

Aquatic Invasive Species Early Detection Survey (Gold Package)

Surveyor 1: Ethan Hosey
Surveyor 2: Dylan Notsch

Survey Date: 8/23/2021
Survey Time: 11:00 – 17:00 CDT

Environmental Conditions

Partly cloudy conditions with no precipitation, air temperature at 90 °F, 43% relative humidity, 4 mph wind from the south. Water temperature at 78 °F.

History

Known infestations of Eurasian watermilfoil, curly-leaf pondweed and zebra mussels as of 2017. EWM was treated in 2020.

Diagnosis

- Starry stonewort: Not detected
- Eurasian watermilfoil: Not Detected
- Curlyleaf pondweed: Present**
- Brittle naiad: Not detected
- Rusty crayfish: Not detected
- Banded mystery snails: Not detected
- Chinese mystery snails: Not detected
- Zebra mussels (Juvenile-Adults): Present**
- Common carp: Present**

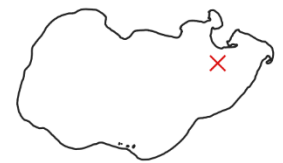
Curlyleaf Pondweed



Zebra Mussels



Common Carp



X Invasive Present

Outcome Summary

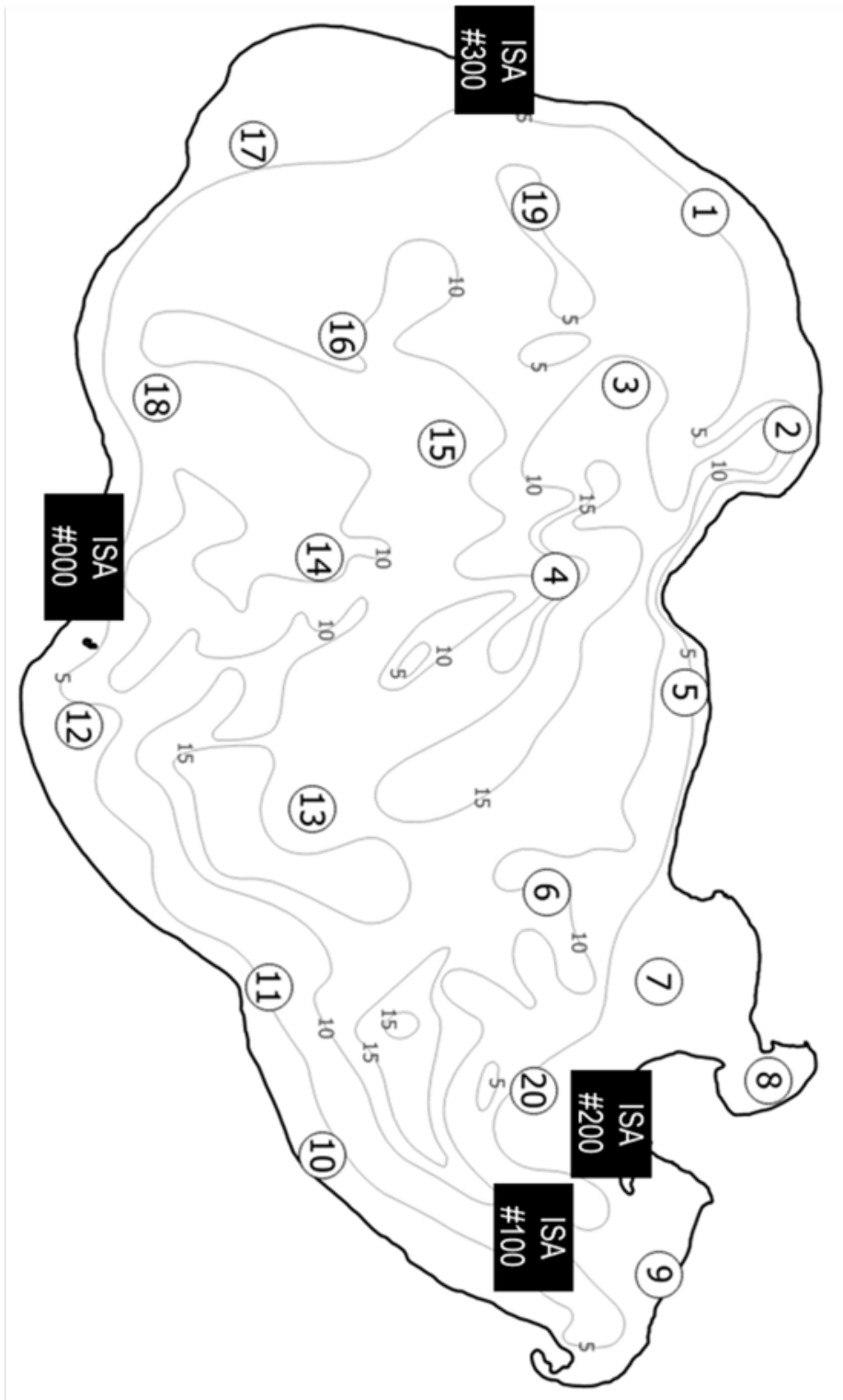
AIS were detected at multiple locations within the lake. AIS included zebra mussels (*Dreissena polymorpha*) (7/24 sites = 29%) and curly-leaf pondweed (*Potamogeton crispus*) (CLP; 3/24 sites =13%). Eurasian watermilfoil (*Myriophyllum spicatum*) was not detected but is known to be within the lake. CLP is underrepresented due to its life-cycle being such that at the time of this survey most of the annual crop has died back. No other invasive species were detected. Floating dead common carp were also found on Lake Washington. Twenty-nine native species of plants were detected, including coontail (*Ceratophyllum demersum*), muskgrass (*Chara* spp.), Canadian waterweed (*Elodea canadensis*), filamentous algae (various), water stargrass (*Heteranthera dubia*), northern watermilfoil (*Myriophyllum sibiricum*), slender watermilfoil (*Myriophyllum tenellum*), slender naiad (*Najas flexilis*), nitella (*Nitella* spp.), variable-leaved pondweed (*Potamogeton gramineus*), Illinois Pondweed (*Potamogeton illinoensis*), Floating-leaf Pondweed (*Potamogeton natans*), long-leaf pondweed (*Potamogeton nodosus*), small pondweed (*Potamogeton pusillus*), clasping-leaf Pondweed (*Potamogeton Richardsonii*), flat-stem pondweed (*Potamogeton zosterformis*), broad-leaved arrowhead (*Sagittaria latifolia*), hardstem bulrush (*Schoenoplectus acutus*), sago (*Stuckenia pectinata*), and water celery (*Valisneria americana*).

Survey Description

- ISA #000: 200 ft x 100 ft, boat launch, transect
- ISA #100: 100 ft x 100 ft, previous EWM, transect
- ISA #200: 100 ft x 100 ft, boat launch, transect
- ISA #300: 100 ft x 100 ft, inlet culvert area, transect

*ISA = Intensive Search Area

WASHINGTON LAKE, AIS EARLY DETECTION SURVEY: SPECIES SUMMARY AND SURVEY SITES



WASHINGTON LAKE, AIS EARLY DETECTION SURVEY: SPECIES SUMMARY AND SURVEY SITES

Site	Longitude	Latitude	Common Carp	Zebra Mussels	Curly-leaf Pondweed	Clasping-leaf Pondweed	Common Waterweed	Coontail	Filamentous Algae	Flatstem Pondweed	Floating-leaf Pondweed	Hardstem Bulrush	Illinois Pondweed	Long-leaf Pondweed	Muskgrasses	Nitella	Northern Watermilfoil	Sago	Sago	Slender Naiad	Small Pondweed	Variable-leaf Pondweed	Water Celery	Water Stargrass	Whorled Watermilfoil	
1	-04.39042	45.07839				X									X			X								
2	-04.39015	45.08129													X		X									
3	-04.38811	45.07582			X										X											
4	-04.37902	45.07357													X											
5	-04.37396	45.07799				X									X			X								
6	-04.36399	45.07343			X		X								X											
7	-04.35983	45.07727													X											
8	-04.35522	45.08103													X								X			
9	-04.34591	45.07746		X											X								X			
10	-04.35132	45.06806													X											
11	-04.35924	45.06415		X					X						X					X						
12	-04.37149	45.05781		X					X			X			X											
13	-04.36773	45.06553							X						X											
14	-04.37969	45.06568				X			X						X						X					
15	-04.38521	45.06989			X										X									X		
16	-04.39022	45.06825				X				X					X									X		
17	-04.39825	45.06315												X	X			X					X			
18	-04.38712	45.06008						X							X											
19	-04.39656	45.07265													X											
20	-04.35456	45.07312	X	X		X			X						X											
ISA #000	-04.37952	45.05795		X		X					X				X			X					X		X	
ISA #100	-04.34773	45.07359				X		X		X					X		X						X		X	
ISA #200	-04.35308	45.07596	X							X					X								X		X	
ISA #300	-04.4033	45.07117	X									X			X								X		X	
Percent Sites Occupied			4%	29%	13%	29%	4%	13%	17%	17%	4%	8%	8%	4%	79%	8%	8%	21%	13%	8%	4%	17%	29%	13%	4%	

