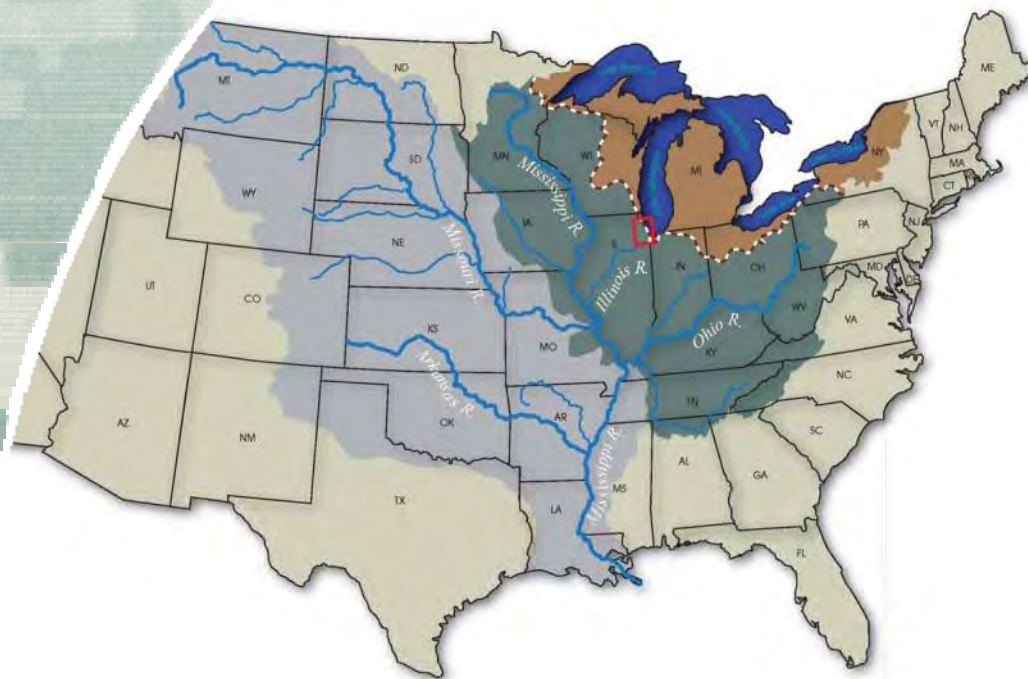


Great Lakes & Mississippi River Interbasin Study GLMRIS

Dave Wethington, P.E.
Project Manager
USACE Chicago District



US Army Corps of Engineers
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Summary of Study Authority

- Authority

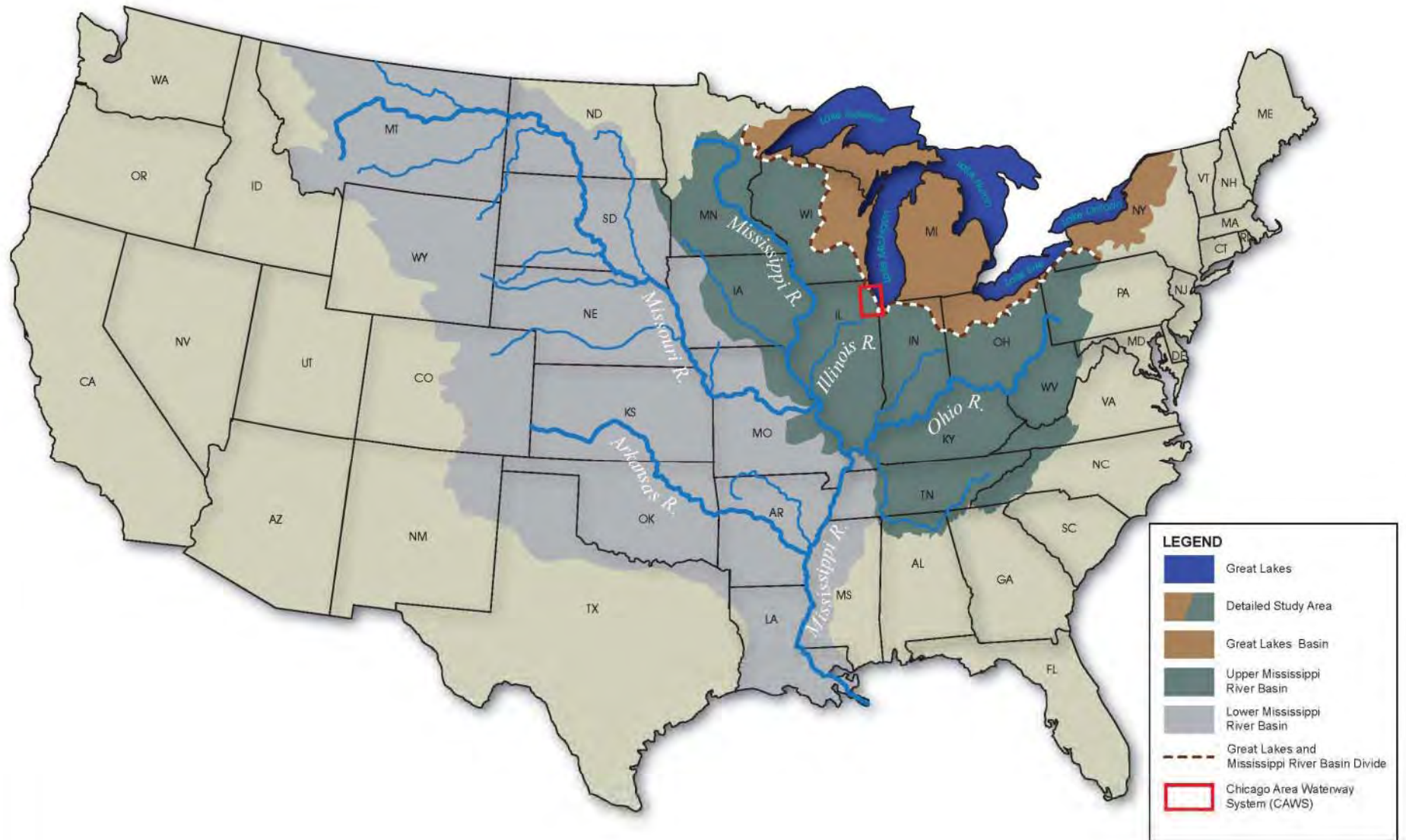
*(d) FEASIBILITY STUDY.-The Secretary, in consultation with appropriate Federal, State, local, and nongovernmental entities, shall conduct, at Federal expense, a feasibility study of the range of **options and technologies available to prevent the spread of aquatic nuisance species** between the Great Lakes and Mississippi River Basins **through the Chicago Sanitary and Ship Canal and other aquatic pathways.***

- Special Considerations

- ▶ Alternative recommendation shall include impact analysis on CSSC; as part of this study, USACE will conduct a detailed analysis of various ANS controls, **including hydrologic separation.**
- ▶ The term "prevent" includes the **reduction of risk to the maximum extent possible**, as it may not be technologically feasible to achieve an absolute solution.
- ▶ Study is 100% Federally funded



GLMRIS STUDY AREA MAP



GLMRIS - Feasibility Study Scope

	Includes	Does not Include
Pathways	Aquatic Connections	Terrestrial Airborne
	Swimmers (<i>fish</i>) Floaters (<i>algae, plants, etc</i>) Hitchhikers (<i>parasites</i>)	Human Release
Locations	Interface between Great Lakes Basin and Mississippi River Basin	Atlantic slope; St. Lawrence Seaway
	Portions of 17 U.S. states	Canada
Elements	Analysis of options/technologies to prevent/ reduce risk of interbasin transfer of all ANS	Detailed biological research on aquatic nuisance species of concern
	Evaluation of hydrologic separation	Airborne or terrestrial separation elements
	Regional economic modeling	Location-specific economics
	Risk-based ecological decision-making	Quantitative environmental models
	Environmental Impact Statement	



GLMRIS Strategy

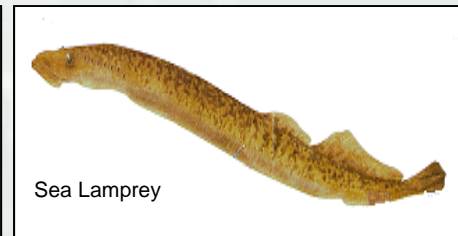
- Study two geographically-oriented Focus Areas along basins' divide
 - ▶ Chicago Area Waterways (CAWS) – Primary effort
 - ▶ “Other Pathways” outside the CAWS
- Organize for success
 - ▶ USACE
 - Leadership and local knowledge from across the organization: USACE Regional Technical Experts, Planning Centers of Expertise, Research Laboratories
 - ▶ Executive Steering Committee (ESC)
 - ▶ Stakeholders – Federal, Tribal, State, Local and NGO’s
 - Solicit input and leverage resource capabilities
 - Key stakeholders ability to provide input and directly support GLMRIS efforts
- Cycle out Interim Products and Reports
 - ▶ Summary of collected data
 - ▶ Incremental or specific solution elements
- Adapt to new and evolving information to the extent possible
- Abide by all legal and regulatory guidance



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Study Purpose

- Identify aquatic pathways that may exist between the Great Lakes and Mississippi River basins
 - ▶ Focus Area I – Chicago Area Waterways
 - ▶ Focus Area II – Other Pathways
- Inventory current and future potential aquatic nuisance species (ANS)



- Analyze possible ANS controls available to prevent or reduce the risk of ANS transfer between basins, via aquatic pathways
 - ▶ Includes evaluation of hydrologic separation of the basins



CAWS

Focus Area I

- Specify Problems & Opportunities
- Inventory & Forecast Conditions
 - ▶ Baseline data; surveys
 - ▶ Reports
- Formulate Alternative Plans
- Evaluate Effects of Plans
- Compare Alternatives
- Select Recommended Plan
 - ▶ Feasibility Report
 - ▶ Environmental Impact Statement
 - ▶ Record of Decision

Collaboration

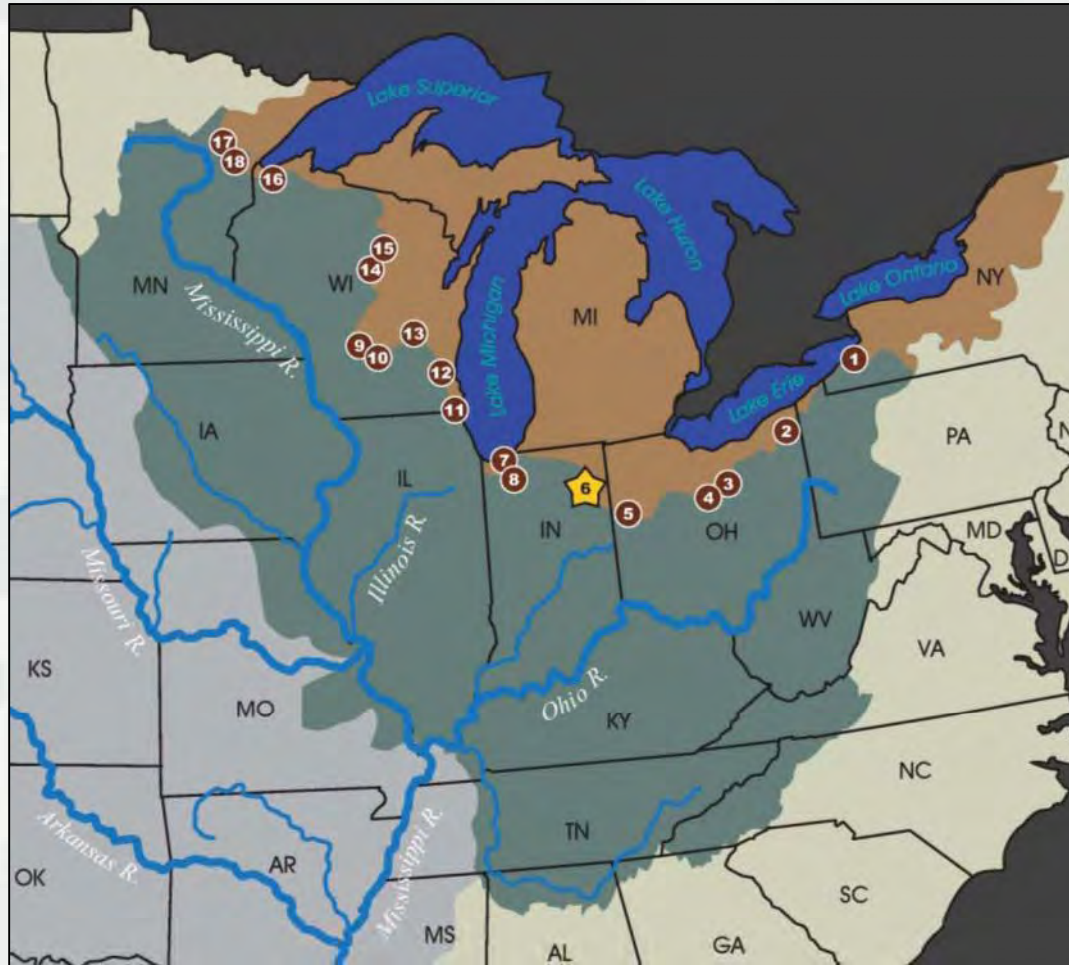
- Federal, State, Regional Agencies
- Native American Tribes
- Non-governmental organizations



Other Pathways

Focus Area II

Preliminary Risk Characterization



- Objectives
 - ▶ Inventory of potential aquatic pathways
 - ▶ Assess risk of ANS transfer
- Results
 - ▶ 36 total – 18 locations w/ significant risk for potential ANS transfer
 - ▶ Highest Risk:
Eagle Marsh, Ft Wayne, IN
 - Intermittent aquatic pathway; Asian carp reported w/in 25 mi
 - Interim measure implemented by InDNR
 - USACE developing long-term risk mitigation alternatives



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Accomplishments to Date

Proj Mgmt Plan Development

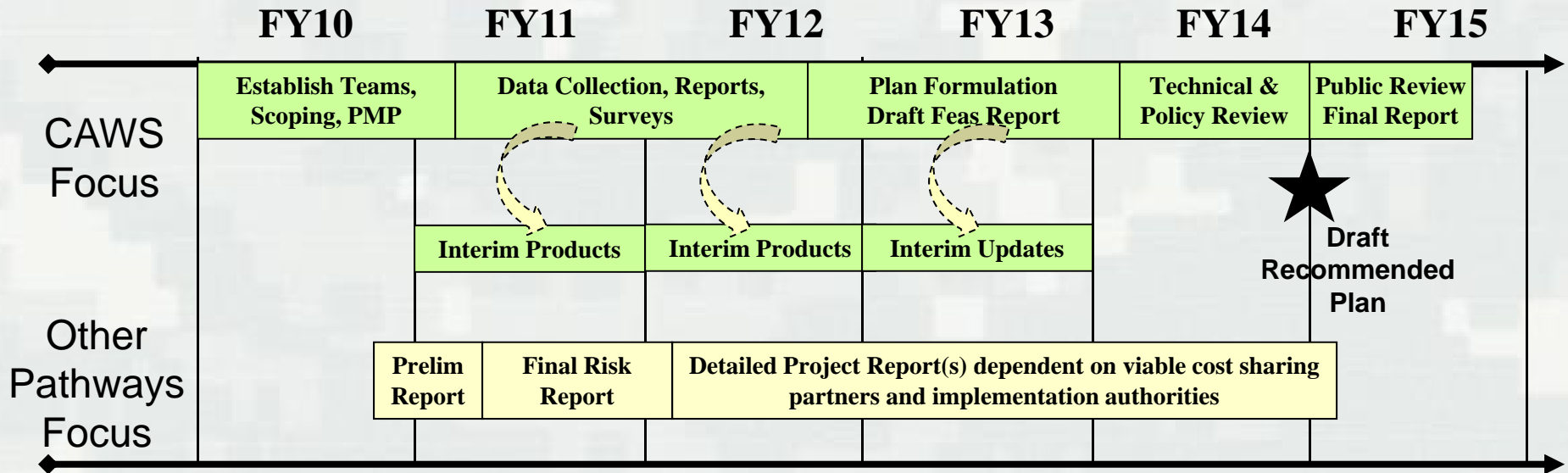
- Jun 09 – Receipt of funds
- Sep 09 – multi-district kick-off
- Nov 09 – Estbl PDT & Spt Teams
- Dec 09 – Begin PMP development
- Jan 10 – Agency scoping meeting
- Jan 10 – Develop plan formulation
- Mar to Nov 10 – Prep/Final PMP
- Jun 10 – Tribal meeting
- Jul 10 – Draft PMP to ESC mbrs
- Aug 10 – Conduct ESC workshop
- Nov 10 – Complete PMP
- Dec 10 – Begin Public Scoping

Simultaneous Execution

- Literature Review
- Data Collection
- eDNA and fish barrier efficacy study and research
- Preliminary Risk Characterization Report for Other Pathways
- Eagle Marsh, Ft. Wayne, IN
 - ▶ GLMRIS facilitated identification of pathway; implementation of interim risk reduction measure by state DNR
 - ▶ Initiated Detailed Project Report for long-term recommendation



GLMRIS Project Schedule



CAWS

- **Data Collection:** Fall '10 - Summer '12
- **Formulate Alternatives:** Spring '12 – Winter '13
- **Evaluate & Compare Alt's:** Winter '13 – Summer '13
- **Select Recommended Plan/Prepare Draft Report:** Summer '13 – Winter '14
- **Technical and Policy Review:** Winter '14 – Fall '14
- **Release Report for Public Review:** Fall '14 – Winter '15
- **Finalize Report:** Winter '15 – Summer '15

Other Pathways

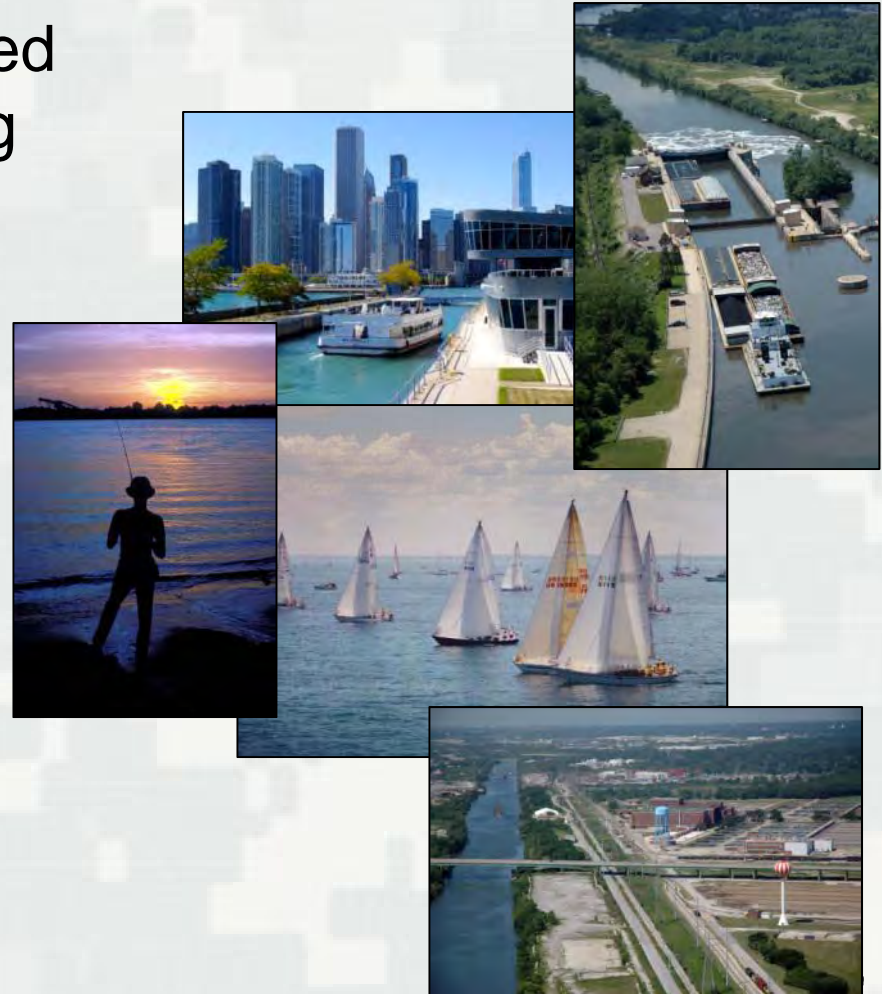
- **Preliminary Risk Characterization Report:** Fall 2010
- **Final Risk Characterization Rpt (17 locations)** Fall 2011
- **Eagle Marsh – Ft. Wayne, IN**
 - Detailed Project Report – Fall 2011
 - Authority & sponsor TBD



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Inventory & Forecast – Interim Products

- Interim Products will be cycled out during the data-gathering phase
- Interim Products
 - ▶ Inventory ANS & Transport Mechanisms
 - ▶ ANS Control Technologies
 - ▶ Navigation Surveys
 - Commercial Cargo
 - Commercial Passenger
 - Recreational Boating
 - ▶ Fisheries Surveys
 - Great Lakes
 - Mississippi River



“How Can We Help?”

GLMRIS – Stakeholder Input

- Stakeholder inputs need to:
 - ▶ Directly apply to GLMRIS scope
 - ▶ Conform to USACE Quality Control/Quality Assurance requirements

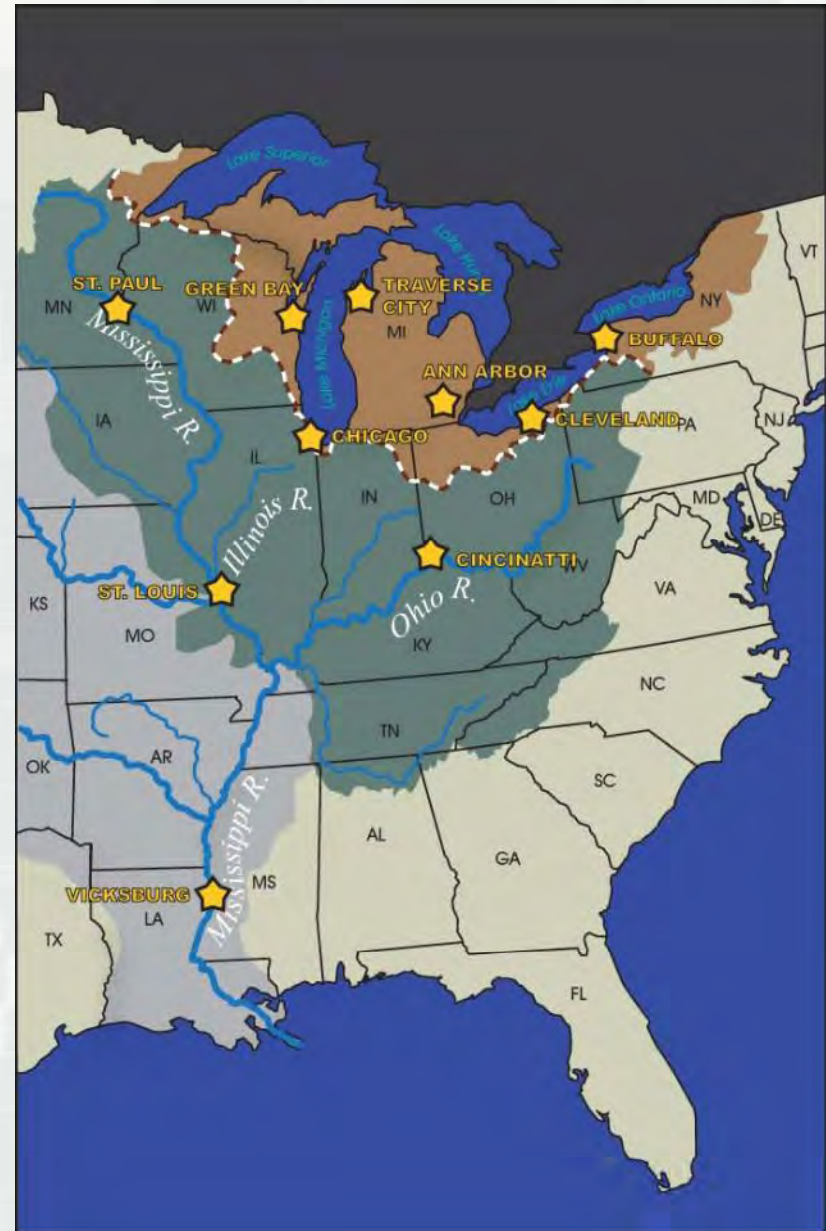
- Example Inputs to Accelerate GLMRIS:
 - ▶ Inventory Cultural Resources (*US Park Service*)
 - ▶ Survey/Inventory Water Supply/Water Dischargers including WWTPs (*State/U.S. EPA*)
 - ▶ ANS Ballast Water Issues (*USCG/USEPA*)
 - ▶ ANS Controls (*USGS/USFWS*)
 - ▶ Survey Great Lakes Fisheries (*USFWS/NOAA*)
 - ▶ Early Detection and Rapid Response (*USGS/USFWS*)
 - ▶ Hydrologic and historical data (*State DNRs*)
 - ▶ ANS biology expertise (*USFWS, USGS, State DNRs*)



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Other Ways to Provide Input & Stay in Touch

- NEPA Scoping Process
 - ▶ First meeting
 - Gleacher Center, Chicago, IL
December 15, 2010
 - ▶ Regional locations



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Other Ways to Provide Input & Stay in Touch

- Website

**Learn more about GLMRIS &
Submit Comments**

<http://glmris.anl.gov>



- Social Media

Join the Conversation!



Great Lakes & Mississippi River Interbasin Study
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