Great Lakes RESTORATION

U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR

Hydrilla at Alum Lake

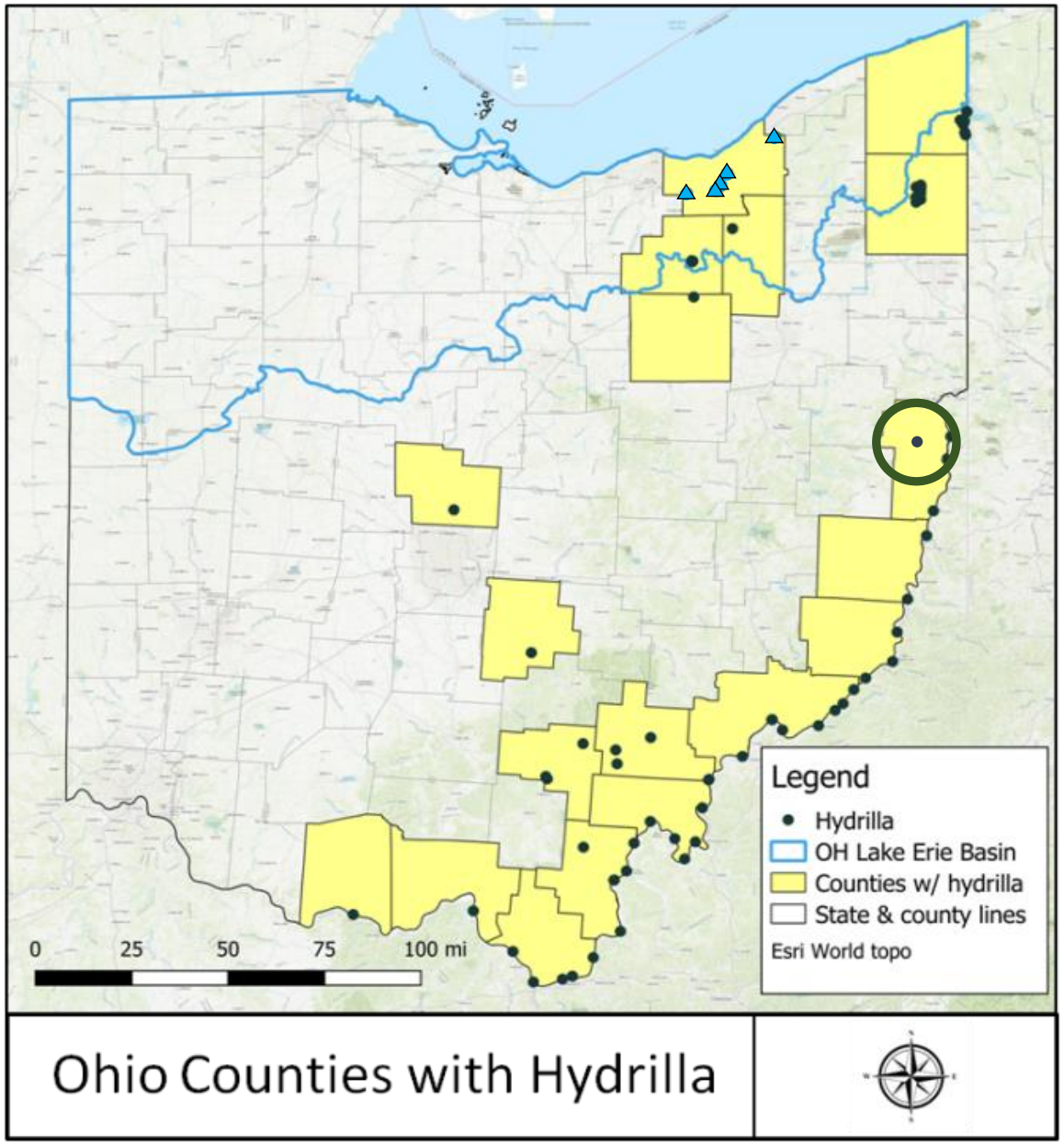
Ohio Aquatic Invasive Species Committee Meeting

12/20/22

Hydrilla in Ohio

New in 2022

No longer detectable



Hydrilla in Ohio

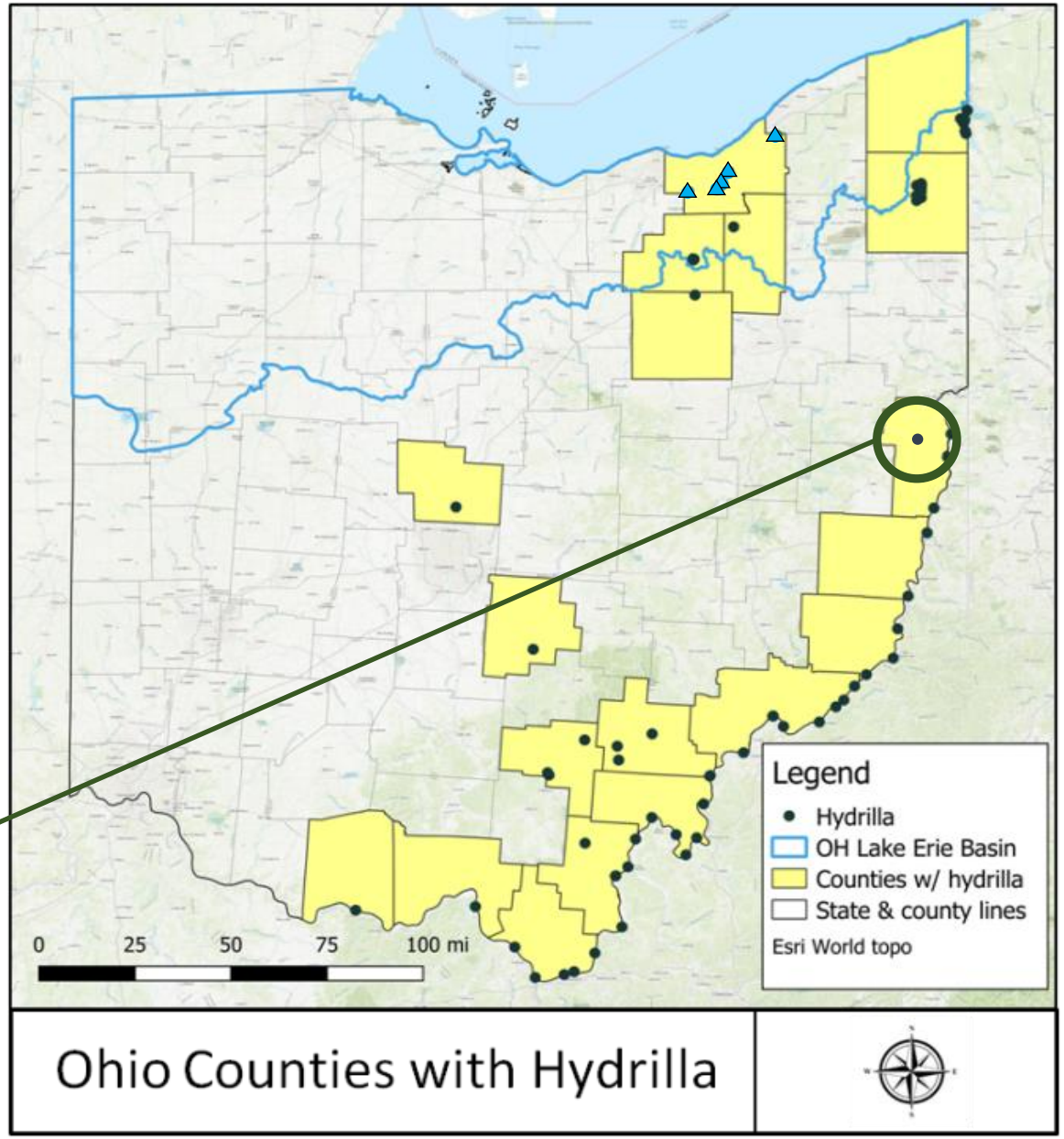
New in 2022

No longer detectable

Jefferson Lake
State Park

Tubers
Serrated leaf edges

Photos courtesy of Aqua Doc

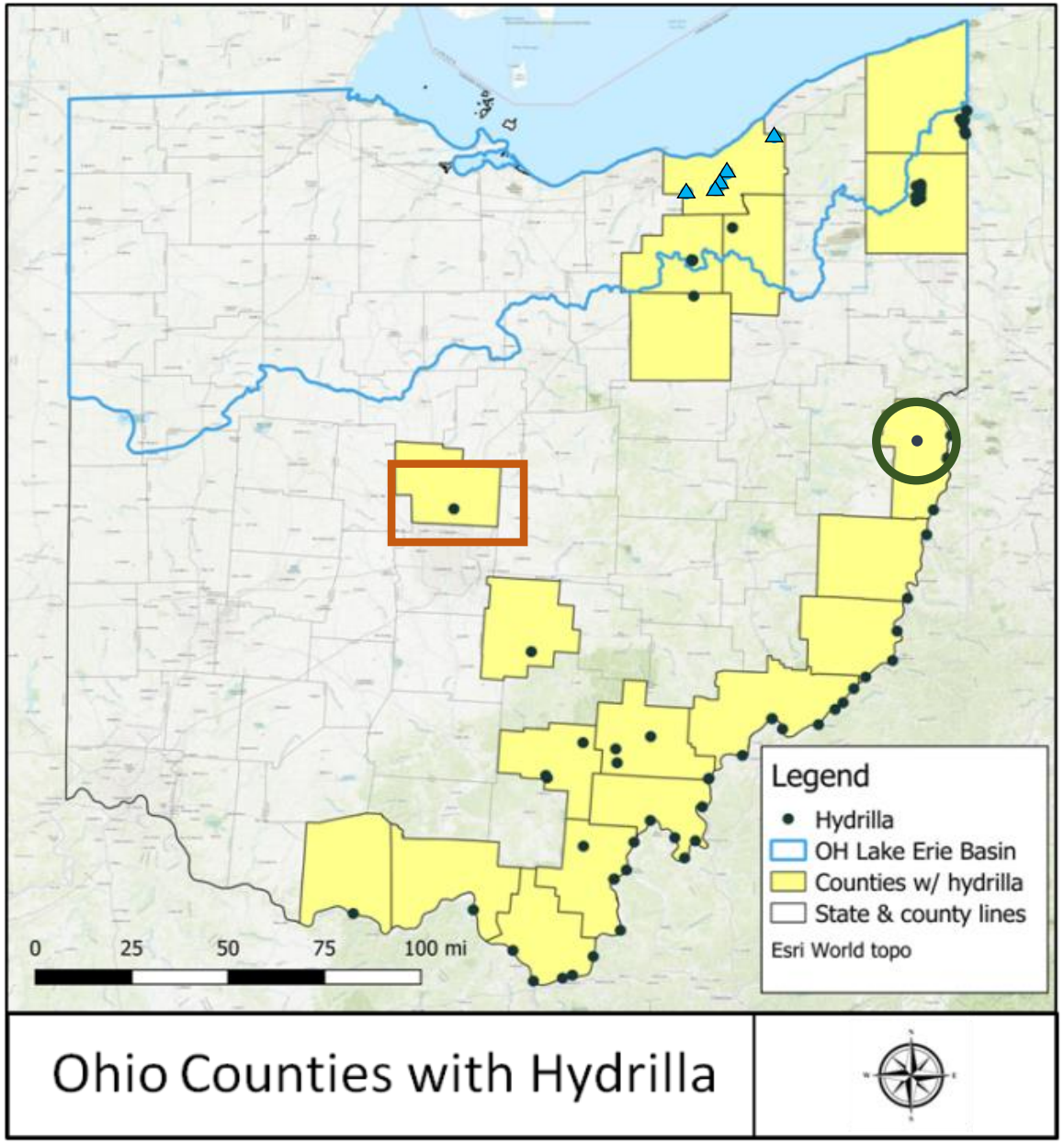


Hydrilla in Ohio

New in 2022

No longer detectable

Alum Lake



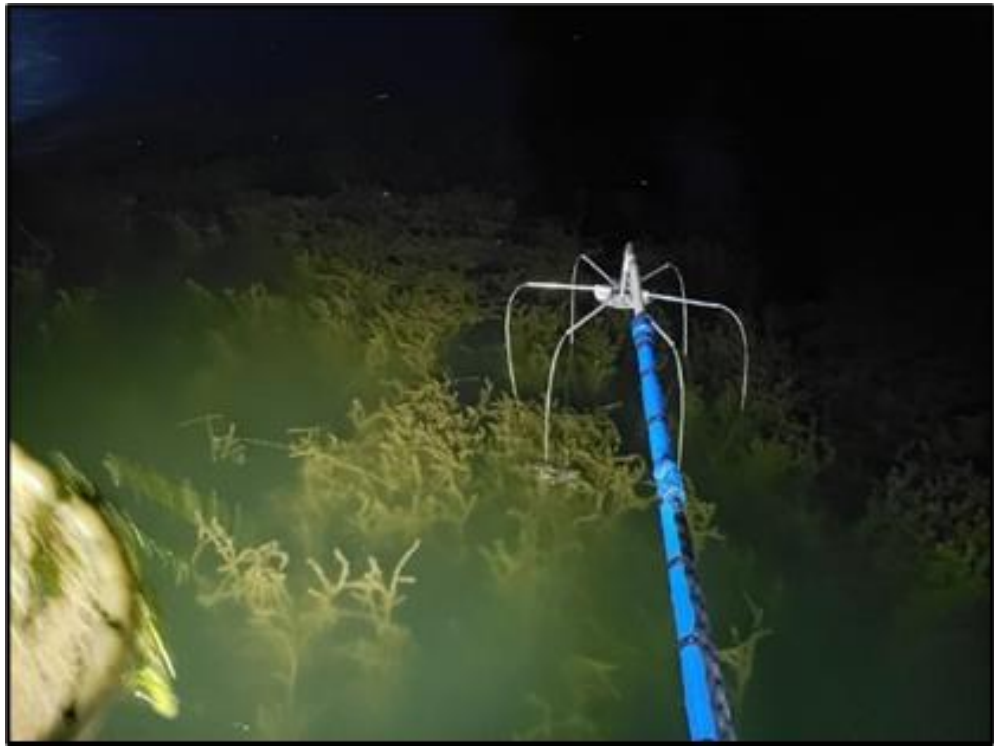
3387 acres

Delaware Co.

Completed in 1976

October 7, 2021 -	Hydrilla discovered during fish sampling
April 12, 2022 –	planning meeting
July 29, 2022 –	vegetation survey
August 18, 2022 –	first treatment (5.5 acres)

Serrated leaf edges



Hydrilla in the water column during sampling

Photos by N. Radabaugh

Outreach

Great Lakes Landing Blitz provided materials

Three kits (R) to USACE, State Parks, Div. of Wildlife

Signs available to be posted

Distributed 12 kits around Ohio. USACE Huntington, ODNR State Parks, ODNR Wildlife District 1

Vegetation survey, summer 2022

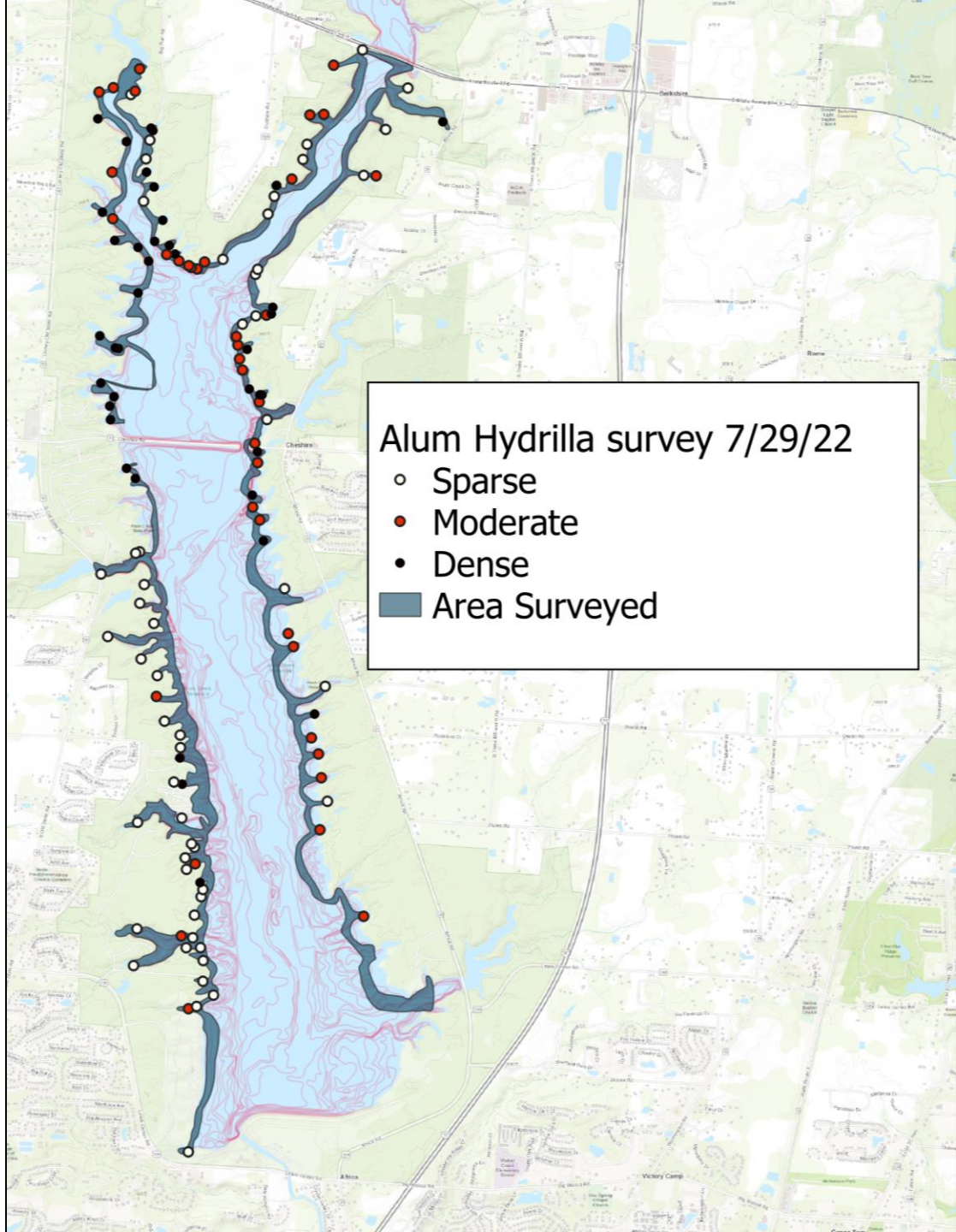
1-day survey

13 Participants from four agencies
(CM, USACE, Wildlife, State Parks)

550 acres surveyed

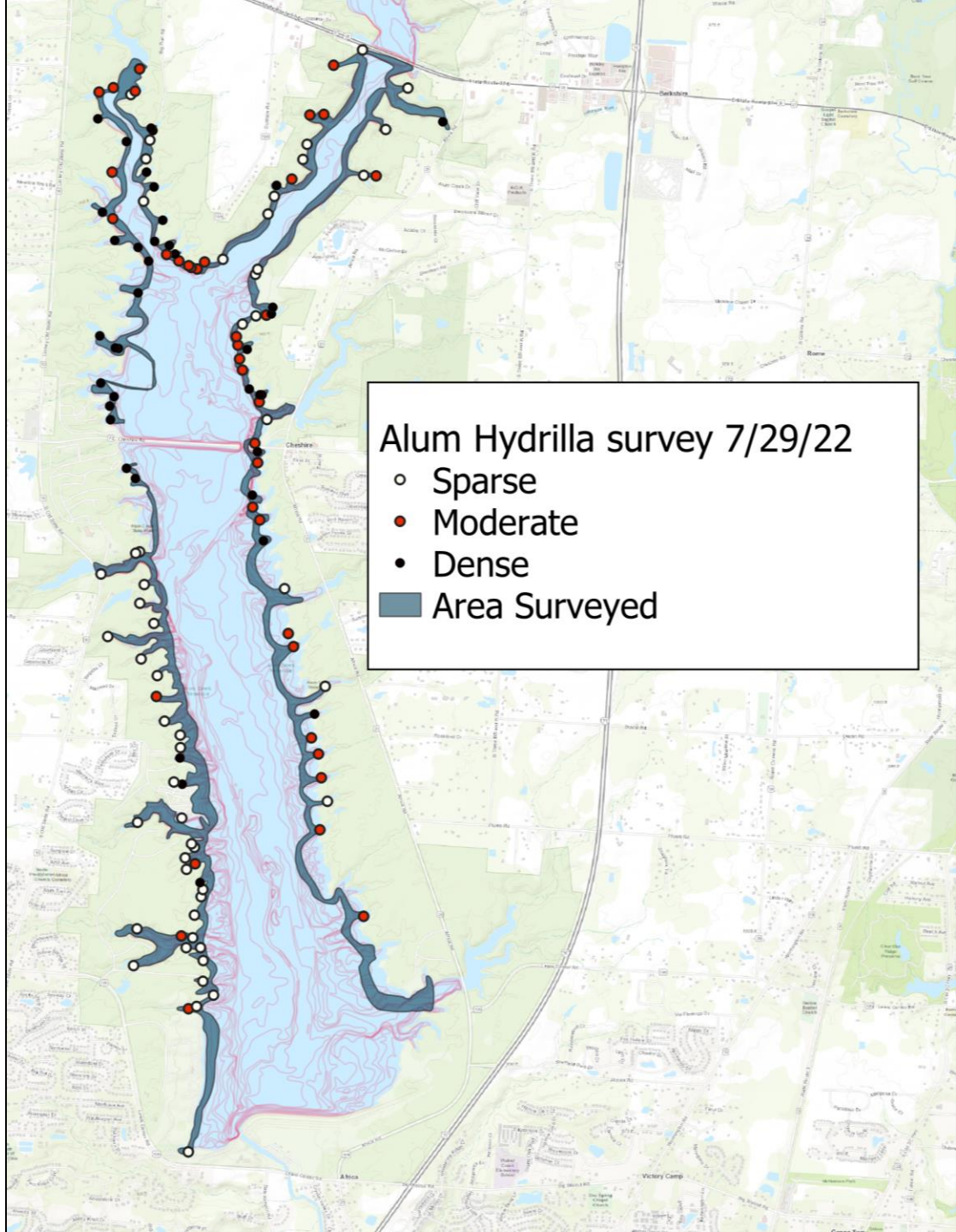
131 detections of hydrilla

We did this because we thought we would find lots of hydrilla in the shallow locations



Dense stand of hydrilla in a sheltered bay

USACE Huntington Ranger inspects a hydrilla-infested bay



Sparse
1-10%

Moderate
10-25%

Dense
25-100%

2022 Management

Two boat ramps identified as priorities

Treated 5.5 acres – Cheshire &
Hollenback Boat Ramps on 8/18/22

Aquathol K (Endothall a.i.) @ 3 ppm

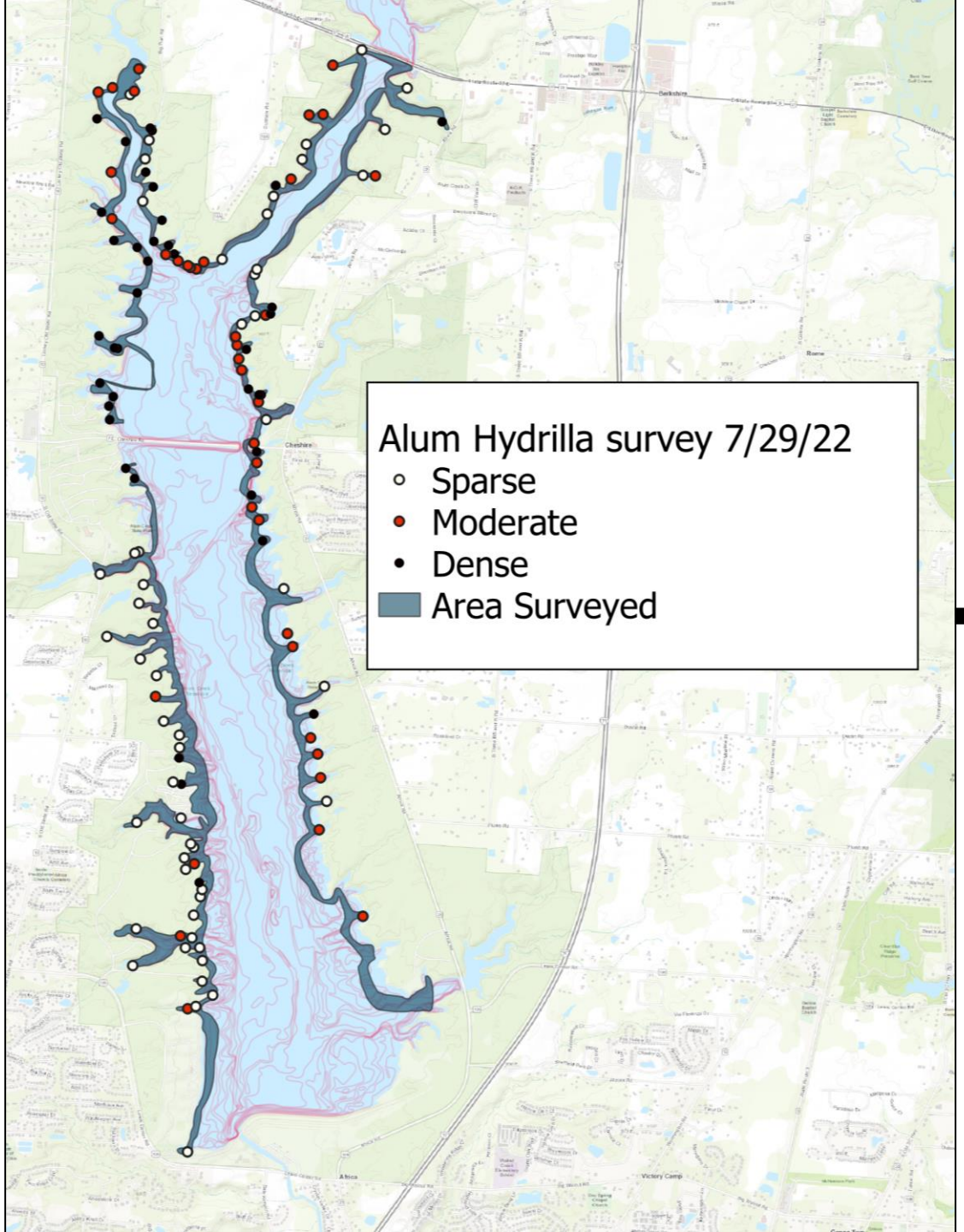
SonarOne (Fluridone a.i.) @ 60 ppb

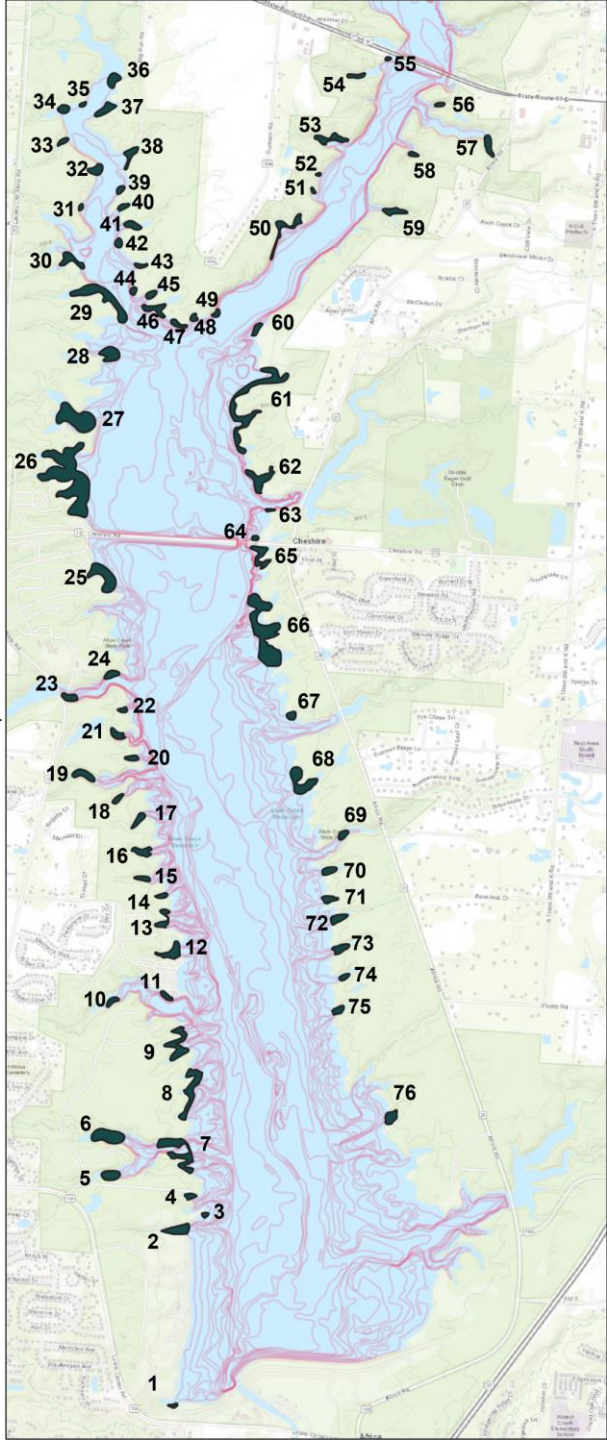
Cheshire Ramp

Endothall @ 3 ppm
Fluridone @ 60 ppb
13 DAT

Cheshire Ramp

Endothall @ 3 ppm
Fluridone @ 60 ppb
13 DAT


Alum Hydrilla survey 7/29/22
Sparse
Moderate
Dense
Area Surveyed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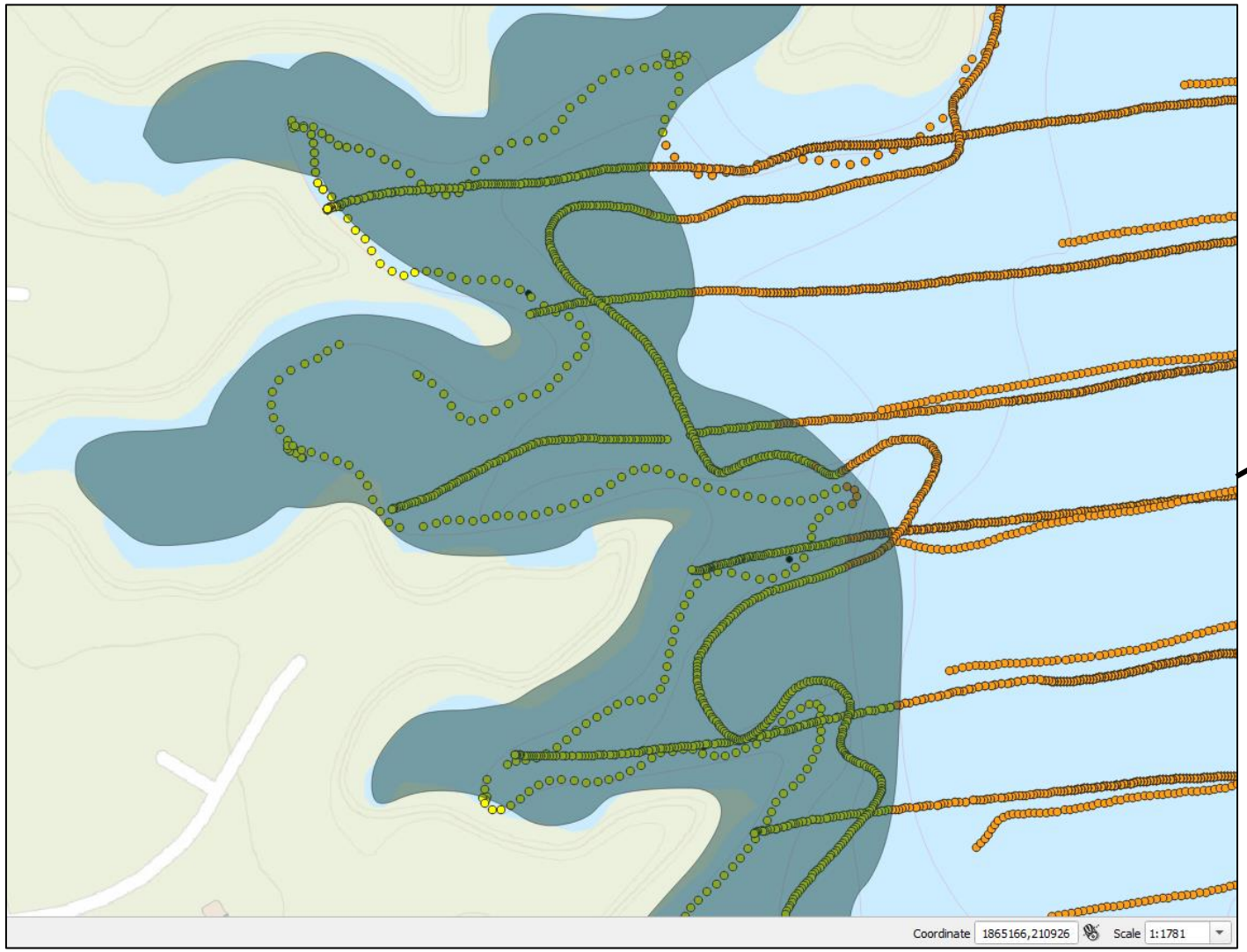
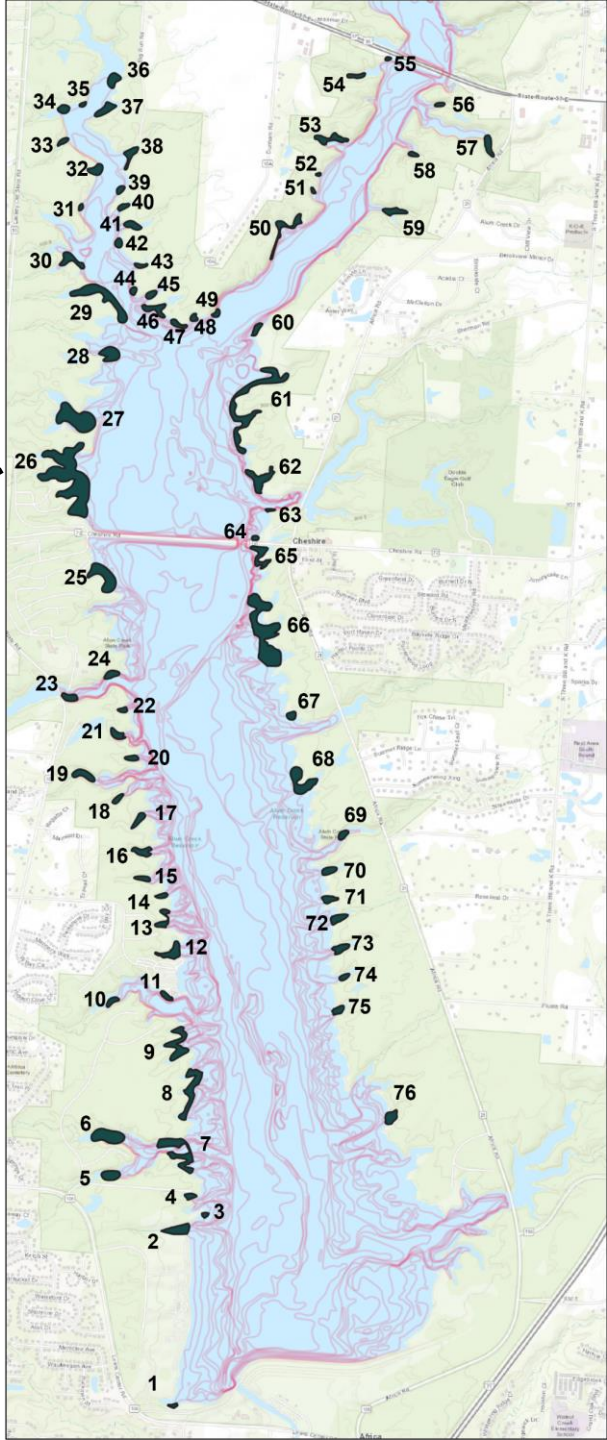


Depth points from ODNR



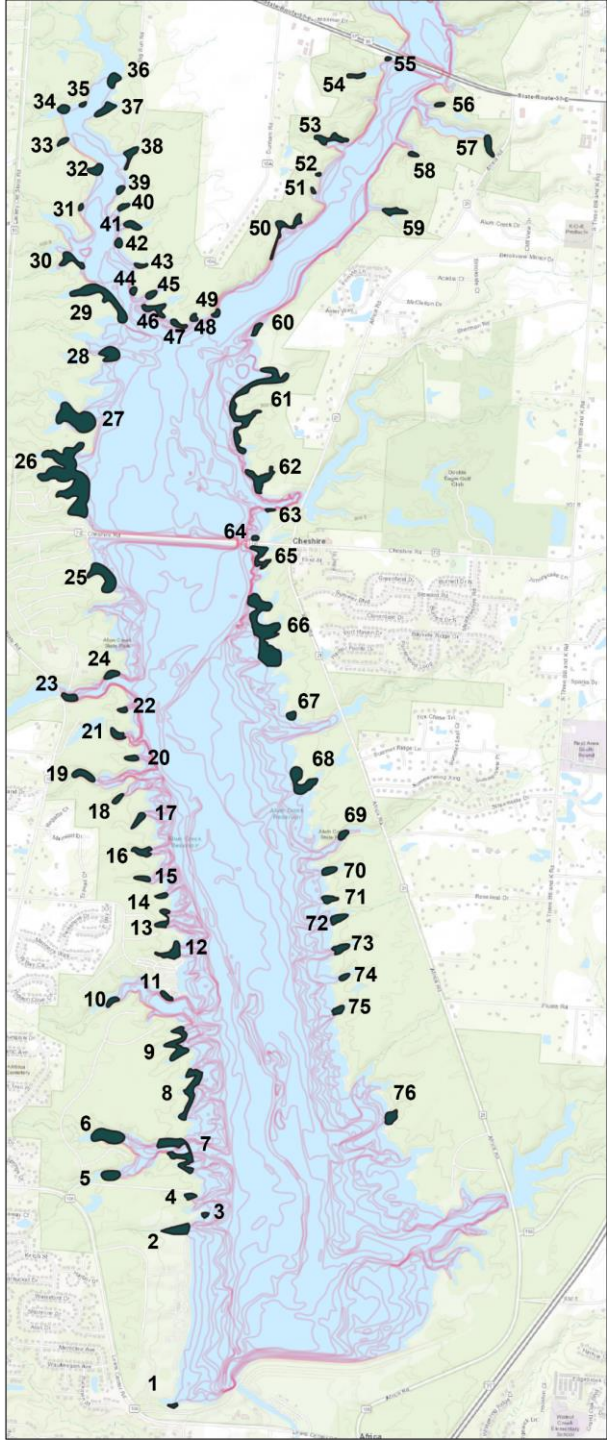
2023 Direction - DRAFT

Average of 5.9 feet

76 units

147.7 acres total

Estimated $200,000 for herbicide (fluridone)

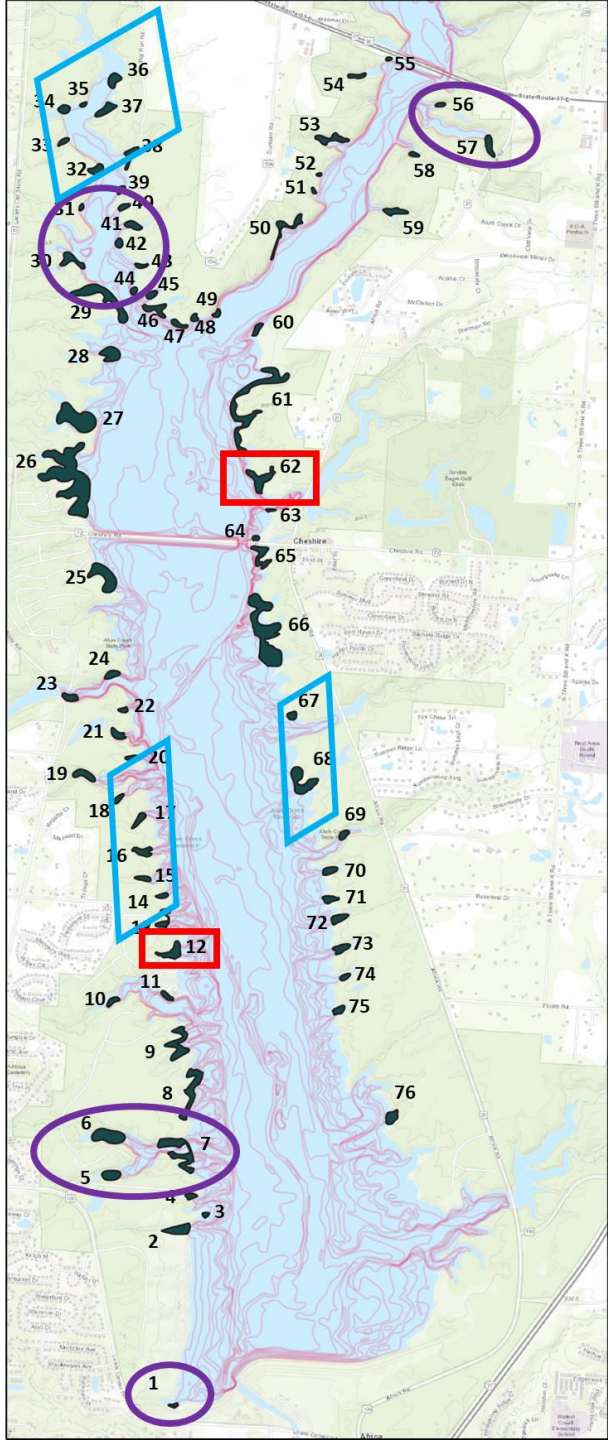


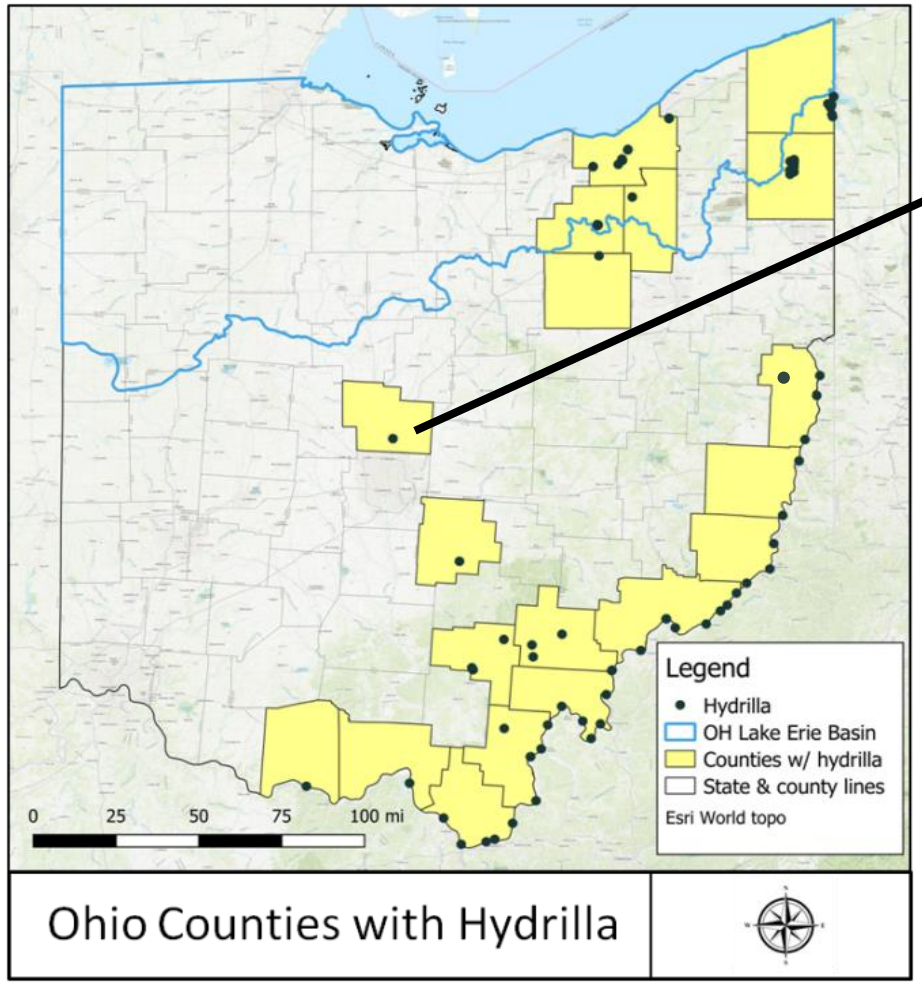
Tier 1 – boat ramps, risk of external spread

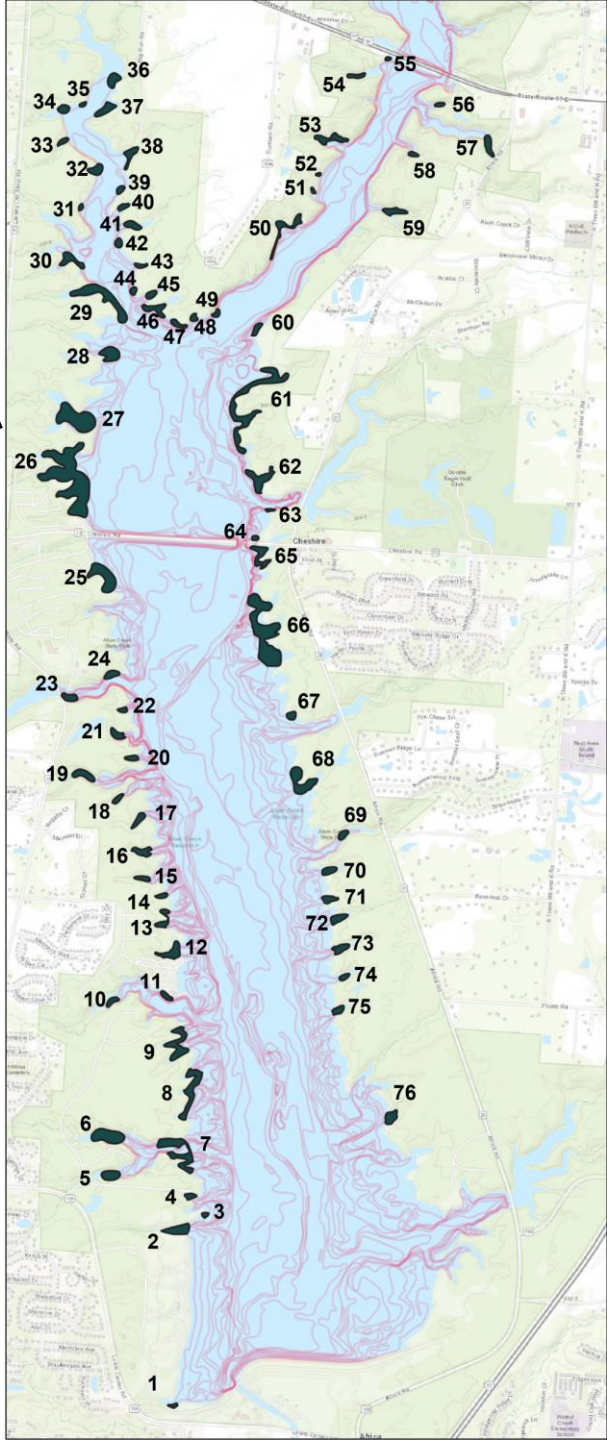
Tier 2 – recreation areas such as docks and swim spots

Tier 3 – expanded around recreation and access points

Treatment area	Area (acres)	Avg. depth (ft)	Volume (Acre ft)	Treatment (lbs SonarOne) May 25 (30 ppb)	Jun. 10 (50 ppb)	Aug. 25 (25 ppb)	Total
12	2.2	5	11.0	17.82	29.70	14.85	**62.37**
26	19.7	8	157.6	255.31	425.52	212.76	**893.59**
62	3.3	6	19.8	32.08	53.46	26.73	**112.27**
Totals	**25.2**	**6.3**	**188**			**Total lbs**	**1068.23**
Tier 1 sites are at Hollenback, Chesire, and the State Park Campground Boat Ramps. It is recommended to manage hydrilla here to avoid the risk of external spread						Total tubs	54
						Cost	**$ 37,530**
						Cost/acre	$ 1,489.29
						Cost/acre ft	$ 199.20




Legend
Hydrilla
OH Lake Erie Basin
Counties w/ hydrilla
State & county lines
Esri World topo
0
25
50
75
100 mi
Ohio Counties with Hydrilla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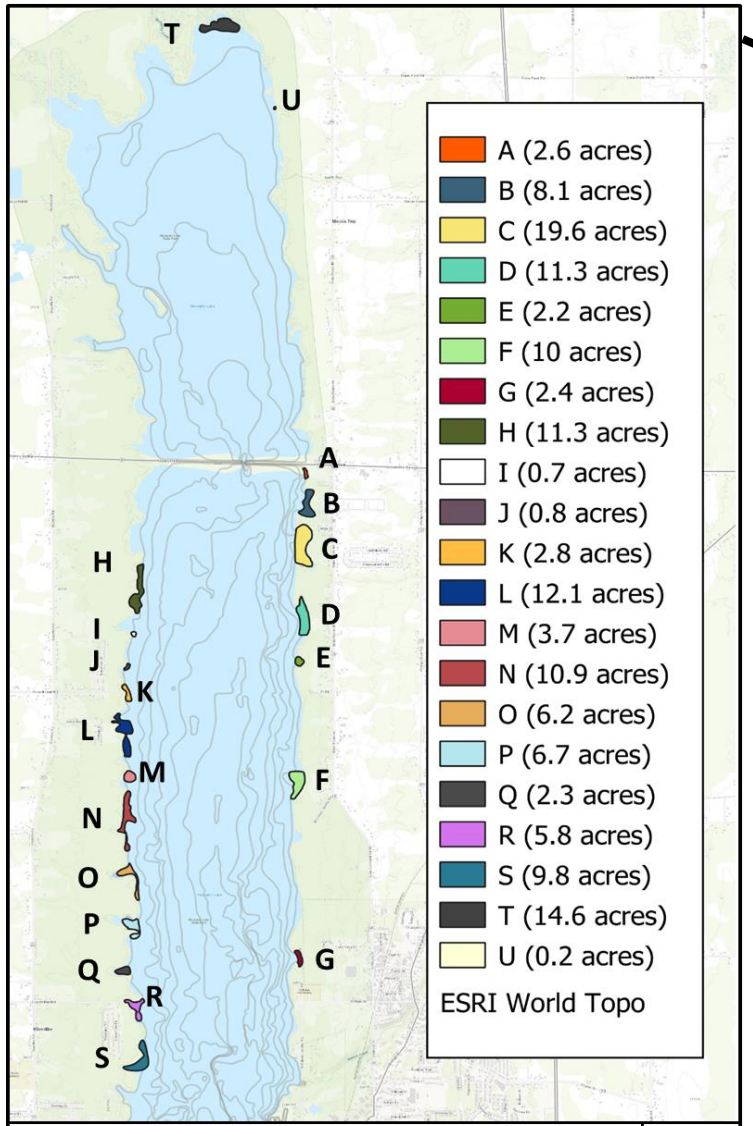
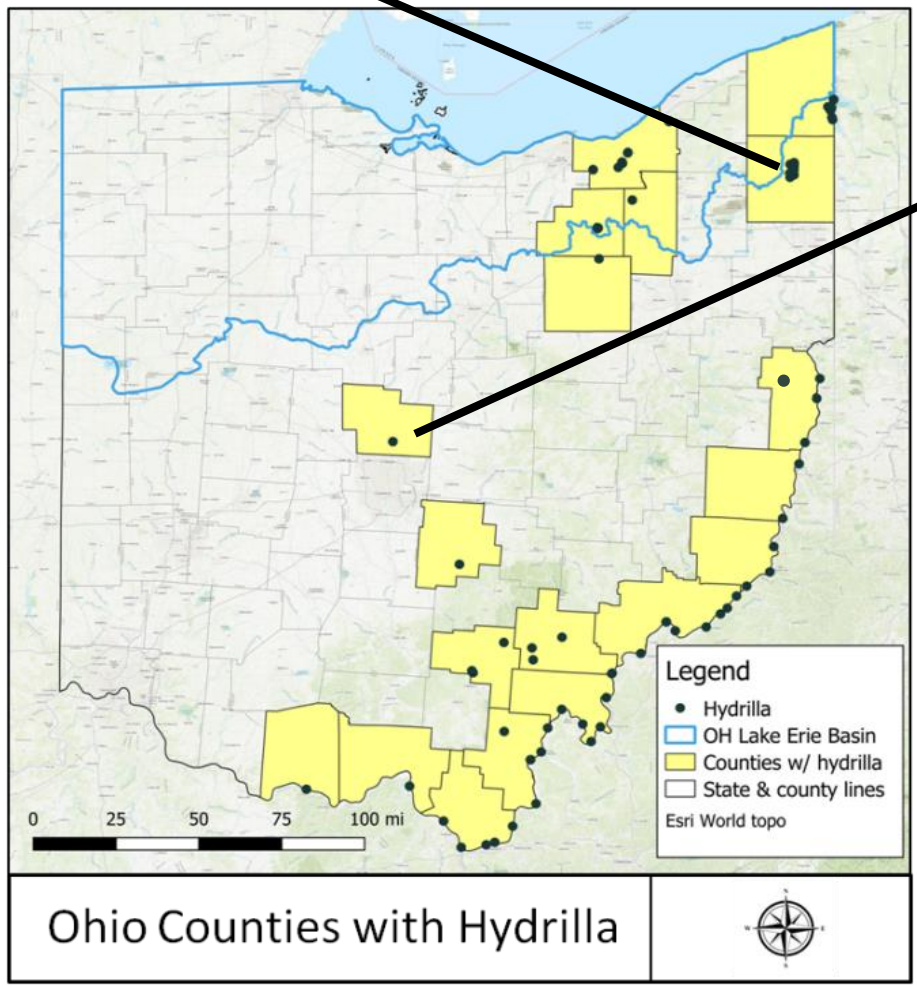


Mosquito Lake
Proposed Hydrilla Treatment Areas (2023)

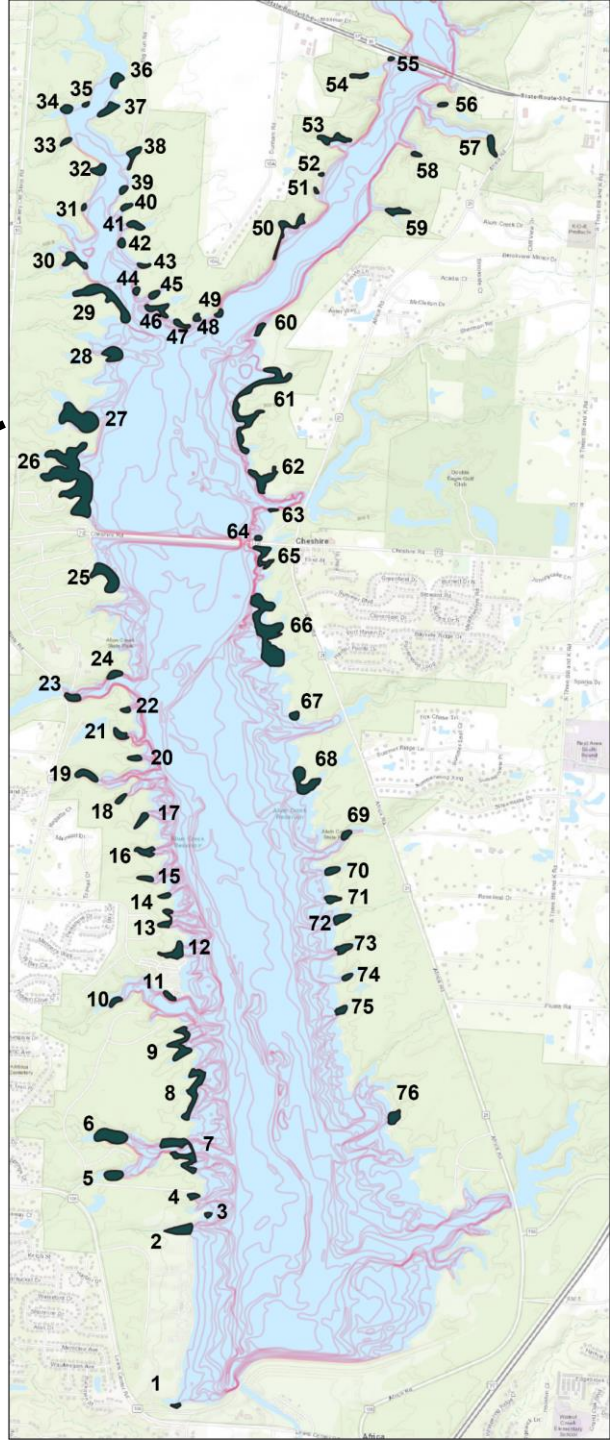
N

0 1 2 3 4 mi

Cleveland Metroparks



Ohio Counties with Hydrilla



Project Goals

Limit the extent and prevalence of hydrilla in Alum Lake to undetectable levels of negative ecological and recreational impact

Limit the probability of the hydrilla population at Alum Lake from being a source for introduction to other waterbodies, especially the Great Lakes


Indian Lake, Logan County
Ohio State Parks Facebook Page
Not Hydrilla
SHORELINE
MARINE CONSTRUCTION

As of August 22, 2022

- 5,100 acre lake
- Seven harvesters + support staff
- 59,509 yd^3 removed

- 3,970 dump trucks (15 yd^3)
- 258 train cars (231 yd^3)
- 2.5-mile train*

House Bill 377 – at least $1.25m budgeted

SHORELINE MARINE CONSTRUCTION

*high-side gondolas, 231 yd^3 capacity, 52 ft length

Conclusion

Hydrilla changed Ohio natural resources management at Alum Lake

Alum's deep water may make treatment challenging

Prevention is important – we need more

Future meetings to help determine scope of work in 2023

Ohio is focused on Aquatic Invasive Plants

Hydrilla at Alum Lake

Ohio Aquatic Invasive Species Committee Meeting
12/20/22

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