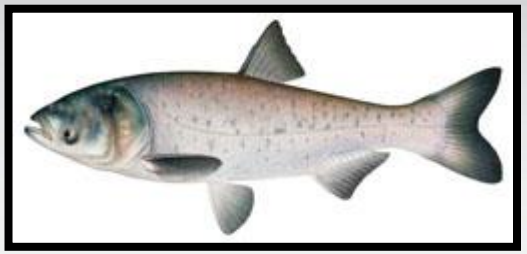
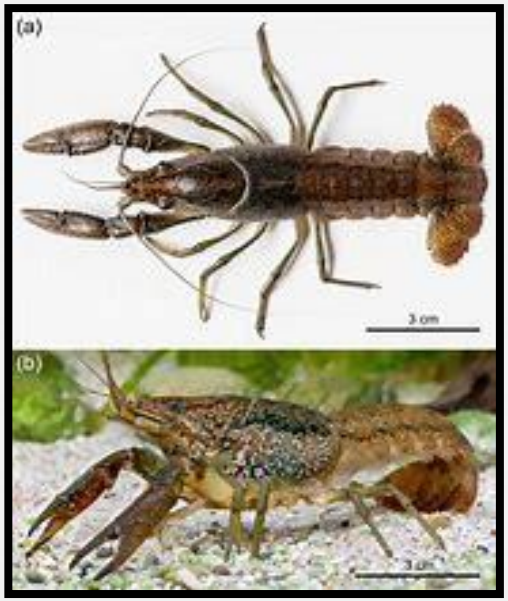
Ohio AIS Update

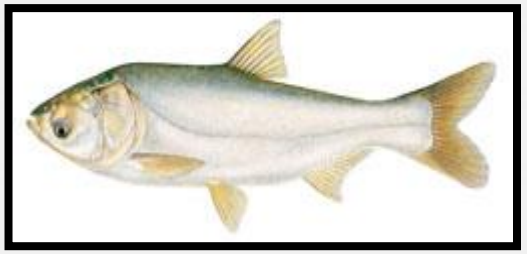
Ohio AIS Committee
Organisms in Trade Session
November 23, 2021

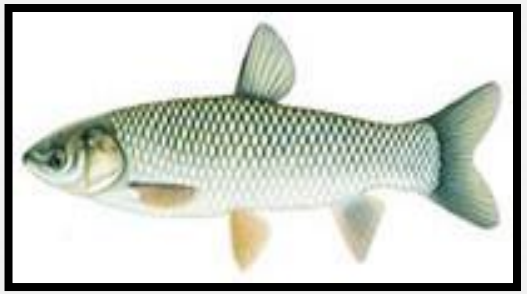
ODNR Division of Wildlife
John Navarro
Aquatic Stewardship Program Administrator

- Canals and Waterways
- Grass Carp Barrier
- Pet Trade



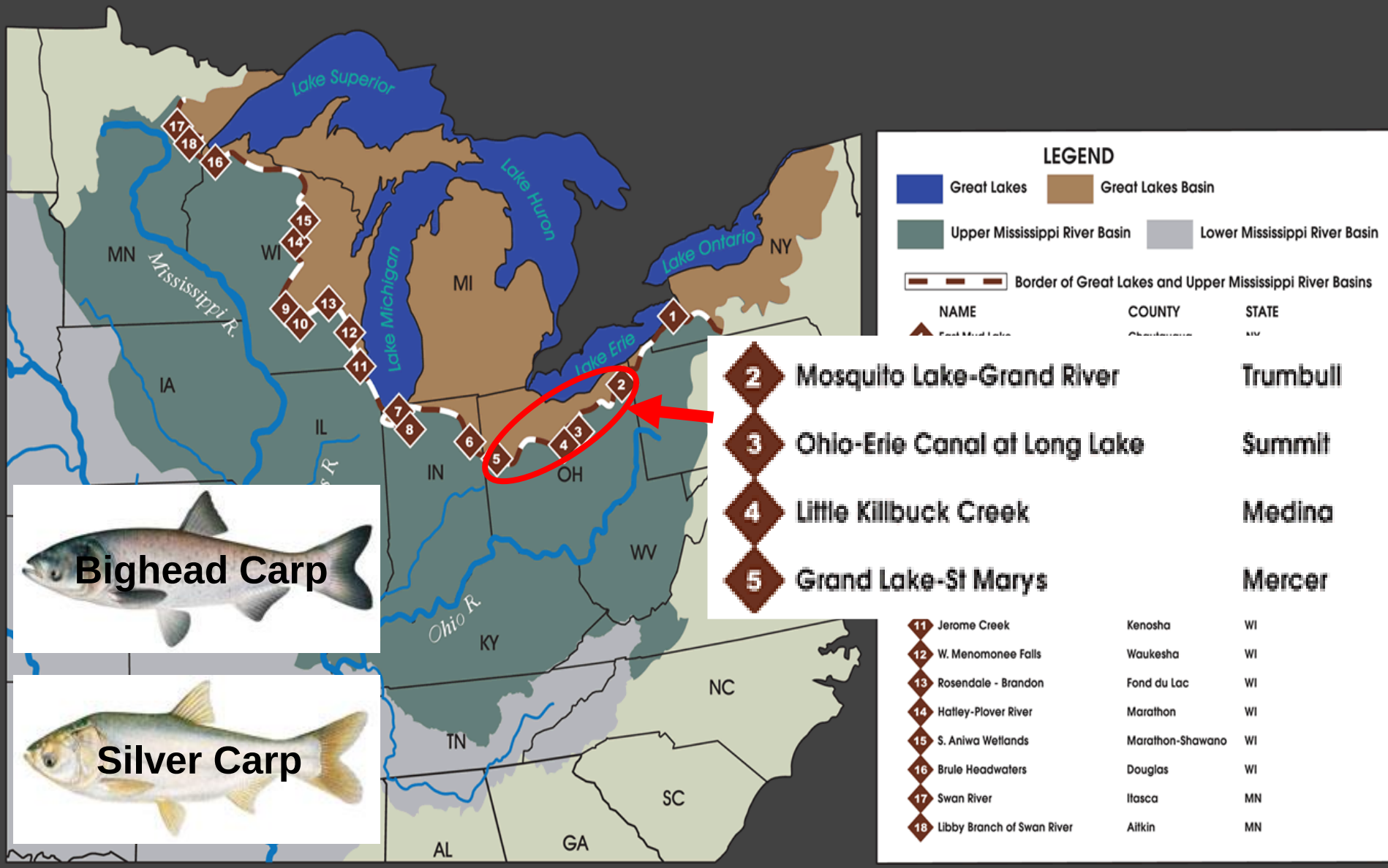


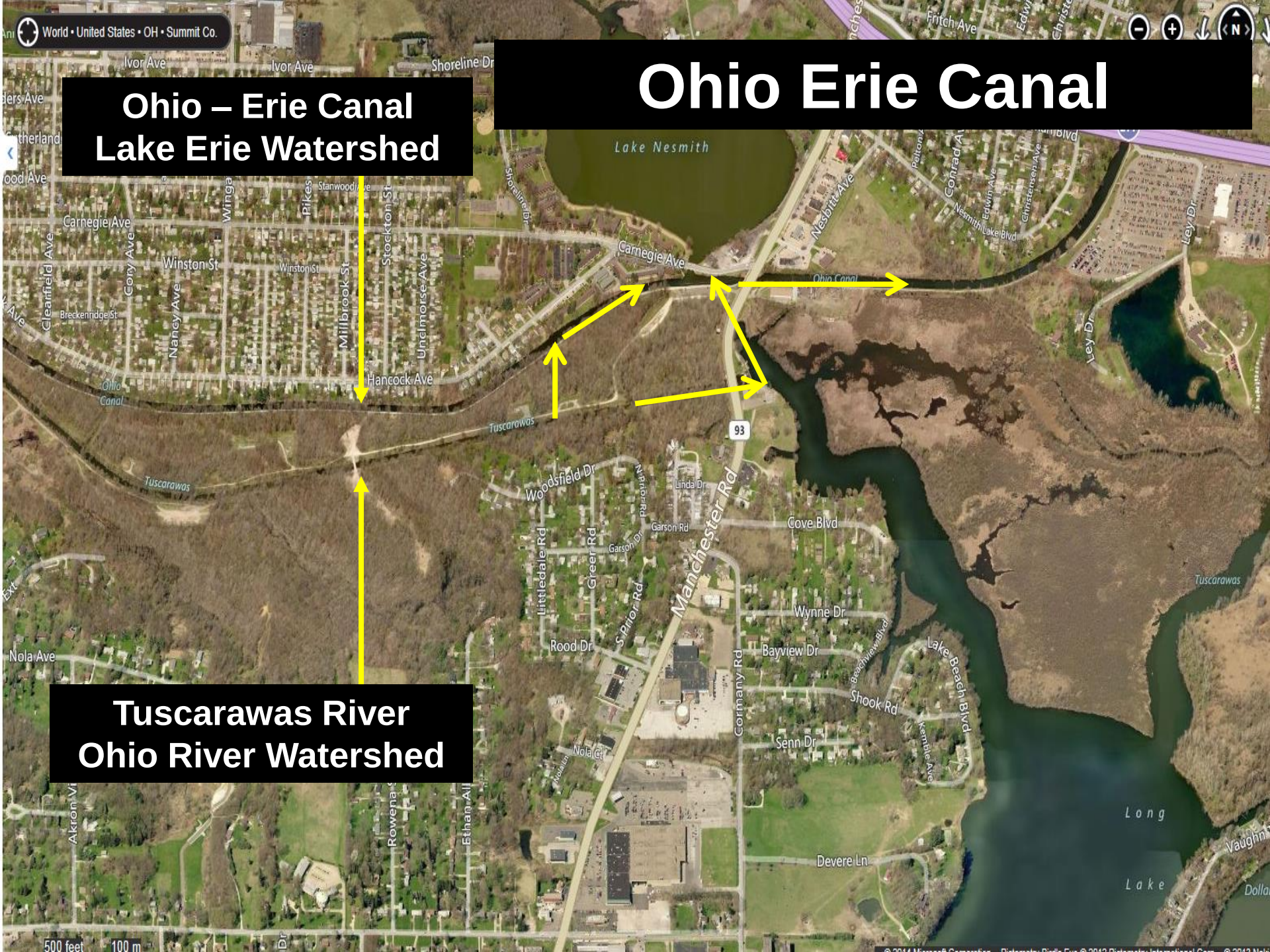




OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE

Canals and Waterways




Ohio Erie Canal
Ohio – Erie Canal
Lake Erie Watershed
Tuscarawas River
Ohio River Watershed
Lake Nesmith
Carnegie Ave
Winston St
Hancock Ave
Ohio Canal
Tuscarawas
Manchester Rd
93
Cove Blvd
Wynne Dr
Bayview Dr
Shook Rd
Senn Dr
Devere Ln
Long
Lake
Ivor Ave
Shoreline Dr
Fritch Ave
Nesbitt Ave
Millbrook St
Stockton St
Cleanfield Ave
Nancy Ave
Cory Ave
Breckenridge St
Woodsfield Dr
Linda Dr
Garson Rd
Greer Rd
Littledale Rd
S Prior Rd
Rood Dr
Cormany Rd
Lake Beach Blvd
Nola Ave
500 feet
100 m

Little Killbuck Creek

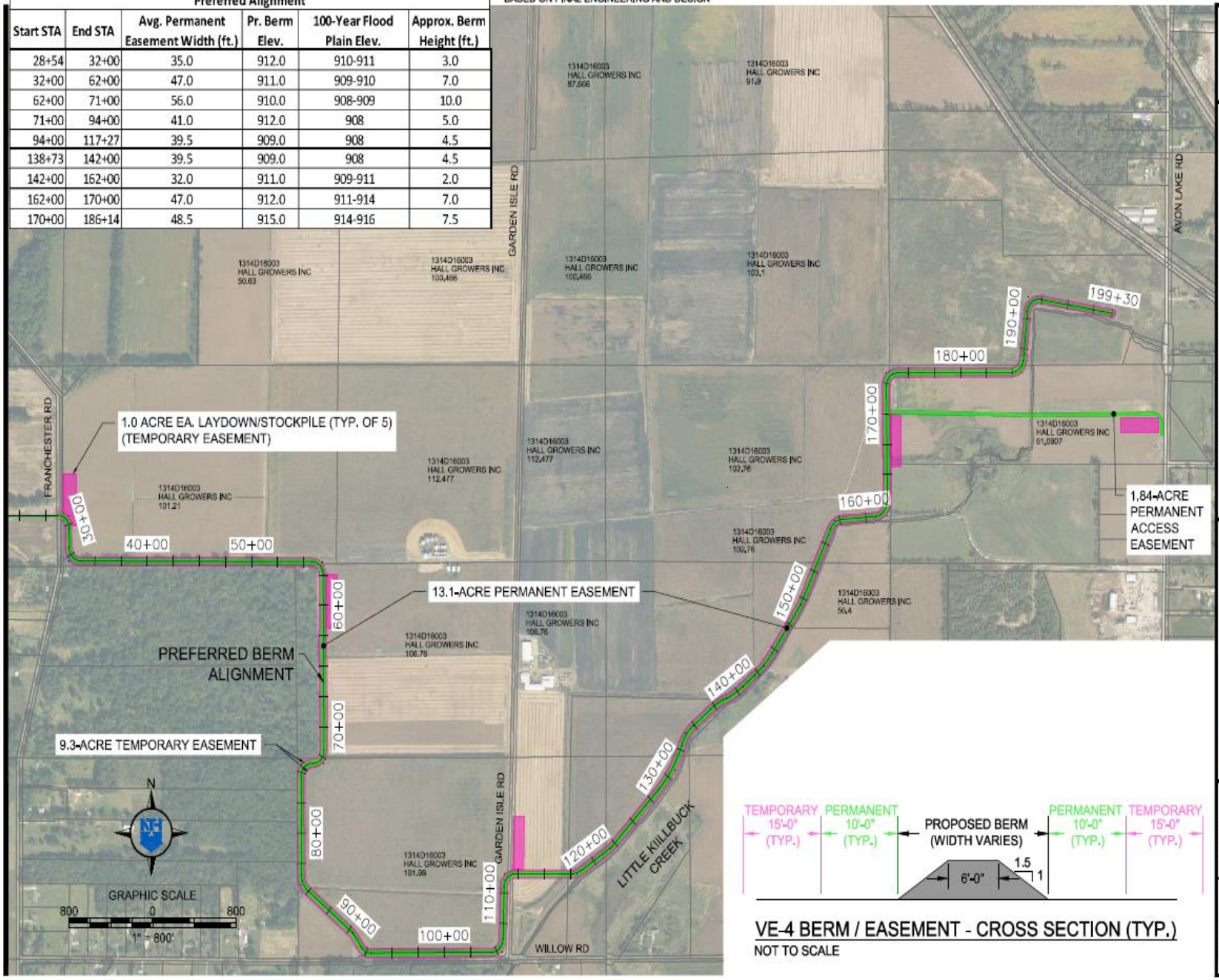
Lake Erie Watershed

The Connection

Ohio River Watershed

NOTE:
BERM HEIGHTS ARE PRELIMINARY AND SUBJECT TO CHANGE
BASED ON FINAL ENGINEERING AND DESIGN

Preferred Alignment					
Start STA	End STA	Avg. Permanent Easement Width (ft.)	Pr. Berm Elev.	100-Year Flood Plain Elev.	Approx. Berm Height (ft.)
28+54	32+00	35.0	912.0	910-911	3.0
32+00	62+00	47.0	911.0	909-910	7.0
62+00	71+00	56.0	910.0	908-909	10.0
71+00	94+00	41.0	912.0	908	5.0
94+00	117+27	39.5	909.0	908	4.5
138+73	142+00	39.5	909.0	908	4.5
142+00	162+00	32.0	911.0	909-911	2.0
162+00	170+00	47.0	912.0	911-914	7.0
170+00	186+14	48.5	915.0	914-916	7.5



VE-4 BERM / EASEMENT - CROSS SECTION (TYP.)
NOT TO SCALE

PRELIMINARY PROPOSED EASEMENTS
HALL GROWERS, INC. (1314D16003)
LITTLE KILLBUCK CREEK INVASIVE SPECIES CLOSURE
MEDINA COUNTY, OHIO

FIGURE No. ES3

NTH Consultants, Ltd.
Infrastructure Engineering and Environmental Services

NTH PROJECT No.: 73-160141	CAD FILE NAME: EASEMENTS		
DESIGNED BY: PEN	INCSP DATE: MAR 2018		
DRAWN BY: JBB	DRAWING SCALE: AS SHOWN		
CHECKED BY: DRL	PLOT DATE: 4/5/2021		

Ohio Erie Canal:

- 3 Million Dollar Project
- Completed Construction in 2020
- ODNR Long-Term Maintenance

US Army Corps of Engineers®
Buffalo District
BUILDING STRONG®

Little Killbuck Creek

- Project Cost Based on Final Design
- Landowner negotiation / acquisition
- Final design
- Construction
- Closure in 2025

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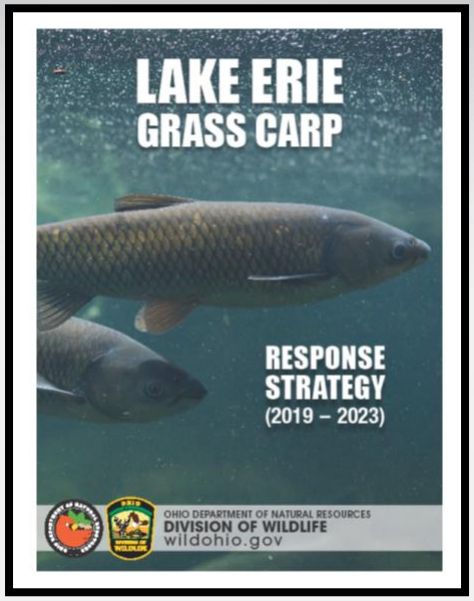
DIVISION OF WILDLIFE

Pathway Progress:

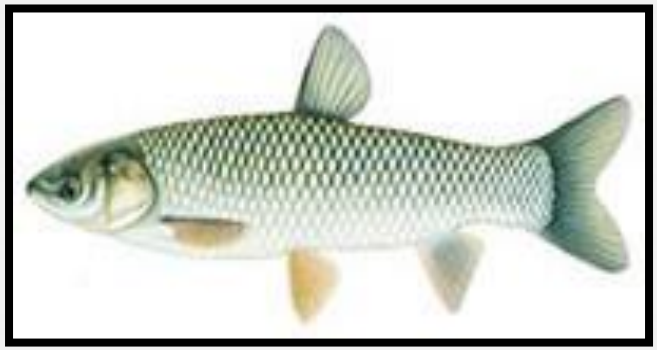
Ohio Hydrologic Separations



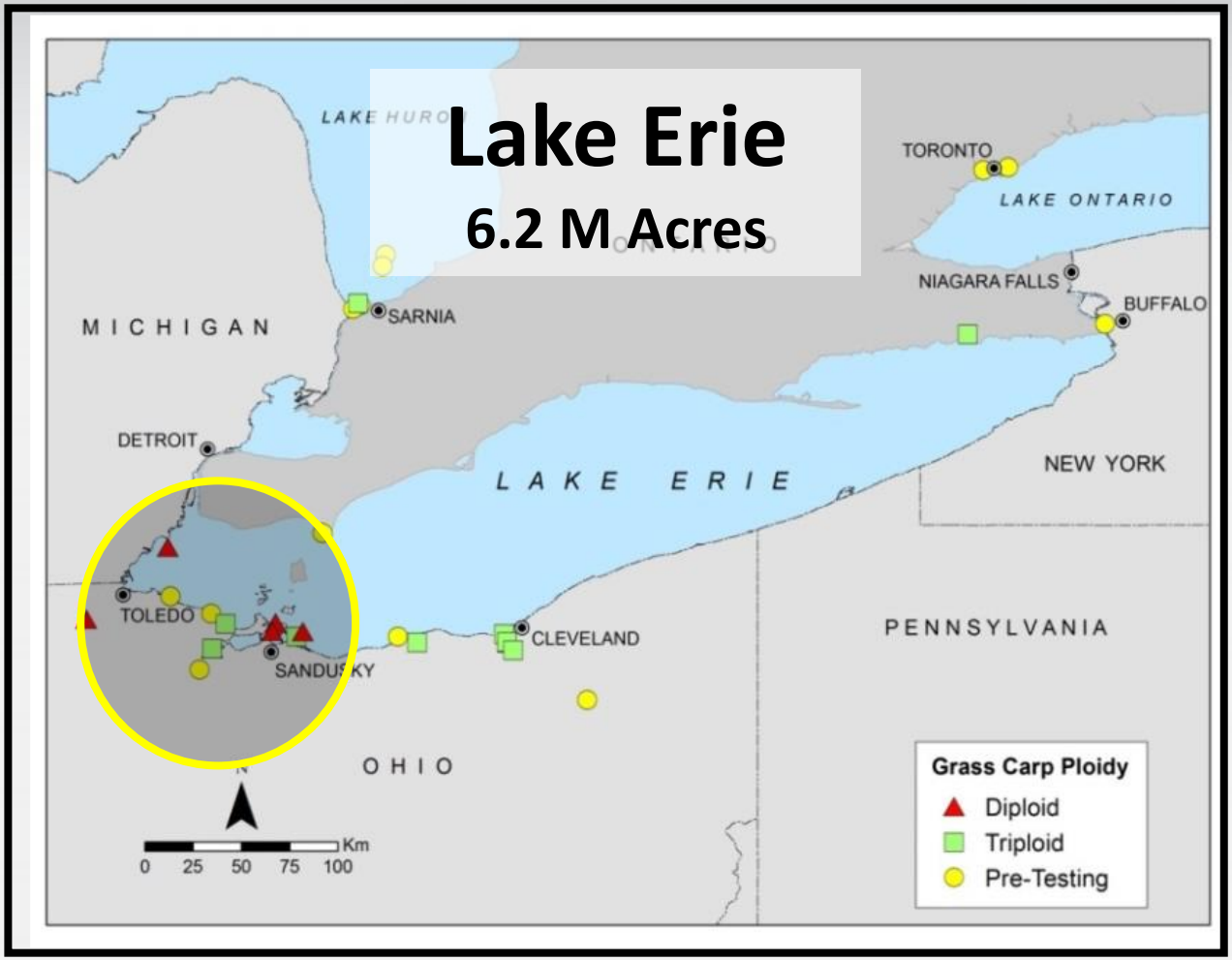
Grass Carp

***Goal 1*: Prevented Expansion Beyond Western Basin of Lake Erie**

***Goal 2*: Prevent Population from reaching levels that compromise aquatic communities.**

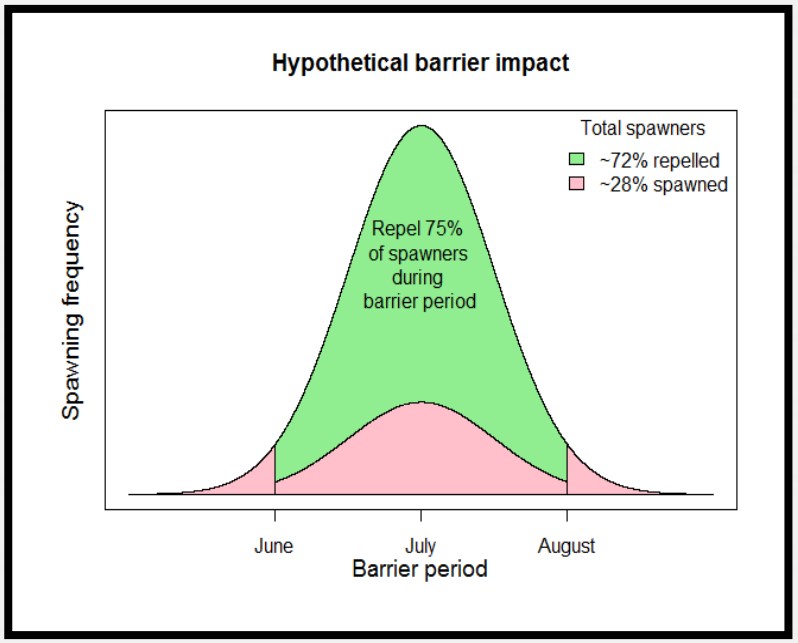


- **Removal – 390**
- **Behavioral Barrier**


Lake Erie
6.2 M Acres
LAKE HURON
TORONTO
LAKE ONTARIO
NIAGARA FALLS
BUFFALO
MICHIGAN
SARNIA
DETROIT
LAKE ERIE
NEW YORK
TOLEDO
CLEVELAND
SANDUSKY
PENNSYLVANIA
OHIO
Grass Carp Ploidy
Diploid
Triploid
Pre-Testing
N
0 25 50 75 100
Km

Barrier Evaluations

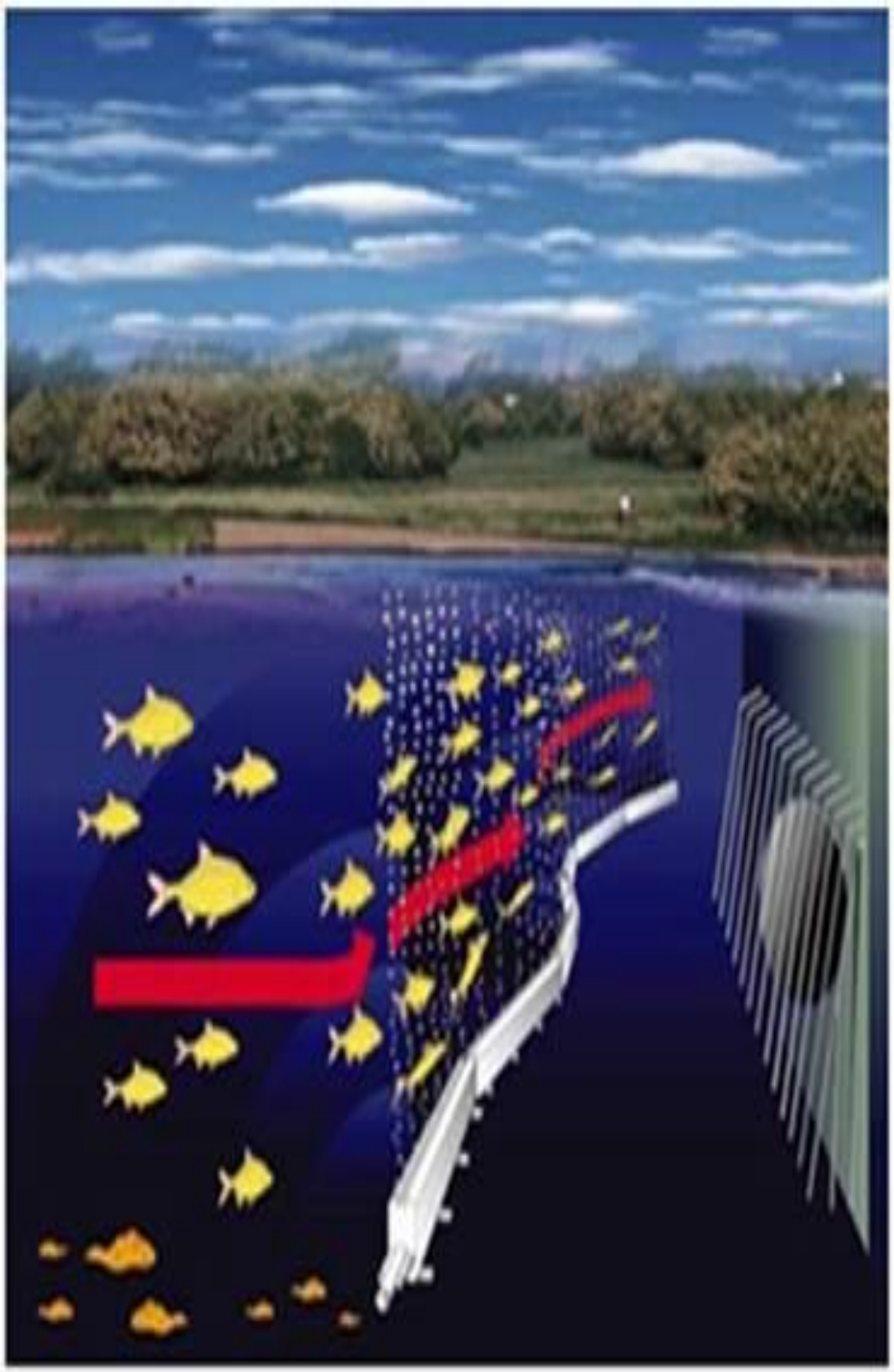
- **<u>Goal:</u> Reduce the reproductive potential to amplify the effects of removal and other possible control technologies.**

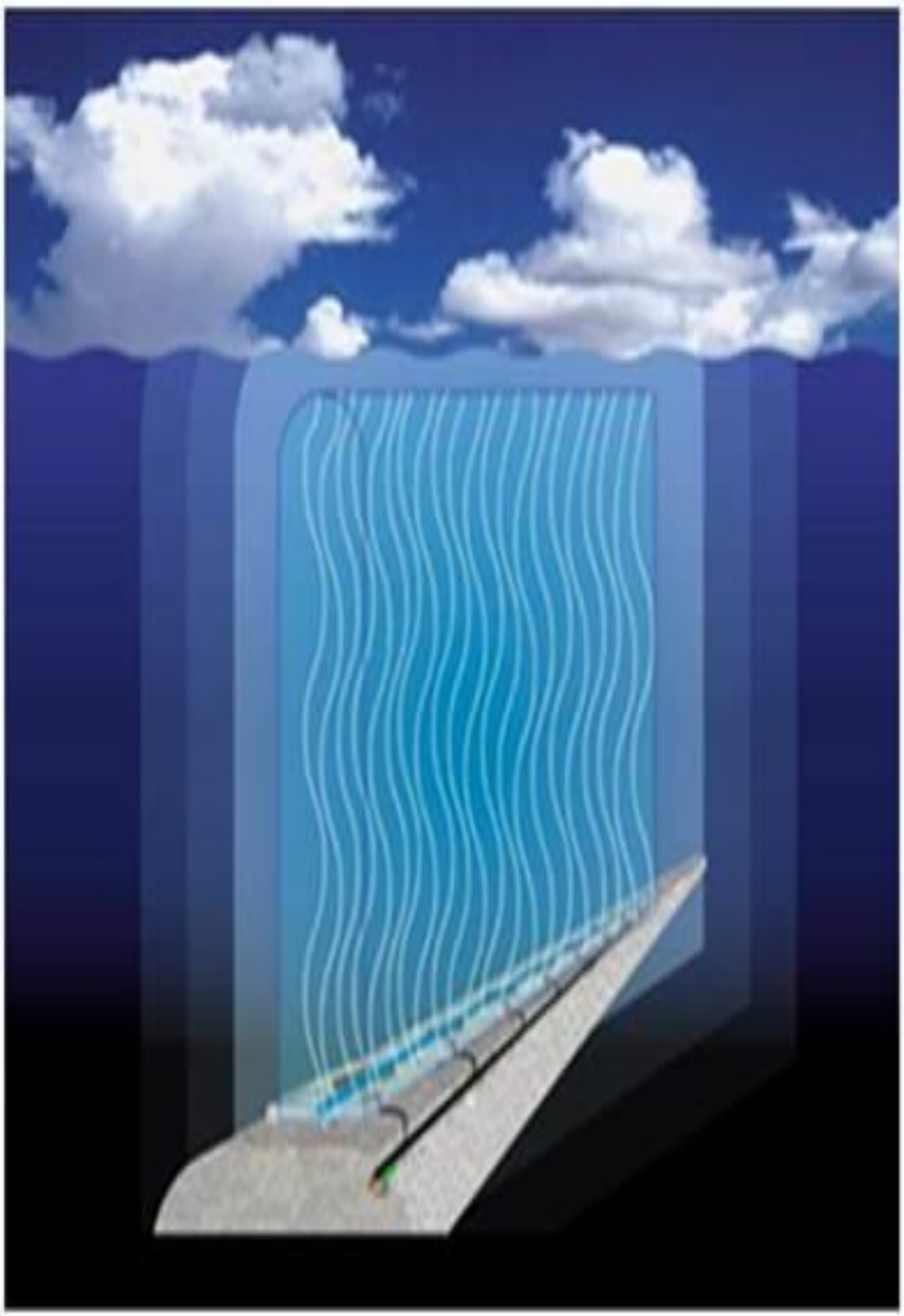


Barrier Type:

- **Acoustic**
- **Light**
- **Air Bubble**


PROPOSED BEHAVIORAL BARRIER LAYOUT
11/10/2020
Adam St
531
529
525
North St
Sand St
Existing
Boat Ramp
FLOW
Existing
Boat Ramp
Primary Behavioral Barrier Section
Approx. 500ft Length
Propsed Trapping Area
Secondary Behavioral Barrier Section
Approx. 150ft Length
Optional Trapping Area
Optional Barrier Section
(Behavioral or Net Barrier)
Approx. 150ft Length
2nd St
Kentucky
Bradys Island





Marbled Crayfish

Injurious Aquatic Invasive Species

Marbled Crayfish (Procambarus virginalis)

- Spread of the marbled crayfish through the pet trade increases the probability of it being released into natural ecosystems, harming native wildlife.
- It is the only known decapod crustacean species to reproduce through parthenogenesis, and therefore, all individuals are female and only one is needed to establish a new population.

Marbled Crayfish

- Two Cases Pending
- Ebay Transactions
- 96 Transactions
- 2 years Period
- 31 States

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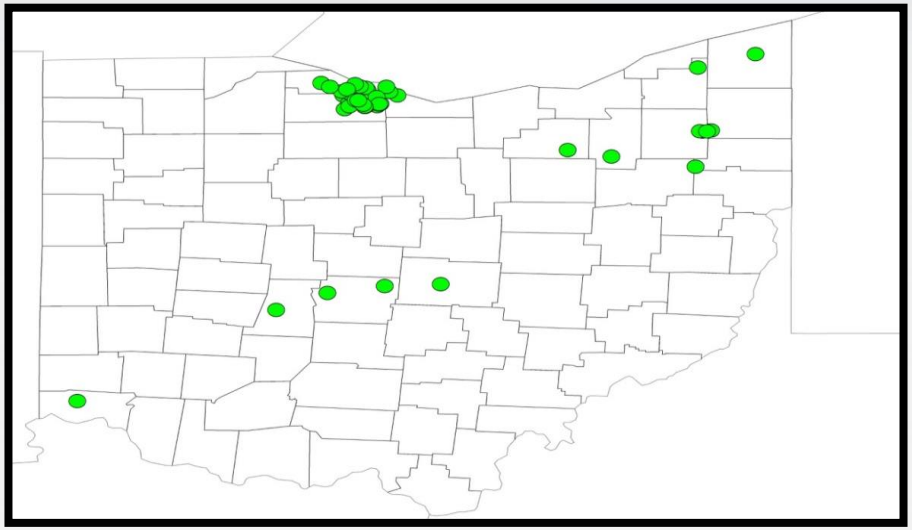
Redswamp Crayfish



- **Main invasion: Lake Erie – Sandusky Bay**
- **Winous Point Shooting Club - Epicenter**
- **Present for approximately 50 years**
- **Throughout SB and along coast (750 km2)**

What We Know

- Widespread, established, and abundant
- Prefer soils with high organic content
- Low gradient ditches are a dispersal route
- Six other burrowing crayfish encountered
- Out competing other burrowing crayfish

Butler County MetroParks