

# River Resource Action Team (RRAT) Briefing

## NAVIGATION ECOSYSTEM SUSTAINABILITY PROGRAM (NESP)

### POOL 24 ISLANDS- DENMARK & DRIFT

Presenters:

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Elisa Royce – Plan Formulation

Plan Formulation USACE - MVS

Date: 13<sup>th</sup> & 14<sup>th</sup> Sept 2023



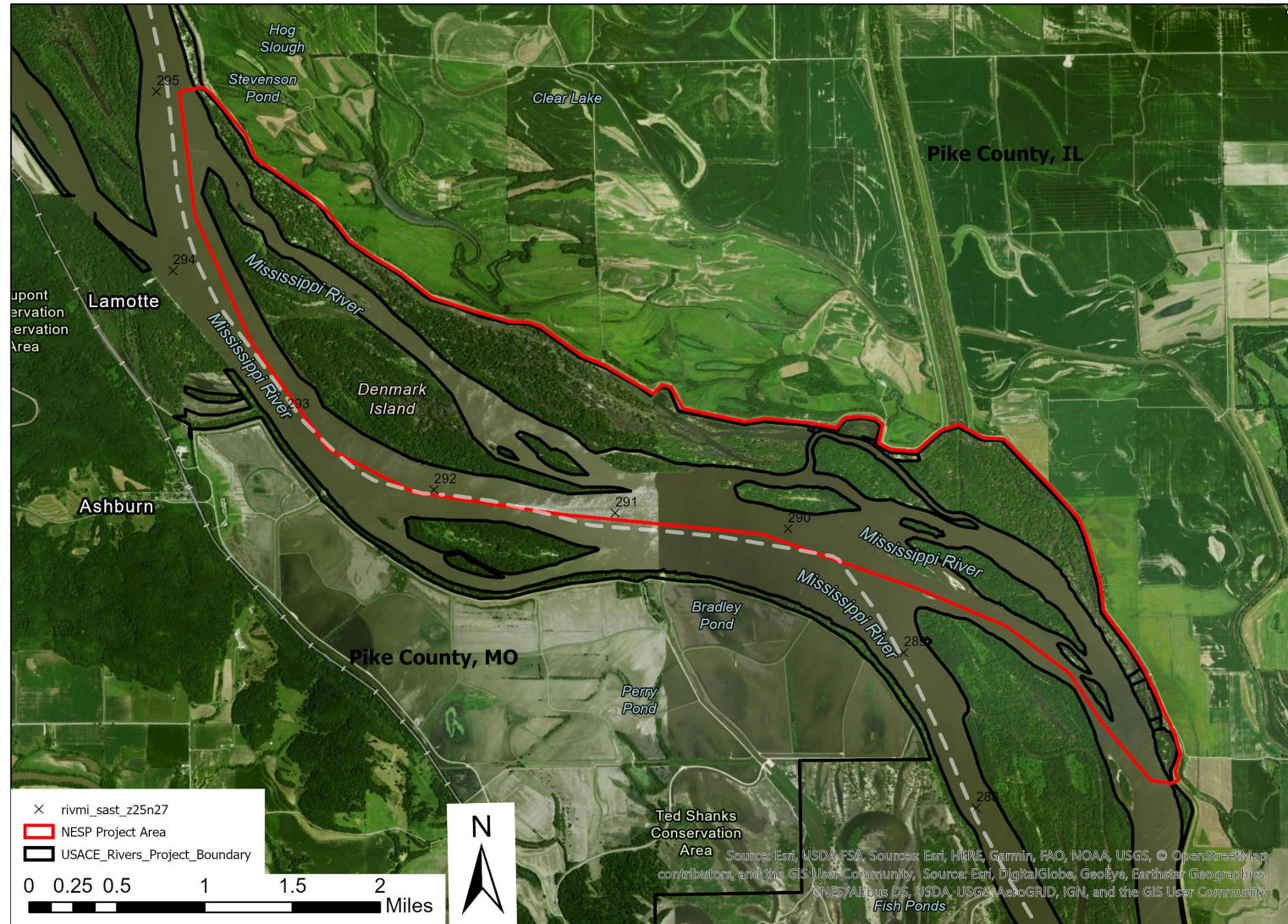
US Army Corps  
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# BACKGROUND

## Denmark and Drift Island Complex Habitat Enhancement Project





# TIMELINE



- Forest Inventory collected 2009-2011 and 2015-2017
- RPO Stand walks completed 2020
- RPO Forest Management Plans written
- Support from partners
- NESP Ecosystem project approval 2022
  - 18 month timeframe
  - Final report approval – Spring 2024



# PROBLEMS

- Backwater sedimentation causes poor water quality, shallow depths, and loss of connectivity. This leads to loss of side channel flow and bathymetric diversity, with subsequent decreases in habitat function and availability for aquatic and riverine species.
- Loss of topographic and hydrologic diversity reduces vegetative community diversity and wildlife resources (e.g., forage, invertebrate production, nesting habitat, and resting sites).
- Sediment deposition impacts natural hydrologic processes and their influence on terrestrial areas, resulting in increased flood durations and decreased forest health and diversity.



# OBJECTIVES

- Restore flow diversity, connectivity, and substrate diversity for the benefit of terrestrial and aquatic species and habitat.
- Restore native aquatic and terrestrial vegetative diversity and structural complexity.
- Restore topographic and bathymetric diversity and structural complexity.
- Reduce inundation hydroperiod on impacted forest stands.





# PROJECT UPDATE

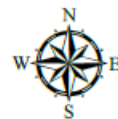


- Currently Developing Project Implementation Report (PIR)
- Tentatively Selected Plan Identified
  - Forestry
    - Timber Stand Improvement
    - Reforestation
    - Oak/Hickory, Cottonwood/Sycamore, Maple Communities
    - Invasive species treatment
    - Wet prairie restoration
  - Sediment plug removal
    - Restore natural hydrology
  - Mussel habitat
    - Riffle habitat restoration



## Floodplain Forest Restoration

- TSI - Cottonwood/Sycamore Tree Planting
- TSI - Maple Community Tree Planting
- TSI - Maple/Cottonwood Tree Planting
- TSI - Oak/Hickory Tree Planting
- TSI - Natural Regeneration
- Wet Prairie Planting




0 0.5 1 Miles







## Max Mussel and Forest Alternative

 Project Boundary

### Measures

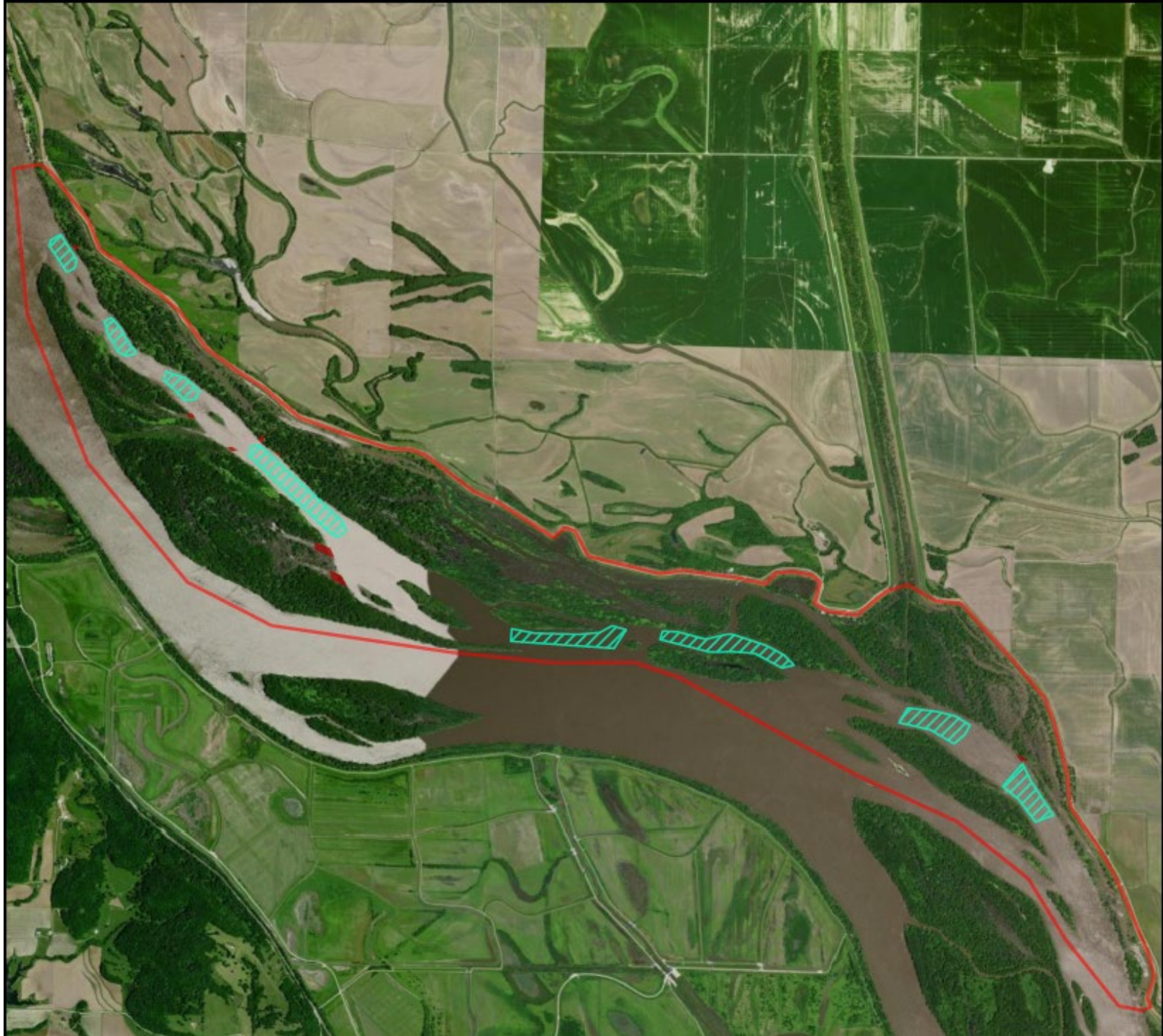
 Mussel Riffles

 Sediment Plug Removal

Alternative also includes  
Floodplain Forest Restoration.



0 0.5 1  
Miles





# QUESTIONS

