

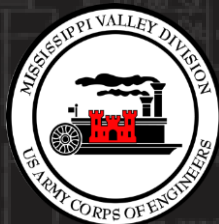
PEARL RIVER BASIN, MISSISSIPPI FLOOD RISK MANAGEMENT PROJECT

DRAFT ENVIRONMENTAL IMPACT STATEMENT

**Public Meetings
July 10-11, 2024**



**US Army Corps
of Engineers®**



Presentation Agenda

- Introductions
- Message from Vicksburg
- Rules of Engagement
- Meeting Purpose
- Public Meeting Schedule
- Project Details
- Findings
- Conclusion
- Project Timeline
- Opportunities to Comment
- Opportunities for individual discussions.





U.S. ARMY

Message from Colonel's of Vicksburg



Public Message from Prior Commander of Vicksburg District: COL Klein



Public Message from Current Commander of Vicksburg District: COL Gipson





U.S. ARMY

Rules of Engagement



- Wait to speak until given permission by the moderator
- Limit speaking time to three minutes or less
- Use respectful language
- Avoid interrupting the panel, moderator, or fellow attendees
- Submit your statement/comment/question/idea:
 - Verbally or via a written comment card at an in-person public meeting
 - Via email at pearlriverfrm@usace.army.mil
 - Send mail to:

Mr. Eric Williams; Chief, Environmental Branch
U.S. Army Corps of Engineers, Regional Planning and Environmental Division South
CEMVN-PDS
7400 Leake Avenue
New Orleans, Louisiana 70118.

Thank you for adhering to these rules to create a productive and enjoyable session for all participants.





Meeting Purpose



Why are we here?

- Present the Draft EIS
 - Provide background on the Proposed Action
 - Present alternative analysis
- Receive Comments
 - Comments received through August 6, 2024
 - Full participation is encouraged.
 - It is a priority to provide effective flood risk solutions to the Jackson metropolitan area.





U.S. ARMY

Public Meeting Schedule



In Person Meeting Schedule

Wednesday

July 10, 2024
2 p.m.

Mississippi Public
Broadcasting Auditorium,
3825 Ridgewood Road,
Jackson, MS 39211

Wednesday

July 10, 2024
6 p.m.

Mississippi Trade Mart,
1200 Mississippi St,
Jackson, MS 39202

Thursday

July 11, 2024
11 a.m.

Slidell Municipal
2056 2nd Street,
Slidell, LA 70458

Thursday

July 11, 2024
6 p.m.

Monticello Civic Center
125 E Broad Street,
Monticello, MS 39654

Virtual Public Meeting Completed

Thursday

June 27, 2024
6 p.m.

- The virtual meeting transcripts, presentation, and additional information for the virtual meeting can be found on the USACE Vicksburg District Website
- <https://www.mvk.usace.army.mil/Missions/Programs-and-Project-Management/Project-Management/Pearl-River/>

Public Input

- Self-addressed comment cards provided at public meetings
- Traditional Mail
U.S. Army Corps of Engineers, New Orleans District, CEMVN-PDS
7400 Leake Ave. New Orleans, LA 70118
- E-Mail PearlRiverFRM@usace.army.mil





Public Review Period

- The Draft EIS is published for public review and comment.
- The 45-day public comment period is extended 15-days to August 6, 2024.
- Your comments and input are **welcomed** and **encouraged**.
- Once comment period closes, project team will consider all substantive comments and, if necessary, conduct further analysis.
- Responses to comments will be included in the final SEIS





U.S. ARMY

PROJECT INTRODUCTION



Scope

Developed a reasonable range of alternatives that meet the project purpose in consideration of the human built and natural environment to include a preliminary determination of the National Economic Development (NED) Plan

Purpose

To evaluate flood risk management alternatives that could be implemented under the authority.

Non-Federal Interest

Rankin-Hinds Pearl River Flood and Drainage Control District.

Authorization

Sec. 3104 of Water Resources Development Act (WRDA) 2007 (within Hinds and Rankin Counties, MS, the Secretary may construct NED plan, the locally preferred plan (LPP), or a combination thereof subject to certain determinations).

Funding

Bipartisan Infrastructure Law allocated funding to complete the validation study and initiate design and construction for a comprehensive flood damage reduction plan, to include channel improvements.

NFI Report

NFI submitted a Draft Final Integrated Feasibility Report and EIS, dated 6/22/22, under Sec. 211 of WRDA 1996, to the Assistant Secretary of the Army (ASA) Civil Works(CW) in July 2022.

USACE Process

In Oct. 2022, ASA(CW) charged the Corps with preparing a report and environmental compliance documentation for the Pearl River Basin, MS, project that addresses the statutory requirements and informs the ASA(CW)'s determinations. The DEIS was released for public review beginning June 7, 2024 and ending July 22, 2024. A 15-day extension has been published in the Federal Register extending the comment period through August 6, 2024





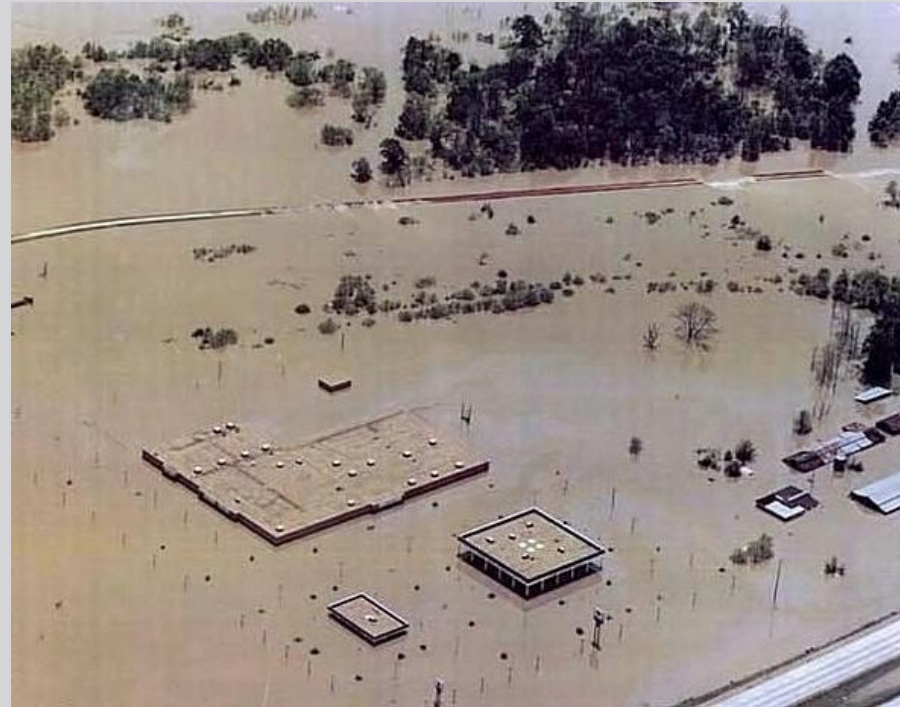
U.S. ARMY

PEARL RIVER FLOODING

9



- The Jackson, MS metropolitan area has repeatedly experienced devastating flooding from the Pearl River over the past 100 years. Major flooding incidents include 1961, 1979, 1982, 1983, and 2020.





U.S. ARMY

HISTORY

10



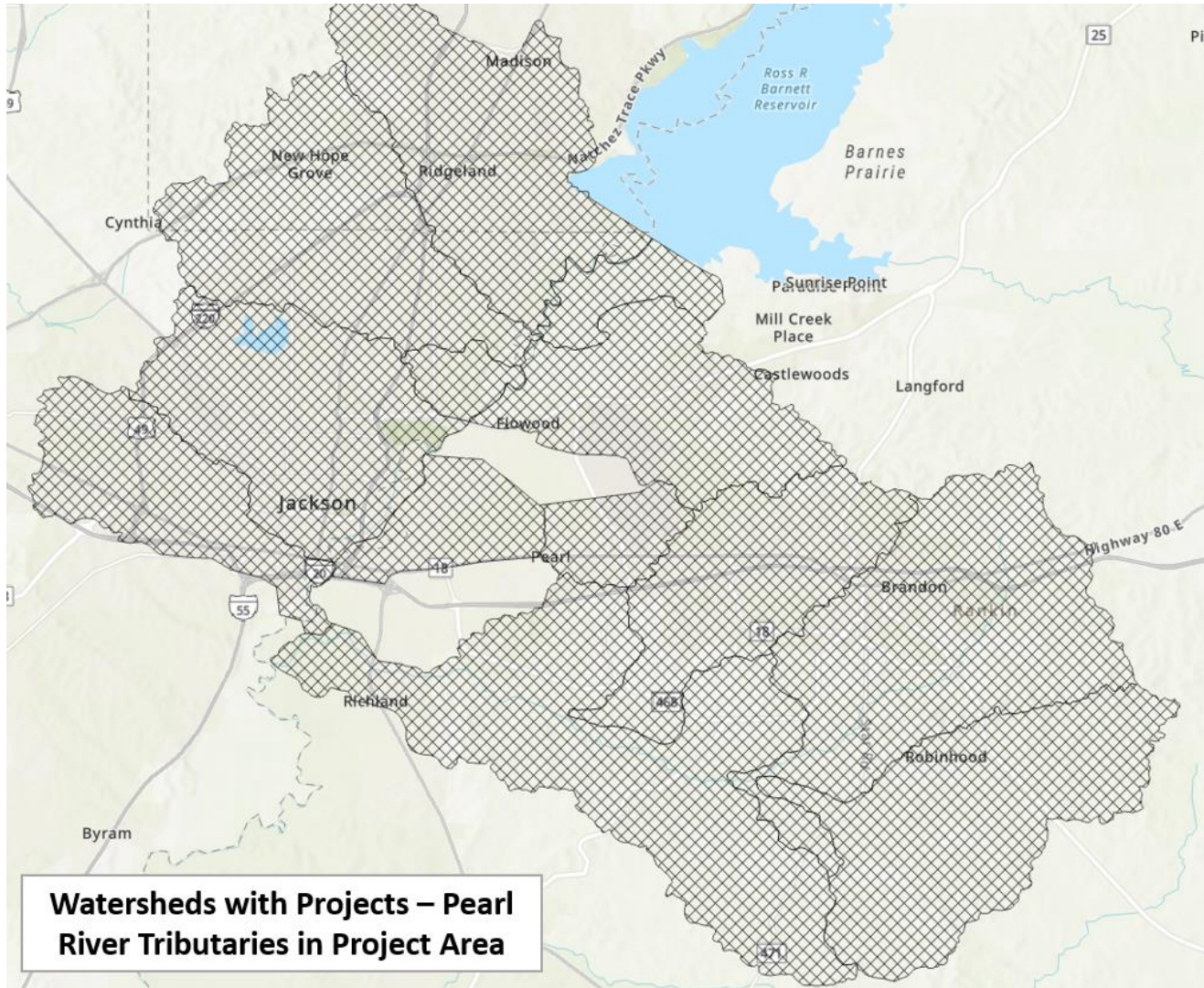
- **Jackson East & West Levees constructed 1968**
- **Flood of Record – April 1979**
- **Numerous Flood Risk Studies Conducted**
 - 2007 USACE Preliminary Draft Report
 - Evaluated a Levee Plan and the LeFleur Lakes Plan
 - 2018-2022 Rankin-Hinds (R-H) Feasibility Report
 - Prepared under Section 211 of WRDA 1996
 - Released for Public Review in Summer 2018
 - Modified plan to address public comments
 - Modified plan to address OASACW/USACE comments
 - 2022-2024 USACE DEIS
 - USACE in collaboration with R-H prepared a DEIS and Commander's Report





U.S. ARMY

Local Tributary Projects within the Pearl River Flood Risk Management (FRM) Project Area



Below is the FRM estimated costs done by outside sources within project area:

Hinds County: 6 projects estimated total:
\$8,144,00.00

Rankin County: 31 projects estimated total:
\$69,095,713.00

Madison County: 3 projects estimated total:
\$9,000,000.00

City of Jackson Funding





U.S. ARMY



PURPOSE AND NEED

PURPOSE: Evaluate flood risk management alternatives that could be implemented under Section 3104 of WRDA 2007.

NEED:

1. Severe rainfall in the Upper Pearl River Watershed causes a high risk of downstream flooding in the Study Area, impacting the Jackson MSA and thousands of residents within the surrounding area.
2. High risk of flooding threatens critical infrastructure, including an existing wastewater treatment facility.
3. Major transportation routes and evacuation routes become impassible and damaged during flood events in the Study Area.
4. Environmental justice communities are at the greatest risk to sustain damages from flooding.





U.S. ARMY

USACE ACTIVITIES

13



Per Section 3104, the Secretary is authorized to construct the NED plan, the LPP, or some combination thereof.

USACE in collaboration with R-H has prepared a DEIS to inform the Secretary decision.

- Identify NED plan
- Compare level of flood protection of alternatives
- Assess the environmental acceptability and technical feasibility of the alternatives





STUDY/PROJECT AREA



U.S. ARMY

STUDY AREA (Yellow Circle)

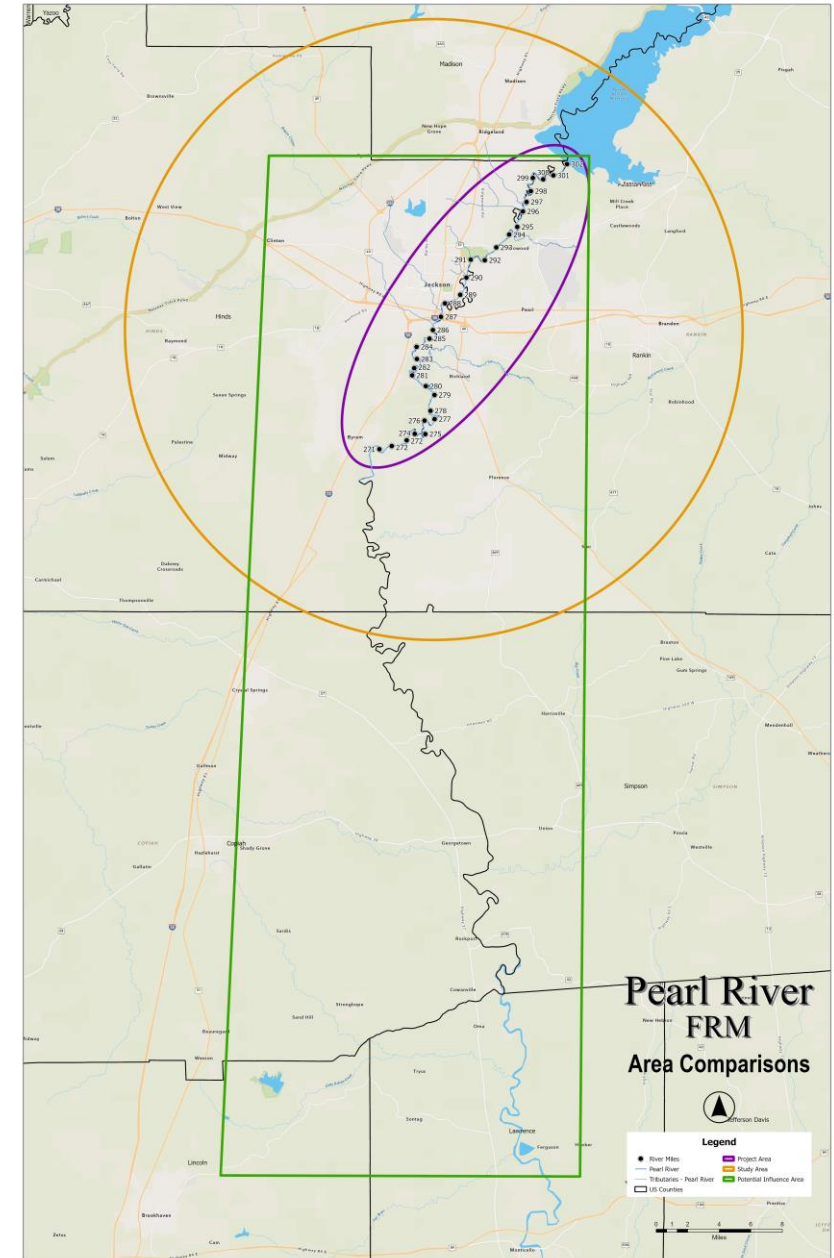
- The focus for this study is the Middle Pearl-Strong Basin (HUC 03180002).
- Municipalities include: Jackson, Flowood, Pearl, and Richland.
- Counties include: Hinds and Rankin.
- Major tributaries include: Caney, Eubanks, Hanging Moss, Hog, Lynch, Prairie Branch, Purple, Richland and Town Creek.

PROJECT AREA (Purple Oval)

- The project area comprises the Pearl River Basin in Rankin and Hinds counties, MS between River Mile (RM) 270.0 just south of Byram, Mississippi, and RM 301.77 at the dam of Ross Barnett Reservoir.
- Project area would be limited to the area where proposed actions would be implemented.

POTENTIAL INFLUENCE AREA (Green Trapezoid)

- Are defined by changes in hydrology from a proposed alternative.





U.S. ARMY

ALTERNATIVES UNDER EVALUATION

15



NFI Alternatives Considered

- Alternative A – NS Plan. *Removed from further consideration*
- Alternative B – Levee Plan. *Removed from further consideration*
- Alternative C – LPP Plan. Channel Improvement/Weir/Levee Plan. Carried forward for further analysis.

USACE New Alternatives collaborated with RH

- Alternative A1 – Modified NS Plan
- Alternative D - Likely NED Plan. Combination Thereof (CTO) with Weir
- Alternative E - CTO Without Weir





U.S. ARMY

ALTERNATIVE A1 (Non-structural)



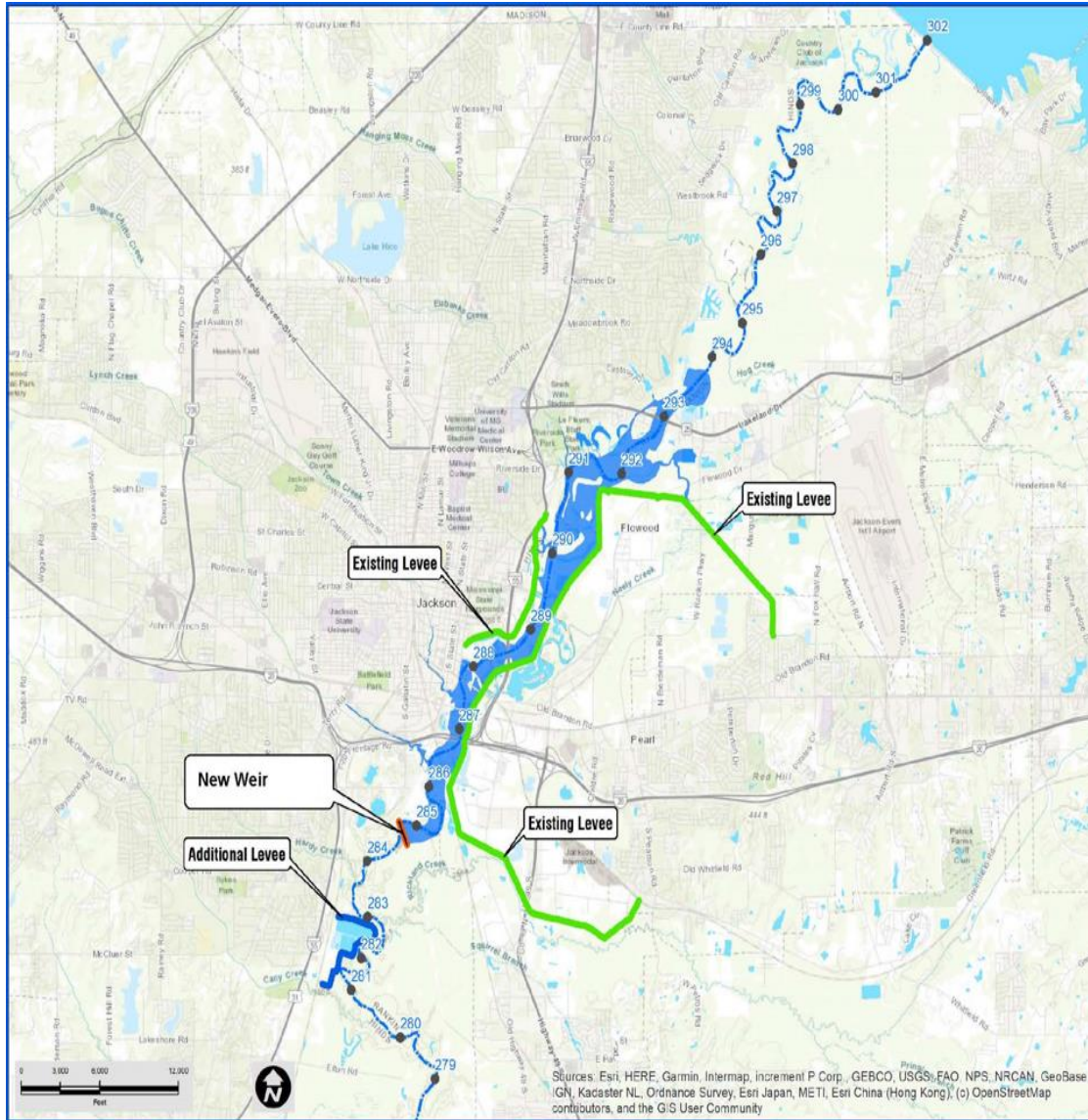
- Structures within the 25-year floodplain
- Elevation – Residential - Raised to the 100-year
- Floodproofing – Non-residential
- Voluntary property acquisition
Acquired properties would become greenspace
- Identified Structures = 143 total structures
81 residential
62 number non-residential





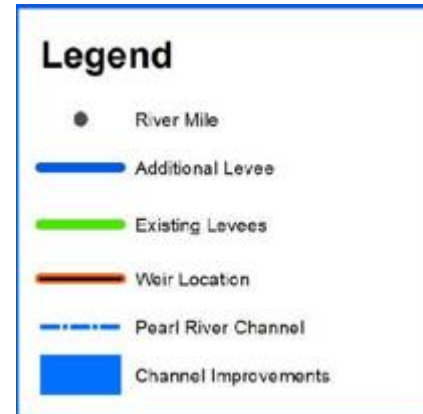
U.S. ARMY

Alternative C – Locally Preferred Plan



Improved conveyance results in FRM benefits in the northern floodplain.

- Clearing and lowering of the channel overbanks to increase hydraulic conveyance
- demolition of the existing weir near the J. H. Fewell Water Treatment Plant (WTP)
- Construction of a new weir with a low-flow gate structure further downstream to Elevation 258.0
- Upgrading an existing non-Federal levee into a Federalized ring levee around the Savannah Street Wastewater Treatment Plant (WWTP)
- Upgrades to interior drainage of existing Federal Levees



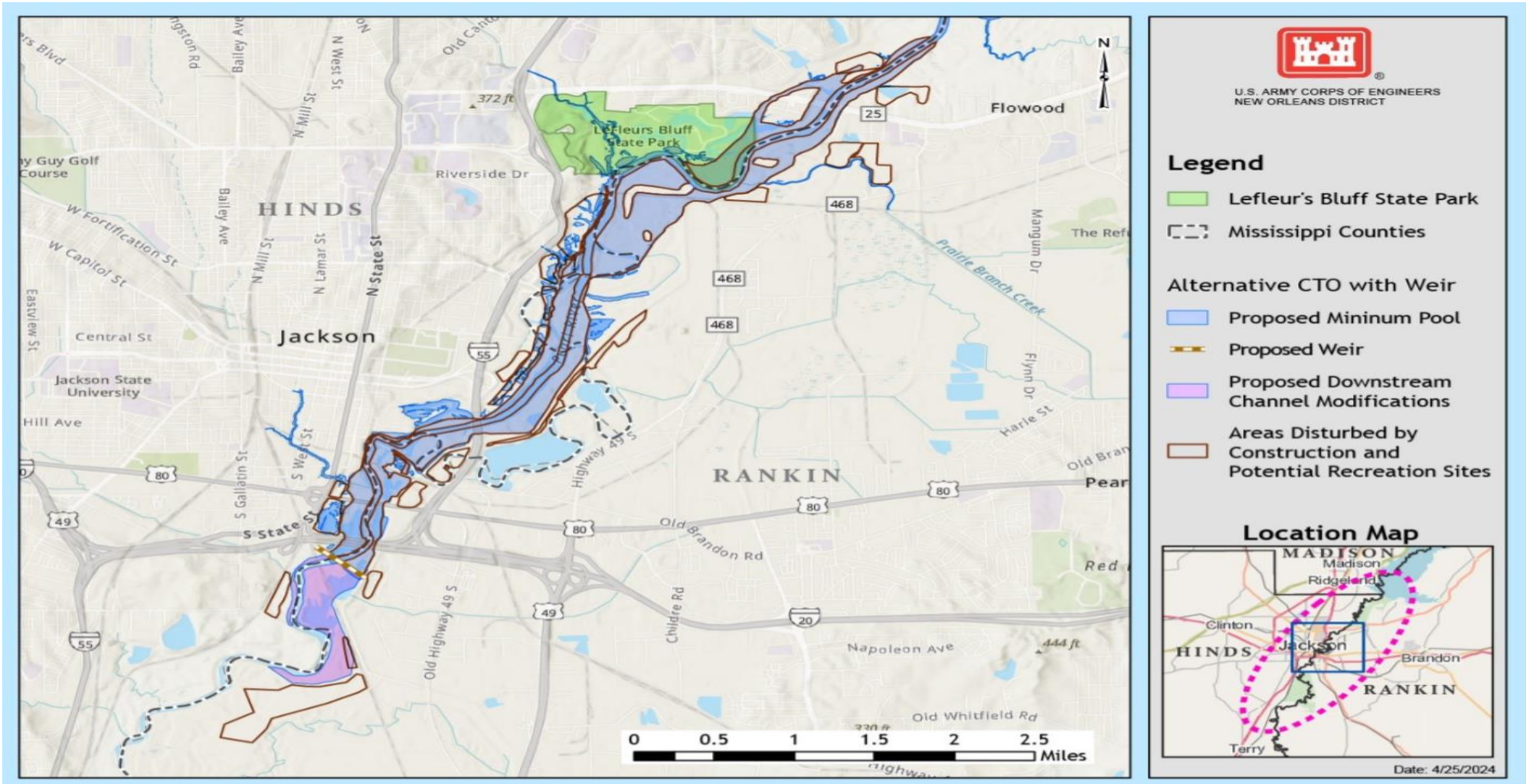


U.S. ARMY

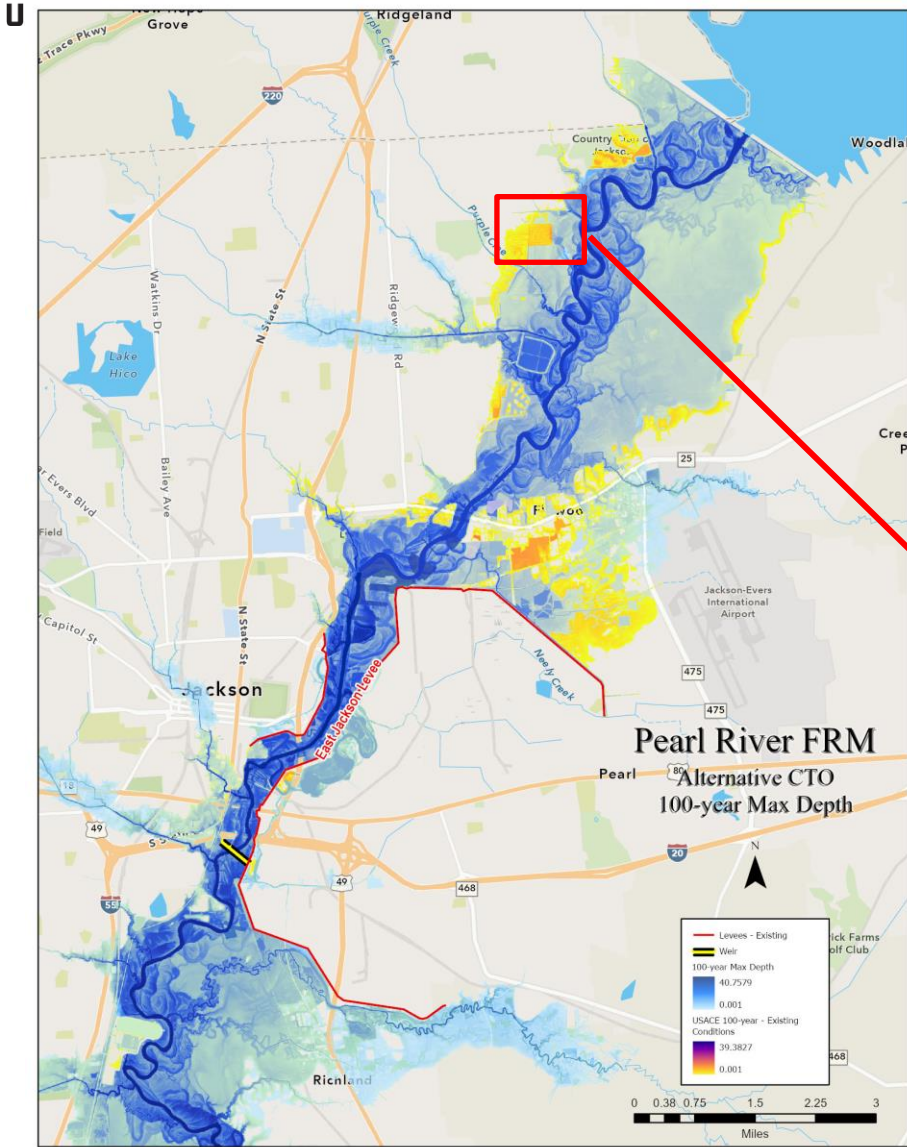
CTO Alternates (ALTERNATIVE D w/ Weir & ALTERNATIVE E w/o Weir)



Secretary of the Army may select any or all the features associated with the presented alternatives to create a final project array, so long as this final project array provides the same or better flood risk reduction as the NED Plan.



★ CTO with weir (ALTERNATIVE D) – Potential NED Plan**



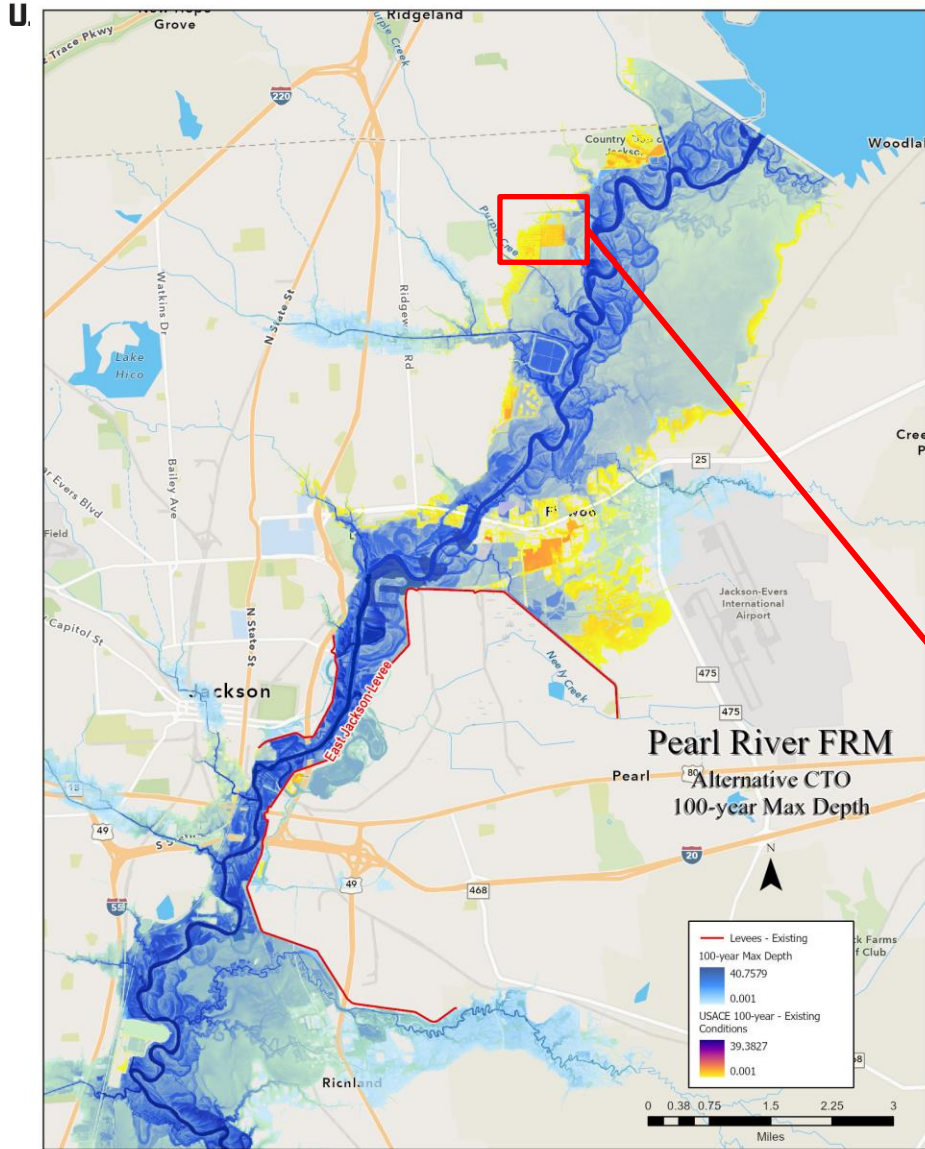
1. Improved conveyance results in FRM benefits in the northern floodplain similar to Alternative C.
 - Reduced excavations compared to Alternative C
2. Weir just downstream of Interstate 20, Elevation 256.0 feet
 - Upstream of weir location proposed in Alternative C
 - Known HTRW avoidance
 - Weir elevation reduced by 2 feet compared to Alternative C
3. Addition of Canton Club Levee results in additional FRM benefits
4. Modified A1 Nonstructural Plan



Note: Yellow shows areas no longer flooding for the 100-year return interval. See Alt C Slide for inducements.



CTO without weir (ALTERNATIVE E)



1. Identical to Alternative D, except no weir for permanent impoundment for future water supply and recreation.
2. Same level of flood reduction and inducements as Alternative D.



Note: Yellow shows areas no longer flooding for the 100-year return interval. See Alt C Slide for inducements.



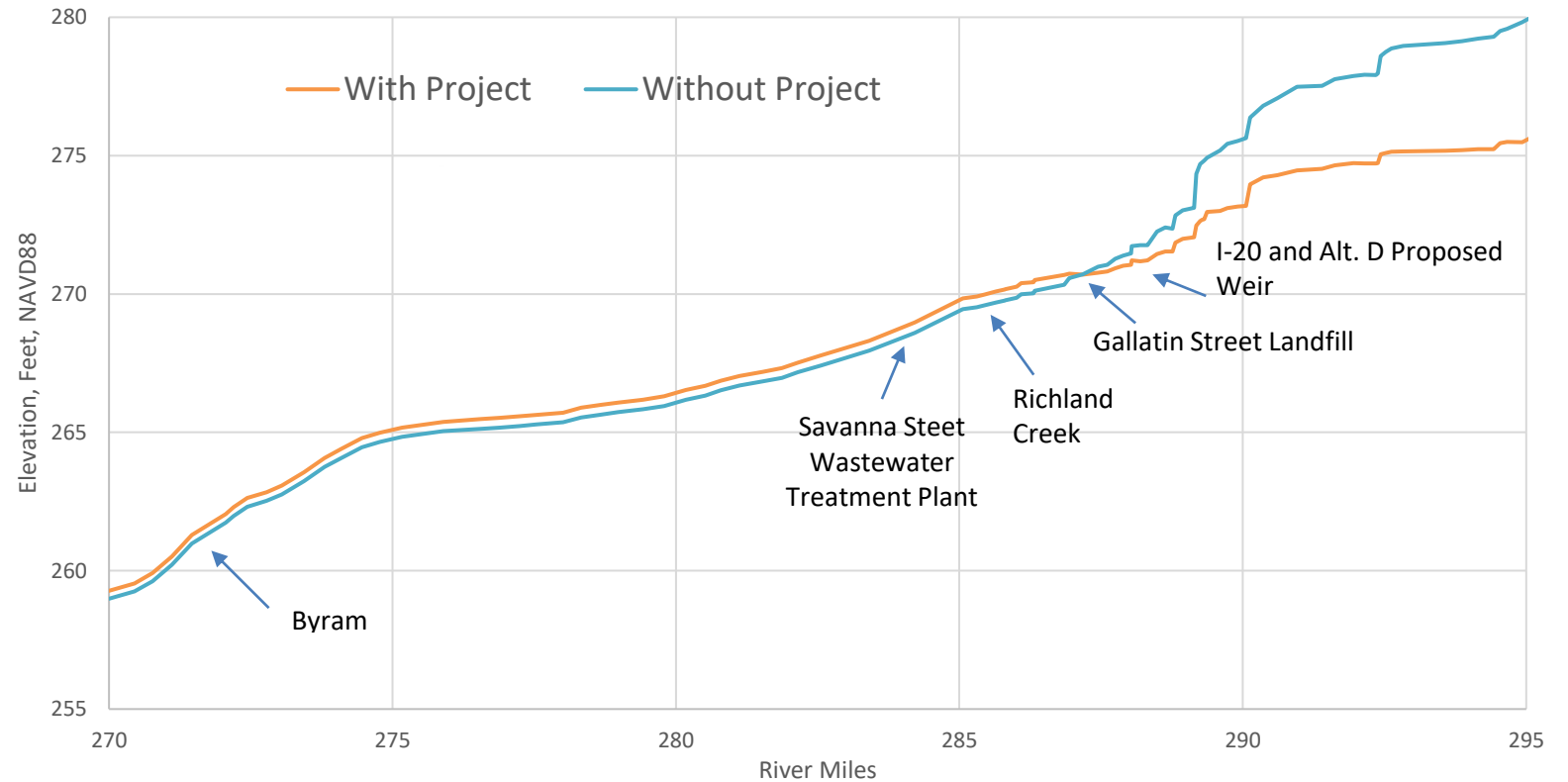
U.S. ARMY

H&H: Impacts and Benefits



1. Construction of Alternatives C, D, E raise the downstream water levels about 6 inches near the weir for the 100-year Flood Event as compared to a no action scenario.
2. Hydraulic downstream impacts negligible beyond 5 miles north of Monticello, MS.
3. Sedimentation Modeling accomplished in subsequent phase.

Water Surface Elevations for the 100-year Event





U.S. ARMY

Habitat Mitigation



Habitat	Alt C Acres of Impact	CTO (Alt D & Alt E) Acres of Impact	Alt C AAHUs	CTO (Alt D & Alt E) AAHUs
Lacustrine/Open Water	200	81	1,232	497
BLH wet	1,224	689	3,011	1,695
Swamp	150	55	368	135
Forested Uplands	710	223	2,733	859
Riverine*	287	232 (Alt D only)	TBD	TBD



- There are no anticipated habitat impacts associated with Alternative A1 and therefore no mitigation requirements.
- Lacustrine impacts would be self-mitigating with both Alt C and Alt D (CTO with weir).
- The mitigation team is currently assessing the NFI mitigation plan presented in the 2022 EIS to determine how much terrestrial habitat mitigation it can produce.
- Prior to construction activities, appropriate riverine species will be used to run habitat models to determine potential lost riverine functions and values and mitigation requirements.
- A detailed mitigation plan will be developed prior to any construction activities.



U.S. ARMY

Threatened and Endangered Species



Alternative A1 is not expected to impact any of the listed species in the area.

Species in the project area and effects determinations

Species	Alt C	Alt CTO with weir (Alt D)	Alternative CTO w/o weir (Alt E)
Gulf Sturgeon (T)	LAA	LAA	NLAA
Ringed Sawback Turtle (T)	LAA	LAA	LAA
Northern Long-eared Bat (E)	NLAA	NLAA	NLAA
Pearl River map Turtle (PT)	LAA	LAA	LAA
Alligator Snapping Turtle (PT)	LAA	LAA	LAA
Louisiana pigtoe (PE)	LAA	LAA	NLAA
Tricolored bat (PT)	NLAA	NLAA	NLAA
Monarch Butterfly (C)	LAA	LAA	NLAA



- T – threatened
- E – endangered
- PT – proposed threatened
- PE – proposed endangered
- C – candidate species

LAA – likely to adversely affect but not likely to jeopardize the continuing existence of
 NLAA – not likely to adversely affect

A biological assessment (Appendix D of DEIS) was prepared and submitted to USFWS with the above effects determinations. Consultation is ongoing and is anticipated to be completed by release of the Final EIS.





U.S. ARMY

CULTURAL RESOURCES



Impacts:

- All Alternatives (A1, C, CTO [D and E]) have the potential to affect Cultural Resources, including National Register listed or eligible buildings, districts, sites, or structures within the project construction areas.

Section 106 NHPA Programmatic Agreement (PA):

- In accordance with 36 CFR 800.14, a PA is appropriate because the Undertaking is complex; may adversely affect significant historic properties; and the extent of effects is not fully known.
- USACE is negotiating a PA with the SHPO, Federally-Recognized Tribal Governments, and other stakeholders that will govern the Undertaking and all its parts and allow USACE to comply with the National Historic Preservation Act during the project's construction.
- The PA will be executed before a Record Of Decision is signed, ideally before the final EIS is complete.





U.S. ARMY

TRIBAL RESOURCES



- It is the policy of the Federal government to consult with Federally-Recognized Tribal Governments on a Government-to-Government basis as specified in E.O. 13175 (“Consultation and Coordination with Indian Tribal Governments;” U.S. President 2000) The E.O. is further specified through USACE Tribal Consultation Policy, dated Dec. 5, 2023.
- Per policy, USACE is required to determine if any of three categories of resources would be significantly adversely affected by the proposed action:
 - 1) **Tribal Rights;**
 - 2) **Tribal Lands;** or
 - 3) **Protected Tribal Resources.**
- Accordingly, coordination and consultation with Federally-Recognized Tribes who have identified the study area as part of their Area of Interest is ongoing. No **Tribal Lands** or **Rights** have been identified. Consulting Tribes have identified Protected Tribal Resources, however.
- **Protected Tribal Resources** within the Study Area, and surrounding vicinity, include:
 - 1) Cultural Keystone Species (CKS) (which can be a plant, animal, or other natural resource that has greatly shaped the cultural identity of a group of people);
 - 2) A wide variety of places and landscapes: archaeological sites, cemeteries, trails and pathways, campsites and villages, fisheries, hunting grounds, plant gathering areas, holy lands, landmarks, important places in Native American history and culture, and places of persistence and resistance.





U.S. ARMY



Environmental Justice:

ALTERNATIVE COMPARISONS: No Action, Alt A1, Alt C and Alt CTO

- For the no-action alternative, all of the structures in the 100-yr floodplain (n= 773) are in EJ areas of concern.
- A vast majority of the 143 structures making up Alt A1, the Non-Structural plan, are in areas of EJ concern.
- Alternative C provides flood risk reduction benefits to those in EJ areas of concern, but less than CTO.
- Over 2/3 of structures flooding under no action would no longer flood under Alt CTO.
- Structure flooding inducements occur from Alt C and CTO, 83 vs 52, and all are in areas of EJ concern.
- EJ Outreach and meetings in EJ communities over the next few months offer the opportunity for residents to ask questions about the project.



U.S. ARMY

Recreation



Alternative	Incidental Water-Based Recreation <i>BENEFITS</i>	Incidental Shoreline-Based Recreation <i>BENEFITS</i>	Lafleur's State Park <i>IMPACTS</i>
No Action	NO	NO	NO
A1	NO	NO	NO
C	YES	YES	YES
CTO	YES (less than C)	YES (less than C)	YES

BENEFITS: Incidental recreation would apply to development on **public, project lands only.**

IMPACTS: Potentially at Lefleur's Bluff State Park:

- 9 recreation projects/grants have been supported through Section 6(f)(3) of the Land Water Conservation Fund (LWCF) since 1965.
- *“No property acquired or developed with assistance under this section shall, without the approval of the Secretary, be converted to other than public outdoor recreation uses.”*
- *“Lands of equal market value and recreation usefulness shall be provided.”*





Economics: Summary of Results



- Alt D (CTO with Weir) has a project first cost ranging from \$487 million to \$655 million. It yields annualized net benefits from \$8.2 million to \$1.6 million and has a benefit to cost ratio from 1.4 to 1.1.
- Alt E (CTO without Weir) has a project first cost ranging from \$400 million to \$508 million. It yields annualized net benefits from \$6.8 million to \$2.4 million and has a benefit to cost ratio from 1.4 to 1.1.
- Alt A1 (Nonstructural Only) has a project first cost of \$50 million. It yields annualized net benefits of \$2.1 million and has a benefit to cost ratio of 2.2.
- Alt A1 with Canton Club Levee has a project first cost of \$60 million. It yields annualized net benefits of \$2.6 million and has a benefit to cost ratio of 2.1.





U.S. ARMY

Economics: Summary of Results



Pearl River-Summary of Results						
FY 24 Price Level and Discount Rate						
	Alt D (CTO with Weir)		Alt E (CTO Without Weir)		A1-NS Only	A1 with Canton Levee
	Low	High	Low	High		
Project First Cost	\$487,328,569	\$655,391,345	\$399,498,775	\$508,474,363	\$50,072,903	\$60,072,903
IDC	\$18,613,297	\$25,161,141	\$15,305,461	\$19,748,644	\$170,090	\$306,657
Total Investment Cost	\$505,941,865	\$680,552,487	\$414,804,236	\$528,223,006	\$50,242,993	\$60,379,561
Benefits	\$27,718,600	\$27,718,600	\$22,409,565	\$22,409,565	\$4,010,090	\$4,828,250
AA Investment Cost	\$18,740,500	\$25,208,300	\$15,403,200	\$19,738,400	\$1,861,000	\$2,236,500
AA O&M Cost	\$729,936	\$891,122	\$196,976	\$421,372	\$0	\$20,340
Total AA Cost	\$19,470,436	\$26,099,422	\$15,600,176	\$20,159,772	\$1,861,000	\$2,256,840
Annualized Net Benefits	\$8,248,164	\$1,619,178	\$6,809,389	\$2,249,793	\$2,149,090	\$2,571,410
BCR	1.4	1.1	1.4	1.1	2.2	2.1





U.S. ARMY

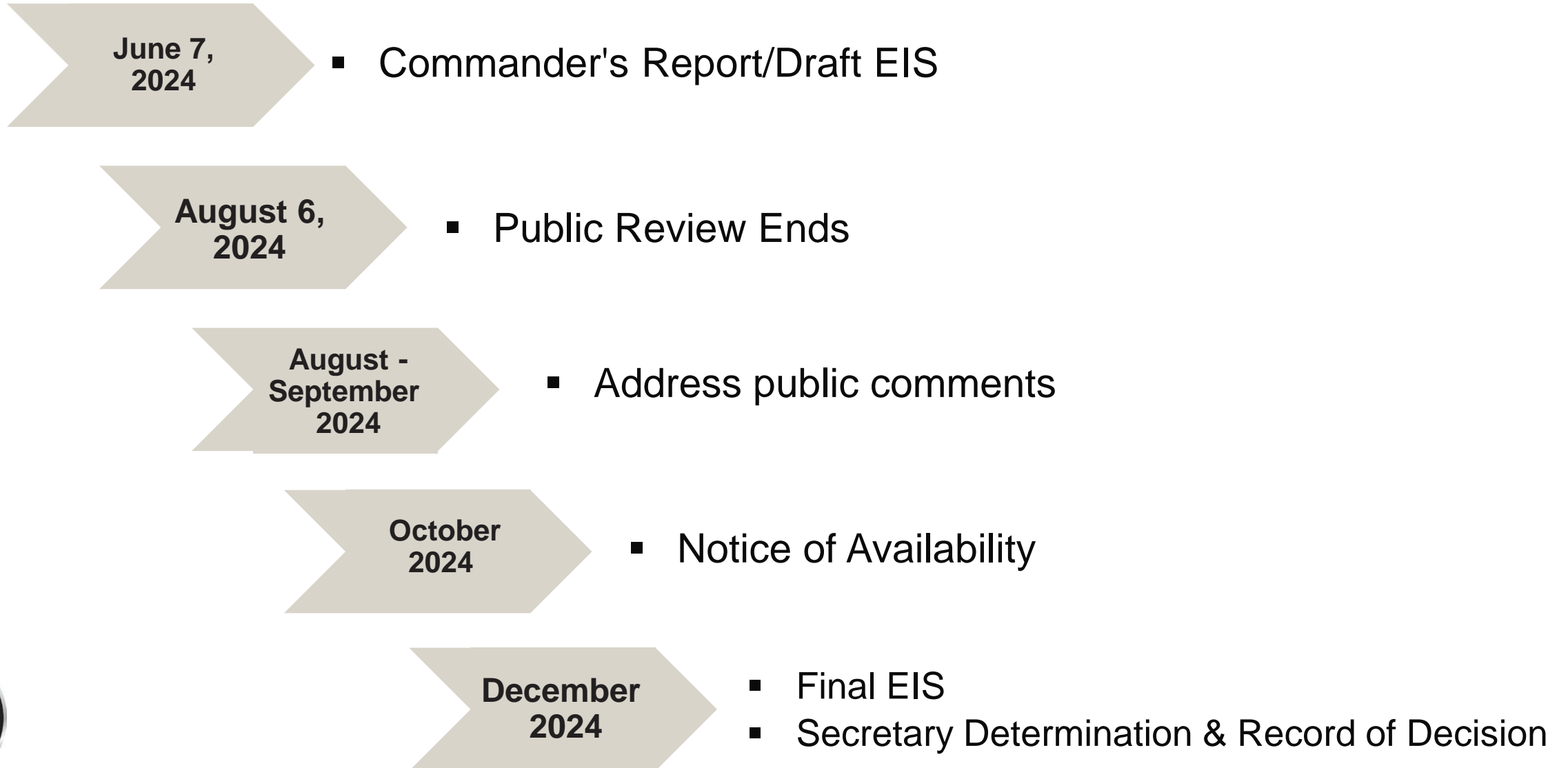
Hazardous, Toxic, and Radiological Waste

- An American Society for Testing Materials (ASTM) Phase I was conducted by the NFI, September 2014 (Phase I), August 2021 (Phase I), and December 2023 (Phase I), and were reviewed by USACE according to the Engineering Regulation (ER) 1165-2-132 guidance and will inform the next steps.
- An ASTM Phase I & Limited Phase II Environmental Site Assessment (ESA) has been conducted within the Project Area: November 2002 (Phase II), March 2003 (Phase II), August 2004 (Phase I and Phase II), September 2014 (Phase I), August 2021 (Phase I), and December 2023 (Phase I)
- Once an alternative is selected, additional assessment will be conducted prior to construction per ER guidelines, ER 1165-2-132, ASTM E1527-13, and ASTM Phase II ESA





TIMELINE





U.S. ARMY



QUESTIONS?



U.S. ARMY



TO SUBMIT FEEDBACK / PROVIDE INPUT

Feedback/input will be accepted through August 6, 2024

Email: PearlRiverFRM@usace.army.mil

Address for feedback via Mail:

Mr. Eric Williams; Chief, Environmental Branch
U.S. Army Corps of Engineers
CEMVN-PDS
7400 Leake Ave
New Orleans, Louisiana 70118

Project Website:

<http://www.mvk.usace.army.mil/Missions/Programs-and-Project-Management/Project-Management/Pearl-River/>



