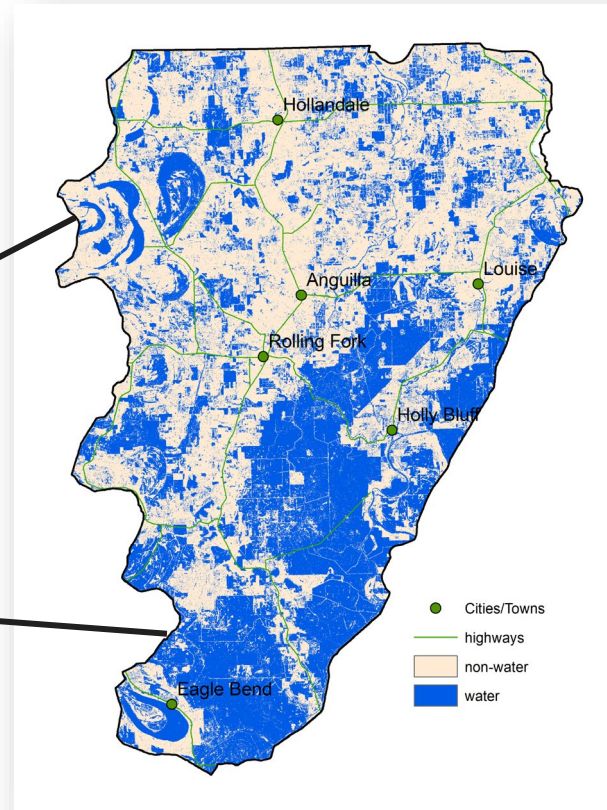
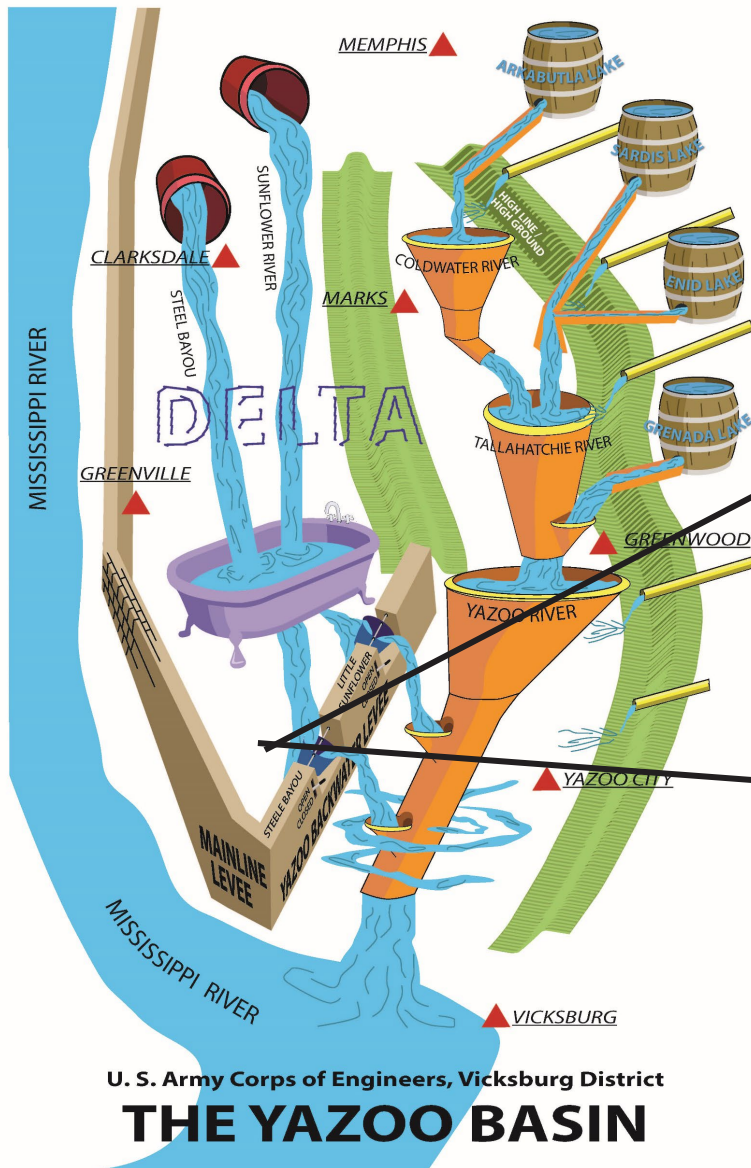


RECOMMENDED PREFERRED APPROACH FOR YAZOO BACKWATER AREA

U.S. Army Corps of Engineers,
U.S. Fish and Wildlife Service,
& U.S. Environmental Protection Agency



WHY DOES FLOODING OCCUR?

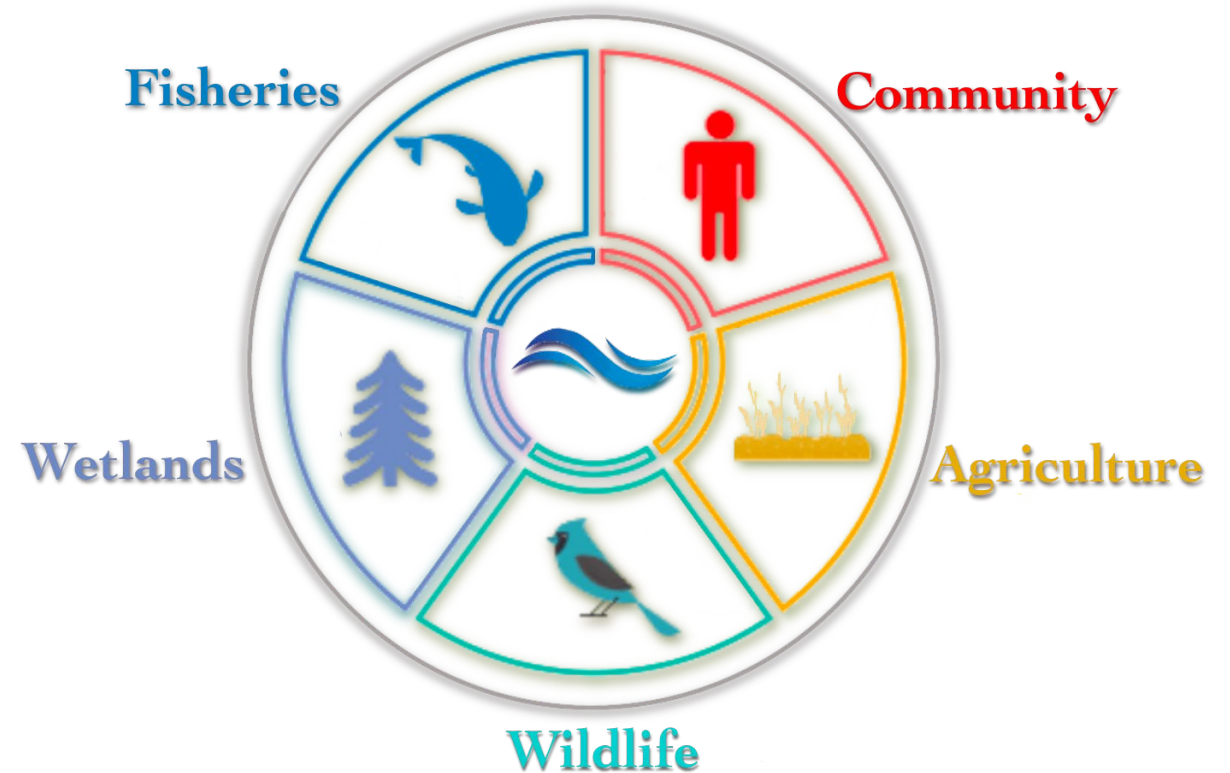


Satellite-derived image of flooding within the Yazoo Backwater Area after heavy rains in late August, 2022 when gates were open. The composite image is of water extent from satellite images collected from 9/10/22-9/23/22

- 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
- Flooding can still occur with the gates open

PURPOSE

The recommended approach provides flood risk reduction for communities and the local economy. Flood risk reduction will target primary residences (and roads isolating them), schools, infrastructure, commercial properties, and prime farmland while minimizing environmental losses.



PROPOSED WATER MANAGEMENT SOLUTION

Pump: 25,000 cfs

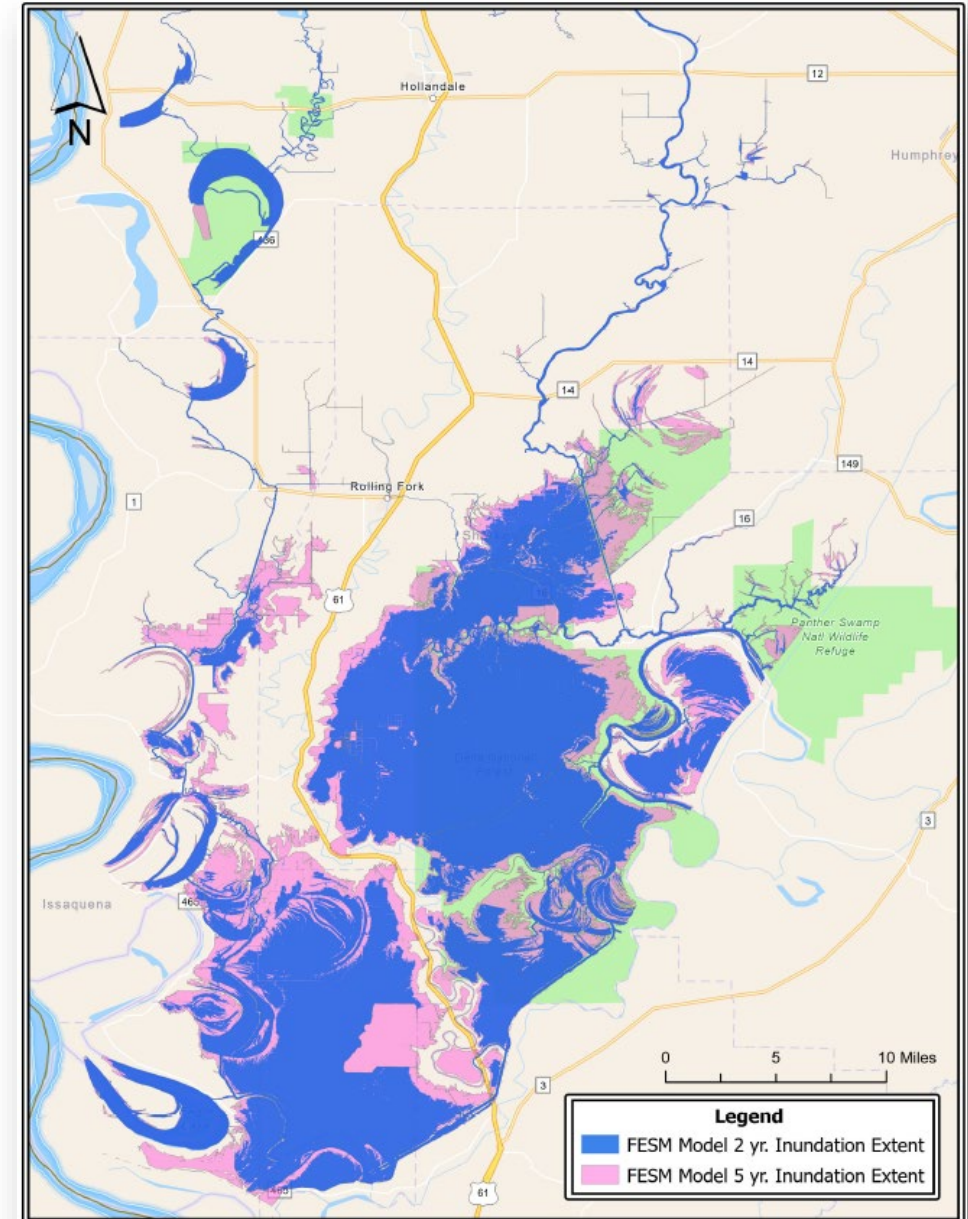
- Manage backwater flooding seasonally
 - 5-year floodplain during non-crop season (~93ft - pink)
 - 2-year floodplain during crop season (~90ft - blue)

Non-structural:

- Modify Steele Bayou gate management to benefit fisheries
- Provide option of buy-outs, ring levees, and home elevations

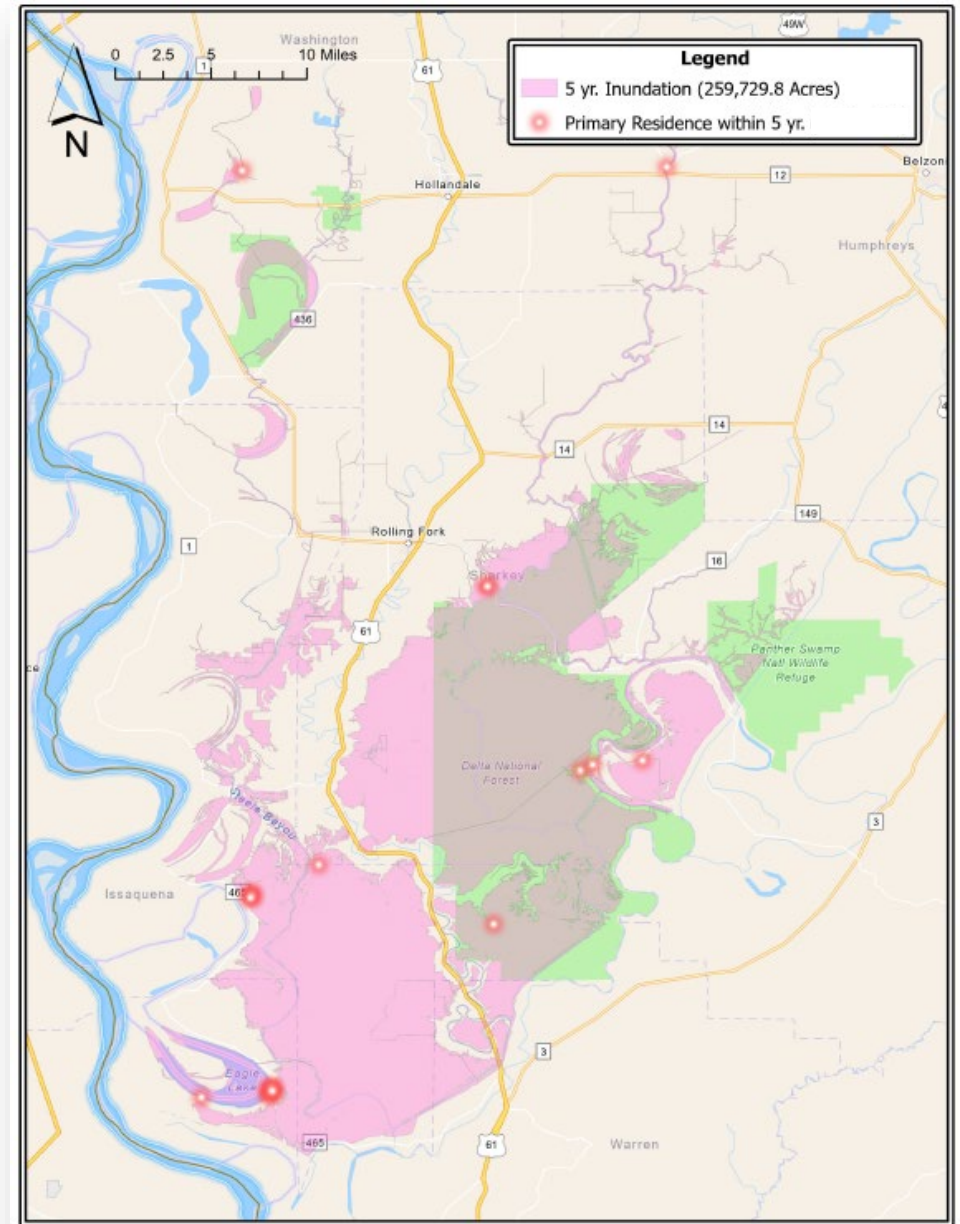
Federal Agreements:

- Water control manual
- Follow-up monitoring
- Compensatory mitigation planning

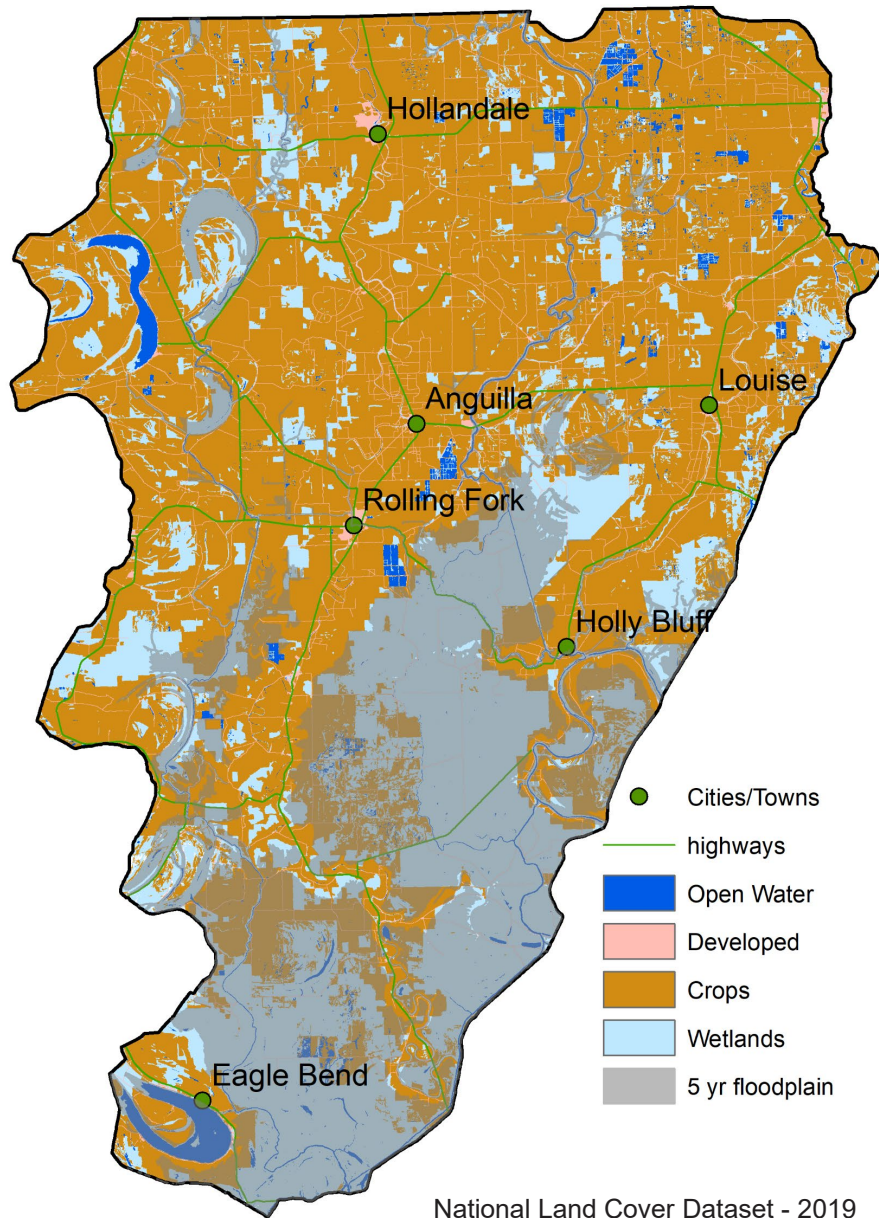


CONSIDERATION: RESIDENCES

- USACE conducted field surveys in the 5-year floodplain to locate primary residences:
- Primary residences in the 5-year floodplain will have floodproofing options, such as:
 - Buy-outs
 - Home elevations
 - Ring levees
- Additional considerations under other authorities:
 - Road elevations
 - Septic and sanitary sewer protection



CONSIDERATION: AGRICULTURE



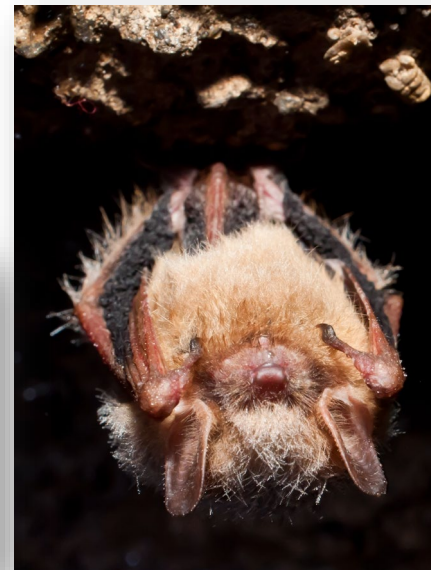
- The agencies worked with the Natural Resources Conservation Service and MS Agriculture Commission to understand the primary crops, crop seasons, days to reach maturity, and field preparation methods in the Delta
- Primary crops protected
 - Soybeans
 - Field Corn
 - Cotton
- Estimated crop season with pump
 - March 25th – October 31st

CONSIDERATION: FISH, WILDLIFE, & WETLANDS

- FWS, USACE, and EPA agree on the species to focus on during impact assessment
- The agencies are working together and will be in agreement on the methods to determine impacts on the wetlands, fish, and other species

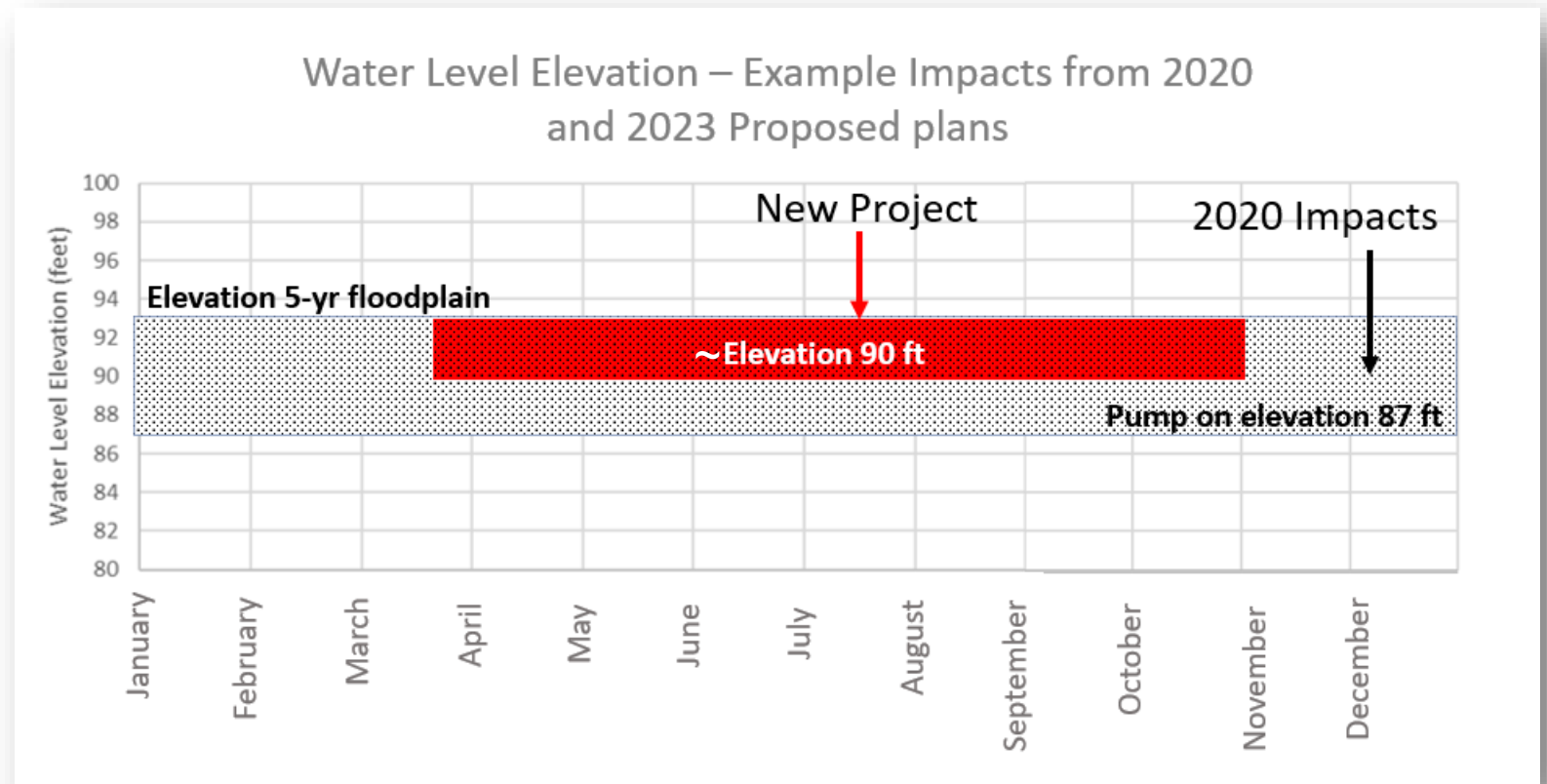
Avoid, minimize, and reduce impacts

Assessed Species
<i>Prothonotary Warbler</i>
<i>Kentucky Warbler</i>
<i>Wood Thrush</i>
<i>Acadian Flycatcher</i>
<i>King Rail</i>
<i>Great Blue Heron</i>
<i>Shorebirds</i>
<i>Waterfowl</i>
<i>Northern Long-eared Bat</i>
<i>Tricolored Bat</i>
<i>Alligator Snapping Turtle</i>
<i>Pondberry</i>



IMPACT ASSESSMENT CRITERIA

- **Non-crop season:**
 - Backwater flooding reaches 5-year floodplain (~93ft); minimal expected functional loss
- **Crop season:**
 - Backwater flooding managed to 2-year floodplain (~90ft); some functional loss expected
- Agreed-upon methods and calculations for assessing impacts to wetlands, fish and aquatic species, and wildlife



New project designed for no conversion of wetlands to non-wetlands

MITIGATION STRATEGY

- Compensatory mitigation in advance of or concurrent with project impacts.
- Prior to project impacts:
 - All mitigation sites will be secured
 - All mitigation plans will be approved by USACE, USEPA and USFWS
- Mitigation opportunities within and outside the Yazoo River Basin being considered



NEXT STEPS

May –
June
2023

- Compile feedback
- Revise preferred approach

June
30,
2023

USACE
delivers
final
preferred
approach*

*Subject to final analysis pursuant to NEPA, the CWA, and other relevant statutes and regulations