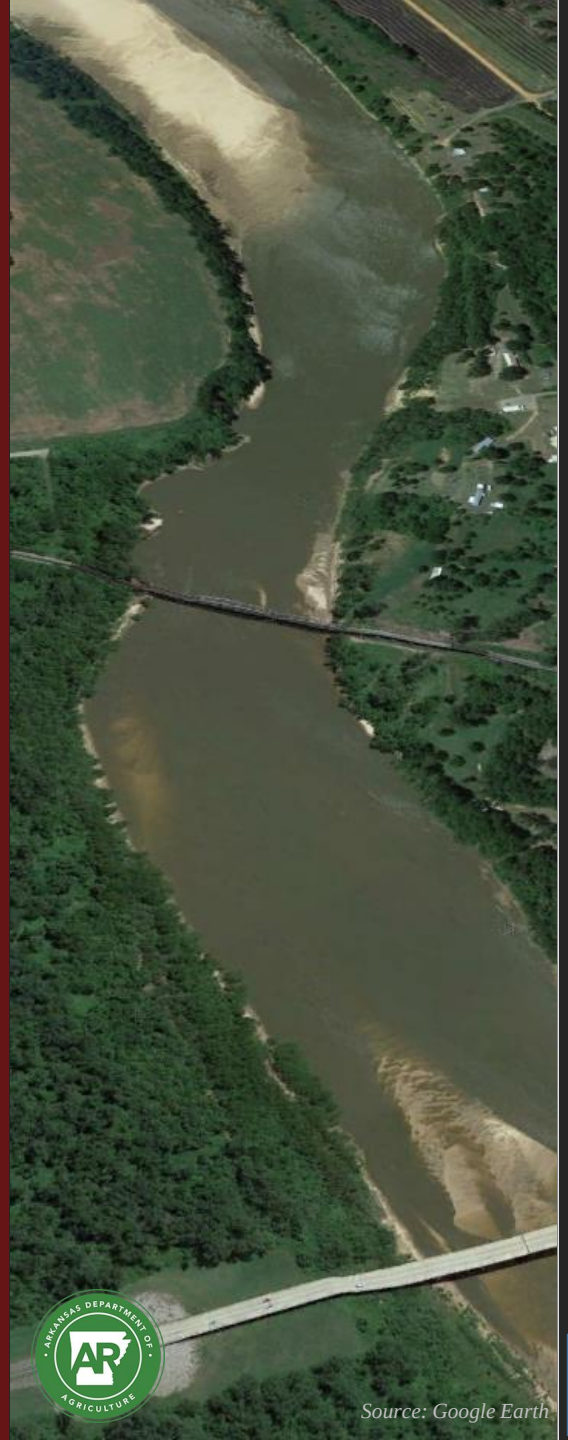


# SW Arkansas Red River Navigation

## WRDA 1986, Section 203 Feasibility Study and EIS

June 1, 2023

**State of Arkansas Department of Agriculture**

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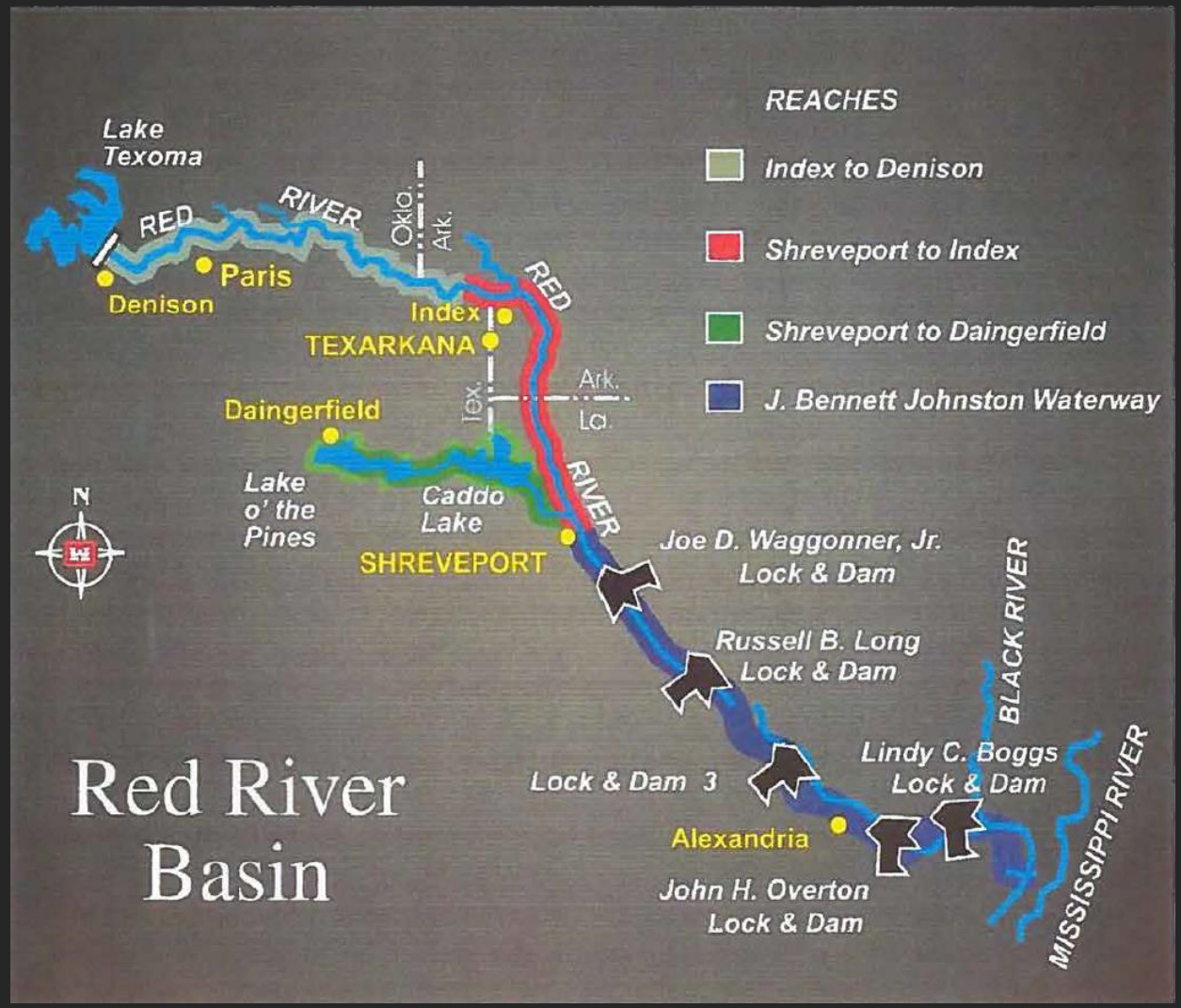
## Study Area

- Red River Waterway

Source: Google Earth

# Study Area – Red River Waterway




- Southwest Arkansas & Northwest Louisiana
- Shreveport-Bossier City to Index
- Total 134 River Miles

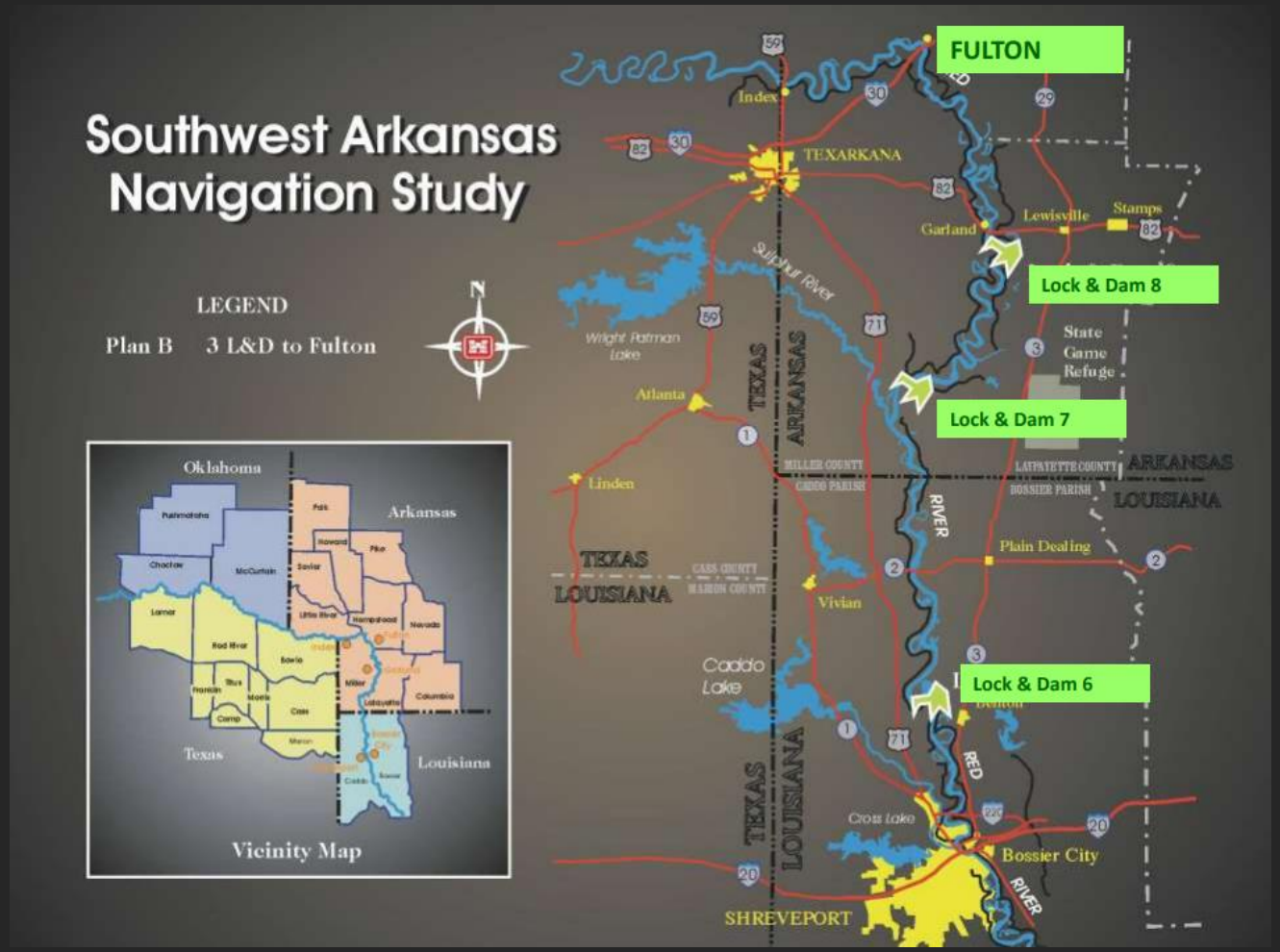
# History

- Feasibility Study (2005)
- Navigation Economics Study

Source: Google Earth

# History – Feasibility Study

## SW Arkansas Red River Navigation




- WRDA 1996, Section 402
- Draft Feasibility Study, 2005
- Two Lock & Dams (LD6 & LD7)
- 9-ft Channel Depth
- Navigation Extend to Garland
- BCR < 1.0

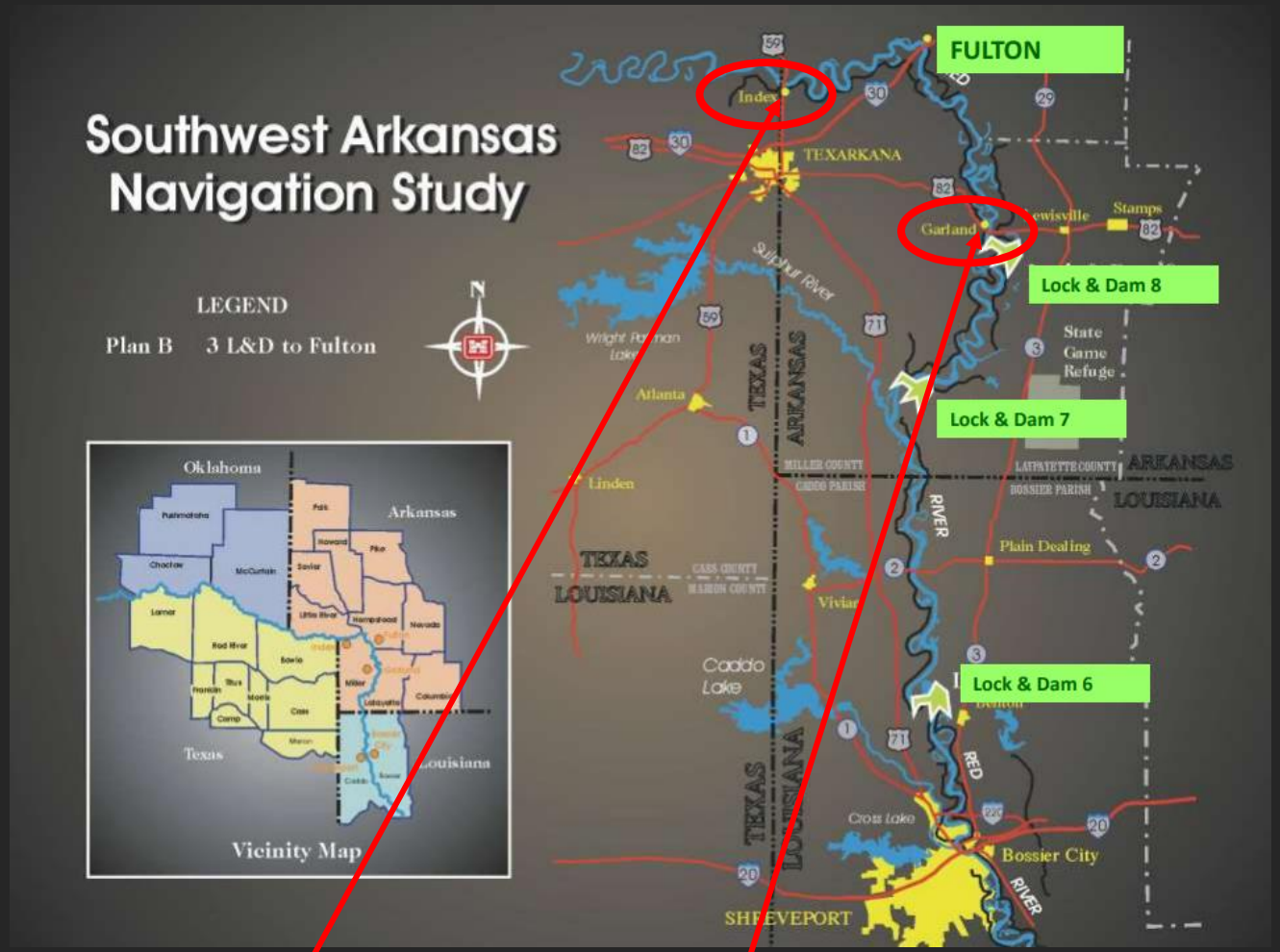
## History

- Feasibility Study (2005)
- Navigation Economics Study

Source: Google Earth

# History – Navigation Economics Study

## SW Arkansas Red River Navigation




1.2 BCR for a three-lock alternative to Index

1.8 BCR for a two-lock alternative to Garland

- Performed by GEC
- Analyzed Extent of Bulk Commodity Shipments
- Compared Rail vs Barge Movement Costs
- Benefits to Businesses, Shipment Flows, Farm & Non-Mineral Industries

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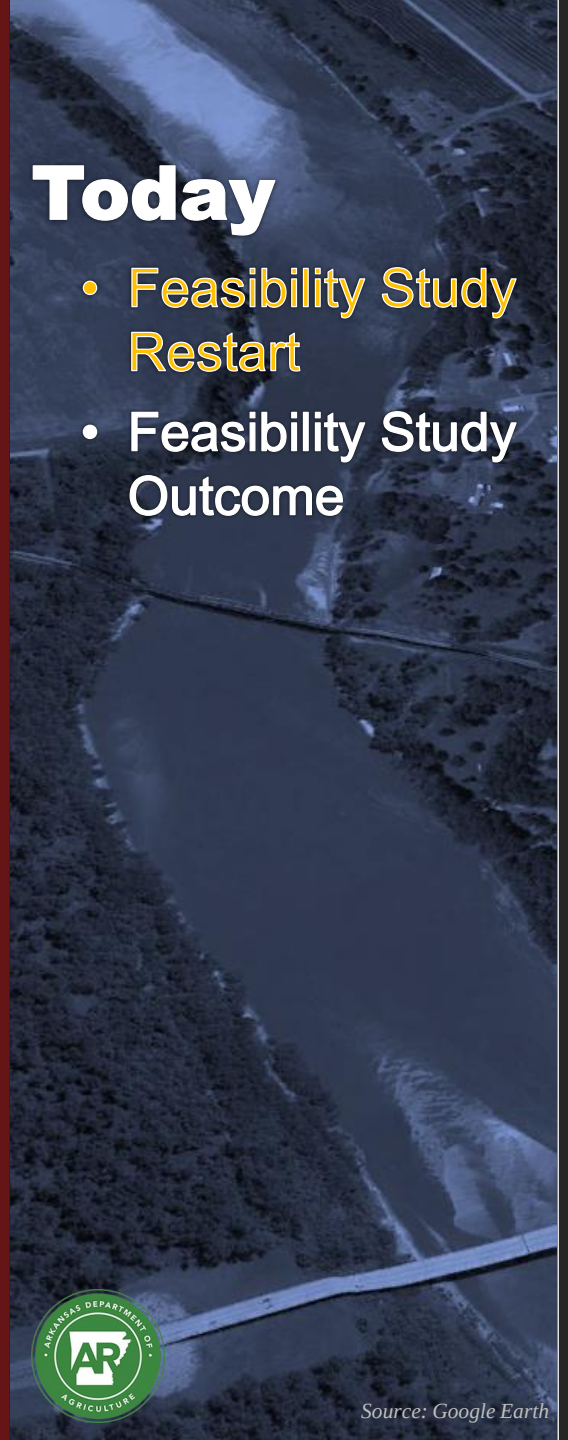


# Today – Feasibility Study Restart

## SW Arkansas Red River Navigation

- Section 203 Feasibility Study Report & EIS
  - *Allows Non-Federal Interest to Undertake Feasibility Study for Submittal to Assistant Secretary of the Army for Civil Works [ASA (CW)]*
- Non-Federal Interests
  - *Arkansas Department of Agriculture, Natural Resources Division*
  - *Arkansas Department of Agriculture, Arkansas Red River Commission*
- Turnkey Feasibility Study Report & EIS Preparation
  - *Pending Contract to A-E Consultant Team*
- Technical Assistance & Reviews
  - *Provided by USACE Vicksburg and New Orleans Districts*
- Feasibility Study Planning Process
  - *Follow USACE SMART* Planning Principles*
  - *Adhere to USACE Civil Works Policies, Procedures & Standards*
  - *Finish within 3-Years and within $3 million*

**SMART – Specific, Measurable, Attainable, Risk Informed & Timely*

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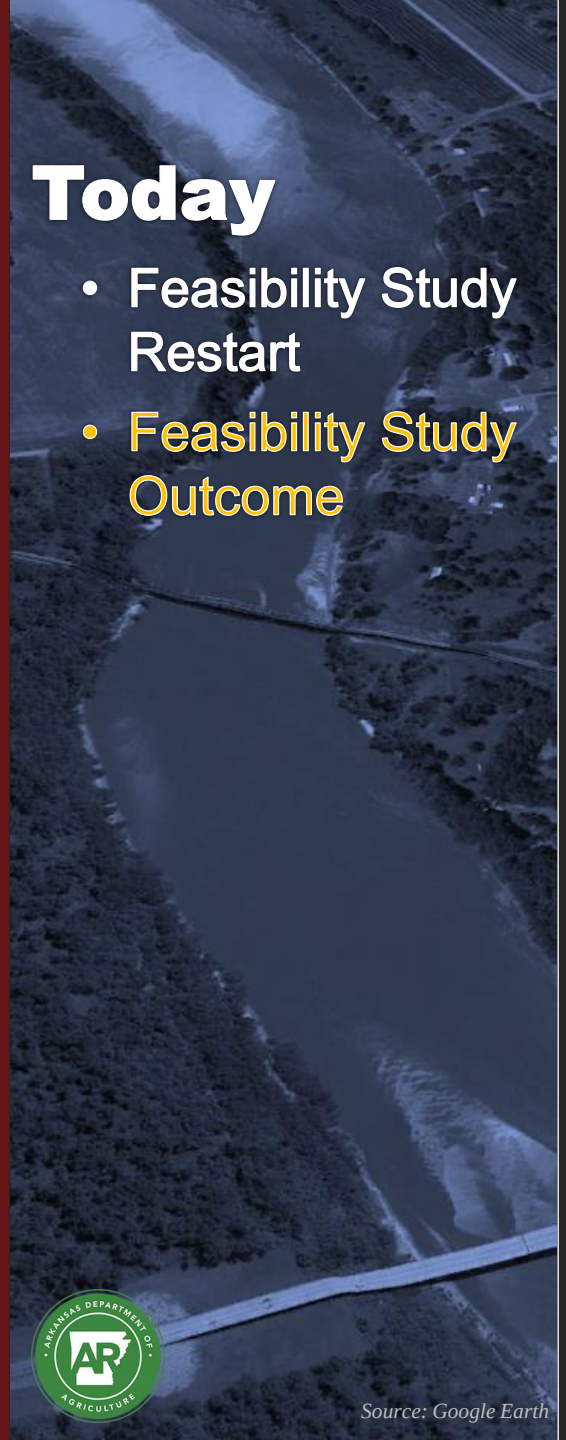


# Today – Feasibility Study Outcome

## SW Arkansas Red River Navigation

- Targeted Outcomes
  - *Project Recommendation to Extend Red River Navigation*
    - *Positive Navigation Transportation Cost Saving Benefits with BCR >> 1.0*
    - *Navigation Extension from Shreveport through SW Arkansas Red River*
    - *Shallow-Draft Navigable Channel Geometry Similar to JBJ Waterway*
    - *Locks & Dams for Barge Traffic Vertical Lift*
  - *Complete NEPA-Compliance Documentation with Record of Decision*
  - *ASA (CW) and OMB Approval of Feasibility Study Recommendation*
  - *Congressional Authorization for Future Project Implementation by USACE*

- Follow-On Phases
  - *Pre-Construction Engineering & Design*
  - *Construction (Implementation)*
  - *Operations & Maintenance*

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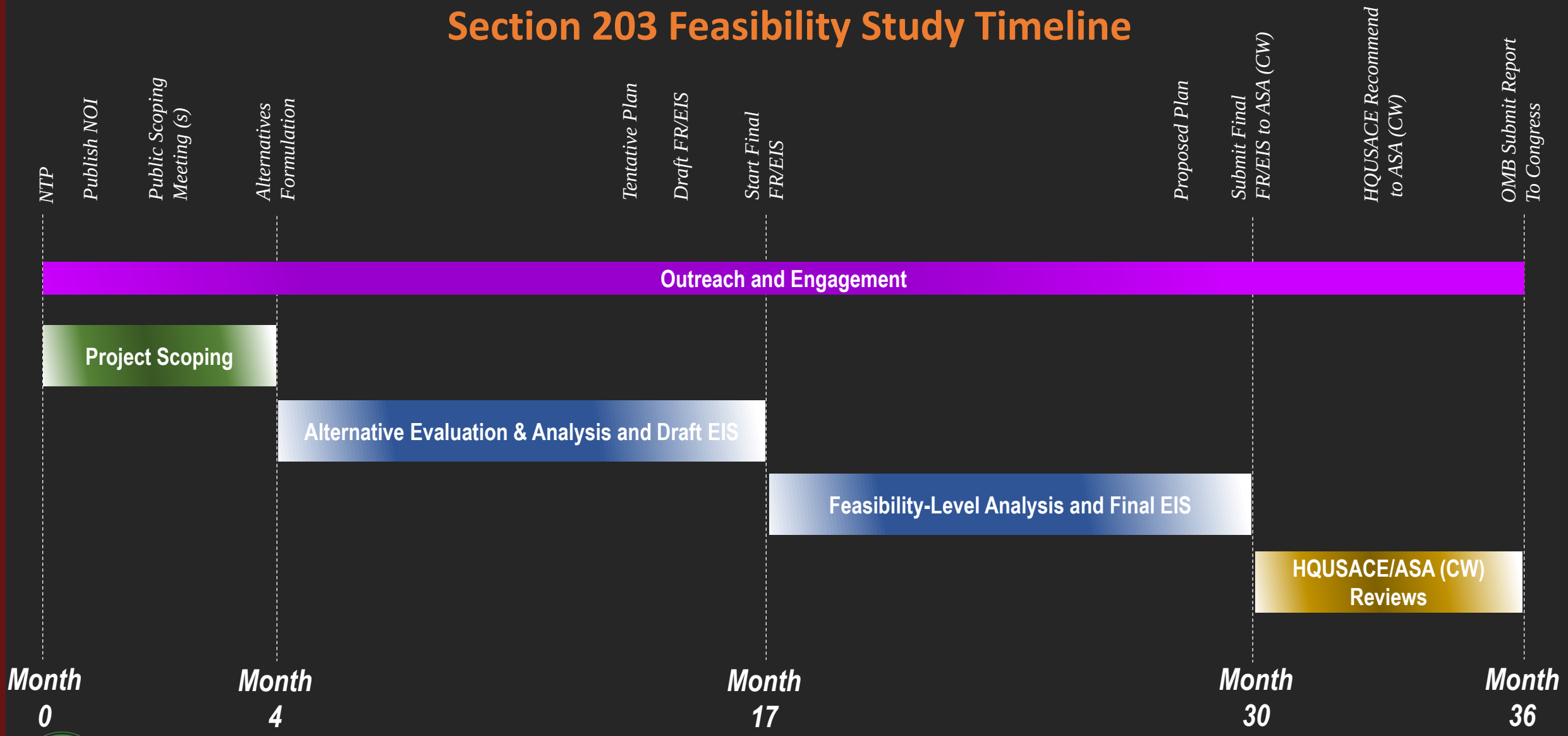
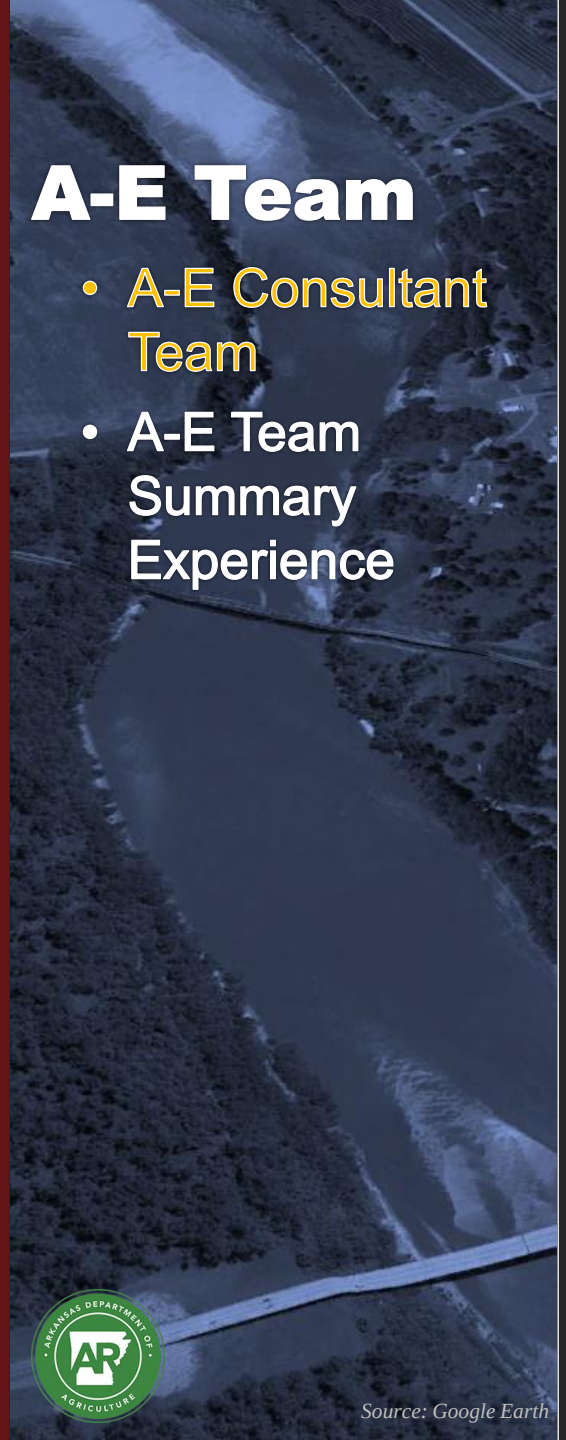
# Schedule

## Section 203 Feasibility Study Timeline



## A-E Team

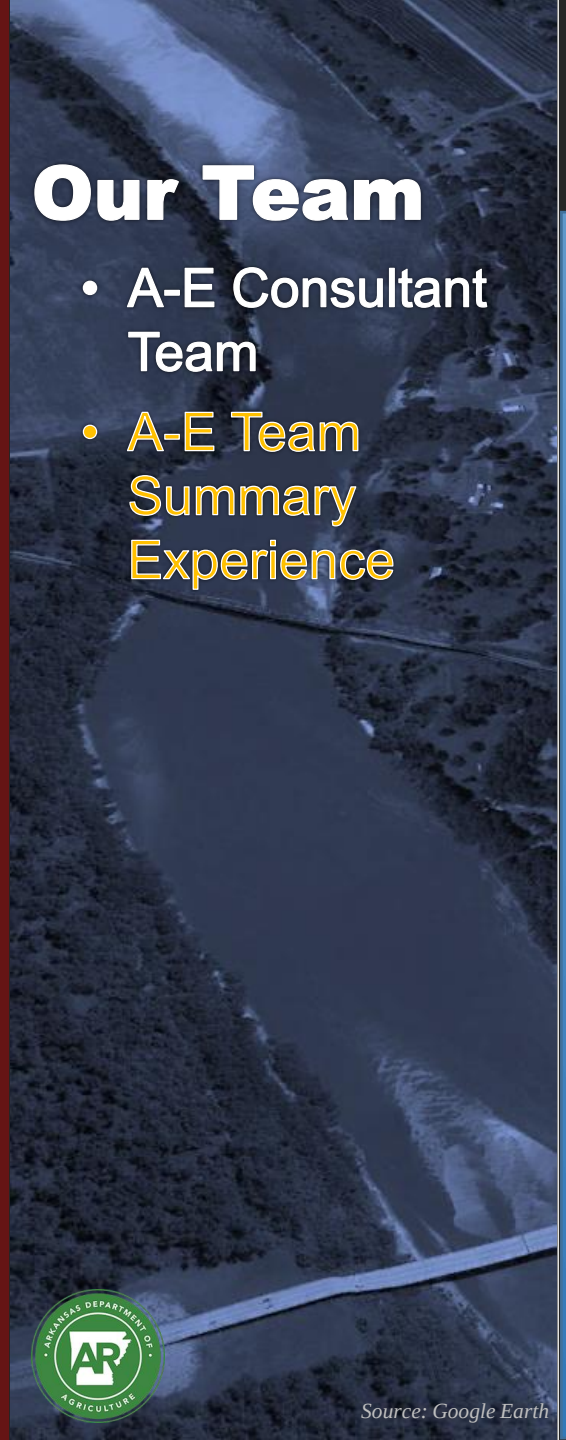
- A-E Consultant Team
- A-E Team Summary Experience



Source: Google Earth

# A-E Consultant Team

| FIRM | SPECIALTY | ROLE |
|---|---|---|
| FREESE AND NICHOLS | *WATER RESOURCES & TRANSPORTATION INFRASTRUCTURE PLANNING & ENGINEERING* | • Prime/Project Management<br>• Plan Formulation, Engineering, H&H Modeling and NEPA/EIS |
| GEC | *MULTI-MODAL TRANSPORTATION & WATER RESOURCES INFRASTRUCTURE PLANNING & ENGINEERING* | • Study Management<br>• Plan Formulation, Economics, NEPA/EIS and Cost Estimates |
| GARVER | *WATER RESOURCES & TRANSPORTATION INFRASTRUCTURE PLANNING & ENGINEERING* | • Public/Stakeholder Engagement, Navigation Structures, and H&H Modeling |
| Yokum YES Engineering Solutions | HEAVY CIVIL WORKS STRUCTURAL ENGINEERING | • Locks & Dams Features Design |
| Alexander Aaron | MULTI-PURPOSE CIVIL WORKS ECONOMICS | • Recreation Economics |




# Summary of A-E Team Experience

- **Experience in Delivering a Section 203 Navigation Feasibility Study and Environmental Impact Statement.**
- **History with Preparing Water Resources Feasibility Studies for USACE.**
- **Knowledge of USACE's Project Management Business Development Processes, Water Resources Policies, and Planning & Engineering Regulation and Guidance.**
- **Multi-Disciplinary Team Capable of Deriving Primary Benefits for Navigation and Ancillary Benefits for Water Supply, and Recreation.**
- **Understanding of the Red River System through Previous Economic Market Analysis and Lock & Dam Designs.**
- **A Team that has Worked Together on Previous Studies and Projects.**
- **Passion for Navigation and Water Resources Multi-Uses.**

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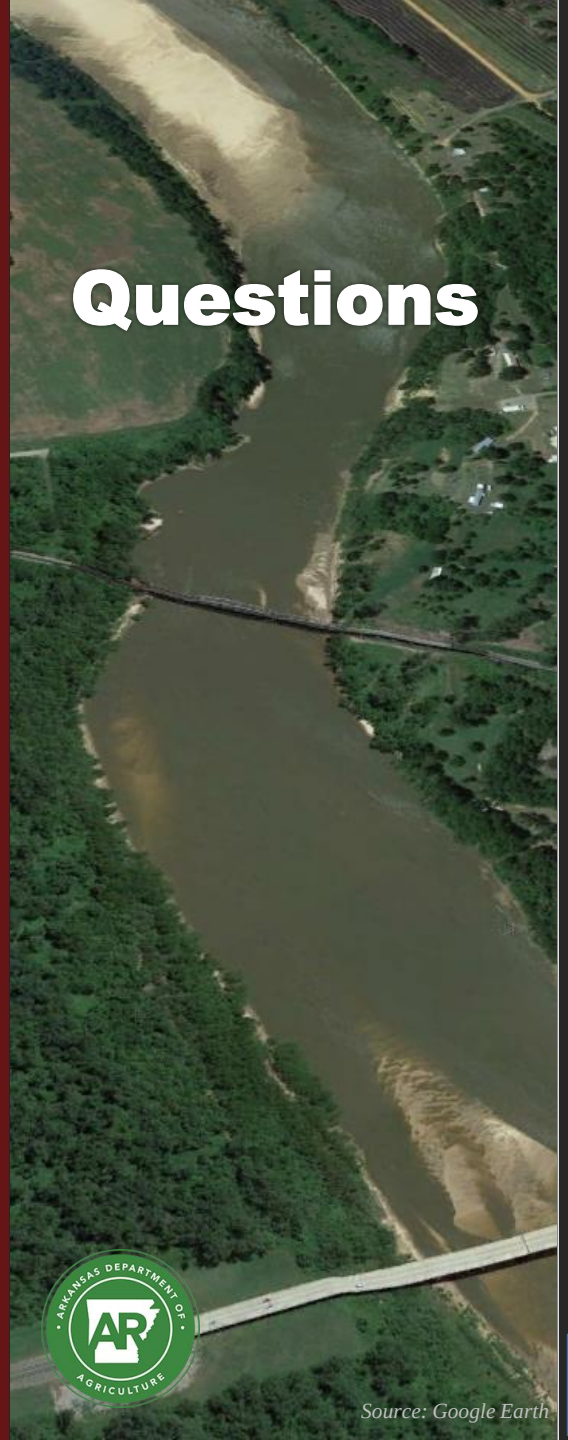
# Questions




Questions?

FREESE AND NICHOLS

GEC GARVER Yokum YES Engineering Solutions Alexander Aaron