DRAIN 27 WETLAND RESTORATION

Environmental Assessment Virtual Public Meeting

US Army Corps of Engineers ®

July 21st, 2020

4:00 PM

BUILDING STRONG® and Taking Care of People! 45TH ST

124TH AVE S



MEETING AGENDA

- FM Diversion Project Overview
- Wetlands background
- Reasons for Drain 27 Wetland Restoration Project
- Design
- Impacts
- Schedule
- Comments/Questions

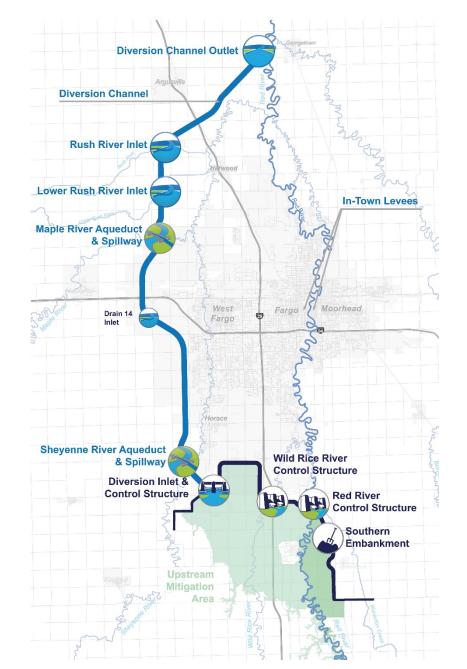








- Project includes
 - Diversion Channel
 - River Control Structures
 - In-Town Protections
 - Southern Embankment
 - Upstream Mitigation Area
- Construction on the Diversion Inlet and Wild Rice River Structure is ongoing
- Split delivery









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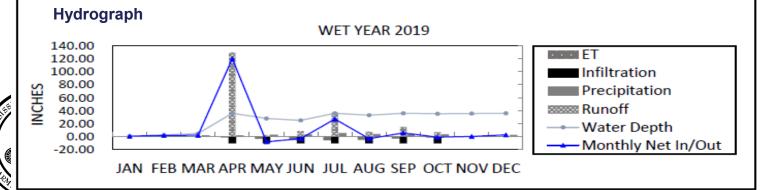
WHAT IS A WETLAND?



3 general characteristics

- Hydric soils
- Hydrology
- Vegetation



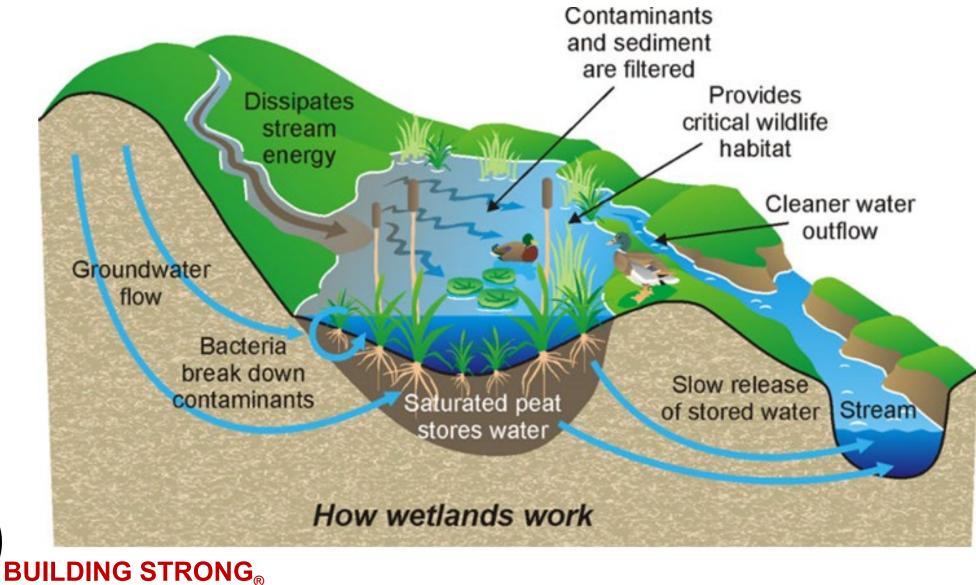






WHY ARE WETLANDS IMPORTANT?





and Taking Care of People!











WHAT IS WETLAND RESTORATION?



Return wetland characteristics to site(vegetation, soils, hydrology)

Reestablish lost functions



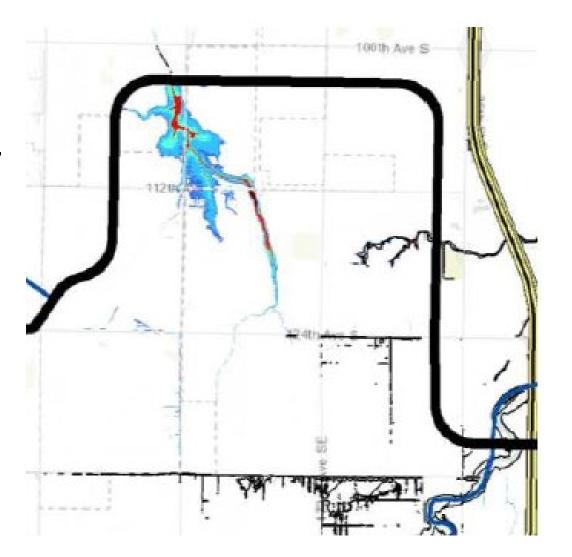




WHY IS THIS PROJECT BEING CONSIDERED?



- Mitigate unavoidable wetland impacts.
- Challenges for continued agricultural use.
- Area has characteristics of a historic wetland.

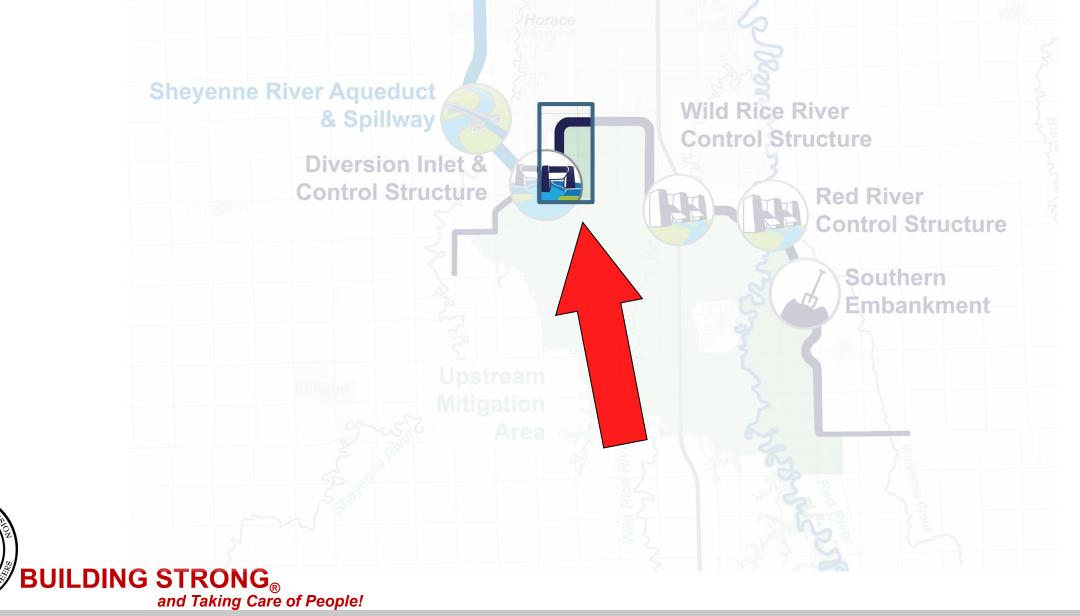




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WHERE IS THE DRAIN 27 WETLAND RESTORATION PROJECT LOCATED?









DESIGN





WHAT WILL THE AREA LOOK LIKE?

Total of 320 acres

- 150 acres of wetland
- 70 acres of wetland buffer
- 100 acres of inefficient/inaccessible land











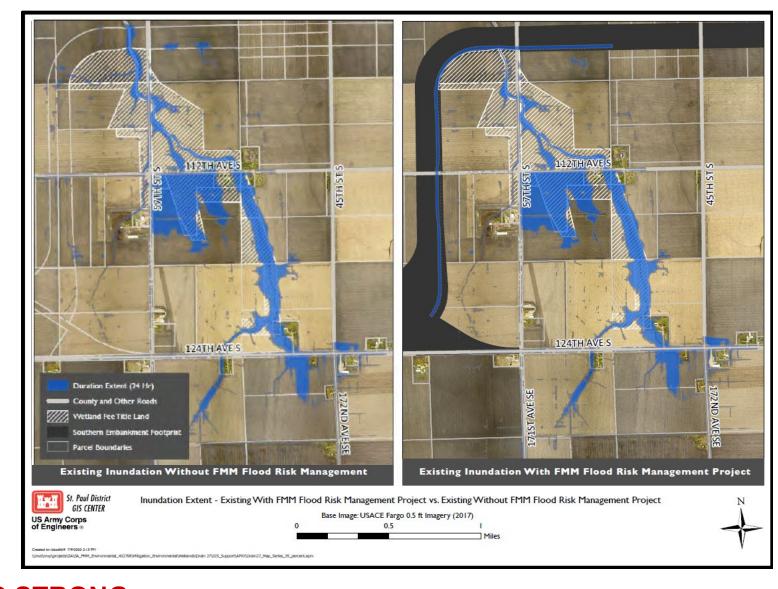
Hydraulic Goal: Design the weir to maximize the extent and duration of the inundation within the wetland fee parcels following the 10-year, 24-hour event, while maintaining adjacent property owner flood duration to less than 24 hours from the peak pool elevation.





DESIGN – HYDRAULICS



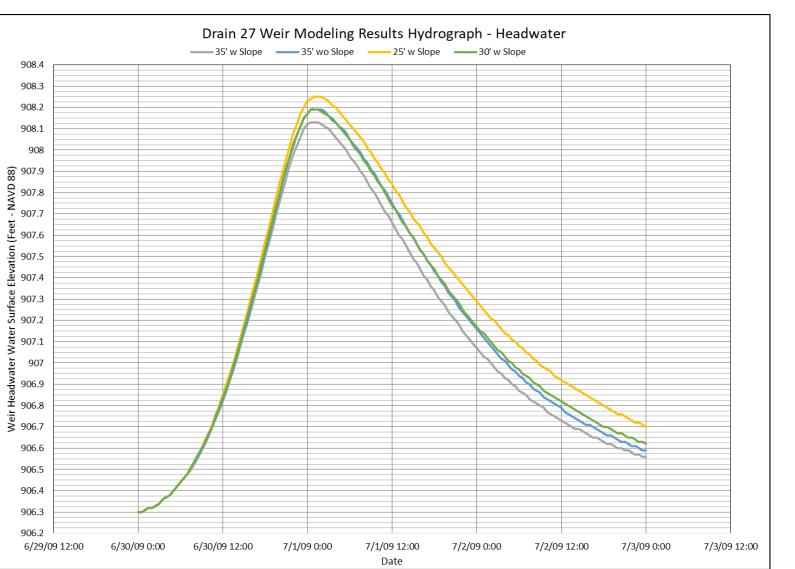




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DESIGN – HYDRAULICS



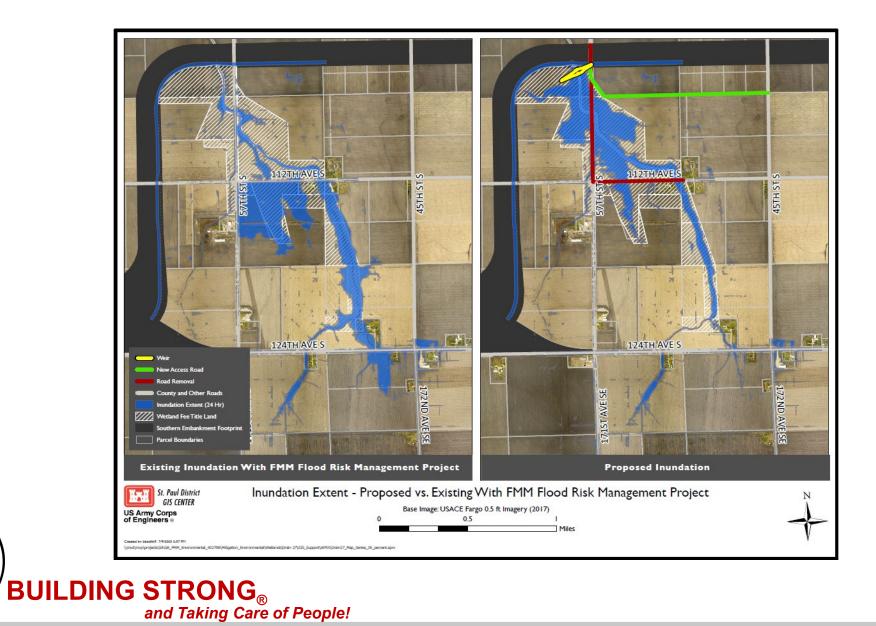


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DESIGN – HYDRAULICS





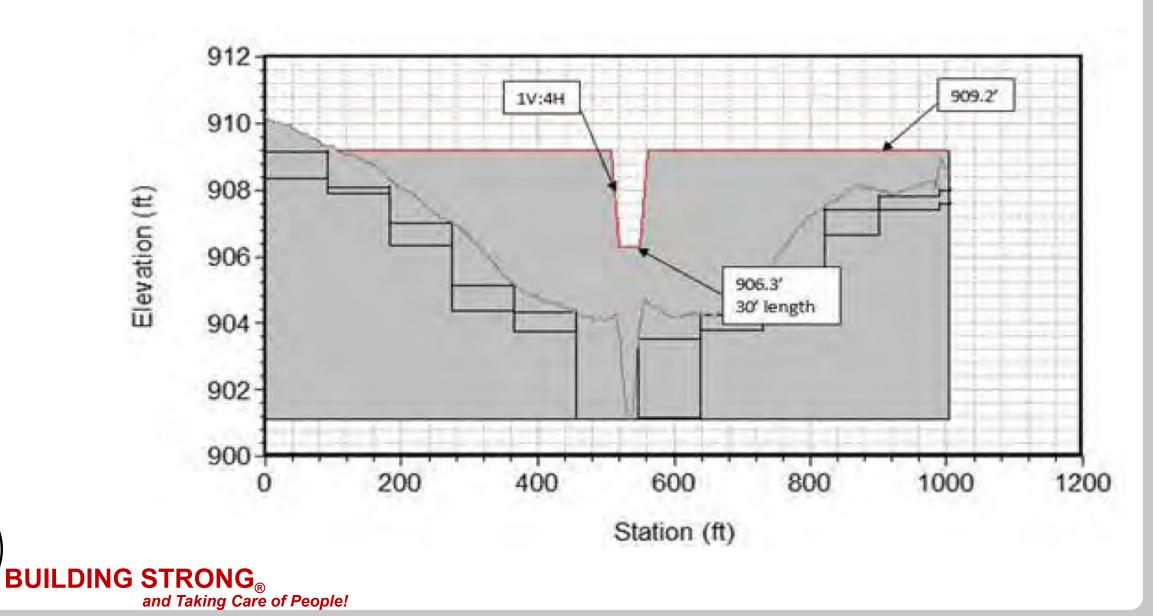




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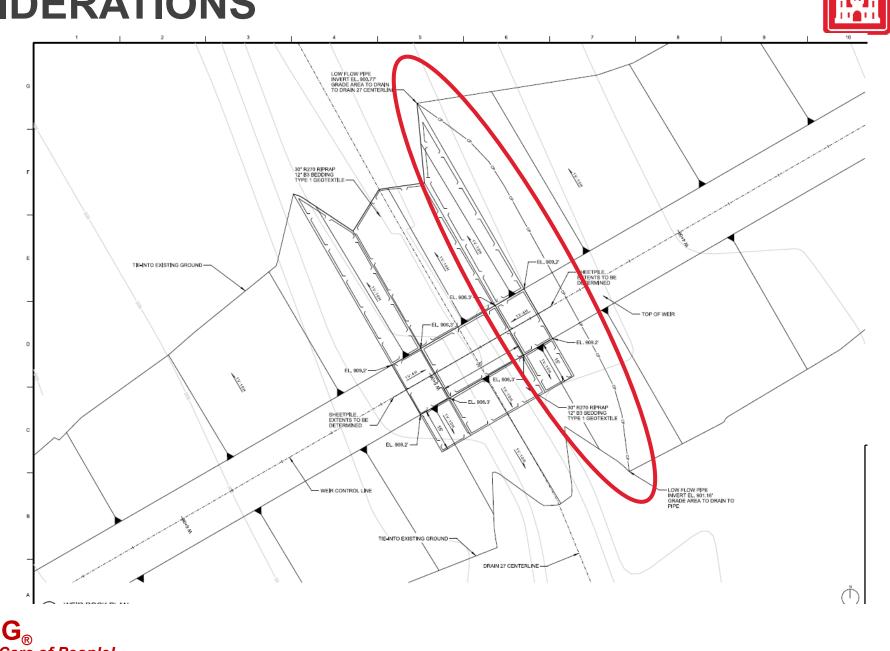






WEIR CONSIDERATIONS

- Earthen vs. Sheetpile
- Low-flow pipe







DESIGN - RECREATION

- Recreation features being considered but not a part of this project at this time
- Metro COG looking at recreation as part of the Agassiz Greenway Master Plan <u>http://fmmetrocog.org/AgassizGreenway</u>
- Features being considered include: trails, kiosks, and trail access locations











DRAINAGE





- Existing Conditions:
 - Drainage through Drain 27



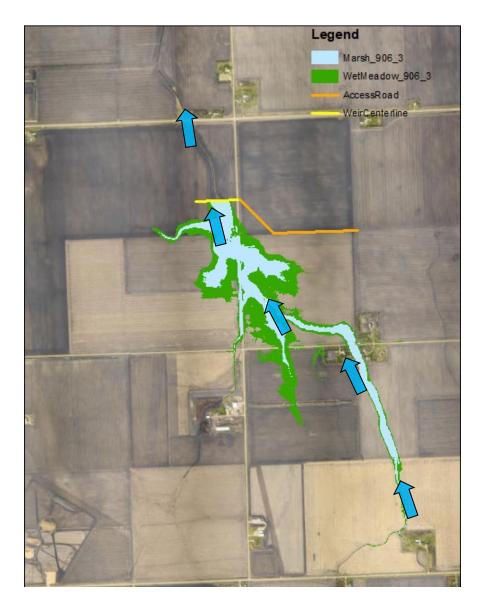






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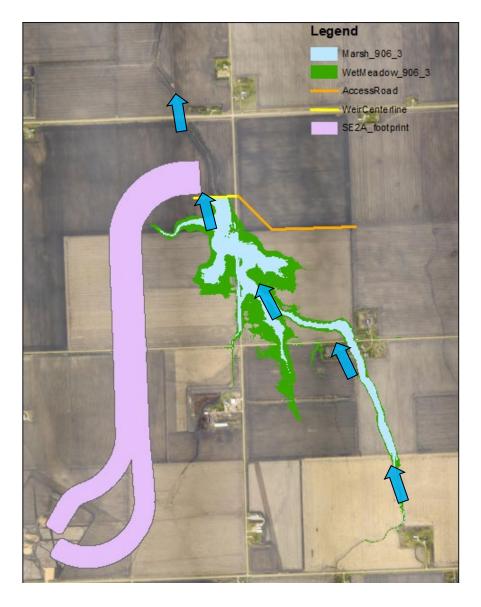
- Wetland Construction:
 - 2022 construction season
 - Drainage through Drain 27 downstream of project







- Southern Embankment SE-2A Construction:
 - 2022 through 2023
 - Drainage through Drain 27 downstream of project

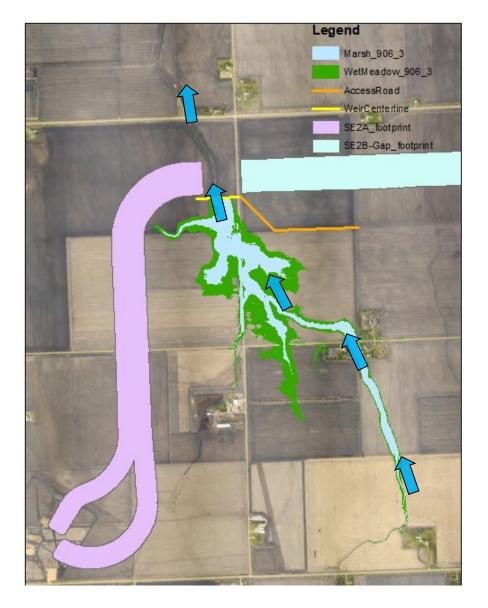








- Southern Embankment SE-2B
 Construction:
 - 2023 through 2024
 - Gap left in S. Embankment
 - Drainage through Drain 27 downstream of project

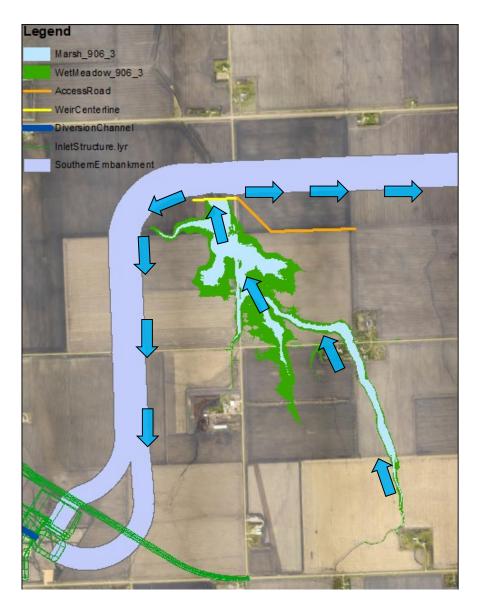








- Gap filled in Southern Embankment:
 - One of the last phases to be constructed
 - Estimated for construction in 2026/2027

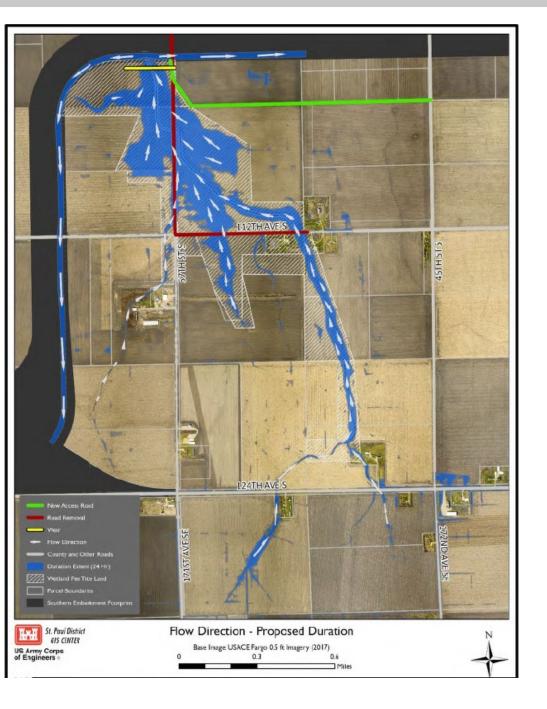




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FINAL DRAINAGE









WHAT ARE THE ENVIRONMENTAL EFFECTS?



- Agriculture
 - ~1 mile of Drain 27 would be abandoned and ~300 acres of land currently being farmed would be taken out of production
 - Wetland restoration project designed to ensure farmland and crops outside of the project parcels are not inundated for more than 24 hours following a large summer rainfall

Transportation

- To fully restore the wetland, 4,300 linear feet of 57th Street and 2,700 linear feet of 112th Street would be removed
- Affected residents would have alternate routes for traveling in and out of the area





WHAT ARE THE ENVIRONMENTAL EFFECTS?



- Wetlands
 - Long-term beneficial effect by restoring ~84 acres of wet meadow and 66 acres of marsh
 - Restoration of wetland would provide:
 - habitat for wildlife by increasing habitat diversity
 - water quality improvements by filtering sediments, nutrients, & pollutants
- Vegetation
 - Wetland restoration project would change vegetation from row crops to approximately 150 acres of native wetland and 170 acres of prairie vegetation



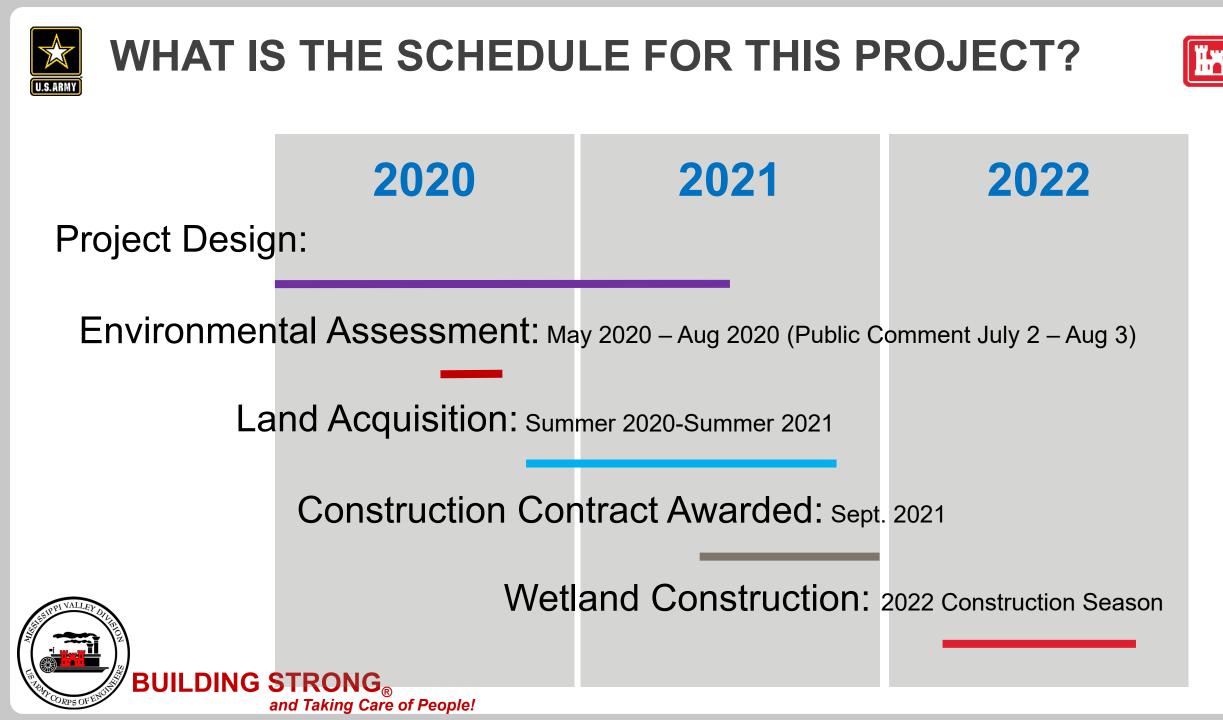


ENVIRONMENTAL ASSESSMENT



- Released 2 July 2020
- <u>https://www.mvp.usace.army.mil/Home/Public-Notices/</u>
- Questions on the project or comments on the Environmental Assessment can be directed to Derek Ingvalson at (651) 290-5252 or at <u>Derek.S.Ingvalson@usace.army.mil</u>
- Comment period ends 3 August 2020







QUESTIONS?

- Questions on the project or comments on the Environmental Assessment can be directed to Derek Ingvalson at (651) 290-5252 or at Derek.S.Ingvalson@usace.army.mil
- Smaller meetings to discuss individual concerns can also be requested.



