

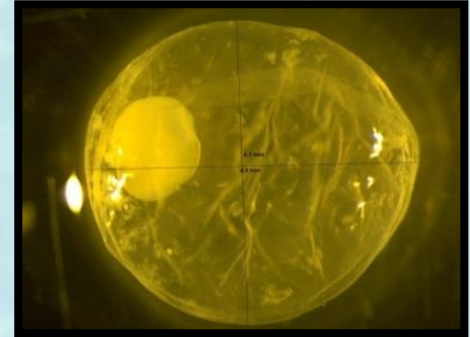
Ohio's Grass Carp Response



Grass Carp Focus Area



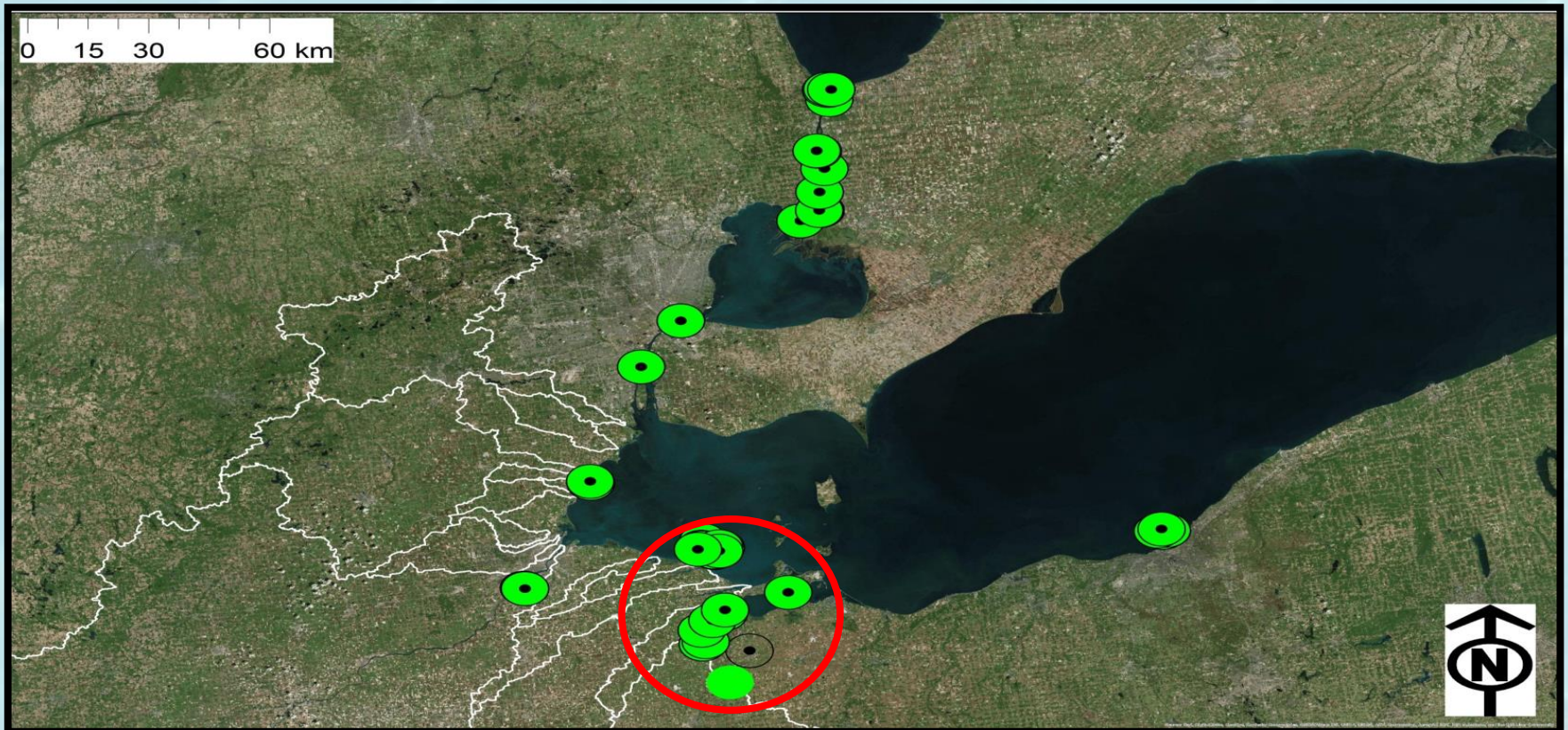
Addressing the Knowledge Gaps



- **Ploidy analysis: fertile vs. sterile**
- **Commercial fishermen: removal**
- **Egg/Larvae sampling: early life history**
- **Telemetry: seasonal movements**
- **Modeling: spawning and hatching locations**
- **Vegetation mapping: food availability/impact**

Grass Carp Detections in 2017

1. Identify tributary use
2. Aggregations
3. Inter-basin movements



2018 Targeted Response

- **Locations were informed by telemetry**
- **Timing overlapped with suitable spawning conditions**
- **Increased capacity through Mutual Aid Agreement for AIS Response**



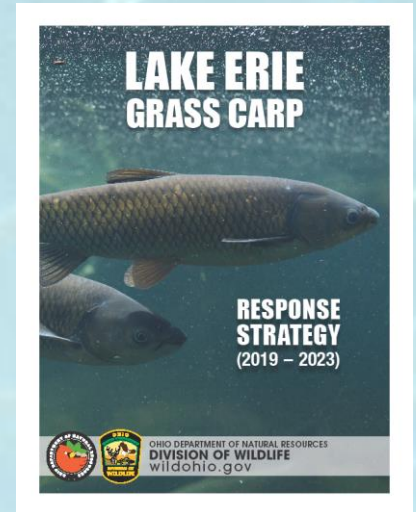
2018 Targeted Response

- High effort and participation
 - 63.7hrs TN; 70.5hrs EF
 - 71 people
- Tandem electrofishing best
- 30 Grass Carp captured
 - 27 Sandusky
 - 3 Maumee
- 75% of Grass Carp removed
- Future - targeted removal



Ohio's 5-Year Response Strategy

Prevent diploid Grass Carp from becoming further established in the Lake Erie basin and as the science develops, eradicate them from Lake Erie.



Outcome 1: Prevent Further Introduction / Expansion

- **Objective 1.1 – Secure Supply Chain**
- **Objective 1.2 – Insure Secure Bait Trade**
- **Objective 1.3 – Close Knowledge Gaps / Understand Life History**

Outcome 2: Manage Grass Carp Populations

- **Objective 2.1 – Removal & Prevention**
- **Objective 2.2 – Engage Commercial Netters**
- **Objective 2.3 – Evaluate Use of Innovative Control Technologies**

Moving Forward

- **Grass Carp Removal Program**
- **Ramp up real-time tracking**
- **University of Toledo and MSU**
- **Barrier Assessment**

