Cleveland Metroparks

FIND YOUR PATH

Great Lakes RESTORATION

U.S. FISH & WILDLIFE SERVICE

DEPARTMENT OF THE INTERIOR

Ohio AIS Surveillance

2/7/2023

Mark Warman – Cleveland Metroparks

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Cleveland Metroparks

Role

Site surveys

Detection and decontamination materials

Management

OHIO DEPARTMENT OF NATURAL RESOURCES

Connect agencies to resources

Collect and share detections

ED Methods: State of Ohio

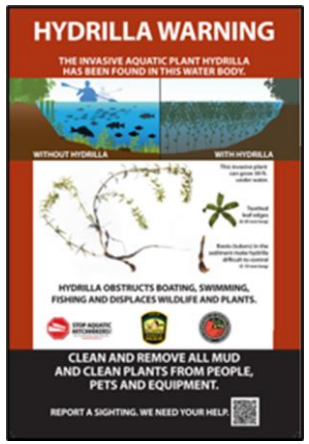
Opportunistic observations – ODNR staff trainings
Specific districts may have expertise

No devoted staff for ED of Invasive Aquatic Plants

Contractors for in-depth surveys

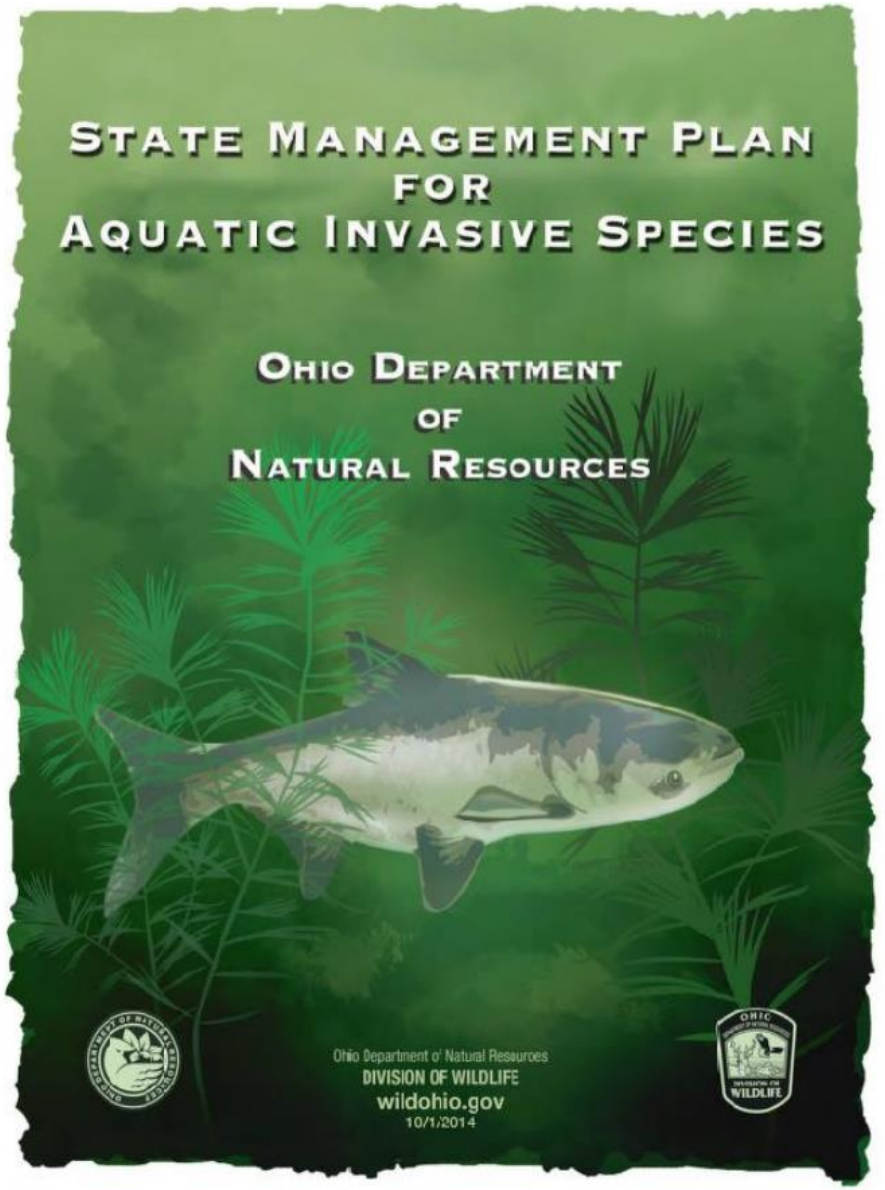
Coordinate & enable partners to conduct ED

Solicits reports from public – Mostly fish – No plants yet



Hold up your phone!

Links to Ohio AIS submission form



2014

ED Methods: Cleveland Metroparks

Goals

- Lake Erie watershed, primarily
- many waterbodies
- near known infestations
- public > private
- identify plants in field
- record data

Site Specific Approach

Boat, kayak, wading, rake tosses

ED Methods: Cleveland Metroparks

One FT coordinator, two seasonal surveyors

Quick, meander surveys

Increase rigor if priority IAP detected

12 ft and shallower (max 30 ft)

Rake Tosses at places of interest

Boat ramps, inflows, outflows, fishing piers, areas partners identify, backflows and oxbows, water control features

Site Specific Approach

Boat, kayak, wading, rake tosses

Technique	Waterbody size	Pros	Cons
Walking the banks (Visual assessment)	**Small, isolated**	**Quick, field many questions from public**	**May not be able to walk entire margin, 20-30 ft reach only**
Wader survey	Small, shallow, tributaries, margins	Thorough, often observe species at small pop. sizes	Labor intensive, potentially hazardous
Kayak	**Medium (<75 acres), nooks and crannies of large systems**	**Reach shallow areas, emergent plant zones**	**Fewer acres than boating, difficult to toss rakes**
Boating	Large (>75 acres)	many acres quickly	Set up and clean up lengthy, often borrowing boats - coordination

Rakes may/may not be included in each method

Summary slide: ED methods

OHIO DEPARTMENT OF NATURAL RESOURCES

No devoted ED staff

Opportunistic surveys

Contractors for in-depth surveys

Coordinate and enable others to survey

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Meander surveys with 3 staff

Kayaks, wading > boat surveys

Site-specific approach

Prioritize points of human interaction*
Areas near known infestations

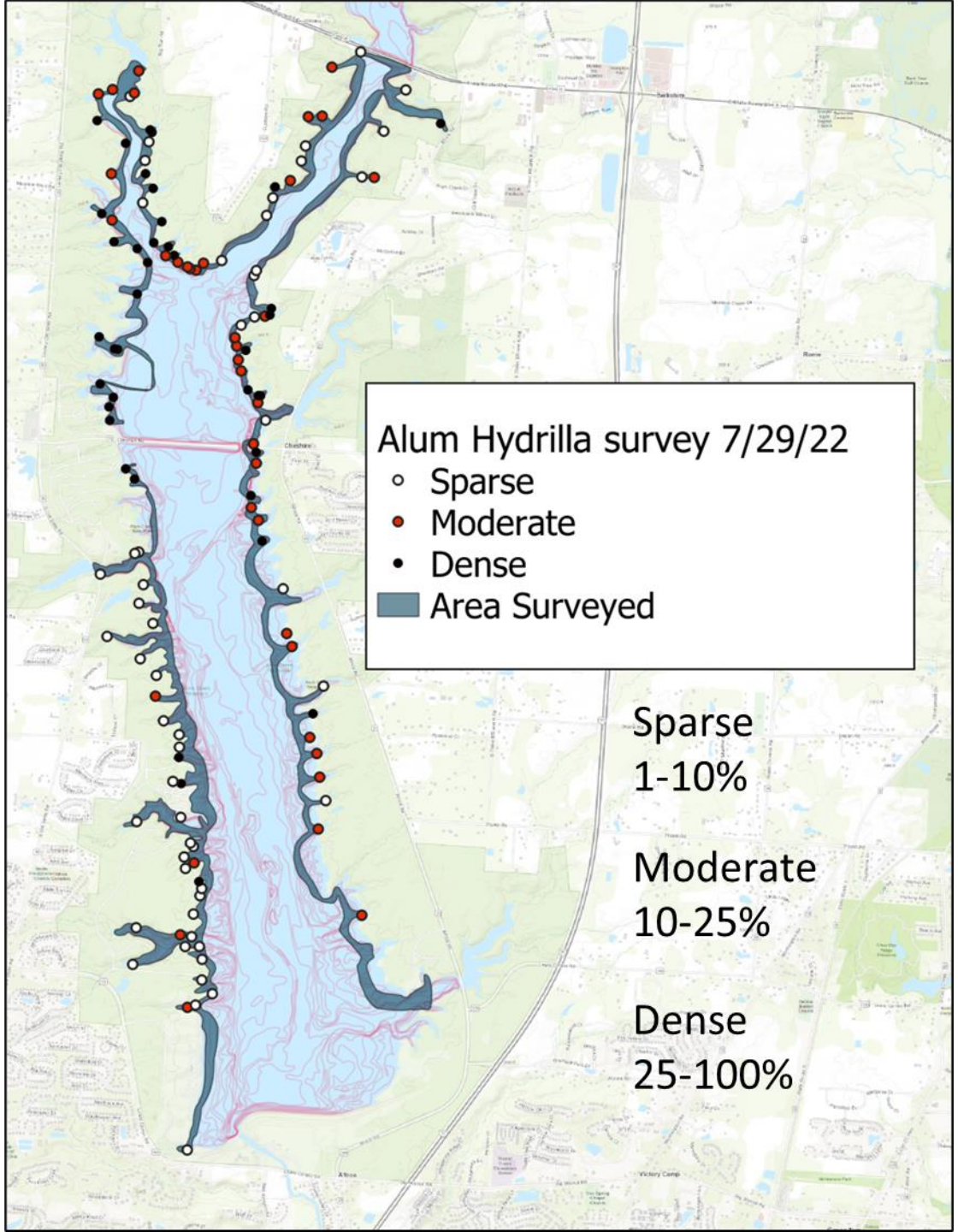
*Boat ramps, inflows, outflows, fishing piers, areas partners identify, backflows and oxbows, water control features

Ohio DNR and Cleveland Metroparks cooperate on surveys

Alum Creek Lake 1-day, boat survey

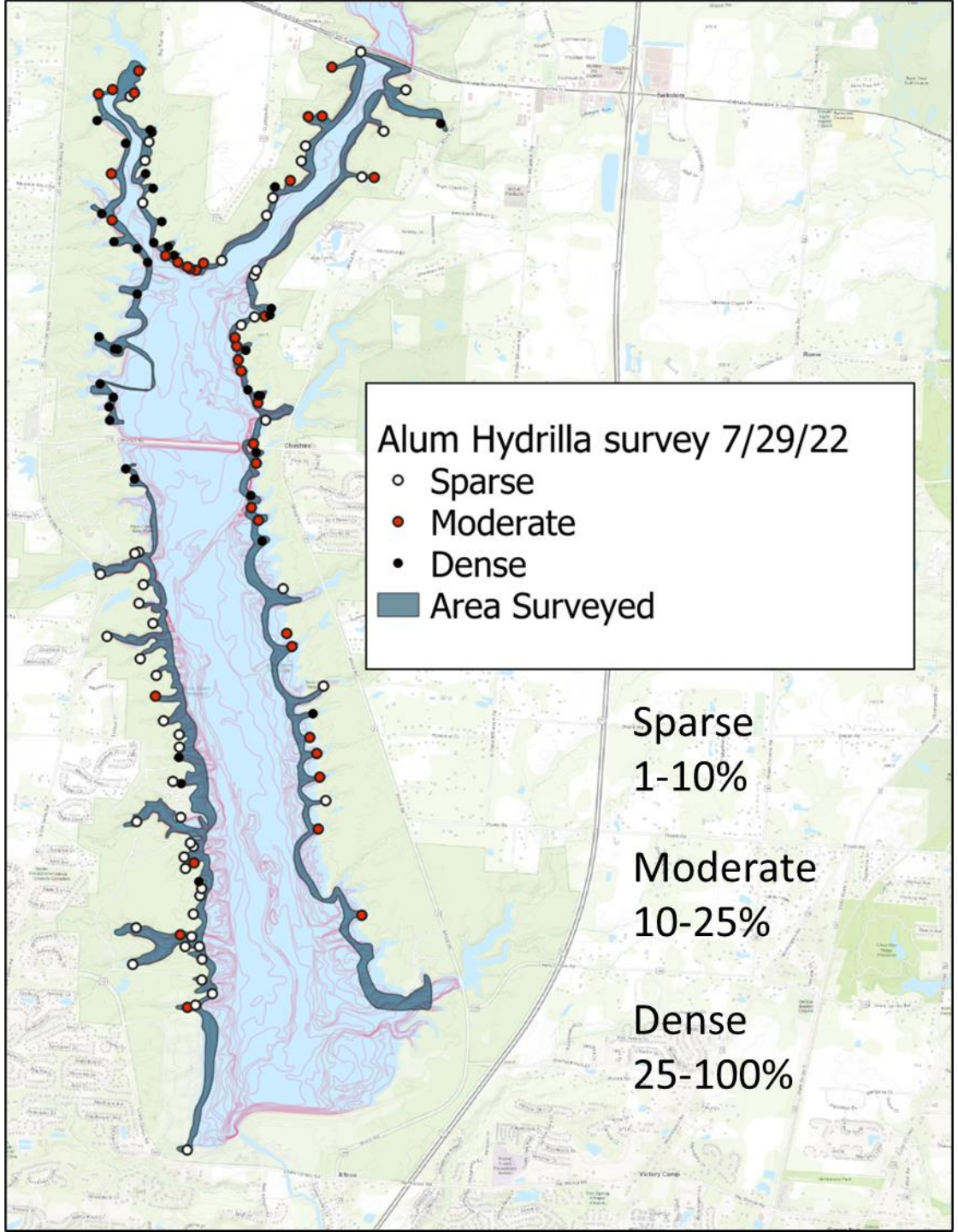
3 boats, 11 people

Reach shallow areas, develop management plan



Ohio DNR and Cleveland Metroparks cooperate on surveys

Great Lakes Landing Blitz did enable voluntary boat ramp inspections.



Results & Outputs

Ohio AIS Committee

Coordination among partners

Agency training

Reporting pathway

Data from contractors

100 – 200 sites surveyed per year (1.5 – 3.5K acres)

2 – 3 in depth surveys @ large waterbodies

Plant lists w/ GPS data (natives too)

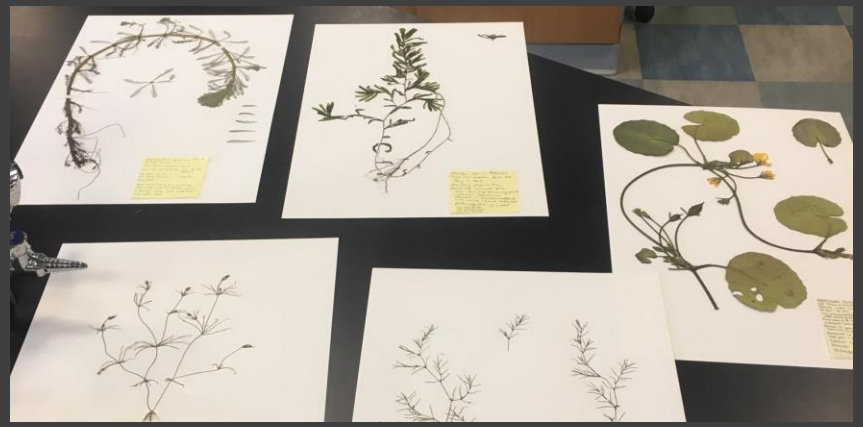
Herbarium vouchers

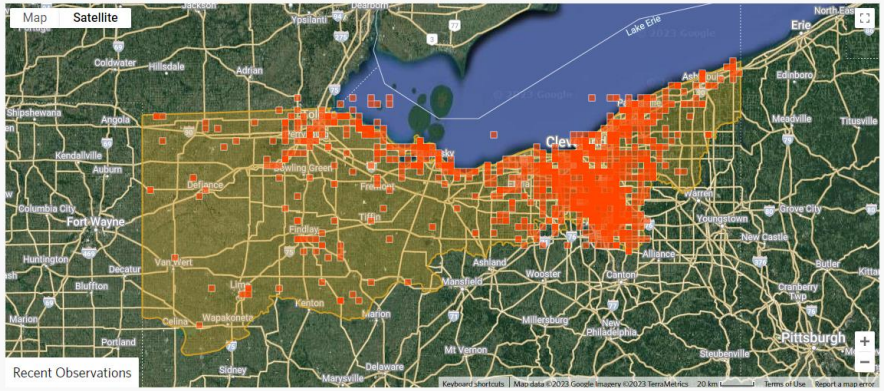
ED results submitted to USGS

Photos of plants in habitat + nuisance populations

Many records on **iNaturalist**

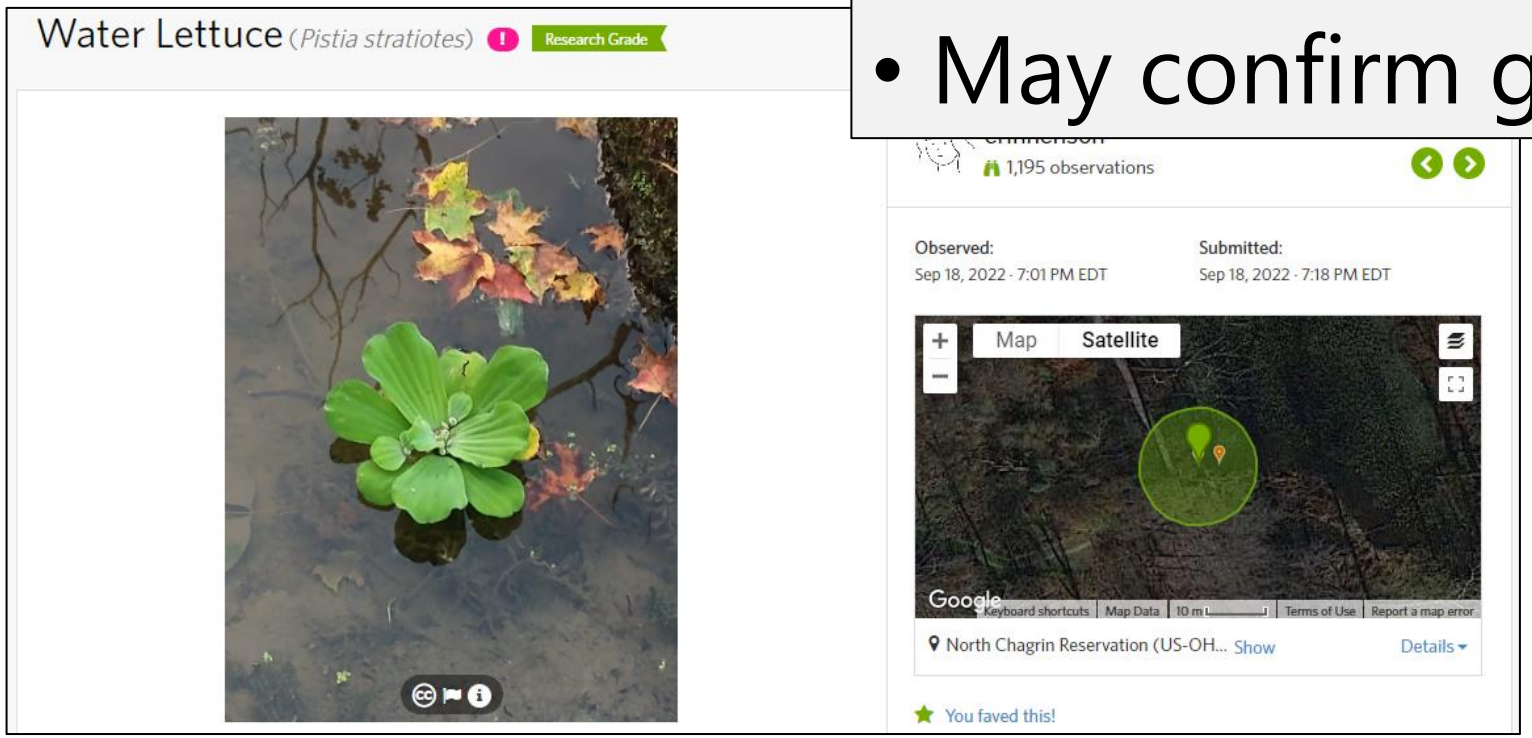
Herbarium vouchers – can train your next crew

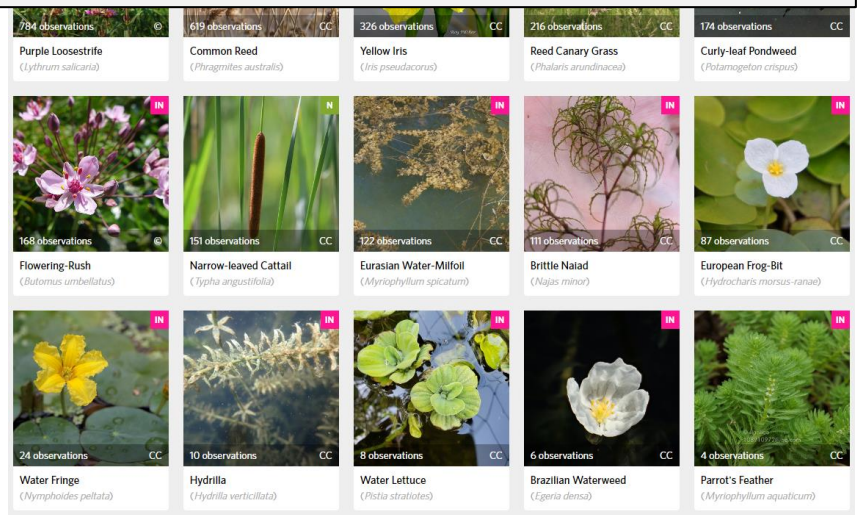




iNaturalist for showy specie

- 1 – 5 heroic observations per year
- Low time investment
- May confirm growing season





Summary: Ohio Results & Outputs

Heavy agency investment

At least 20 ED kits in circulation

Pathways for community observations

Opportunistic/Incidental records, sporadic

Absent records not yet shared with EDDMapS

Annual AIS records to USGS NAS

Contractors contribute

Early Detection and Decontamination kit

Trade Offs

Agency support vs coordinating partners/citizens

Few devoted agency staff

Prioritize speed and sites over thorough surveys
    Multi-species (native) included add value

Meander surveys vs point intercept

Difficulties sharing data collection forms/format

Building awareness = more reports?

Representative of
many surveys

Outstanding questions

Improve our methods with limited staff?

Visit sites or perform thorough surveys?

Engage other agencies?

Which community data collection method is best?

ED to rapid response:

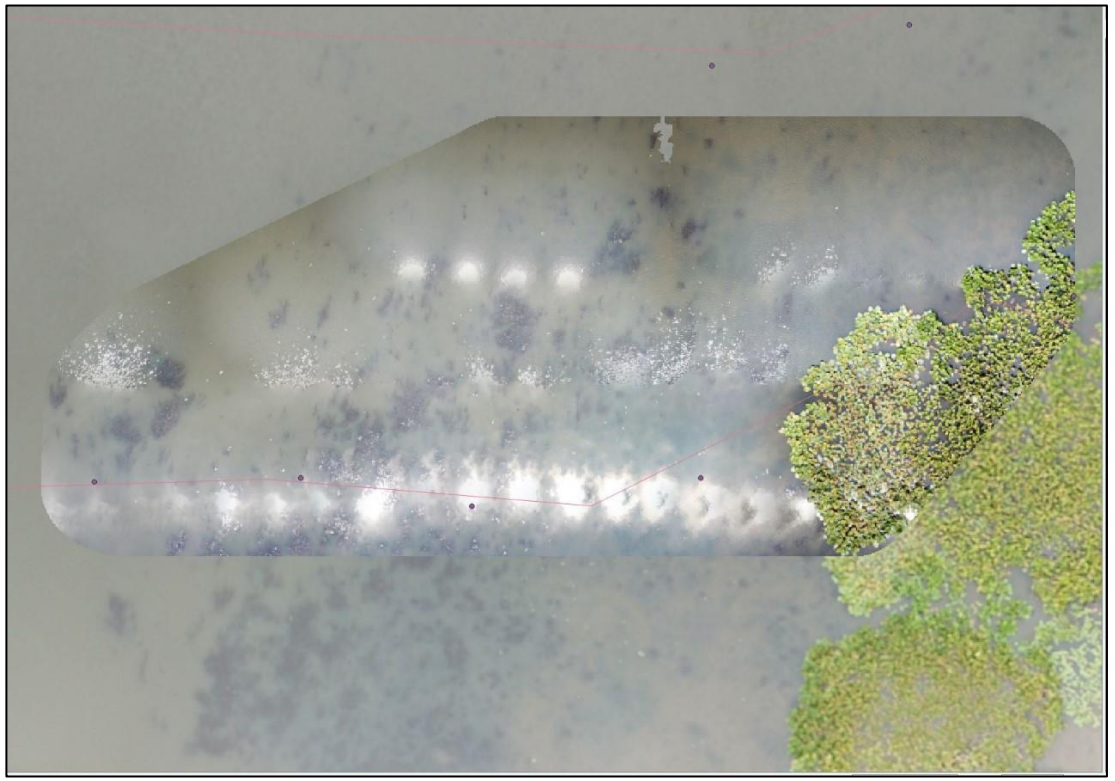
Year 1 - mobilize and qualitative

Year 2 – more capacity and quantitative

Outstanding questions – remote detection

Great Lakes specific: eDNA, genetic testing labs, pricing, contracts

(Off topic – independent herbicide residue lab)



Drone imagery

eDNA

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