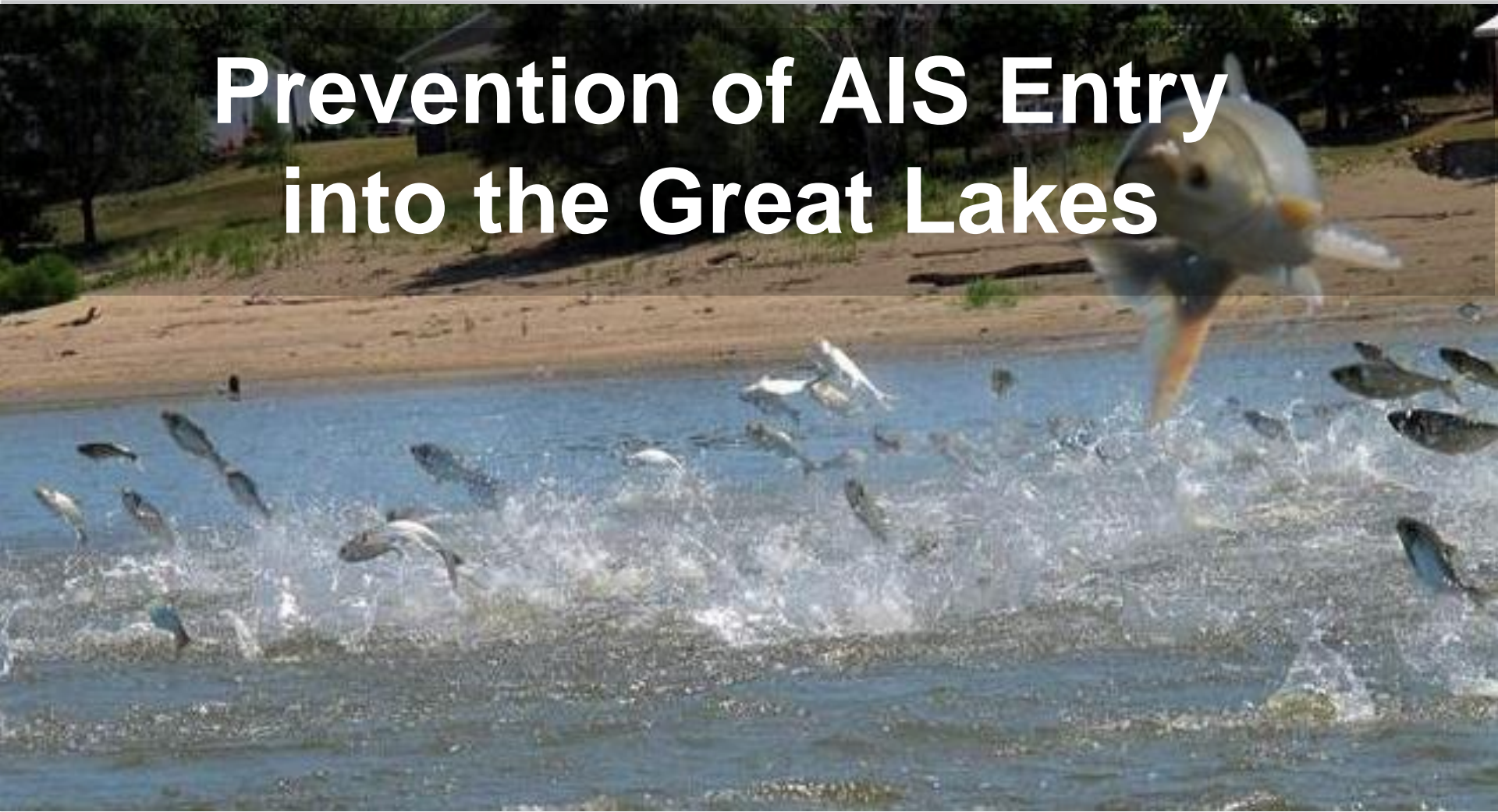


# Prevention of AIS Entry into the Great Lakes



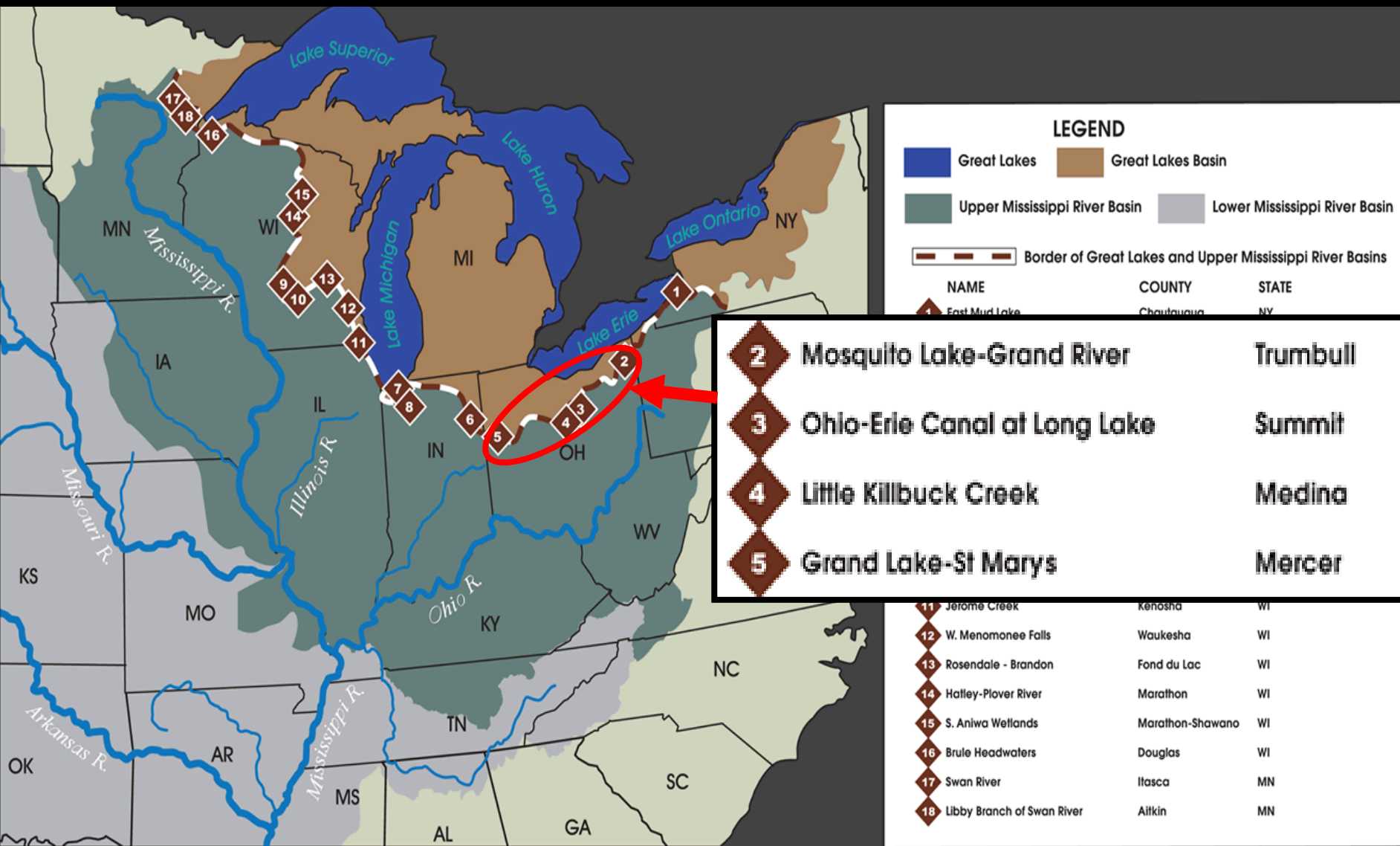
***ODNR Division of Wildlife***

*John Navarro*

*Aquatic Stewardship Program Administrator*



# Great Lakes Mississippi River Interbasin Study (GLMRIS)



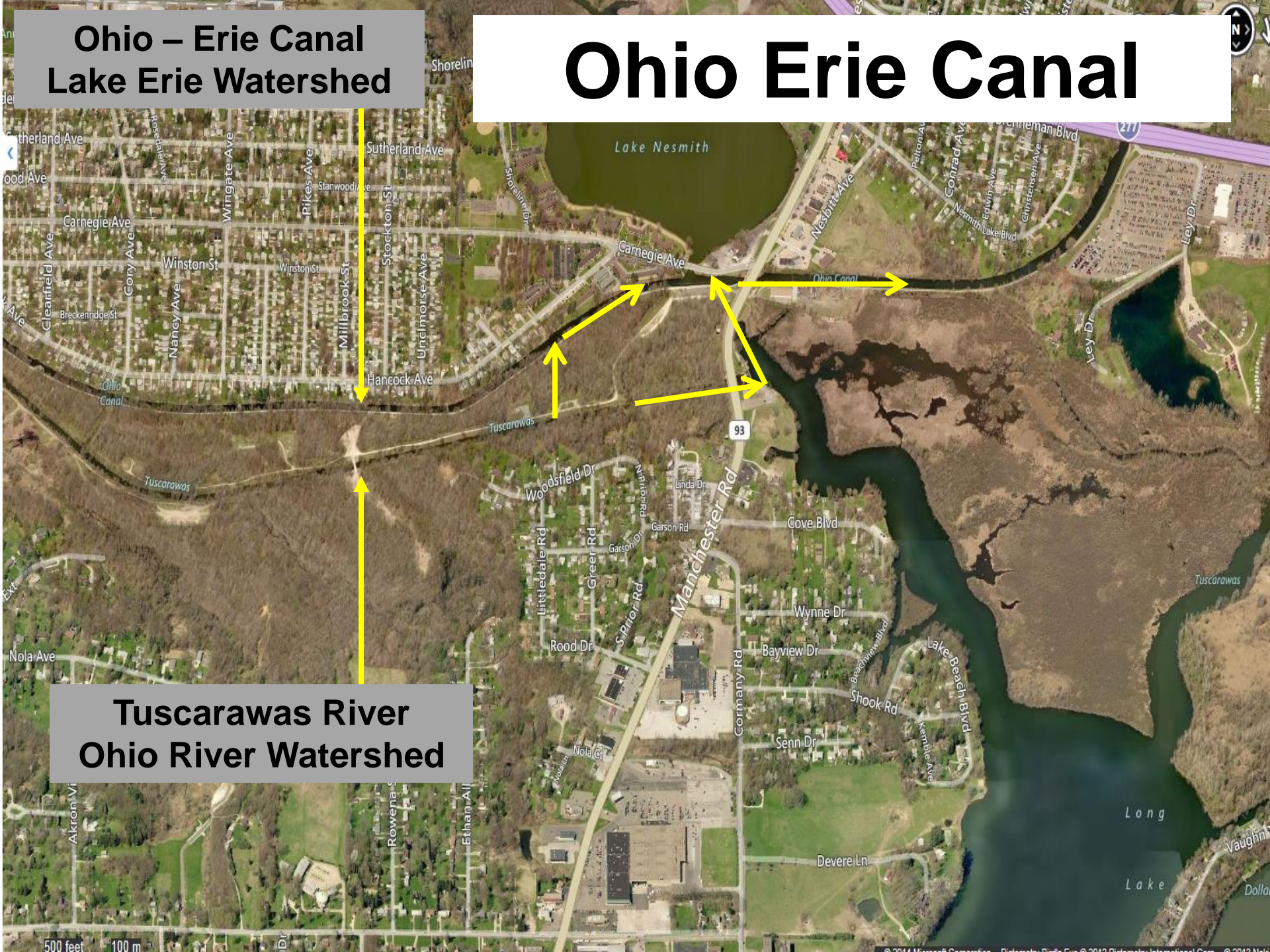
# Mosquito Creek Lake



**Ohio – Erie Canal  
Lake Erie Watershed**

# Ohio Erie Canal

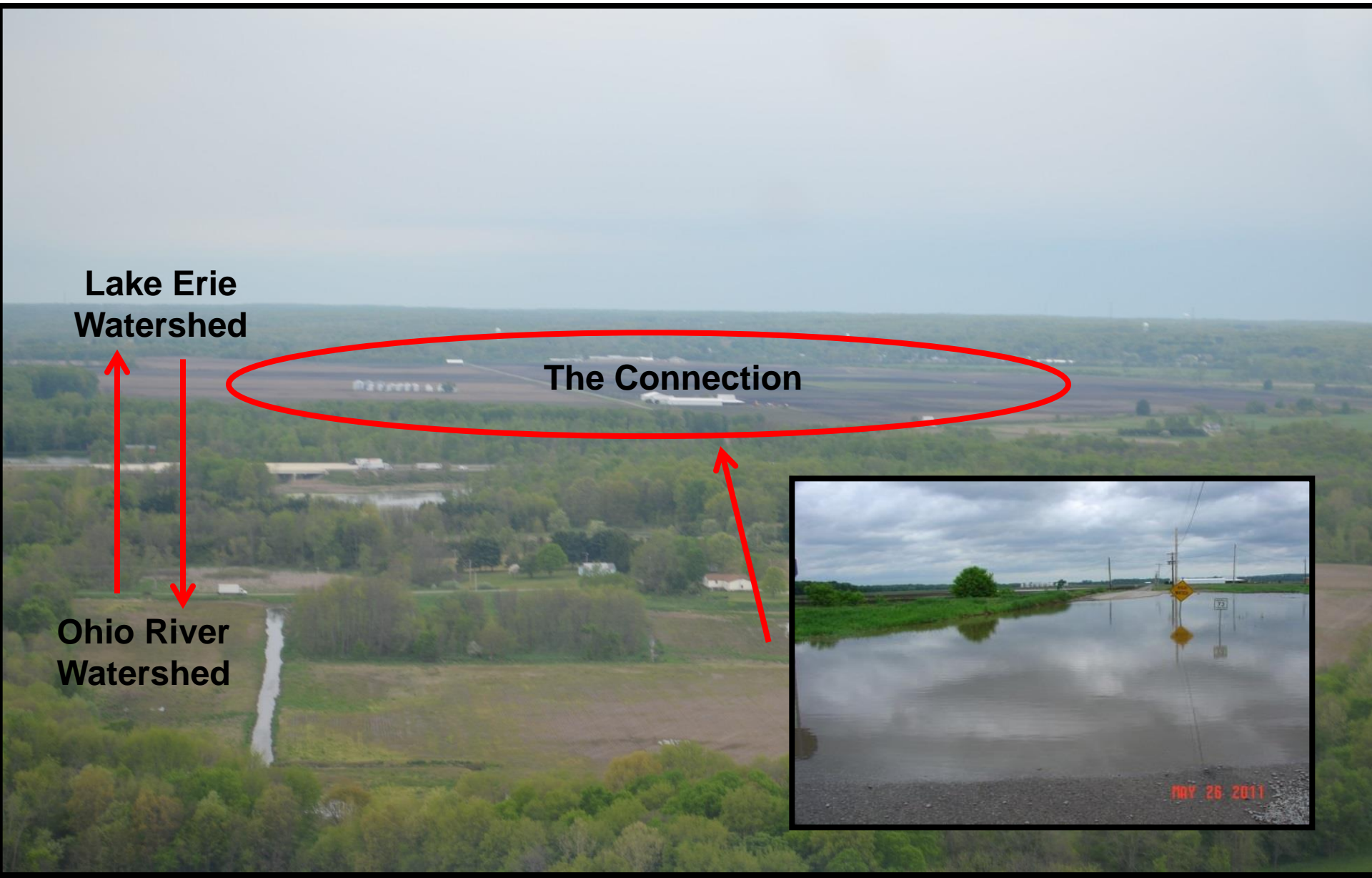
**Tuscarawas River  
Ohio River Watershed**



# Bundle of Deterrents



# Little Killbuck Creek



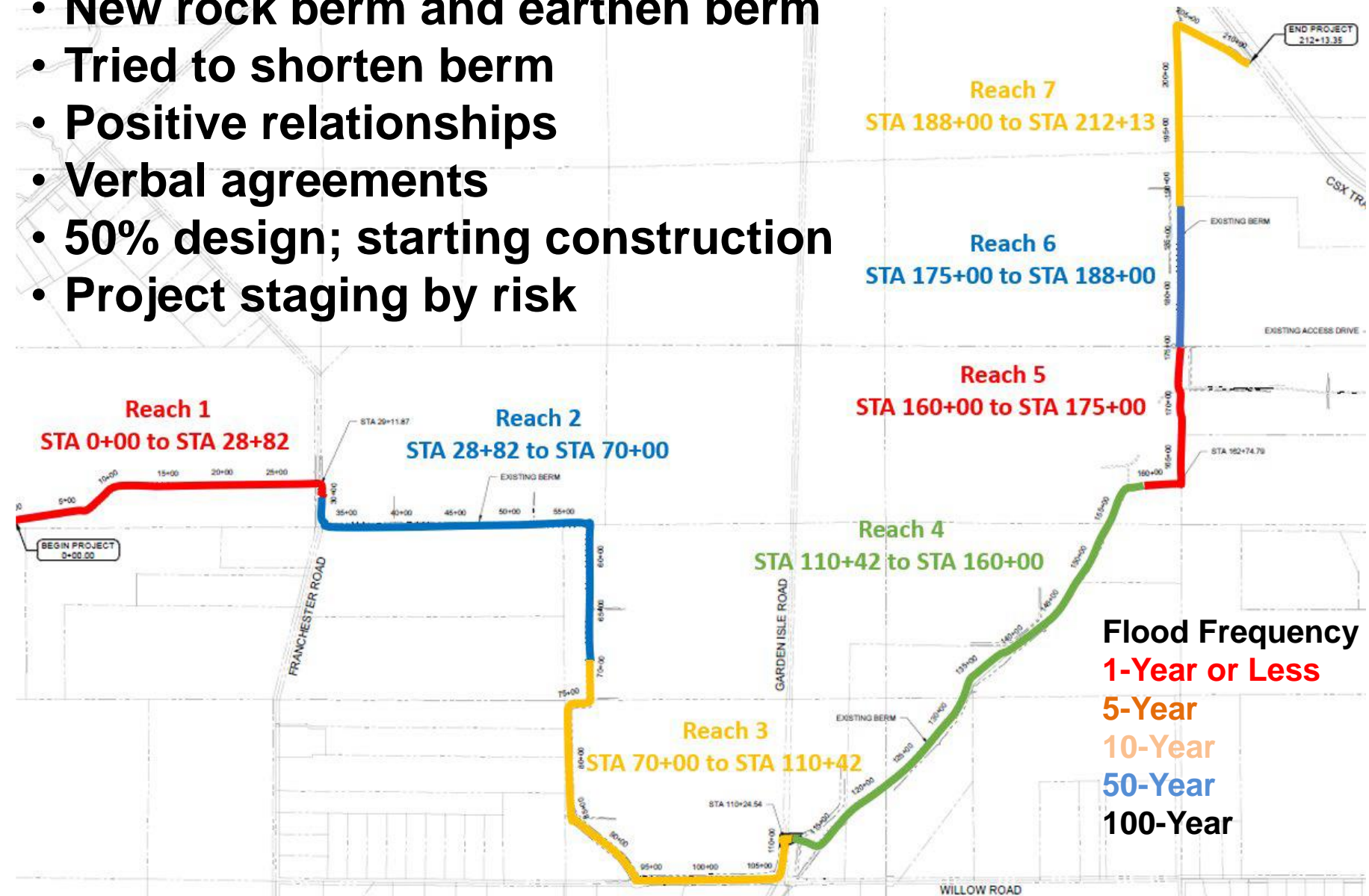
**Lake Erie  
Watershed**

**The Connection**

**Ohio River  
Watershed**



- Started project in 2010
- Down to two landowners
- New rock berm and earthen berm
- Tried to shorten berm
- Positive relationships
- Verbal agreements
- 50% design; starting construction
- Project staging by risk



# Phase I



New Rock Berm



Raise Road



**Reach 2**  
STA 28+82 to STA 70+00  
\$3,184,000

**Reach 7**  
STA 188+00 to STA 212+13  
\$898,000

**Reach 6**  
STA 175+00 to STA 188+00  
\$3,513,000

**Reach 5**  
STA 160+00 to STA 175+00  
\$2,340,000

**Reach 4**  
STA 110+42 to STA 160+00  
\$2,357,000

**Reach 3**  
STA 70+00 to STA 110+42  
\$5,303,000

**Flood Frequency**  
**1-Year or Less**  
**5-Year**  
**10-Year**  
**50-Year**  
**100-Year**

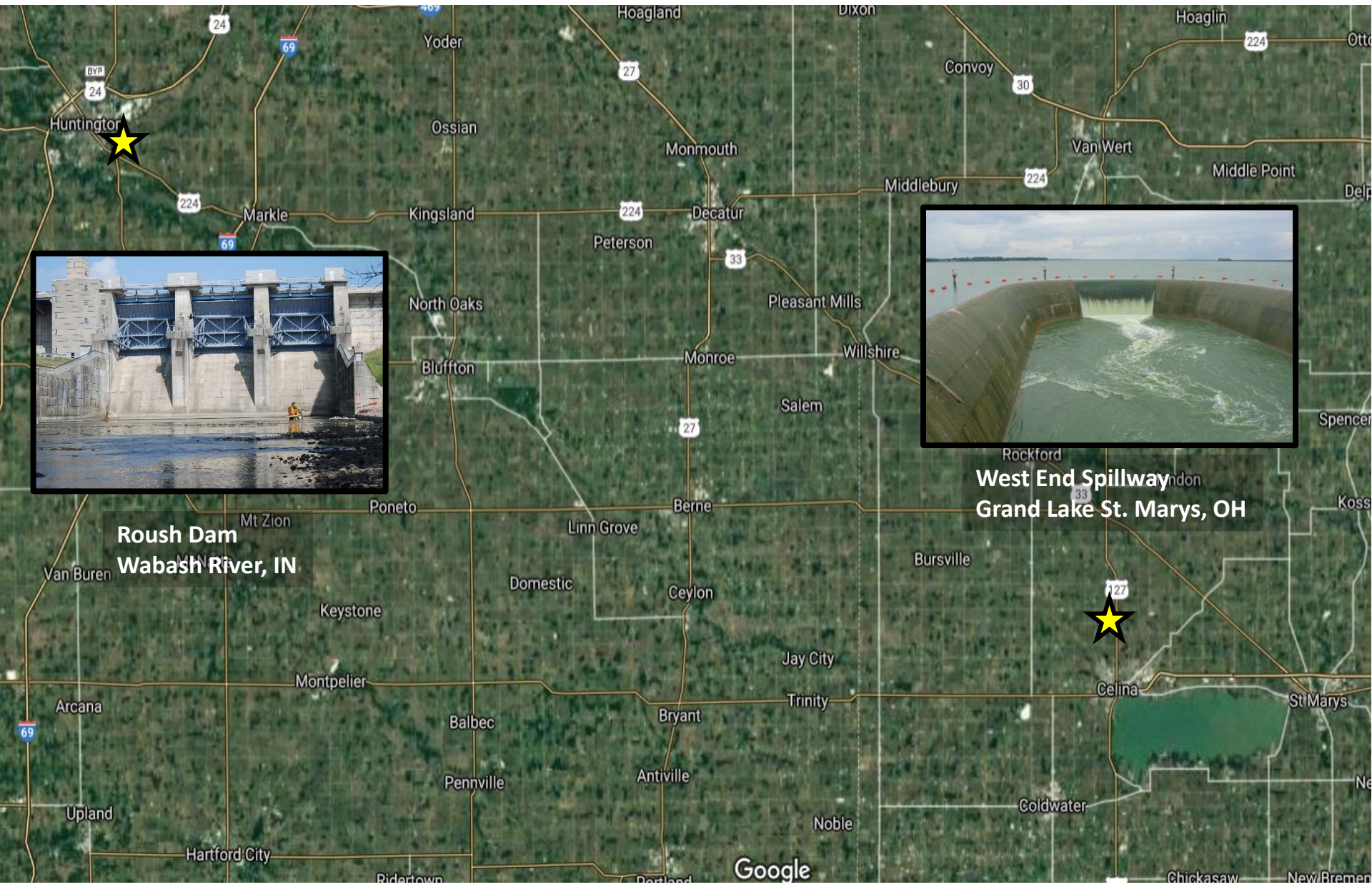
# Roush Dam to Grand Lake St. Marys (70M)



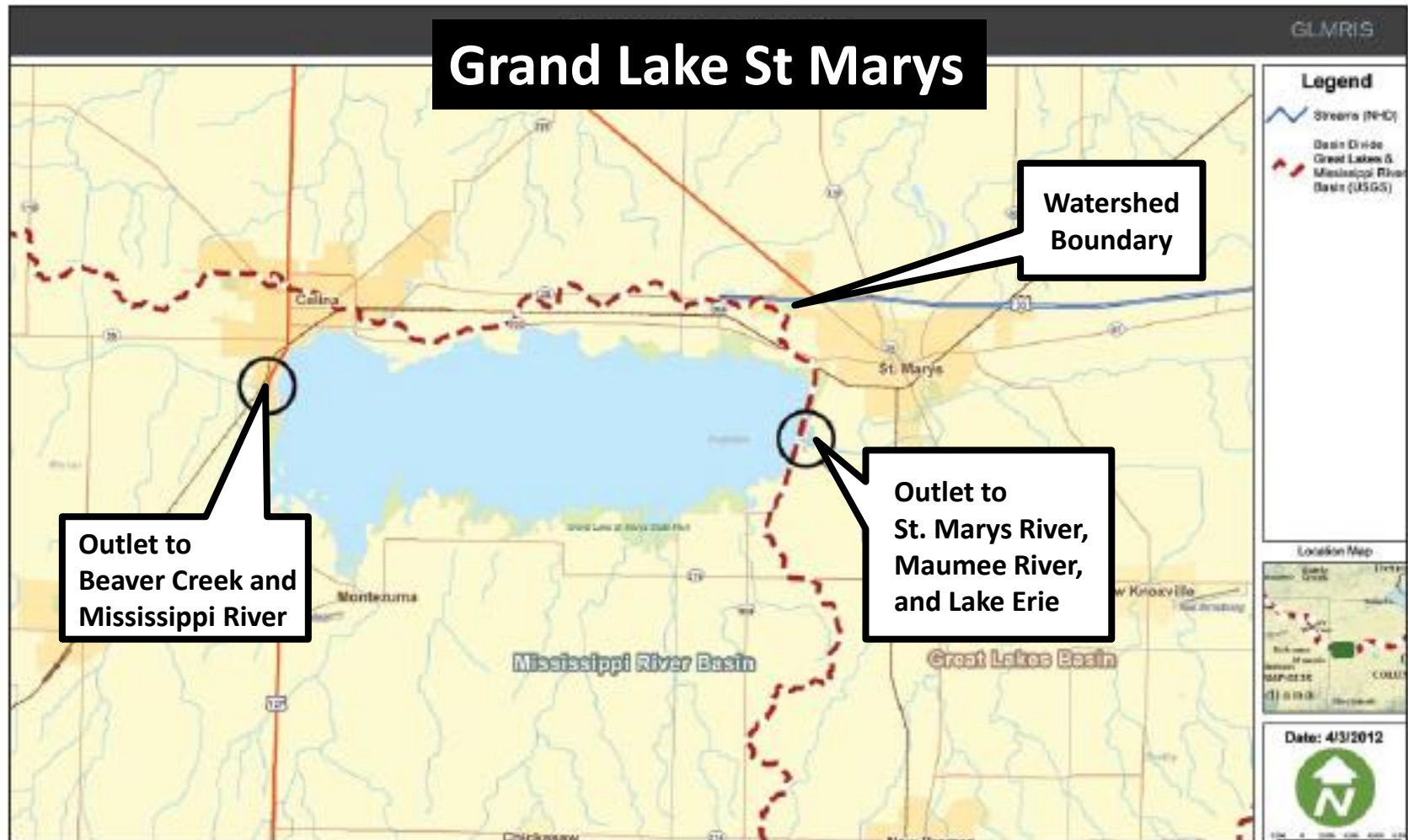
**Roush Dam**  
**Wabash River, IN**



**West End Spillway**  
**Grand Lake St. Marys, OH**



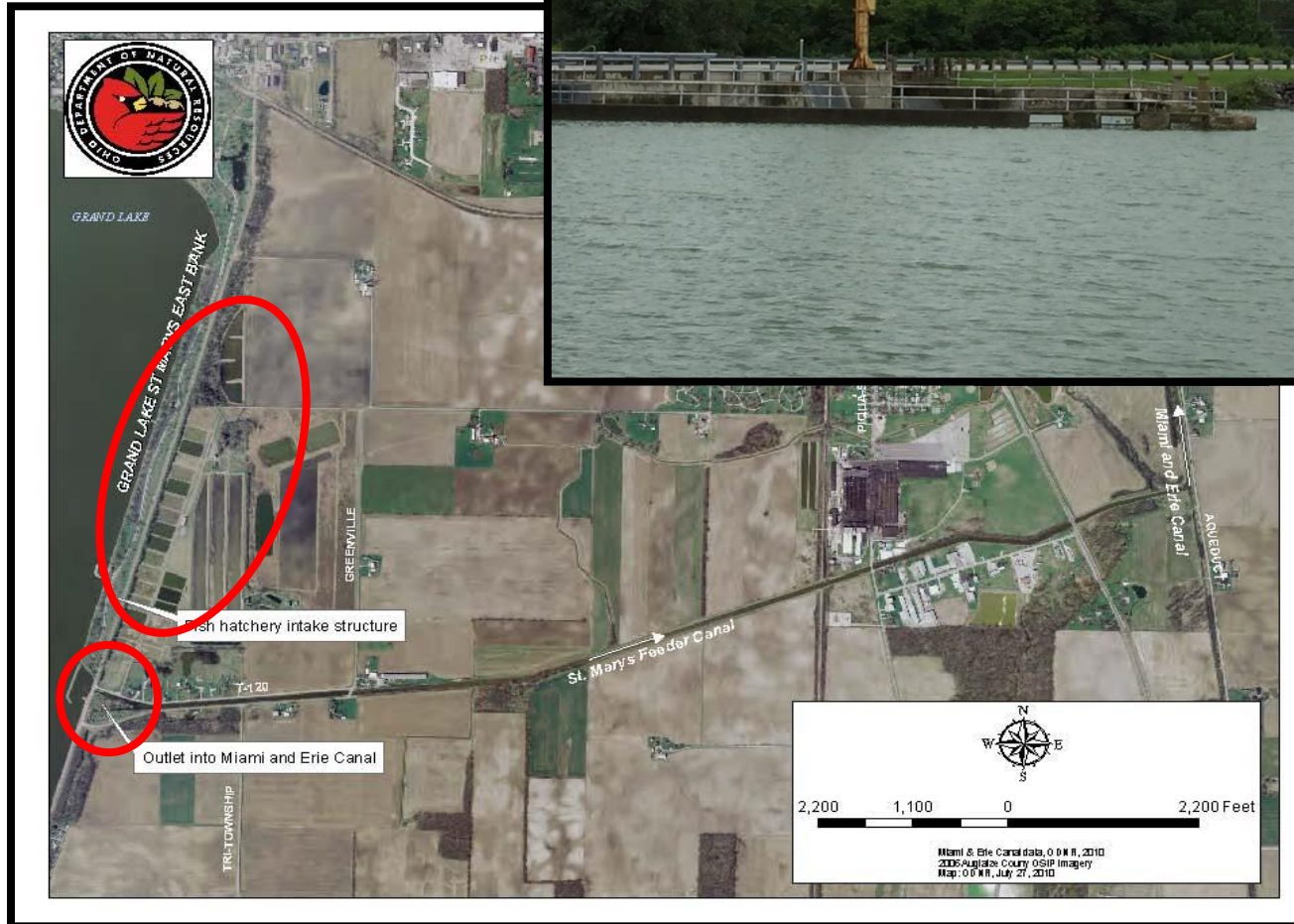
# Outlets to Both Watersheds



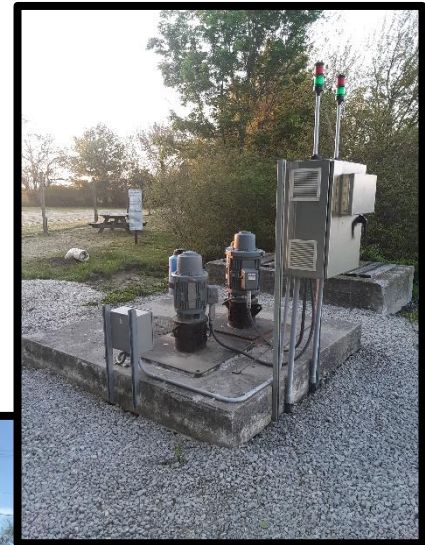
# Grand Lake St Marys

## Transfer Risks

1. SMSFH
2. Outlet



# Operational Upgrades at St Marys St Fish Hatchery



# GLSM East End Outlet

**Funds Spent to Date:**

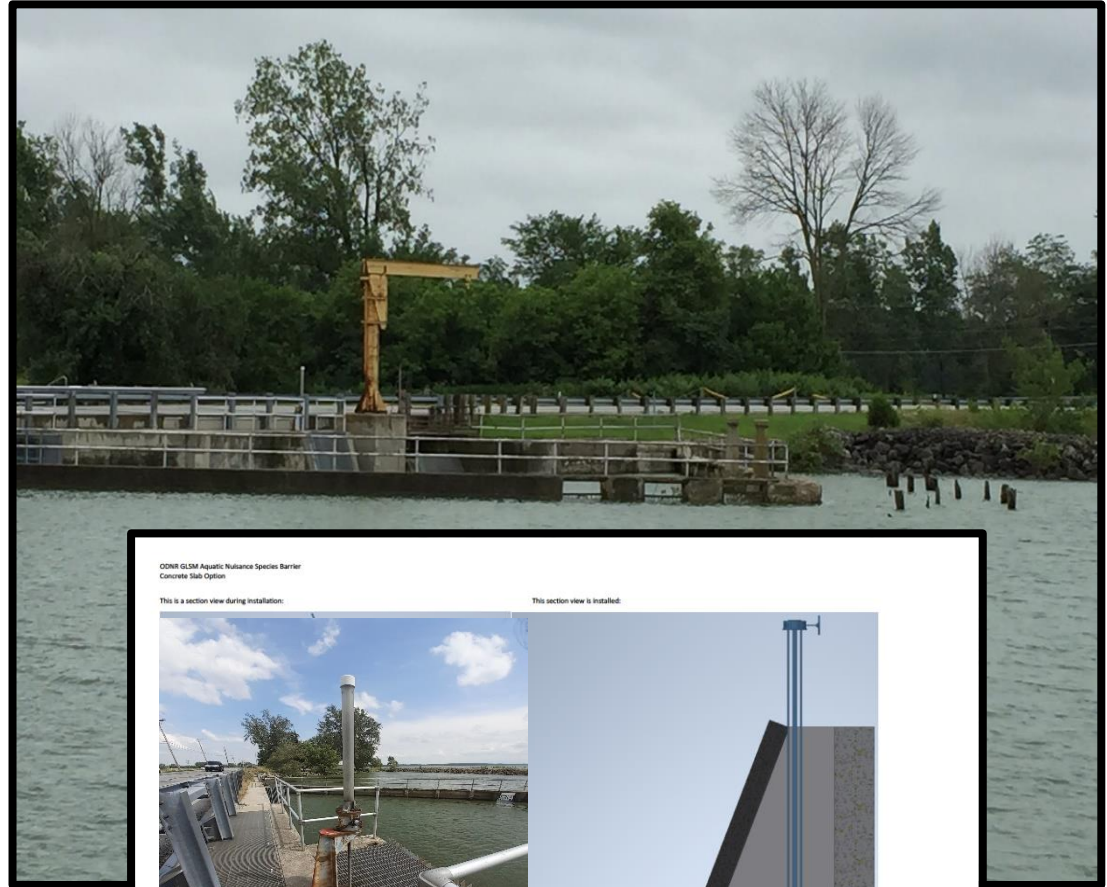
- **\$1,129,032**

**Final Design Cost:**

- **\$200,000**
- **Tetra Tech**

**Final Phase is a  
Screening Structure at  
East End Outlet:**

- **\$1M Construction**



# Takeaways

- These projects are complicated, expensive, and have long timelines.
- Of the highest risk connections, two and closed and plans are underway for the other two.
- Once secondary connections are closed, need to concentrate of the CAWS.

