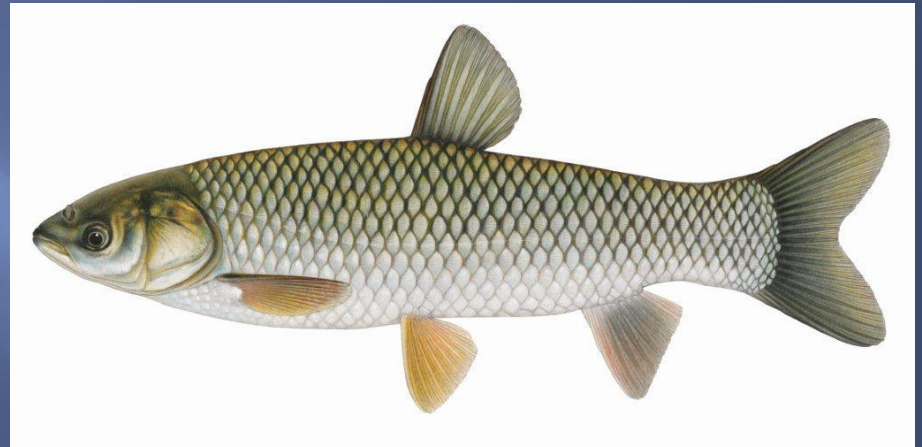


Sandusky River Grass Carp Planned Action

To Conserve and
improve Fish and
Wildlife resources and
their Habitats for
sustainable use and
appreciation by all



John Navarro
Aquatic Invasive Species Program Administrator



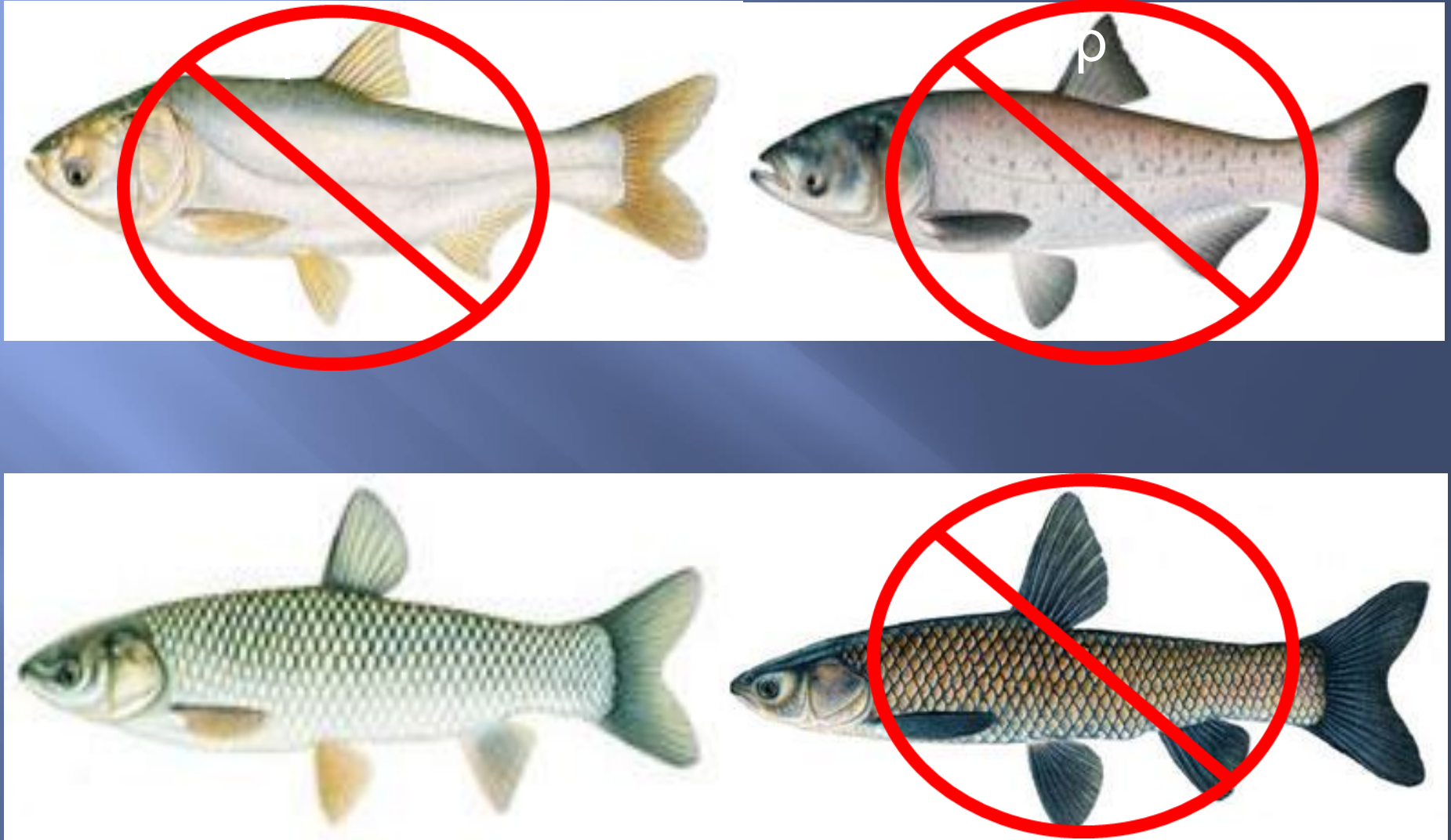
“Asian carp reproducing in Sandusky River and still nothing done”

“~~Asian~~ Grass carp reproducing in Sandusky River and a unified effort underway to address the problem ~~still nothing done~~”

Need to Communicate the Three E's

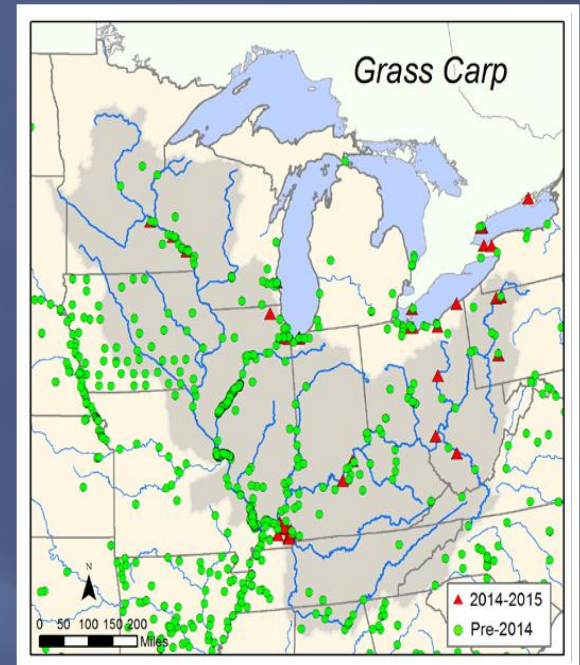
- Established
- Eradication
- Expectations

Invasive Carps

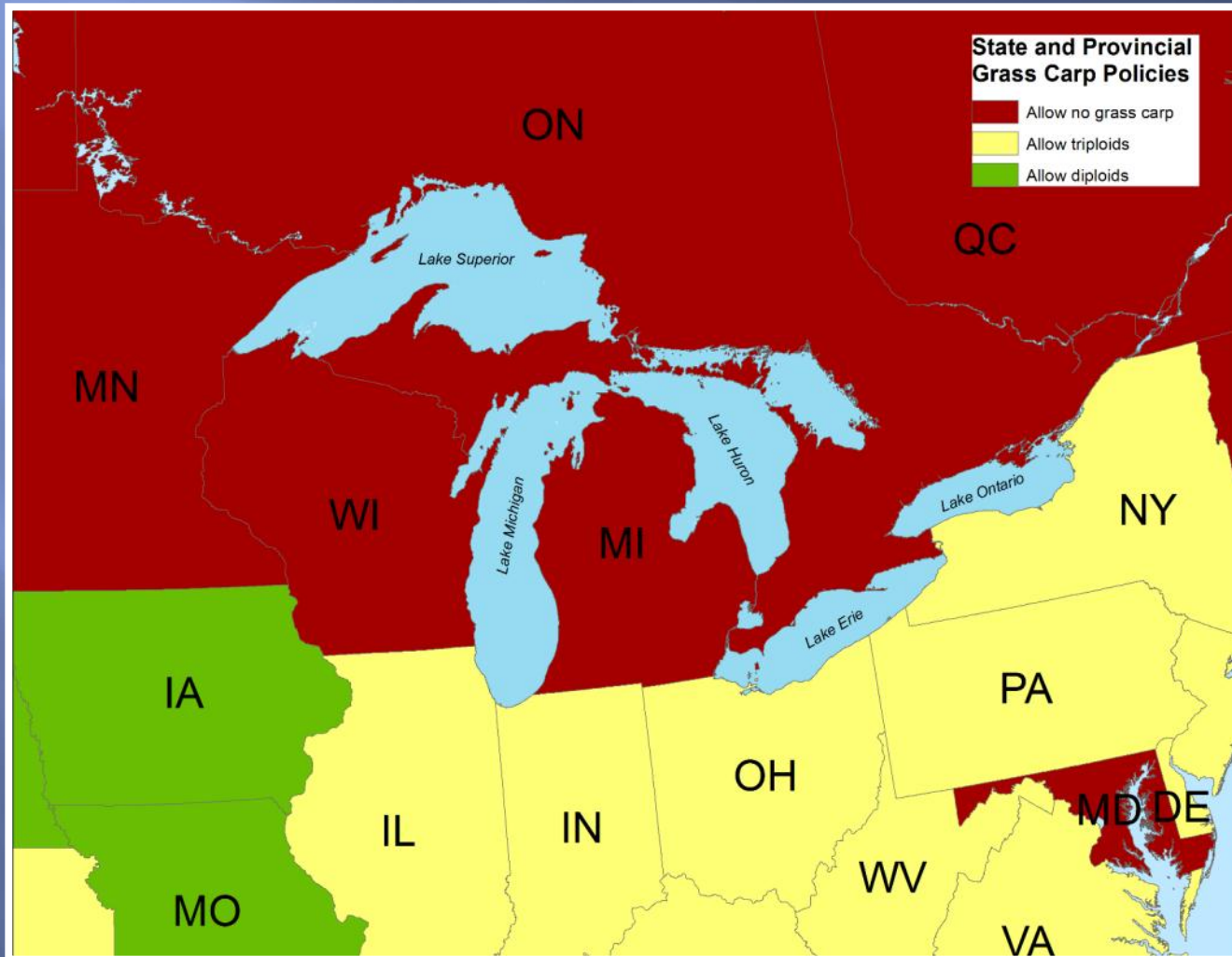


Grass Carp in the Great Lakes

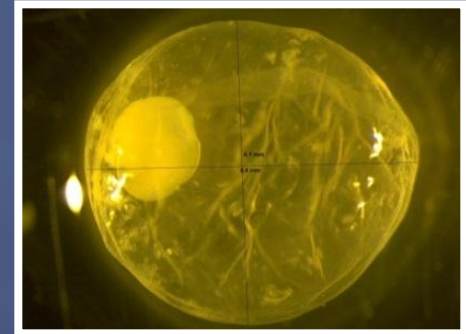
- Originally brought to U.S. in 1963 for biocontrol
- First detected in Lake Erie in 1980s
- Regulations in place to mitigate risk of spread
 - State regulations vary
 - Active enforcement



Grass Carp Regulations in the Great Lakes

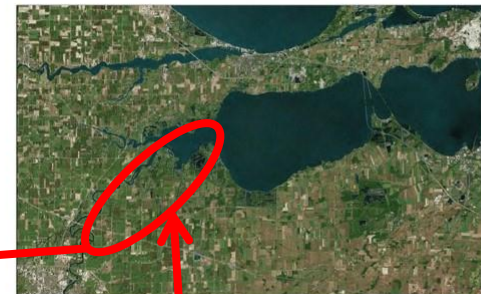
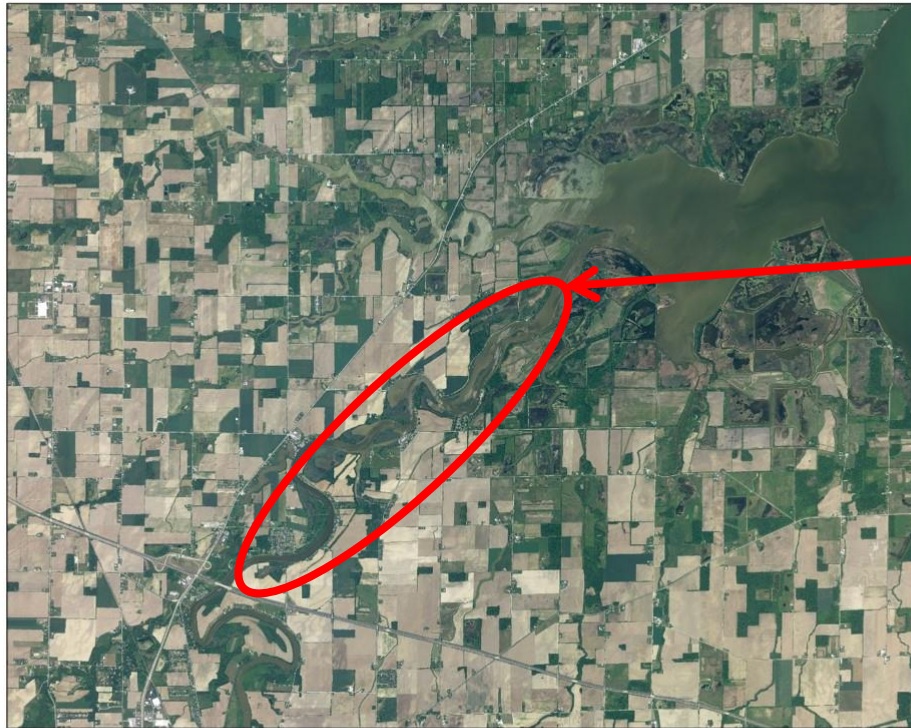


Addressing the Knowledge Gaps



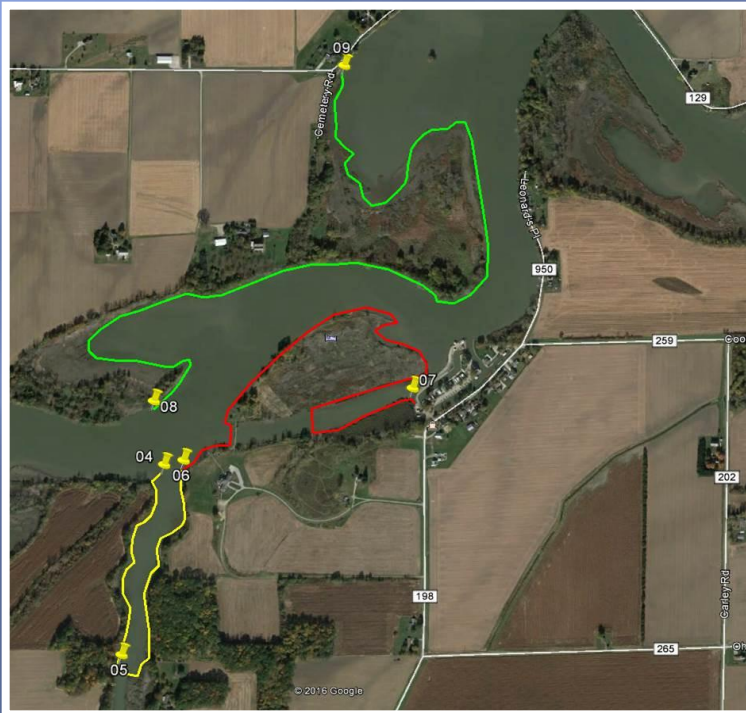
- **Ploidy analysis: fertile vs. sterile**
- **Commercial fishermen: removal**
- **Egg/Larvae sampling: early life history**
- **Telemetry: seasonal movements**
- **Modeling: spawning and hatching locations**
- **Vegetation mapping: food availability/impact**

Sandusky River and Sandusky Bay



Planned Action

Goal: Use a collaborative multi-agency approach in 2017 to refine sampling methodologies in preparation for large-scale effort in 2018



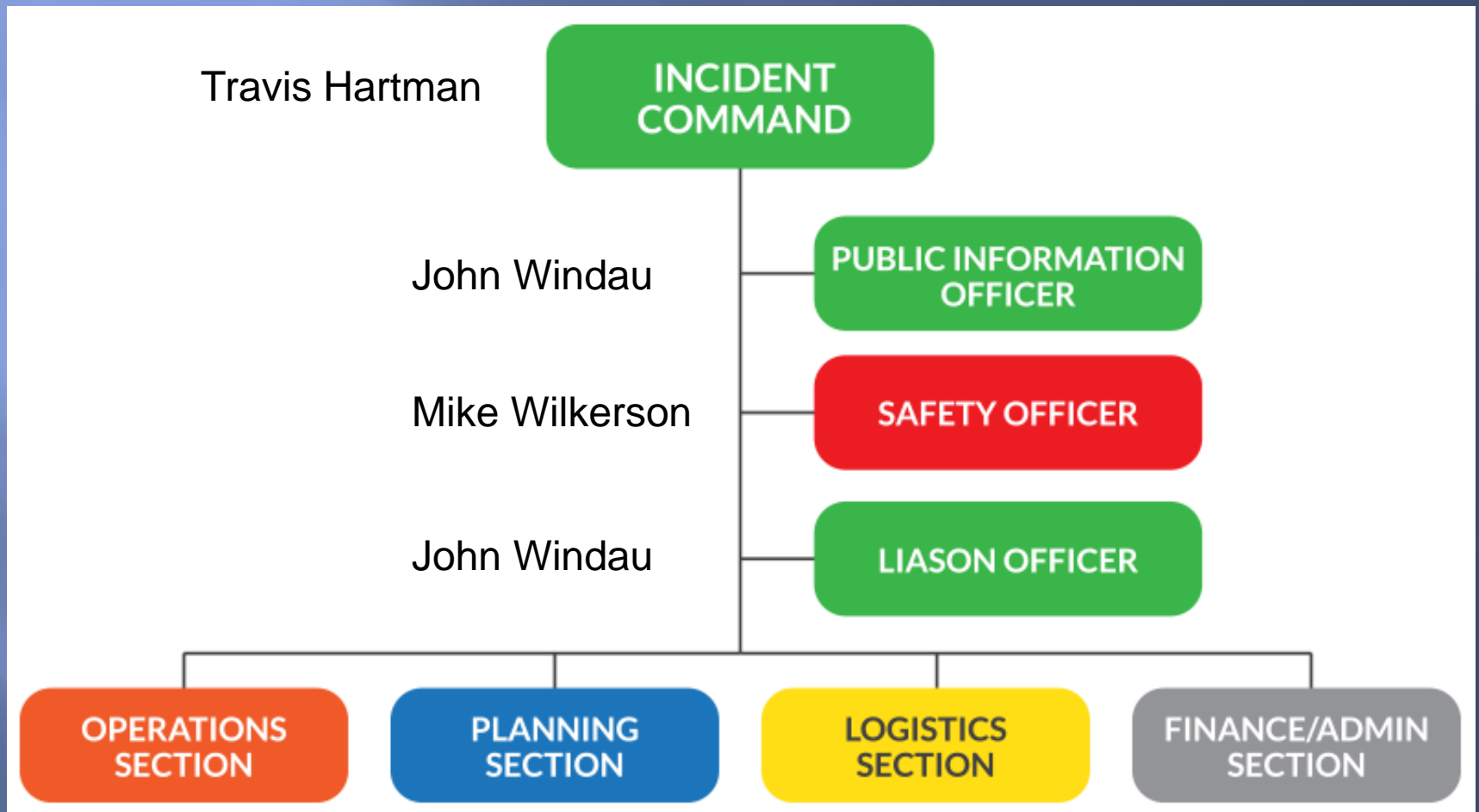
- Evaluate various gears
- Increase proficiency
- Work collaboratively
- Determine demographics.

Mutual Aid Agreement

Basis for Action: The parties shall consider actions when there are opportunities to prevent or address serious threats from AIS



Incident Command System - Light



Eric Weimer

Eric Weimer

Eric Weimer

John Navarro

The Partnership



- **Forty-three individuals from 7 organizations**
- **Field effort was on August 29-30**
- **Coincided with USFWS netting - Sandusky Bay**
- **USGS provided ploidy testing support**
- **Six mini fyke nets set in the Sandusky River**
- **Six electrofishing and three netting vessels**

The Effort



- Three combined gear methods tested:
 1. Electrofishing - trammel net enclosures
 2. Electrofishing - gill net enclosure
 3. Electrofishing - gill nets as block nets
- 26 hours of electrofishing effort
- 20 hours of gill net effort
- 14 hours of trammel net effort
- 96 hours of mini fyke net effort

The Results

- DFO Methodology Best (EF and TN)
- Eight Grass Carp Collected
- All Diploid
- Length (672 mm – 1,043mm)



Field Lessons Learned

- ICS structure worked well
- Coordination among crews was great
- Crews learned about the river system and what gears and techniques worked best
- Important when considering the buy-in from staff



Future Actions

Grass Carp numbers are low but at more than incidental levels which reinforces the importance of continued control/manage/eradicate efforts.

- **This action will inform the nature of the 2018 action.**
- **Finalize goal/vision for the 2018 action.**
- **Link the 2018 action into the SDM process.**

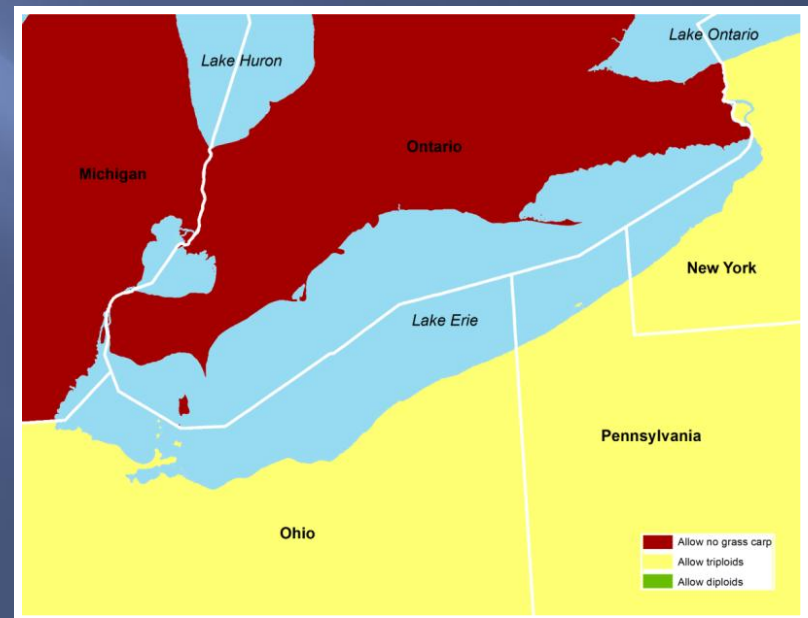


Lake Erie Fisheries Management

A Joint Strategic Plan for Management of Great Lakes Fisheries

Lake Erie Committee

- Michigan
- Ontario
- Ohio
- Pennsylvania
- New York



What We Will Do in the Future

- **We will** continue to gain knowledge
- **We will** evaluate potential to control Grass Carp at specific locations using sound science



**Ensure that the
Incident
Command
Center is Well
Hydrated**

