					1					0.01					10									1	5				6		9	3	6
7/26	375750	4701925	1.10	2	S		12		50							2	0.01		1											5					20	2				8		9	2	7
7/26	376300	4701950	0.60	1	T																		100																			1	0	1
7/26	376300	4701950	0.60	2	O																																					0	0	0
7/26	376275	4701950	0.70	1	O																																					0	0	0
7/26	376275	4701950	0.70	2	T																														100							1	0	1
7/26	376250	4701950	0.60	1	T											100																										1	1	0
7/26	376250	4701950	0.60	2	T	5			95																																	2	0	2

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphaea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
7/25	376225	4701950		1	O																																					0	0	0
7/25	376225	4701950		2	T														100																							1	1	0
7/26	375975	4701950	3.00	1	O																																					0	0	0
7/26	375975	4701950	3.00	2	T		75		25																																	2	0	2
7/26	375950	4701950	3.10	1	T	15	15		10																													60				4	0	4
7/26	375950	4701950	3.10	2	T				15							5	2		1											2					5	69				1		8	2	6
7/26	375925	4701950	3.20	1	T		68		1							20	1																			10						5	1	4
7/26	375925	4701950	3.20	2	T	10	40		30							10																				10						5	1	4
7/26	375900	4701950	2.00	1	S		35		39							15	0.01		10		0.01									0.01					1					0.01		9	3	6
7/26	375900	4701950	2.00	2	S		72		25							1	0.01				0.01																			2		6	2	4
7/26	375875	4701950	2.50	1	S		85		5							5	5																									4	1	3
7/26	375875	4701950	2.50	2	T		5		80							5	5				4														1							6	2	4
7/26	375850	4701950	2.00	1	T		10		80							5																			5							4	1	3
7/26	375850	4701950	2.00	2	T		37		50								5				1												5		1					1		7	1	6
7/26	375825	4701950	1.65	1	S											12	3									0.01										85				0.01		5	2	3
7/26	375825	4701950	1.65	2	S		45		55								0.01		0.01																							4	1	3
7/26	375800	4701950	1.65	1	T				100																																	1	0	1
7/26	375800	4701950	1.65	2	S				5								10		5											1						79						5	1	4
7/26	375775	4701950	1.60	1	S		2		20							28	0.01		0.01																					50		6	2	4
7/26	375775	4701950	1.60	2	S				20		0.01		0.01			20	10				0.01									10						25				15		9	2	7
7/26	375750	4701950	1.75	1	T		10		80							5	1				1					2														1		7	3	4
7/26	375750	4701950	1.75	2	T				65							25	3				2					1									3					1		7	3	4
7/26	375725	4701950	1.40	1	T	1			85							12					2																					4	2	2
7/26	375725	4701950	1.40	2	S	1	5		74							15	1				0.01									2						1				1		9	2	7
7/26	376300	4701975	0.80	1	T		100																																			1	0	1
7/26	376300	4701975	0.80	2	O																																					0	0	0
7/26	376275	4701975	0.60	1	T		99																							1												2	0	2
7/26	376275	4701975	0.60	2	O																																					0	0	0
7/26	376250	4701975	0.70	1	T				5										95																							2	1	1
7/26	376250	4701975	0.70	2	T		19																80												1							3	0	3
	Rake Toss	286				13	81	3	117	0	6	3	42	0	3	93	59	0	31	0	23	0	7	0	0	33	0	1	1	42	0	0	2	6	78	26	0	8	0	43	0			
	"O"	102																																										
	"T"	144																																										
	"S"	39																																										
	"M"	1																																										
	"D"	0																																										

Data 7. Fall Creek rake-toss post-herbicide measurements recorded in 2016. 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 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/2	376575	4701375		1	O																																					0	0	0
11/2	376575	4701375		2	O																																					0	0	0
11/2	376575	4701400		1	O																																					0	0	0
11/2	376575	4701400		2	O																																					0	0	0
11/2	376550	4701400		1	O																																					0	0	0
11/2	376550	4701400		2	O																																					0	0	0
11/2	376550	4701425		1	O																																					0	0	0
11/2	376550	4701425		2	O																																					0	0	0
11/2	376525	4701425		1	O																																					0	0	0
11/2	376525	4701425		2	O																																					0	0	0
11/2	376550	4701442		1	O																																					0	0	0
11/2	376550	4701442		2	O																																					0	0	0
11/2	376525	4701450		1	O																																					0	0	0
11/2	376525	4701450		2	O																																					0	0	0
11/2	376500	4701450		1	O																																					0	0	0
11/2	376500	4701450		2	O																																					0	0	0
11/2	376525	4701475		1	O																																					0	0	0
11/2	376525	4701475		2	O																																					0	0	0
11/14	376500	4701475		1	O																																					0	0	0
11/14	376500	4701475		2	O																																					0	0	0
11/2	376500	4701500		1	T					100																																1	0	1
11/2	376500	4701500		2	O																																					0	0	0
11/2	376475	4701500		1	O																																					0	0	0
11/2	376475	4701500		2	O																																					0	0	0
11/2	376500	4701510		1	O																																					0	0	0
11/2	376500	4701510		2	O																																					0	0	0
11/14	376475	4701525		1	O																																					0	0	0
11/14	376475	4701525		2	O																																					0	0	0
11/2	376450	4701525		1	O																																					0	0	0
11/2	376450	4701525		2	O																																					0	0	0
11/14	376475	4701550		1	O																																					0	0	0
11/14	376475	4701550		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/14	376450	4701550		1	O																																					0	0	0
11/14	376450	4701550		2	O																																					0	0	0
11/2	376425	4701550		1	O																																					0	0	0
11/2	376425	4701550		2	O																																					0	0	0
11/1	376450	4701575		1	O																																					0	0	0
11/1	376450	4701575		2	O																																					0	0	0
11/14	376425	4701575		1	O																																					0	0	0
11/14	376425	4701575		2	O																																					0	0	0
11/2	376400	4701575		1	O																																					0	0	0
11/2	376400	4701575		2	O																																					0	0	0
11/1	376425	4701600		1	O																																					0	0	0
11/1	376425	4701600		2	O																																					0	0	0
11/14	376400	4701600		1	O																																					0	0	0
11/14	376400	4701600		2	O																																					0	0	0
11/2	376375	4701600		1	O																																					0	0	0
11/2	376375	4701600		2	O																																					0	0	0
11/1	376425	4701625		1	T				100																																	1	0	1
11/1	376425	4701625		2	T																									100												1	0	1
11/1	376400	4701625		1	T				70							30																										2	1	1
11/1	376400	4701625		2	T				100																																	1	0	1
11/2	376350	4701625		1	O																																					0	0	0
11/2	376350	4701625		2	O																																					0	0	0
11/14	376350	4701625		1	O																																					0	0	0
11/14	376350	4701625		2	T											100																										1	1	0
11/1	376425	4701650		1	O																																					0	0	0
11/1	376425	4701650		2	T								100																													1	0	1
11/14	376400	4701650		1	O																																					0	0	0
11/14	376400	4701650		2	O																																					0	0	0
11/14	376375	4701650		1	O																																					0	0	0
11/14	376375	4701650		2	O																																					0	0	0
11/14	376350	4701650		1	T				35				5			60																										3	1	2
11/14	376350	4701650		2	T				20							80																										2	1	1

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/2	376325	4701650		1	T				100																																	1	0	1
11/2	376325	4701650		2	O																																					0	0	0
11/1	376450	4701675		1	O																																					0	0	0
11/1	376450	4701675		2	O																																					0	0	0
11/14	376425	4701675		1	O																																					0	0	0
11/14	376425	4701675		2	O																																					0	0	0
11/14	376400	4701675		1	O																																					0	0	0
11/14	376400	4701675		2	O																																					0	0	0
11/14	376375	4701675		1	O																																					0	0	0
11/14	376375	4701675		2	O																																					0	0	0
11/10	376350	4701675	0.60	1	O																																					0	0	0
11/10	376350	4701675	0.60	2	T				100																																	1	0	1
11/10	376325	4701675	0.50	1	T				100																																	1	0	1
11/10	376325	4701675	0.50	2	O																																					0	0	0
11/2	376300	4701675		1	O																																					0	0	0
11/2	376300	4701675		2	T				100																																	1	0	1
11/1	376425	4701700		1	O																																					0	0	0
11/1	376425	4701700		2	O																																					0	0	0
11/1	376375	4701700		1	O																																					0	0	0
11/1	376375	4701700		2	O																																					0	0	0
11/1	376325	4701700	0.30	1	O																																					0	0	0
11/1	376325	4701700	0.30	2	T				100																																	1	0	1
11/1	376300	4701700	0.60	1	T				100																																	1	0	1
11/1	376300	4701700	0.60	2	O																																					0	0	0
11/1	376275	4701700	0.50	1	T		100																																			1	0	1
11/1	376275	4701700	0.50	2	O																																					0	0	0
11/14	376175	4701700		1	O																																					0	0	0
11/14	376175	4701700		2	T																100																					1	1	0
11/1	376325	4701725		1	O																																					0	0	0
11/1	376325	4701725		2	O																																					0	0	0
11/1	376300	4701725	1.20	1	T				100																																	1	0	1
11/1	376300	4701725	1.20	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/1	376275	4701725	1.50	1	T				100																																	1	0	1
11/1	376275	4701725	1.50	2	T				100																																	1	0	1
11/2	376250	4701725		1	O																																					0	0	0
11/2	376250	4701725		2	O																																					0	0	0
11/2	376175	4701725		1	O																																					0	0	0
11/2	376175	4701725		2	O																																					0	0	0
11/14	376150	4701725		1	T				100																																	1	0	1
11/14	376150	4701725		2	O																																					0	0	0
11/1	376275	4701750		1	T				100																																	1	0	1
11/1	376275	4701750		2	O																																					0	0	0
11/1	376250	4701750	0.50	1	T										100																											1	1	0
11/1	376250	4701750	0.50	2	O																																					0	0	0
11/2	376225	4701750		1	O																																					0	0	0
11/2	376225	4701750		2	O																																					0	0	0
11/14	376150	4701750		1	T				60		40																															2	0	2
11/14	376150	4701750		2	O																																					0	0	0
11/1	376250	4701775		1	O																																					0	0	0
11/1	376250	4701775		2	O																																					0	0	0
11/1	376225	4701775		1	O																																					0	0	0
11/1	376225	4701775		2	O																																					0	0	0
11/10	376200	4701775	2.00	1	O																																					0	0	0
11/10	376200	4701775	2.00	2	T				100																																	1	0	1
11/2	376175	4701775		1	T				100																																	1	0	1
11/2	376175	4701775		2	O																																					0	0	0
11/10	376150	4701775	0.50	1	O																																					0	0	0
11/10	376150	4701775	0.50	2	T				100																																	1	0	1
11/1	376225	4701800		1	O																																					0	0	0
11/1	376225	4701800		2	O																																					0	0	0
11/10	376200	4701800	0.80	1	O																																					0	0	0
11/10	376200	4701800	0.80	2	O																																					0	0	0
11/10	376175	4701800	2.50	1	T						100																															1	0	1
11/10	376175	4701800	2.50	2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/10	376150	4701800	1.50	1	T				100																																	1	0	1
11/10	376150	4701800	1.50	2	T				50		35					15																										3	1	2
11/2	376125	4701800		1	T				100																																	1	0	1
11/2	376125	4701800		2	O																																					0	0	0
11/1	376225	4701825		1	O																																					0	0	0
11/1	376225	4701825		2	O																																					0	0	0
11/10	376200	4701825	2.00	1	O																																					0	0	0
11/10	376200	4701825	2.00	2	T		50		50																																	2	0	2
11/1	376175	4701825		1	O																																					0	0	0
11/1	376175	4701825		2	O																																					0	0	0
11/10	376150	4701825	1.00	1	T		100																																			1	0	1
11/10	376150	4701825	1.00	2	T				100																																	1	0	1
11/10	376125	4701825	2.20	1	O																																					0	0	0
11/10	376125	4701825	2.20	2	T						100																															1	0	1
11/10	376100	4701825	0.60	1	T		22		75		2					1																										4	1	3
11/10	376100	4701825	0.60	2	T		4		60		34					2																										4	1	3
11/2	376025	4701825		1	O																																					0	0	0
11/2	376025	4701825		2	T																		100																			1	0	1
11/2	376000	4701825		1	O																																					0	0	0
11/2	376000	4701825		2	O																																					0	0	0
11/1	376225	4701850		1	O																																					0	0	0
11/1	376225	4701850		2	O																																					0	0	0
11/1	376200	4701850		1	O																																					0	0	0
11/1	376200	4701850		2	O																																					0	0	0
11/1	376150	4701850		1	O																																					0	0	0
11/1	376150	4701850		2	O																																					0	0	0
11/10	376125	4701850	1.60	1	T				100																																	1	0	1
11/10	376125	4701850	1.60	2	O																																					0	0	0
11/10	376100	4701850	2.50	1	O																																					0	0	0
11/10	376100	4701850	2.50	2	O																																					0	0	0
11/2	376075	4701850		1	T		50		50																																	2	0	2
11/2	376075	4701850		2	T		50		45							3					2																					4	2	2

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/2	376050	4701850		1	T		90		10																																	2	0	2
11/2	376050	4701850		2	T		95		5																																	2	0	2
11/2	376000	4701850		1	T																		100																			1	0	1
11/2	376000	4701850		2	O																																					0	0	0
11/1	376250	4701875		1	O																																					0	0	0
11/1	376250	4701875		2	O																																					0	0	0
11/1	376225	4701875		1	O																																					0	0	0
11/1	376225	4701875		2	T				100																																	1	0	1
11/1	376125	4701875		1	O																																					0	0	0
11/1	376125	4701875		2	O																																					0	0	0
11/10	376100	4701875	2.00	1	O																																					0	0	0
11/10	376100	4701875	2.00	2	T				50							50																										2	1	1
11/10	376075	4701875	1.90	1	O																																					0	0	0
11/10	376075	4701875	1.90	2	O																																					0	0	0
11/10	376050	4701875	1.40	1	T				100																																	1	0	1
11/10	376050	4701875	1.40	2	T				50		50																															2	0	2
11/2	376025	4701875		1	T		49		50												1																					3	1	2
11/2	376025	4701875		2	T		50		48							2																										3	1	2
11/2	376000	4701875		1	T		5		80							7					7														1							5	2	3
11/2	376000	4701875		2	T		7		85							5					3																					4	2	2
11/1	376325	4701900		1	O																																					0	0	0
11/1	376325	4701900		2	O																																					0	0	0
11/1	376300	4701900		1	O																																					0	0	0
11/1	376300	4701900		2	O																																					0	0	0
11/1	376275	4701900		1	O																																					0	0	0
11/1	376275	4701900		2	O																																					0	0	0
11/10	376250	4701900		1	O																																					0	0	0
11/10	376250	4701900		2	O																																					0	0	0
11/1	376225	4701900		1	O																																					0	0	0
11/1	376225	4701900		2	O																																					0	0	0
11/1	376075	4701900		1	O																																					0	0	0
11/1	376075	4701900		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/10	376050	4701900	3.00	1	T			1	99																																	2	0	2
11/10	376050	4701900	3.00	2	O																																					0	0	0
11/10	376025	4701900	3.00	1	O																																					0	0	0
11/10	376025	4701900	3.00	2	O																																					0	0	0
11/10	376000	4701900	2.60	1	O																																					0	0	0
11/10	376000	4701900	2.60	2	O																																					0	0	0
11/10	375975	4701900	3.00	1	O																																					0	0	0
11/10	375975	4701900	3.00	2	O																																					0	0	0
11/10	375950	4701900	1.40	1	O																																					0	0	0
11/10	375950	4701900	1.40	2	T		60		40																																	2	0	2
11/10	375925	4701900	0.60	1	T		90		4		5					1																										4	1	3
11/10	375925	4701900	0.60	2	T		1		20		64					10					5																					5	2	3
11/10	375900	4701900	0.60	1	T		10		75		5					10																										4	1	3
11/10	375900	4701900	0.60	2	T		3		80	1	2					12					1														1							7	2	5
11/10	375875	4701900	0.60	1	T		14		85												1																					3	1	2
11/10	375875	4701900	0.60	2	T		20		74							5					1																					4	2	2
11/10	375850	4701900	0.60	1	T		9		90		1																															3	0	3
11/10	375850	4701900	0.60	2	T		2		98																																	2	0	2
11/10	375825	4701900	0.60	1	T		1		85		10					4																										4	1	3
11/10	375825	4701900	0.60	2	S		0.01		80		19					1																										4	1	3
11/10	375800	4701900	0.60	1	T				100																																	1	0	1
11/10	375800	4701900	0.60	2	T				95							1					3														1							4	2	2
11/10	375775	4701900	0.60	1	T		1		90		5					1					3																					5	2	3
11/10	375775	4701900	0.60	2	T		1		96		2										1																					4	1	3
11/1	376350	4701925		1	O																																					0	0	0
11/1	376350	4701925		2	O																																					0	0	0
11/1	376325	4701925		1	O																																					0	0	0
11/1	376325	4701925		2	O																																					0	0	0
11/1	376300	4701925		1	T																		100																			1	0	1
11/1	376300	4701925		2	O																																					0	0	0
11/10	376275	4701925		1	O																																					0	0	0
11/10	376275	4701925		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/10	376250	4701925		1	O																																					0	0	0
11/10	376250	4701925		2	O																																					0	0	0
11/1	376025	4701925		1	O																																					0	0	0
11/1	376025	4701925		2	O																																					0	0	0
11/1	376000	4701925		1	T		45									45			10																							3	2	1
11/1	376000	4701925		2	T				50							50																										2	1	1
11/10	375975	4701925	2.50	1	O																																					0	0	0
11/10	375975	4701925	2.50	2	O																																					0	0	0
11/10	375950	4701925	2.50	1	O																																					0	0	0
11/10	375950	4701925	2.50	2	O																																					0	0	0
11/10	375925	4701925	2.70	1	O																																					0	0	0
11/10	375925	4701925	2.70	2	T				100																																	1	0	1
11/10	375900	4701925	1.50	1	T				100																																	1	0	1
11/10	375900	4701925	1.50	2	T				75		25																															2	0	2
11/10	375875	4701925	1.70	1	T		70		30																																	2	0	2
11/10	375875	4701925	1.70	2	T		100																																			1	0	1
11/10	375850	4701925	1.00	1	T				95		5																															2	0	2
11/10	375850	4701925	1.00	2	T		45		45		8										1																			1		5	1	4
11/10	375825	4701925	1.00	1	S				75		15					10					0.01																					4	2	2
11/10	375825	4701925	1.00	2	S		5		90							5																										3	1	2
11/10	375800	4701925	0.80	1	S				85		15					0.01					0.01																					4	2	2
11/10	375800	4701925	0.80	2	S		2		95		3										0.01																					4	1	3
11/10	375775	4701925	0.70	1	T				61		30					3					5																			1		5	2	3
11/10	375775	4701925	0.70	2	T		10		40		45					2					3																					5	2	3
11/10	375750	4701925	0.70	1	T				80		10					5					5																					4	2	2
11/10	375750	4701925	0.70	2	T		15		75		3					5					1														1							6	2	4
11/1	376300	4701950		1	S								0.01										100																			2	0	2
11/1	376300	4701950		2	S								0.01										100																			2	0	2
11/14	376275	4701950		1	O																																					0	0	0
11/14	376275	4701950		2	O																																					0	0	0
11/14	376250	4701950		1	O																																					0	0	0
11/14	376250	4701950		2	O																																					0	0	0

Date Sampled in 2016	NAD83 X cord EAST 18T	NAD83 Y cord NORTH	Depth (m) 2016	Rake toss #	Rake Abundance Rating	Alisma gramineum	Ceratophyllum demersum	Chara vulgaris	Elodea sp.	Fontinalis sp.	Heteranthera dubia	Hydrilla verticillata	Lemna minor	Lemna trisulca	Marsilea quadrifolia	Myriophyllum spicatum	Najas flexilis	Najas guadalupensis	Najas minor	Nitella flexilis	Nitellopsis obtusa	Nuphar advena	Nymphea odorata	Polygonum amphibium	Pontederia cordata	Potamogeton crispus	Potamogeton foliosus	Potamogeton illinoensis	Potamogeton praelongus	Potamogeton pusillus	Potamogeton richardsonii	Potamogeton zosteriformis	Ranunculus trichophyllus	Spirodela polyrhiza	Stuckenia pectinata	Stuckenia vaginata	Utricularia sp.	Vallisneria americana	Wolffia columbiana	Zannichellia palustris	Filamentous algae +	Total Species	Non-native Species	Native Species
11/1	376225	4701950		1	O																																					0	**0**	0
11/1	376225	4701950		2	O																																					0	**0**	0
11/1	375975	4701950		1	T				5							**95**																										2	**1**	1
11/1	375975	4701950		2	T				100																																	1	**0**	1
11/1	375950	4701950		1	O																																					0	**0**	0
11/1	375950	4701950		2	O																																					0	**0**	0
11/1	375925	4701950		1	T		2		45		6					**45**																			2							5	**1**	4
11/1	375925	4701950		2	T		5		85		2					**5**					**2**														1							6	**2**	4
11/1	375900	4701950		1	T		10		5		5										**80**																					4	**1**	3
11/1	375900	4701950		2	T		2		90							**8**																										3	**1**	2
11/10	375875	4701950	2.20	1	O																																					0	**0**	0
11/10	375875	4701950	2.20	2	T		98		2																																	2	**0**	2
11/10	375850	4701950	1.60	1	O																																					0	**0**	0
11/10	375850	4701950	1.60	2	T		60																																	40		2	**0**	2
11/10	375825	4701950	0.90	1	S		2		92		4					**2**					**0.01**																					5	**2**	3
11/10	375825	4701950	0.90	2	S		2		85		10					**3**																										4	**1**	3
11/10	375800	4701950	0.80	1	S		10		75		3					**5**			**0.01**		**2**																			5		7	**3**	4
11/10	375800	4701950	0.80	2	S		5		47		40					**5**					**3**																					5	**2**	3
11/10	375775	4701950	0.90	1	S				96							**3**					**1**																					3	**2**	1
11/10	375775	4701950	0.90	2	S		0.01		85		10					**3**					**2**																					5	**2**	3
11/10	375750	4701950	0.80	1	S		5	3	80		5					**2**			**0.01**		**5**																					7	**3**	4
11/10	375750	4701950	0.80	2	S		0.01		85		5					**2**					**8**																			0.01		6	**2**	4
11/10	375725	4701950	0.80	1	S			0.01	75							**10**					**15**																					4	**2**	2
11/10	375725	4701950	0.80	2	S				75		2					**3**			**0.01**		**20**																					5	**3**	2
11/1	376300	4701975		1	O																																					0	**0**	0
11/1	376300	4701975		2	O																																					0	**0**	0
11/1	376275	4701975		1	O																																					0	**0**	0
11/1	376275	4701975		2	O																																					0	**0**	0
11/1	376250	4701975		1	O																																					0	**0**	0
11/1	376250	4701975		2	O																																					0	**0**	0
	Rake Toss	286				0	47	3	88	2	37	**0**	4	0	**1**	**44**	0	0	**4**	0	**31**	0	5	0	0	**0**	0	0	0	1	0	0	0	0	6	0	0	0	0	5	0			
	"O"	180																																										
	"T"	89																																										
	"S"	17																																										
	"M"	0																																										
	"D"	0																																										

Coordinates 1. Dates and locations of hydrilla discoveries in Fall Creek during 2016, using True North and North American Datum 1983. There was no hydrilla found in southern Cayuga Lake, however hydrilla was found in the Golf Course Lagoon within Fall Creek. No hydrilla was found during 2016 in other areas of Fall Creek or any areas of the Cayuga Inlet, the likely initial introduction into the Southern Cayuga Lake watershed.

Date Sampled	UTM X coord EAST	UTM Y coord North
Fall Creek		
7/25/2016	376150	4701725
8/8/2016	376150	4701750
8/8/2016	376146	4701764
8/8/2016	376147	4701739
8/8/2016	376149	4701736
8/8/2016	376169	4701719

References

Borman, S., R. Korth, J. Temte. 1999. Through the Looking Glass: A Field Guide to Aquatic Plants. Wisconsin Lakes Partnership, University of Wisconsin-Extension. Reindl Printing, Inc. Merrill, WI. pp. 1-238.

Crow, G. E. and C. B. Hellquist. 2000. Aquatic and Wetland Plants of Northeastern North America. The University of Wisconsin Press. 2 volumes. pp. 1-480; 1-400.

Madsen, J. D. 1999. Point and line intercept methods for aquatic plant management. APCRP Technical Notes Collection (TN APCRP-M1-02), U.S. Army Engineer Research and Development Center, Vicksburg, MS. pp. 1-16. ADA361270

Netherland, M. D. 1997. Tuber Ecology of Hydrilla. J. Aquatic Plant Management 35: pp 1-10.

Johnson, R. L. 2008. Aquatic Plant and Aquatic Macroinvertebrate Monitoring in Chautauqua Lake during 2007. Racine-Johnson Aquatic Ecologists, 1185 Ellis Hollow Road, Ithaca, NY 14850. pp. 1-49.

Johnson, R. L. 2013. Cayuga Lake and Cayuga Inlet Aquatic Plant Community 2012. Racine-Johnson Aquatic Ecologists, 1185 Ellis Hollow Road, Ithaca, NY 14850. pp. 1-179.

Johnson, R. L. 2014. 2013 Monitoring Report of the Cayuga Inlet and Southern Cayuga Lake Monoecious Hydrilla Eradication Project. Racine-Johnson Aquatic Ecologists, 1185 Ellis Hollow Road, Ithaca, NY 14850. pp. 1-272.

Johnson, R. L. 2015. 2014 Monitoring Report of the Cayuga Inlet and Southern Cayuga Lake Monoecious Hydrilla Eradication Project. Racine-Johnson Aquatic Ecologists, 1185 Ellis Hollow Road, Ithaca, NY 14850. pp. 1-271.

Johnson, R. L. 2016. 2015 Monitoring Report of the Cayuga Inlet and Southern Cayuga Lake Monoecious Hydrilla Eradication Project. Racine-Johnson Aquatic Ecologists, 1185 Ellis Hollow Road, Ithaca, NY 14850. pp. 1-299.

www.Stophydrilla.org Local website of the Cayuga Inlet and Southern Cayuga Lake Monoecious Hydrilla Eradication Project.

Racine-Johnson Aquatic Ecologists

Erica M. Herman
Robert L. Johnson
Mikhail S. Kern
Mihai C. Miroiu
Nicholas P. Radford (NYSDEC Intern)
Melanie K. Rooney
Joellen M. Riggs Carling
Jason A. Toner