

Yazoo Backwater Area Water Management Project

DRAFT ENVIRONMENTAL IMPACT STATEMENT

Virtual Public Meeting –
Informational Session
July 16, 2024



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US Army Corps
of Engineers®





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Presentation Agenda

- Introductions
- Message from Vicksburg
- Rules of Engagement
- Meeting Purpose
- Public Meeting Schedule
- Project History
- Scoping
- Measures and Alternatives
- Impacts
- Conclusion
- Project Timeline
- Opportunities to Comment





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Message from the Commander of USACE Vicksburg



Public Message from Commander of Vicksburg
District: COL Jeremiah Gipson





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Rules of Engagement



- **Recording Notice:** Please be aware that the event video and chat box are being recorded. They will be made available to the public in the future for reference purposes. Be aware that phone numbers and email addresses that are entered into the chat will be available to the public.
- **Questions and Comments:** Please post all questions and comments in the chat box only. This helps us keep track of all inquiries and ensures everyone can participate in this informational meeting.
- **Avoid Spamming:** Please refrain from spamming the chat box with multiple messages. Post your question or comment once to avoid clutter.
- **Camera Usage:** Please keep your camera turned off throughout the session.
- **Microphone Mute:** Always keep your microphone on mute.
- **Respectful Communication:** Be respectful and courteous in your interactions with others in the chat. Avoid using inappropriate language or engaging in disruptive behavior.

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





Meeting Purpose



Why are we here?

- It is a priority to provide effective flood risk solutions to the Yazoo Backwater area
- Provide background on the Proposed Action
- Present the Draft Environmental Impact Statement (EIS)
- Receive Comments
 - Comments received through August 12, 2024
 - Full participation is encouraged





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Public Meeting Schedule



In Person Meeting Schedule

Monday

July 22, 2024

10:00 AM

2:00 PM

6:00 PM

South Delta High School

303 Parkway St.

Rolling Fork, MS

39159

Tuesday

July 23, 2024

10:00 AM

2:00 PM

6:00 PM

Vicksburg Auditorium

901 Monroe St

Vicksburg, MS

39183

Virtual Public Meeting Schedule

Tuesday

July 16, 2024

6 p.m.

- Information to log in or dial in to meeting are available on the web at:

- <https://usace1.webex.com/meet/VICKSBURGDISTRICT>

or for phone only

+1-844-800-2712 US Toll Free

+1-669-234-1177 US Toll

Access code: 2761 069 4978

Public Input

- Comment cards provided at public meetings

- Traditional Mail

Attention CEMVK-PPMD

Vicksburg District, US Army Corps of Engineers

4155 Clay Street, Vicksburg MS 39183

- E-Mail yazoobackwater@usace.army.mil





Public Review Period

- The Draft EIS is published for public review and comment.
- The 45-day public comment period ends on August 12, 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 EIS





Office of the Assistant Secretary of the Army for Civil Works Introduction



Ms. Robyn Colosimo

Deputy Assistant Secretary of the Army for Project Planning and Review



Yazoo Backwater Flooding



- Recurring backwater flooding is impetus for action
- 21st century: 20 out of 42 years backwater-induced flooding
- Historic 2019 flood- Longest inundation since 1927 (> 6 months):
 - 500,000 acres flooded
 - Hundreds displaced from homes
 - Little/no nest success for turkey
 - High small mammal mortality
 - Warbler nesting sites underwater
 - Effects on recreation
 - Farmers lost entire crop season (\$800M in agricultural losses)
 - Contributed to long periods of hypoxia (dissolved oxygen < 3.00 mg/l) impacting aquatic resources
- February 2020 flood further devastated region
 - Stage 2 ft lower than 2019
 - Flooded 450,000 acres of land





Interagency Collaboration



- **2022:** Biden Administration listening sessions spurred interagency work to resolve recurring backwater flooding broadscale impacts
- **2023:**
 - Joint memorandum between USACE, USEPA and USFWS executed, facilitating unprecedented close collaboration and leveraging of expertise, data, and tools
 - Public engagements and listening sessions provided vital input from communities on needs and informed water management approaches
 - NOI released in July outlines resultant preferred approach that consists of structural and nonstructural components developed through interagency process
- **2024 (To Date):** Draft EIS release





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2022 & 2023 Listening Sessions (Public Scoping)



- **Total of 14 engagement sessions to date**
 - 9 public sessions
 - 5 targeted sessions (ag/enviro/elected officials/community)
- **Issues Raised:**
 - Access to Emergency Services
 - Access to Homes
 - Agriculture
 - Economics
 - Environmental Impacts
 - Community Impacts
 - Health Concerns
 - Housing or Property Impacts
 - Infrastructure
 - Social Networks, Cohesion





Persistent Areas of Concern: Prior Plans



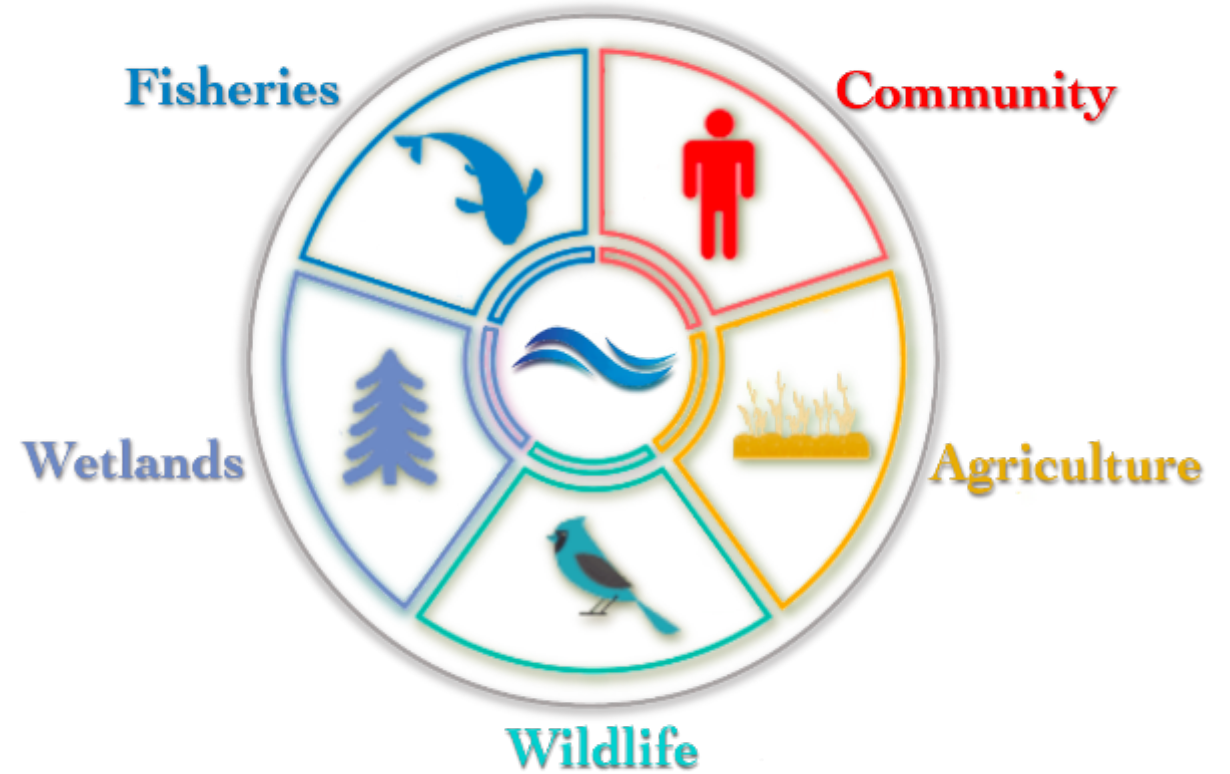
- Mitigation needs, strategy and timing
- Impacts to overburdened and underserved communities downstream
- Impacts to the functions and values of floodplain wetlands
- Impacts to Endangered Species and Wetlands
- Perceptions that pumps will only support agricultural production



Yazoo Backwater Project Purpose



- Providing flood risk reduction for communities, including overburdened and underserved communities, and the local economy through targeted water management operations.
- Flood risk reduction will target primary residences (and roads isolating them), schools, infrastructure, commercial properties, and prime farmland while avoiding, minimizing and fully mitigating environmental losses.
- NOT optimizing one purpose/outcome over another

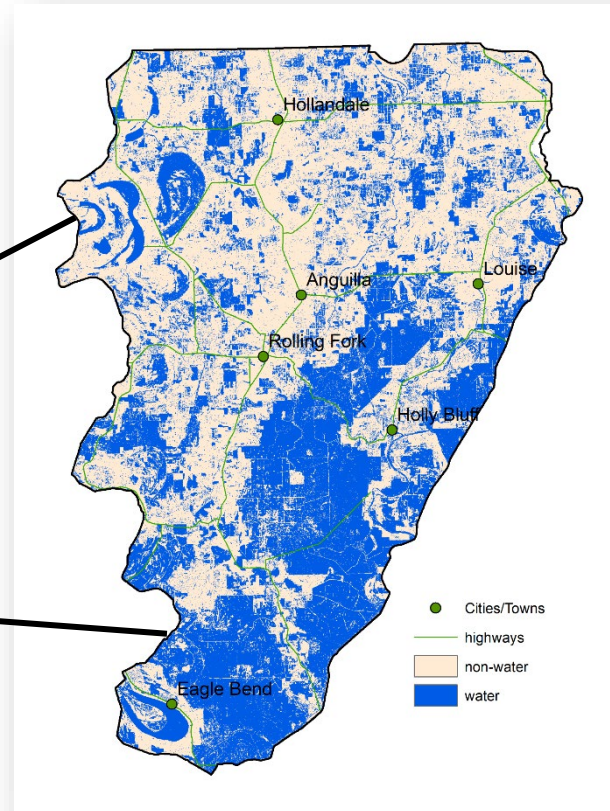
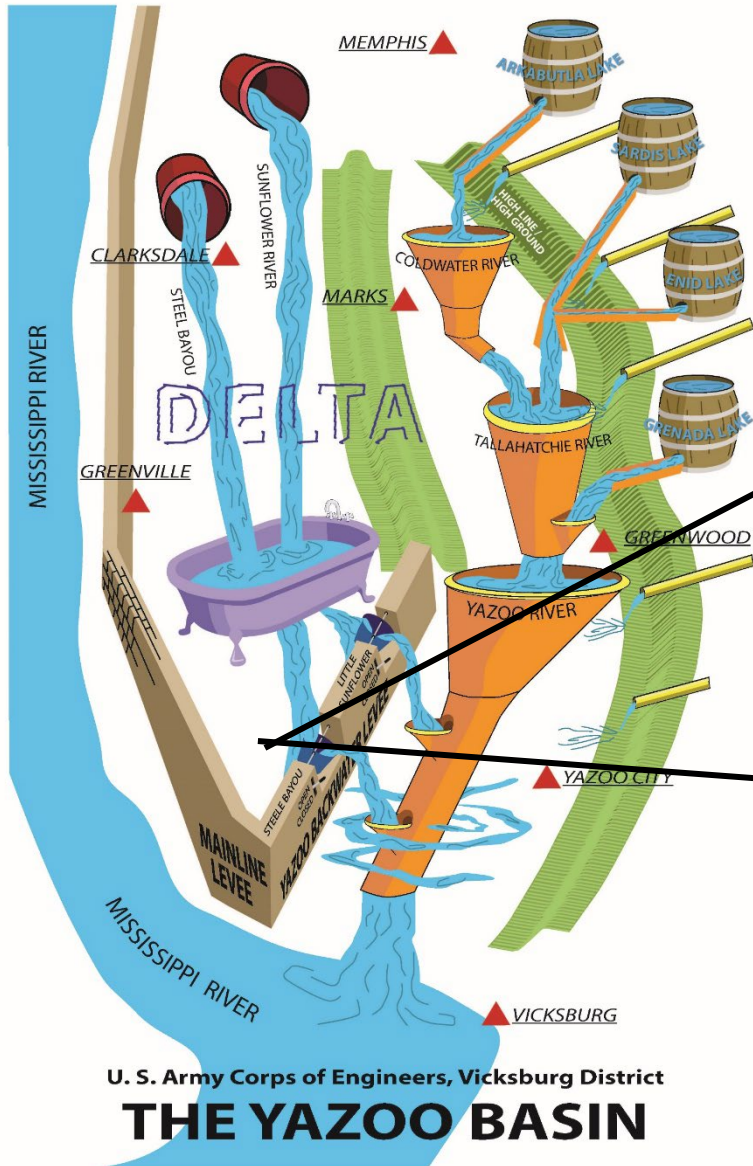


**USACE Vicksburg
Overview of Draft
Environmental
Impact Statement**



**US Army Corps
of Engineers®
Vicksburg District**

Why Does Flooding Occur?



Satellite-derived image of flooding within the Yazoo Backwater Area after heavy rains in late August, 2022 when gates were open. The composite image is of water extent from satellite images collected from 9/10/22-9/23/22

- Gates close and stay closed, when the Yazoo River is higher than the water level in the backwater area
- When the Yazoo River water level is below the backwater area, the gates can be reopened
- The collection of water that occurs when the gates are closed results in backwater flooding



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PLANNING OBJECTIVES

- Reduce flood damage to urban and rural structures, as well as agricultural properties and overburdened and underserved communities, resulting from prolonged flood stages on the Mississippi River when the Steele Bayou and Little Sunflower structures are closed and floodwaters pond within the backwater area of the structures;
- Reduce levels of agricultural intensification;
- Reduce adverse environmental impacts;
- Compensatory mitigation secured prior to project impacts





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MEASURES AND ALTERNATIVES EVALUATED

17



Initial Measures Considered:

- Pump Station Locations
- Pump Station Operation Elevations
 - Upper Bound & Lower Bound
- Seasonal Pump Operations tied to Crop Seasons
- Pumping Capacity
- Low Flow Wells
- Local Protections (Ring Levees)
- Nonstructural Measures
 - *Elevation of structures*
 - *Relocation of structures*
 - *Acquisition of structures*
 - *Dry Flood Proofing or Wet Flood Proofing of structures*
 - *Flood Warning Systems; Evacuation Plans; Risk Communication; Floodplain Mapping; and Flood Emergency Preparedness Plans*
 - *Flood Insurance; Land Use Regulation*



FINAL ARRAY FOR DEIS

Alternative 1, No Action

Water Management Solutions (2 operational scenarios):

- Alternative 2; Crop Season (16Mar-15Oct) and non-crop season (16Oct-15Mar)
- Alternative 3; Crop Season (25Mar-15 Oct) and non-crop season (15Oct-24Mar)
- 34 low flow shallow water groundwater wells in upper Basin to supplement flows during drought conditions
- Limited Nonstructural Measures to further reduce flood risk (below 90 ft and 93 ft)
 - Mandatory acquisition of structures below 90'
 - Voluntary acquisition of structures located between 90' – 93'
 - Voluntary acquisition of cleared land to 93' to further reduce flood damages to properties

Alternative 4; Nonstructural Plan Only

- Voluntary acquisition of structures in recent historical floodplain (2019)
- Voluntary acquisition of cleared land in recent historical floodplain (2019) to further reduce flood damages to properties





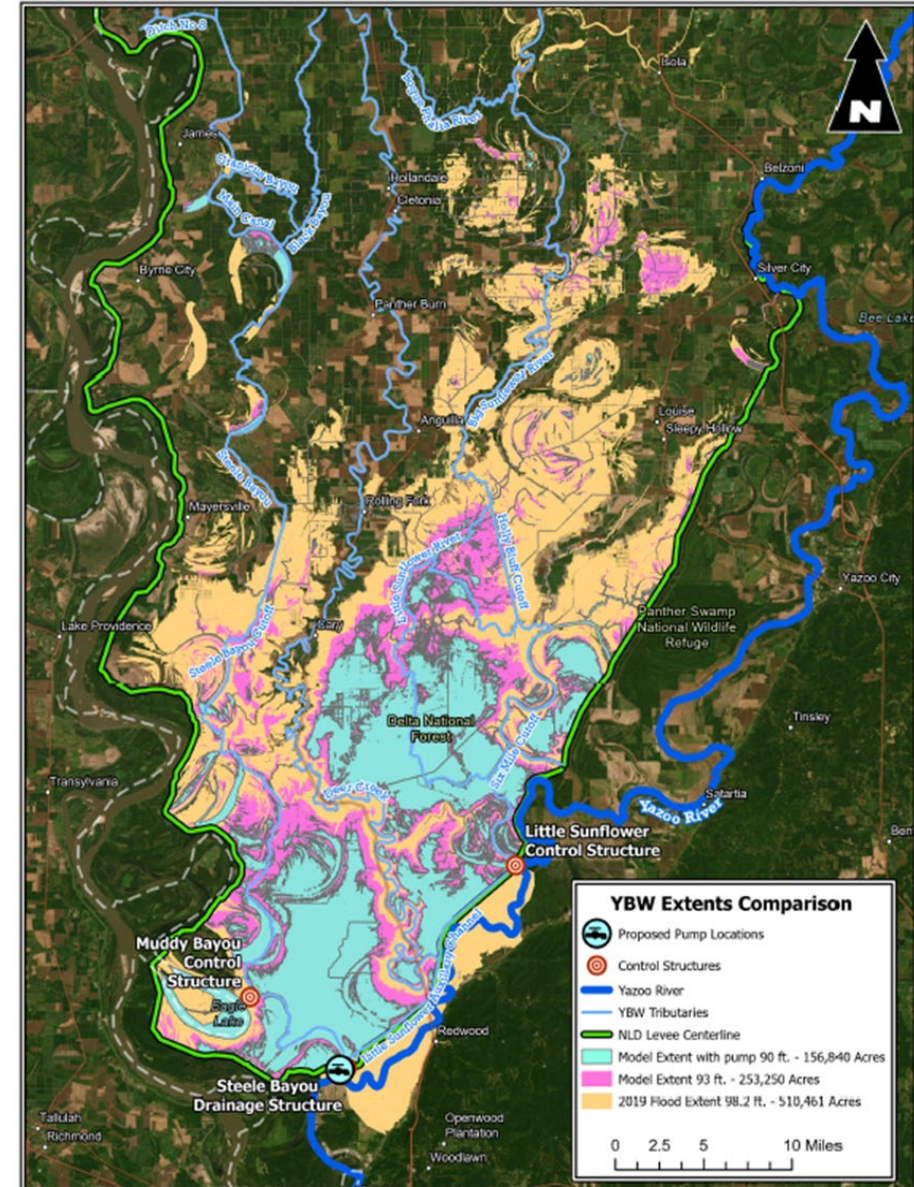
PROPOSED WATER MANAGEMENT SOLUTION



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Manage backwater flooding seasonally

- 5-year floodplain during non-crop season (~93ft - pink)
Pumping initiated to hold water to 93' elevation
- 2-year floodplain during crop season (~90ft - blue)
Pumping initiated to hold water to 90' elevation
- Two operational Scenarios Proposed
 - Alternative 2: *Crop season 16 March – 15 October and non-crop season 16 October – 15 March*
 - Alternatives 3: *Crop season 25 March – 15 October and non-crop season 16 October – 24 March*
- How to manage water levels:
 - Adjusting Water Control Manual for Steele Bayou Drainage Structure
 - 25,000 cfs pumping station





PROPOSED WATER MANAGEMENT SOLUTION: DURATION



Hypothetical Historic Pumping Durations

Pumps would turn on less than 50% of the years since 1979 and would be on for approximately 1 month during the years they would operate

	Mean (days)	Median (days)
Alternative 2 Crop season = 16 March – 15 October	39	38
Alternative 3 Crop season = 25 March – 15 October	30	26

	Total days pumping (Alt 2)	Total days pumping (Alt 3)
1979	62	58
1980	6	6
1983	52	52
1984	45	45
1990	5	5
1991	4	4
1991	23	23
1993	36	36
1994	68	59
1997	34	25
2002	6	6
2008	49	49
2009	27	27
2011	32	32
2013	18	18
2015	8	8
2015	4	4
2016	10	6
2017	5	5
2018	59	59
2019	158	158
2020	144	144
Mean	39	38
Median	30	26





PROPOSED WATER MANAGEMENT SOLUTION



- Compensatory mitigation secured prior to project impacts
- Combination of mitigation strategies to meet the full mitigation need and includes:
 - Purchase of in-kind credits through In Lieu Fee Program
 - Purchase of In-Kind Mitigation Bank Credits located in the YSA
 - Construction of a Yazoo specific mitigation by USACE for remaining acres





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STATUS OF ENVIRONMENTAL COMPLIANCE

- **Section 7 (Endangered Species Act)**
 - Collaborative effort between USACE and USFWS
 - Biological Assessment and Section 7(a)(1) Conservation Plan for pondberry is being finalized
 - Will be sent to USFWS to initiate formal consultation

- **Section 106**
 - In accordance with 36 CFR 800.14, a Programmatic Agreement (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 engaging with SHPOs, Federally-Recognized Tribal Governments, and other stakeholders to amend the Section 106 NHPA PA previously developed in 2020/2021 to govern this iteration of the Undertaking to allow USACE to remain compliant with the National Historic Preservation Act
 - Amended PA will be executed before a Record Of Decision is signed
 - Coordination and consultation with Federally-Recognized Tribes who have identified the study area as part of their Area of Interest is ongoing

- **Section 404(b)(1)**
 - Coordination is ongoing with USACE and EPA
 - Draft Section 404(b)(1) included for public review with DEIS
 - Coordination with State of Mississippi is ongoing for water quality certification

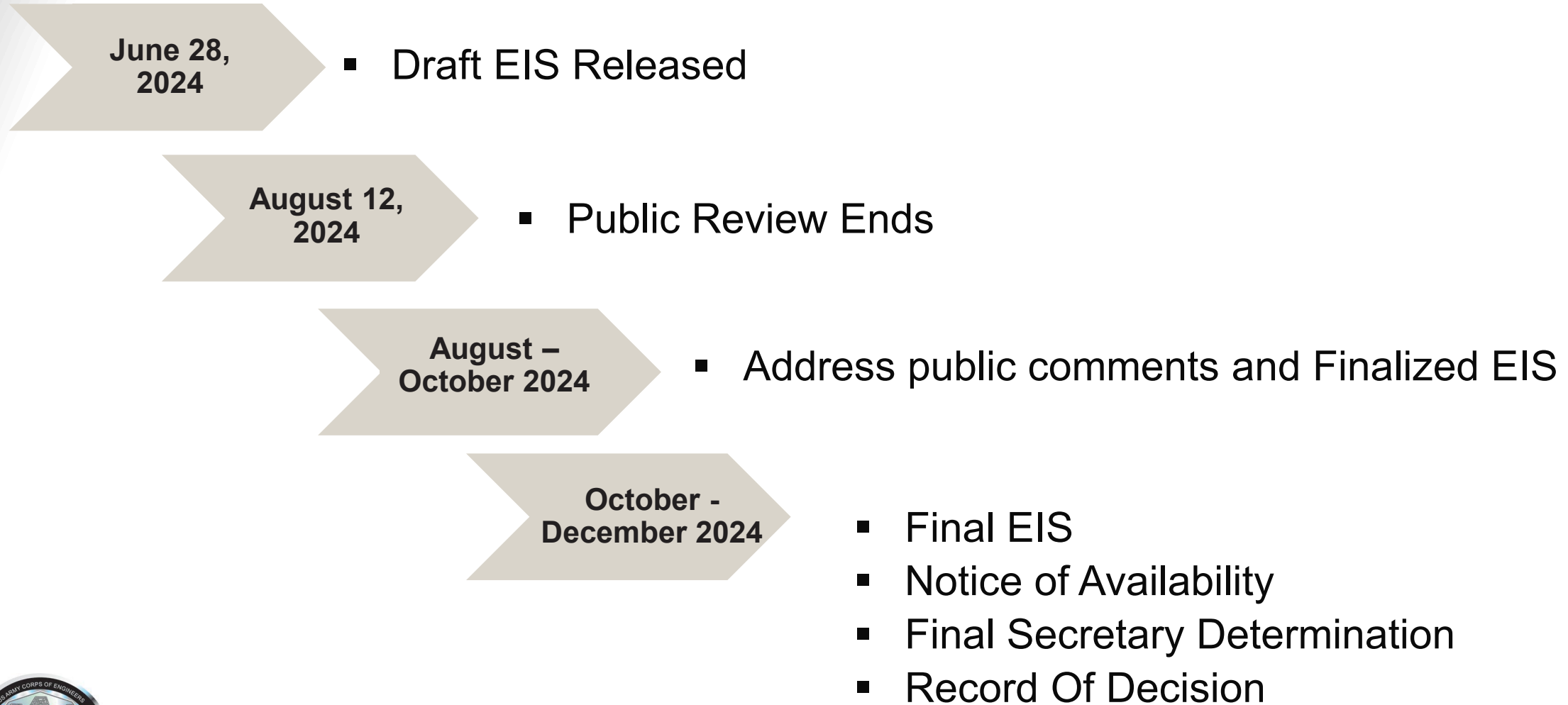




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TIMELINE





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TO SUBMIT FEEDBACK / PROVIDE INPUT

Feedback/input will be accepted through August 12, 2024

Email: yazoobackwater@usace.army.mil

Address for feedback via Mail:

Mr. Mike Renacker

Vicksburg District, US Army Corps of Engineers

4155 Clay Street, Vicksburg MS 39183

Project Website:

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



