

WINFIELD PUBLIC MEETING NESP LOCK & DAM NO. 25

NESP Lock & Dam 25
Project Delivery Team

October 29th, 2024



US Army Corps
of Engineers®



OPENING REMARKS

COLONEL PANNIER
ST. LOUIS DISTRICT
COMMANDER



WINFIELD PUBLIC MEETING

NESP LOCK & DAM NO. 25

Jose R. Lopez, PE, PMP
L&D 25 Project Manager
USACE - St. Louis District

October 29th, 2024



U.S. ARMY



US Army Corps
of Engineers®





AGENDA

- Navigation Ecosystem Sustainability Program (NESP) Overview
- Project Purpose & Benefits
- Project Overview
- Project Timeline, Scope, and Status
- Project Progress and Upcoming Work
- Site Access and Flyover Perspective
- Open Discussion / Q&A



NESP OVERVIEW



US Army Corps
of Engineers®

NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM (NESP)

ST. PAUL DISTRICT- ROCK ISLAND DISTRICT - ST. LOUIS DISTRICT

NAVIGATION AND ECOSYSTEMS PROJECTS



The Navigation and Ecosystem Sustainability Program (NESP) is a long-term, dual-purpose program that integrates navigation improvements and ecosystem restoration together to provide Upper Mississippi River System once in a generation-type positive impacts.

The primary goals of the program are to increase the capacity and improve the reliability of the inland navigation system while restoring, protecting, and enhancing the environment.

This map shows both projects that are actively being implemented and future ecosystem projects that have been approved. NESP includes an additional 5 - 1200' locks, systemic mitigation, and hundreds of ecosystem restoration projects.

ACTIVE IMPLEMENTATION

- ★ Lock 25 New 1200' Lock
- ★ Lock and Dam 22 Fish Passage Improvement Project
- 1 Pool 2 Wingdam Notching
- 2 Lock 14 Mooring Cell
- 3 Starved Rock Breakwater
- 4 Moore's Towhead System Mitigation
- 5 Twin Island - Island Protection and Enhancement
- 6 Alton Pools Islands - Island Protection and Side Channel Restoration

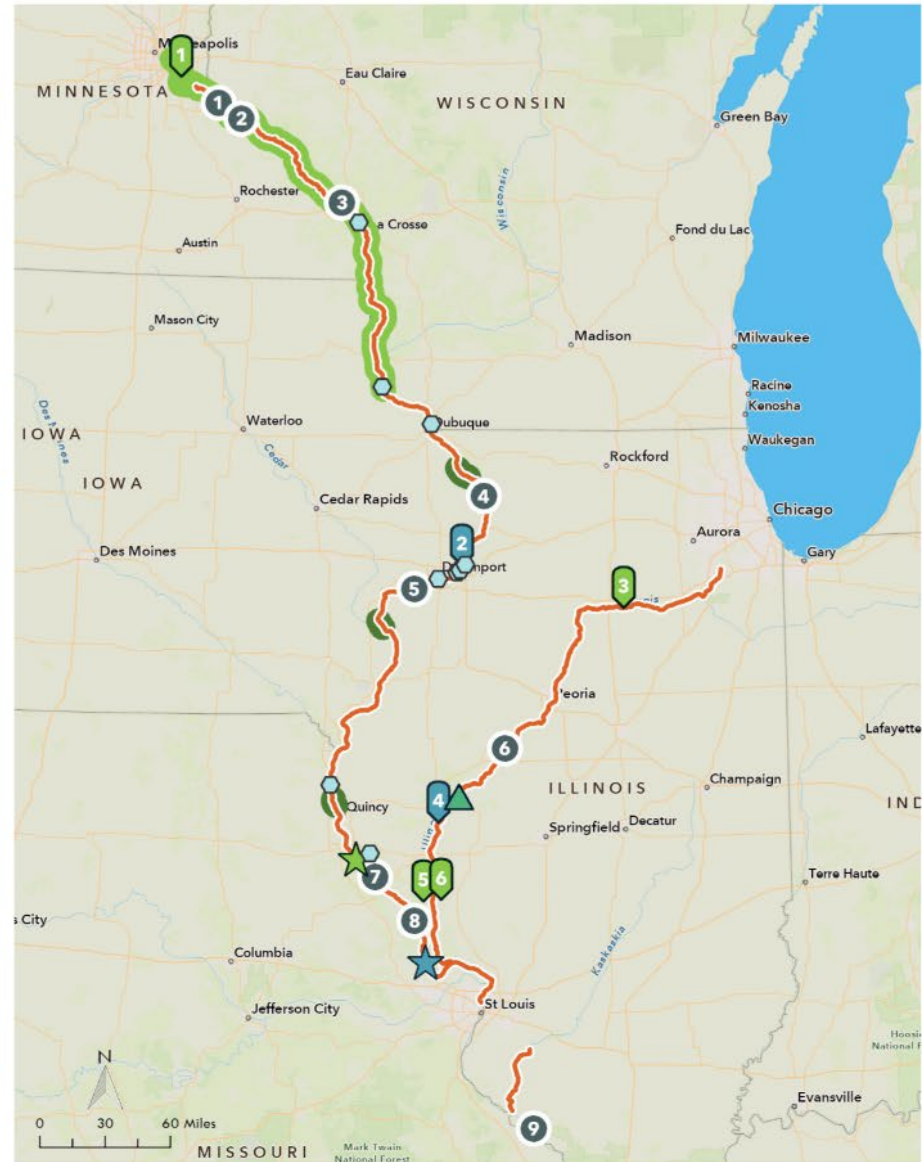
ECOSYSTEM PROJECTS - APPROVED

- WLM - Reduce Water Level Fluctuations
- Systemic Forest Restoration
- Multi-Pool Forest Restoration
- 1 North Sturgeon Lake
- 2 Wacouta Bay
- 3 Johnson Island
- 4 Sabula Lakes
- 5 Andalusia Island Complex
- 6 Liverpool Flowing Side Channel
- 7 Pool 24 Island Restoration - Denmark and Drift Islands Complex
- 8 Pool 25 Side Channels - Clarksville/Carroll Island Complex, Haugens Island/Lower Pool 25 Complex
- 9 Middle Mississippi River Stone Dike Alterations Phase 1

NAVIGATION PROJECTS

- Mooring Facilities
- ▲ LaGrange New 1200' Lock Design
- Systemic Mitigation - throughout the Upper Mississippi River Basin

PARTNERS



as of July 2022



LOCK 25 – PROJECT PURPOSE

Authorization: Title VIII of Water Resources Development Act (WRDA) 2007, P.L. 110-114 and WRDA 2022, P.L. 117-263. Authorized cost in legislation is at the Navigation Ecosystem Sustainability Program (NESP) level, not for the individual projects.

Purpose/Description: The construction of a new 1200-foot lock at Lock & Dam 25 will significantly reduce delays and increase safety. Proposed project features include construction of a new 1200-foot deep founded lock located in the auxiliary miter gate bay, construction of an upstream ported guard wall totaling 1200-feet, and a 650-foot downstream approach wall.





MISSISSIPPI RIVER LOCK 25 – BENEFITS

Multiple benefits associated with the construction of the New 1,200-ft Lock Chamber are:

- Reduced lockage time, resulting in:
 - Increased daily lockage capacity
 - Significantly reduced wait-time and delays
 - Improved overall navigation efficiency
- Accommodation of the largest tow configurations on the Upper Mississippi River
- Added redundancy at the site
- Improved safety during the lockage process





MISSISSIPPI RIVER LOCK 25 - PROJECT OVERVIEW

Project consists of design and construction of a new pile-founded 1200' lock chamber, which includes construction of:

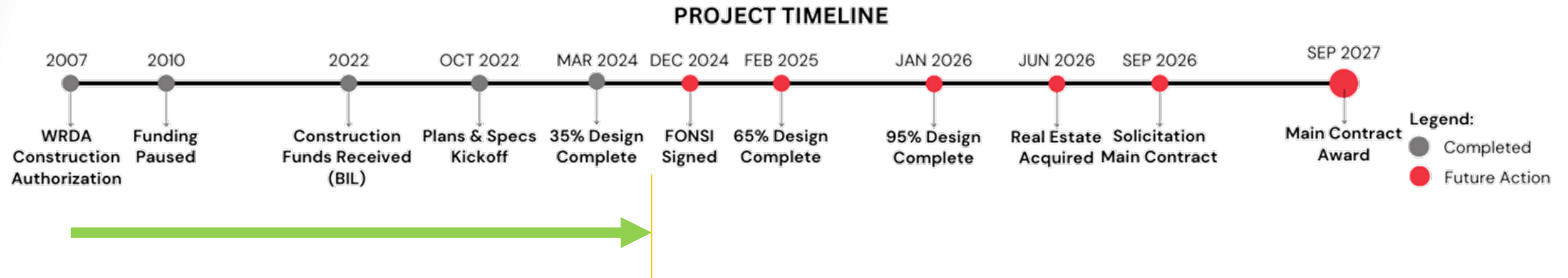
- A new 1200' of River Wall
- A new 1200' upstream Guide Wall
- A new 600' downstream Guide Wall
- A new 600' extension of the Intermediate Wall
- A new Lock floor
- A new control house and associated facilities





MISSISSIPPI RIVER LOCK 25 - PROJECT TIMELINE

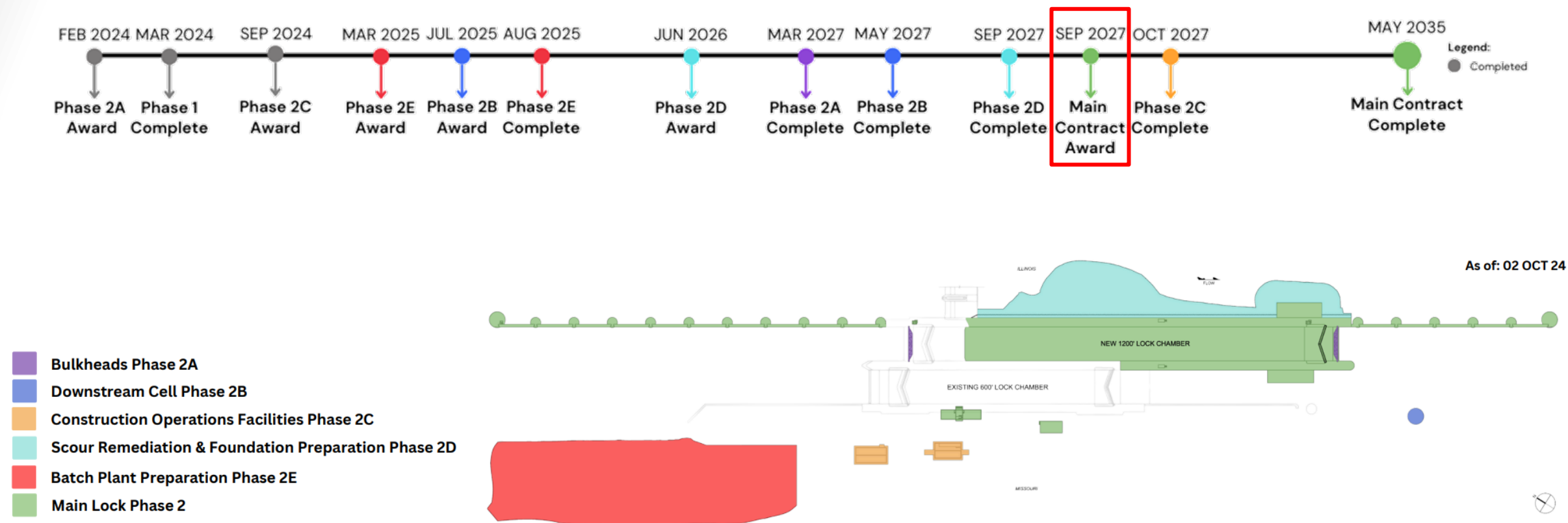
Pre-construction/Design Phase





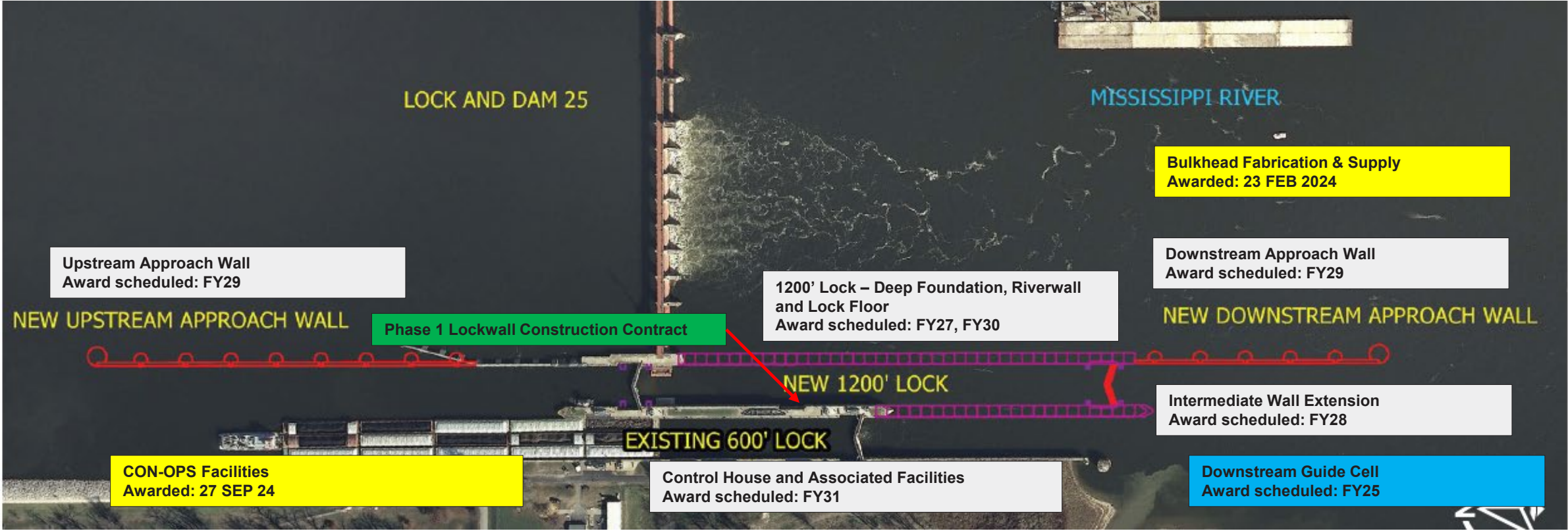
MISSISSIPPI RIVER LOCK 25 – PHASES TIMELINE

Pre-Fabrication & Construction Phase





MISSISSIPPI RIVER LOCK 25 - SCOPE



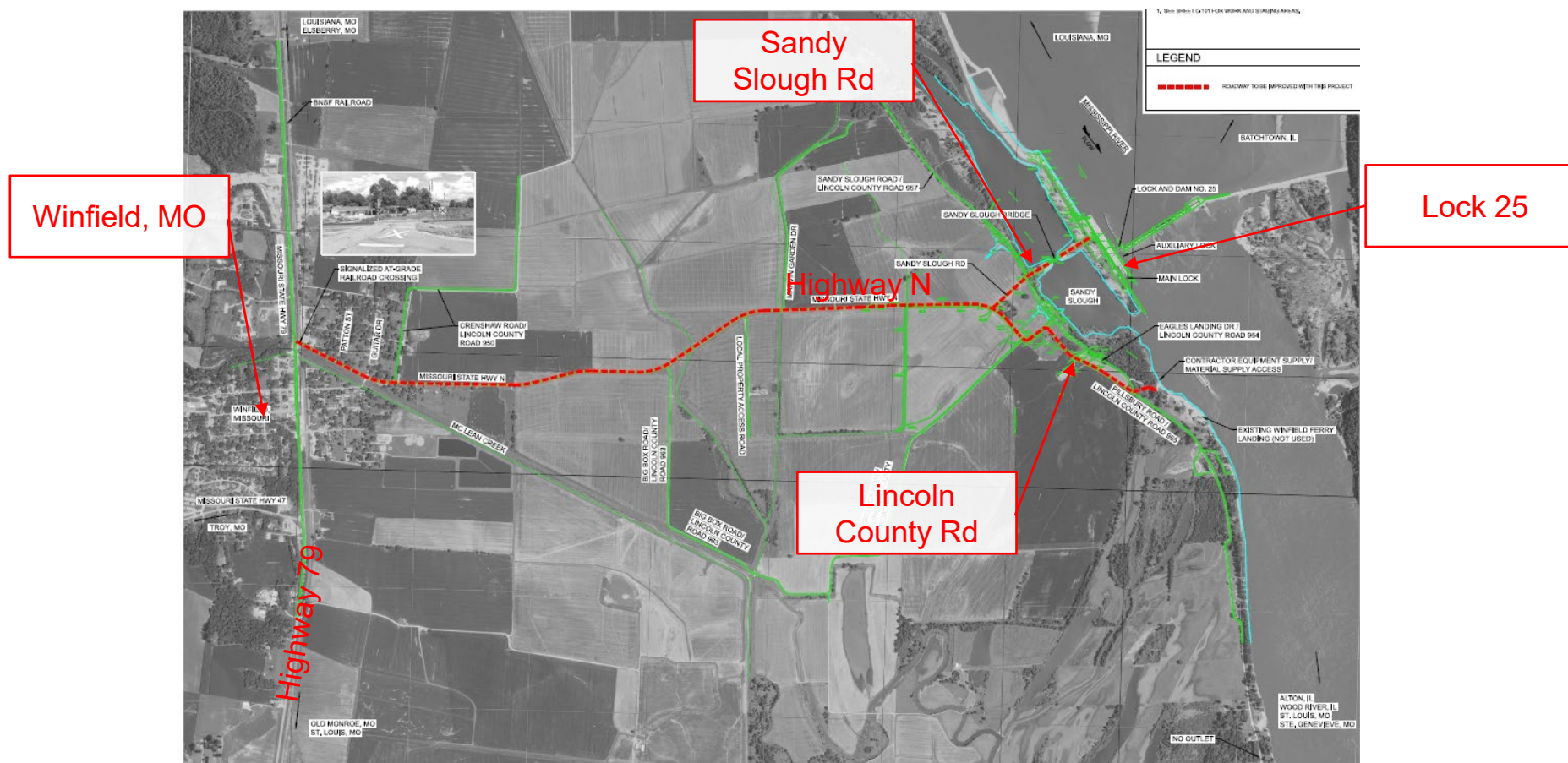
Contract Legend

Completed
Current
Upcoming
Future

*Timelines assume full/efficient funding and are subject to change.



MISSISSIPPI RIVER LOCK 25 - CIVIL SITE ACCESS



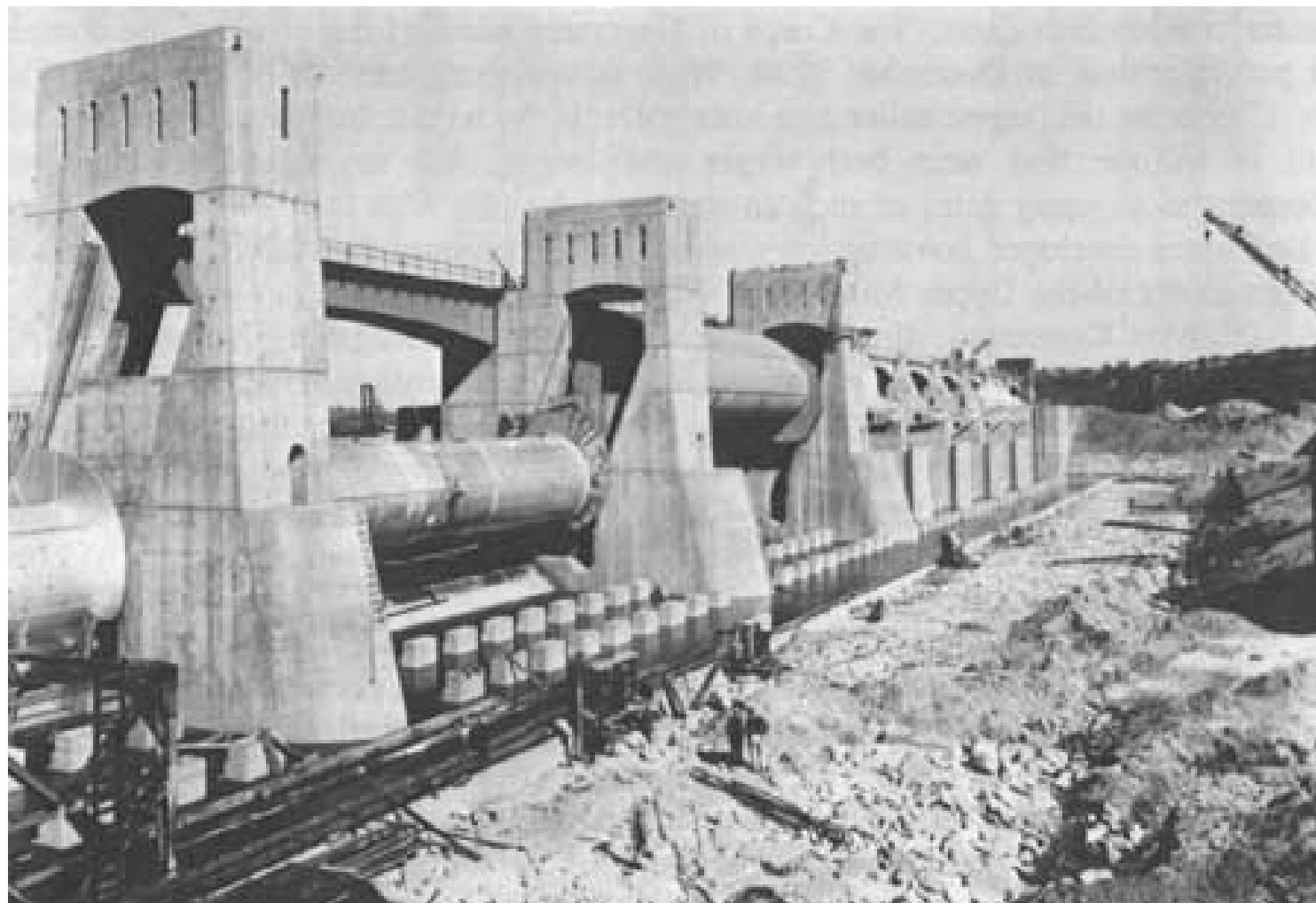


FLYOVER – LOCK HEADING UPSTREAM





THANK YOU





CONTACT INFORMATION

Visit our website:



Phone:

(314) 331-8000

USACE – St. Louis District

1222 Spruce Street

Saint Louis, MO 63103-2833

USA





MISSISSIPPI RIVER LOCK 25 - OVERVIEW

Authorization: Title VIII of Water Resources Development Act (WRDA) 2007, P.L. 110-114 and WRDA 2022, P.L. 117-263. Authorized cost in legislation is at the Navigation Ecosystem Sustainability Program (NESP) level, not for the individual projects.

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Schedule: Design: Complete FY26; Construction: Complete TBD, dependent on funding stream.

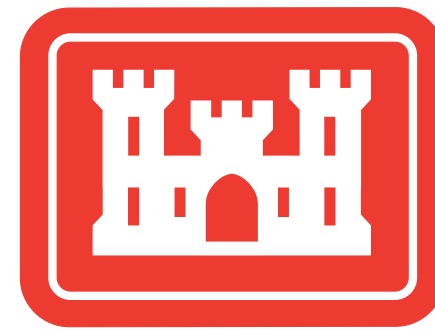
Cost: Latest certified Total Project Cost (TPC) is \$2,263,062,000 (Certified in June 2023) with 59% contingency at a 15% level of design. This cost was validated with industry offers for the ECI-IDaC solicitation. Current Working Estimate (CWE) for 35% is \$2,181,487,000. The next CWE update will occur at the 65% milestone in the Fall 2024. A new certified cost will be obtained then as well.

***estimates shown assume full or efficient funding.**



MISSISSIPPI RIVER LOCK 25 - PROGRESS

- **Progress:** Phase 1 - Lockwall Construction Contract
 - Final Inspection: 6 March 2024
- **Progress:** Phase 2a - Bulkhead Fabrication and Supply
 - Awarded 23 February 2024
 - Construction completion March 2027
 - \$17.7M Firm Fixed Price Contract
- **Progress:** Phase 2b – Guide Cell
 - Scheduled for Award – Q2 FY25
- **Progress:** Phase 2c – O&M Facilities Design-Build
 - Awarded 27 Sept 2024

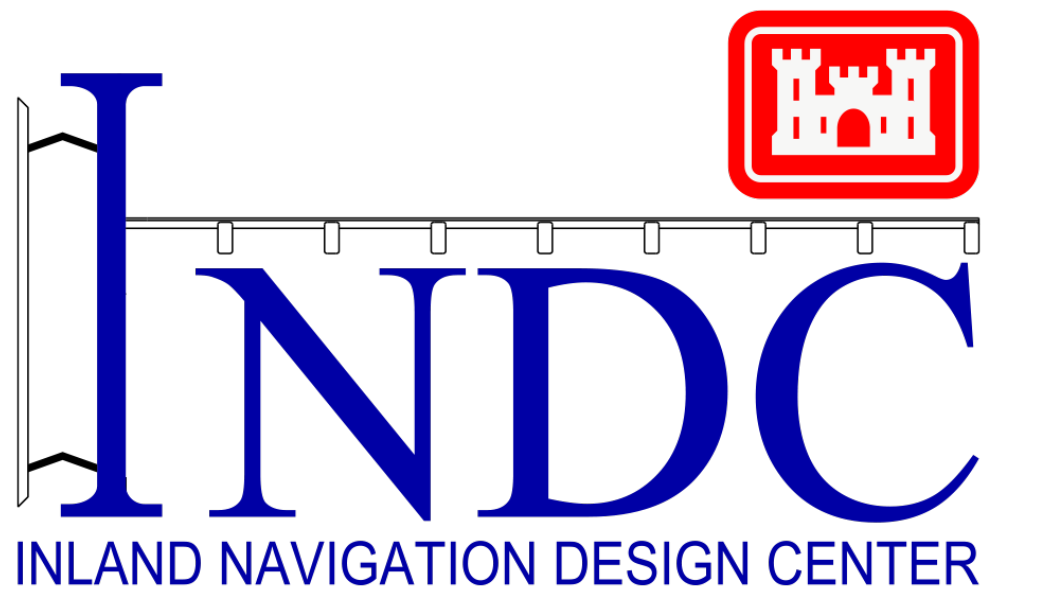


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LOCK 25 NEW 1200-FOOT LOCK

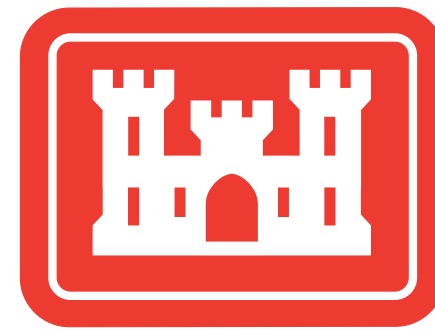
MEGA PROJECT FUNDED WITHIN NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM (NESP)

SCOUR REMEDIATION AND FOUNDATION PREPARATION



- Remove existing stone protection
- Place 68,000 cubic yards of dredged sand
- Place 78,000 cubic yards of stone protection
- Stones weigh as much as 5,000 pounds

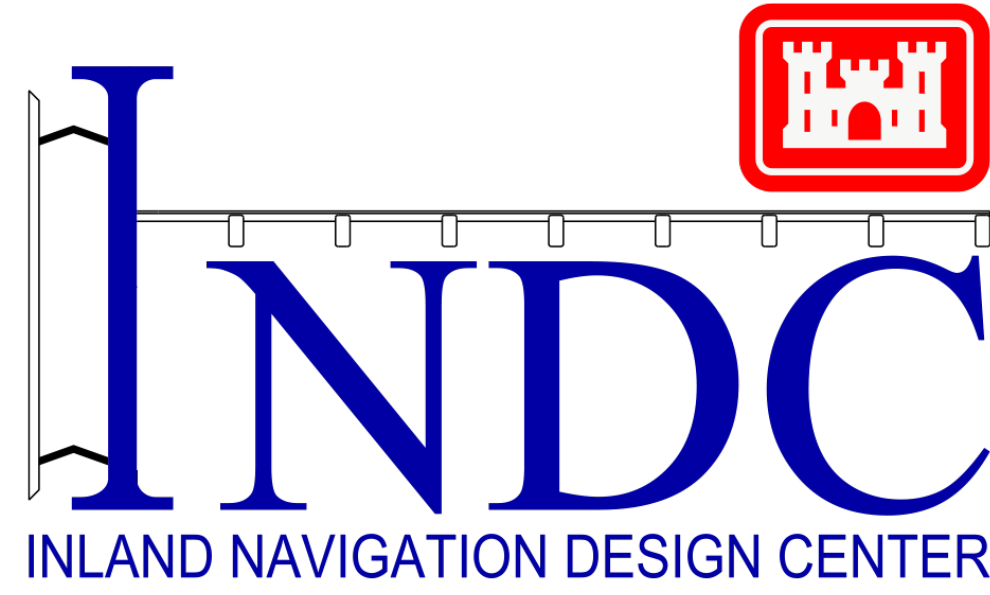
Approximately
146,000 cubic yards
of stone and sand will
be placed at the project,
this would increase the
elevation of **Gateway Arch
National Park** by **2 feet**



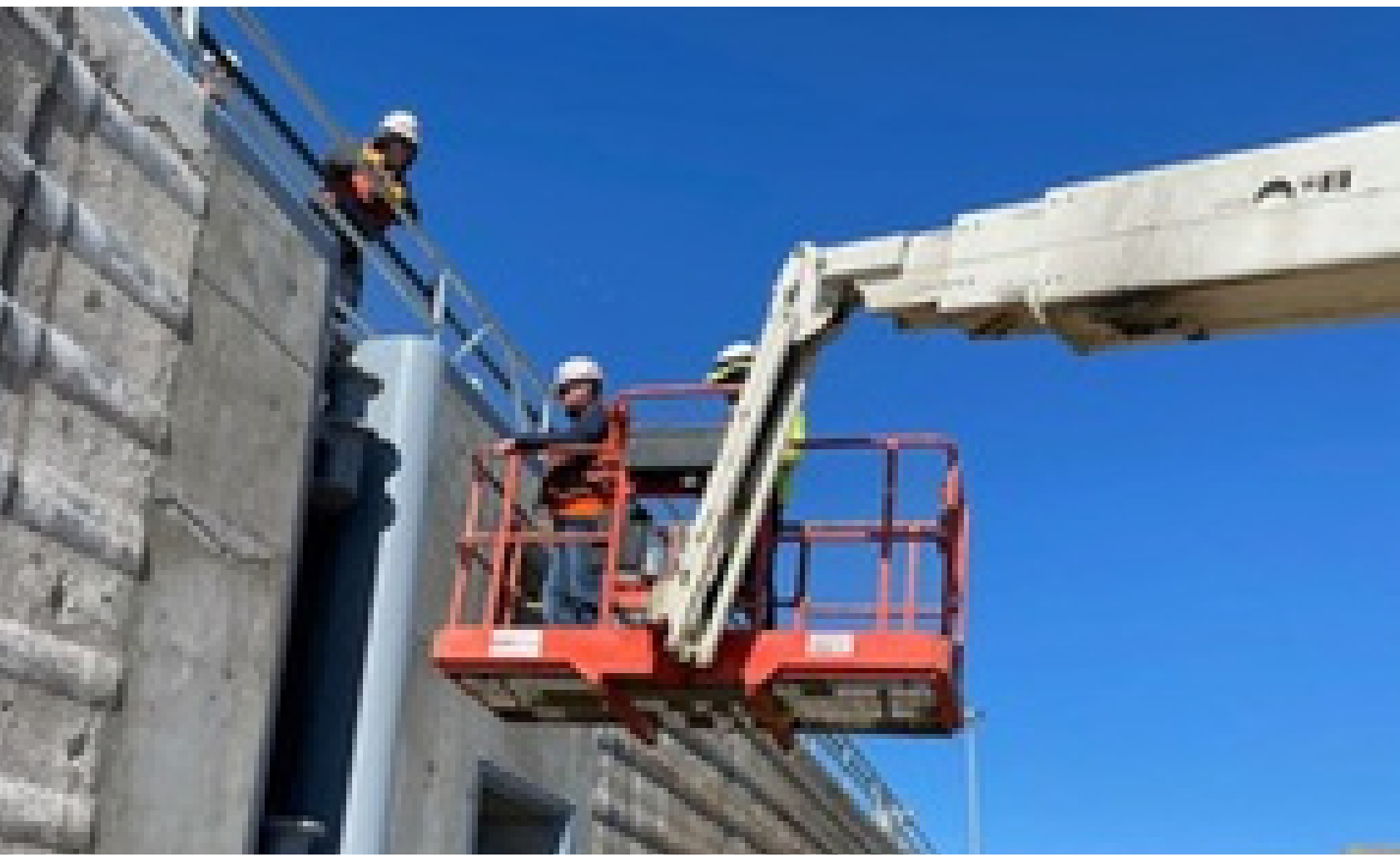
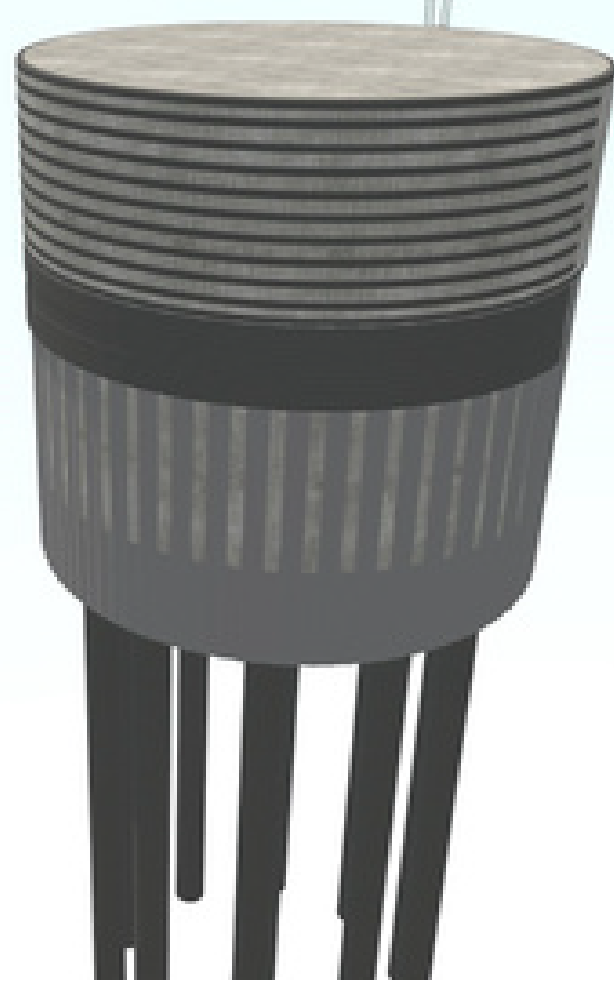
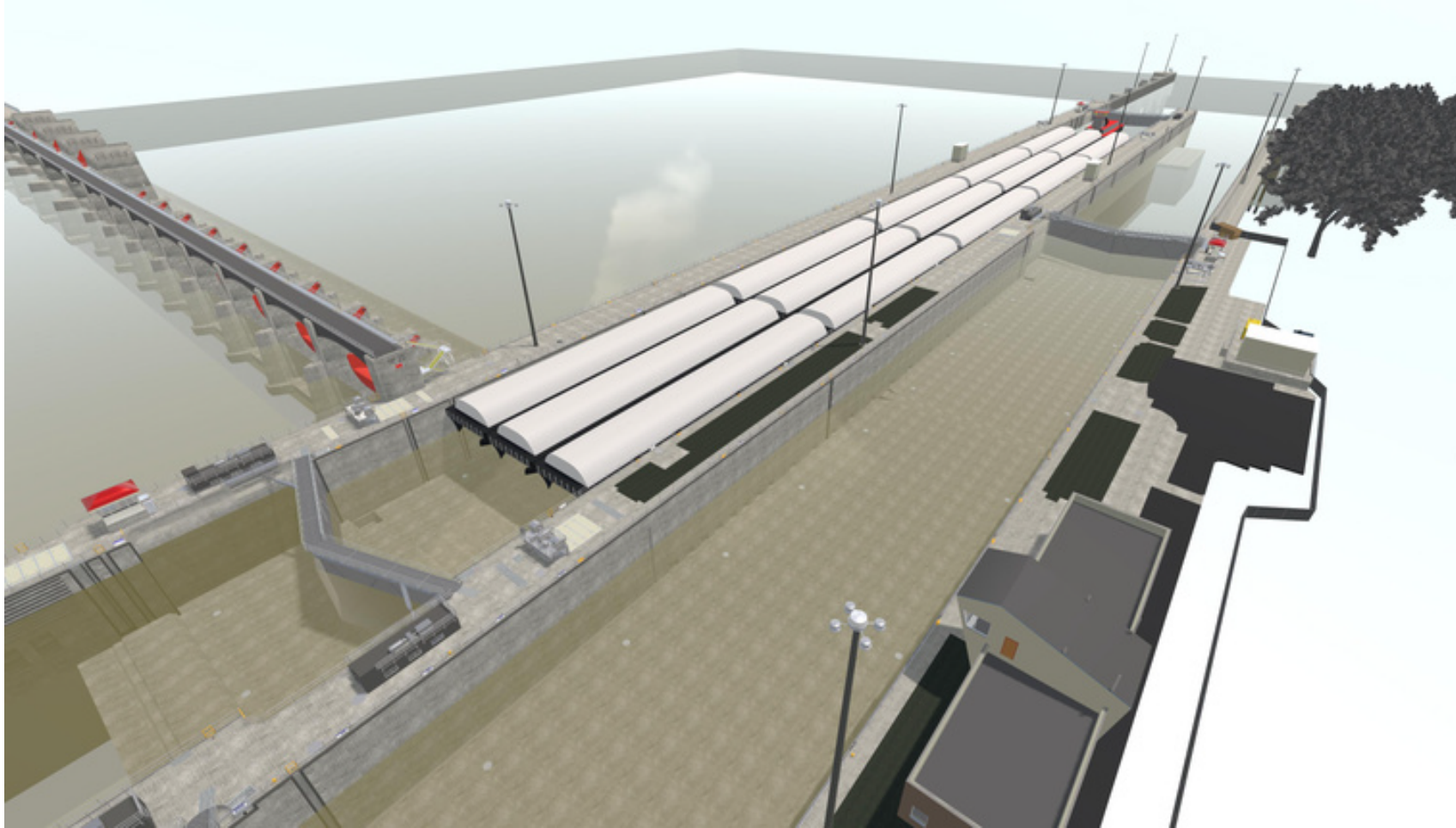
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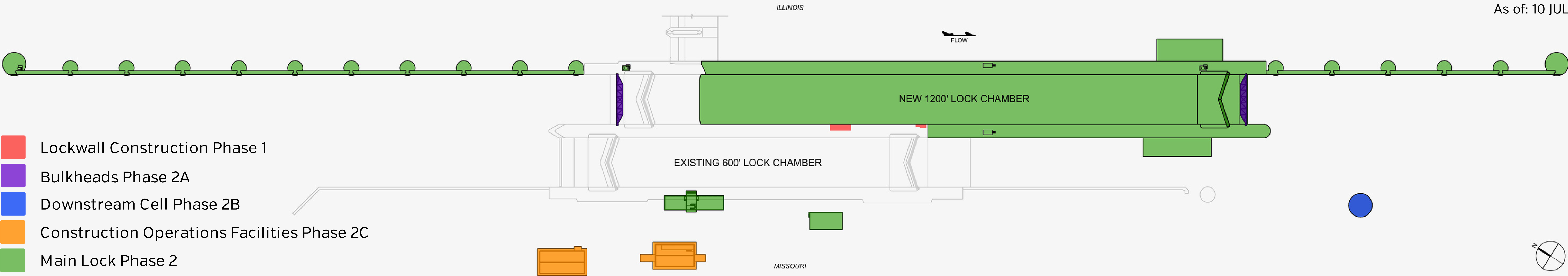
LOCK 25 NEW 1200-FOOT LOCK

MEGA PROJECT FUNDED WITHIN NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM (NESP)

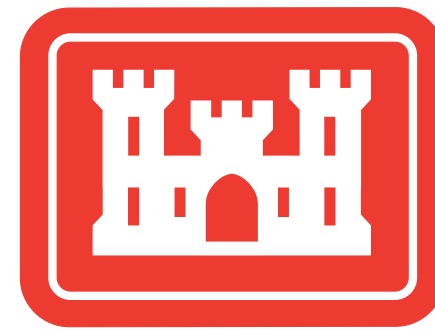


CURRENT PROJECT STATUS

Lockwall Construction Phase 1	Bulkheads Phase 2A	Downstream Cell Phase 2B	Construction Operations Facilities Phase 2C	Main Lock Phase 2	Quarterly Outlook
Design	Design	Design	Design	Design	4th Quarter FY24: <ul style="list-style-type: none">Contract award for Construction Operations FacilitiesIndustry 1-on-1's with contractorsInitial coordination of navigation impacts with industry 1st Quarter FY25: <ul style="list-style-type: none">Downstream cell design completePrepare new acquisition planConstruction Operations Facilities notice to proceed for designComplete Real Estate boundary surveys 2nd Quarter FY25: <ul style="list-style-type: none">65% design completeNew acquisition plan approved65% cost update completeReal Estate acquisition negotiations
Acquisition	Acquisition	Acquisition	Acquisition	Acquisition	
Construction <ul style="list-style-type: none">First construction contract awarded ever on NESP authority 	Fabrication <ul style="list-style-type: none">Required for unwatering & construction of lock floorLong lead time item 	Construction Not started <ul style="list-style-type: none">Industry requested navigational aideRequired before Intermediate wall construction begins95% design reviews ongoing 	Construction Not started <ul style="list-style-type: none">Contains QA concrete lab facilities for USACE oversightRequired to operate & maintain both lock facilities 	Construction Not started <ul style="list-style-type: none">65% design reviews ongoing65% cost update ongoingMarket research for Design Bid Build contract 	



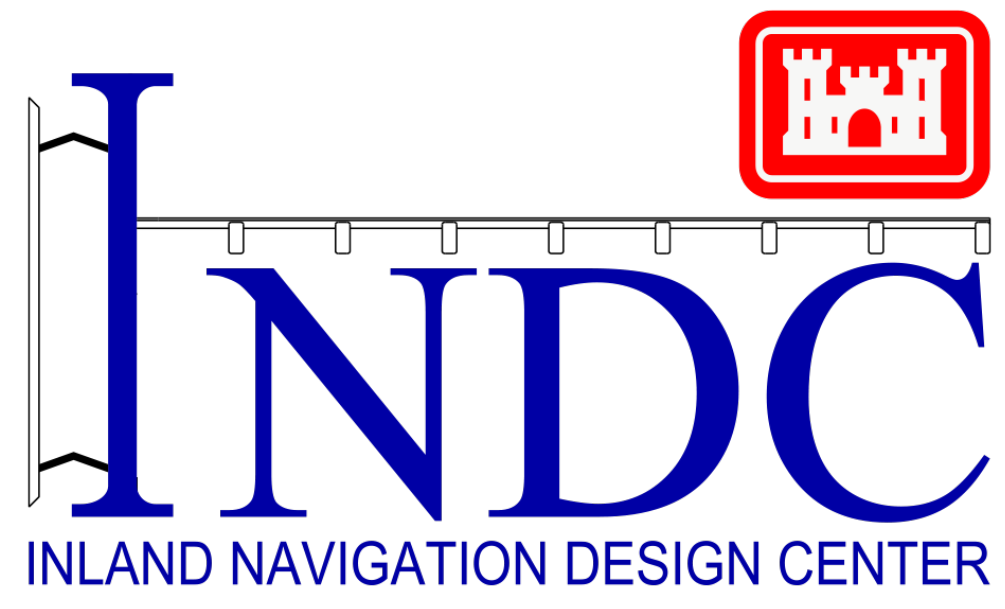
As of: 10 JUL 24



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NAVIGATION AND ECOSYSTEM SUSTAINABILITY PROGRAM (NESP)

ST. PAUL DISTRICT- ROCK ISLAND DISTRICT - ST. LOUIS DISTRICT



NAVIGATION AND ECOSYSTEM PROJECTS

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This map only shows projects actively being implemented. NESP includes an additional 5 - 1,200-foot locks, systemic mitigation, and hundreds of ecosystem restoration projects.

1 Pool 2 Wingdam Notching

10 Starved Rock Breakwater

16 Moore's Towhead System Mitigation

19 Alton Pools Islands - Island Protection

20 Twin Island Protection and Enhancement

2 Pool 4 Island System Mitigation

8 Lock 14 Downstream Mooring Cell

24 Lock 25 New 1,200-Foot Lock

CONSTRUCTION COMPLETE

ONGOING CONSTRUCTION

9 Andalusia Island Complex Planning

14 LaGrange New 1,200-Foot Lock Design

17 Lock and Dam 22 Fish Passage

AE DESIGN SERVICE CONTRACT AWARDS

ONGOING DESIGN

3 Wacouta Bay

4 Johnson Island

6 Sny Magill, Effigy Mounds National Monument

7 Sabula Lakes

12 Liverpool Flowing Side Channel

13 Lee County Islands and Backwaters

18 Pool 24 Island Restoration - Denmark and Drift Islands Complex

21 Clarksville/Carroll Island Side Channel

22 Hausgen Island Side Channel

25 MMR - NWR - Horse Island

26 Middle Mississippi River Stone Dike Alterations Phase 1

Water Level Management - Reduce Water Level Fluctuations

5 Pool 8 Goose Island Invasive Control

11 Pools 17 and 18 Forest Inventory

SYSTEMIC FOREST MANAGEMENT

15 Pool 21 Long Island Forest Inventory

23 Pool 26 Cuivre Island Tree Planting

The map displays the Upper Mississippi River System from Minneapolis, MN, to St. Louis, MO, and further south. Numbered project locations (1-26) are marked along the river. A legend box titled 'Program Reaches' lists: Upper Impounded Reach, Lower Impounded Reach, Illinois River Reach, Open River Reach, and River Miles (Mississippi River: 866 mi, Illinois River: 291 mi, Kaskaskia River: 36 mi, St. Croix River: 26 mi, Minnesota River: 20 mi). A QR code is present. The date 'AS of June 2024' is noted at the bottom right.

NESP PARTNERS

<https://www.mvr.usace.army.mil/Rock-Island-District/Programs/NESP/>