THANK YOU FOR JOINING US

Our presentation will begin momentarily

Lower Mississippi River Comprehensive Management Study – Quarterly Public Update

View the study website at:
www.mvn.usace.army.mil/About/LMRComp/

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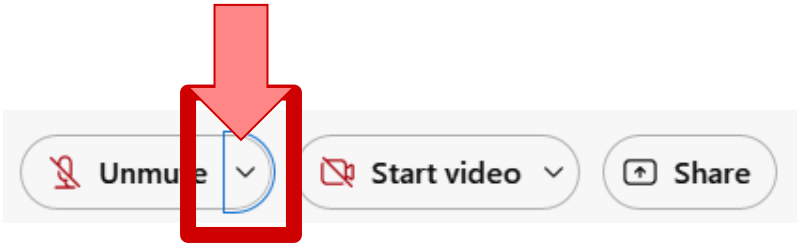
Study Website

SOUND CHECK

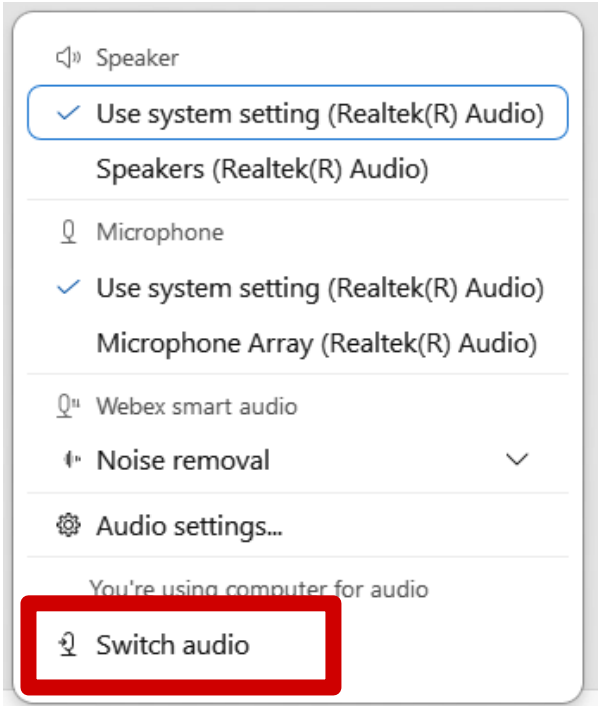
If you cannot currently hear the music, please follow these instructions to adjust your audio settings.

1 Check that your computer speakers are turned on and volume is turned up.

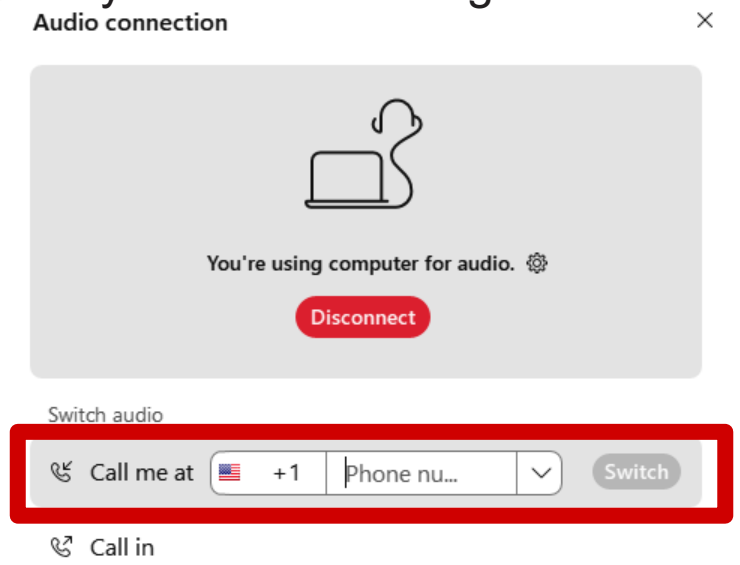
2 Change your speaker settings in Webex by clicking the small arrow next to the unmute button.



3 Select a different speaker from the dropdown list OR select "Switch Audio" to join by phone.



4 Enter your phone number and select "Switch." Webex will then call the number and join you to the meeting.



5 If steps 1-4 do not work, dial directly from any phone:

Phone: 1-844-800-2712
Meeting number: 1991 65 9004
(you will be automatically muted when you join)

LOWER MISSISSIPPI RIVER COMPREHENSIVE MANAGEMENT STUDY

QUARTERLY PUBLIC UPDATE
OCTOBER 3, 2024

Ann Hijuelos, Senior Project Manager
Programs and Project Management Division
New Orleans District

Cherie Price, Senior Planner
Regional Planning and Environment Division South
New Orleans District

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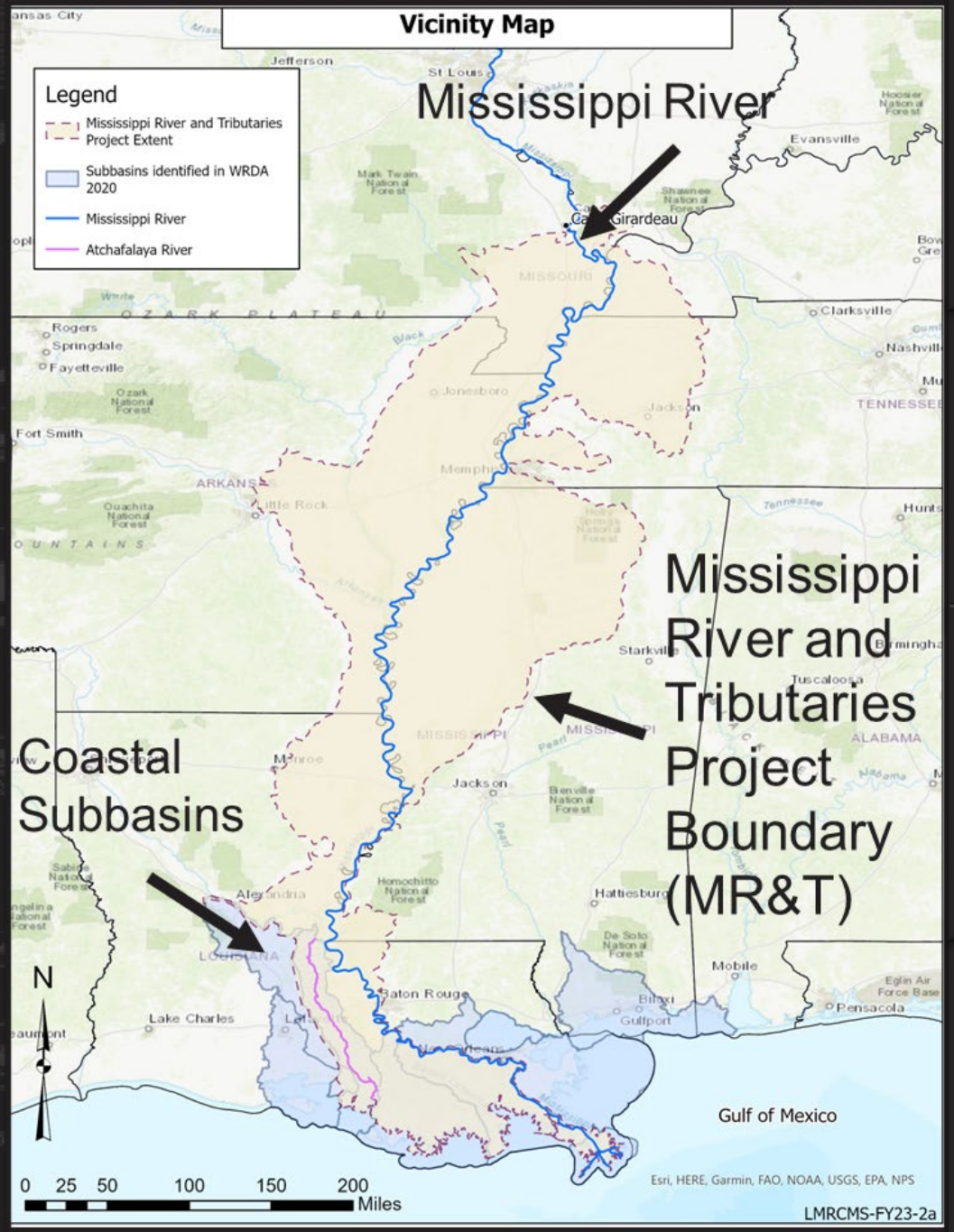

HOW CAN YOU SUBMIT QUESTIONS OR COMMENTS TODAY?

1

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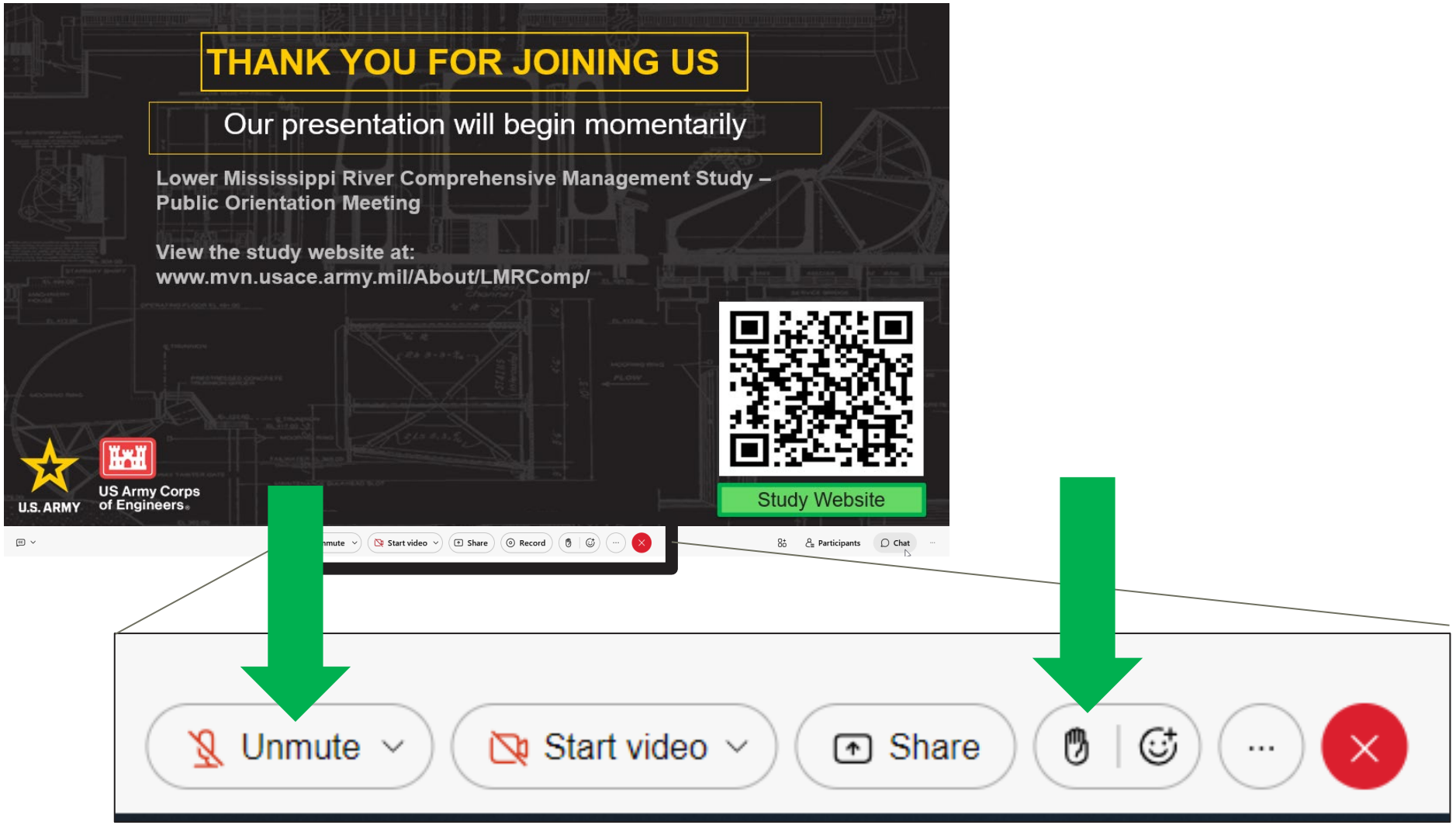

HOW CAN YOU SUBMIT QUESTIONS OR COMMENTS TODAY?

3

Email Us:
LMRComp@usace.army.mil

Subject Line:
Quarterly Public Update

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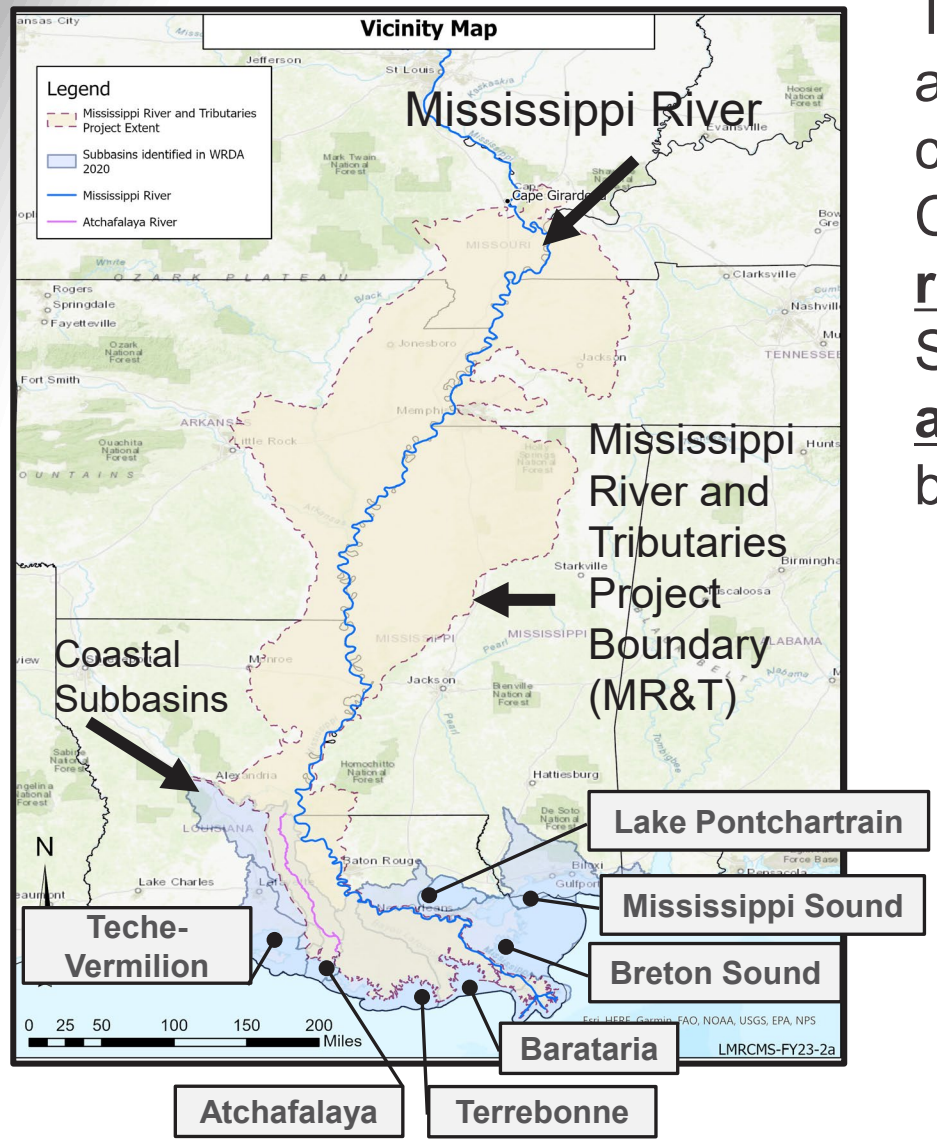
AGENDA

- What is the study purpose (Recap)
- Where are we in the study process?
- Progress since last meeting
- Screening Process
- Timeline/90-day outlook before next meeting
- Questions and Comments
- Feedback on this webinar

2 MIN BREAK

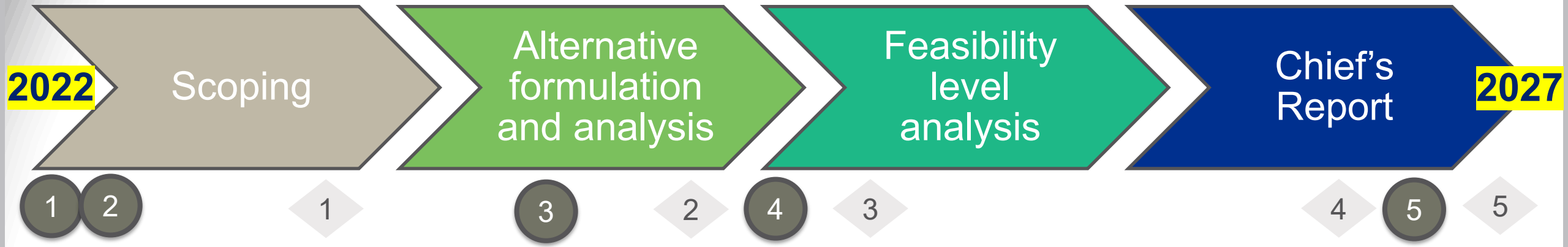
WHY ARE WE STUDYING THE MISSISSIPPI RIVER?



The Secretary, in collaboration with the heads of other Federal agencies and pursuant to subsection (d)(1)(A), shall conduct a comprehensive study of the Lower Mississippi River basin from Cape Girardeau, Missouri, to the Gulf of Mexico, to identify **recommendations of actions** to be undertaken by the Secretary, **under existing authorities or after congressional authorization**, for the comprehensive management of the basin for the purposes of –

A. Hurricane and storm damage reduction, flood risk management, structural and nonstructural flood control, and floodplain management strategies;
B. Navigation
C. Ecosystem and environmental restoration
D. Water supply
E. Hydropower production
F. Recreation
G. Other purposes as determined by the Secretary

WHERE ARE WE IN THE STUDY PROCESS



Feasibility Study Process

1. Alternatives Milestone
2. Tentatively Selected Plan Milestone
3. Agency Decision Milestone
4. State and Agency Review
5. Chief of Engineer's Report with Final NEPA Documentation

National Environmental Policy Act Process

1. Identify Need for Action
2. Begin Scoping
3. Begin Drafting NEPA documentation
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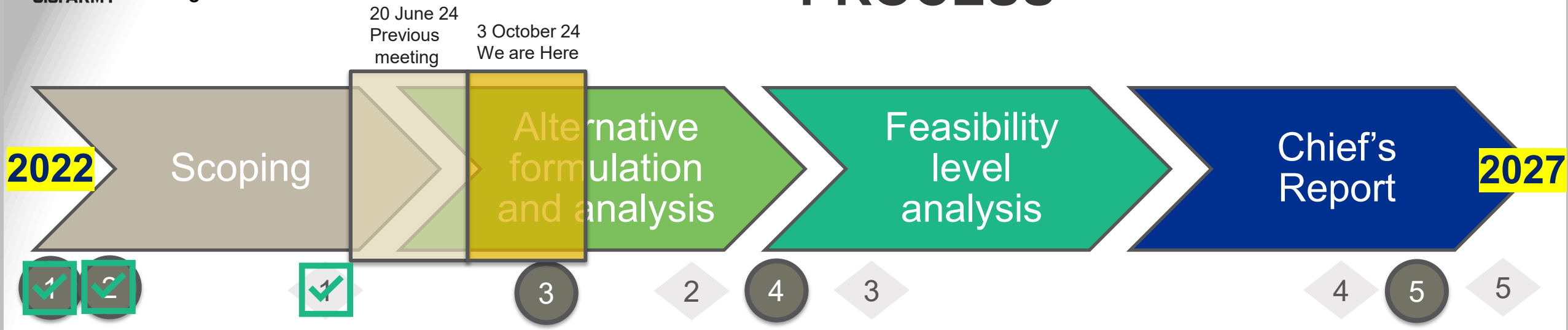

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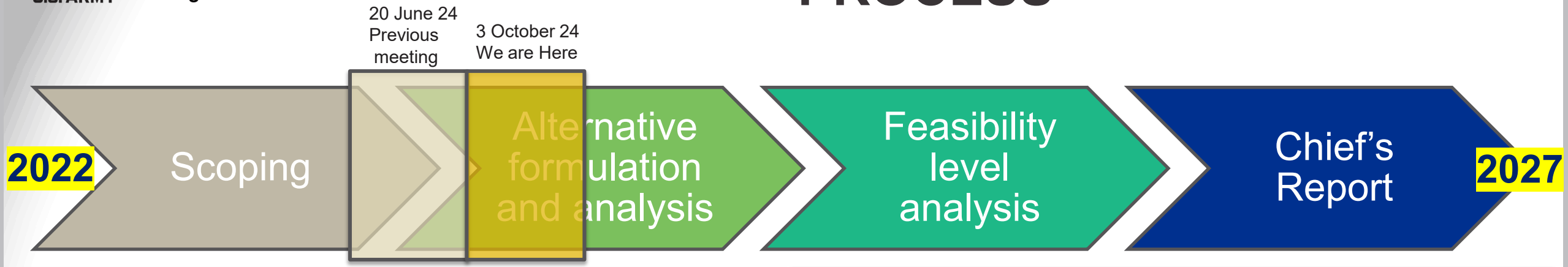

Recap of Last Quarterly Public Update:

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- Public Orientation Meeting (23 January 2024)
- 32 Public Meetings (Feb-Mar 2024)
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Public Scoping Report release 24 July 24

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Alternatives Milestone Meeting (26 April 2024)

- concurrence from senior USACE Leadership on the scope for completing the Study and moving forward to the next milestone, the Tentatively Selected Plan (TSP)

Activities Since Last Quarterly Public Update:

Coordination:

- Engagement with Federal and State Agencies, Tribal Nations, and Stakeholders

Reviewing Scoping Input

- Screening measures based on criteria
- Developing the process for tiered studies

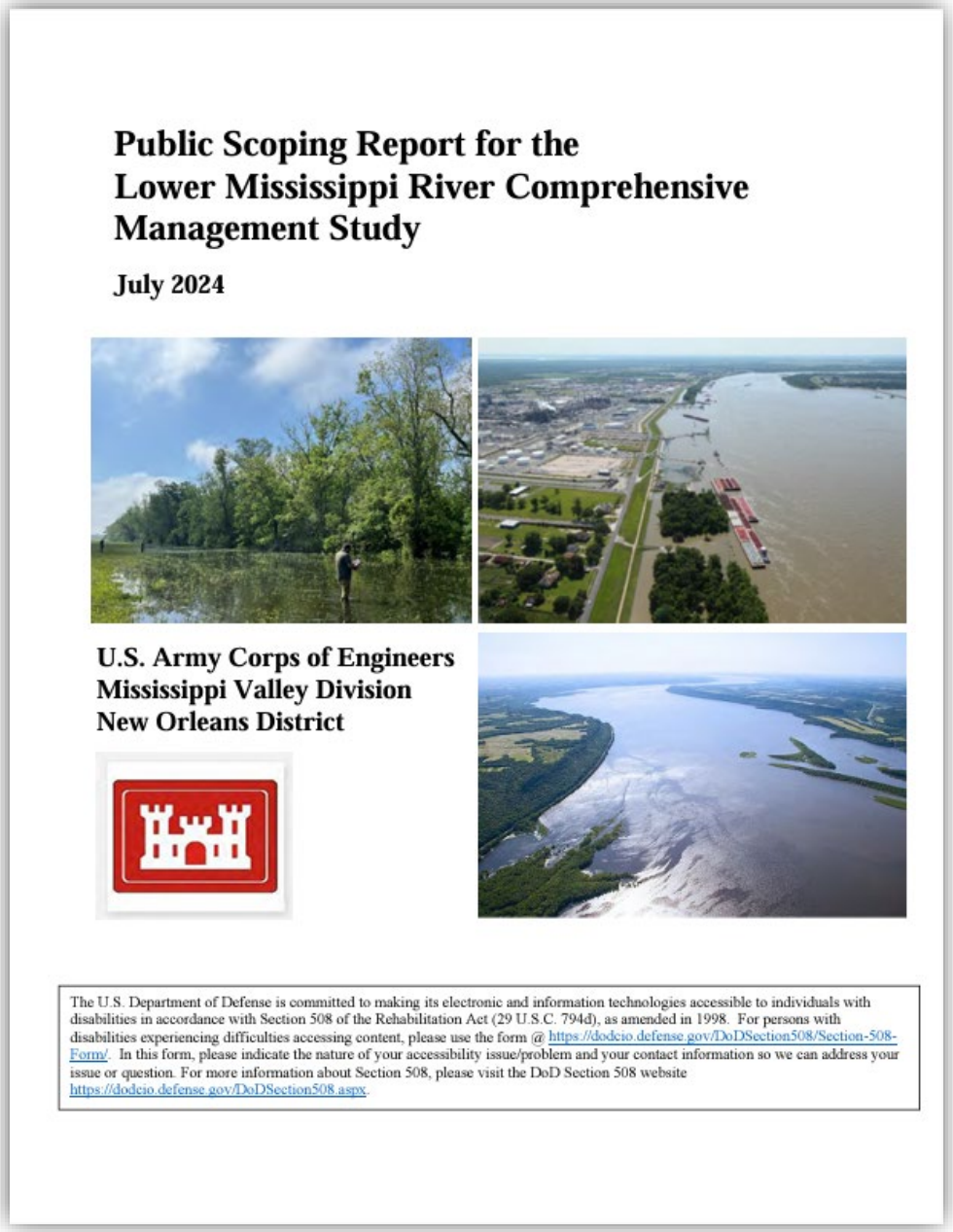
Modeling:

- Water models developed for Mississippi and Atchafalaya Rivers
- Investigating operational changes at existing structures, such as Old River Control Complex
- Sediment models calibrated/validated.

PUBLIC SCOPING REPORT

- Summarizes what was heard at Public Scoping meetings
- Includes a record of all comments received

https://www.mvn.usace.army.mil/About/LMRComp



Public Scoping Report for the Lower Mississippi River Comprehensive Management Study

July 2024

U.S. Army Corps of Engineers
Mississippi Valley Division
New Orleans District

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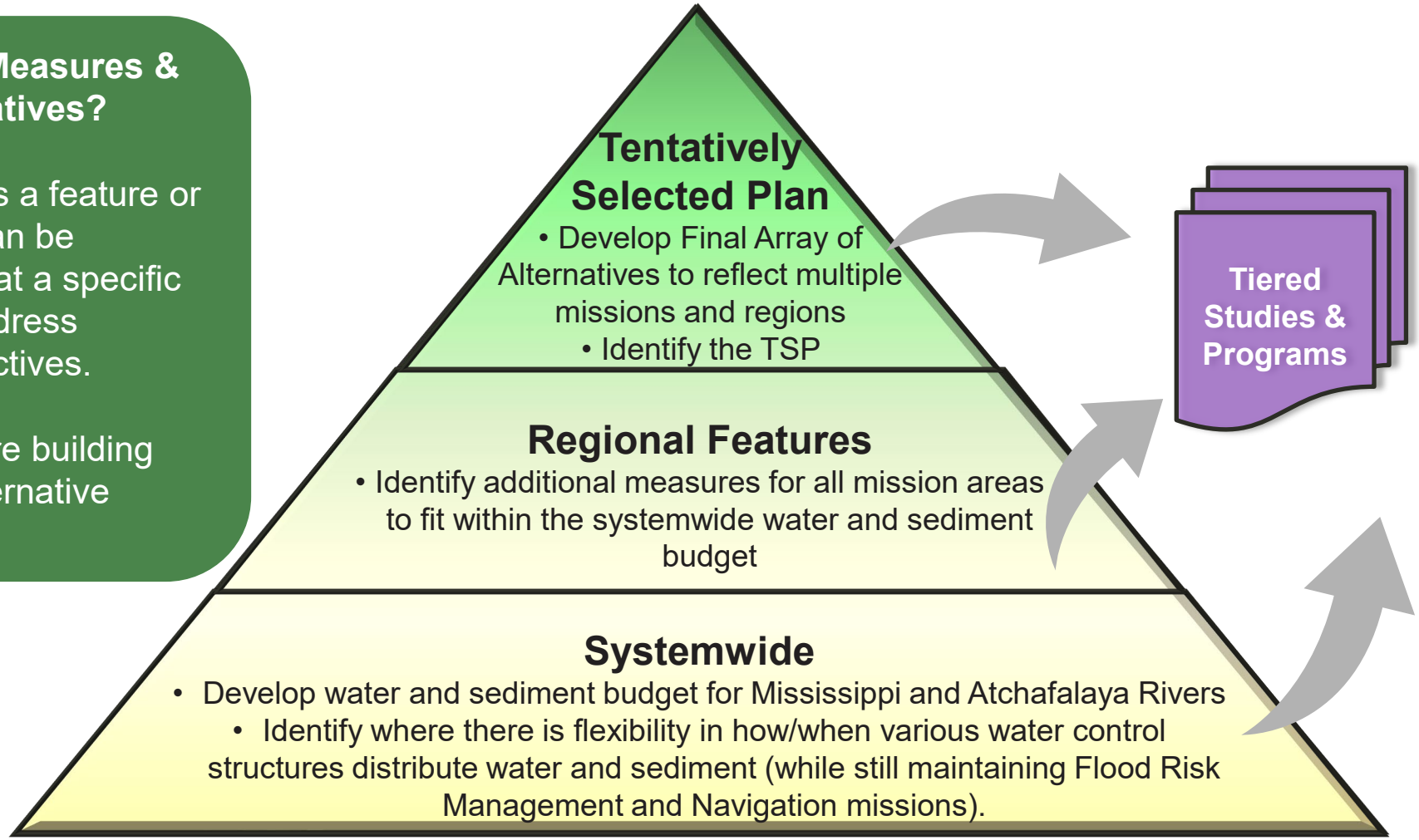
ALTERNATIVE FORMULATION & ANALYSIS

The Study Team is using a step-wise approach to formulating and screening alternatives.

What are Measures & Alternatives?

A “measure” is a feature or activity that can be implemented at a specific location to address planning objectives.

“Measures” are building blocks of “Alternative Plans”.

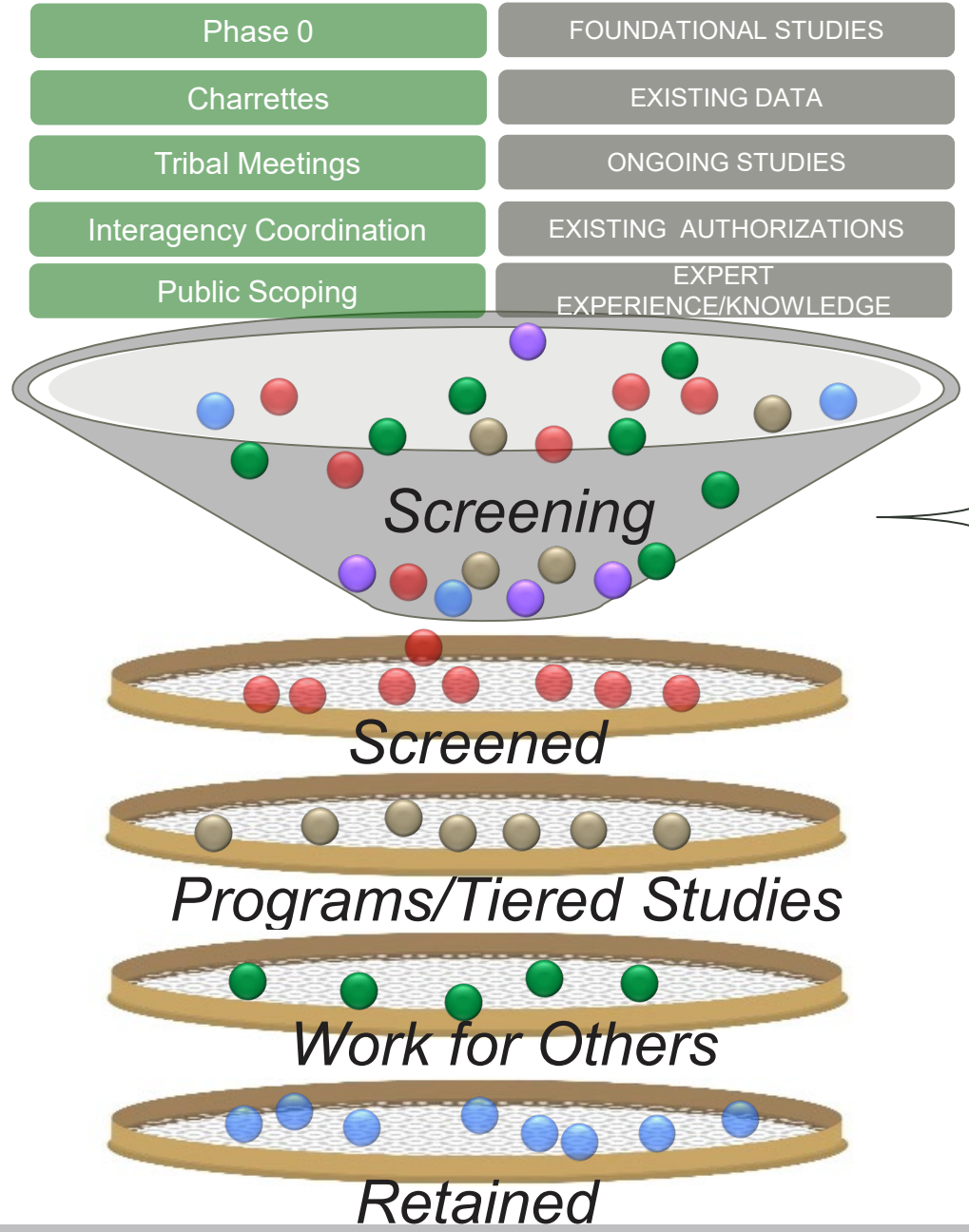


MEASURE SCREENING PROCESS

Where we've been →

We are here! →

Where we're going →



- Focus groups established to initiate measures' evaluation process
- Groups are leveraging results from existing reports, historical information, and existing data to screen measures
- Geographic Specific – Evaluating measures in subject matter expert groups while working across multiple USACE districts
- Measures screening will be informed by hydraulic and hydrologic modeling

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MEASURE SCREENING CRITERIA

- Is the measure a duplicate?
- Does the measure fit within the Authority and scope of this study?
- Is the measure technically feasible?
- Would the measure increase flood risk?
- Would the measure cause life safety concerns?
- Would the measure transfer risk/impact somewhere else?
- Would the measure negatively impact the environment or provide environmental benefits?
- Are there existing Authorities/Project/Programs that are already implementing this measure or are better suited to implement the measure?
- Will the measure effectively achieve the benefits proposed?
- Is the measure cost-effective?
- Does the measure meet study objectives and avoid constraints?

STUDY CONSTRAINTS

- **Navigation** – NO reduction of authorized navigation performance.
- **Flood Risk Management & Coastal Storm Risk Management** – NO loss of risk reduction from existing flood risk management and coastal storm damage risk reduction projects.
- **Species and Habitats** - Avoid and/or minimize negative impacts to Threatened & Endangered (T&E) Species, protected species and critical habitats, Essential Fish Habitat (EFH).
- **Cultural and Historic Sites** - Avoid and/or minimize negative impacts to cultural resources and historic sites.
- **Water Supply** – Avoid and/or minimize negative impacts to municipal, industrial, residential freshwater infrastructure and tribal usage along the Mississippi River and Tributaries Project.
- **Induced Development** – Avoid inducing development in floodplains that contributes to increasing life safety risks, to the maximum extent practicable.
- **Tribal Impacts** – USACE cannot authorize, approve or carryout any activities that result in a breach of Tribal treaty rights, affect lands, or restrict access to resources.
- **Compliance with applicable laws and USACE Civil Works Policies.**

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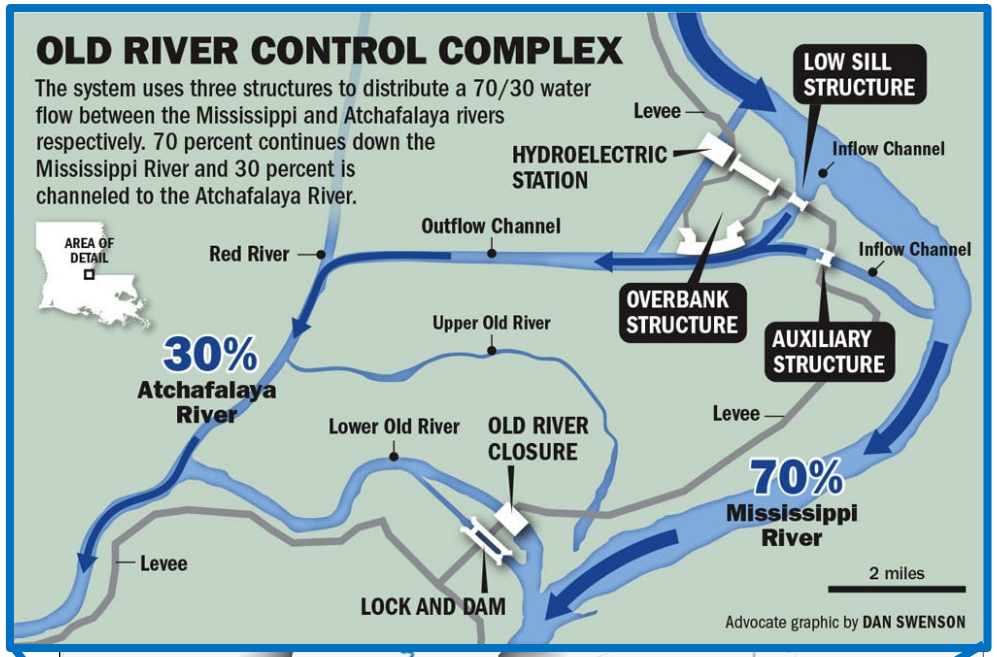
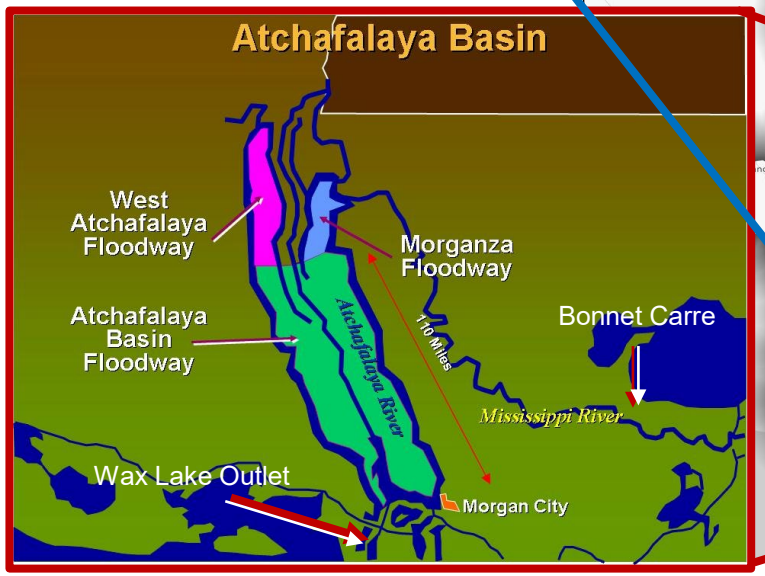
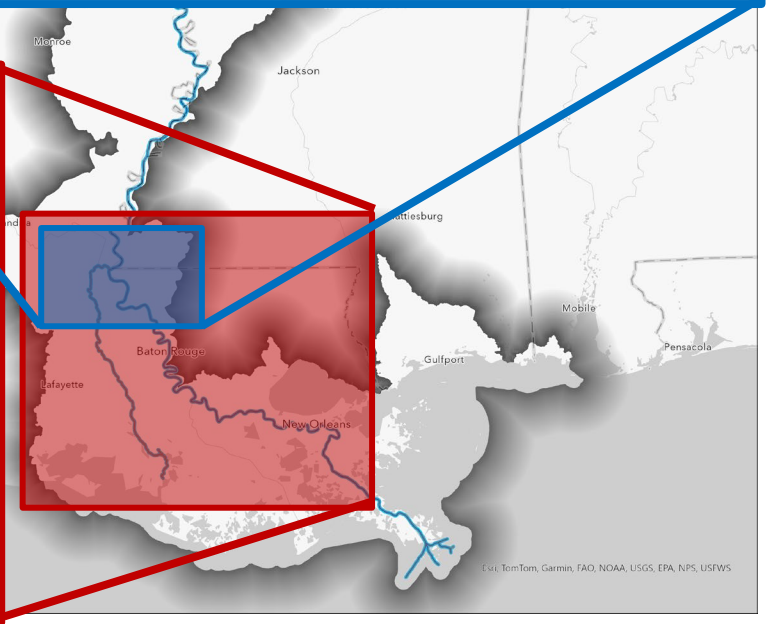
MEASURES FOR REDUCING FLOOD RISK

- Optimize collective operation of Old River Control, Morganza and Bonnet Carré
- Widen and deepen Wax Lake Outlet
- Utilize Ama, Union and Mid-Breton diversions
- Increase dredging in specific locations in aggrading reaches
- Close distributaries from Atchafalaya River to increase stream power and reduce dredging







Example measures. Subject to change.

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MEASURES FOR IMPROVING NAVIGATION

- Evaluate options for grade control and to stabilize Hickman Control Point
- Address low water in mainstem and harbor entrances
- Consider relocating navigation channel in the vicinity of Stouts Pass (Atchafalaya River)
- Restrict flow downstream of east bank crevasses to regulate flow

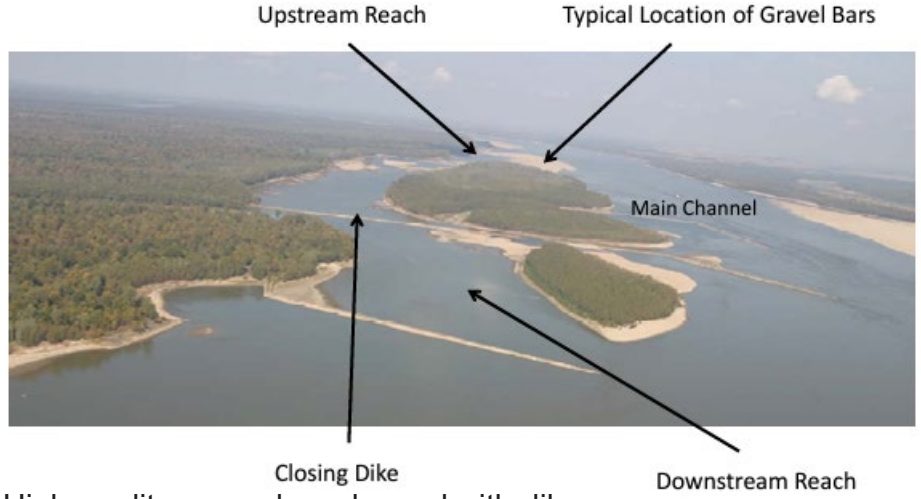
Example measures. Subject to change.

MEASURES FOR IMPROVING ECOSYSTEM RESTORATION

- Utilize woody debris taken from revetment construction to create habitat for aquatic macro-invertebrates
- Restore native riparian vegetation in areas for ER and bank stabilization
- Restore cypress-tupelo and bottomland hardwood habitat
- Return flow to abandoned oxbow lakes and meanders
- Install river training structures to divert water to upstream ends of secondary channels
- Restore connectivity to secondary channels
- Restore wetland buffers on the riverside of the mainline levee system
- Dedicated dredging for wetland enhancement
- Dredge sand from river and place in crevasses for land building
- Strategically mound sand during low water to mitigate saltwater intrusion and promote land building

Example measures. Subject to change.

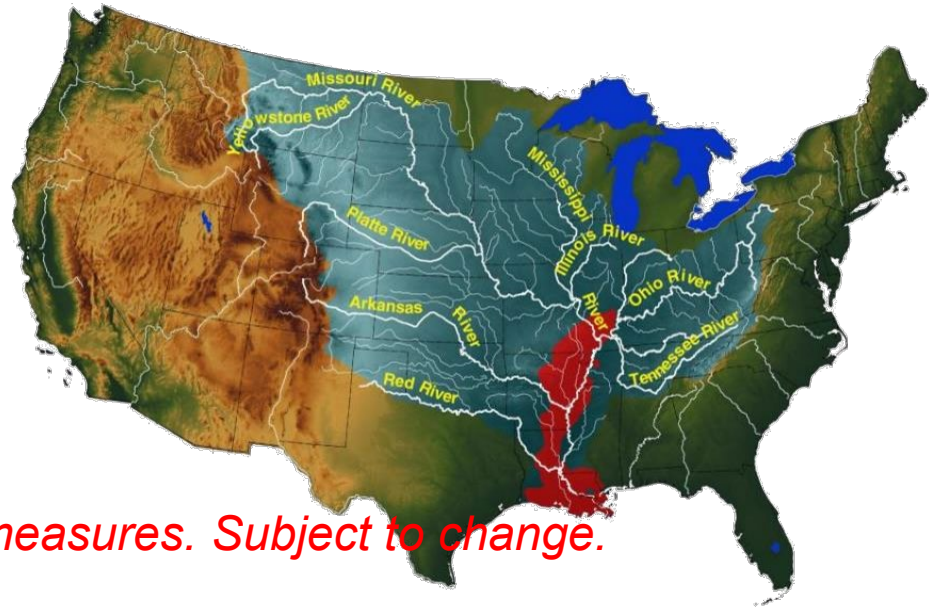
Mississippi River winding along the border of Arkansas and Mississippi. Source: earth.com



High-quality secondary channel with dikes.
Source: ERDC TN-EMRRP-ER-15 August 2012

MEASURES FOR IMPROVING WATER SUPPLY RELIABILITY

- Continue dredging in the Atchafalaya in select areas for drinking water reliability
- Increase flows down Atchafalaya to the Chitimatcha reservation lands to provide adequate water supply
- Pump water into oxbows such as Mhoon Lake to allow controlled releases to tributaries



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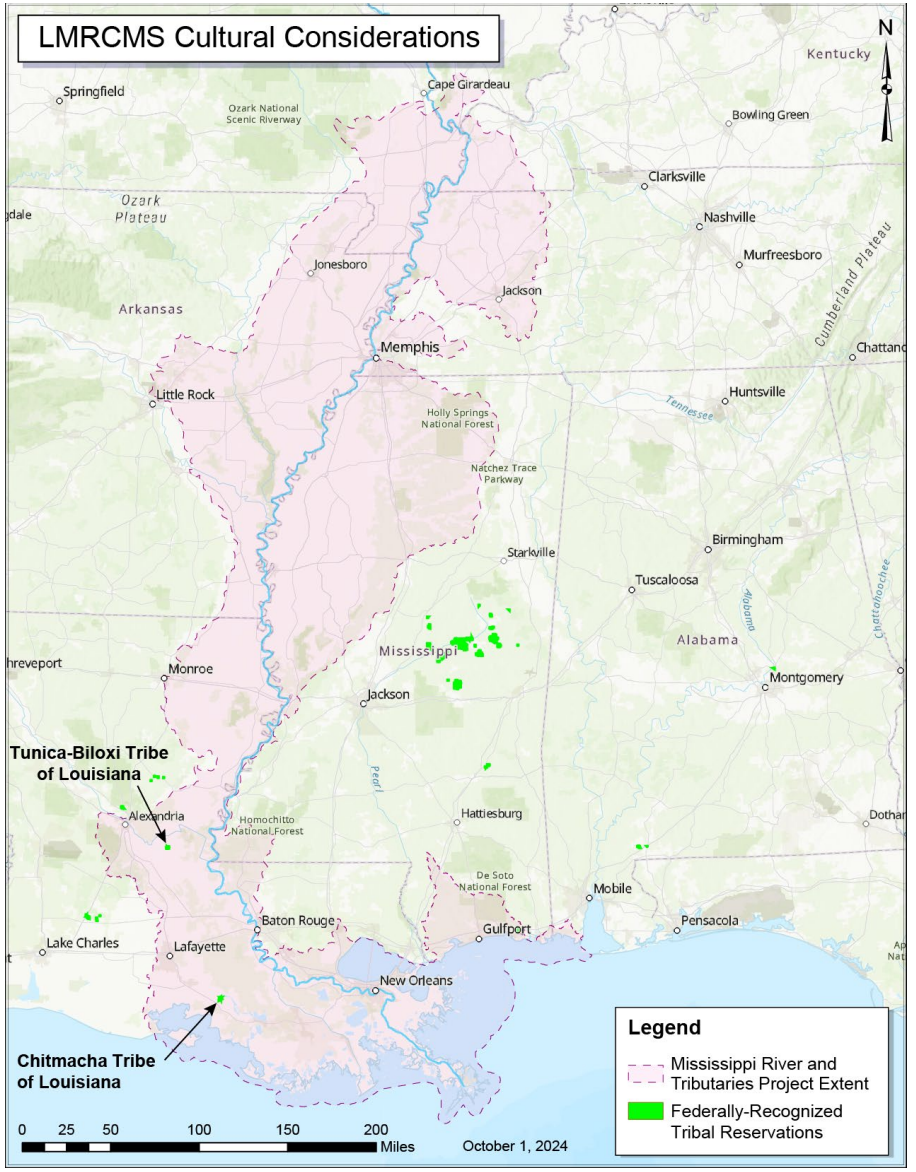


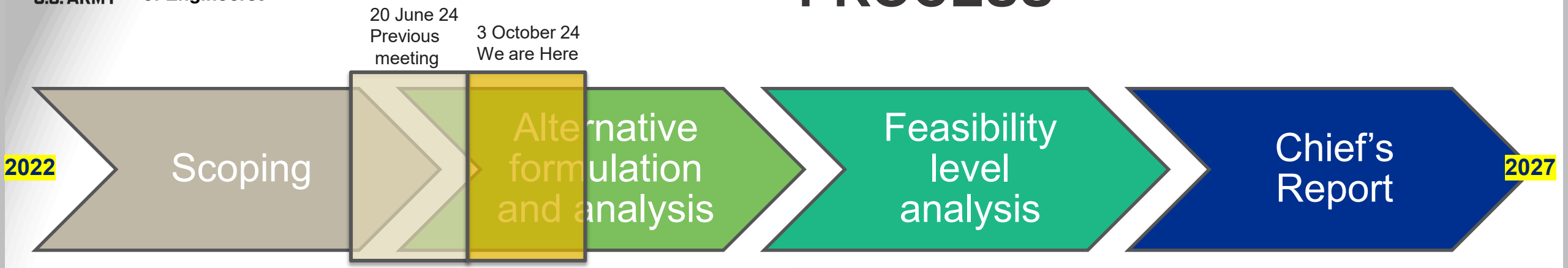
MEASURES FOR IMPROVING ACCESS FOR RECREATION AND EMERGENCY RESPONSE

- Partner with organizations to implement walking/biking paths along existing features
- Reconnect secondary channels for recreation access and use
- Install boat ramps/public access points for recreation, emergency access, and data collection
- Reconnect flows to secondary channels to improve conditions for recreation

https://www.lmrcc.org/outdoor-recreation/fishing/

Example measures. Subject to change.

WHERE ARE WE IN THE STUDY PROCESS



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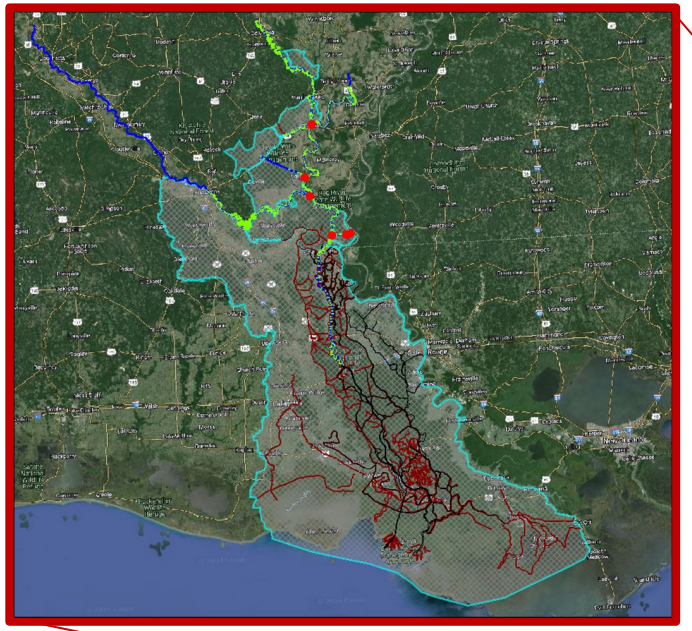
HYDRAULIC MODELING

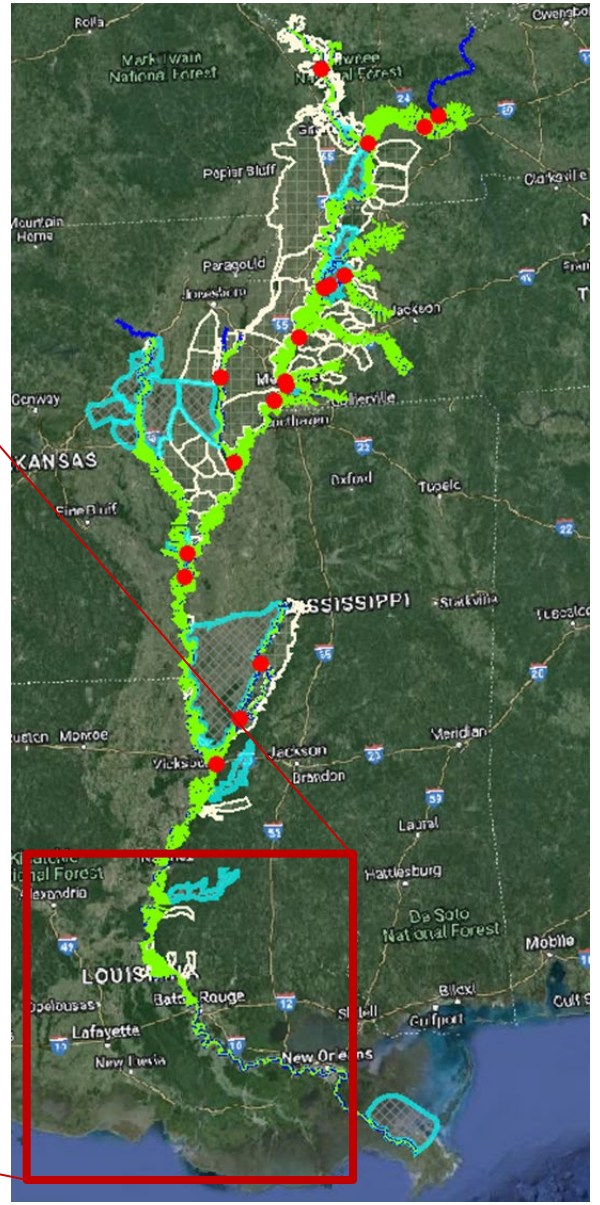
Two Hydraulic Models will be used

- **Mississippi River** 1D HEC-RAS Model - spans over 1,000 river miles, extending from above the confluence of the Ohio and Mississippi Rivers down to the Gulf of Mexico.
- **Atchafalaya River** 1D/2D HEC-RAS Models
- Hydraulic models will produce **hydrographs**, **Water-Surface Elevations**, **Levee Profiles**, **Inundation Maps**, **Flow Rates**, and **Timing of the Operation/Activation of Structures.**
- Results will be used to evaluate the system's response to changes in physical conditions and operations.
- 6 Events being modeled
  - 58AEN Project Design Flood
  - 2011 (High River - Highest Recorded Flows)
  - 2019 (High River - Longest Duration)
  - 2021 (Typical River Season)
  - 2022 (Low River)
  - Climate Reliance and Adaptability

Atchafalaya River Model



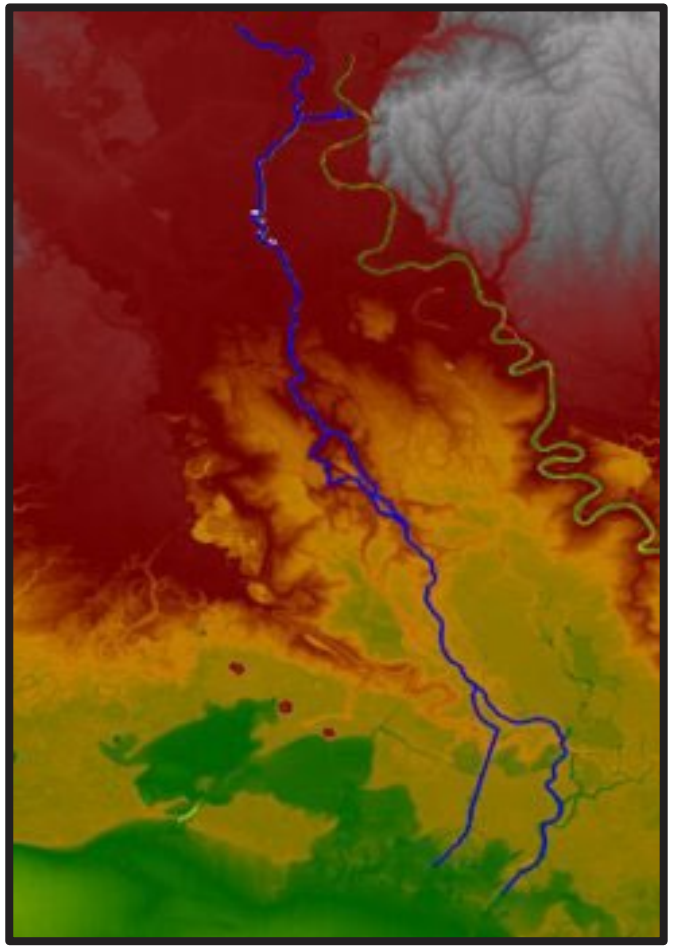
Mississippi River Model



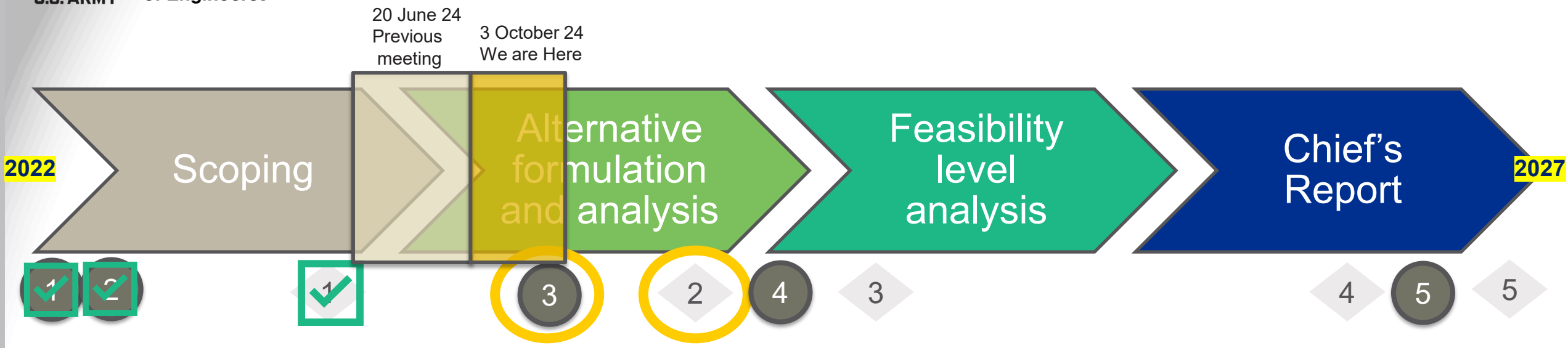
SEDIMENT MODELING

HEC-6T Model

- 1D numerical model to determine **the long-term (100-year) and systemwide sedimentation effects** that would occur in the Atchafalaya River.
- Evaluate the response of the Atchafalaya River in terms of **water-surface elevation changes, bed elevation changes,** and **sediment transport.**
- The model's extents are:
  - Upstream #1: Acme, LA along the Red River
  - Upstream #2: ORCC, along the Outflow Channel
  - Downstream #2: Gulf of Mexico, through the Wax Lake Outlet
  - Downstream #2: Gulf of Mexico, along the lower Atchafalaya River.



NEXT STEPS



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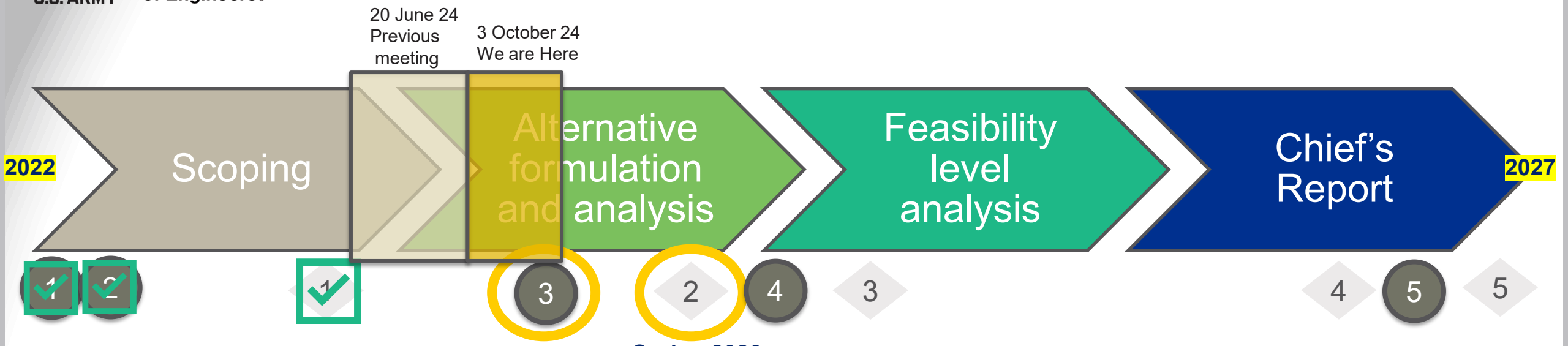
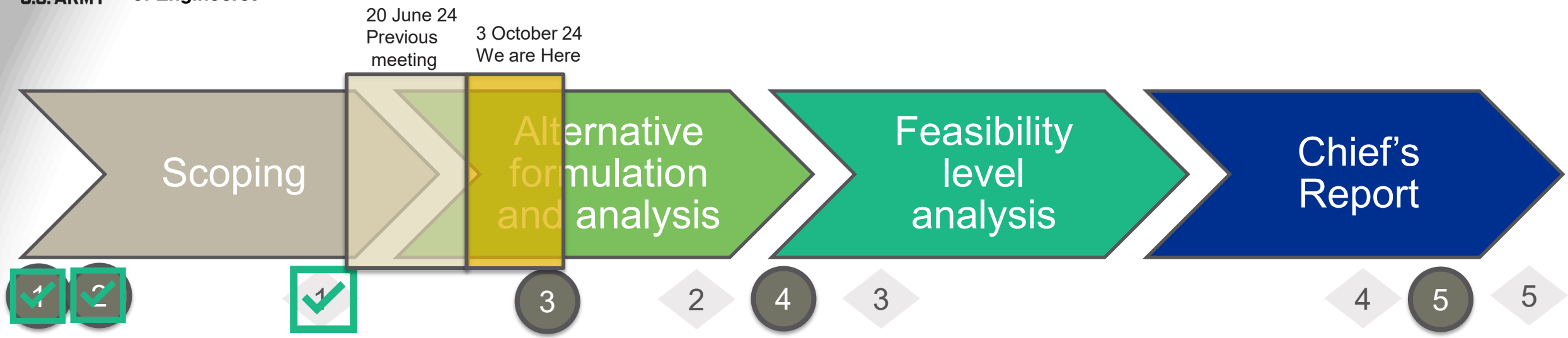


Spring 2026:
Tentatively Selected Plan

- ✓ Complete reviews of measures
- ✓ Complete water model runs and start sediment modeling
- ✓ Identify and run ecosystem models to evaluate ecosystem benefits
- ✓ Analyze, evaluate, and compare Alternatives
- ✓ Conduct additional meetings with the Public and Agencies
- ✓ Begin preparing the Draft Integrated Feasibility Report and Environmental Documentation
- ✓ Select Tentatively Selected Plan
- ✓ Identify recommendations for Tiered Studies

NEXT STEPS



STAY TUNED!
Next Quarterly Public Update will be in January 2025

QUESTIONS AND COMMENTS SESSION

Before you log off, please fill out this short questionnaire on today's webinar!

Quarterly Public Update 2 - Lower Mississippi River Comprehensive Management Study (2)

https://forms.osi.apps.mil/r/XMUn2c8zgG

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MISSISSIPPI VALLEY DIVISION
US ARMY CORPS OF ENGINEERS

THANK YOU FOR ATTENDING TODAY'S MEETING

Lower Mississippi River Comprehensive Management Study – Quarterly Public Update

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Email us at:
LMRComp@usace.army.mil

Mail:
USACE-MVN Attn: LMR Comp c/o Project Management
7400 Leake Avenue
New Orleans, Louisiana, 70118

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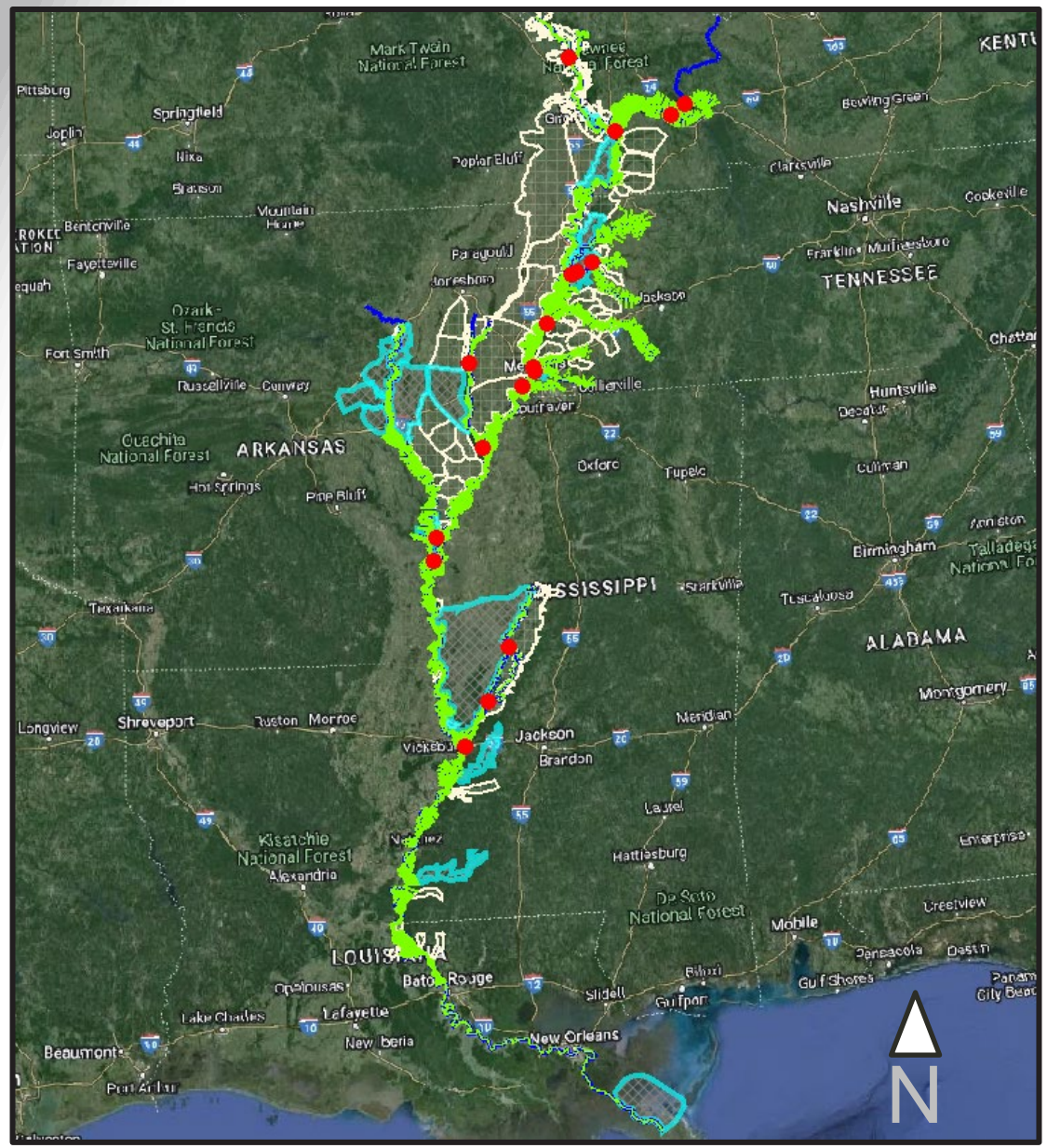
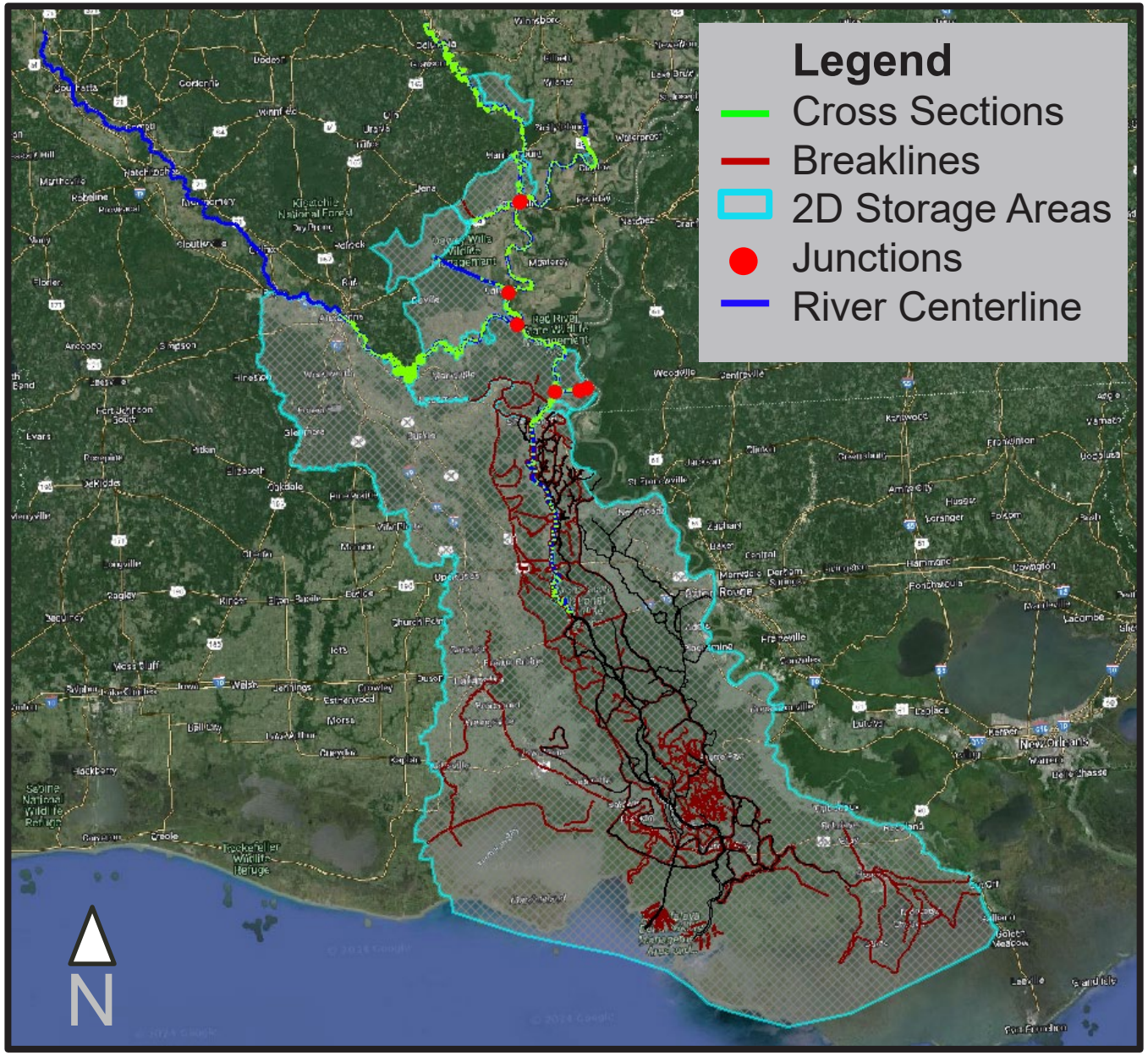
HYDRAULIC MODELING





SCREENING CRITERIA AND CONSTRAINTS

Decision Matrix Discussions/Decisions:

- Would implementation of the measure negatively impact the Project Design Flood?
- Would implementation of the measure increase flood risk or life safety?
- Would implementation of the measure transfer risk/impact somewhere else?
- Was the measure recommended a duplicative measure already being evaluated?
- Are there existing Authorities/Project/Programs that can implement the measure and are currently studying/designing it?
- Is the measure within the authority of the Study?
- Will the measure effectively achieve the benefits proposed?
- Is implementation of the measures cost-effective?

Constraints:

- Threatened/Endangered Species – Avoid and/or minimize negative impacts to species and protected habitats (inclusive of Critical Habitat and Essential Fish Habitat)
- No loss of authorized navigation performance
- Avoid inducing development in floodplains
- Avoid or minimize impacts to water supply – municipal, industrial, residential, tribal and freshwater infrastructure
- Unintended changes in water levels
- Tribal Impacts – inclusive of affects to Tribal lands or restricted access to resources